



User Guide for Cisco Unified Contact Center Management Portal, Release 15.0(1)

For Unified and Packaged CCE

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Americas Headquarters

Cisco Systems, Inc.

170 West Tasman Drive

San Jose, CA 95134-1706

USA

<https://www.cisco.com>

Tel: 408 526-4000 800

553-NETS (6387)

Fax: 408 527-0883

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Cisco Unified Contact Center Management Portal Help February 19, 2026

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Preface

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- [Related Documentation](#)
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Change History

This table lists changes made to this guide. Most recent changes appear at the top.

Change	See	Date
Updated the note to explain the risks of uploading more than 500 items per csv.	Using the Bulk Upload Tool	February, 2026
Added information about Common Identity Support for agents and persons.	Creating Persons Creating an SSO enabled person & Selecting an existing person with SSO enabled	November, 2025

Related Documentation

The latest versions of all Cisco documentation can be found online at <https://www.cisco.com>.

Technical Support documentation and tools are accessible from: <https://www.cisco.com/en/US/support/index.html>.

The Product Alert tool is accessible from (sign in required): <https://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): https://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: https://www.cisco.com/en/US/products/sw/custcosw/ps1001/prod_technical_reference_list.html.

Communications, Services, and Additional Information

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Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software

Field Alerts and Field Notices

Cisco products may be modified or key processes may be determined to be important. These are announced through use of the Cisco Field Alerts and Cisco Field Notices. You can register to receive Field Alerts and Field Notices through the Product Alert Tool on Cisco.com. This tool enables you to create a profile to receive announcements by selecting all products of interest.

Log into www.cisco.com and then access the tool at <https://www.cisco.com/cisco/support/notifications.html>

Documentation Feedback

To provide comments about this document, send an email message to the following address:

contactcenterproducts_docfeedback@cisco.com

We appreciate your comments.

Document Conventions

This document uses the following conventions:

Convention	Description
boldface font	<p>Boldface font is used to indicate commands, such as entries, keys, buttons, folders and submenu names. For example:</p> <ul style="list-style-type: none"> ▪ Choose Edit > Find ▪ Click Finish
<i>italic</i> font	<p>Italic font is used to indicate the following:</p> <ul style="list-style-type: none"> ▪ To introduce a new term; for example: A <i>skill group</i> is a collection of agents who share similar skills ▪ For emphasis; for example: <i>Do not</i> use the numerical naming convention ▪ A syntax value that the user must replace; for example: IF (<i>condition, true-value, false-value</i>) ▪ A title of a publication; for example: Refer to the <i>Cisco CRS Installation Guide</i>
window font	<p>Window font, such as Courier, is used for the following:</p> <ul style="list-style-type: none"> ▪ Text as it appears in code or that the window displays; for example: <code><html> <title>Cisco Systems, Inc. </title> </html></code>
<>	<p>Angle brackets are used to indicate the following:</p> <ul style="list-style-type: none"> ▪ 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 (ICM) Hosted

Getting Started

- [About the Application](#)
- [About Application User Types](#)
- [About Application Modes](#)
- [Keyboard Shortcuts](#)
- [Accessing the Application](#)
- [Using Online Help](#)
- [About the Home Page](#)
- [Disabling Pop Up Blockers](#)
- [Changing Languages](#)
- [The Folder Tree](#)
- [Logging Out](#)

About Unified Contact Center Management Portal

Unified Contact Center Management Portal (Unified CCMP) is a browser-based contact center management. It provides a unified view of the equipment in the contact center, and enables users to monitor and control it using a single interface.

Unified CCMP enables users to manage the resources in the contact center (for example, agents and skill groups).

Unified CCMP partitions the contact center resources in folders. These folders can be secured using a sophisticated security structure that enables administrators to specify which users can perform which actions within which folders.

Unified CCMP supplies a number of tools that enable users to monitor and modify contact center resources:

- Provisioning tools enable users to manage the contact center resources. Supervisors can manage and reskill the agents in their teams. With the appropriate permissions, users can also partition, view and edit resources, and view the provisioning status.
- Security tools can be used to create and manage users and groups, allocate role-based permissions to users and groups, and apply folder-based permissions to the partitioned contact center resources.
- Information notices can be configured to display messages to users as required.

About Unified CCMP User Types

There are multiple types of Unified CCMP user:

- **Host Administrator**
- **Tenant Administrator**
- **Tenant User**
- **Basic User**

When Unified CCMP is first installed, the host administrator configures the platform and creates the tenant administrators. Each tenant administrator configures the tenant area and creates the tenant users.

Host Administrator

A host administrator is responsible for the entire platform and has a view across all the equipment, tenants, and their resources. Some host administrator tasks include:

- Ensuring that the tenant equipment (peripherals) are correctly located in the tenant or shared folders.
- Creating a tenant administrator user for each tenant.
- Assigning any specific roles.

Tenant Administrator

A tenant administrator is responsible for part of the system, usually, this user handles just the part that belongs to a single tenant. Some tenant administrator tasks include:

- Creating a resource folder structure that maps onto the tenant's business.
- Moving the tenant's resources into the appropriate location in the folder structure.
- Creating security groups to provide role based access to the subfolders.
- Creating tenant users and assigning them to security groups that are relevant to their role.

Tenant User

A tenant user may have access to any or all of the Unified CCMP tools, depending on their role in the contact center and the privileges they have been assigned. Several classes of tenant user may be created by the tenant administrator using user groups and roles to achieve their business requirements.

Basic User

A basic user can be created by the tenant administrator or by a tenant user with sufficient privileges. Basic users have a restricted user interface that enables them to perform functions related to day-to-day team management only.

About Standard and Advanced Modes

Unified CCMP provides the following user modes:

- **Standard Mode:** This mode provides a simplified interface that enables supervisors to manage their teams. Standard mode users can perform a limited set of agent management functions, access information notices, and modify their own user settings. There is no access to advanced functions like resource or security management.
- **Advanced Mode:** This mode provides a more comprehensive interface with additional functionality. Depending on their security permissions, users may be able to:
 - Manage resources (agent teams, skill groups and campaigns)
 - Manage security
 - Manage folders
 - Manage information notices

Advanced mode users can also switch between standard and advanced modes.

Keyboard Shortcuts

The following keyboard shortcuts can be used while on the home page:

- **Hamburger  menu shortcut:** Press the tilde or grave key [`].

The following keyboard shortcuts can be used while in standard mode on the home page:

- **Run shortcut:** SHIFT + R
- **Delete shortcut:** SHIFT + D

When selecting objects in the application, The UP and DOWN arrows can be used to navigate objects and the SPACEBAR can be used to select the object.

Accessing the Application

Depending on your user settings and security configuration, there are multiple authentications you can use to log into Unified CCMP using Single Sign-On. The authentication modes you can use to login to the system are set by the Enabled Login Type setting in the user manager.

Single Sign-On (SSO) is an authentication and authorization process. Authentication proves you are the user you say that you are, and authorization verifies that you are allowed to do what you are trying to do. A single action of user authentication and authorization can permit a user to access all computers and systems where they have access permission, without a prompt to resupply user credentials.

To access the application directly single sign-on:

1. In your web browser, enter the address of the server that is running Unified CCMP. This is in the format:
 - `https://<Web Server Host Name or Load Balancer FQDN>/portal`. For example:
`https://example.xyz.com/portal`.
2. The first time you access the application you may be prompted to accept a security certificate. Accept this security certificate then proceed.
3. Upon navigating to Unified CCMP from the landing page, the Security Access page is displayed. On the Security Access page containing the login message, click **agree** to move to your home page.
4. If the login is successful, the home page displays the different channels of the application that can be accessed based on the permissions of the user account. With the proper permissions, you can access the Unified CCMP Console or the other consoles of the application.

