CISCO

**User Guide
for Cisco Unified Contact Center Domain Manager**

Release 9.0(1)

August 2012

Contents

Preface

Purpose

This document explains how to use the Cisco Unified Contact Center Domain Manager (Unified CCDM) to manage settings, services, security and your system using the Web Portal tool.

Audience

This document is intended for all users of Unified CCDM, from high-level administrators to team supervisors. The reader needs no technical understanding beyond a basic knowledge of how to use computers.

Organization

The sections of this guide are as follows:

Chapter 1	Welcome	Provides basic information on the Unified CCDM environment and how to use the context-sensitive online help.
Chapter 2	Settings	Describes how users can change their settings, or the settings of others, such as email address, time-zone, or security privileges.
Chapter 3	Service Management	Explains how supervisor users can use Unified CCDM for management of agents, teams, and skill groups.
Chapter 4	Information Notices	Explains how to view and edit information notices.
Chapter 5	System Administration	Describes the folder structure of Unified CCDM and explains how to set up and maintain agents, contacts, equipment, and other resources using Unified CCDM.

Chapter 6   Security Manager   Explains how to set up security settings for individual users by means of roles and tasks, and how users with the same permissions can be added to groups to simplify management.

Related Documentation

Documentation for Cisco Unified ICM/Contact Center Enterprise & Hosted, as well as related documentation, is accessible from Cisco.com at: http://www.cisco.com/cisco/web/psa/default.html.

- Related documentation includes the documentation sets for Cisco CTI Object Server (CTIOS), Cisco Agent Desktop (CAD), Cisco Agent Desktop - Browser Edition (CAD-BE), Cisco Unified Contact Center Domain Manager, Cisco Unified Customer Voice Portal (CVP),Cisco Unified IP IVR, Cisco Unified Intelligence Center, and Cisco Support Tools.

- For documentation for these Cisco Unified Contact Center products, go to http://www.cisco.com/cisco/web/psa/default.html, click **Voice and Unified Communications**, then click **Customer Contact**, then click **Cisco Unified Contact Center Products** or **Cisco Unified Voice Self-Service Products**, then click the product/option you are interested in.

- For troubleshooting tips for these Cisco Unified Contact Center products, go to http://docwiki.cisco.com/wiki/Category:Troubleshooting, then click the product/option you are interested in.

- Documentation for Cisco Unified Communications Manager is accessible from: http://www.cisco.com/cisco/web/psa/default.html.

- Technical Support documentation and tools are accessible from: http://www.cisco.com/en/US/support/index.html.

- The Product Alert tool is accessible from (sign in required): http://www.cisco.com/cgi-bin/Support/FieldNoticeTool/field-notice.

- For information on the Cisco software support methodology, refer to *Software Release and Support Methodology: ICM/IPCC* available at (sign in required): http://www.cisco.com/en/US/partner/products/sw/custcosw/ps1844/prod_bulletins_list.html.

For a detailed list of language localizations, refer to the *Cisco Unified ICM/Contact Center Product and System Localization Matrix* available at the bottom of the following page:
http://www.cisco.com/en/US/products/sw/custcosw/ps1001/prod_technical_reference_list.html.

Product Naming Conventions

In this release, the product names defined in the table below have changed. The New Name (long version) is reserved for the first instance of that product name and in all headings. The New Name (short version) is used for subsequent instances of the product name.

Note This document uses the naming conventions provided in each GUI, which means that in some cases the old product name is in use.

Old Product Name	New Name (long version)	New Name (short version)
Cisco IPCC Enterprise Edition	Cisco Unified Contact Center Enterprise	Unified CCE
Cisco IPCC Hosted Edition	Cisco Unified Contact Center Hosted	Unified CCH
Cisco Intelligent Contact Management (ICM) Enterprise Edition	Cisco Unified Intelligent Contact Management (ICM) Enterprise	Unified ICM
Cisco Intelligent Contact Management (ICM) Hosted Edition	Cisco Unified Intelligent Contact Management (ICM) Hosted	
Cisco CallManager/Cisco Unified CallManager	Cisco Unified Communications Manager	Unified CM

Conventions

This document uses the following conventions:

Convention	Description
boldface font	Boldface font is used to indicate commands, such as entries, keys, buttons, folders and submenu names. For example: • Choose **Edit** > **Find** • Click **Finish**
italic font	Italic font is used to indicate the following: • To introduce a new term; for example: A *skill group* is a collection of agents who share similar skills • For emphasis; for example: *Do not* use the numerical naming convention • A syntax value that the user must replace; for example: IF (*condition, true-value, false-value*) • A book title; for example: Refer to the *Cisco CRS Installation Guide*
window font	Window font, such as Courier, is used for the following: • Text as it appears in code or that the window displays; for example: `<html><title>Cisco Systems, Inc. </title></html>`

Convention	Description
< >	Angle brackets are used to indicate the following: • For arguments where the context does not allow italic, such as ASCII output • A character string that the user enters but that does not appear on the window, such as a password

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, 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.

Documentation Feedback

You can provide comments about this document by sending an email message to the following address:

mailto:ccbu_docfeedback@cisco.com

We appreciate your comments.

1.   Welcome

About Unified CCDM

How does it work?

Cisco Unified Contact Center Domain Manager (Unified CCDM) is a browser-based management application designed for use by contact center/system administrators, business users, and supervisors. It is a dense, multi-tenanted provisioning platform that overlays the contact center equipment. The contact center equipment is viewed as consisting of configuration items, generally known as resources, such as agents or skill groups, and events logged when the resources are used by the equipment, such as call record statistics.

Unified CCDM partitions the resources in the equipment using a familiar folder paradigm. These folders are then secured using a sophisticated security structure that allows administrators to specify which users can perform which actions within the specified folders. Unified CCDM supplies a number of tools that operate on the configuration and statistics data and allow users to modify both the contact center and Unified CCDM itself. The tools are all inherently multi-tenanted and those currently supported are:

- **Information Notices** tool provides a "Message of the Day" functionality

- **Service Manager** tool enables the dynamic modification of Agent Teams and Skill Groups

- **System Manager** tool enables users to create and modify resources such as agents or call types, and organize them into a hierarchical folder structure

- **Security Manager** tool enables administrators to set up and manage security permissions

Unified CCDM focuses on supplying multi-tenancy functionality, playing to the business plans of hosts and large enterprises by enabling distributed or disparate contact center equipment to be partitioned.

- Unified CCDM abstracts and virtualizes the underlying contact center equipment, thereby allowing centralized deployment and decentralized control which in turn gives economies of scale while supporting multi-level user command and control

- Unified CCDM allows the powerful and flexible native provisioning operations to be abstracted into simple, high level tasks that enable business users to rapidly add and maintain contact center services across the virtualized enterprise (or portion thereof)

- A Unified CCDM user can only see the resources in the platform that he/she is entitled to see, thereby giving true multi-tenancy.

- A Unified CCDM user can only manipulate resources visible to them, by using the tools and features he/she has been authorized to use, thereby giving role-based task control.

Unified CCDM maintains a complete data model of the contact center equipment to which it is connected which is periodically synchronized with the equipment. In addition to the configuration information such as agent and skill-groups, Unified CCDM records the events logged by the equipment, such as call records, for management information and reporting.

First Steps

Overview

There are a number of different types of user:

- **Host administrator** is responsible for the whole platform and therefore has a view across all the equipment, tenants and their resources.

- **Tenant administrator** is responsible for the slice of the system assigned to them by the host administrator.

- **Tenant user** has access only to the resources and tools assigned by the tenant administrator. Several sub-classes of tenant user may be created by the tenant administrator using user groups and roles to achieve their business requirements. For example one class of user may be able to add information notices.

- **Basic user** (also known as a *Standard user*) has limited access to the system to manage one or more agent teams.

On a newly installed system the host and tenant administrators must perform their respective tasks before the tenant user is given access to the system.

Host Administrator First Steps

The Host Administrator is responsible for:

- Ensuring that the tenant equipment (peripherals) are correctly located in the tenant or Shared folders.

- Creating an administrator user for each tenant.

- Adding them to the tenant administrators group and assigning any specific roles.

Tenant Administrator First Steps

The Tenant Administrator is created by the Host Administrator and is responsible for:

- Creating a resource folder structure that maps onto the tenant's business.
- Moving the tenant's resources into the relevant subfolders.
- Creating security groups which provide the required role based access to the subfolders.
- Creating the required number of users and assigning them to the security group(s) relevant to the role of the user.

Tenant User First Steps

The tenant user (usually called just the user) is created by the Tenant Administrator. Tenants can select the following tools from the home page:

- **Information Notices;** view or manage information notices
- **Security Manager;** manage users and security groups.
- **System Manager**; manage resources (sometimes referred to as dimensions).
- **Service Manager**; view and manage teams, agent reskilling and self-skilling..

Basic User First Steps

Basic Mode (also known as *Standard Mode*) is a simplified interface that provides a simple way for supervisors to manage their teams. Select the appropriate option from the menu bar near the top of the page:

- To manage agents and agent teams select the **Agents** option.
- To quickly re-skill agents select the **Skill Groups** option.

Web Tool Commands and Browser Interaction

Supported Browsers

The Unified CCDM web application is designed for use with Internet Explorer (version 7 or later).

Disabling Popup Blockers

The Unified CCDM web application may be affected by browser or third-party popup-blocking utilities. Either disable popup blocking altogether, or exclude the domain from popup blocking.

To disable popup blocking (in other words, to enable popups) in Internet Explorer:

- Click **Tools** > **Internet Options.**

- Select the **Privacy** tab.

- At the bottom of the window, make sure the **Block pop-ups** is cleared.

- Click **OK.**

Alternatively, you can enable popups for Unified CCDM only. To do this using Internet Explorer, use Unified CCDM normally until a message displays at the top of the browser window telling you a popup has been blocked. Click on this and choose to permanently allow popups from Unified CCDM, while remaining protected against popups from other sites.

Changing Your Language

For new users, Unified CCDM recognizes supported languages from Internet Explorer.

To change your language preferences in your web browser before you first logon follow these steps:

1. Click **Tools** > **Internet Options.**

2. Click **Languages**.

3. Click **Add** to add a language to your list.

4. Use the **Move Up** and **Move Down** buttons to change a language's priority. For example, if you understand both English and French but prefer to read web pages in French, your list would contain both English and French (fr-FR), with French at the top.

To change the language settings for a user that has already accessed the system navigate to the **Settings** section of the interface using the link available in the header. From there the user locale may be selected from the list of supported languages.

Accessing Unified CCDM

Logging in

To **login** to the system:

1. Open your web browser and enter the URL address of the web server in the browser's address field. This will be in the format:

   ```
   http://<Server>/portal
   ```

   For example: `http://webserver1/portal`.

2. The security access page displays to inform the user that access to the platform is restricted to authorized users.

Note
The login banner can be changed by the administrator (for further information see section Change the System Settings).

3. Click **Agree.**

4. The Login page displays.

5. Enter your **User Name** and **Password** details and click **Login**. If the login is successful, your home page displays.

Note
Before the first time the system is used, the **User Name** for the host administrator is automatically set to **administrator**, with a blank password. A new password must be set immediately.

Note
If the web page is already open when you want to login, click **Logout**. The system displays the normal login window.

Note
If you do not perform any action on the system for twenty minutes, the system will assume you are inactive and log you out automatically.

First Time Users

The first time you access Unified CCDM you may be prompted to accept a security certificate. Accept this security certificate then proceed

After you have logged in for the first time, you may have to change your password immediately. If prompted to change your password you must do so, otherwise further access will be denied.

Note
The password field is case sensitive. If your password is 'password1' and you type 'PASSWORD1' your login will fail. If you have difficulty logging in, make sure that you have not accidentally pressed the Caps Lock key.

Note
By default, you have a maximum of three attempts to log into the system. If, after three attempts, you have not logged in correctly, your user account will be locked. If this happens, contact the administrator responsible for re-enabling it.

Note
The system automatically logs out a user when the web browser window is closed.

Logging Out

To logout of the tool, click **Logout** in the top menu. Alternatively, closing the web browser window logs you out of Unified CCDM automatically. When logging out, close your browser session to ensure that no other user can interfere with your account.

Single Sign On

The administrator may have set up Unified CCDM so that it recognizes the Windows users who are able to access it. In this case, as long as you are logged into Windows as yourself, you should not need to log in to Unified CCDM at all.

The first time you access Unified CCDM using Single Sign On (SSO) a dialog box may pop up, requesting your Windows username and password. To sign in automatically in future, you need to add the Unified CCDM website to your browser's list of local intranet sites.

To do this in Internet Explorer:

1. Click **Tools** > **Internet Options**, and select the **Security** tab.

2. Select the **Local intranet** zone and click the **Sites** button.

3. Click **Advanced** to add the Unified CCDM site to IE's list of local intranet sites.

4. Enter the URL of the Unified CCDM website in **Add this website to the zone**, and click **Add**.

5. Click **OK** when prompted until you are returned to the browser window.

Using Online Help

For security purposes the online help is only available after the user is logged in. To open online help, click the **Help** link in the top right corner of the screen. It provides:

- Instructions for using, provisioning and managing the system

- A comprehensive glossary

- Logical indexing to help you quickly find the topics you need

- Search facilities

To the left of the main panel, in which the topic text displays, there are four tabs. Click on the tab header to display the tab contents. The tabs are as follows:

- **Contents:** displays the topic list as a table of contents, to help you locate the topic you require

- **Index:** lists key words and links to the topics in which they are mentioned

- **Search:** enables you to search through all the topics for a particular word or phrase. Enter the text in the field provided and click **Go**. A list of all the topics in which the text occurs is listed. Similarly you may also use the search field displayed in the top right of the dialog window

- **Glossary:** covers and explains the terminology.

Unified CCDM User Modes

There are two modes in which Unified CCDM can be used.

- **Basic Mode** (also known as Standard User Mode) provides a simplified interface to the system that enables users to perform a limited set of agent management functions, access Information Notices, and modify their own user settings. There is no access to advanced functions such as the system or security management. Only options for which users have permission may be displayed.

- **Advanced Mode** provides users with the potential, depending on their security permissions, to:

  - Manage resources (Agent Teams, Skill Groups)

  - Manage security

  - Manage folders

  - Manage Information Notices

Advanced users can also switch between Basic and Advanced modes.

Your Home Page

After you have logged in, your personalized home page displays. Your home page is the launch pad for accessing the rest of the system.

If you are a **basic mode** (or *standard mode*) user your team management page displays. For further information about basic mode options, see section Basic Mode Options.

If you are an **advanced mode** user**,** the main central panel will display the **system management** functions you can access. For further information about advanced mode options, see section Advanced Mode Options.

The **top menu** at the top right of the screen displays further functions, which may vary depending upon the system functions you are using and the permissions granted to you:

- **Home**: returns to your homepage. Alternatively, if you are a Basic Mode user, you can use the drop-down list beside Home to go directly to any tool available to you.

- **Tools** Click to display a list of all the tools available to you. The Tools page is only available to Advanced Users. Alternatively, if you are an Advanced Mode user, you can use the drop-down list beside Tools to go directly to any tool available to you.

- **Help** Click to display this online help. It contains everything you need to understand and use the system features. For more information about using online help see section Using Online Help.

- **Settings** Click to change user or system settings. For more information about changing settings see section Settings.

- **Logout** Click to end your session. For more information about logging out, see section Logging Out.

Other options may have been provided by your system administrator. See the Customize Top Menu topic for information on how to add new options.

Basic Mode Options

After logging in in basic mode, your team management page displays. You can always return to this page by clicking **Home** on the top menu.

The following functions are available on the Home menu:

- **Agent Team Manager**: allows you to manage your agent teams.
- **Skill Group Manager**: allows you to manage your skill groups.

Advanced Mode Options

Advanced mode provides more complex reporting functionality and access to system management functions.

To switch between basic mode and advanced mode, click **Settings** > **User Settings**. Select the **Advanced Mode** check box then click **Save** and **Back**.

You can set a commonly-used tool to be your homepage using the **Default Tool** setting.

The following tools may be available (depending on your security permissions):

- **Information Notices** enables you to create and manage online notices; a messaging feature which informs and updates system users with important information.
- **Security Manager** enables you to manage security by creating and managing users and groups, their roles, which define the tasks they may perform and the customer data and system functions they may access.
- **Service Manager** enables you to view and manage individual Agent Teams and Skill Groups.
- **System Manager** enables you to provision and manage the entire system.

Note

If you think you should have access to some of these tools but cannot see them in the Tools page, contact your system administrator.

Changing Your Password

Note

This section does not apply if you log into Unified CCDM using Single Sign On (see section Single Sign On).

To change your password, click **Settings**, and then click **Change Password** on the left menu-panel. The **Change your password settings** page will be displayed.

You need to change/set your password when:

- You have logged into Unified CCDM for the first time.
- Your password has expired.
- Others know your password.

To change your password:

- Enter your Old Password.
- Enter a New Password.
- Re-enter your new password in the Confirm Password field.
- Click **Save** and then **Back**.

Note Your password must consist of at least 3 characters. There may also be other constraints, such as requiring numbers, and both lower and upper case letters. Contact your system administrator for more detail. Previously used passwords are stored in memory and cannot normally be reused.

Tip Create a secure password by choosing a memorable phrase. For example, choose your favorite proverb or line of a poem, selecting the first letters of each word in the phrase. Turn some of those letters into numbers. For example, the proverb '*a chain is no stronger than its weakest link'*, can be shortened to '*acinstiwl*', which you can then turn into a password '*AC1nst1WL*' which is easy to remember, but difficult for a hacker to crack.

The Folder Tree

Note The folder tree is only available to Advanced Mode users. Basic mode users have a simplified interface that just shows a list of the resources that are available to them.

Overview

The Unified CCDM folder tree defines the hierarchical structure of tenants and resources in the system. It is used by many of the tools available in advanced mode. The folder tree allows users to navigate the hierarchy, to view resources, and modify items, depending on the user permissions applied to the folder in the hierarchy.

Users with suitable privileges can:

- use the System Manager tool to modify the structure and contents of the folder tree (see Chapter System Administration).

- use the Security Manager tool to apply security settings to control access to sections of the folder tree (see Chapter Security Manager).

The following sections describe the general features of the folder tree. Unless otherwise stated, the features are available everywhere the folder tree appears.

Note Most users cannot access everything in the folder tree. A user can only see and modify the folders and items allowed by their user permissions. Usually, only host administrator users can see and modify the whole folder tree. Tenant administrator users can typically see and modify the items that belong to their tenant. Other users are likely to have greater restrictions.

Contents and Organization

The top of the folder tree is a root folder. This usually corresponds to the service provider. Beneath the root folder are the customers, their resources and the users who can access them.

The following types of folder can occur below the root folder:

- **Search folders.** These folders contain a number of predefined searches and are only visible to users with appropriate permissions. See section Predefined Searches for more information about predefined searches.

- **System folders**. These folders can only occur immediately below the root folder:

  - **Shared system folder**. This is a single system folder that contains resources that may be shared across all tenants. This folder can only be accessed by the Host Administrator.

  - **Unallocated system folder**. This is a single system folder that contains all the resources that are not allocated to a specific tenant or shared across all tenants. By default, this folder can only be accessed by the Host Administrator.

- **Tenant folders**. These folders can only occur immediately below the root folder. Each tenant has one top-level folder. The folder contains all the resources that belong to that tenant. Tenant folders are usually created by the Host Administrator when the system is first configured.

- **Resource folders (** or **resource filters)**, containing resources of a single type. They provide quick access to all resources of that type in a folder. Some resource types can exist at a system level or below a tenant, but some resource types can only be associated with a tenant.

- **Other folders**, which may in turn contain any of the folder types in this section except system folders and tenant folders. These may occur anywhere in the hierarchy.

Note Search folders and resource folders are only shown in the folder tree in the System Manager tool. They are not shown in the other tools.

Folder Order

At each node in the folder tree, folders are ordered as follows:

- Search folders, in alphabetical order (System Manager only).
- System folders, in alphabetical order.
- Tenant folders, in alphabetical order.
- Other non-resource folders, in alphabetical order.
- Resource folders, in alphabetical order (System Manager only).

Expanding and Collapsing the Folder Tree

Nodes in the folder tree can be expanded and collapsed using the + (plus) and **-** (minus) icons displayed next to a folder. Any folder with the + icon displayed next to it is a *parent* folder that contains subfolders or *child* folders. Click on the + icon to expand the tree at that point and display the child folders. Similarly, click the **-** icon to collapse the tree at that node and hide the child folders.

Listing Child Folders

To improve performance, if there are many child folders below a parent folder, not all of them are shown when the parent folder is expanded. The number that are shown is user configurable (**Settings** > **User Settings** > **Folder Paging Size,** see section Basic Mode Options*).* If a node contains more items than the folder paging size:

- If there are more items above the first item shown in an expanded folder, the Page Up icon is shown at the top of the contents of the expanded node. Click on **Page Up** to scroll one page further up the items.
- If there are more items below the last item shown in an expanded folder, the Page Down icon is shown at the **top** of the contents of the expanded node. Click on **Page Down** to scroll one page further down the items.

Each time the user clicks Page Down or Page Up, the items below the unexpanded node scroll down or up by the folder paging size.

Figure 1.1   Expanded Folder with More Items Below the Items Displayed
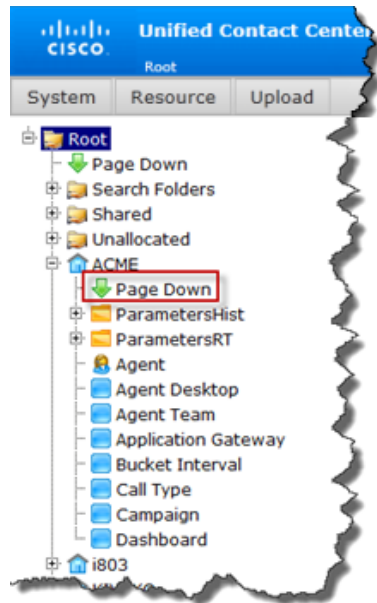
Figure 1.2   Expanded Folder with More Items Above and Below the Items Displayed
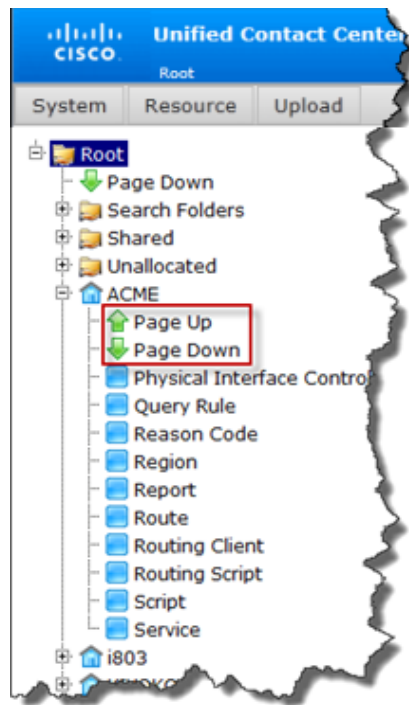
Figure 1.3   ***Expanded Folder with More Items Above the Items Displayed***
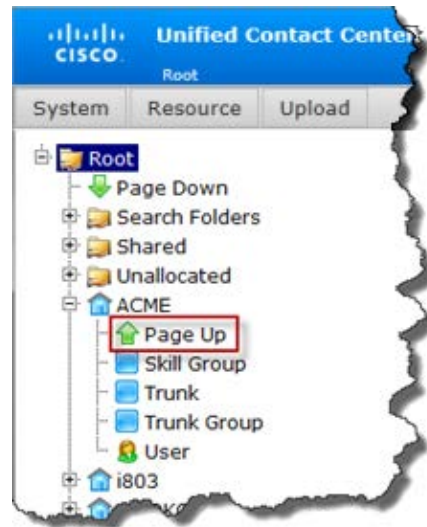
Selecting a Single Folder

When you select a single folder in the folder tree, it is shown in dark blue highlight. What happens next depends on the tool you are using and the type of folder you have selected.

- When you select a single folder in most tools, you will see a list of items in that folder with check boxes. Clicking the check box to select an item will allow you to perform a range of actions on that item, for example, editing it, moving it or deleting it.

- When you select a single folder in System Manager, you will see a summary list of the different item types and the number of each item type in that folder. Clicking an item type will display the list of items of that type in the folder.

Selecting Multiple Folders

You can select multiple folders in the folder tree in one of the two ways:

- select several individual folders by selecting each folder with **CRTL** + **Click**

- select a range of consecutive folders by selecting the first one in the range using Click as usual, and the last one in the range using **SHIFT** + **Click**.

> **Note** Even though you have selected multiple folders, some folder tree commands (for example, Delete, Create) will only apply to the first folder in a multiple selection. The main use for multiple selections is when using drag and drop to move folders (see section *Drag and Drop*).

Selection and Provisional Selection

You can make a provisional selection by hovering over another folder in the tree with the mouse, or by using the arrow keys on the keyboard (see section Keyboard Shortcuts) to move from the currently selected folder to another folder in the tree.

If there is a provisionally selected folder, it is shown in lighter blue.

The provisional folder does not become the selected folder until it is explicitly selected, either by clicking on it with the mouse (left or right click) or by pressing the SPACEBAR (see section Keyboard Shortcuts). To improve performance, the rest of the user display is not updated until the provisional folder is selected as the current folder.

Figure 1.4   Selected and Provisionally Selected Folders in the Folder Tree

Shortcut Menus

You can right click on most folders in the folder tree to get a shortcut menu. The options shown on the shortcut menu depend on the type of folder you choose. The following options may be shown:

- **Create Folder**: Create new folder below the selected folder, if you have sufficient permissions. The folder is created with a default name of **NewN**, a blank description, and inherits the permissions of the parent folder. You cannot insert a folder below the search folder or any of the predefined searches, or below a resource folder.

- **Delete Folder**: Delete the selected folder, if you have the permission to delete that folder. You will be asked to confirm the deletion. You cannot delete the root folder, the search folder, any of the predefined searches, the shared folder, the unallocated folder, or a resource folder.

- **Rename Folder**: Make the folder name available for editing. Any text you enter will overwrite the existing folder name. You cannot rename the root folder the search folder, any of the predefined searches, the shared folder, the unallocated folder, or a resource folder.

- **Refresh:** Refresh the folder tree at the selected node to show the latest information. If there is an associated Items panel display, that is refreshed too.

Note If there is no shortcut menu available for an item in the folder tree, right click does the same thing as left click. In particular, right clicking on **Page Up** scrolls up one page and right clicking on **Page Down** scrolls down one page.

Drag and Drop

You can select one or more folders in the folder tree and move them to another location in the tree using your mouse to drag and drop the selected items to a new location.

While you are dragging the folders, if it is valid to drop them at the current location, you will see a green tick beside the folders you are dragging. If you cannot drop the folders at the current location, you will see a red cross beside the folders you are dragging.