Using Online Help

Help is contextualized to display topics specific to the current page open in the application.

To access online help:

1. Click the **Help** icon beside your user name on the menu bar.
2. Based on the page you currently have open, the help topic pertaining to that page appears.


The Home Page

Upon logging in, the personalized home page displays. The home page is the launch pad for accessing the rest of the system.

- If logged in as a **standard mode** user, the home page is your team management page.
- If logged in as an **advanced mode** user, the personalized [gadgets](#) page appears. Advanced mode users can also access the classic Unified CCMP tools.

The Menu Bar

The menu bar across the top of the screen provides access to further functions, which may vary depending upon the system functions being used and the permissions granted to the user account. This includes:

- **Hamburger icon** : Click to show the tools menu. The tools displayed here depend on permissions assigned to the user and whether the user is a standard mode user or an advanced mode user.
- **Gadgets menu (advanced mode users only)**: Click the drop-down arrow to see the gadgets functions. For more information see [About Gadgets and Apps](#). While on the gadgets page, with an app open, the app name is shown on the menu bar below the user name.
- **User menu**: This shows the name of the logged in user. Click the user name to:
 - Go to the home page (the team management page for standard mode users, and the gadgets home page for advanced users).
 - Access help. For more details, see [Using Online Help](#).
 - Access settings. For more details, see [User Settings](#) and [System Settings](#).
 - Access build and license information. For more details, see [About Page](#).
 - Log out. For more details, see [Logging Out](#).


Other options may have been provided by the system administrator.

If you are an advanced mode user, when you are on the gadgets page and have an app open, the app name is shown on the menu bar below your user name.

Standard Mode Team Management Page

If you are a standard mode user, the following functions are available on the team management page:

- **Agent Teams**: enables you to manage your agent teams.
- **Re-Skilling** : enables you to manage your skill groups.

Click the **Hamburger icon**  at any time to access these tools directly, or return to the home page by clicking the user name on the menu bar, and selecting **Home** from the drop-down menu.

Gadgets

Gadgets are only available to advanced mode users.


Gadgets and apps are Unified CCMP system resources. They can exist anywhere in the folder tree and can be accessed by anyone with suitable permissions.

For more information about gadgets and how to personalize the gadgets page, see [About Gadgets and Apps](#).

Tools

The following tools may be available to advanced mode users, depending on the security permissions assigned:

- **Agent Teams:** View and manage your agent teams.
- **Reskilling:** View and manage skill groups.
- **Information Notices:** Create and manage online notices to display information to Unified CCMP users.
- **Activity Monitor:** View the current status of the provisioning queue.
- **Users:** Create and manage Unified CCMP users.
- **Groups:** Create and manage Unified CCMP groups.
- **Security:** Manage Unified CCMP users and groups and control the folders they are allowed to access.
- **Roles:** Create and manage global roles and folder roles.
- **Resource Manager:** Provision and manage the entire system.

Click the **Hamburger**  button at any time at any time to access these tools directly.

If these tools are not visible, contact the system administrator for more assistance.

Disabling Pop-up Blockers

The Unified CCMP web application may be affected by browser or third-party pop-up blocking utilities. If there is difficulty viewing the Unified CCMP web application, pop-up blocking may need to be disabled, or pop-ups for Unified CCMP need to be allowed.

To disable pop-up blocking:

1. In Internet Explorer, click **Tools > Internet Options**.
2. Select the **Privacy** tab.
3. At the bottom of the window, make sure the **Block pop-ups** is cleared.
4. Click **OK**.

To enable pop-ups for Unified CCMP:

- Use Unified CCMP normally until a message displays at the top of the browser window telling you a pop-up has been blocked. Click this and choose to permanently allow pop-ups from Unified CCMP, while remaining protected against pop-ups from other sites.

Changing Languages

Follow the steps of your browser's help to change your language preferences in your web browser before you first login.

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

The Folder Tree

The Unified CCMP folder tree defines the hierarchical structure of tenants and resources in the system. It is used by many of the tools. The folder tree enables users to move around 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 Resource Manager to modify the structure and contents of the folder tree. For more details, see [About Resource Manager](#).
- Use Security Permissions Manager to apply security settings to control access to sections of the folder tree. For more details, see [Managing Permissions](#).

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

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. For more information, see [About System Search Folders](#).
- **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):** Contains 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. For more information see [About Resources](#).
- **Other folders:** May contain any of the folder types in this section except system folders and tenant folders. These may occur anywhere in the hierarchy.

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

Folder Order

At each node in the folder tree, the following folders are in alphabetical order:



- **Search folders**
- **System folders**
- **Tenant folders**
- **Other non-resource folders**
- **Resource folders**

Search and Resource folders are in alphabetical order only in the Resource Manager.



Expanding and Collapsing Nodes

Nodes in the folder tree can be expanded and collapsed.

To expand a node:

- Click  beside an unexpanded node. The node is expanded and the icon changes to .

To collapse a node:

- Click  beside an expanded node. The node is collapsed and the icon changes to .

Showing Child Folders

If there are many child folders below a parent folder, not all of them are shown when the parent folder is expanded to improve performance. The number that is shown is user configurable with the **Folder Paging Size** setting in User settings.

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

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

Selecting Multiple Folders

Multiple folders in the folder tree can be selected at once:

- 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, and the last one in the range using **SHIFT + Click**.

Shortcut Menus

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

A shortcut menu can be displayed for most folders by right-clicking. The options shown on the shortcut menu depend on the type of folder chosen, as well as what permissions have been assigned. The following options may be shown:

- **Create Folder:** Create a new folder below the selected folder. The folder is created with a default name of **New Node**, a blank description, and inherits the permissions of the parent folder. Folders cannot be created below the search folder or any of the predefined searches, or below a resource folder.
- **Delete Folder:** Delete the selected folder. Folders that cannot be deleted include: 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 entered overwrites the existing folder name. The following folders cannot be renamed: 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.

Keyboard Shortcuts

The following keyboard shortcuts can be used in the folder tree:

- **LEFT ARROW:** While an expanded node of the folder tree is selected, collapse the node, otherwise move the selection one position up the folder tree.
- **DOWN ARROW:** Move the selection one position down the folder tree.

- **UP ARROW:** Move the selection one position up the folder tree.
- **RIGHT ARROW:** While a collapsed node of the folder tree is selected, expand the node. If not, move the selection one position down the folder tree.

Drag and Drop Operations

With the appropriate permissions, users can select one or more folders in the folder tree and move them to another location in the tree using the mouse to drag and drop the selected items to a new location. This can be done via ICE or directly in the system if necessary.

When dragging and dropping to move folders and the items they contain, the usual rules for moving items of that type apply. For example, if some resources are moved from one tenant to another, existing relationships may be broken, or existing resources deleted and new ones recreated. See [Purging Resources](#) for more details.

To drag and drop folders in the folder tree, you need a global role that includes the **Folder Tree Management** task. See the *Security Guide for Cisco Unified Contact Center Management Portal* for more information about security and global roles.

The following can occur while dragging and dropping folders:

- While dragging the folders, if it is valid to drop them at the current location, a green tick is displayed beside the folders being dragged. If the folders cannot be dropped at the current location, a red X appears beside the folders being dragged.
- While dragging the folders, if the mouse hovers over a folder that is currently collapsed, it expands to show the subfolders.
- When the move operation starts, a message displays with the items in the folder that are being moved. Another message confirming that the move has been completed is displayed upon moving the folders.

Logging Out

Automatic Logout

Users are automatically logged out if:

- They close their web browser window
- They have not performed any action on the system for twenty minutes. This excludes the following pages:
 - Resource Manager Bulk Upload Page

If a user has multiple tabs or windows open, any page that is eligible for inactivity timeout triggers a session timeout regardless of any excluded pages that may also be in use. For best performance, it is recommended that users utilize a single tab or window for Unified CCMP.

To ensure that the excluded web pages automatically log out when left idle, you can enable the **Override Idle Timeout Exceptions** setting to via ICE System Properties.

Manually Logging Out of the Application

To logout of Unified CCMP:

1. Click the drop-down arrow beside your user name on the menu bar, then select **Logout** in the top menu.
2. After logging out, close your browser session to ensure that no other user can interfere with your account. On logging out, you are also logged out on the Identity Server.
3. Alternatively, you are automatically logged out of Unified CCMP when you close your the web browser window.

Gadgets & Apps

- [About Gadgets and Apps](#)
- [Opening an App](#)
- [Setting a Default App](#)
- [Building Apps](#)
- [Saving Apps](#)
- [Deleting Apps](#)

About Gadgets and Apps

Gadgets and Apps are only available to advanced mode users.

About Gadgets

Gadgets are configurable components that can help you do various tasks, for example, reskill agents or view resources.

Your Unified CCMP home page shows a personalized gadget layout, where you can select and arrange the gadgets of your choice to help you carry out the tasks you do regularly.

Example

You may decide to add a gadget to the gadget layout on your home page. This gadget could be used to manage your agents.

Unified CCMP includes some standard gadgets located in the **/Shared** folder by default. You may also have custom gadgets that have been created to meet your specific business needs.

The following gadgets are available in the application to be added to apps:

- [CVP Resource Upload Gadget](#)
- [Resource Manager Gadget](#)

About Apps

An arrangement of gadgets can be saved in an app, which you can run on your home page. You can use one of the supplied apps for easy consumption, or create your own by modifying the gadgets in the app, and saving it as a new app. You can specify a default app which opens automatically when you go to your home page.

When a charting gadget is a part of an open app, the screen timeout will be disabled.

Example

A reskilling app could contain a resource management gadget showing your agents, a resource management gadget showing your skill groups and a third resource management gadget showing your precision queues.

You could make this app your default app, so that it opens automatically when you go to your home page.

Opening an Existing App

To open an existing app, from your home page:

1. Click the **Gadgets** drop-down menu.
2. Select **Open App** to see a list of the available apps.
3. Locate the app you want to open by doing one of the following:

- Type a name or partial name in the search box, for example, "email" to find all apps you can see with "email" in the title, including the Email Performance and Email Effectiveness apps. Then click Search or Enter to see a list of matching gadgets.
 - Click the **Filter by Folder** button to select a folder to see the apps in that folder.
4. Click an app to open it. The name of the app you have opened is shown on the menu bar. When you open an app in your home page, any existing gadgets on the page are cleared and replaced with the gadgets from the new app.

Setting a Default App

An app can be set as the default app, which opens automatically upon first signing in to the application.

To set a default app:

1. If you want to use your current gadget layout as your default app, ensure that you have previously saved it as an app.
2. Open the app that you want to use as your default app.
3. Click the **Gadgets** drop-down menu.
4. Select **Set Default App**.
5. At the confirmation screen, click **Yes**. This app is now your default app and is opened when you go to your home page.

Building Apps

Adding Gadgets

Gadgets are the components of an app (for example: the individual charts, reports and interactive tools). Each gadget is configured individually and the app itself is a framework, a saved layout of these gadgets. The Gadgets menu is used to build or edit an app by adding, removing, and arranging the gadgets.

To add a gadget to your home page:

1. Click the **Gadgets** drop-down menu.
2. Select **Add Gadget** to see a list of the available gadgets.
3. Locate the gadget you want to open by doing one of the following:
 - Type a name or partial name in the search box, for example, type "report" to find all gadgets you can see with "report" in the title, including the Reporting and Report Builder gadgets. Click **Search** or press **Enter** to see a list of matching gadgets.
 - Expand the gadget group tree on the left and click a group to see the gadgets in that group. For example, click the Reporting gadget group to see Reporting and Charts gadgets.

4. A list of matching gadgets is shown, each with an image and a description. If the list has more than 3 items, it is paginated, and you can click a page number below the list to go to that page. Above the list there are options to sort the list alphabetically or in order of popularity.
5. Each gadget has a version number and you may be able to select from several versions in a drop-down menu below the description. Use this if you require an older version of a gadget for some compatibility reason.
6. Select the gadget you want and click the **Add** button to add it to your app.
7. Once added to the app, each type of gadget has its own options to interact with it. For example, the Reporting Gadget prompts you to select a folder and then a report in that folder.

Resizing Gadgets

To resize a gadget:

1. Hover your mouse over one of the lower corners of a gadget.
2. Hold the mouse button and move the mouse to drag the corner of the gadget, releasing when the gadget has the desired dimensions. Note that the gadget snaps to a grid, so you do not have to drag it to an exact location.

Moving and Editing Gadgets

Ensure that the gadget borders and title bars are visible. If they are currently hidden, click the **Gadgets** drop-down menu and select **Toggle Borders**.

To move or edit a gadget:

1. Hover your mouse pointer over the gadget's title bar, hold the mouse button and move the mouse to drag the gadget, and release it when it is in the desired position. Note that the gadget snaps to a grid, so you do not have to drag it to an exact location.
2. To maximize a gadget, click the **Maximize** icon in the gadget's toolbar. The gadget expands to full-screen at the top of the app and any other gadgets are moved down. If you minimize the gadget, it returns to its previous size and position.
3. To refresh a gadget, click the **Refresh** icon in the gadget's toolbar.
4. Toggle the **Accept** icon and **Ignore** icon in the gadget's toolbar to accept or ignore inputs from other gadgets. For example, when a gadget is accepting inputs, the focus of the gadget could change automatically to show a resource that the user clicked on in another gadget. If the gadget is ignoring inputs, then its focus can only be changed from within the gadget itself.

Removing Gadgets

Ensure that the gadget borders and title bars are visible. If they are currently hidden, click the **Gadgets** drop-down menu and select **Toggle Borders**.

To remove a gadget:

- Click the **Delete** icon in the gadget's toolbar.

Clearing All Gadgets

Clearing all gadgets is a quick way to remove any app that is currently open on the home page, transforming it into a blank canvas on which to a new app can be built. If the app on the home page is saved, this action does not delete it; it remains saved and you can reopen it at any time.

To clear all gadgets:

1. Click the **Gadgets** drop-down menu.
2. Select **Clear Gadgets**.

Saving Apps

Once a useful gadget layout has been crafted on the home page, it can be saved as an app. Changes can be made to the gadget layout within an existing app if it exists in a folder in which the user has the necessary permissions to manage apps.

Any standard apps supplied with the product are subject to change between releases or when updates are applied to the system. If you include a component from one of these apps in your own copy of an app, it is a subject to change in this manner.

Alternatively, select **Save App As** to create a copy of the existing gadget layout as a new app, and then edit the gadget layout, or remove or add gadgets without affecting the original app.

If you use Save App As to create a copy of an existing app, any charts or reports within is shared by both apps. The app itself is simply a layout. Any changes made to a chart or report within one app (such as parameters or charting options) is also visible in the other app.