While you are dragging the folders, if you pause with your mouse over a folder that is currently collapsed, it will expand so you can see the subfolders.

When the move operation starts, you will see a message saying the items in the folder are being moved. You will see another message confirming that the move has completed. Click **OK** when you see the confirmation message.

Note When you use drag and drop to move folders and the items they contain, the usual rules for moving items of that type apply. For example, if you move some resources from one tenant to another, existing relationships may be broken, or existing resources deleted and new ones recreated. See section More About Moving Resources for more details.

Keyboard Shortcuts

You can use the following keyboard shortcuts in the folder tree:

- **INS:** insert a new folder below the currently selected folder (if the operation is supported and you have the permission to create a folder there). The folder is created with a default name of **NewN**, a blank description, and which inherits the permissions of the parent folder. You cannot insert a folder below the search folder or any of the predefined searches, or below a resource folder.

- **DEL:** display a warning message asking if you want to delete the currently selected folder (if the operation is supported and you have the permission to delete that folder). You cannot delete the root folder, the search folder, any of the predefined searches, the shared folder, the unallocated folder or a resource folder.

- **LEFT ARROW**: if the provisional selection is on an expanded node of the folder tree, collapse the node, otherwise move the provisional selection one position up the folder tree.

- **DOWN ARROW**: move the provisional selection one position down the folder tree.

- **UP ARROW**: move the provisional selection one position down the folder tree.

- **RIGHT ARROW**: if the provisional selection is on a collapsed node of the folder tree, expand the node. If not, move the provisional selection one position down the folder tree.

- **SPACEBAR**: if the provisional selection is different from the current selection, make the provisional selection into the current selection. But if the provisional selection is on the Page Up or Page Down command, action the command.

- **F2**: make the currently selected item available to be renamed.

2.   Settings

Manage Settings

Click **Settings** to display the Settings page. There are several areas you can customize in the left menu panel:

- **User Settings** enable you to change your time zone, culture, name, description and various display parameters. Advanced users may also change their homepage settings.

- **Change Password** enables you to change your password.

- **System Settings** enable users with host administrator permissions to set system options such as the login message.

- **Security Settings** enable users with host administrator permissions to set system security options such as password requirements or the default security groups created in each policy root.

- Provisioning Settings Enable users with host administrator permissions to set resource management options such as whether agent states can be traced.

- **About** enables you to see the version of Unified CCDM that is being used

Change Your User Settings

Basic Mode Options

Click **Settings** to display the Settings page. Select **User Settings** from the left menu panel. The Update settings for this user page displays.

- **Timezone:** local time region. Select a zone from the drop-down list.

- **Report Timezone**: the timezone used by reports. This setting is not used for Unified CCDM.

- **Culture:** local language. Select from the drop-down list.

- **First Name** and **Last Name:** your preferred names identifying you in Unified CCDM.

- **Email Address:** email address to which Unified CCDM may send any emails if necessary.

- **Description:** a suitable description of yourself (such as job title or departmental role).

- **Data Paging Size:** dictates the number of selected items to be displayed per page, for example, in the central Items panel of the System Manager. Numbers above 20 are not recommended.

- **Folder Paging Size:** specifies the number of folders to be displayed at one time in an expanded node of the folder tree. Low numbers reduce the time taken to generate and display the folder tree.

- **Show Default Parameter Set:** displays available parameter sets of the correct type when the user is viewing a report. This setting is not used by Unified CCDM.

Advanced Mode Options

Advanced users may access further functions. Select or overwrite the required fields and click **Save**. These fields are explained below:

- **Advanced Mode:** enables you to switch between advanced mode (selected) and basic mode. In advanced mode you will have access to the Tools homepage, whereas in basic mode, your homepage will display a predefined set of reports.

- **User Home Folder:** the folder you work in by default. This must be a folder on which you have security permissions.

- **Show Deleted Resources:** select this check box to view all deleted items you have permission to see, or clear it to view only active and pending items.

- **Default Tool:** enables you to change your homepage. Select a tool from the drop-down menu to display that tool as your homepage when you are in Advanced Mode. To see all your tools in your homepage, select **Tools View**.

- **Tools Layout:** the format of the Tools Page. You may choose between a list of tools or a table.

Click **Save** to save your settings.

Change the System Settings

Only users with sufficient permissions can access and manage system settings.

To display the Settings page click the **Settings** link and select **System Settings** from the left menu panel.

- **Product Name** field displays the name of the application.

- **Set for Language** allows you to modify the messages displayed for users of specific languages. Selecting the value **(Default Entry)** allows you to edit the

messages displayed to users accessing the application using an unconfigured language.

- **Login Message** allows you to set the message displayed to a user before the user logs into the system (this is known as the *splash screen*). By default a WYSIWYG editor is used, but by clicking on the **<>** button you can choose to work in plain text or insert your own HTML tags instead. You can remove the splash screen entirely by setting a blank message.

  - The **Message Agreement Link** field contains the text shown on the button that the user must click to proceed from the login and post login message set above to the login page. This text should be no longer than 40 characters.

- **Post Login Message** allows you to set the message displayed to a user when the user logs into the system. Again, you can remove this screen entirely by setting a blank message.

  - The **Message Agreement Link** field contains the text shown on the button that the user must click to proceed from the login and post login message set above to the login page. This text should be no longer than 40 characters.

Note The login and post login messages should not exceed six lines (about 500 characters) in the default 8pt font or three lines in 14pt font.

Note To use the WYSIWYG editor to format the login message, you must highlight the text to be formatted and use the appropriate editor function

Customize the Top Menu

The top menu is displayed at the top right of every screen. You can customise this to include your own links.

Note Changes to the top menu are system-wide and will be applied to all tenants.

Adding a Link to the Top Menu

To add a new link to the top menu:

1. In the System Settings screen, click the **Customize Top Menu** button to open the Customize Top Menu page.

2. In the Create a new menu item section:

   - **Name** Enter the text to be shown in the top menu

   - **Link** Enter the URL to link to. You can check that this is valid by clicking the **Check Link** (🔍) icon to the right of the link.

3. Click **Add**.

Editing a Link on the Top Menu

To edit an existing custom link:

1. Click **Customize Top Menu** option in the toolbar to open the Customize Top Menu page.

2. Existing links are shown in the Existing editable menu-items list. Point to one of these to bring up the **Edit** icon (🖹) and the **Delete (✖)** icon for that item.

3. Click **Edit**.

4. Change the link details as desired.

5. Click the **OK** icon (✅) to save your changes, or the **Cancel** icon (❌) to exit without saving your changes.

Note The custom link is not changed until you select Back and return to the System Settings page.

Deleting a Link from the Top Menu

To delete an existing custom link:

1. Click **Customize Top Menu** option in the toolbar to open the Customize Top Menu page.

2. Existing links are shown in the Existing editable menu-items list. Point to one of these to bring up the **Edit** icon (🖹) and the **Delete (✖)** icon for that item.

3. Click **Delete**, and then **OK** at the confirmation dialog.

4. Click **Back** to return to the System Settings page. The custom link will be removed.

Tip The custom link is not removed until you select **Back** and return to the System Settings page.

Change the Security Settings

Security settings cover all aspects of system security, from password restrictions to security groups. Typically, only a user with host administrator permissions has the right to access and manage security settings.

To change the system's security settings, click the **Settings** link. Then click **Security Settings**.

- If the **New Folder Inheritance Default** field is checked then, when creating new folders, the Inherit Permissions check box is checked by default

- **Password Format** field contains the required format for the password entered by a user. The options are:

  - **Custom:** This is for system administrators only. It requires *regular expressions* and a knowledge of *system configuration.* If you select this option a Password Expression field will appear in which to enter the required expression.

  - **Low Security:** Any string.

  - **Medium Security:** Any string between the minimum and maximum password length.

  - **Medium/High Security:** Any string between the minimum and maximum password length, which must contain lowercase, uppercase and numeric values.

  - **High Security:** Any string between the minimum and maximum password length, which must contain lowercase, uppercase, numeric values and any of the following characters: @ # $ % ^ & + = !

- **Minimum Password Length** field indicates the lowest number of characters the system will accept as valid for a password.

- **Maximum Password Length** field indicates the highest number of characters the system will accept as valid for a password.

- **Minimum Password Age (days)** field shows how long a user must wait between changing passwords.

- **Password Expiry (days)** field displays the length of time the system will accept a password before the user is requested to change it.

- **Number of previous passwords to check** field displays the number of previous passwords the system accepted for a specific user. If any one of these previous passwords is used, the user will be denied further access to the system.

- **Login attempts before lockout** field indicates the number of times a user can enter the wrong password before being locked out of the system.

- **User Folder Default Role** specifies the default folder role that a new user is given on the user folder when the Create a New Folder for This User option is checked during user creation. This is a drop-down containing a list of the folder roles available in the system. Note that you will still need to give the user the correct global roles so that they can actually use these permissions (see section The Global Security Manager for more information about creating and assigning global roles and section The Role Manager and Folder Roles for more information about creating and assigning folder roles).

- Optionally, the **User Folder Suffix** field allows you to choose a suffix which, when added to a user's name, becomes the name of the personal folder created

when the **Create a new folder for this user** option is checked during user creation. This is disabled when using single sign on.

- **Groups to create when removing inheritance** section allows you to change the groups that are automatically created when a folder becomes a policy root, and the permissions that they are assigned within that folder and its child folders. You may choose to uncheck all the groups (in which case no groups will be created automatically) or to assign them custom roles. See section Inheritance and Policy Root Folders for more information on policy roots.

> **Note** It is not currently possible to change the global roles that groups are assigned by default. The Basic User and Supervisor User groups will therefore always have the permissions of the Basic global role, and the Advanced User group will have the permissions of the Advanced global role.

Change the Provisioning Settings

Typically, only a user with host administrator permissions has the right to access and manage security settings.

To change the settings for provisioning on your system, click the **Settings** link. Then click **Provisioning Settings**.

- The **Agent State Trace Enabled** check box determines whether or not the State Trace check box on the Agent Details page can be selected. When the State Trace check box for an agent is selected, Unified CCE will capture details of every state transition made by the agent.

An individual agent's state will only be traced if the State Trace option is selected. To view the status of this feature click **Agent > Select an Agent > Advanced** tab.

> **Note** Agent State Trace must be limited due to the additional load it places on Unified CCE. Please see the *Cisco Unified Contact Center Enterprise Solution Reference Network Design Guide (SRND)* for details.

About Settings

To display the Settings page click the **Settings** link. Then click **About**.

The About This Installation page describes the version of Unified CCDM that is installed on your system.

3.   Service Management

The Service Manager provides Advanced Mode users with the ability to quickly and directly manage the service that is provided by the contact center, using tools that are also available directly to Basic Mode users. The Service Manager provides the following tools:

- Agent Team Manager, to manage agents

- Skill Group Manager, to manage skill groups and agent reskilling

Note

If you use any of these tools regularly you may wish to make the Service Manager page your default page. To do this:

- Click **Settings** and the Settings page displays.

- Click **User Settings**

- Select **Service Manager** from the Default Homepage drop-down list.

- Click **Save**.

- Click **Home**. The Service Manager displays as your homepage.

Configuring Access to the Service Management Tools

To manage agents using the Agent Team Manager or Skill Group Manager the Unified CCDM user must be associated with a related Unified CCE Person resource. This Unified CCE Person must be associated with the Supervisor Agent for the Agent Team that contains the Agents to be managed.

The Agent Team Manager and the Skill Group Manager rely on Agent Teams and their associated Supervisors being configured correctly in Unified CCDM. Once the Agent Team and the associated Supervisor Agent exist then you can create a Unified CCDM user that can use these tools. To create the user:

1. Sign in to Unified CCDM using an Administrator account.

2. Open **System Manager** and navigate to the folder containing the Supervisor Agent.

3. Open the Supervisor Agent and choose the **Person** tab.

4. Click the **Edit Person** button (green arrow).

5. Go to the **Portal** tab.

6. Select the Portal Account (this will display **None** if no user is mapped).

7. Select **Create User** to create a new user account.

8. Specify **User Name** and **Password** for the new Unified CCDM user.

9. In the group membership screen select the **Basic User** and **Supervisor** groups for default permissions at the required location.

10. Click **Save** to create the Unified CCDM user.

Agent Team Management

The Agent Team Manager tool allows supervisor agents to manage the persons and agents in their agent teams.

Each Agent must be associated with a Person, which represents an actual physical person who performs customer contact duties. A Person may be associated with more than one Agent. For example a person who alternates between two teams on different peripherals would need to be associated with two Agents, one on each peripheral. So John Smith, who uses voice equipment and email equipment will need:

*   a person record for his details

*   an associated agent record for his voice equipment

*   an associated agent record for his email equipment.

To display the Agent Team Manager in Basic Mode, click the **Agent Team Manager** menu option on the Tools menu.

To display the Agent Team Manager in Advanced Mode, from the home page, go to the **Service Manager** tool and click the **Agent Team Manager** link.

Viewing an Agent Team

To see an agent team, click on the **My Agent Team** drop-down box and select the team you wish to work with. A list of the agents in the team will be shown below the box.

The agent list shows each agent's name, their status within the system (such as Ready or Pending Active), and the date from which they have been active in the system (an **Active From Date** in the future indicates an agent who has not yet started work).

There is also an agent details icon that allows you to view and edit agent details,

and a copy icon that allows you to create a copy of an agent (for example, if you

wish to add to your team a new agent who has exactly the same skills as an existing agent).

Viewing or Editing Agents

To view or edit an agent:

1. Select an agent team from the drop-down list.

2. Click on the agent details icon. The Edit the current Agent page will open, showing you the agent's details.

3. Make any changes to the agent. Selecting a different tab (such as Supervisor or Agent Teams) will show a different set of fields. You can always go back to previous tabs.

4. Click **Save** to save your changes or **Cancel** to leave the agent's details as they were before you started editing.

Note You are unlikely to need to use the Advanced tab unless you are changing start or finish dates for an agent.

To set an agent's starting or leaving date:

1. Select an agent team from the drop-down list.

2. Click on the agent icon for the agent you wish to edit. The Edit the current Agent page will open, showing you the agent's details.

3. To set or change an agent's starting date (Active From Date) or finishing date (Active To Date), select the **Advanced** tab. You can only change the Active From Date if it is in the future – otherwise it is greyed out. To change the Active To Date, first untick the Forever box, if it is ticked.

4. To change a date, you can:

   • either use the UP and DOWN arrow keys to adjust the date and time in the date/time box

   • or click on the calendar icon beside the Active From Date or Active To Date field. A calendar popup appears.

     • To change the year, click on the drop-down arrow to select the year you want.

     • To change the month, either click on the drop-down arrow to select the month you want, or click on **Prev** or **Next** to go backwards or forwards one month at a time.

   • Select the day of the month.

5. Use the UP and DOWN arrow keys to set the time on the selected date on which the agent is starting or finishing (for example, 17:00:00 for someone leaving at the end of business hours).

6. Click **Save** to save your changes or **Cancel** to leave the agent's details as they were before you started.

Changing an Agent's Team

To change an agent's team:

1. Select the agent team to which the agent belongs from the drop-down list.

2. Click on the agent details icon (not the copy icon beside it) for the agent you wish to edit. The Edit the current Agent page will open, showing you the agent's details.

3. Click on the Agent Teams tab. The agent's current team membership is shown.

4. Select the check box for the agent team and click **Remove**.

5. You may optionally select a team from the list below and click **Add** to add the agent to that team. You can add the agent either as a member of that team by checking the Member box, or as a primary or secondary supervisor if they are a supervisor agent.

6. Click **Save.**

Adding a New Agent

To add a new agent:

Note
All agents must be associated with a person. If a person record for the new agent does not already exist on the system, you can create one as part of adding the new agent.

1. Click **New Agent** menu option. The Create a New Agent page displays.

2. Fill in the fields for each tab. All mandatory fields are marked with a red asterisk. These fields are on the Details tab. **Save** will not be enabled until all the required fields have been filled in.

3. On the **Details** tab:

   - Fill in the Agent's Name (such as BOates or Beth_Oates).

   - Give a Description of the agent (such as a job title).

   - Select a Peripheral to create the agent on (this will usually be the same peripheral that you use).

   - Choose whether to associate the agent with an existing Person, or to create a new one. A Person can have more than one agent identity if all those agents are created on different peripherals

- **Select Existing Person** Select a person from the drop-down list, or search for a specific person by typing a part of their name in the Search box. The new agent will use the details specified in that Person's Peripheral Login box to log on to their Agent Desk Setting.

- **Create New Person** Enter the first name and last (or family) name for the person, and fill in the details they will use to login to the peripheral. The person will be automatically created and associated with the agent.

Note Multiple Agents may be associated with a single Person, if all Agents involved are on different peripherals

4. In the **Supervisor** tab:

- If the agent is to be a supervisor, check the Supervisor check box.

- If the Supervisor box is checked, the agent must be associated with a Domain Account (the account they will use to log into a computer on the contact center network). Type in part of the account name, click Find and then select the correct account.

Note You cannot set up a domain account from Unified CCDM. Contact your IT department if you are uncertain of the domain account to use.

5. In the **Agent Teams** tab:

- Select an agent team for the agent to belong to. Agents may only be a member of a single team, but a supervisor can supervise multiple teams. Use the Selected Path drop-down to see agent teams in other folders.

- Click **Add** to associate the team with this agent.

- Check the Member box to make the agent a member of the team. Supervisors can supervise a team without being a member.

- If the agent is a supervisor, select a primary or secondary supervisory role for any team they are to supervise. They may or may not also be a member of this team.

6. In the **Skill Groups** tab:

- Select skill groups for the agent to belong to. Use the **Selected Path** drop-down to change folders.

- Click **Add** to add the agent to the selected skill groups.

7. In the **Advanced** tab:

Note You will probably only edit these settings to set an agent's start or finish date.

- **Enterprise Name** is the name the agent is known as within Unified CCDM
- **Agent Extension** is the internal extension number for the agent
- **Agent Desktop** allows you to specify the agent's desk settings (also called the Desk Setting)
- **Check State Trace** if you wish to let the system track the agent's state, such as whether they are logged off or talking
- Use the **Active From Date** box to set the agent's starting time and date (you may enter the date manually in day/month/year format, or select a date from the calendar)
- Use the **Active To Date** box to set the agent's leaving date

8. Check the **Create Another** check box to create another agent whose settings are identical to this agent's except for their name and login details

9. Click **Save** to create the agent, or Cancel to cancel agent creation and return to your homepage.

Adding a New Person

To add a new person:

1. Click **Create Person** option.

2. All mandatory fields are marked with a red asterisk. These fields are on the Details tab. Save will not be enabled until all the required fields have been filled in

3. In the **Details** tab:
   - **Person's First Name** (such as Janet or John)
   - **Person's Last Name** or family name (such as Smith or Black)
   - **Description** of the Person (such as a job title)
   - **Login Name** they should use to log onto the Peripheral
   - **Password** they should use to log onto the Peripheral, and confirm it

4. In the **Portal** tab:
   - Select the **None** option to present the Portal Account interface. When prompted select the **Create User** option to add a new Unified CCDM user mapped to this Person.
   - Fill in the **Login Name** they should use to log onto Unified CCDM.
   - Fill in the **Password** they should use to log onto Unified CCDM, and confirm it. Passwords may be required to be of a certain length, or to contain lower case letters, upper case letters and numbers. If you have difficulty supplying a valid password, contact your system administrator.

- You may optionally add the user to any security Groups you yourself are a member of, such as your company's Supervisors group if they will need to manage teams.

5. On the **Advanced** tab:

- Use **Active From Date** box to set the person's starting time and date (you may enter the date manually in day/month/year format, or select a date from the calendar).

- Use **Active To Date** box to set the person's leaving date.

6. Check the **Create Another** check box to create another person after saving the current one.

7. Click **Save** to create the person, or Cancel to cancel person creation and return to your homepage.

Agent Reskilling

The Skill Group Manager tool allows you to view and edit agent skill group memberships.

To display the Skill Group Manager in Basic Mode, click the **Skill Group Manager** menu option on the Tools menu.

To display the Skill Group Manager in Advanced Mode, from the home page, go to the **Service Manager** tool and click the **Skill Group Manager** link.

Note Unified CCDM limits the number of skill groups to which an agent can belong, to avoid affecting performance.

Viewing a Skill Group

To see a skill group, click on the **Skillgroup** drop-down box and select the skill group you wish to work with. A list of the agents associated with the skill group will be shown below the box. A complete list of all the agents who can be associated with the skill group (those who are on the same peripheral as the skill group) is shown below that.

The agent list shows each agent's name, their status (such as Ready or Pending Active), and the date from which they are active in the system (an Active From Date in the future indicates an agent who has not yet started work). Clicking on the **Edit** icon ( ) allows you to edit the agent.

Adding an Agent to a Skill Group

To add an agent to a skill group:

1. Select a skill group for the agent or agents to belong to.

2. Select agents to belong to the skill group using the check boxes. Use the Selected Path drop-down to see agents in other folders.

3. You can type part of an agent's name into the search box, and then click **Search** to filter the list of agents by the specified search string.

4. Click **Add** to associate the agents with this skill group

5. Click **Save** to save your changes, or **Cancel** to leave the details as they were before you started

Removing an Agent from a Skill Group

To remove an agent from a skill group:

1. Select a skill group to remove an agent or agents from.

2. In the top list, select the agents to remove from the skill group using the check boxes.

3. You can type part of an agent's name into the search box, and then click **Search** to filter the list of agents by the specified search string.

4. Click **Remove** to remove the agents from this skill group.

5. Click **Save** to save your changes, or **Cancel** to leave the details as they were before you started.

Self-Skilling

Self-Skilling is accessible through the basic mode tools menu or via the advanced mode **Service Manager** tool. Self-Skilling allows a Unified CCDM user associated with a valid Unified CCE person to update the skill groups to which they are assigned.

Adding Yourself to a Skill Group

- If your Person is mapped to more than one Agent, select which Agent you wish to re-skill using the drop-down list provided.

- Browse to the folder where the skill groups are you wish to add yourself to.

- Check the box next to the skill groups you wish to join.

- Click **Add** and they appear in the Selected Skill Groups list.

- Click **Save** to commit the changes.

Removing Yourself from a Skill Group

- If your Person is mapped to more than one Agent, select which Agent you wish to re-skill using the list box provided.

- Check the box next to the skill group you wish to remove yourself from in the Selected Skill Groups list.

- Click **Remove** and the skill group will disappear from this list.
- If you are the last person in the skill group (and removing yourself would effectively leave this skill group empty), a confirmation window appears. Click **OK** if you wish to continue or click **Cancel** to abort.
- Click **Save** to commit the changes.

4.   Information Notices

Overview

Information notices (also sometimes called system notices) are similar to a notice board or *Message of the Day* feature. Information notices are a useful way to inform all contact center staff of general information in one action and in one location, rather than having to inform each staff member individually. Notices may typically include changes to agent assignments or important customer information. Once you have logged in, if there are any current information notices that apply to you, you will see the Information Notice icon (🛈) beside the top menu at the top right corner of the screen.

Viewing Current Information Notices

To view an information notice:

1. Click the 🛈 icon beside the top menu to display the Information Notices dialog box showing the information notices available, and then click on the name of the notice you wish to read from the list. The notice text will be displayed in full.

2. Once you have finished reading the notices, click the X in the top right hand corner of the Information Notices dialog box**.**

Note

The information notices panel only displays current or valid notices. Notices which are out of date or pending are not displayed.

Advanced Mode Options

Creating an Information Notice

To **create** an information notice:

1. Click **New**. The **New System Notice** page displays.

2. Select the folder in the tree, whose users are the target audience for the new notice. The folder name will be displayed at the top of the page. Then perform the following:

   - **In the Subject** field enter a title for the notice.

   - In the **Text** field enter the text. You can format the text as required by using the editor buttons displayed above the text field. Move the mouse pointer over an editor button to see what it does. Click the Show Source (**< >**) editor button to switch between the WYSIWYG editor and plain text with HTML tags.

Note To format the information notice text, highlight the text to be formatted then click the appropriate editor button. The editor functions do not allow you to format the text as you type, for example, clicking the *I* button does not turn on italics mode for the text you type afterwards.

   - **In the Valid From** and **Valid To** fields, enter start and end dates to refine the lifetime of the notice, by clicking on the calendar icons and selecting the appropriate months and days.

   - Select the **Create Another** check box if you wish to add another notice after the creation of the current notice.

3. Click **Save**.

Note You can also create a notice by clicking on the **Create a Notice** link on the Information Notice section of the Home page.

Viewing Information Notices

When you select the **Information Notices** tool, the initial view gives a list of all information notices (expired, current and pending).

Note You can also view all information notices (expired, current and pending) by clicking on the **View Notices** link on the **Information Notices** section of the Home page.

Editing an Information Notice

To edit an information notice:

1. Select the **Information Notices** tool and in the list of information notices, click the name of the notice to be modified. The notice displays.

2. Click **Edit**. The **Edit Information Notices** page displays.

3. Make the required modifications to the notice in the fields provided, as explained for creating an information notice above.

4. Click **Save** to save your changes.

Note You can also edit a notice by clicking on the Edit Notice link on the Information Notice section of the Home page.

Deleting an Information Notice

To delete one or more information notices from the list of information notices, check the boxes by the notices you want to delete, and then click **Delete**.

To delete an information notice you are editing, select the **Delete** menu option.

Moving an Information Notice

To move an information notice:

1. In the list of information notices, check the box or boxes of the notice or notices to be moved. Click the **Move** button. The folder tree displays.

2. Select the folder to move the notice to and click **Save.**

5.   System Administration

Administrator Tasks

Overview

This section identifies the main tasks that users with tenant administrator permissions perform in Unified CCDM. Tasks do not need to be performed in the order shown below, however, this order reflects the dependency of certain item types on the existence of others.

Users with System Administrator permissions can also perform all of the tasks in this section.

Agent and Group Related Tasks

The tasks listed below pertain to agent record creation and agent groupings.

Task	Description	Where
Create Agent Desk Settings.	Agent Desk Settings associate a set of permissions or characteristics with specific agents, such as how and when calls to these agents are redirected, how and when they enter various works states, and whether they can make outbound calls. You can create a Default Desk Setting that is the set of permissions automatically assigned to all new agents unless overridden.	Manage Agent Desk Settings page

Task	Description	Where
Create Agents and Agent Supervisors. Assign desk settings to agents.	In order to use the back-end system, all prospective agents first need an account which includes a login name and password. You can designate certain agents as supervisors, allowing them to be later designated as supervisors of agent teams. You can assign different desk settings to different agents based on their needs, and, as necessary, temporarily suspend their login permissions or turn on Agent State Trace, which allows you to track their transition through various states of readiness.	Manage Agents page
Create Skill Groups and assign agents to skill groups.	A skill group is a collection of agents that share a common set of skills. Skill groups are one of the primary devices for routing and reporting. An agent can be associated with multiple skill groups and each skill group is associated with a specific media routing domain (MRD) such as voice, chat, or e-mail.	Manage Skill Groups page
Create Agent Teams. Assign agents and supervisors to teams.	Agent teams allow you to associate a set of agents with a specific supervisor. In addition to reporting uses, this association also allows Unified CCE to determine which supervisor to route an agent's Supervisor Assist requests to.	Manage Agent Teams page
Optionally, create Enterprise Skill Groups. Assign skill groups to enterprise skill groups.	An enterprise skill group is a logical grouping of skill groups, and can include skill groups from different MRDs. Through enterprise skill groups, you can generate reports that include any grouping of skill groups you desire. Unlike the Skill Groups page, the Enterprise Skill Groups page can display skill groups from all MRDs.	Manage Enterprise Skill Groups page

Contact Routing Tasks

The tasks listed below pertain to contact (voice and non-voice) routing configuration.

Task	Description	Where
Create Call Types.	A call type is a category of incoming routable task. Specific call types are associated with Dialed Numbers. In this association, each call type has a schedule that determines which routing script(s) are active for that call type at any time. Because the call type determines which routing script is run for a call, the call type defines call treatment in a Unified CCE system. There are two classes of call type/dialed number associations: voice and non-voice.	Manage Call Types page
Create Dialed numbers. Map Call Types to Dialed Numbers.	You set up a Dialed Number List, which identifies all of the phone numbers in your contact center that customers can dial to initiate contact. Dialed numbers are mapped to call types; this mapping is used to identify the appropriate routing script for each call. A typical call center requires a number of dialed number definitions. In addition to answered calls, dialed numbers also need to be set up for ring on no answer, dialed number plan entries, and for supervisor/emergency assist calls.	Manage Dialed Numbers page

Understanding System Manager

Overview

The System Manager tool creates resource folders and resources and allows the user to partition the resources in a hierarchical structure. This is achieved by the use of a Folder Tree panel located at the left hand side of the tool. The user may view the subfolders of specific folders by selecting them. Users with sufficient security permissions can access and manage the entire contents of the system via the System Manager interface. The Unified CCDM web application lets you remotely configure and administer key aspects of your Unified CCE system including:

- Agents, agent teams, skill groups and desktop settings
- Dialed numbers and call types

Note

You cannot use the System Manager to manage security in Unified CCDM. To manage security, use the Security Manager (see Chapter 6).

To display the System Manager tool, click **Tools** then click the **System Manager** header and the System Manager tools page will be displayed.

Note

If you use the System Manager tool regularly you may wish to make the Service Manager page your default page. To do this:

- Click **Settings** and the Settings page displays.

- Click **User Settings**

- Select **System Manager** from the Default Homepage drop-down list.

- Click **Save**.

- Click **Home**. The System Manager displays as your homepage.

Resources

Resource Types

Resources are the entities in the system which reports display data about. Each tenant in the system has resources assigned to them, such as *dialed numbers, agents* and so on. These resources are used on a daily basis as a part of contact center network operations. Reports show you how these resources are used. However it is important to differentiate between the types of resources used by the system. There are two different types:

- **System Resources** (users, folders and so on) are entities which can be created and managed by Unified CCDM. These resources are local to Unified CCDM, and not provisioned onto the remote equipment. Unified CCDM resources may or may not be associated with a tenant.

- **Remote Resources** (agents, dialed numbers and so on) are entities which exist on the remote equipment. Some remote resources can be created or edited in Unified CCDM and provisioned onto the remote system. Other remote resources can be accessed by Unified CCDM but cannot be created, edited or provisioned in Unified CCDM. All remote resources must be associated with a specific tenant.

System Resources

The system resources you can create and manage are:

- **Folder.** The placeholders in the system for related information. For more information about managing folders see section Managing Folders.

- **Group.** A set of Unified CCDM users who share the same security permissions. For more information about managing groups see section The Group Manager.

- **Information Notice.** The 'Message Of The Day' facility. For more information about managing information notices see section Information Notices.

- **User.** The contact center members who are permitted to access Unified CCDM. For more information about managing users see section The User Manager .

Remote Resources

The remote resources you can create and manage are:

- **Agent.** A person who handles customer contacts. For more information about managing agents see section Managing Agents.

- **Agent Desktop.** A set of permissions or settings for a particular agent, such as how much time is allocated to wrap up a call and what outbound calls can be made. For more information about managing agent desktops see section Managing Agent Desktops.

- **Agent Team.** A group of agents, managed by one or more supervisors. For more information about managing agent teams see section Managing Agent Teams.

- **Call Type.** A category of incoming routable task. The call type determines the routing script that is run for the call. For more information about managing call types see section Managing Call Types.

- **Device Profile**. A telephone template that a user can use to retain their specific phone configuration across a number of different physical phones. For more information about managing device profiles see section Managing Device Profiles.

- **Dialed Number.** The number dialed by the caller. This helps to determine the call type. For more information about managing dialed numbers see section Managing Dialed Numbers.

- **Directory Number.** The line connected to an IP Phone. For more information about managing directory numbers see section Managing Directory Numbers.

- **Enterprise Skill Group.** A logical grouping of skill groups. These may be from different media routing domains. For more information about managing enterprise skill groups see section Managing Enterprise Skill Groups.

- **Expanded Call Variable.** A variable used to pass information about calls. For more information about managing expanded call variables see section Managing Expanded Call Variables.

- **IP Phone.** An IP device with a single line used by an agent to make and receive calls. For more information about managing IP phones see section Managing IP Phones.

- **Label.** A string that is passed to a routing client for each network target. For more information about managing labels see section Managing Labels.

- **Person.** The representation of a physical person on the system. A person can be a user and/or one or more agents. For more information about managing persons see section Managing Persons.

- **Peripherals**. A connected system such as an ACD switch that routes customer phone calls to contact center staff gateway that routes customer phone calls to contact center staff. For more information about managing peripherals see section Managing Peripherals.

Note You cannot provision a peripheral through Unified CCDM, you can only change its associated user for Unified CM provisioning.

- **Service.** A Unified CCE Service, with associated Skill Groups and Peripherals. For more information about managing services see section Managing Services.

- **Skill Group.** A collection of agents with the same skills and assigned to a single media routing domain. For more information about managing skill groups see section Managing Skill Groups.

- **User Variable.** A named object that holds a value - often used in routing scripts. For more information about managing user variables see section Managing User Variables.

- **VRU Script.** A script used by the voice response unit to play a message to the caller. For more information about managing VRU scripts see section Managing Audio.

Note You cannot provision a VRU Script through Unified CCDM, you can only change its associated audio file.

You can view the details of other remote resources provisioned through Unified CCE, such as Media Routing Domain or Script, but you cannot edit these.

Resource States

Each remote resource in Unified CCDM can be in one of five states that indicate its stage in the resource life cycle (see Figure 5.1).

Figure 5.1   Resource Lifecycle States

User Interface
Only items in the Error and
Ready states can be edited
through the UI. Items in
Pending Active cannot be
edited until they have
been processed by the
provisioning system
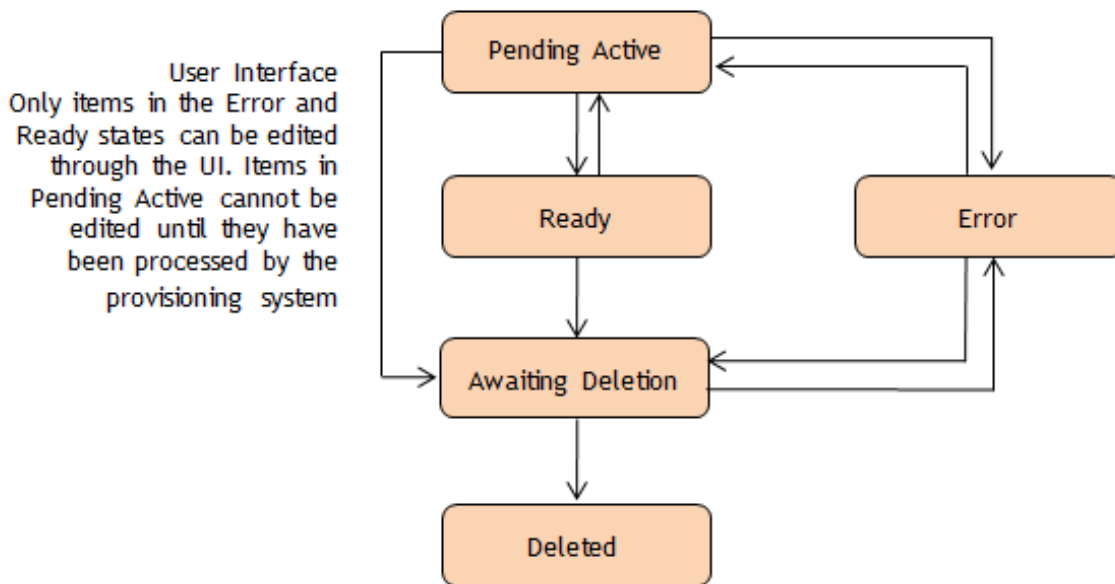
Pending Active

When a resource is successfully created or changed using the Unified CCDM web application, its state is set to Pending Active (sometimes shortened to just Pending). This indicates that while it has been provisioned successfully within Unified CCDM, it has not yet been fully provisioned on the remote system. A resource can be deleted while it is in this state.

Note A resource can be successfully provisioned in Unified CCDM even if it cannot be provisioned on the remote system. In this case it will remain in the Pending Active state.

Ready

When a resource has been successfully provisioned in Unified CCDM and pushed to the remote system its state will be set to Ready. A resource will normally remain in this state until it is deleted.

Error

Where Unified CCDM is unable to provision the resource on the remote system, it will enter the Error state. You can attempt to fix this either by editing the item, in which case its state will become Pending Active again, or you can delete it, in which case it will be set to Awaiting Deletion (also known as Delete Pending).

Awaiting Deletion

When you delete a resource through the Unified CCDM web application (or when Unified CCDM automatically deletes a resource that has reached its Active to date) it enters the Awaiting Deletion state, which means that it has been successfully marked as deleted within Unified CCDM but has not yet been deleted from the remote system.

Deleted

Once the resource has been successfully deleted from on the remote system it enters the state Deleted. Resources are never actually deleted from Unified CCDM, only set to the state Deleted, as their histories are kept for audit reporting purposes.

System Management Tools

CCDM provides the following system management tools.

Tool Name	Usage
Create a Folder	Allows you to quickly create folders in the hierarchy.
Activity Monitor	Allows you to monitor and inspect: the current status of the provisioning queue the audit history for remote resources.
System Manager	Allows you to create and modify folders and resources, to partition the resources in a hierarchical structure and (for users with suitable privileges) to manage the entire contents of the system.

All these tools are available on the tools page. System Manager is also available at any time from the drop-down on the top menu.

The Activity Monitor

The Activity Monitor allows you to view the current status of the provisioning queue and provides basic audit reporting for provisioned resources.

To start the Activity Monitor, on the **Tools** page, select the **Activity Monitor** link below **System Manager**.

Provisioning Queue Tab

Resource Displays

The Provisioning Queue tab provides two status monitors, showing a summary of provisioning information for:

- **Resources I Control**: the provisioning status of the remote resources that you are authorized to view or edit.

- **All Resources**: the provisioning status of all remote resources below the root folder, to help understand the state of the entire system.

The status monitors show real-time data that is updated every 20 seconds. Each status monitor shows:

- **Errors**: the number of resources that are currently in an error state. In the status display for Resources I Control, you can click on this number to view the details of the errors.

- **Provisioning**: the number of resources that are currently in the pending active state or awaiting deletion state. In the status display for Resources I Control, you can click on this number to view the details of these resources.

- **A performance indicator**: the overall system performance recently. This is to the right of the provisioning information and is one of the following symbols:

    - : the number of items in the provisioning queue is decreasing

    - : the number of items in the provisioning queue remains approximately constant

    - : the number of items in the provisioning queue is increasing.

- **The provisioning activity graph**: a graph showing the state of the provisioning queue at 20 second intervals over the last 15 minutes. At each time interval the items in the queue are color-coded as follows:

    - **Green**: this represents the number of items at the time of sampling that have been in the provisioning queue for less than the time specified by the P*rovisioning Warn Threshold*

    - **Orange**: this represents the number of items at the time of sampling that have been in the provisioning queue for more than the time specified by the P*rovisioning Warn Threshold* but less than the time specified by the P*rovisioning Max Threshold*

    - **Red**: this represents the number of items that have been in the provisioning queue for more than the time specified by the P*rovisioning Max Threshold.*

Note The Provisioning Warn Threshold and Provisioning Max Threshold values are configurable using the ICE System Properties tool (see the *Administration Guide for Unified Contact Center Domain Manager,* section *System Properties Manager*). The default values are:

- Provisioning Warn Threshold: 5 minutes
- Provisioning Warn Threshold: 5 minutes

Error and Provisioning Details

Click on the number of error or provisioning resources in the Resources I Control status display to see a list of resources in that state, and the details about each operation. Some of the fields in the list are hyperlinks, so you can click on these to get more information about the item. You can also click on some of the column headers to sort the items in the list by the values in that column.

The fields that are available are:

Field	Meaning	Hyperlink?	Sortable?
Date/Time	The date and time the event occurred, in the time zone of the current user.	No	Yes
Item Type	The type of resource affected by the event.	No	No
Name	The name of the resource affected by the event.	Yes	Yes
Path	The location of the item in the folder hierarchy.	No	Yes
Related Item Name	The name of the related resource associated with this event, if applicable.	Yes	Yes
Related Item Path	The location of the related item in the folder hierarchy, if applicable.	No	Yes
Last Modified by	The login name of user that last modified the item.	No	Yes
Status	The status of the event.	No	Yes
Internal Error (for Error Resources only)	A description of the error that occurred.	No	Yes

Audit Detail Tab

The Audit Detail tab shows an audit history report for provisioned resources.

The following filters are available to restrict the number of items shown in the report:

- **Path**: Click on the drop down arrow to choose the folder path for the resources you are interested in. The default folder path is your root folder.

- **Include Subfolders**: Select the checkbox to include items in subfolders in the audit history report.

- **Item Type**: Click the drop down arrow to see the available item types, then select the required items from the list. By default, no item types are selected.

- **Date from**: Select the date and time of the oldest events to display. The default value is midnight, one week ago.

- **Date to**: Select the date and time of the newest events to display. The default value is today and now.

- **Event Outcome**: Select the event outcome or outcomes you want to view. The default is to view events with both success and failure outcomes.

When you have selected your filters, click **View** to see the audit details. Some of the fields in the list are hyperlinks, so you can click on these to get more information about the item. You can also click on some of the column headers to sort the items in the list by the values in that column. The fields that are shown are:

Field	Meaning	Hyperlink?	Sortable?
Date/Time	The date and time the event occurred, in the current user's time zone.	No	Yes
Event Description	The event details.	No	No
Item Type	The type of item affected by the event.	No	No
Name	The name of the resource affected by the event.	Yes	Yes
Path	The location of the resource in the folder hierarchy.	No	Yes
Related Item Name	The name of the related resource associated with this event, if applicable.	Yes	Yes
Related Item Path	The location of the related resource in the hierarchy, if applicable.	No	Yes
Related Item Type	The type of the related resource.	No	No
Equipment	The equipment the item is located on.	No	Yes
User	The login name of the user that initiated the event.	No	Yes
Event Outcome	The result of the event (success or failure)	No	Yes

System Manager User Interface

The System Manager tool consists of the following panels:

- The standard toolbar, the breadcrumb trail (which shows the path by which the user accessed the current page) and the Information Management panels are displayed at the top of the browser.

- The *Folder Tree panel* displays on the left of the browser. It shows a hierarchical structure of all the resources the user is allowed to see based on their security permissions. There is a minimize bar containing two small arrowheads located on the right hand edge of the Folder Tree panel. Click on this bar to close the Folder Tree panel and give more screen space if the Folder Tree panel is not required.

- The *Items panel* displays in the middle of the browser. It shows the items contained in the currently selected folder. There is a minimize bar containing two small arrowheads located on the right hand edge of this panel. Click on this bar to give more screen space if the Items panel is not required.

- The *Details panel* displays on the right hand side of the browser. This panel displays the details of the most recent resource item selected in the Items panel. If you have sufficient security permissions, you can edit these details.

Folder Tree Panel

The general structure and operation of the folder tree is described in section The Folder Tree.

In System Manager, the Folder Tree panel also contains the following buttons:

- **System**: allows you to create new System resource items

- **Resource**: allows you to create new remote resource items

- **Upload**: allows you to perform bulk uploads (see section Bulk Upload of Resources).

⚠️ **Caution**

No more than 1000 of any one type of resource should be contained in any one folder. For example, a folder might have 900 Agents and 900 Agent Desktops, but should not contain 1800 Agents.

Items Panel

Description

When you select an item in the Folder Tree panel, the Items panel displays the contents of that folder. Depending on what you have selected in the Folder Tree panel, the Items panel may show a *list view*, or a *summary view*.

- If the selected item is a resource folder, the Items panel is a list view. The list view show a list of each of the items of that resource type in the resource folder. Each item has a check box beside it to allow it to be selected for a move or delete operation. Click on the item itself to display the item details in the Details panel.

- If the selected item is any other sort of folder, the Items panel is a summary view. The summary view shows a summary list of each of the resource types in that folder, and the number of each resource type. When you click on a resource type in the summary list, the Items panel displays a list view containing each of the items of that resource type in the resource folder.

> **Note**
>
> In Unified CCDM 9.0(1) and later, the summary view in the Items panel does not have a separate summary list item for *tenants*. Tenants are included in the *folders* summary item.

List View Buttons

The Items panel (list view) contains the following buttons:

- **Move**: allows you to move selected items in the list view to another location.
- **Delete**: allows you to delete selected items from the database.
- **Merge**: allows you to merge selected items into a single item (see section Merging Items).

List View Pages

To improve performance, if there are many items to show in the Items panel list view, they will be shown in pages. You can use the page numbers or the arrows at the bottom left of the Items panel to move through the pages.

> **Note**
>
> You can change the number of items shown in each page of the Items panel, list view, using **Settings > User Settings > Data Paging Size**.

List View Display Options

To filter the list of items, type part of a resource name into the search box, and then click **Search** to show just the resource items that match that text.

To refresh the list of resource items click the Refresh icon ( ).

To toggle the display names between the user-entered names and the enterprise names click the Display icon ( ).

Details Panel

Description

Use the Details panel to view or change the details and associations of the resource item that is currently selected in the Items panel (list view).

The Details panel contains a tabbed dialog, where each tab represents an operation to be performed.

Anchoring Resources

When you select a tab in the Details panel, and then change the selected item in the center Items panel (list view), the view is anchored by the Details panel so that the same tab will be viewed for the new item.

The reverse is also true: if you select an associated resource that is shown in the Details panel (for example, a skill group would be an associated resource shown for an Agent), the type of resources shown in the Items panel (list view) will also change.

Details Panel Tabs

The following sections describe the contents of some tabs that are common to several resource types.

Details Tab

The details tab is a form which contains a series of fields for information that belong to the resource, such as Name in the case of an Agent. Each field may be either mandatory, optional or read-only (that is, Unified CCDM fills it in automatically). Each field has a help text item to guide the user on its use and an indication as to whether it is mandatory or not.

Associations Tabs

Depending on the type of resource there may be one or more association tabs that allow the user to associate other resources with this resource. For example, if a skill group has been selected then there will be an Agents tab to allow the user to specify which agents are to be associated with this skill group.

Tip The associations can usually be modified from either side of the association. For example, to add an agent to a skill group you can either select the skill group and use the agents tab or select the agent and use the skill group tab.

Each association tab has two sub-panels, one above the other. The top sub-panel shows the resource items that are already associated with this resource, the bottom sub-panel shows the available resources that may be added. The contents of this available items sub-panel is filtered by the logged in user's security permissions and any other pertinent business rule. For example, if adding agents to a skill group then the sub-panel will only show those agents who are on the same peripheral as the skill group.

The user may move resource items between the top and bottom sub panels in order to get the required associations.

Advanced Tab

Depending on the type of resource there may also be an advanced tab. This shows information that is normally set by the system but may be overridden by the user.

History Tab

Note This tab is only shown for remote resources, and only after they have been created in Unified CCDM. It is not shown for a System resource, or when a remote resource is first created.

The history tab shows audit information for the resource.

Where an event involves another resource, for example adding an agent to a skill group, the resource is linked to in the description. If a drop-down arrow is shown beneath an event, you can click on it for more information (such as the user who performed the event). A *Request* event indicates a change made using Unified CCDM's user interface; an *Execution* event indicates that the requested changes were successfully made on Unified CCE. Success or failure of the event is shown by a green tick or red cross.

If the audit history for a resource is long, you can use the Edit Filter link to show only certain events, such as unsuccessful change attempts.

Status Tab

Note This tab is only shown for remote resources, and only after they have been created in Unified CCDM. It is not shown for a System resource, or when a remote resource is first created.

The status tab shows the current status of the resource and its related resources. This enables you to see whether any problem with a resource originates with that resource or with its related resources. For example, when creating an Agent, if it enters the Error state that might indicate a problem with provisioning the related Person.

Purging Resources

If a remote resource has been in the Pending Active state for a long time or is in the Error state (see section Resource States), you can click **Purge** in the Status tab to delete the resource and break any relationships with other resources. The resource will be re-imported into Unified CCDM on the next import cycle.

Managing Folders

Creating a Folder

To create a folder (and specify all the folder properties):

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the new folder.

2. In the Folder Tree panel, click **System**, and then click **Folder**.

3. In the **Name** field enter a name for the new folder.

4. In the **Description** field enter any explanatory text for the folder, if required.

5. If required, uncheck the **Inherit Permissions** check box to turn this folder into a policy root that does not inherit security permissions from its parent folder.

6. Select the **Create Another** check box if you wish to create further folders at the same point in the tree structure.

7. Click **Save** to save the new folder in the tree.

To create a folder (using the default values):

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the new folder.

2. Create the folder in one of the following ways:

    • Press the **INS** key on the keyboard.

    • Right click at the position where you want to create the new folder and select **Create Folder.**

3. A new folder is created with the following default values:

    • **Name: New** followed by a unique number

    • **Description:** no value (left blank)

    • **Permission:** inherit permissions from the parent.

4. Enter a new name to replace the default name if required.

Note

To change the security permissions for the folder, you need to use the Role Manager tool. See section The Role Manager and Folder Roles for more information.

Tip

In addition to creating folders one at a time, you can also bulk upload folders that were previously saved to a Comma Separated Values (CSV) file. See section *Bulk Upload of Resources* for further information.

Bulk Loading Folders

In addition to creating folders one at a time, you can also bulk load folders previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Renaming a Folder

You can rename a folder in one of the following ways:

• In **System Manager**, select the folder in the Folder Tree panel and press **F2** on the keyboard.

• In **System Manager**, right click on the folder in the Folder Tree panel and select **Rename Folder**.

You can use either of these methods to rename tenants as well as folders.

Moving a Folder

To move a folder:

Method 1 – Using Drag and Drop

1. In **System Manager**, in the Folder Tree panel, select the folder or folders you want to move (see section Selecting Multiple Folders to learn how to select more than one folder).

2. Drag and drop the selected folders to the new location (see section Drag and Drop for more information about drag and drop in the folder tree).

Method 2 – Using the Move Button

1. In **System Manager**, in the Folder Tree panel, select the folder that contains the folder or folders you want to move. The Items panel displays a list of the resource types contained in that folder.

2. In the Items panel click on **Folders** The Items panel changes to a list view showing the folders in this location.

3. Check the box or boxes of the folder or folders to be moved.

4. Click the **Move** button.

5. The Move the Current Items page will be displayed, showing the folder tree.

6. In the folder tree, select the location to move the folder or folders to.

7. Click **Save.**

Note If the folder is moved to a different tenant then any remote resources it contains will be marked as deleted and recreated under the new tenant. See section *More About Moving Resources* for more information about the effects of this.

Deleting a Folder

Note If the folder to be deleted contains resources, you must move them to another location before you can delete the folder. This includes deleted resources, which can be shown by selecting **Settings > User Settings > Show Deleted Resources**.

To delete a folder:

Method 1 – Using the Folder Tree

1. In **System Manager**, in the Folder Tree panel, select the folder or folders you want to delete (see section Selecting Multiple Folders to learn how to select more than one folder).

2. In the Folder Tree panel, either press the **DEL** key on the keyboard, or **right click** to see the shortcut menu, and select **Delete Folder.**

3. In the Delete Folder dialog, select **OK**. The selected folders and any subfolders will be deleted.

Method 2 – Using the Delete Button

1. In **System Manager**, in the Folder Tree panel, select the folder that contains the folder or folders you want to delete. The Items panel displays a list of the resource types contained in that folder.

2. In the Items panel click **Folders.** The Items panel changes to a list view showing the folders in this location.

3. Check the box or boxes of the folder or folders to be deleted.

4. Click **Delete**.

5. In the Delete folder dialog, select **OK**. The selected folders and any subfolders will be deleted.

> **Note** You may receive the message "WARNING: This folder [/path] has a direct mapping to the remote equipment…". Deleting the folder will result in a change to the importer's logic surrounding the placement of new resources. Please ask an administrator or refer to the *Administration Guide for Cisco Unified Contact Center Domain Manager*, section *Equipment Mapped Folder*s.

The folder may contain resources that are not visible to you. If so, you will be prompted to find an administrator to move these resources elsewhere.

Managing Resources

Creating a Resource Item

To create a new resource item:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the new resource.

   - To create a System resource item, click on **System**, and then select the type of resource you want to create from the drop-down list.

   - To create a remote resource, click on **Resource**, and then select the type of resource you want to create from the drop-down list.

2. A new page will be displayed. The contents of this page depend on the resource that is being created. Fill in the details and press **Save** to confirm or **Back** to cancel the operation.

3. You will be returned to the System Manager and the new resource item will appear in the resource item list in the Items panel.

Note System resources can be created anywhere in the folder tree, except below the Search Folders node, but Remote resources must be created below a tenant.

Viewing Resource Items

Method 1 – Using the Summary View in the Items Panel

You can view the resources of a particular resource type in a folder by selecting the resource type from the Items panel, summary view, as follows:

1. In **System Manager**, in the Folder Tree panel, click on the folder that contains the resources you want to view. The Items panel displays a summary view, showing a list of the resource types contained in the folder. If the Items panel was minimized then it will automatically be opened to display the summary view.

2. In the Items panel, click on the resource type you want to view. The Items panel changes to a list view showing a list of the resources of that type in this location.

Method 2 – Using a Resource Filter in the Folder Tree

You can also view the resources of a particular resource type in a folder by selecting the resource type filter from the Folder Tree panel, as follows:

1. In **System Manager**, in the Folder Tree panel, go to the folder that contains the resources that you want to view, and click on the resource filter for the type of resource you want to view. The Items panel displays a list view showing the resources of that type at that location. If the Items panel was minimized then it will automatically be opened to display the list view.