Save a New Gadget Layout from a Blank Canvas as an App

To save a new gadget layout from a blank canvas as an app:

1. In your home page, click the **Gadgets** drop-down menu then select **Save App**.
2. Specify the **Name** for the app.
3. Specify the **Folder** where you want to save it.
4. Click **Save**. This app is now your current app, and the name of the app is shown on the menu bar.

Saving an Updated Gadget Layout for an Existing Apps

To save an updated gadget layout for an existing app:

1. Click the **Gadgets** drop-down menu.
2. Select **Save App**.
3. Click **Yes** when prompted to confirm that you want to overwrite the existing app. The current gadget layout is saved within the app and is displayed when the app is opened again.

Saving a Gadget Layout as a New App

To save a gadget layout as a new app:

1. Click the **Gadgets** drop-down menu.
2. Select **Save App As**.
3. Specify the Name, the Folder where you want to save it.
4. Click **Save**.

Deleting Apps

An app can be deleted only if it exists in a folder to which permissions to manage apps have been provided. Standard apps cannot be deleted by anyone.

To delete a dashboard:

1. In your home page, open the app that you wish to delete.
2. Click the **Gadgets** drop-down menu.
3. Select **Delete App**.
4. Click **Yes** when prompted to confirm that you want to delete the app. This cannot be undone.

Settings

- [User Settings](#)
- [System Settings](#)
- [Custom Links](#)
- [About Page](#)

User Settings

Changing a Password

If using single sign-on to log into Unified CCMP (see [Logging In to Unified CCMP](#)), the password cannot be changed from within Unified CCMP.

To change your password:

1. Click the drop-down arrow beside your user name on the menu bar.
2. In the Settings section, select **Change Password**.
3. Follow the prompts to change your password. Your new password must comply with the password requirements for your system. For more information, consult your system administrator.

Changing Other User Settings

To change other user settings:

1. Click the drop-down arrow beside your user name on the menu bar.
2. In the Settings section, select **User Settings**.
3. You can change the following user settings:
 - **First Name:** Your preferred first name.
 - **Last Name:** Your preferred last name.
 - **Email Address:** The email address for emails from Unified CCMP.
 - **Description:** A description of yourself or your role.
 - **Timezone:** Your local timezone. Select from the drop-down list.
 - **Culture:** Your local language. Select from the drop-down list.
 - **User Home Folder:** The folder you work in by default. Click the folder icon to change your home folder. This must be a folder on which you have security permissions.
 - **Advanced Mode:** (Advanced mode users only). Whether you are using the standard or advanced mode user interface. In advanced mode your home page shows your personalized gadget layout, which you can configure and customize with the gadgets of your choice to help you carry out the tasks you do regularly. In standard mode your home page shows your team management page.
 - **Show Deleted Resources:** Whether deleted resources are shown. Select to view all deleted resources you have permission to see. Otherwise you can only see active and pending items.
 - **Show Default Parameter Sets:** Select to view all available parameter sets of the correct type when you are viewing a report. You have the option of three default parameter sets:
 - **All In Folder:** Run reports on all items in the user location folder.

- **All In Folder And Sub Folder:** Run reports on all items in the user location folder and its sub folders.
 - **All In Tenant:** Run reports on all items in the user tenant folder and its sub folders.
 - **Data Paging Size:** The number of selected items to be displayed per page, for example, in the central Items panel of Resource Manager. We recommend a maximum data paging size of 100.
 - **Folder Paging Size:** 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.
4. Click **Save** to save your settings.

System Settings

A user with sufficient permissions can change various provisioning, security, and login settings.

Changing the System Settings

To change the system settings:

1. Click the drop-down arrow beside your user name on the menu bar.
2. In the Settings section, select **System Settings**.
3. Select the tab that corresponds to the type of setting you want to change:
 - **Provisioning:** Change the provisioning settings. For more details, see [Provisioning Settings](#).
 - **Security:** Change the security settings. For more details, see [Security Settings](#).
 - **System:** Change the login settings. For more details, see [Login Settings](#).
4. Click **Save** to save your settings.

Provisioning Settings

The following provisioning settings can be adjusted:

- **Agent State Trace Enabled:** Whether the **State Trace** check box on the agent **Advanced** tab can be selected. When state trace is enabled for an agent, Unified CCE captures details of every state transition made by the agent. This is not selected by default due to the additional load it places on Unified CCE.

Security Settings

The following security settings can be adjusted:

- **New Folder Inheritance Default:** Whether **Inherit Permissions** is selected by default when a new folder is created.

- **Password Format:** The required format for the password entered by a user. The options are:
 - **Custom:** A custom string defined by a regular expression. This is for system administrators only, and requires a knowledge of regular expressions.
 - **Low Security:** Any string of any length.
 - **Medium Security:** Any string between the minimum and maximum password length.
 - **Medium/High Security:** Any string between the minimum and maximum password length, containing at least one lowercase value, one uppercase value and one numeric value.
 - **High Security:** Any string between the minimum and maximum password length, containing at least one lowercase value, one uppercase value and one numeric value, and at least one of the following special characters: @ # \$ % ^ & + = !

Where an available password setting is related to the format of the password, changes made to that setting do not automatically alter other related settings. For example, you may specify that the password follows the Medium Security format, and that the minimum password length is 6 (instead of the default value of 8). If you later change the password format to High Security, the previously-set minimum password length of 6 still applies to the new password format, unless you change it again.

- **Password Expression:** A regular expression defining the required password format. Only shown when the selected Password Format is Custom.
- **Minimum Password Length:** The lowest number of characters the system accepts as valid for a password. Only shown when the selected Password Format is one of Medium Security, Medium/High Security or High Security. For all formats, the minimum length a password can be set to is 1 character.
- **Maximum Password Length:** The highest number of characters the system accepts as valid for a password. Only shown when the selected Password Format is one of Medium Security, Medium/High Security or High Security. For all formats, the maximum length a password can be set to between 1 and 80 characters.
- **Minimum Password Age (days):** The number of days a user must wait between password changes.
- **Password Expiry (days):** The number of days before the user is asked to change their password.
- **Number of previous passwords to check:** The number of previous passwords the user cannot reuse when choosing a new password.
- **Login attempts before lockout:** The number of times the user can enter the wrong password before being locked out of the system.
- **User Folder Default Role:** 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 selected during user creation. This is a drop-down containing a list of the folder roles available in the system (for more information see [Roles](#)). Note that you still need to give the user the correct global roles so that they can actually use these permissions (for more information see [Global Roles](#)).
- **User Folder Suffix:** (Optional) The 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:** The groups that are automatically created when a folder becomes a policy root, and the roles and global roles that they are assigned within that folder and its child folders. You can select a group and assign it a role and global role, or clear the group, so that is not created automatically when a policy root folder is created. If you clear the check box for all the specified groups, no groups are created automatically. See [Inheritance and Policy Root Folders](#) for more information on policy roots.

Login Settings

The following login settings can be adjusted:

- **Product Name:** The name of the application. This is the name that is shown at the left of the top menu.
- **Set for language:** The language for which you are modifying the login settings. Select the language from the drop-down or select **(Default Entry)** to define the messages displayed for users of other languages. You can edit the following settings for each language.
- **Login Message:** The message displayed to a user before the user logs into the system. You can use a plain text message or insert your own HTML tags to apply formatting. You can remove the message entirely by leaving this field blank.
 - **Message Agreement Link (Login Message):** The text to display on the button that the user clicks to proceed from the login message (if displayed) to the login page. This text should be no longer than 40 characters.
 - **Post Login Message:** The message displayed to a user after the user has logged into the system. You can use a plain text message or insert your own HTML tags to apply formatting. You can remove the message entirely by leaving this field blank.
 - **Message Agreement Link (Post Login Message):** The text to display on the button that the user clicks to proceed from the post-login message (if displayed) to the application. This text should be no longer than 40 characters.