Selecting Resource Items

There are two ways to select resource items from a list view in the Items panel, depending on the action you want to take next.

- **To select one or more resource items** to move or delete (or to merge, if applicable), select the check boxes to the left of the resource item.

- **To view or edit the properties of a single resource item**, click on the name of the resource item. The properties of the resource item will be shown in the Details panel.

Moving Resource Items

1. In **System Manage**r, in the Folder Tree panel, select the location that contains the resource or resources you want to move.

2. If you selected a resource filter from the Folder Tree panel then the Items panel shows a list view showing the resources of that type at that location.

3. If you selected any other folder from the Folder Tree panel, the Items panel shows a summary view, showing the resource types at that location. In this case, click on a resource type to see the list of resources of that type.

4. Check the box or boxes of the resource or resources to be moved.

5. Click the **Move** button.

6. The Move the Current Items page will be displayed, showing the folder tree.

7. In the folder tree, select the location to move the item or items to.

8. Click **Save** to begin the move operation.

Note To move a resource, you need the appropriate permissions to manage the resource type, and to access the source and destination folders. The resource inherits the security defined for the new location.

Note When a remote resource is moved to a different tenant, the resource is marked as deleted at its old location and recreated under the new tenant. See section More About Moving Resources for more information about the effects of this.

Deleting Resource Items

To delete one or more resources items:

1. In **System Manage**r, in the Folder Tree panel, select the location that contains the resource or resources you want to delete.

2. If you selected a resource filter from the Folder Tree panel then the Items panel shows a list view showing the resources of that type at that location.

3. If you selected any other folder from the Folder Tree panel, the Items panel shows a summary view, showing the resource types at that location. In this case, click on a resource type to see the list of resources of that type.

4. Check the box or boxes of the resource or resources to be deleted.

5. Click the **Delete** toolbar button and a confirmation dialog will be displayed.

6. Click **OK** button to start the delete operation.

More About Moving Resources

This section contains additional information for users who need to understand more about moving resources.

Note For detailed information about moving resources, see the information about equipment mappings in the *Administration Guide for Cisco Unified Contact Center Domain Manager*.

Moving a Resource to a Different Tenant

When a resource is moved out of a tenant, the resource is no longer owned by that tenant. The original resource is deleted and a new resource is recreated at the new location. Old audit data relating to the resource is not visible to the new owner. No changes are performed on the remote equipment during this change.

Moving Remote Resources Owned by Remote Tenants

In Unified CCE the following types of resource can belong to a Remote Tenant ("Customer Definition"):

- Dialed Number
- Call Type
- Label
- Network VRU Script
- Scheduled Target
- Routing Script

Unified CCDM automatically manages which resources belong to which Remote Tenant according to where they are located in the folder tree. A resource which is located anywhere under a Remote Tenant mapped folder is associated with and belongs to that Remote Tenant.

If a resource is moved out of a Remote Tenant folder then the user is prompted for confirmation. If the user continues, the resource is disassociated from the Remote Tenant on the Unified CCE, and deleted and recreated at the new location.

When a resource is moved into a Remote Tenant mapped folder, an association to that Remote Tenant is created on the Unified CCE.

If the resource is referenced by a customer-specific Unified CCE script or has a membership to any other items which have a Remote Tenant mapping then it cannot be moved to another Remote Tenant. For example, you cannot move a label out of a folder which has a Remote Tenant mapping if the label is referenced by a script which has a Remote Tenant association. To move the label, first remove it from the script or make the script visible to all customers using the Unified CCE Script Editor.

Provisioning of Scheduled Targets is not supported, so any move which requires a change of Remote Tenant will not be allowed. Likewise if a Routing Script move

results in a change of Remote Tenant ownership and Script Provisioning is disabled in Cluster Configuration, the move operation will be aborted.

Resources owned by Remote Tenants that do not have a folder mapping will not have their Remote Tenant ownership changed unless they are moved under a folder with a Remote Tenant mapping.

Moving Resources Using AW tools

If the ownership of a resource is changed outside Unified CCDM, by using the Admin Workstation (AW) and changing the Customer Definition ID, the change will be imported into Unified CCDM on the next import cycle.

This change will disable the resource at the old location and create a new instance of the resource under the new tenant.

Managing Tenants

Managing Tenants Overview

What is a Tenant?

A tenant represents a real world organization which has been configured as a customer definition in Unified CCE. For each customer definition created in Unified CCE (a remote tenant), a corresponding tenant can be created in Unified CCDM. Just as Unified CCE enforces telephony isolation between tenants, visibility and management of tenants is controlled within Unified CCDM via the security model.

The isolation of each tenant within Unified CCDM means that a tenant folder does not inherit the permissions and properties of the Root folder. Each tenant folder has an individual set of security permissions and user groups. While users who are members of the customer organization that the tenant represents will need access to view and manage resources within a tenant, only system wide or host administrators should be given access to manage the tenants themselves.

Note Tenants cannot be created or deleted in Unified CCDM. They are set up using the Integrated Configuration Environment (ICE) Cluster Configuration tool. See the *Installation and Configuration Guide for Cisco Unified Contact Center Domain Manager* for more details.

What is a Prefix Rule?

A prefix rule is a rule which is used by Unified CCDM to move remote resources to a specific folder based on a naming convention or taxonomy. Prefix rules are matched against the Internal Name (Enterprise Name) of an item.

When remote resources such as Agents, Call Types and Dialed Numbers are first imported into Unified CCDM they are placed in a default location based on the following rules:

- If Unified CCDM can determine the tenant which owns the item from information stored in Unified CCE then the item will be placed in the root of the owning tenant.

- If Unified CCDM cannot determine the tenant which owns the item from information stored within Unified CCE then the item will be placed in the corresponding 'equipment' folder under the Unallocated folder. The Unallocated folder contains an equipment folder for each Unified CCE which is configured for use with Unified CCDM.

Using prefix rules to automate the movement of remote resources reduces the administrative overhead of manually moving items which are imported into Unified CCDM from Unified CCE which can be significant for large systems with complex folder structures.

The movement of items according to prefix rules is carried out by a scheduled process which runs overnight.

If a resource which matches a prefix rule is manually moved to a location within the same tenant or a to location in the Unallocated folder, the resource will be moved back to the location defined by the rule the next time the prefix management process runs unless the rule is disabled or deleted.

Creating a Prefix Rule

To create a prefix rule for a tenant do the following:

1. In System Manager, in the Folder Tree panel, select the folder containing the tenant you want to create a prefix rule for. The Items panel displays a list of the resource types contained in the folder.

2. Select **Folder** (at this level tenants are just another type of folder). The Items panel changes to a list view showing each of the folders and tenants at this location.

3. Click on the name of the tenant. The tenant details are displayed in the Details panel.

4. Click **Prefixes** tab. Any existing prefixes associated with the selected tenant display in a table.

5. Click **Add New Row** (+) to add a prefix.

6. Fill in the fields as follows:

    - In **Prefix** field enter the new prefix that will be used to match against resource names. The '%' character is used to match against zero or more occurrences of any character.

        For example, the prefix '`%.SAL.ENG.%.ag`' would match:

        > BOS.SAL.ENG.JohnSmith.ag

        > CHI.SAL.ENG.SamirPatel.ag

It would not match:

>> BOS.SAL.SPA.JohnSmith.ag

>> BOSSAL.ENG.JohnPatel.ag

By default the rules are case insensitive, unless case sensitivity was enforced in the database management system when Unified CCDM was installed.

- From **Type** drop-down list, select the remote resource type that the rule will apply to.

- In **Priority** field enter a unique numerical value (0 - 9999). The priority value must be unique among prefix rules within the tenant. If a resource matches more than one rule for its type, the rule with the highest value priority number will take precedence.

- To enable the prefix, select **Enabled** check box.

- Click in the **Path** field to display the folder tree, and then select the destination folder for matching resources.

7. Click **Submit** to create the prefix rule.

Editing a Prefix Rule

To edit a prefix rule for a tenant do the following:

1. In **System Manager**, in the Folder Tree panel, select the folder containing the tenant with the prefix rule you want to edit. The Items panel displays a list of the resources contained in the folder.

2. Select **Folder** (at this level tenants are just another type of folder). The Items panel changes to a list view showing each of the folders and tenants at this location.

3. Click on the tenant you want to edit. The tenant details are displayed in the Details panel.

4. Click the **Prefixes** tab. Any existing prefixes associated with the selected tenant display in a table.

5. Click on a prefix to select it.

6. Click **Edit selected row** (✏) at the bottom of the table to edit the selected prefix rule.

7. Amend the required field(s).

8. Click **Submit** to finish editing the rule.

Viewing a Prefix Rule

To view a prefix rule for a tenant do the following:

1. In **System Manager**, in the Folder Tree panel, select the folder containing the tenant with the prefix rule you want to view. The Items panel displays a list of the resources contained in the folder.

2. Select **Folder** (at this level tenants are just another type of folder). The Items panel changes to a list view showing each of the folders and tenants at this location.

3. Click on the tenant you want to edit. The tenant details are displayed in the Details panel.

4. Click the **Prefixes** tab. Any existing prefixes associated with the selected tenant display in a table.

5. Click on a prefix to select it.

6. Click **View selected row** ( ) at the bottom of the table to view the selected prefix rule.

7. If there is more than one prefix rule for the tenant, you can use the < and > symbols at the bottom left corner of the dialog box to view the other prefix rules.

8. Click **Close** to finish viewing the rule.

Deleting a Prefix Rule

To delete a prefix rule for a tenant do the following:

1. In **System Manager**, in the Folder Tree panel, select the folder containing the tenant with the prefix rule you want to delete. The Items panel displays a list of the resources contained in the folder.

2. Select **Folder** (at this level tenants are just another type of folder). The Items panel changes to a list view showing each of the folders and tenants in this location.

3. Click on the tenant you want to edit. The tenant details are displayed in the Details panel.

4. Click the **Prefixes** tab. Any existing prefixes associated with the selected tenant display in a table.

5. Click on a prefix to select it.

6. Click **Delete Selected Row** ( ) at the bottom of the table to delete the selected prefix rule.

7. Click **Delete** to confirm the deletion of the rule.

Prefixes and Multi-tenanted Environments

When more than one tenant shares the same Unified CCE environment, resources may be shared between them. The host administrator must ensure that different prefix rules are used for each tenant that shares the same Unified CCE environment.

If a resource matches prefix rules on more than one tenant on the same Unified CCE equipment, the tenant that is ordered first alphabetically within Unified CCDM will 'own' that shared resource and the movement of that resource. Rules configured for subsequent tenants on the same equipment will not be applied.

If resources are moved between different tenants on the same Unified CCE equipment, any prefix rules that applied to the resource on the original tenant will not apply until the resource is moved back to the previous tenant or the Unallocated folder. This is because a prefix rule only applies within the scope of the tenant for which it is defined and the Unallocated folder.

Managing Persons and Agents

Managing Persons

Overview

You can use System Manager to create, edit, and delete individual persons, and to define their access to Unified CCDM (if any).

What is a Person?

Each person item represents a single physical person who handles customer contacts. This person may be associated with a user account on Unified CCDM, or with one or more Agents.

Note To associate a person with more than one Agent, each Agent must be on a different peripheral.

Note Persons may be created on multiple pieces of equipment. Common properties will by default be inherited from those entered on the Default Details tab unless specifically over-written using the equipment tab.

Creating a Person

To create a person:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the person.

2. In the Folder Tree panel, click **Resource**, and then click **Person**.

3. Enter a first name, last name, login name and password for the person. Names can be up to 32 characters long, and must consist of letters, numbers, underscores and periods only.

4. On the equipment tab select the **Unified CCEs** and **Unified Communications Managers** to which the person should be added, specifying any equipment specific configuration.

5. Complete fields as described in the Persons fields table below. Active from and to dates can be set in the **Advanced** tab.

6. Click **Save**.

> **Note** Once created, a Person's Unified CCDM account details cannot be edited via the Person. You must edit the user directly. A Person cannot be linked with an existing Unified CCDM user account.

Bulk Loading Persons

In addition to creating agents one at a time, you can also bulk load agent records previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Changing a Person's Password

To change a person's password:

1. In **System Manager**, navigate to the folder containing the person you want to update, and view the persons in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, click on the person you want to edit. The details of this person are displayed in the Details panel.

3. On the **Default Details** tab, check the **Reset Password** check box.

4. Enter a new password and confirm.

5. Click **Save**.

Deleting a Person

To delete one or more persons:

1. In **System Manager**, navigate to the folder containing the person or persons you want to update, and view the persons in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel check the box or boxes of the person or persons to be deleted.

3. Click **Delete**.

4. In the Delete Person dialog box, select **OK**. The person or persons will be deleted.

All agents associated with those persons will also be deleted.

Note

Person Fields

Field	Description	Entry	Default	Required?
Default Details Tab				
First Name	The person's first name.	Up to 32 characters.	Null	Yes
Last Name	The person's last name.	Up to 32 characters.	Null	Yes
Description	A description of the person.	Up to 255 characters.	Null	No
Login Name	A unique login name for the person to allow them to login to the peripheral. Note: The Unified CCE database is case-insensitive in determining whether an agent login name is unique - for example, it considers "joe_smith" and "JOE_SMITH" to be the same. Further, agent login to agent desktop software (such as CTI OS) is not case-sensitive.	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Null	Yes
Password	The password that the person will use to log in to the portal.	Unique. At least five letters long. Longer passwords, including numbers and other characters, may be required. Ask your system administrator for details.	Null	Yes

Field	Description	Entry	Default	Required?
Confirm Password	The same as for the Password field. This ensures that the person is not prevented from logging in by typographical errors made when setting his or her password.		Null	Yes
Equipment Tab				
Unified CCE	Check this box to create the associated person onto an associated Unified CCE. Once selected you must choose the Unified CCE to add the person to.	Check box to select, and then check the required Unified CCE equipment. Click on the ⬜ icon to edit the login details for the equipment.	Checked	No
Unified Communications Manager	Check this box to create the associated person onto an associated Unified Communications Manager. Once selected you must choose the Unified Communications Managers to add the person to.	Check box to select, and then check the required Unified Communications Manager equipment. Click on the ⬜ icon to edit the login details for the equipment.	Unchecked	No
Portal Tab				
Portal Account	Click this link to show the Choose a User dialog box which can be used to associate the person with a Portal user account. It is advantageous for supervisors to have a Portal account in order to manage their teams.	Hyperlink	None	No

Field	Description	Entry	Default	Required?
Portal Tab > Choose a User dialog box				
Choose a User option button	The kind of user to associate the person with. **None**: no user is associated with this person. **Create User**: a new user is associated with this person. **Existing User**: an existing user is associated with this person.	Select one of the options.	None	Yes
Create User option > Login Name	The unique name of the Portal user account. This can be the same as the login name for WebView reporting, or that for the peripheral.	Unique. Up to 50 characters, excluding any characters in the following list: / : ? ; & " = + ! $ * > < | ' { } ( ) Must begin with a letter or number.	Null	Yes
Create User option > Password	The password that the user will use to log in to the system.	Unique. At least five letters long. Longer passwords, including numbers and other characters, may be required. Ask your system administrator for details.	Null	If creating a new user.
Create User option > Confirm Password	The same as for the Password field. This ensures that the user is not prevented from logging in by typographical errors made when setting his or her password.	Enter password confirmation, and then >> to continue to User's Groups dialog box.	Null	If creating a new user.

Field	Description	Entry	Default	Required?
Create User option > User's Groups Dialog box	Allows you to assign the user to one or more security groups, such as the Supervisors group. You can only assign a user to groups you have permission to modify.	If required, click **Add** then select security group from folder tree. Repeat to add user to more groups. Click **Save** to save details and create user.	None	No
Existing User option	Associates the person to a Portal user account that already exists.	Find and select the user in the folder tree that is displayed. Then click the **>>** button to continue to User's Groups dialog box User's Groups dialog box.	None	If selecting an existing user.
Existing User > User's Groups dialog box	Allows you to assign the user to one or more security groups, such as the Supervisors group. You can only assign a user to groups you have permission to modify.	If required, click **Add** then select security group from folder tree. Repeat to add user to more groups. Click **Save** to save details and amend user's security groups.	None	No
Advanced Tab				
Active From Date	The date from which the person will be active in the system.	Select date from calendar.	Current date	Yes
Active To Date	The date after which the person should be deleted from the system.	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Managing Agents

Overview

You can use System Manager to create, edit, and delete agents and supervisor agents, and to define agent properties such as passwords, skill group associations, and desk settings.

What is an Agent?

An agent is someone who handles customer contacts. In Unified CCE, each agent can be a member of one or more skill groups. You can group agents into agent teams, which associate each with a specific supervisor or supervisors.

Each agent record must be associated with a Person. During agent creation, you can choose either to associate the agent with an existing person, or to create a new person for that agent. Multiple agents can be associated with a single person, should it be necessary (for example, someone who provides cover for teams on different peripherals will need to be represented by a separate agent account on each peripheral used).

Note In order to use non-voice applications agents must be enabled for non-voice use via the administration interfaces for these multi-channel applications. Thus, while you can create all of your new agent records using Unified CCDM, you will need to use the administration interfaces of these non-voice applications to configure agents for their use.

What is a Supervisor Agent?

A supervisor agent is an agent, often with a user account on Unified CCDM, who can view reports about and administer specific agents and agent teams. While a supervisor agent does not have to be assigned to supervise a specific team, an agent must be a supervisor agent to supervise a team.

A team supervisor may be a *primary* or *secondary* supervisor. A team may have any number of secondary supervisors, but only one primary supervisor.

You can define an agent to be a supervisor agent by checking the Supervisor check box.

Note When an agent is set to be a supervisor agent, if the associated Person has a Unified CCDM user account, that user should be added to the Supervisors security group, which allows users to edit agents and agent teams.

Creating an Agent

To create an agent:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the agent.

2. In the Folder Tree panel, click **Resource**, and then click **Agent**.

3. Enter a Name, and select a Peripheral and Person to associate the agent with. You can choose either to associate the agent with an existing Person, or to create a new Person for that agent as follows:

   - **Select Existing Person.** Select a person from the drop-down list, or search for a specific person by typing a part of their name in the Search box. The new agent will use the details specified in that Person's Peripheral Login box to log on to their Agent Desk Setting.

   - **Create New Person.** Enter the first name and last (or family) name for the person, and fill in the details they will use to login to the peripheral. The person will be automatically created and associated with the agent.

4. Complete fields as described in the Agents fields table below. Active from and to dates can be set in the **Advanced** tab.

5. Click **Save**.

Once you've created an agent, you can assign that user as the member of an Agent Team, and to one or more Skill Groups.

Note Multiple Agents may be associated with a single Person, if all Agents involved are on different peripherals.

Note The peripheral login details cannot be edited once the agent has been created.

Bulk Loading Agents

In addition to creating agents one at a time, you can also bulk load agent records previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Adding an Agent to a Team

You can use the Agent Teams tab to change the team an agent is a member of and, in the case of a supervisor agent, to set the agent as primary or secondary supervisor for one or more teams.

Note A supervisor agent does not need to be a member of a team to supervise it.

To add an agent to a team as either a supervisor or a member:

1. In **System Manager**, navigate to the folder containing the agent you want to update, and view the agents in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, click on the agent you want to add to a team. The details of this agent are displayed in the Details panel.

3. In the Details panel, click on the **Agent Teams** tab.

Shown in the upper box is a list of teams the agent is currently assigned to, and shown in the lower box is a list of teams available in the current folder. You may see teams in other folders using the Selected Path drop-down folder list. The dates between which each team is active are displayed, as is the primary supervisor for that team.

4. Select teams in the lower box and click on the **Add** button to add the agent to them. They will automatically be moved into the upper box.

5. Check the **Member** box if the agent is to be a member of the team. This box should be checked in most cases.

Note   An agent cannot be a member of more than one team, though a supervisor can supervise multiple teams.

- If the agent is a supervisor agent, you may choose to assign them as a supervisor to that team. Select **Primary Supervisor** or **Secondary Supervisor** from the drop-down list. A team can have multiple secondary supervisors but only one primary supervisor.

Note   If you replace an existing primary supervisor, the replaced supervisor will automatically become a secondary supervisor for that team.

- You can remove the agent from a team by selecting the team (or teams) in the upper box and clicking on the **Remove** button.

6. Click **Save**.

Editing an Agent

To edit an agent:

1. In **System Manager**, navigate to the folder containing the agent you want to edit, and view the agents in that folder using the Items panel list view.

2. In the Items panel, click on the agent you want to edit. The details of this agent desktop are displayed in the Details panel.

3. In the Details panel, click on the appropriate tab and make the desired changes.

Note

If you select the Person tab and edit the details for the associated person, then the existing person record is updated when the agent changes are saved.

4. Click **Save**.

Deleting an Agent

To delete one or more agents:

1. In **System Manager**, navigate to the folder containing the agent or agents you want to delete, and view the agents in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the agent or agents to be deleted.

3. Click **Delete**.

4. In the Delete Agent dialog box, select **OK**. The agent or agents will be deleted.

Note

Deleting an agent or agent supervisor will automatically remove that agent from any associated teams or skill groups, including multi-channel skill groups. Deleting an agent or agent supervisor does not delete the associated person.

Agent Example

ExampleCorp has ten agents in its New York contact center, and five in San Francisco. These agents are to be divided into three teams.

First, ExampleCorp creates two teams (Green and Blue) in New York, and one (Red) in San Francisco. Then it creates five Persons in San Francisco and ten Persons in New York, creates an Agent associated with each, and adds each Agent to a team.

ExampleCorp wants the two teams in New York to be supervised by the same senior supervisor agent. ExampleCorp therefore edits this agent to make her into a supervisor agent, and adds her as a Primary Supervisor to both teams. An agent can only be a member of a single team, however this supervisor supervises the Blue Team without being a member of it.

The user account of the Person associated with this supervisor agent is added to the ExampleCorp_Supervisors user group.

A primary supervisor is also assigned to the Red Team.

ExampleCorp then assigns secondary supervisors. It decides that the senior supervisor agent in New York should also be a secondary supervisor of the Red Team in San Francisco. Since it is possible to have any number of secondary supervisors for each team, this does not prevent them assigning a San Francisco agent as secondary supervisor to this team as well.

See Figure 5.2 for a diagram of this scenario.

Figure 5.2   Agent Teams Example

Agent Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the entry. This may be the same as the login name, last name or first name fields. Your company may specify a convention for this field (such as <first name>_<last name>) to make it easier to identify agents.	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Null	Yes
Description	A description of the agent.	Up to 255 characters.	Null	No
Peripheral	The peripheral to be used for the agent.	Select from list.	Default Peripheral	Yes

Field	Description	Entry	Default	Required?
Create New Person or Select Existing Person option (only shown when creating a new agent)	The kind of person to associate this agent with. **Create New Person**: The agent record is for a new employee, or one who has not previously existed as a Person within Unified CCDM. **Select Existing Person**: The person to be associated with this agent record already exists within the system, for example if the Person record for a new employee was created before it was clear which peripheral they would be using.	Select one of the options, and then complete the remaining fields for that option as shown below.	Create New Person	Yes
Create New Person > First Name	The person's first name.	Up to 32 characters.	Null	Yes
Create New Person > Last Name	The person's last name.	Up to 32 characters.	Null	Yes
Create New Person > Login Name	A unique login name for the person to allow them to login to the peripheral. Note: The Unified CCE database is case-insensitive in determining whether a login name is unique - for example, it considers "joe_smith" and "JOE_SMITH" to be the same. Further, agent login to agent desktop software (such as CTI OS) is not case-sensitive.	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Null	Yes

Field	Description	Entry	Default	Required?
Create New Person > Password	The password that the person will use to log in to the system.	Unique. At least five letters long. Longer passwords, including numbers and other characters, may be required. Ask your system administrator for details.	Null	Yes
Create New Person > Confirm Password	Confirmation of the password.	The same as for the Password field. This ensures that the person is not prevented from logging in by typographical errors made when setting his or her password.	Null	Yes
Select Existing Person > List of persons	List of available persons, optionally filtered by the search field.	Select the person corresponding to this agent.	First person in list.	Yes
Select Existing Person > Search filter	Optional search field to filter results in list of persons.	Type a partial name to restrict the list of available persons to those which include that name.	None (complete list of persons shown).	No
Person Tab (not shown when creating an agent)				
First Name	The person's first name.	Up to 32 characters.	Null	Yes
Last Name	The person's last name.	Up to 32 characters.	Null	Yes

Field	Description	Entry	Default	Required?
Description	The person's description	Up to 255 characters.	Null	No
Login Name	A unique login name for the person associated with this agent to allow them to login to the peripheral. Note: The Unified CCE database is case-insensitive in determining whether a login name is unique - for example, it considers "joe_smith" and "JOE_SMITH" to be the same. Further, agent login to agent desktop software (such as CTI OS) is not case-sensitive.	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Null	Yes
Login Enabled	Check this box to allow the person associated with the agent to log on to peripheral	Check box.	Checked.	No
Reset Password	Check this box to reset the password for the person associated with this agent.	Check box.	Unchecked.	No
Password	The new password that the person uses to log in to the system. Only shown if Reset Password is checked.	Unique. At least five letters long. Longer passwords, including numbers and other characters, may be required. Ask your system administrator for details.	Null	Yes

Field	Description	Entry	Default	Required?
Confirm Password	Confirmation of the changed password. Only shown if Reset Password is checked.	The same as for the Password field. This ensures that the person is not prevented from logging in by typographical errors made when setting his or her password.	Null	Yes
Supervisor Tab				
Supervisor	Check this box if an agent is to be considered a supervisor. This does not require that they supervise a team.	Check box	Unchecked	No
Associate with Domain Account	Associates a supervisor agent with an existing domain login (the login used to log onto the network and to WebView).	Check box	Unchecked	If Supervisor checked
Login Name	The existing domain login name to be used by the supervisor agent	Existing domain login name. Select from list of possibilities by typing part of the login name.	Null	If Supervisor checked

Field	Description	Entry	Default	Required?
Agent Teams Tab				
Agent Teams	The supervisory teams with which the agent is associated.	Select from lower list of available agent teams and click **Add** to include agent in the checked teams. To remove an agent from an existing agent team, select agent team from upper list and click **Remove**.	Null	No
Skill Groups Tab				
Skill Group	The skill group or groups of which the agent is a member. Changes to an agent's skill group membership take place immediately within the agent's current session.	Select from lower list of available skill groups and click **Add** to include agent in the checked skill groups. To remove an agent from an existing skill group, select from upper list and click **Remove**.	Null	No

Field	Description	Entry	Default	Required?
Advanced Tab				
Enterprise Name	The name used to identify the agent within the system	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Auto-generated from the agent name. The system reserves 5 characters for tenant, 5 characters for peripheral, 17 characters taken from the agent name, and 2 characters for dimension type, plus 3 separating dots.	No
Agent ID	The internal extension number that can be used to call the agent.	Up to 18 numbers.	Auto-generated.	No
Agent Desktop	The desktop settings to be associated with the agent.	Select from list of available agent desktops.	None	No

Field	Description	Entry	Default	Required?
State Trace	Enables the system to track the agent's state transitions such as Available or Talking. This check box is dimmed by default and must be made available by a System Administrator before it can be used (using **Settings > Provisioning Settings > Agent State Trace Enabled**). Note: Cisco state that tracking agent state data puts additional load on UCCE. Please consult the Cisco documentation before using this feature.	Check box.	Unchecked	No
Active From Date	The date from which the agent will be active in the system.	Select date from calendar.	Current date	Yes
Active To Date	The date after which the agent should be deleted from the system.	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Managing Agent Desktops

Overview

You can use System Manager to create, edit, and delete agent desktops (also sometimes called agent desk settings).