Upon defining the messages for a language, click **Save** to save the settings for that language, before selecting another language from the **Set for language** drop-down. Otherwise, the settings for that language are lost. The login and post login messages should not exceed six lines (about 500 characters) in the default 8 point font or three lines in 14 point font.

The login and post login messages have a maximum limit of 2000 characters. This includes the HTML tags embedded in the plain text.

When the system is first installed, the login message is set to a default message. This is pre-translated for the supported languages. For all other languages, the default login message is in English.

Custom Links

Custom links can be added to the user menu to provide quick access to useful applications and web pages.

Custom links are system-wide and visible to all tenants.





Adding Custom Links

To add a new custom link:

1. Click the drop-down arrow beside your user name on the menu bar.
2. From the Settings section, select **Custom Links**.
3. Enter the following:
 - **Name:** The text to be shown for the link
 - **Link:** The link URL. The box is green if the link is valid. If the link is not valid, a warning displays.
4. Click **Add**.
5. The new link is added to the **Existing editable menu-items** list.
6. When you have finished adding custom links, click **Submit** to save your changes.

Editing Custom Links

To edit an existing custom link:

1. Click the drop-down arrow beside your user name on the title bar.
2. From the **Settings** section, select **Custom Links**.
3. Existing links are shown in the **Existing editable menu-items list**. Hover over the link you want to edit to see the **Edit**  icon and the **Delete**  icon for that link.
4. Click **Edit** and change the link details.
5. Click the **OK**  icon to save your changes, or the **Cancel**  icon to leave the link unchanged.
6. Click **Submit** to save your changes.

About Page

The About page contains product version information.

To view the product version and license details:

1. Click the drop-down arrow beside your user name on the menu bar.
2. From the **Other** section, select **About**. The product version is shown.

Agent Re-Skilling

- [About Agent Re-skilling in Cisco](#)
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About Agent Re-Skilling


The Agent Re-Skilling tool enables users to view and edit agent skill group memberships.

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

A user must be linked to an ICM Person with an Agent who is marked as a supervisor, and must be a member of the supervisor group for the tenant that requires reskilling in order use the Agent Re-Skilling tool. The user can see then skill groups that are available under the current security context.

Opening the Agent Re-Skilling Tool

To open the Agent Re-Skilling tool:


1. In the menu bar, click the **Hamburger** icon  to show the tools menu.
2. Select **Provisioning > Agent Re-Skilling**.

Viewing a Skill Group

To view a skill group:

1. In the Agent Re-Skilling tool, click the **Skillgroup** drop-down.
2. Select the skill group you wish to view. 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).

3. Clicking the **Edit**  icon enables you to edit the agent.

Configuring a User to Access the Re-Skilling Tool

To configure a user that can manage an agent team:

1. Ensure that the agent team exists and that a supervisor agent has been defined.
2. Sign in to Unified CCMP using an Administrator account.
3. Open Resource Manager and go to the folder containing the supervisor agent.
4. Open the supervisor agent and choose the **Person** tab.
5. Click **Edit Person** (green arrow).
6. Go to the **Portal** tab.

7. Select the **Portal Account** (this will display None if no user is mapped).
8. Select **Create User** to create a new user account, or select an existing user.
9. Specify **User Name** and **Password** for the new user.
10. In the group membership screen, select the **Basic User** and **Supervisor** groups for default permissions at the required location.
11. Click **Save** to create the user.

Adding an Agent to a Skill Group

To add an agent to a skill group:

1. In the Agent Re-Skilling tool, select a skill group for the agent or agents to which they should belong.
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 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.

Removing an Agent from a Skill Group

To remove an agent from a skill group:

1. In the Agent Re-Skilling tool, 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 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 undo your changes.

Agent Team Manager

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About Agent Team Manager in Cisco

The Agent Team Manager tool enables 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



In order to use the Agent Team Manager tool to manage an agent team, the user must be associated with an agent who is a primary or secondary supervisor of the agent team.

Opening the Agent Team Manager Tool

To open the Agent Team Manager tool:

1. In the menu bar, click the **Hamburger** icon  to show the tools menu.
2. Select **Provisioning > Agent Team Manager**.

Viewing an Agent Team

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. Keep in mind that when copying an agent, the details of the agent are copied but the roles are not; for example, if a supervisor agent is copied, the details of the agent are copied, but the supervisor role must be assigned.

To view an agent team:

- In the Agent Team Manager tool, click the **My Agent Team** drop-down box and select the team you wish to view. A list of the agents in the team is shown below the box.

Configuring User Access to the Agent Team Manager

In order to use the Agent Team Manager tool to manage an agent team, the user must be associated with an agent who is a primary or secondary supervisor of the agent team.

To configure a user that can manage an agent team:

1. Ensure that the agent team exists and that a supervisor agent has been defined.
2. Sign in to Unified CCMP using an Administrator account.
3. Open Resource Manager and go to the folder containing the supervisor agent.
4. Open the supervisor agent and choose the **Person** tab.
5. Click **Edit Person** (green arrow).
6. Go to the **Portal** tab.
7. Select the **Portal Account**. This displays **None** if no user is mapped.
8. Select **Create User** to create a new user account, or select an existing user.
9. Specify User Name and Password for the new user.
10. In the group membership screen select the **Basic User** and **Supervisor** groups for default permissions at the required location.
11. Click **Save** to create the user.

Adding a New Person in the Team Manager

To add a new person:

1. In the Agent Team Manager tool, 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, provide the following:
 - **First Name**
 - **Last Name** or family name
 - **Description**, such as a job title
 - **Login Name** they should use to log onto the peripheral
 - **Password** they should use to log onto the peripheral
4. In the **Portal** tab, perform the following actions:
 - Select the **None** option to present the Portal Account interface. When prompted select the **Create User** option to add a new user mapped to this Person.
 - Fill in the **Login Name** they should use to log in to the application.
 - Fill in the **Password** they should use to log to the application 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. If you do not add a user to any groups they will still be able to view reports.
5. On the **Advanced** tab, perform the following actions:
 - 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** box to create another person after saving the current one.
 7. Click **Save** to create the person.

Adding an Agent in the Team Manager

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.

To add a new agent:

1. In the Agent Team Manager tool, 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, perform the following actions:

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

- Provide the agent's name.
 - Provide a description.
 - Select a Peripheral to create the agent on. This is usually the same peripheral that you are on.
 - 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 Desktop.
 - **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. In the Supervisor tab, perform the following actions:

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

- If the agent is to be a supervisor, check the **Supervisor** 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.
5. In the Agent Teams tab, perform the following actions:
- 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, perform the following actions:
- 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, edit the following fields:

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

- **Enterprise Name:** The name the agent is known as within the application.
 - **Agent Extension:** The internal extension number for the agent.
 - **Agent Desktop:** Enables you to specify the agent's desk settings.
 - **State Trace:** Check this box if you wish to let the system track the agent's state, such as whether they are logged off or talking.
 - **Active From Date:** 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).
 - **Active To Date:** Set the agent's leaving date.
 - **Create Another:** Check this box to create another agent whose settings are identical to this agent's except for their name and login details
8. Click **Save** to create the agent.