What is an Agent Desktop?

Agent Desktops associate a set of permissions or characteristics with specific agents. The settings are comparable to Class of Service settings on a PBX or ACD. You assign desk settings to each agent via the agent record.

When you create a desktop definition, you specify the amount of non-active time after which an agent is automatically logged out, whether wrap-up is required following incoming and outbound calls, the amount of time allocated for wrap-up, and the method used for assist and emergency calls. You also specify settings for the **Re-route on No Answer** feature.

Unified CCE ships with a system default desktop. New agent records are automatically assigned this default unless you specify otherwise when creating an agent.

Creating an Agent Desktop

To create a Desktop record:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the agent desktop.

2. In the Folder Tree panel, click **Resource**, and then click **Agent Desktop**.

3. Enter unique name of up to 32 characters for the record. This name can use alphanumeric characters, periods, and underscores.

4. Complete fields as described in the Desktop Fields table below.

5. Click **Save.**

Bulk Loading Agent Desktops

In addition to creating agent desktop one at a time, you can also bulk load agent desk setting records previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Editing an Agent Desktop

To edit the details of an agent desktop:

1. In **System Manager**, navigate to the folder containing the agent desktop you want to edit, and view the agent desktops in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, click on the agent desktop you want to edit. The details of this agent desktop are displayed in the Details panel.

3. In the Details panel, click on the appropriate tab and make the desired changes.

4. Click **Save**.

Deleting an Agent Desktop

Note
You cannot delete an agent desktop if it is being referenced by an agent record or if it is specified as the default desktop.

To delete one or more agent desktops:

1. In **System Manager**, navigate to the folder containing the agent desktops you want to delete, and view the agent desktops in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the agent desktops to be deleted.

3. Click **Delete**.

4. In the Delete Folder dialog box, click **OK**. The agent desktops will be deleted.

Agent Desktop Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the record.	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Null	Yes
Ring no answer time	The maximum number of seconds a call will to ring at the agent's station before being redirected. This can be from 1 to 120 seconds (2 minutes).	1 to 120	Null	No
Ring no answer dialed number	Identifies the dialed number for a new re-route destination in the case of a ring no answer. The selection list consists of the dialed numbers configured for the system.	Select from list	Null	No
Logout non-activity time	The number of seconds during which the agent has been in the not ready state and inactive that the system will wait before logging out the agent. A blank entry will disable the timer.	10 to 7200	Null	No
Incoming work mode	Indicates whether the agent is allowed or required to enter work mode after an incoming call.	Select from list.	Required	Yes
Outgoing work mode	Indicates whether the agent is allowed or required to enter work mode after an outgoing call.	Select from list.	Required	Yes

Field	Description	Entry	Default	Required?
Wrap-up time	The amount of time in seconds allocated to an agent to wrap up the call.	1 to 7200	7200	Yes
Assist call method	Indicates whether to use a consultative call or a blind conference call for the supervisor assistance request.	Select from list.	None.	No
Emergency call method	Indicates whether to use a consultative call or a blind conference call for an emergency call request.	Select from list.	None	No
Recording Mode	Specifies whether calls are routed through the Peripheral Interface Manager (PIM)	Select from list	None	No
Remote Agent Type	Indicates how mobile agent call routing is handled.	Select from list	Local Only	Yes
Description	A description of the desktop.	Up to 255 characters.	Null	No
Details Tab > Miscellaneous				
Auto answer	Indicates calls to the agent are automatically answered.	Checked or Unchecked	Unchecked	No
Idle reason required	Indicates the agent must enter a Not Ready reason before entering the Idle state.	Checked or Unchecked	Unchecked	No
Logout reason required	Indicates the agent must enter a reason before logging out.	Checked or Unchecked	Unchecked	No
Auto record on emergency	Specifies that a record request (a request to record the call) is automatically sent when an emergency call request starts.	Checked or Unchecked	Unchecked	No
Silent Monitor Audible Indication	Specifies whether to indicate that silent monitoring has begun by a click.	Checked or Unchecked	Unchecked	No

Field	Description	Entry	Default	Required?
Silent Monitor Warning Message	Specifies whether to indicate that silent monitoring has begun with a message box on the agent's desktop.	Checked or Unchecked	Unchecked	No
Available after Incoming	Whether the agent is to be automatically considered available after handling an incoming call.	Checked or Unchecked	Unchecked	No
Available after Outgoing	Whether the agent is to be automatically considered available after handling an outgoing call.	Checked or Unchecked	Unchecked	No
Remote Login Without Desktop	Allows the agent to log in to the contact center without using an agent desktop	Checked or Unchecked	Unchecked	No
Details Tab > Outbound Access				
Outbound Access	For deployments where agents can make outbound calls, determines the type of outbound calls they can make.	Select one or more from International, National, Local private network, Operator assisted, PBX, Agent to Agent, Non ACD Calls, Initiate Supervisor Calls Allowed.	Unchecked	No
Agent Tab				
Agents	The agents with which the desktop is associated.	Select from lower list of available agents and click **Add** to include the checked agents in this desktop. To remove existing agents from this desktop, select from upper list and click **Remove**.	Null	No
Advanced Tab				

Field	Description	Entry	Default	Required?
Enterprise Name	The name used to identify the desktop within the system.	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Auto-generated from the name.	No
Active From Date	The date from which the desktop will be active within the system.	Select date from calendar.	Current date	Yes
Active To Date	The date after which the desktop will be deleted from the system.	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Managing Agent Teams

Overview

You can use System Manager to create, edit, and delete agent teams, and to assign agents and supervisors to a team.

What is an Agent Team?

You can group individual agents into agent teams that can be managed by supervisors. Agents are assigned to agent teams individually. When configuring agent teams, be aware of the following rules:

- An agent can be a member of only one agent team (or of no teams).
- An agent team can have only one Primary Supervisor.
- A supervisor can be a supervisor of any number of agent teams.
- A supervisor for an agent team can also be a member of that agent team.

Creating an Agent Team

To create an agent team:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the agent team.

2. In the Folder Tree panel, click **Resource**, and then click **Agent Team**.

3. Enter a unique name for the team.

4. Complete fields as described in the Agent Team Fields table below.

5. To assign agents to the team, check the boxes of one or more agents in the Agents tab, and click on **Add** above the list.

Note The Selected Path drop-down opens up a folder tree so that you can also select agents from other folders to add to the team.

6. Once an agent is added to the team, you must also check their **Member** box to make them a member of the team. This is because it is possible to be involved with a team without being a member, by supervising it.

7. If an agent is a supervisor, a drop-down list appears in the right-hand column. You can use this to specify whether the agent has a supervisory role for this particular team.

Note A team may have multiple secondary supervisors, but only one primary supervisor. If you replace an existing primary supervisor, the replaced supervisor will automatically become a secondary supervisor for that team.

8. Click **Save**.

Bulk Loading Agent Teams

In addition to creating agent teams one at a time, you can also bulk load agent team records previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Editing an Agent Team

To edit an agent team:

1. In **System Manager**, navigate to the folder containing the agent team you want to edit, and view the agent teams in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, click on the agent team you want to edit. The details of this agent team are displayed in the Details panel.

3. Click through the tabs and edit the fields you want to change.

4. To remove agents from a team, click on the **Agents** tab and check the boxes of the agents you wish to remove from the team. Click **Remove**.

5. Click **Save**.

Deleting an Agent Team

To delete one or more agent teams:

1. In **System Manager**, navigate to the folder containing the agent teams you want to delete, and view the agent teams in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the agent teams to be deleted.

3. Click **Delete**.

4. In the Delete Agent Teams dialog box, click **OK**. The agent teams will be deleted.

Agent Team Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the record.	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Null	Yes
Description	A description of the team.	Up to 255 characters.	Null	No
Peripheral	The peripheral to associate with the team.	Select from list.	Default peripheral	Yes
Supervisor script dialed number	The dialed number identifier for the agent team.	Select from list.	None	No
Agents Tab				
Agents	Individual agents associated with this team.	Select from lower list of available agents and click **Add** to include the checked agents in this agent team. To remove existing agents from this agent team, select from upper list and click **Remove**.	Null	No
Advanced Tab				

Field	Description	Entry	Default	Required?
Enterprise Name	The name that will represent the team within the network	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	From Name and Peripheral	Yes
Active From Date	The date from which this team must be active within the network	Select date from calendar.	Current date	Yes
Active To Date	The date after which this team will be deleted from the system	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar	Forever	No

Managing Skill Groups

Overview

You can use System Manager to create, edit, and delete skill groups, and to assign agents to these groups.

What is a Skill Group?

A skill group is a collection of agents that share a common set of skills. Agents are assigned one or more skills by associating the agent with the desired skill groups.

Each skill group is associated with a specific media routing domain such as voice, chat, or e-mail. In a multichannel deployment (that is, a Unified CCE deployment that includes non-voice applications like Cisco Collaboration Server or E-Mail Manager), when an agent logs in the agent automatically logs into skill groups associated with that agent within the correct MRD. Then, as a task request for a specific MRD begins script execution, the Agent/IVR Controller considers only the skill groups associated with that specific MRD. This allows one script to be written to handle many MRDs.

When you add an agent to a skill group, you are able to specify whether this is the default skill group for that agent. The default skill group is used for reporting when the skill group routing is not available.

Note Unified CCDM does not support "sub-skill groups" - skill groups defined as a subset of a parent group.

Creating a Skill Group

To create a skill group:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the skill group.

2. In the Folder Tree panel, click **Resource**, and then click **Skill Group**.

3. Enter a unique name for the group.

4. Complete fields as described in the Skill Groups Fields table below.

5. To assign agents to the skill group, on the Agents tab, check the boxes of one or more agents, and click on **Add** above the list.

Note The Selected Path drop-down at the top allows you to select agents from other folders to add to the skill group.

6. To create a route and assign it to the skill group, on the Routes tab, specify the name of the route, and an optional description, then click **Add**. A new route will be created and associated with the skill group when the skill group is saved.

7. Click **Save**.

Bulk Loading Skill Groups

In addition to creating skill groups one at a time, you can also bulk load skill group records previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Editing a Skill Group

To edit a skill group:

1. In **System Manager**, navigate to the folder containing the skill group you want to edit, and view the skill groups in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, click on the skill group you want to edit. The details of this skill group are displayed in the Details panel.

3. Click through the tabs and edit the fields you want to change.

4. To remove agents from a skill group, click on the **Agents** tab and check the boxes of the agents you wish to remove from the team. Click **Remove**.

5. To remove a route association from a skill group, on the Routes tab, click the **Delete** icon beside the route you want to remove. The route will be deleted, and the association with the skill group will be removed when the changes to the skillgroup are saved.

6. To edit the details of an existing route that is associated with a skill group, click the **Edit** icon beside the route, make the required changes, then click **OK** to confirm the changes. The route details will be changed when the changes to the skill group are saved.

7. Click **Save**.

Deleting a Skill Group

> **Note** You cannot delete a skill group that is referenced in a script. This reference must be removed before the skill group can be deleted.

To delete one or more skill groups:

1. In **System Manager**, navigate to the folder containing the skill groups you want to delete, and view the skill groups in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the skill groups to be deleted.

3. Click **Delete**.

4. In the Delete Skill Groups dialog box, click **OK**. The skill groups and any routes associated with them will be deleted.

> **Note** Deleting a skill group automatically removes it from any enterprise skill groups in which it is referenced.

Skill Group Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique enterprise name for the record.	Unique. Up to 32 characters, letters, numbers, periods, and underscore characters only. Must begin with letter or number.	Null	Yes
Description	A description of the skill group.	Up to 255 characters.	Null	No
Peripheral	The peripheral to be used for the agents in the skill group.	Select from list.	Default Peripheral	Yes

Field	Description	Entry	Default	Required?
Media Routing Domain	A description of how contact is made	Select from list	Cisco_Voice	No
Contact Centre Picks The Agent (IPTA)	A tick-box indicating whether Unified CCE selects the Agents within the Skill Group to receive calls	Check box	Checked	No
Service Level Type	Optionally, use to indicate how abandoned calls should be factored in calculating service levels.	Select from Default, Ignore Abandoned Calls, Abandoned Calls Have Negative Impact, and Abandoned Calls Have Positive Impact. Note: "Default" = Ignore Abandoned Calls.	Use Default	No
Service Level Threshold	The threshold, in seconds, for the Unified CCE service level.	0 to 2147483647	Null	No
Agents Tab				
Agents	Agents associated with this skill group.	Select from lower list of available agents and click **Add** to include the checked agents in this skill group. To remove existing agents from this skill group, select from upper list and click **Remove.** To make this skill group the default skill group for an agent, check the **Default** box beside the agent. To revert the default skill group for this agent to the system default, uncheck the box.	Null	No

Field	Description	Entry	Default	Required?
Routes Tab				
Route Name	The name of the route.	Unique. Up to 32 characters, letters, numbers, periods, and underscore characters only. Must begin with letter or number.	Null	Yes
Route Description	A description of the route.	Up to 255 characters.	Null	No
Advanced Tab				
Enterprise Name	The name that will represent the skill group within the network	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	From Name and Peripheral	Yes
Peripheral Number	The number to be used on the peripheral for the Skill Group	0 to 16777215	Generated automatically	No
Active From Date	The date from which the Skill Group should be active in the system	Select date from calendar.	Current date	Yes
Active To Date	The date after which the Skill Group should be deleted from the system	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Managing Enterprise Skill Groups

Overview

You can use System Manager to create, edit, and delete enterprise skill groups.

What is an Enterprise Skill Group?

An Enterprise Skill Group is a logical grouping of skill groups joined together for reporting purposes. Enterprise skill groups can include skill groups from different media routing domains.

Creating an Enterprise Skill Group

To create an enterprise skill group:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the enterprise skill group.

2. In the Folder Tree panel, click **Resource**, and then click **Enterprise Skill Group**.

3. Enter a unique name for the group.

4. Complete fields as described in the Enterprise Skill Group Fields table below.

5. To assign skill groups to the group, click the **Add** button below the Skill Groups box and select one or more skill groups.

Note The Selected Path drop-down at the top allows you to select skill groups from other folders to add to the enterprise skill group.

6. Click **Save**.

Bulk Loading Enterprise Skill Groups

In addition to creating enterprise skill groups one at a time, you can also bulk load enterprise skill group records previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Deleting an Enterprise Skill Group

To delete one or more enterprise skill groups:

1. In **System Manager**, navigate to the folder containing the enterprise skill groups you want to delete, and view the enterprise skill groups in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the enterprise skill groups to be deleted.

3. Click **Delete**.

4. In the Delete Enterprise Skill Groups dialog box, click **OK**. The enterprise skill groups will be deleted.

Enterprise Skill Group Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the record.	Unique. Up to 32 characters, letters, numbers, periods, and underscore characters only. Must begin with letter or number.	Null	Yes
Description	A description of this enterprise skill group.	Up to 255 characters.	Null	No
Skill Groups Tab				
Skill Groups	Skill groups associated with this enterprise skill group.	Select from lower list of available agents and click **Add** to include the checked agents in this agent team. To remove existing agents from this agent team, select from upper list and click **Remove.**	Null	No
Advanced Tab				
Enterprise Name	The name by which the Enterprise Skill Group will be known within the system.	Unique. Up to 32 characters, letters, numbers, periods, and underscore characters only. Must begin with letter or number.	Auto generated	No
Active From Date	The date from which the Enterprise Skill Group should be active in the system.	Select date from calendar.	Current date	No

Field	Description	Entry	Default	Required?
Active To Date	The date from which the Enterprise Skill Group should be deleted from the system.	Either leave **Forever** checked, or uncheck **Forever** and select date f from calendar.	Forever	No

Managing Contacts

Managing Dialed Numbers

Overview

You can use System Manager to create, edit, and delete dialed numbers and associate them with other resources such as Agent Desktops or Labels.

What is a Dialed Number?

A dialed number (DN) is the number a caller dials to initiate a call. It is sent as part of the call detail information in the route request message sent from the routing client. The Dialed Number plays an integral role in routing calls. Dialed Numbers are required pieces of call types, which are used to identify the appropriate routing script for each call. In addition to answered calls, Dialed Numbers also need to be set up for ring on no answer, dialed number plan entries, and for supervisor/emergency calls.

Creating a Dialed Number

To create a dialed number:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the dialed number.

2. In the Folder Tree panel, click **Resource**, and then click **Dialed Number**.

3. Enter unique name of up to 32 characters for the Dialed Number. This must consist of alphanumeric characters, periods, and underscores only.

4. Complete fields as described in the Dialed Number Fields table below.

5. Click **Add** to specify the call types and other dialing information to be associated with this dialed number.

Note The order of the entries in the Dialed Number mapping table reflects the order in which call types are processed for the Dialed Number.

6. Click **Save**.

Bulk Loading Dialed Numbers

In addition to creating dialed numbers one at a time, you can also bulk load dialed number records previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Deleting a Dialed Number

Note   You cannot delete a Dialed Number that is referenced in a script. This reference must be removed before the Dialed Number can be deleted.

To delete one or more dialed numbers:

1. In **System Manager**, navigate to the folder containing the dialed numbers you want to delete, and view the dialed numbers in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the dialed numbers to be deleted.

3. Click **Delete**.

4. In the Delete Dialed Numbers dialog box, click **OK**. The dialed numbers will be deleted.

Dialed Number Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the record.	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Null	Yes
Description	A description of the record.	Up to 255 characters	Null	No
Dialed Number	For voice MRD only, the string value by which the Agent/IVR Controller identifies this Dialed Number. This must be the value the Agent/IVR Controller uses for calls to this number. For example: 8005551212	Up to 32 characters	Null	Yes

Field	Description	Entry	Default	Required?
Permit Application Routing	Indicates whether Application Routing is allowed	Check box	Disabled	No
Routing Client	The routing client (such as NIC or PG) that this number should use to submit routing requests to the Unified CCE	Drop-down list. *Cannot be edited after dialed number has been created.*	First in list	Yes
Media Routing Domain	A description of how contact is made	Select from a drop-down list. *Cannot be edited after dialed number has been created.*	Cisco_ Voice	Yes
Agent Desktops Tab				
Agent Desktops	The Agent Desktops associated with this Dialed Number.	Select from lower list of available agent desktops and click **Add** to associate the checked agent desktops with this dialed number. To remove an agent desktop association from this dialed number, select from upper list and click **Remove.**	Null	No
Agent Teams Tab				

Field	Description	Entry	Default	Required?
Agent Teams	The Agent Teams associated with this Dialed Number.	Select from lower list of available agent teams and click **Add** to associate the checked agent teams with this dialed number. To remove an agent team association from this dialed number, select from upper list and click **Remove.**	Null	No
Labels Tab				
Labels	The Labels associated with this Dialed Number.	Select from lower list of available labels and click **Add** to associate the checked labels with this dialed number. To remove a label association from this dialed number, select from upper list and click **Remove.**	Null	No

Field	Description	Entry	Default	Required?
Call Types Tab				
Call Types	The Call Types associated with this Dialed Number. These specify onward routing for certain calls. The call types are listed in priority order.	Either click: • **Add** to add a details for a new call type or select an existing call type from list and click: • **Edit** to edit existing call type details • **Remove** to delete existing call type details The Call Type dialog box is displayed. **Note**: You can select a call type from the list then click **Up Arrow** ( ) to move the call type up the priority list or click **Down Arrow** ( ) to move the call type down the priority list.	Null	No
Call Types Tab > Call Type dialog box				
Call Type	The call type for this call type routing.	Select from list.	First in list	Yes

Field	Description	Entry	Default	Required?
Calling Line ID	The calling line identification (CLID) to associate with this call type and routing.	Select one of the options. **All**: route all calls **Region**: route all calls from specified region **Prefix**: route all calls where number starts with this prefix **Match**: route calls from this number only	All	Yes
Caller Entered Digits	The caller entered digits (CED) to associate with this call type and routing.	Select one of the options. **All:** route all calls regardless of CED **None**: route calls with no CED. **CED:** route calls with this CED only. If you choose None, you can also optionally check one or both of: **None Required**: caller wasn't asked for any CED **None Entered**: caller was asked for CED but didn't respond	All	Yes

Field	Description	Entry	Default	Required?
Advanced Tab				
Enterprise Name	The name that will represent the Dialed Number within the network.	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	From Name	Yes
Active From Date	The date from which the Dialed Number will be active in the system.	Select date from calendar.	Current date	Yes
Active To Date	The date after which the Dialed Number should be deleted from the system.	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Managing Call Types

Overview

You can use System Manager to create, edit, and delete call types.

What is a Call Type?

A call type is a category of incoming routable task. Specific call types are associated with Dialed Numbers. In this association, each call type has a schedule that determines which routing script or scripts are active for that call type at any time.

There are two classes of call type/dialed number associations:

- **Voice**: Voice call type/dialed number combinations such as phone calls are categorized by the dialed number (DN), caller-entered digits (CED), and calling line ID (CLID). The CED and CLID can be optional, depending on the call.

- **Non-voice**: Non-voice type/dialed number combinations (such as e-mail and text chat) are categorized by the Script Type Selector, Application String 1, and Application String 2. Application String 1 and Application String 2 can be optional, depending on the application.

Because the call type determines which routing script is run for a call, the call type defines call treatment. Therefore, the call type is the highest level reporting entity. Reporting on call type activity provides insight into end-to-end customer interactions

with the system and with agents by providing data such as service level adherence, transfers, average speed of answer, calls handled, and calls abandoned.

In routing scripts you can change the call type at specific points in the script to indicate that a transaction has been completed. For example, if the customer is calling a bank and successfully checks his or her account balance using a Self-Service script, you may want to change the call type to indicate that the account balance transaction has completed and a new transaction has begun. You can also change call type in a script to invoke a new routing script associated with that call type. For example, if a call is not answered at an agent's desktop, you can change the call type in the script to redirect the call to a different script designed for Redirection on No Answer. The Redirection on No Answer script assigns a different agent to handle the call.

Creating a Call Type

To create a call type:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the call type.

2. In the Folder Tree panel, click **Resource**, and then click **Call Type**.

3. Enter a unique name of up to 32 characters for the call type. This can contain alphanumeric characters, periods, and underscores only.

4. Complete fields as described in the Call Type Fields table below.

5. Click **Save**.

Once you have created a call type you can reference it in a dialed number configuration through Unified CCE.

Bulk Loading Call Types

In addition to creating call types one at a time, you can also bulk load call type records previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Deleting a Call Type

You cannot delete the default call type.

Note

To delete one or more call types:

1. In **System Manager**, navigate to the folder containing the call types you want to delete, and view the call types in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the call types to be deleted.

3. Click **Delete**.

4. In the Delete Call Types dialog box, click **OK**. The call types will be deleted.

Deleting a call type automatically removes it from any dialed number mappings in which it is referenced.

Note

Call Type Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the record.	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Null	Yes
Description	An internal description of the record.	Up to 255 characters.	Null	No
Bucket Interval	The count of Answered or Abandoned calls that are used as intervals for the Call Type	Select from list	System Default	No
Service level threshold	Optionally, use to indicate whether this call type will use a service level threshold other than the system default.	Select from Use Global, None, and Use Specified. For Use specified, you must also enter a number in seconds between 0 and 2147483647.	Use global	No
Service level type	Optionally, use to indicate how abandoned calls should be factored in calculating service levels.	Select from Use global setting, Ignore Abandoned Calls, Abandoned Calls Have Negative Impact, and Abandoned Calls Have Positive Impact.	Use global setting	No

Field	Description	Entry	Default	Required?
Advanced Tab				
Enterprise Name	The name that will represent the Call Type within the network.	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Auto-generated from Name	No
Active From Date	The date from which this Call Type should be active within the system	Select date from calendar.	Current date	Yes
Active To Date	The date after which this Call Type should be deleted from the system	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar	Forever	No

Managing Labels

Overview

You can use System Manager to create, edit, and delete labels.

What is a Label?

In Unified CCE the label represents a string that is passed to a routing client for each network target. Unified CCDM will automatically create labels for many high level operations but the functionality is included for specific label creation such as blind transfers. The only label type supported will be type Normal, the only network target is device target.

Creating a Label

To create a label:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the label.

2. In the Folder Tree panel, click **Resource**, and then click **Label**.

3. Enter a unique name of up to 32 characters for the label. This must contain alphanumeric characters, periods and underscores only.

4. Complete fields as described in the Label Fields table below.

5. Click **Save**.

Bulk Loading Labels

In addition to creating labels one at a time, you can also bulk load label records previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Deleting a Label

To delete one or more labels:

1. In **System Manager**, navigate to the folder containing the labels you want to delete, and view the labels in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the labels to be deleted.

3. Click **Delete**.

4. In the Delete Labels dialog box, click **OK**. The labels will be deleted.

Label Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the record.	Unique. Up to 32 characters.	Null	Yes
Description	A description of the record.	Up to 255 characters.	Null	No
Label	The string value used to identify the label by the routing client	Up to 32 characters.	Null	Yes
Routing Client	The enterprise name of the routing client associated with this label	Select from the supplied list of routing clients that the logged in user has the security permissions to see.	Null	Yes
Dialed Numbers Tab				

Field	Description	Entry	Default	Required?
Dialed Numbers	The Dialed Numbers to associate with this label	Select from lower list of available dialed numbers and click **Add** to associate the checked dialed numbers with this label. To remove a dialed number association from this label, select from upper list and click **Remove.**	Null	No
Advanced Tab				
Active From Date	The date from which this label should be active within the system	Select date from calendar.	Current date	Yes
Active To Date	The date after which this label should be deleted from the system	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Managing Services

Overview

You can use System Manager to create, edit, and delete services.

What is a Service?

A service is a particular type of call processing required by the user, which is associated with a specific peripheral. Skill Groups may be associated with one or more services. For example, a Customer Support service might be associated with a Customer Support Skill Group.

Creating a Service

To create a service:

1. In System Manager, in the Folder Tree panel, select the folder where you want to create the service.

2. In the Folder Tree panel, click **Resource**, and then click **Service**.

3. Enter a unique name of up to 32 characters for the service. This must contain alphanumeric characters, periods and underscores only.