Editing Agents in the Team Manager

Editing Agents

To edit an agent:

1. In the Agent Team Manager tool, select an agent team from the drop-down list.
2. Click the **Agent Details** icon. The Edit the current Agent page opens, showing the agent's details.
3. Make any changes to the agent. Selecting a different tab (such as Supervisor or Agent Teams) shows a different set of fields. You can always go back to previous tabs.
4. Click **Save** to save your changes.

Setting an Agent's Start or Leave Date

To set an agent's starting or leaving date:

1. In the Agent Team Manager tool, select an agent team from the drop-down list.
2. Click the agent icon for the agent you wish to edit. The **Edit the current Agent** page opens, showing the agent's details.
3. To set or change an agent's starting date or finishing date, select the **Advanced** tab. You can only change the Active From Date if it is in the future, otherwise it is dimmed. To change the Active To Date, first make sure the Forever check box is not ticked.
4. To change a date, perform one of the following actions:
 - Use the UP and DOWN arrow keys to adjust the date and time in the date/time box.
 - Click the calendar icon beside the **Active From Date** or **Active To Date** field. A calendar pop-up appears.
5. To change the year, click the drop-down arrow to select the year you want.
6. To change the month, perform one of the following actions
 - Click the drop-down arrow to select the month you want.
 - Click **Prev** or **Next** to go backwards or forwards one month at a time.
7. To select the day of the month, 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).
8. Click **Save** to save your changes.

Changing an Agent's Team

To change an agent's team:

1. In the Agent Team Manager tool, select the agent team to which the agent belongs from the drop-down list.
2. Click the **Agent Details** icon (not the copy icon beside it) of the agent you want to edit. The **Edit The Current Agent** page opens, showing the agent's details.
3. Click 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 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**.

Information Notices

- [Information Notices](#)
- [Advanced Options for Information Notices](#)

Information Notices



Information notices, also known as 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.

Advanced mode users are able to create and edit information notices as well as view the current information notices.

Viewing Current Information Notices

The information notices panel only shows current notices. Notices which have expired (with a **Valid To** date in the past) or pending (with a **Valid From** date in the future) are not shown.

To view an information notice:


1. After signing in to the application, if there are any current information notices that apply to you, the **Information Notice**  icon is displayed beside your user name in the menu bar. Click the  icon to see a list of information notices.
2. Click the notice you want to read.
3. Once you have finished reading the notice, click **Back**.

Advanced Options for Information Notices

Advanced mode users are able to create and edit information notices as well as view the current information notices.

Opening the Information Notices Tool

To open the Information Notices tool:

1. In the menu bar, click the **Hamburger** icon  to show the tools menu.
2. Select **Information Notices**. When you open the **Information Notices** tool, the initial view shows a list of all information notices. This list includes all information notices, including expired information notices (with a **Valid To** date in the past) and pending information notices (with a **Valid From** date in the future).

Creating Information Notices

To create an information notice:

1. In the **Information Notices** tool, click **New**. The **New System Notice** page displays.

2. Select the folder containing the users who need to see the new notice. The folder name is displayed at the top of the page. Then perform the following:
 - In the **Subject** field enter a title for the notice.
 - In the **Content** field enter the text. You can use a plain text message or insert your own HTML tags to apply formatting.
 - 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 **Create Another** to create another notice after this one is created.
3. Click **Save**.

Editing Information Notices

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

Deleting Information Notices

To delete one or more information notices:

- In the Information Notices tool, check the boxes by the notices you want to delete, and click **Delete**. To delete an information notice you are editing, select the **Delete** menu option.

Moving Information Notices

To move an information notice:

1. In the **Information Notices** tool, check the box or boxes of the notice or notices to be moved from the list of information notices. Click the **Move** button. The folder tree displays.
2. Select the folder to move the notice to and click **Save**.

Activity Monitor

- [Activity Monitor](#)
- [Provisioning Queue Tab](#)
- [Audit Detail Tab](#)

Activity Monitor


The Activity Monitor is only available to advanced mode users.

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

The Activity Monitor is licensed separately and is not available on the system if the license has not been purchased.

Opening the Activity Monitor

To open the Activity Monitor:

1. In the menu bar, click the **Hamburger** icon  to show the tools menu.
2. Select **Provisioning > Activity Monitor**. The [Provisioning Queue Tab](#) and the [Audit Detail Tab](#) can be accessed for more details.




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.
- **Synchronizing:** 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 Provisioning 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 Provisioning Warn Threshold but less than the time specified by the Provisioning Max Threshold.
 - **Red:** This represents the number of items that have been in the provisioning queue for more than the time specified by the Provisioning Max Threshold.

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

Provisioning Warn Threshold: 5 minutes
Provisioning Max Threshold: 10 minutes.

Error and Provisioning Details

Click the number of error or provisioning resources in the **Resources | 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 that can be clicked to get more information about the item. Also, click some of the column headers to sort the items in the list by the values in that column. Refer to the table to see which columns are sortable and which fields are hyperlinks.

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

Field	Meaning	Hyperlink	Sortable
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 check box 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.

After selecting the desired filters, click **View** to see the audit details. Some of the fields in the list are hyperlinks that can be clicked to get more information about the item. Also, click some of the column headers to sort the items in the list by the values in that column. Refer to the table to see which columns are sortable and which fields are hyperlinks.

Field	Meaning	Hyperlink	Sortable
Date/Time	The date and time the event occurred, in the time zone of the current user.	No	Yes
Event Description	The event details.	No	No
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
Related Item Type	The type of the related resource.	No	No
Equipment	The equipment	No	Yes

	the item is located on		
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

Resource Manager

- [Introduction](#)
- [Folders](#)
- [Tenants and Prefix Rules](#)
- [Resources](#)
- [Bulk Upload of Resources](#)
- [Item Merging](#)
- [System Search Folders](#)

About Resource Manager

Resource Manager is only available to advanced mode users.

Resource Manager, not to be confused with the Resource Manager gadget, 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. Users can 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 Resource Manager interface. The Unified CCMP web application lets users remotely configure and administer key aspects of the Unified CCE system including:

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

Resource Manager cannot be used to manage security in Unified CCMP. To manage security, see the *Security Guide for Cisco Unified Contact Center Management Portal*.

To start Resource Manager:

1. Click the **Hamburger icon**  in the menu bar, to show the tools menu.
2. Select **Provisioning > Resource Manager**.

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To start Resource Manager:

1. Click the **Hamburger icon**  in the menu bar, to show the tools menu.
2. Select **Provisioning > Resource Manager**.

Resource Manager User Interface

Resource Manager 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 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 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. With sufficient security permissions, users can edit these details.

Folder Tree Panel

For general information about the folder tree, see [The Folder Tree](#).

In Resource Manager, the **Folder Tree** panel also contains these buttons:

- **System:** Create new system resource items.
- **Resource:** Create new remote resource items.
- **Upload:** Perform bulk uploads. For more information, see [About Bulk Upload](#).

Ensure that no folder contains more than 1000 of any one type of resource. For example, a folder can contain 900 Agent resources and 900 Agent Desktop resources, but should not contain 1800 Agent resources.

Items Panel

Description

When selecting an item in the **Folder Tree** panel, the **Items** panel displays the contents of that folder. Depending on what has been 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. Upon clicking 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.

In Unified CCMP 9.1 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:** Move selected items in the list view to another location.
- **Delete:** Delete selected items from the database.
- **Merge:** Merge selected items into a single item. For more information, see [About Merging](#).