4. Complete fields as described in the Service Fields table below.

5. Click **Save**.

Deleting a Service

To delete one or more services:

1. In **System Manager**, navigate to the folder containing the services you want to delete, and view the services in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the services to be deleted.

3. Click **Delete**.

4. In the Delete Services dialog box, click **OK**. The services will be deleted.

Service Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the record.	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Null	Yes
Description	A description of the record.	Up to 255 characters.	Null	No
Peripheral	The peripheral to associate this service with.	Select from drop-down.	Null	Yes
Peripheral Name	The name to be specified for this service at the peripheral	Up to 32 characters.	Null	Yes

Field	Description	Entry	Default	Required?
Service Level Type	How the service level is calculated	Select from drop-down: **Default** Use the default specified for the peripheral **Ignore Abandoned Call**s Do not include abandoned calls in the calculation **Abandoned Calls have Negative Impact** Abandoned calls count as exceeding the service level threshold **Abandoned Calls have Positive Impact** Abandoned calls count as having been promptly answered **Note** For services associated with a Communications Manager, this will always be Ignore Abandoned Calls.	Default	Yes
Service Level Threshold	The acceptable time limit in seconds during which a call should be answered.	0 to 1000000, or blank, to disable service level calculation and force the router to use the service level threshold of the associated MRD peripheral.	Null	Yes
Skill Groups Tab				
Skill Groups	The Skill Groups to associate with this service	Select from lower list of available skill groups and click **Add** to associate the checked skill groups with this label. To remove a skill group's association from this service, select from upper list and click **Remove.**	Null	No
Advanced Tab				

Field	Description	Entry	Default	Required?
Enterprise Name	The name that will represent the service within the network.	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	From Name	Yes
Peripheral Number	The number to be specified for this service at the peripheral.	0 to 999999999	Null	Yes
Media Routing Domain	The media routing domain associated with this service.	Select from list	Null	Yes
Active From Date	The date from which this service should be active within the system	Select date from calendar.	Current date	Yes
Active To Date	The date after which this service should be deleted from the system	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Managing Equipment

Select Equipment

Many types of resource are tied to one or more types of equipment, for example agents and skill groups are tied to a specific peripheral.

These peripherals are configured within Unified CCDM using the Cluster Configuration Manager, as part of the commissioning of the system.

Managing IP Phones

Overview

You can use System Manager to create, edit, and delete telephones.

Using Unified CCDM with Other Provisioning Systems

When using a separate provisioning system to add IP phones to a Unified CM, check the **Contact Center Enabled** check box for all the Directory Numbers provisioned by the external system to ensure that they are added correctly to Unified CCE. Do not attempt to make any other changes to phones on that Unified CM using Unified CCDM.

What is an IP Phone?

A telephone is the IP device that the contact center agent uses to make or receive calls. The telephone has a single line (typically line 1 if using a Cisco multi-line phone), whose number is known to the call routing software. The agent logs into the contact center using the login name and password allocated by the Manage Agent page and the line number allocated in this page. Line numbers may be allocated automatically by Unified CCDM or entered manually through the user interface.

Creating an IP Phone

To create an IP Phone:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the IP phone.

2. In the Folder Tree panel, click **Resource**, and then click **IP Phone**.

3. Select the phone type from the drop-down.

4. Complete fields as described in the IP Phone Fields table below.

5. Optionally add directory numbers by checking the boxes of numbers to add and clicking **Add**.

6. Click **Save**.

Deleting an IP Phone

To delete one or more IP phones:

1. In **System Manager**, navigate to the folder containing the IP phones you want to delete, and view the IP phones in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the IP phones to be deleted.

3. Click **Delete**.

4. In the Delete IP Phones dialog box, click **OK**. The IP phones will be deleted.

IP Phone Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the record.	Unique. Up to 100 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Null	Yes

Field	Description	Entry	Default	Required?
Description	An internal description of the record.	Up to 128 characters.	Null	No
Communications Manager	The Communications Manager to be associated with the IP Phone.	Select from the list of Communications Managers available for the tenant.	Default Communications Manager	Yes
Peripheral	The Peripheral to be associated with the IP Phone.	Select from the list of Peripherals associated with the selected Unified CM.	Default Peripheral	No
Product	Type of Telephone	Select from list.	Null	Yes
Protocol	The type of protocol the telephone should use for communication.	Select from list.	Depends on product.	Yes
Template	The XML template to be used to configure the IP Phone.	Select from list of templates available for the specific phone model.	Null	Yes
Button Template	The configuration to use for the buttons	Select from list of button templates set up.	Null	Yes
MAC Address	The MAC Address of the IP phone used to uniquely identify it.	12-digit hexadecimal number.	Null	Yes
Extension Mobility	Used to configure the Extension Mobility service on the phone. When selected users may log on to the phone using their associated device profile.	Check box.	Depends on template selected.	No.
Directory Numbers Tab				

Field	Description	Entry	Default	Required?
Directory Numbers	The lines to be associated with the IP Phone.	To associate a directory number with this IP phone, select a directory number from the lower list of available directory numbers and click **Add**. To remove a directory number association from this IP phone, select the directory number from the upper list and click **Remove.**	Null	No
Index	The port on the IP Phone that the line is plugged into.	Number.	Next in sequence.	No
Advanced Tab				
Device Pool	A pool of phones that have similar character.	Select from the list of Device Pools available to the logged in user.	Default Device Pool	No
Active From Date	The date from which the IP Phone will be active in the system.	Select date from calendar.	Current date	Yes
Active To Date	The date after which the IP Phone should be deleted from the system.	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Advanced Information

The Unified CCDM web application automatically links or adds default additional information to Unified CCE as follows:

- Links the Unified CM *calling search space* from the tenant owning folder

- Links the Unified CM *route partition* from the tenant owning folder

- Links the Unified CM *location* from the parent folder

- Links the Unified CM *owner user ID* from the PG user id allocated to the tenant

- Creates a Unified CCE *device target* for the phone/line.

- Creates a Unified CCE *label* for each combination of *device target* and routing client (to route calls to a Unified CCE agent, you must have defined a *label* associated with the *device target*).

Managing Directory Numbers

Overview

You can use System Manager to create, edit, and delete directory numbers.

What is a Directory Number?

A directory number is an extension line which is attached to an IP Phone.

Creating a Directory Number

To create a Directory Number:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the directory number.

2. In the Folder Tree panel, click **Resource**, and then click **Directory Number**.

3. Select whether the number is contact center enabled.

4. Complete fields as described in the Directory Number Fields table below.

5. Click **Save**.

Deleting a Directory Number

To delete one or more directory numbers:

1. In **System Manager**, navigate to the folder containing the directory numbers you want to delete, and view the directory numbers in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the directory numbers to be deleted.

3. Click **Delete**.

4. In the Delete Directory Numbers dialog box, click **OK**. The directory numbers will be deleted.

Directory Number Fields

Field	Description	Entry	Default	Required?
Details Tab				

Field	Description	Entry	Default	Required?
Name	A unique name for the record.	Unique. Up to 100 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Null	Yes
Description	An internal description of the record.	Up to 50 characters.	Null	No
Contact Centre Enabled	Determines whether a Device Target must be created on the Unified CCE for this number. This must be checked for any phones added using a separate provisioning system.	Check box	Unchecked	No
Advanced Tab				
Communications Manager	The Cisco Unified Communications Manager to be associated with the Directory Number.	Select from the list of Communications Managers available for the tenant.	Default Communications Manager	Yes
Route Partition	The group of numbers (such as area codes or internal numbers) that this number is to be associated with.	Select from list.	Default Peripheral	Yes
Automatically Allocate a Number Pattern/ Number Pattern	Whether to automatically allocate the number to be used for this Directory Number.	Check box. Either leave box checked or uncheck to enter number of 1-20 digits manually in the Number Pattern text box.	Checked	Yes
Active From Date	The date from which the Directory Number will be active in the system.	Select date from calendar.	Current date	Yes

Field	Description	Entry	Default	Required?
Active To Date	The date after which the Directory Number should be deleted from the system.	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Managing Device Profiles

Overview

You can use System Manager to create, edit, and delete Unified CM extension mobility device profiles.

What is a Device Profile?

A device profile is a telephone template that a user can use to retain their specific phone configuration across a number of different physical phones. A device profile may be associated with more than one user allowing it to be shared by multiple Unified CM users. A device profile may contain a number of directory number mappings.

Creating a Device Profile

To create a device profile:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the device profile.

2. In the Folder Tree panel, click **Resource**, and then click **Device Profile**.

3. On the Directory Numbers tab, optionally add directory numbers by checking the boxes of numbers to add and clicking **Add**.

4. On the Users tab, optionally add associated users that may use the device profile by checking the boxes of those users and clicking **Add**.

5. Complete fields as described in the Device Profile Fields table below.

6. Click **Save**.

Deleting a Device Profile

To delete one or more device profiles:

1. In **System Manager**, navigate to the folder containing the device profiles you want to delete, and view the device profiles in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the device profiles to be deleted.

3. Click **Delete**.

4. In the Delete Device Profiles dialog box, click **OK**. The device profiles will be deleted.

Device Profile Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the device profile.	Unique. Up to 100 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.		Yes
Description	An internal description of the device profile.	Up to 128 characters.	Null	No
Users Tab				
Users	The lines to be associated with the device profile.	To associate a user with this device profile, select a user from the lower list of available directory numbers and click **Add**. To remove a directory number association from this device profile, select the directory number from the upper list and click **Remove.**	Null	No
Directory Numbers Tab				

Field	Description	Entry	Default	Required?
Directory Numbers	The lines to be associated with the device profile.	To associate a directory number with this device profile, select a directory number from the lower list of available directory numbers and click **Add**. To remove a directory number association from this device profile, select the directory number from the upper list and click **Remove.**	Null	No
Advanced Tab				
Enterprise Name	The name that will represent the device profile within the network.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	—	—
Active From Date	The date from which the device profile will be active in the system.	Select date from calendar.	Current date	Yes
Active To Date	The date after which the device profile should be deleted from the system.	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Managing Peripherals

Overview

You can use System Manager to view and edit the properties of a peripheral.

Note

Unified CCDM only allows you to view the peripheral details, change the display name and the application user associated with it. You cannot create or delete a peripheral through Unified CCDM, or edit any other fields.

What is a Peripheral?

A peripheral is a connected system such as an ACD switch that routes customer phone calls to contact center staff.

Editing a Peripheral

1. In **System Manager**, navigate to the folder containing the peripheral you want to edit, and view the peripherals in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, click on the peripheral you want to edit. The details of this peripheral are displayed in the Details panel.

3. In the Details panel, click on the appropriate tab and make the desired changes.

4. Click **Save**.

Peripheral Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique display name for the peripheral.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Name used by Unified CCE.	Yes
Description	An internal description of the peripheral.	You cannot change this value in Unified CCDM.		
Advanced Tab				
Enterprise Name	The name that will represent the peripheral within the network.	You cannot change this value in Unified CCDM.		

Field	Description	Entry	Default	Required?
Application User	A user on the Unified CM, with whom new phones will be associated.	Select from list.	Default application user.	Yes
Active From Date	The date from which the peripheral will be active in the system.	You cannot change this value in Unified CCDM.		
Active To Date	The date after which the peripheral should be deleted from the system.	You cannot change this value in Unified CCDM.		

Managing Audio

Managing Network VRU Scripts

Overview

You can use System Manager to change the audio file associated with a network VRU script.

Note Unified CCDM only allows you to change the audio file associated with a network VRU script. You cannot create a new VRU Script through Unified CCDM.

What is a Network VRU Script?

A Network VRU (voice response unit) is a telecommunications computer (also called an Interactive Voice Response (IVR) unit) that responds to caller-entered touch-tone digits. This uses routing scripts to process a call. At various stages, this may run a VRU script to play a message to the caller, such as a repeated announcement when they are in a call queue.

Associating a VRU Script with an Audio File

To change the audio file associated with a VRU script:

1. In **System Manager**, navigate to the folder containing the Network VRU script you want to edit, and view the Network VRU scripts in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, click on the Network VRU script you want to edit. The details of this script are displayed in the Details panel.

3. Select the **Audio** tab.

Note If no Audio tab is available, this may mean that the Network VRU Script has not been configured correctly. For example, Unified CCDM can only work with Network VRU Scripts with names in the format: two characters, a wav filename, and a number. For example: *AB,voice.wav,0001.* You may need to contact your system administrator.

4. Click the **Browse** button and navigate to the appropriate folder on your machine where the audio file is saved, and then select it and click **Upload**.

5. Once the file has uploaded, click **Save**.

Note The audio file will be saved under the name configured in the VRU script, replacing any previous audio file.

Managing Variables

Managing User Variables

Overview

You can use System Manager to create and delete user variables.

Note User variables can only be created and deleted. They cannot be edited.

What is a User Variable?

A user variable is a named object which can hold a value up to 40 characters long. Variables are used in routing scripts.

To Create a User Variable

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the user variable.

2. In the Folder Tree panel, click **Resource**, and then click **User Variable**.

3. Complete fields as described in the User Variable Fields table below. Active from and to dates can be set in the **Advanced** tab.

Note Unified CCE requires that all user variable names begin with the string `user`. The Code Text will therefore automatically be prefixed with this string on saving. For example, if you enter a Code Text of `Temp`, the resulting user variable will be called `userTemp`.

4. Click **Save**.

Bulk Loading User Variables

In addition to creating user variables one at a time, you can also bulk load user variable records previously output to a CSV (comma separated values) file. For more information about bulk loading, see section Bulk Upload of Resources.

Deleting a User Variable

To delete one or more user variables:

1. In **System Manager**, navigate to the folder containing the user variables you want to delete, and view the user variables in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the user variables to be deleted.

3. Click **Delete**.

4. In the Delete User Variables dialog box, click **OK**. The user variables will be deleted.

User Variable Fields

Field	Description	Entry	Default	Required?
Details Tab				
Code Text	The name of the user variable.	Up to 28 characters, consisting of letters, numbers, periods and underscores only. Will be automatically prefixed with 'user' by the system upon saving	Null	Yes
Object Type	The type of object with which to associate the variable. You may choose not to associate the user variable with an object by selecting OT_USER_VARIABLE.	Select from list	Null	Yes
Data Type	The data type for the variable.	Select from list	Long	Yes
Persistent	Whether the user variable retains value across Central Controller restarts.	Check box.	Checked	No

Field	Description	Entry	Default	Required?
Description	A description of the variable and how it should be used.	Up to 255 characters.	Null	No
Advanced Tab				
Active From Date	The date from which the variable will be active in the system.	Select date from calendar.	Current date	No
Active To Date	The date after which the variable should be deleted from the system.	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Managing Expanded Call Variables

Overview

You can use System Manager to create and delete expanded call (ECC) variables.

What is an Expanded Call Variable?

An expanded call variable is a named object which is used by a VRU script to exchange call information with the Unified CCE.

Creating an Expanded Call Variable

To create an expanded call variable:

1. In **System Manager**, in the Folder Tree panel, select the folder where you want to create the expanded call variable.

2. In the Folder Tree panel, click **Resource**, and then click **Expanded Call Variable**.

3. Complete fields as described in the Expanded Call Variable Fields table below. Active from and to dates can be set in the **Advanced** tab.

4. Click **Save**.

Deleting an Expanded Call Variable

To delete one or more expanded call variables:

1. In **System Manager**, navigate to the folder containing the expanded call variables you want to delete, and view the expanded call variables in that folder using the Items panel list view (see section Viewing Resource Items).

2. In the Items panel, check the box or boxes of the expanded call variables to be deleted.

3. Click **Delete**.

4. In the Delete Expanded Call Variables dialog box, click **OK**. The expanded call variables will be deleted.

Expanded Call Variable Fields

Field	Description	Entry	Default	Required?
Details Tab				
Name	The name of the call variable	Unique. Up to 27 characters, letters, numbers, and underscore characters only. Must begin with letter or number. Will be automatically prefixed with 'user.' by the system.	Null	Yes
Description	The description of the call variable	Up to 255 characters	Null	No
Maximum Length	The maximum length of the value of the call variable	A whole number between 1 and 210.	Null	Yes
Provided by Cisco	Whether the call variable provided by Cisco. This is normally determined by the system.	Check box.	Unchecked	No
Persistent	Whether the variable is written to the historical database with the TCD/RCD record	Check box	Unchecked	No
Enabled	Whether the call variable is currently enabled	Check box	Checked	No

Field	Description	Entry	Default	Required?
ECC Array	Whether the variable is an array	Check box	Unchecked	No
Maximum Array Size	The maximum size of elements in the array represented by the call variable	Up to 255. The equation <Maximum Length> * <Maximum Array Size> + <Maximum Array Size> + 5 must not exceed 299. For example, if the Maximum Length was 97, the array size could not exceed 3.	Null	If ECC Array checked
Advanced Tab				
Active From Date	The date from which the variable will be active in the system.	Select date from calendar.	Current date	No
Active To Date	The date after which the variable should be deleted from the system.	Either leave **Forever** checked, or uncheck **Forever** and select date from calendar.	Forever	No

Bulk Upload of Resources

The bulk upload tool is used to import hundreds of resource items into Unified CCDM. It is used to generate resources such as Agents or Skill Groups by filling in resource attributes using the standard CSV format.

All CSV files require headers that dictate where each value goes. These headers are provided by templates that can be downloaded from the appropriate Bulk Upload page in Unified CCDM. How to use these templates is described later in this chapter.

You can bulk upload the following system resources:

- folders
- users

You can bulk upload the following remote resources:

- persons
- agents
- agent desktops

- agent teams
- skill groups
- enterprise skill groups
- user variables
- labels
- call types
- dialed numbers

Editing CSV files

You can use Notepad or any other text-based editor to edit CSV files. Excel also offers support for CSV files so you can edit these in a familiar environment while maintaining the integrity of the CSV format.

Editing CSV files in Excel can cause missing commas.

Note

Template Guide

This section runs through every template and describes the columns included in the template.

Data Types

The following data types are used:

- SNC means Standard Naming Convention. This is alphanumeric data with no exclamation marks or hyphens, although underscores (_) are permitted.
- BOOLEAN means one of the following values:
  - TRUE
  - FALSE
  - Empty field. Leaving these fields empty defaults the field to FALSE.
- Y/N is similar to Boolean however it can only contain the values Y or N.
- Date format is the universal date format <Year>-<Month>-<Day> for example 2006-08-30.
- Any Data Type marked with a hyphen (-) means that there are no constraints on what you can put in the field (except for the constraints imposed by the native CSV format).

Where a column supports a list of values (for example, an agent may belong to multiple skill groups) separate each skill group with a semi-colon (;) character, for example Skillgroup1; Skillgroup2; Skillgroup3.

> **Note** Make sure that the value you specify for each field is a valid value for that data type. The upload will fail with an error if any values are invalid.

Global Template Columns

These columns are common to every template file except where stated.

The **Required?** column in the tables below indicates whether the column can be removed entirely.

Column Name	Data Type	Required?	Description
Path	Path	No	Describes where in the tree the resource will be created. If you wish to supply the path in the bulk upload screen, you must remove this column. **Note** If you leave the column present and do not set a value, it will attempt to upload into the Root directory, which is valid for items such as folders, but not for resources such as Agent or Skill Group. Removing the column completely will upload the resources into the folder you were working in when you initiated the bulk upload.
Name	SNC	Yes	The name of the resource in Unified CCDM. This must be a unique name. In most cases, this will not be provisioned.
Description	-	Yes	Describes the dimension being created. This is never provisioned.
EnterpriseName	SNC	No	The name for the resource being created. This field is provisioned and cannot be omitted. If you leave it blank an Enterprise name is generated for you.
EffectiveFrom	Date	No	The date from which the resource is active. The default is the current date. Note This date is not localized, and will be treated as a UTC date.
EffectiveTo	Date	No	The date on which the resource becomes inactive. The default is forever. Note This date is not localized, and will be treated as a UTC date.

Person Template

Column Name	Data Type	Required?	Description
EquipmentName	SNC	No	The instance name of the Unified CCE or Unified CM you want this person added to. This will correspond directly with the equipment instance name that was specified when configured via the Unified CCDM Cluster Configuration utility.
FirstName	SNC	Yes	The first name of the person.
LastName	SNC	Yes	The last name of the person.
LoginName	SNC	Yes	The peripheral login name for the person.
PassPhrase	Password	Yes	The peripheral login password for the person.

Note When uploading Person records to a location where both Unified CCE and Unified CM resources exist, the Person will be attached to both pieces of equipment unless the equipment field is set in the bulk load template.

Agent Template

Column Name	Data Type	Required?	Description
DefaultSkillGroup	Enterprise Name	No	The default skill group to be used for reporting when the skill group routing is not available. This skill group will be automatically included in the Skill Group Member field above if it is not already present.
PeripheralNumber	Numeric	No	The service number as known at the peripheral. Autogenerated if not supplied.
PeripheralName	SNC	No	The name identifying the agent on the associated peripheral.
Supervisor	Boolean	No	Indicates whether the agent is a supervisor. This will not create a Unified CCDM user, as this is a future feature, however it enables you to bind this agent to a domain login name.
AgentStateTrace	Y/N	No	Indicates whether the software collects agent state trace data for the agent.

Column Name	Data Type	Required?	Description
DomainLogin Name	NETBIOS Login Name	If Agent is a supervisor	The login name for the domain user this Agent is associated with. This will often be of the form <domain>\<username>
DomainUserName	NETBIOS Username	If Agent is a supervisor	The username of the domain user this Agent is associated with. In the above Domain Login example, this would be simply <username>
PeripheralMember	Enterprise Name	Yes	The Peripheral to assign this Agent to.
AgentDesktop Member	Enterprise Name	No	The Desktop this Agent will use.
PersonMember	Enterprise Name	Yes	The Person that this Agent represents.
AgentTeamMember	Enterprise Name	No	The team this agent belongs to. The team must be on the same Peripheral otherwise provisioning will fail. This column may also be subject to capacity limitations. For example, there may only be so many agents allowed in a team and that team has already reached its capacity.
SkillGroupMember	Enterprise Name	No	The skill group or skill groups this agent belongs to. The skill groups must be on the same Peripheral otherwise provisioning will fail. To specify multiple skill groups, separate each skill group with a semi-colon (;) character.

Folders Template

Note Folders do not use the Enterprise Name, Effective To or Effective From global columns.

Column Name	Data Type	Required?	Description
Security	CSS Styled List	No	Allows you to set security on the folder you upload. See section *Security Field Example* for an example of the syntax for this field.

Security Field Example

DOS-styled syntax example:

```
<USERNAME>:<ROLENAME>:<USERNAME>:<ROLENAME>[:<MULTIPLEROLENAMES>]
```

This is an example of what can be put into the Security field in the agent CSV file:

- A single user with a single role

```
Administrator:Advanced Users
```

- A single user with more than one role

```
Administrator:Advanced Users:Supervisors
```

- Multiple users

```
Administrator:Advanced Users:Supervisors;User1:Basic Users
```

Users are separated by semicolons. Users are separated from roles by colons. This is similar to CSS syntax except that a user can have multiple roles.

Note Group permissions on a folder cannot be set during bulk upload.

Users Template

Note Users use only the Path and Description global columns from the Global Template.

Column Name	Data Type	Required?	Description
LoginName	SNC	Yes	The login name of the user that will be used for application logon.
Password	Password	Yes	The password for the new user account
AdvancedMode	Boolean	No	Determines if the user is advanced or not
FirstName	SNC	No	The first name of the user
LastName	SNC	No	The last name of the user
ChangePasswordOn NextLogon	Boolean	No	Determines if after the initial logon the user should be prompted to reset their password
PasswordNeverExpires	Boolean	No	Determines if the password for this user will ever expire

Column Name	Data Type	Required?	Description
HomeFolder	Path	No	The folder path to the folder which will be used as the users home folder
CreateNewUserFolder	Boolean	No	Determines whether a new folder should be created for the user home folder in the HomeFolder location
Groups	Group Name(s)	No	A semi colon separated list of Group names (including their path) to which the user will be added. Since group names are not unique the path must also be specified for example, /Folder1/Admins;/Folder2/Admins

Agent Desktop Template

Column Name	Data Type	Required?	Description
WrapupDataIncoming Mode	Numeric	No	Indicates whether the agent is allowed or required to enter wrap-up data after an inbound call. **0**: Required **1**: Optional **2**: Not allowed If not supplied, defaults to 1.
WrapupDataOutgoing Mode	Numeric	No	Indicates whether the agent is allowed or required to enter wrap-up data after an outbound call. **0**: Required **1**: Optional **2**: Not allowed If not supplied, defaults to 1.
WorkModeTimer	Numeric	No	The amount of time in seconds (1-7200) allocated to an agent to wrap up the call. If not supplied, defaults to 7200.

Column Name	Data Type	Required?	Description
RemoteAgentType	Numeric	No	Indicates how mobile agents are handled. **0**: No remote access **1**: Use call by call routing **2**: Use nailed connection **3**: Agent chooses routing at login If not supplied, defaults to 0.

Agent Team Template

Column Name	Data Type	Required?	Description
PeripheralMember	Enterprise Name	Yes	The peripheral to assign this agent team to.
DialedNumberMember	Enterprise Name	No	The dialed number to use for this Agent team.

Skill Group Template

Column Name	Data Type	Required?	Description
PeripheralNumber	Numeric	No	The service number as known at the peripheral. If not supplied, an auto-generated number is used.
PeripheralName	SNC	No	The name of the Peripheral as it is known on the site.
AvailableHoldOffDelay	Numeric	No	The value for this Skill Group instead of using the one associated with this peripheral.
Priority	Numeric	No	The routing priority for the skill. This should be set to 0.
Extension	Numeric	No	The extension number for the service (used by Lucent DEFINITY ECS).
IPTA	Y/N	No	Indicates whether the Unified CCE picks the agent.

Column Name	Data Type	Required?	Description
ServiceLevelThreshold	Numeric	No	The service level threshold, in seconds, for the service level. If this field is negative, the value of the Service Level Threshold field in the Peripheral table is used.
ServiceLevelType	Numeric	No	Indicates how the system software calculates the service level for the skill group. If this field is 0, Unified CCE uses the default for the associated Peripheral/MRD pair. Possible values: 0 = Use Default; 1 = Ignore Abandoned Calls; 2 = Abandoned Call Has Negative Impact; 3 = Abandoned Call Has Positive Impact.
DefaultEntry	Numeric	No	Normal entries are 0 (zero). Any records with a value greater than 0 are considered a default skill group for configuration purposes. Records having a value of 1 are used by Unified CCE as the default target skill group.
PeripheralMember	Enterprise Name	Yes	The peripheral to assign this skill group to.
RouteMember	SNC	No	The Routes associated with this skill group. To supply a list of routes, separate the routes in the list with a semi-colon (;). **Note**: The specified route or routes must not already exist. They will be created as part of the bulk upload of the skill group.
MediaRoutingDomain Member	Numeric	Yes	The Media Routing Domain. This cannot be changed after skill group upload.

Enterprise Skill Group Template

Column Name	Data Type	Required?	Description

Column Name	Data Type	Required?	Description
SkillGroupMember	Enterprise Name	No	The skill group or skill groups associated with this enterprise skill group. The skill groups must be on the same Peripheral otherwise provisioning will fail. To specify multiple skill groups, separate each skill group with a semi-colon (;) character.

User Variable Template

Column Name	Data Type	Required?	Description
ObjectType	Numeric	Yes	A number indicating the type of object with which to associate the variable. You may choose not to associate the user variable with an object by selecting 31 (User Variable). Valid numbers are as follows: **1:** Service **2:** Skill Group **7:** Call Type **8:** Enterprise Service **9:** Enterprise Skill Group **11:** Dialed Number **14:** Peripheral **16:** Trunk Group **17:** Route **20:** Master Script **21:** Script Table **29:** Application Gateway **31:** User Variable

Label Template

Column Name	Data Type	Required?	Description
RoutingClientMember	SNC	Yes	The name of the routing client (such as NIC or PG) that this number should use to submit routing requests to the Unified CCE.

Call Type Template

Column Name	Data Type	Required?	Description
ServiceLevelType	Numeric	No	Indicates how the system software calculates the service level for the skill group. If this field is 0, Unified CCE uses the default for the associated Peripheral/MRD pair. Valid numbers are as follows: 0 or blank: Use Default 1: Ignore Abandoned Calls 2: Abandoned Call Has Negative Impact 3:Abandoned Call Has Positive Impact.
ServiceLevelThreshold	Numeric	No	The service level threshold, in seconds, for the service level. If this field is negative, the value of the Service Level Threshold field in the Peripheral table is used.

Dialed Number Template

Column Name	Data Type	Required?	Description
Digits	Numeric	Yes	The telephone number, with no spaces between the digits.
RoutingClient Member	SNC	Yes	The name of the routing client (such as NIC or PG) that this number should use to submit routing requests to the Unified CCE.
MediaRouting DomainMember	SNC	Yes	The name of the media routing domain.

Using the Bulk Upload Tool

To use the bulk upload tool:

1. Open the **System Manager** page.

2. Select the required folder.

3. Click on **Upload** in the Folder Tree panel and then select the item type you want to bulk upload from the drop-down list. The **Bulk Upload Control** page displays.

4. Select a template for your chosen resource. The template link is present in the horizontal toolbar near the top of the page. Once selected, a download box is presented allowing you to save this CSV file onto your machine.

5. Open the template in the editor you require (such as Notepad) and begin to enter your data or paste it from another source.

6. Return to the **Bulk Upload Control** page and make sure the path is set correctly.

Note

This path will only be used if you have removed the Path column in the CSV file. This option is not available for folders, dashboard layouts or dashboard styles.

7. Browse to the CSV file you have just entered the data into.

8. Click **Upload**.

A progress bar at the bottom of the screen displays the upload progress.

Caution

Do not upload more than 500 items per CSV file.

If something goes wrong, pause the upload and check why an item failed. For more information about upload failures, see section Reasons for Upload Failure.

If the upload tool encounters a problem that affects all rows and not just the current one, an alert box appears that describes the problem's description and will return you to the Bulk Upload Control page.

Once every row has been processed a summary dialog appears to inform you of how many rows failed and how many passed. Please note this dialog does not give you the result of provisioning these items onto the host system, only the result of uploading the items into Unified CCDM.

Reasons for Upload Failure

The table below details some reasons why an upload might fail.

Exception Type	Reason
No Capacity Left	The capacity limit has been reached.
Enterprise Name Already Exists	The enterprise name already exists.
Login Name Already Exists	The peripheral login name already exists.
SQL Exception	SQL error during upload, usually due to bad data.

Exception Type	Reason
Argument Exception	An attribute contains a bad value. This usually occurs when you have an empty string in the Path column when attempting to upload items which cannot be contained in the Root folder.
Security Exception	You do not have security permissions to upload to the folder.
Format Exception	Invalid data in a column.
No Identity Available	Identity not available.

Merging Items

Access and Use

The Merge function allows items from multiple pieces of equipment to be combined into one single item. By merging items together common properties may be provisioned in one single place, reducing the time involved with creating and updating resource items.

The Merge function is accessed using the **Merge** button in the Items panel of the **System Manager** tool.

Note
The Merge function is only supported for Person items. You can use the Merge function to merge a Unified CCE Person and a Unified CM End User to create a single person.

Master Item

The master item is the item to which all other items will be merged into. The master item may already be selected for you based on selections made in System Manager before entering the page. The equipment that the item is currently located on is shown in brackets after the item name.

To select a new master item, click on a row in Selectable Items table.

Items to Merge

The Items to Merge section of the page displays the current list of items to be merged into the master item. These items may already be selected for you based on selections made in System Manager before entering the page.

To add an entry to the Items to Merge list you must first locate the item in the Selectable Items sections of the page. Once the item is located, expand the row using the cross to show a list of equipment which the item is located on. Select which item

equipment mappings you wish to merge into the master item by selecting the check-boxes.

To remove an entry from the Items to Merge list, click the cross located next to the item name.

Filter Options

You can filter the Selectable Items table using the Filter Options section of the page. Enter part or all of an item name and press the **Find** button.

You can filter a search by a specific piece of equipment using the **Filter by Equipment** drop-down box. You can search for an item across all pieces of equipment by selecting the **All Equipment** option.

Merge

When you have selected one or more Items to Merge, select the **Merge** button to merge the items into the Master Item. This will display a confirmation message for you to check that the items being merged are correct. Press the Confirm button to commit the changes.

Predefined Searches

System Search Folders

If you have a global role that includes the Browse Search Folders permission (see section The Global Security Manager for more information about global roles) then you may be able to see search system folders in the Folder Tree panel, either at root level, or in subfolders, or in both locations. These folders contain predefined searches.

By default, Unified CCDM is configured with the following three predefined searches, located in **Search Folders**, immediately below the root folder:

- **Awaiting Deletion**: allows the user to see a flat list of all the items in the system that they have permission to see and are currently at Awaiting Deletion status.

- **Error**: allows the user to see a flat list of all the items in the system that they have permission to see and are currently at Error status.

- **Pending Active**: allows the user to see a flat list of all the items in the system that they have permission to see and are currently at Pending Active status.

View the Search Details

1. In the Folder Tree panel, click on **Search Folders**.

2. In the Items panel (summary view) you will see a single summary entry representing the searches in the folder. Click on the summary entry to show the list of searches in the Items panel (list view).

3. In the Items panel (summary view), click on a search to see the search details in the Detail panel.

Running a Predefined Search

1. To run a predefined search, in the Folder Tree panel, click on the + beside **Search Folders** to expand it, and then click on the search folder that contains the search you want to run. This runs the search.

2. The Items panel displays a summary list of the item types that match the search criteria. Click on an item type in the summary list to see the items of that type that match the search criteria.

Refreshing the Search Results

Right click on a search and select refresh to refresh the search results.

Moving or Deleting Searches

The searches are predefined. You cannot move or delete searches using the functionality in the Folder Tree panel or in the Items panel.

Viewing or Editing Items Returned in Search Results

To view or edit the items returned in a search:

1. In the Folder Tree panel, below Search Folders, identify the search you are interested in.

2. Next,
    - either click on the search to see a summary view of the results in the Items panel, and then click on a resource type to see a list of the items of that type.
    - or click on a resource folder below the search to see a list view of the resource items of that type in the Items panel.

3. Click on an item in the Items panel to view the details for that item.

4. Optionally, edit the item details, as required, and then click **Save** to apply any changes, or **Cancel** to revert the changes.

Note If you edit the item, you are editing the actual item, not just the search result.

Moving Items Returned in Search Results

To move one or more items returned in a search:

1. In the Folder Tree panel, below Search Folders, identify the search you are interested in.

2. Next,

    -   either click on the search to see a summary view of the results in the Items panel, and then click on a resource type to see a list of the items of that type.

    -   or click on a resource folder below the search to see a list of the items of that type in the Items panel.

3. Check the box or boxes of the item or items to be moved.

4. Click the **Move** button.

5. The Move the Current Items page will be displayed, showing the folder tree.

6. Select the location in the folder tree to move the folder or folders to.

7. Click **Save.**

Note

If you move an item, you are moving the actual item, not just the search result.

Deleting Items Returned in Search Results

To delete one or more items returned in a search:

1. In the Folder Tree panel, below Search Folders, identify the search you are interested in.

2. Next,

    -   either click on the search to see a summary view of the results in the Items panel, and then click on a resource type to see a list of the items of that type.

    -   or click on a resource folder below the search to see a list of the items of that type in the Items panel.

3. Check the box or boxes of the item or items to be deleted.

4. Click **Delete**.

5. At the confirmation message, click OK to start the deletion.

Note

If you delete an item, you are deleting the actual item, not just the search result.

6.   Security Manager

Overview

Security management in Unified CCDM is folder based, and therefore a basic folder structure needs to be in place before security can be set up. Users are granted permissions to perform certain tasks within specified folders, and these permissions are inherited by the child folders and on down through the folder tree.

Inheritance and Policy Root Folders

By default, all folders except the tenant folder inherit the permissions of their parent. The tenant folder is therefore considered the root folder for a single security policy.

This inheritance link can be broken for individual folders, allowing separate permissions to be applied to them. These folders become policy roots, with their child folders inheriting their permissions.

Figure 6.1   Folders and Security Policies
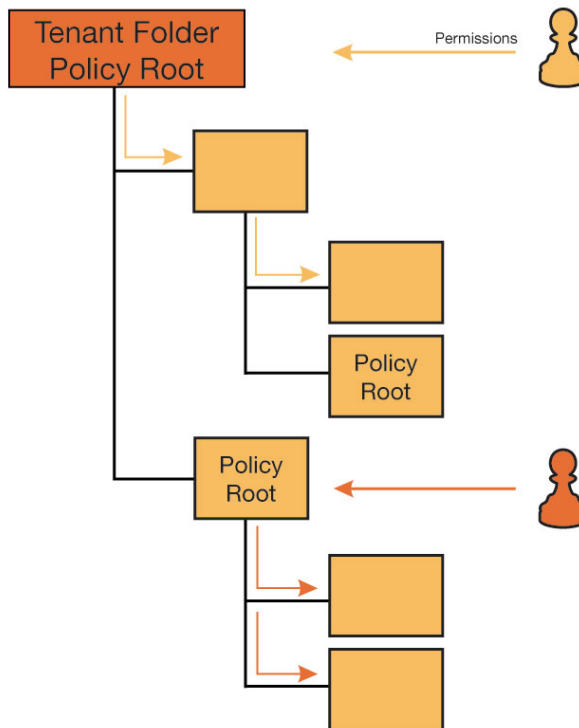
> **Note**   When changing a user's permissions on a folder, checking the **Change permissions for sub-folders** box forces the system to propagate the changes into any policy roots below it in the tree.

Users and Groups

Users can belong to groups of users that have the same permissions. The permissions assigned to that group apply to all members of that group.

Groups may be members of other groups. For example, if you wanted users with permissions over the San Francisco policy root to have permissions only within the San Francisco tree, but users with permissions within the New York policy root to have permissions within both New York and San Francisco, you could create a group for each policy which had permissions only within that policy, and then make the New York group a member of the San Francisco group.
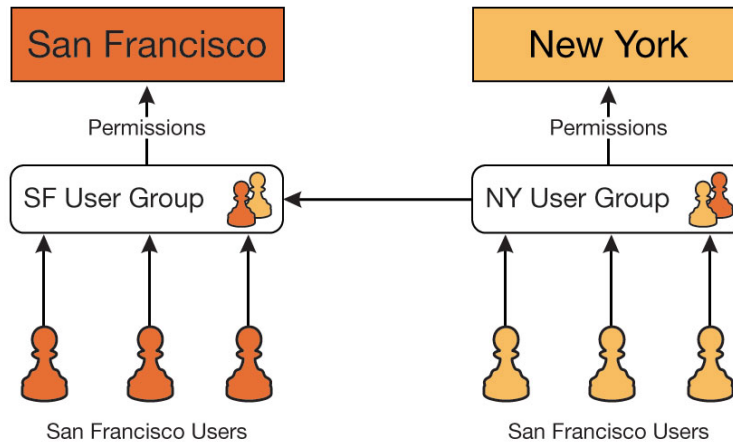
Figure 6.2   Groups and Security Policies Example

Both users and groups may be members of more than one group.

Users and groups are created, moved, edited and deleted from the User Manager and the Group Manager links on the Tools page. To assign permissions to a user or group use the Security Manager.

Default Groups

When you break the inheritance link for a folder, you create a new policy root folder. This automatically creates a number of default user groups within the policy root folder, with permissions over that policy. The default groups that are created, and the permissions they are assigned on folders, are set using **Settings** > **System Settings**.

Two default groups are also present in the Root folder. These are:

*   **Everyone:** allows users to browse the Shared and Unallocated folders. When a user is created they are automatically assigned to this group.

*   **Administrators:** provides the host administrator with full permissions throughout the system.

The details of these two groups cannot be changed, although users and groups may be assigned to them or removed from them as normal.

Permissions

Individual permissions (or tasks), such as creating agents or viewing resources, are gathered together into roles. Permissions for users and groups are then granted by means of these roles. There are two kinds of role used to grant permissions:

*   **Global roles** globally 'switch on' the ability to perform certain kinds of action within the system, such as the ability to access the Security Manager tool (see section What is a Global Role? for more information about global roles).

- **Folder roles** specify the tasks which may be performed within individual folders, for example the ability to manage security within a specific tenant folder (see section What is a Folder Role? for more information about folder roles).

For example, to manage security for a folder, a user needs a global role granting security management permissions, and a folder role granting permission to manage security within that folder.

Global roles are created, edited and assigned to users and groups from the **Global Security Manager** link on the **Tools** page. Folder roles are created and edited from the **Role Manager** link on the **Tools** page. To assign folder roles to users or groups, use the **Security Manager**.

Default Roles

A number of default roles are provided with the system. These roles are shown below.

Default global roles:

- **Global Basic**: allows a user to perform basic provisioning and management functions.

- **Global Advanced**: allows a user to perform advanced provisioning and management functions, including all those allowed by the Global Basic global role.

- **Global Host**: allows a user to perform all licensed functions.

Default folder roles:

- **Supervisor**: allows a user to manage users and most resources in the specified folder.

- **My Reports**: allows a user to browse and manage reports and parameter sets.

- **Basic**: allows a user to browse most resources and to manage reports and parameter sets in the specified folder.

- **Advanced**: allows a user to browse and access to most resources in the specified folder, including all those allowed by the Basic folder role and the Supervisor folder role.

- **Full Permissions**: allows a user to perform all licensed functions in the specified folder.

Security Management Tools

Unified CCDM provides the following tools to manage security.

Tool Name	Usage
Global Security Manager	Allows you to create and manage global roles, and to assign these global roles to users and groups.
Role Manager	Allows you to create and manage folder roles. **Note**. Use Security Manager to assign folder roles to users or groups for specific folders.
User Manager	Allows you to create and manage users, and to view the folder roles and global roles they have.
Group Manager	Allows you to create and manage groups, and to view the folder roles and global roles they have.
Security Manager	Allows you to view and edit (but not create) folder roles, assign folder roles to users and groups, change folder security inheritance and view and edit users and groups. **Note**. Use Global Security Manager to assign global roles to users and groups.

All these tools are available on the tools page. Security Manager is also available at any time from the drop-down on the top menu.

The Global Security Manager and Global Roles

What is a Global Role?

Global roles are collections of tasks that specify the permissions a user has the potential to perform within the system. For example, a user assigned a global role that includes the 'System Manager' task has the potential to access the System Manager tool if they are assigned folder roles that require this. Global roles are not contained within individual folders, but exist throughout the system and can be applied to any user or group.

The roles that are needed in Unified CCDM are determined by the requirements of the different categories of user who will be working within that system.

Note

If some roles appear disabled and marked as unlicensed following an install or an upgrade, it may be that you need a license upgrade to access those features. Contact your reseller for further information.

Managing Global Roles

Global Security can normally only be managed by Host Administrators, but it is possible to allow tenant administrators to grant users and groups global permissions without assigning them full global security permissions by setting up 'global permissions groups' in each tenant root, each of which has been uniquely assigned a particular global role.

To manage global roles, select the **Global Security Manager** link below **Security Manager** on the **Tools** page.

Creating a Global Role

To create a global role:

1. In the **Global Security Manager**, click the **New** option.

2. Give the new role a **Name** reflecting the permissions it grants or the category of user it is intended for.

3. Add a **Description** if necessary, such as a summary of the permissions granted.

4. Check the tasks to be included in this role.

5. Click **Save.**

Assigning a Global Role

To grant or remove global permissions:

1. In the **Global Security Manager**, click on the name of the global role to be assigned to users or groups. The properties of the global role are displayed.

2. Click on the **Members** tab.

To remove a user or group from this global role:

1. Click the **Delete** icon () by the member, and then click **Confirm**.

To add a user or group to this global role:

1. Click the **Add Members** button. A dialog box will open.

2. Navigate through the folder tree on the left to the folder containing the users or groups to be assigned this global role. You can use the fields at the top to filter this view to show only users or only groups, or to search for specific names.

3. Check the check box of the new members. You can select users and groups from multiple folders.

4. **Close** and **Save.**

Editing a Global Role

To edit a global role:

1. In the **Global Security Manager**, click on the name of the global role to be edited.

2. Click on the **Details** tab and change the details if required.

3. Check the **Enabled** check box to ensure that the global role is available to system users.

4. Check the **Hidden** check box if you want the global role to be hidden from system users.

5. On the **Tasks** tab check the tasks you want to add to the global role, and uncheck the tasks you want to remove from the global role.

6. Click **Save** to save your changes.

Deleting a Global Role

To delete a global role:

1. In **Global Security Manage**r, check the box beside the global role you want to delete and click **Delete**.

2. Click **OK** to confirm the deletion.

Note

You will not be able to delete a global role that still has members.

The Role Manager and Folder Roles

What is a Folder Role?

Folder roles are sets of permissions that users and groups may be granted on specific folders. They are not contained within individual folders, but exist throughout the system and can be applied to any user or group for any folder.

The roles that are needed in Unified CCDM are determined by the requirements of the different categories of user who will be working within that system. For each folder role created there should be a global role which provides all the global permissions necessary to allow performance of the tasks specified. A global role with more permissions than needed can normally be safely used instead.

For example, if a folder role contains the task 'Manage Dimensions', there should also be a global role containing the 'System Manager' task along with one or more of 'Provision Agent', 'Provision Agent Desktop' etc tasks, depending on which dimensions the folder role is intended to allow users to manage.

Note If some roles appear disabled and marked as unlicensed following an install or an upgrade, it may be that you need a license upgrade to access those features. Contact your reseller for further information.

Managing Folder Roles

To manage folder roles, select the **Role Manager** link below **Security Manager** on the **Tools** page. To grant users roles on specific folders, use the **Security Manager**.

Note By default, only host administrators can manage folder roles.

Creating a Folder Role

To create a folder role:

1. In the **Role Manager**, click **New**.

2. Give the new role a **Name** reflecting the permissions it grants or the category of user it is intended for.

3. Add a **Description** if necessary, such as a summary of the permissions granted or a list of the global roles that are suitable for use with this folder role.

4. Check the tasks to be included in this role.

5. Click **Save**.

Assigning a Folder Role

To assign a folder role to a folder, use the **Security Manager** tool (see section The Security Manager).

Editing a Folder Role

To edit a folder role:

1. In **Role Manager**, click on the name of the folder role you want to edit.

2. Check the **Enabled** check box to ensure that the folder role is available to system users.

3. Check the **Hidden** check box if you want the folder role to be hidden from system users.

4. Check the tasks you want to add to the folder role, and uncheck the tasks you want to remove from the folder role.

5. Click **Save** to save your changes.

Deleting a Folder Role

To delete a folder role, in **Role Manager**, check the box beside the folder role you want to delete, click **Delete**, and then **OK**.

> **Note** You will not be able to delete a folder role that is still being used.

The User Manager

What is a User?

Unified CCDM treats user accounts similarly to resources. That is, each user account must be contained within a specific folder, and users with appropriate permissions on that folder can change the properties of that user (for example, the password) or move or delete the user account.

The folder that contains a user account does not affect the permissions of that user.

Managing Users

The **User Manager** link below **Security Manager** on the **Tools** page allows you to create, edit and delete users, or add them to groups. To change the permission (folder role) a user has on specific folders, use **Security Manager**.

Creating a User

To create a user:

1. Open the **User Manager.**

2. From the folder tree on the left, select the folder in which to create the new user.

3. Click the **New** option. The **Create a New User** page will open.

4. Enter the following details:

   - In the **Login Name** field enter the name for the new user account. The user will use this name to login to Unified CCDM.

   - In the **Password** field enter the password for the new user.

   - In the **Confirm Password** field re-enter the selected password.

   - In the **First Name** and **Last Name** fields enter the user's details.

   - In the **Email** field enter the email address (if any) of the new user.

   - In the **Description** field, optionally enter any explanatory text, such as a job title.

- Enter the **User Home Folder** that the user will start in when they log in. If you leave this blank, it will automatically be set to the folder the user is created in.

> **Note**
> Basic (or standard) users will be unable to navigate out of their home folder.

5. Select any of the following check boxes which are applicable:

- Select the **Advanced Mode** check box if the user is to be assigned global roles that allow them to access Advanced Mode tools such as the System Manager.

> **Note**
> The number of advanced users should be limited as far as is practical.

- Select the **Enabled** check box to ensure that the user is live in the system. If unchecked the new user account will be saved in the system, but the user will not be able to login.

- Select the **User must change password at next Logon** check box to prompt the new user to change their password after their first login.

- Select the **Password Never Expires** check box to assign the password to the new user indefinitely.

- Select the **User cannot change password** check box to prevent the new user from changing their own password (it can still be changed by administrators).

6. If you wish to create more than one user, select the **Create Another** check box to remain on the Create a new user page after you have created this user.

7. Click **Save**.

> **Note**
> You can also create a user in **System Manager** (in the Folder Tree panel, select **System** > **User**).

Fields available when creating a user

Field	Description	Entry	Default	Required?
Login Name	A unique login name for the Portal user.	Unique. Up to 50 characters, excluding any characters in the following list: / : ? ; & " = + ! $ * > < | ' { } ( ) Must begin with a letter or number.	Null	Yes
First Name	The first name of the Portal user.	Up to 50 characters.	Null	No
Last Name	The last name of the Portal user.	Up to 50 characters.	Null	No
Email	The user's email address	Up to 255 characters. Must be a valid email address in the format name@domain.extension	Null	No
Description	A description of the Portal user.	Up to 255 characters.	Null	No
Advanced Mode	Indicates whether this user has advanced mode functionality.	Check this box to specify whether the user has advanced mode functionality.	Null	No
Account Enabled	Indicates whether this user is currently active on the system.	Check this box to specify that the user is currently active. If this box is not checked then this user will not be able to log on to the Portal web application.	Selected	No
User must change password at next login	Indicates whether this password is only valid for a single log in.	Check this box to force the user to change their password the next time they log in.	Null	No

Field	Description	Entry	Default	Required?
Password never expires	Indicates whether the password will never expire.	Check this box to specify that the user's password never expires. If this box is not checked, the user's password will expire after the number of days specified in Settings > Security Settings > Password Expiry.	Null	No
User cannot change password.	Indicates whether the user cannot change their password.	Check this box to specify that the user cannot change their password. If this box is not checked, the user can change their password using Settings > Change Password.	Null	No
User Home Folder	The user's home folder	From the folder tree, select the location of the home folder that the user will be taken to on login.	/	Yes
Create a new folder for this user	Indicates whether to create a new folder for this user.	Check this box to create a new folder for the user below the User Home Folder. The name of the new folder will be the user's Login Name followed by the default folder suffix specified in Settings > Security Settings > User Folder Suffix.	Cleared	No

Field	Description	Entry	Default	Required?
Password	The password that the user will use to log in to the system.	At least five characters long. Longer passwords, including numbers and other characters, may be required, depending on any password restrictions specified in Settings > Security Settings. Ask your system administrator for details.	Null	Yes
Confirm Password	The same as for the Password field. This ensures that the user is not prevented from logging in by typographical errors made when setting his or her password.	Enter password confirmation. This must match the value specified in the Password field.	Null	Yes

Editing User Details

To edit user details in User Manager:

1. Open the **User Manager**.

2. From the folder tree on the left, select the folder containing the user to be edited.

3. Click on the user. A page showing the user details opens.

4. Edit details as desired. The user's password can be changed from the **Password** tab, and the user can be added or removed from groups using the **Groups** tab.

Note You can also edit a user in **System Manager** by clicking on the user in the Items panel (list view).

Fields available when editing a user

Field	Description	Entry	Default	Required?
Details Tab				
Login Name	A unique login name for the Portal user.	Unique. Up to 50 characters, excluding any characters in the following list: / : ? ; & " = + ! $ * > < | ' { } ( ) Must begin with a letter or number.	Null	Yes
First Name	The first name of the Portal user.	Up to 50 characters.	Null	No
Last Name	The last name of the Portal user.	Up to 50 characters.	Null	No
Email	The user's email address	Up to 255 characters. Must be a valid email address in the format name@domain.extension	Null	No
Description	A description of the Portal user.	Up to 255 characters.	Null	No
User Home Folder	The user's home folder	From the folder tree, select the location of the home folder that the user will be taken to on login.	/	Yes
Advanced Mode	Indicates whether this user has advanced mode functionality.	Check this box to specify whether the user has advanced mode functionality.	Null	No
Account Enabled	Indicates whether this user is currently active on the system.	Check this box to specify that the user is currently active. If this box is not checked then this user will not be able to log on to the portal web application.	Selected	No
Password Tab				

Field	Description	Entry	Default	Required?
Reset Password	Whether to reset the password for this user.	Check this box to reset the user's password.	Null	No
Password	Only shown if Reset Password is checked. The new password for this user.	At least five characters long. Longer passwords, including numbers and other characters, may be required, depending on any password restrictions specified in Settings > Security Settings. Ask your system administrator for details.	Null	Yes
Confirm Password	Only shown if Reset Password is checked. The same as for the Password field.	Enter password confirmation. This must match the value specified in the Password field.	Null	Yes
User exceeded maximum login attempts	Set by the system if the user has been locked out of the system because the maximum number of login attempts has been exceeded.	Clear this box to re-enable the user if the user has been locked out for exceeding the maximum number of login attempts. The user will not be able to log on to the portal until this box has been cleared.	Null	No
Password never expires	Indicates whether password will never expire.	Check this box to specify that the user's password never expires. If this box is not checked, the user's password will expire If this box is not checked, the user's password will expire after the number of days specified in Settings > Security Settings > Password Expiry.	Null	No

Field	Description	Entry	Default	Required?
User cannot change password.	Indicates whether the user cannot change their password.	Check this box to specify that the user cannot change their password. If this box is not checked, the user can change their password using Settings > Change Password.	Null	No
User must change password at next login	Indicates whether this password is only valid for a single log in.	Check this box to force the user to change their password the next time they log in.	Null	No
Groups				
Groups	Add this user to a group or remove this user from a group.	To add user to a group, click **Add to Group**, navigate the folder tree to locate the group you want, then select the group and click OK. To remove a user from a group, click the ⊗ icon beside the group you want to remove the user from.	Null	No

Moving a User

To move a user in User Manager:

1. Open the **User Manager.**

2. From the folder tree on the left, select the folder containing the user to be moved.

3. Select the check box beside the user to be moved.

4. Click the **Move** option. The Move a user page will open.

5. Navigate to the folder you want to move the user to.

6. Click **Save.**

> **Note**
> You can also move a user in **System Manager** by selecting the check box beside the user in the Items panel (list view) and clicking **Move**.