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. Use the page numbers or the arrows at the bottom left of the Items panel to move through the pages.

Users 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 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. For a description of the tabs that are common to several resources, see [Common Details Panel Tabs](#).

Anchoring Resources

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 an associated resource that is shown in the Details panel is selected (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.

Common 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 CCMP 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 is an **Agents** tab to allow the user to specify which agents are to be associated with this skill group.

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 groups 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 can move resource items between the bottom and top panes to make and break associations as required.

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

You can change the number of items shown in each page using **Settings > User Settings > Data Paging Size**.

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

This tab is only shown for remote resources, and only after they have been created in Unified CCMP. 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 CCMP'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.

Custom Data Tab

Some remote resources have a custom data tab, which enables you to specify your own key fields and corresponding values for these keys.

Each resource can have a maximum of ten custom data keys.

If a resource has several custom data keys, you can type a key value into the key text box to quickly show that key and the corresponding key value.

An example of how custom data can be used is:

- To hold emergency contact numbers that the system can be configured to notify if the service level drops below a certain threshold.

About Folders

Unified CCMP uses folders to allow a user to partition resources in a hierarchical structure.

For more information about the folder tree and how to use it, see [The Folder Tree](#).

Resource Manager can be used to create, edit, rename, move and delete folders.

Folder names cannot include special characters, for example: (,), ', ", and so on. If you are upgrading a system from a version prior to 11.0(1), be sure to remove any special characters from the names of the folders that are present in the system prior to upgrading.

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Bulk Uploading 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, see [About Bulk Upload](#).

Creating a Folder

Specifying the Folder Properties

To create a folder and specify all the folder properties:

1. In **Resource 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, clear 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.

Using the Default Values for Folder Properties

To create a folder using the default values for folder properties:

1. In **Resource 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:
 - 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.

To change the security permissions for the folder, you need to use the **Role Manager** tool. For more information, see [Roles](#).

Moving a Folder

To move a folder using drag and drop:

1. In **Resource Manager**, in the **Folder Tree** panel, select the folder or folders you want to move (to learn how to select multiple folders, see [Selecting Multiple Folders](#)).

2. Drag and drop the selected folders to the new location (for more information about drag and drop, see [Drag and Drop Operations](#)).

To move a folder using the move button:

1. In **Resource 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 **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**.

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. For more information about the effects of this, see [More About Moving Resources](#).

Deleting a Folder

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**.

Deleting a Folder Using the Folder Tree

To delete a folder using the Folder Tree:

1. In **Resource Manager**, in the **Folder Tree** panel, select the folder or folders you want to delete (to learn how to select multiple folders, see [Selecting Multiple Folders](#)).
2. In the **Folder Tree** panel, 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.

Deleting a Folder Using the Delete Button

To delete a folder using the Delete button:

1. In **Resource 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.

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 Management Portal*.

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.

Renaming a Folder

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

- In **Resource 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.

About Tenants and Tenant Mappings

Tenants

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 CCMP. Just as Unified CCE enforces telephony isolation between tenants, visibility and management of tenants is controlled within Unified CCMP via the security model.

The isolation of each tenant within Unified CCMP 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.

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

Prefix Rules

A prefix rule is a rule which is used by Unified CCMP 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 CCMP they are placed in a default location based on the following rules:

- If Unified CCMP 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 CCMP 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 CCMP.

Prefix rules automate the movement of remote resources which are imported into Unified CCMP from Unified CCE. They reduce the administrative overhead of manually moving items, 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.

You can manually move a resource that matches a prefix rule to another location. If you do this, the resource will remain in the new location unless the new location is a sub-folder of the **/Unallocated** folder. In that case, 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.

Equipment Mappings

Equipment mappings define the relationships between the contact center equipment and the Unified CCMP tenants and folders. Items created on the contact center equipment are imported into Unified CCMP to the mapped tenants and folders, and items created in Unified CCMP are provisioned to the mapped remote equipment.

The equipment mappings are read-only in the Unified CCMP Web Application. They have been set up in the Unified CCMP Integrated Configuration Environment (ICE) cluster configuration.

For more information on equipment mapping, refer to the *Installation and Configuration Guide for Cisco Unified Contact Center Management Portal*.

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 CCMP 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 Self Care

To change the default call routing mechanism that is shown when setting up the distribution of calls to a dialed number (self care):

1. In **Resource Manager**, in the **Folder Tree** panel, select the folder containing the tenant you want to change the self care for. 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 **Self Care** tab.
5. Choose the desired **Default Call Routing Mechanism** from the drop-down list:
 - **None:** The global default call routing mechanism for Unified CCMP will be used. Contact your system administrator for details.
 - **Maximum Active Calls:** Calls will be distributed to the label with the highest priority. When its maximum active call limit is reached, calls will be distributed to the label with the next highest priority.
 - **Weighting:** Calls will be distributed between labels according to the percentages set for each.
6. Click **Save**.

Self care is licensed separately and may not be available on your system. The **Self Care** tab is not available when a new record is first created. It is only available when an existing record is being edited.

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You can manually move a resource that matches a prefix rule to another location. If you do this, the resource will remain in the new location unless the new location is a sub-folder of the **/Unallocated** folder. In that case, 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.

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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 **Self Care** tab.
5. Choose the desired **Default Call Routing Mechanism** from the drop-down list:
 - **None:** The global default call routing mechanism for Unified CCMP will be used. Contact your system administrator for details.
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6. Click **Save**.

Self care is licensed separately and may not be available on your system. The **Self Care** tab is not available when a new record is first created. It is only available when an existing record is being edited.

Creating a Prefix Rule

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

1. In **Resource Manager**, in the **Folder Tree** panel, select the folder containing the tenant for which you want to create a prefix rule. 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 the tenant. The tenant details are displayed in the **Details** panel.
4. Click the **Prefixes** tab. Any existing prefix rules associated with the selected tenant are displayed in a grid.
5. Click **Add New Row** () to add a prefix rule.
6. Fill in the fields as follows:
 - **Prefix:** Enter the prefix to match against the internal name (enterprise name) of each resource. Use '%' to match zero or more occurrences of any character. The prefix must be unique for the resource type.
By default, prefix rules are not case sensitive, unless case sensitivity was enforced in the database management system when Unified CCMP was installed.

- **Example**


- **The prefix '%.SAL.ENG.%ag' matches:**

- **BOS.SAL.ENG.JohnSmith.ag**
- **CHI.SAL.ENG.SamirPatel.ag**
- **bos.sal.eng.JohnSmith.ag (unless case sensitivity was enforced on installation).**
- **It does not match:**
 - **BOS.SAL.SPA.JohnSmith.ag**
 - **BOSSAL.ENG.JohnPatel.ag**
- **Type:** Select the remote resource type the rule applies to.
- **Priority:** Enter a numerical value between 0 and 9999 to define the priority for this rule. The priority must be unique for the resource type. If a resource matches more than one prefix rule, the rule with the numerically lowest priority value will take precedence.
 - **Example**
 - **If there are two prefix rules for agents**
 - **%.SAL.ENG%.ag (with a priority value of 0)**
 - **%.%.ENG%.ag (with a priority value of 9)**
 - the agent **BOS.SAL.ENG.JohnSmith.ag** will match both, but the first rule will be applied because a priority value of 0 takes precedence over a priority value of 9.
- **Enabled:** Select to enable the prefix rule, clear to disable the prefix rule.
- **Path:** Click to show the folder tree, then select the destination folder where resources that match this rule will be placed on import.