Deleting a User

To delete a user:

1. Open the **User Manager**.

2. From the folder tree on the left, select the folder containing the user to be deleted.

3. Select the check box beside the user to be deleted.

4. Click the **Delete** option and confirm the deletion when prompted.

> **Note** You can also delete a user in **System Manager** by selecting the check box beside the user in the Items panel (list view) and clicking **Delete**.

Copying a User

To copy a user thus copying all of the user's settings, group memberships and roles:

1. Open the **User Manager**.

2. From the folder tree on the left, select the folder containing the user to be copied.

3. Click on the user. A page showing the user details will open.

4. Click on the **Copy** option. A dialog displaying empty user fields will be displayed.

5. Fill in the details of the new user.

6. Click the **Copy** button on the dialog.

User Permissions

Viewing User Permissions

To see a user's permissions (folder roles and global roles):

1. Open the **User Manager**.

2. From the folder tree on the left, select the folder containing the user.

3. Click on the user. A page showing the user details will open.

4. Click on the **Access** option. You can see the folders the user can access, the roles the user can perform on each folder and the global roles the user has.

> **Note** The Access option does not show whether these permissions have been assigned directly to the user or through group memberships.

Changing User Permissions

To change the permissions (folder roles) a user has in a folder, use the **Security Manager** tool (see section The Security Manager).

To change the global roles that a user has, use the **Global Security Manager** (see section The Global Security Manager).

> **Note**
> For ease of maintenance, it is recommended that you assign user permissions to groups, not to individual users.

Changing the Groups a User Belongs To

To change the groups a user belongs to, use the Groups tab:

1. Open the **User Manager.**

2. From the folder tree on the left, select the folder containing the user to be updated.

3. Click on the user. A page showing the user details will open.

4. Select the **Groups** tab.

5. From the Groups tab, you can remove the user from groups by clicking on the **Delete** icon beside each group.

6. You can add the user to new groups, as follows:

   - Click the **Add to Group** button. A dialog box opens.

   - Navigate through the folder tree on the left to the folder containing the group the user is to be added to.

   - Select the check box of the group or groups. You can select groups from multiple folders.

7. Click **Close** and **Save.**

The Group Manager

What is a Group?

Unified CCDM treats groups similarly to resources. That is, each group must be contained within a specific folder, and any user with appropriate permissions on that folder can change the properties of the group.

The folder that contains a group does not affect the permissions of that group.

Managing Groups

The Group Manager link below **Security Manager** on the Tools page allows you to create, edit and delete groups and their memberships. To change the permission (folder role) a group has on a specific folder, use **Security Manager**.

Creating a Group

To create a group:

1. Open the **Group Manager**.

2. From the folder tree on the left, select the folder in which to create the new group.

3. Click the **New** option. The **Create a new group** page opens.

4. Enter the following details:

   - In the **Name** field enter the name for the new group. Groups in different folders may have the same name.

   - In the **Description** field enter a description for the group, such as a summary of its permissions or the categories of users it is intended for.

   - If you want to create more than one group, select the **Create Another** check box to remain on the Create a new group page after you have created this group.

5. Click **Save**.

Note

You can also create a group in System Manager (in the Folder Tree panel, select **System** > **Group**).

Fields available when creating a group

Field	Description	Entry	Default	Required?
Name	A unique name for the group.	Unique. Up to 50 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Null	Yes
Description	A description of the group.	Up to 255 characters.	Null	No

Editing Group Details

To edit group details:

1. Open the **Group Manager**.

2. From the folder tree on the left, select the folder containing the group to be edited.

3. Click on the group. A page showing the group details opens.

4. Edit details as desired. Members of the group can be added or removed using the **Members** tab, and the group itself can be added to or removed from other groups using the **Groups** tab.

Note You can also edit a group in **System Manager** by clicking on the group in the Items panel (list view).

Fields available when editing a group

Field	Description	Entry	Default	Required?
Details Tab				
Name	A unique name for the group.	Unique. Up to 50 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Null	Yes
Description	A description of the group.	Up to 255 characters.	Null	No
Enabled	Indicates whether this group is currently active on the system.	Check this box to specify that the group is currently active. If this box is not checked then any access that has been granted to users through this group is not available.	Selected	No
Members Tab				

Field	Description	Entry	Default	Required?
Members	Add members to this group or remove members from this group.	To add one or more members to this group, click **Add Members**, navigate the folder tree to locate the users to add, then select the user or users and click OK. To remove a user member from this group, click ✖ beside the user you want to remove from the group.	Null	No
Groups				
Groups	Add this group to another group or remove this group from another group.	To add this group to another group, click **Add to Group**, navigate the folder tree to locate the group you want to add this group to, then select the group and click OK. To remove this group from another group, click ✖ beside the group you want to remove this group from.	Null	No

Moving a Group

To move a group:

1. Open the **Group Manager**.

2. From the folder tree on the left, select the folder containing the group to be moved.

3. Select the check box beside the group to be moved.

4. Click **Move**. The Move a group page opens.

5. Navigate to the folder you want to move the group to.

6. Click **Save**.

7. Alternatively, click on the group name and click the **Move** option from the details page.

> **Note** You can also move a group in **System Manager** by selecting the check box beside the group in the Items panel (list view) and selecting **Move**.

Deleting a Group

To delete a group:

1. Open the **Group Manager**.

2. From the folder tree on the left, select the folder containing the group to be deleted.

3. Check the group's check box.

4. Click the **Delete** option and confirm the deletion when prompted.

> **Note** You can also delete a group in System Manager by checking the box beside the group in the Items panel (list view) and selecting **Delete**.

Group Permissions

Viewing Group Permissions

To view the permissions of a group (folder roles and global roles):

1. Open the **Group Manager**.

2. From the folder tree on the left, select the folder containing the group.

3. Click on the group. A page showing the group details will open.

4. Click on the **Access** option. You can see the folders that members of this group can access, the roles that they can perform on each folder and the global roles the user has.

> **Note** The Access option does not show whether these permissions have been assigned directly to the group or are inherited through membership of other groups.

Changing Group Permissions

To change the permissions (folder roles) members of a group have in a folder, use the **Security Manager** tool (see section The Security Manager).

To change the global roles that members of a group have, use the Global Security Manager (see section The Global Security Manager).

Changing the Members in a Group

To change the members of a group, use the **Members** tab:

1. Open the **Group Manager**.

2. From the folder tree on the left, select the folder containing the group.

3. Click on the group. A page showing the group details will open.

4. Select the **Members** tab.

5. From the **Members** tab, you can remove members by clicking on the Delete ( ) icon beside their names.

6. From the **Members** tab, you can add members as follows:

   - Click the **Add Members** button. A pop-up will open.

   - Navigate through the folder tree on the left to the folder containing the users or groups to be added to the current group. You can use the fields at the top to filter this view to show only users or only groups, or to search for specific names.

   - Check the check. box of the new members. You may select users and groups from multiple folders.

7. Click **Close** and **Save**.

> **Note** You can also change the members in a group in **System Manager** by clicking on the group in the Items panel (list view).

Changing the Groups a Group Belongs To

To change the groups that a group belongs to, use the **Groups** tab:

1. Open the **Group Manager**.

2. From the folder tree on the left, select the folder containing the group to update.

3. Click on the group. A page showing the group details opens.

4. Select the **Groups** tab.

5. From the **Groups** tab, you can remove the group from other groups it is a member of click the **Delete** icon ( ) by the group.

6. From the **Groups** tab, you can add the group to other groups as follows:

   - Click the **Add to Group** button. A dialog box will open.

   - Navigate through the folder tree on the left to the folder containing the group the current group is to be added to.

- Check the check box of the group or groups. You may select groups from multiple folders.

7. Click **Close** and **Save**.

Note

You can also change the groups a group belongs to in **System Manager** by clicking on the group in the Items panel (list view).

The Security Manager

Managing Folder Roles

The Security Manager tool allows you to:

- view the folder roles assigned to users and groups for a particular folder

- assign folder roles to users and groups for a particular folder

- change the folder role inheritance for a folder

- view and edit the permissions available in a folder role

- view and edit users

- view and edit groups.

To access the Security Manager select the **Security Manager** link from the **Tools** page, or from the drop-down by Tools on the top menu.

Viewing Folder Roles Assigned to a Folder

To see the folder roles that users and groups have on a particular folder, select that folder from the folder tree on the left. All the folder roles that users or groups have on the selected folder are shown in the **Permissions** tab.

Assigning Folder Roles to Users and Groups

To use **Security Manager** to assign folder roles to users or groups:

1. In **Security Manager**, click on the location in the folder tree that contains the users or groups you want to assign folder roles to. Then:

   - either click on the **Users** tab to see the users in that folder

   - or click on the **Groups** tab to see the users in that folder.

2. Check the box or boxes beside the users or groups that you want to edit the permissions for.

3. Click **Change Permissions** to change the folder roles for the selected users or groups.

4. If you see a message telling you that the current folder is inheriting permissions, and you want to break the inheritance and set different permissions for this

folder, click **Edit Item Security** then **OK** to confirm the action. **Cancel** if you do not want to break the inheritance.

5. If you are continuing to set folder roles, in the **Folder Permissions** dialog box, select a folder location from the folder tree on the left hand side of the screen, and one or more folder roles from the right hand side of the screen.

6. Check the **Change Permissions for Subfolders** if you want to copy the changed permissions to the subfolders of the selected folder also.

7. Click **Save** to see a summary of the folder roles that will be changed.

8. Click **Confirm** to apply the new folder roles.

Note
When assigning folder roles, be aware that, in some cases, to modify an item, users may need browse permissions on related items as well as needing permissions to modify the item itself. For example, in order to modify Agent and/or Skill Group configuration, a user must be able to see the Peripheral that they belong to.

Changing the Inheritance for a Folder

To change a folder's inheritance rule:

1. In **Security Manager**, from the tree on the left, select the folder to change .

2. In the **Permissions** tab, clear the **Inherit permissions from parent** check box to break the inheritance with the parent (or select it to reapply inheritance).

3. Click **OK** to confirm.

   - If you break the inheritance, the initial permissions will be set to those that currently exist on the folder. These can then be changed if necessary.

   - If you recreate the inheritance, the security settings for the folder will be replaced with those of its parent folder.

Viewing and Editing Folder Roles

To view the folder tasks that are included in a folder role:

1. In **Security Manager**, select a folder from the folder tree and click the **Permissions** tab to view the folder roles that apply to the selected folder.

2. Click on the folder role that you want to view or edit, to see a list of tasks that could be included in this folder role.

3. Check the **Enabled** check box to ensure that the folder role is available to system users.

4. Check the **Hidden** check box if you want the folder role to be hidden from system users.

5. Check the tasks you want to add to the folder role, and uncheck the tasks you want to remove from the folder role.

6. Click **Save** to save your changes.

You can also use the **Role Manager** tool to view or edit the folder tasks included in a folder role (see section Editing a Folder Role).

Editing User Details

To edit user details in Security Manager:

1. In **Security Manager**, click on a location in the folder tree, and click on the **Users** tab to see the users in that folder.

2. Edit the user details as described in section Editing User Details

3. Click **Save**.

Editing Group Details

To edit group details in Security Manager:

1. In **Security Manager**, click on a location in the folder tree, and click on the **Groups** tab to see the groups in that folder.

2. Edit the group details as described in section Editing Group Details.

3. Click **Save**.

Glossary

A

Agent

Any contact center operative dealing with customers, usually by answering incoming phone calls. Each agent is associated with a peripheral and can be a member of one or more skill groups.

Agent Desk Settings

Settings for a Unified CCE agent's phone or PC screen. Agent desk settings can be associated with each Unified CCE agent or with a Unified CCE peripheral. Also called agent desktop.

Agent Desktop

See Agent Desk Settings.

Agent Team

Any organizational or functional grouping of agents. An agent team is generally served by the same peripheral and has a common business focus such as a specific aspect of technical support. Agents may belong to several teams and skill groups.

Aggregate

The sum total of many similar elements or a summary of underlying values. It may also refer to the minimum or maximum.

Alphanumeric

Consisting of both letters and numbers.

Announcement

A verbal message played to the caller.

Application log

A folder in the system that records details of events that have occurred in the system. The data recorded can be any data; this is determined by an appropriate system administrator.

Ascending

Defines a list as either starting with the letter A or with the lowest number (compare with Descending).

Assignment

The granting of specific task permissions to a user. See Role/Task.

Attribute

Attributes are features of the graphic user interface that can be customized, such as the company logo, screen colors or icons.

Audit

A report that provides data regarding the operation of the platform itself.

Automate

To define a procedure that is carried out electronically, and independent of manual intervention.

B

Breadcrumb Trail

The route by which the user arrived at the current help page. Each previous page in the "trail" can be accessed by clicking the displayed link.

Browser

See Web Browser.

C

Cache

Memory on the application server, which stores the information used to generate a report for up to one month in case the information is required again.

Call Type

A category of routable task determined by dialed number (DN), caller-entered digits (CED) and calling line ID (CLID). Each call type has a schedule that determines which routing script or scripts are active for that call type at any time.

Cell

See Field.

Chart

A graphical means of displaying report data.

Check box

A small box displayed next to an entity in the system. By selecting the check box, the associated entity is made accessible for editing, deleting and so on.

Child

In folder terms a child folder is one that is contained within another folder, called the parent. A child inherits the security permissions of its parent folder. Note that a single folder may be both the child of one folder and the parent of another. See Parent.

Cluster

A grouping of similar resources, such as individual dialed numbers.

Column

In a table, a column is a vertical slice through the table rows. Each column consists of a certain kind of data, indicated by the column header, whose values appear in the fields beneath. See Field, Row.

Comma Separated Variable (CSV)

A method of representing a spreadsheet using a text file. The values are separated by commas, and each record is ended by a line break. The column headers are contained in the first record.

Create

To add an entity to the system, such as a new user, customer, resource or mapping.

Credentials

See Permissions.

CSV

See Comma Separated Variable.

Customize

To change an entity in the system to suit a unique purpose. Also to change the system settings to suit an individual user's requirements.

D

Data

The information generated by a computer based system.

Data Field

In analysis services, data fields provide the total values to be summarized in a report view.

Data Mart

A server running the Microsoft SQL Server analysis services application, which stores in memory the online analytical processing (OLAP) cubes used in report analysis.

Database

A catalog within the Microsoft SQL Server application that stores in memory the data used in reporting.

Default

The value that will be used when no alternative value is supplied by the user.

Delete

To remove an entity, parameter or mapping from the system.

Descending

Defines a list as either starting with the letter Z or with the highest number (compare with Ascending).

Destination

Code describing the target for an outgoing call (dialed number).

Destination Number

The telephone number to which the call was routed by the network. See Label.

Detail Field

See Total Field.

Dialed Number

The telephone number dialed by the calling party.

Dimension

A means of grouping and separating contact center data of a similar type in the SQL Server Analysis Services database. Also another term for a resource.

Drill down/up

To navigate through trees or data. Drill down to view child folders or data in finer detail and drill up to view parent folders or summarized data values.

Drill through

To use a field in one report to link to the same data item in another report.

E

Edit

To change the properties of an entity in the system.

Enable

To make an entity in the system either accessible or functional.

Enterprise

Collective term describing all parts of a company serviced by a single call distribution system. This may include several contact centers served by different peripherals.

Enterprise Service

Organizational grouping of agents within a company, perhaps spanning several contact centers and served by different peripherals, providing a specific customer service, such as technical support.

Enterprise Skill Group

Organizational association of contact center agents within a company, perhaps spanning several contact centers and served by different peripherals. Agents in a skill group share common talents such as technical or language abilities, or skills in dealing with complaints.

Error

An event on the platform that prevents it from operating as expected.

Excel

The spreadsheet application provided by Microsoft Corporation.

Exception

A value which falls outside set parameters. Exceptions may be highlighted for ease of identification. See Threshold.

Expire

A date and time, configured in the system, at which point a defined process or piece of information is rendered invalid.

Export

To save a report as a document type that can be published and distributed independently of the platform.

Extensible Markup Language (XML)

A markup language used to create special-purpose markup languages. It facilitates the sharing of data across different systems, particularly systems connected via the Internet.

Extension (filenames)

Different report format file names use a character extension that is unique to each format type.

Extension (telephone)

Either a telephone number that is local to the switch or a telephone station served by a PBX (Private Branch Exchange).

F

Field

An area in a table in which data can be included. The value in a field represents the value from the data represented by that specific row that belongs in the context defined by the column. See also Row, Column.

Filter

A means of choosing what data to view.

Folder

A system folder that can be linked to other folders in the system in parent/child relationships (compare with Tenant Folder). See also Parent, Child.

G

Generate

To run a report.

Global role

A role that applies throughout the entire system.

Graphical User Interface (GUI)

The front-end to the application that provides the user with the means to define and generate reports.

Group

A collection of users who share the same security permissions.

GUI

See Graphical User Interface.

H

Header

The field in a report grid which describes the contents of the column beneath it or the row beside it.

Hierarchy

A tree structure in which the root folder at the top of the tree is the parent folder to all the folders beneath it. Folders are organized into parent/child relationships in which the subordinate child folders inherit the security permissions of a parent folder. Tenant folders are unusual in being stand alone and unable to inherit the permissions of a parent folder.

Historical

Historical data reflects the past activities occurring in the organization.

HTML

See Hypertext Markup Language.

Hypertext Markup Language (HTML)

A markup language used to build web pages and other information which can be viewed in a web browser.

I

Icon

A picture displayed in the GUI that represents a system function or object. Some icons may be purely representative. Other icons, however, may be used as shortcuts to the object or function they represent. For example, the Properties icon acts as a link to the properties page in which the properties of the selected object may be modified.

IE

See Internet Explorer.

Import

To load data into the platform from an external source.

Increment

One of a series of regular additions. Specifically, the adding of a new version of a report to a list of previous versions.

Information Notice

Information notices are used to inform contact center staff of general information or new announcements. Information notices are displayed in the home page.

Interactive Voice Response (IVR)

Also called VRU (Voice Response Unit) or ARU (Audio Response Unit). A device that routes a call automatically using a customer's replies to a series of prompted messages. An IVR may respond directly to a customer's voice or to a sequence of dialed digits (CED).

Interface

See Graphical User Interface.

Internet Explorer

The web browser developed by Microsoft Corporation. Several versions are available, providing different levels of functionality.

IP Phone

A telephone that can be integrated into an IP network.

IVR

See Intelligent Voice Response.

J

Job

A task performed by the system.

L

Label

An identifier, usually a destination number, that is associated with a specific peripheral target or with a specific network target used for call routing purposes.

Layout

The way in which information displays.

Legend

A quick means of identifying the different elements displayed in a report.

Link

The system enables you to access certain functions or pages by clicking certain text or buttons. Link text is usually distinguished from normal text by being underlined or bold.

Linked Report

When a report's parameters (items) are changed and saved under a new report name, the new report is linked in the system back to the original report.

List

A series of alphabetical or numerical objects or values.

Log in

For a user to identify themselves to the Web Portal. No user can use the Web Portal without logging in. This is a security measure which ensures that each user may only use those data and functions to which they have been granted access. This process is also called logging on (compare Log out). See Login ID, Password.

Log out

To leave the system, disabling access to functions and data. A user must log out once they have finished working with the system to prevent other individuals gaining access to functions and data they are not authorized to use (compare Log in).

Login ID

This is the same as the user name. Along with a password, it allows a user to log in to the system. See Log in, Password.

M

Mapping

The process of associating one item with another. For example, you might associate a user with a security group that has permission to access particular resources, or a security group with a resource group, or a dialed number with a destination number (label).

Member

A user who belongs to a user group.

Message

A piece of useful or instructional text.

N

Navigate

To search though a hierarchical folder structure in the tree, or to follow a set of commands to access a page or function within the system.

Notice

See Information Notice.

O

Office Web Components (OWC)

Tools based on Microsoft Excel technology, but used in the web browser rather than the desktop. They consist of the Spreadsheet, Chart, Pivot Table and Data Source components.

Online

To be able to communicate across a network.

OWC

See Office Web Components.

P

Parameters

Settings that enable you to define the type and amount of information displayed in a report as well as the way in which the data is presented.

Parent

A folder that contains one or more sub-folders (child folders). A parent folder sets the default security permissions of its child folders (compare with Child).

Password

A word or specific string of characters, usually consisting of letters and numbers, that is used by a given user to access an application. The word is known only to that user and acts as a security measure to ensure that each user can only access their own data and functions. See Log in, Login ID.

PDF

See Portable Document Format.

Peripheral

An individual device or switch providing routed customer phone calls to contact center staff. The term peripheral is also used to describe parts of a contact center Enterprise receiving calls from the device.

Permissions

A security measure. The set of roles a user can perform on a specific folder or folders. See also Role.

Pivot Table

An office web component that is similar to a spreadsheet, except that the row and column data values are summarized values of underlying data, which can be drilled down into to explore highly detailed report values.

Portable Document Format (PDF)

A file format developed by Adobe systems that stores documents independent of the software or hardware used to create them. A PDF document will appear exactly the same regardless of the platform on which it displays.

Prefix

A character added to a folder to specify where to place imported resources.

Print

To make a paper copy of a document or report.

Privilege

See Permissions.

Properties

The qualities possessed by an object which define it.

R

Radio button

Similar to a check box. A small circle displayed next to an entity in the system. By selecting the button the associated entity is made accessible for editing, deleting, and so on.

Refresh

To upload the latest data in a browser window.

Render

The process of creating a report in a specific format.

Report

A view of information or data, which is summarized and displayed numerically in a pivot table or graphically in a chart.

Resource

An entity or value in the data mart that represents an asset belonging to a customer, such as a dialed number, agent, call route, and so on. Resources are stored in folders. Also called dimensions.

Rights

See Permissions.

Role

A defined set of tasks that determine how users can interact with folders. See also Task.

Routing Script

Routing scripts are programs that determine the best way of handling a call. Reports on script activity show which reports have been called, the nodes executed within the scripts and so on.

Routing Table

A table that states which dialed number is directed to which destination number (label).

Row

In a table, a row is a horizontal line of cells spanning the columns. Each row supplies values from a certain set of data that relate to the context described by the column header. See also Column, Field.

S

Scroll

To display a new area of text within the current document or web page. This is normally accomplished using scrollbars that appear at the side or bottom of the window and indicate the user's location within the text.

Security

Any process which prevents the data held in the data mart from being viewed by unwanted users, while at the same time enabling permitted users to access the data they require.

Security Group

A collection of users who are associated with particular resources and perform particular functions according to the permissions granted to the group by the applicable user, such as creating, deleting or viewing reports.

Security Tree

A hierarchical tree in which security groups and their associated users are organized. In Unified CCDM all system resources, users and groups are stored in folders in the tree.

Session

A single period during which a user is logged in to the system.

Settings

Functions that define the manner in which the user interacts with the system.

Skill Group

An organizational association of contact center agents sharing common talents such as technical or language abilities, or skills in dealing with customer complaints. Skill groups are associated with a particular peripheral and allow the Unified CCE to route calls to the most appropriate available agent. Several skill groups at different contact centers are served by different peripherals and may be collectively combined in an enterprise skill group.

Spreadsheet

A document which displays data numerically in fields organized into rows and columns.

State

An item's provisioning status. There are five states: Synchronize, Error, Ready, Delete Pending and Deleted.

Subset

A subset of data is a portion of the data that when calculated together creates a summarized value.

Summary

A high level view of data; the sum of underlying data values.

Supervisor

A person responsible for a team of agents. A supervisor can add and remove agents and view statistics for the team that they supervise. A supervisor may also be an agent. See also Agent Team.

System Administrator

The highest level of user in the management system, who is responsible for creating more users and granting user permissions and access rights.

T

Table

A matrix consisting of fields, separated into rows and columns, which display values.

Tagged Image File Format (TIFF)

A standard image file format. The TIFF format supports multiple images and data in the same file, images of multiple pages and other options.

Task

An action that a user is allowed to perform. Tasks are collected together to create a Role.

Team

See Group, Agent Team.

Tenant Folder

A folder exclusive to a particular tenant. It is the same as a system folder except that a tenant folder does not and cannot inherit the security permissions of a parent folder and is a stand-alone entity (compare with Folder).

Threshold

A limit defined on the application server and applied to report data. Data values breaching the threshold are displayed in a manner that easily differentiates them from other data values.

TIFF

See Tagged Image File Format.

Toolbar

A list of links above the report view panel. These links are used to access the various functions and options available to the user.

Total Field

Totals fields display a value which represents a total or summary of all of the available data selected for analysis.

U

Uniform Resource Locator (URL)

The global address of a document or site on the World Wide Web (such as www.cisco.com).

Uniform Resource Name (URN)

A means of identifying resources on the Internet. An URN is a unique and unchangeable name (compare with Uniform Resource Locator).

URL

See Uniform Resource Locator.

User

An individual granted access to the application.

User Group

Users who share the same role assignments (security permissions).

V

View

How an item (such as a report) displays.

Voice Response Unit (VRU)

A device capable of routing a call automatically using a customer's replies to a series of prompted messages. A VRU may respond directly to a customer's voice or to a sequence of dialed digits. Also called IVR (Interactive Voice Response Unit) or ARU (Audio Response Unit).

W

Web Archive

A standalone HTML file with the extension .mhtml, which contains report data in HTML code.

Web Browser

An application that allows a user to access the World Wide Web or locally held web pages. Web browsers include a graphical interface that lets users interact with and navigate through web pages.

Web Server

The web server obtains data directly from the data mart in response to user queries.

Wrap

A call state in which activities such as paperwork or consultations arising as a direct result of, and associated with, a customer call are completed. Also called Post-Call Processing (PCP) or After-Call Work (ACW). An agent is not available to take calls during wrap up activities.

WYSIWYG

What You See Is What You Get. Typically used to describe a text editor that displays formatted text.

X

XML

See Extensible Markup Language.

Index