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

Deleting a Prefix Rule

To delete a prefix rule for a tenant:

1. In **Resource 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.

Viewing Equipment Mapping

To view the equipment mapping set up for a tenant:


1. In **Resource Manager**, in the **Folder Tree** panel, select the folder containing the tenant with the equipment mapping 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 view. The tenant details are displayed in the **Details** panel.
4. Click the **Equipment** tab. Any existing equipment mappings associated with the selected tenant will be displayed.

The equipment mappings are read-only in the Unified CCMP Web Application.

For more information on equipment mapping, refer to the *Installation and Configuration Guide for Cisco Unified Contact Center Management Portal*.

Viewing a Prefix Rule


To view a prefix rule for a tenant:

1. In **Resource 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.

Editing a Prefix Rule

To edit a prefix rule for a tenant:

1. In **Resource 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.

About Resources

Resource Types

Resources are the items in the contact center system which can be viewed and updated using Unified CCMP.

There are two types of resource, remote resources and system resources.

- **Remote resources** (sometimes called dimensions) are the resources that exist on the remote contact center equipment. Some remote resources can be created or edited in Unified CCMP and provisioned onto the remote equipment. Other remote resources can be viewed in Unified CCMP but cannot be created, edited or provisioned from Unified CCMP. All remote resources must be associated with a specific tenant. Agents, skill groups, dialed numbers, bucket intervals and route partitions are examples of remote resources. Agents, skill groups, and dialed numbers are provisionable remote resources. Bucket intervals and route partitions are non-provisionable.
- **System resources** (sometimes called Unified CCMP resources) are the resources that are local to Unified CCMP and are created and managed by Unified CCMP. They are not provisioned onto the remote contact center equipment. System resources may be associated with a tenant but they do not need to be. Users, groups and folders are examples of system resources.

System Resources

You can create and manage the following types of system resource:

- **Folder:** A placeholders in the system for related information. For more information, see [About Folders](#).
- **Group:** A set of Unified CCMP users who share the same security permissions. For more information, see [Groups](#).
- **Information Notice:** The 'Message Of The Day' facility.
- **User:** The contact center members who are permitted to access Unified CCMP. For more information, see [Users](#).

Remote Resources

You can create and manage the following types of remote resource:

- **Agent:** A person who handles customer contacts. For more information, see [About Agents and Supervisor 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, see [About Agent Desktops](#).
- **Agent Team:** A group of agents, managed by one or more supervisors. For more information, see [About Agent Teams](#).
- **Attribute:** User-defined information that can be associated with an agent. It defines the agent's knowledge or experience in a particular area and the level of that knowledge or experience. For more information, see [About Precision Attributes](#).
- **Call Type:** A category of incoming routable task. The call type determines the routing script that is run for the call. For more information, see [About Call Types](#).
- **Department:** A way of grouping related resources according to user-defined business needs. For more information, see [About Departments](#).
- **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, see [About Device Profiles](#).
- **Dialed Number:** The number dialed by the caller. This helps to determine the call type. For more information, see [About Dialed Numbers](#).
- **Directory Number:** The line connected to an IP Phone. For more information, see [About Directory Numbers](#).
- **Enterprise Skill Group:** A logical grouping of skill groups. These may be from different media routing domains. For more information, see [About Enterprise Skill Groups](#).
- **Expanded Call Variable:** A variable used to pass information about calls. For more information, see [About Expanded Call Variables](#).
- **IP Phone:** An IP device with a single line used by an agent to make and receive calls. For more information, see [About IP Phones](#).
- **IVR Application:** A voice XML (VXML) application that runs on a CVP IVR app server and is used to control call routing. For more information, see [About IVR Apps](#).
- **Label:** A string that is passed to a routing client for each network target. For more information, see [About Labels](#).
- **Media File:** A .wav file that is used by IVR to play back prompts and messages to callers. For more information, see [About Media Files](#).
- **Network VRU Script:** A script used by the voice response unit to play a message to the caller. For more information, see [About Network VRU Scripts](#).
- **Peripheral:** A connected system such as an ACD switch that routes customer phone calls to contact center staff. For more information, see [About Peripherals](#).

You cannot provision a peripheral through Unified CCMP, you can only change its associated user.

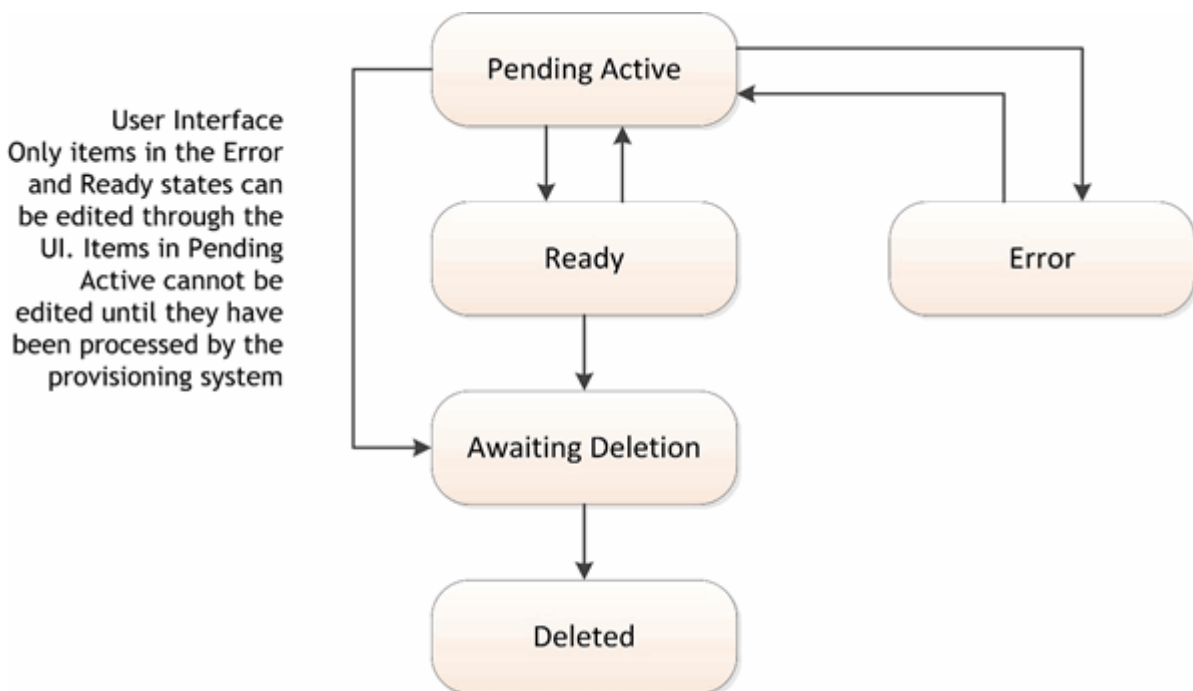
- **Person:** The representation of a physical person on the system. A person can be a user and/or one or more agents. For more information, see [About Persons](#).
- **Precision Queue:** A mechanism to define how to route calls to agents depending on the agents' proficiency attributes and availability. Precision queues can be referenced in routing scripts to define how calls are routed. For more information, see [About Precision Queues](#).
- **Service:** A Unified CCE Service, with associated Skill Groups and Peripherals. For more information, see [About Services](#).
- **Skill Group:** A collection of agents with the same skills and assigned to a single media routing domain. For more information, see [About Skill Groups](#).
- **User Variable:** A named object that holds a value - often used in routing scripts. For more information, see [About User Variables](#).

You can view the details of other remote resources that are provisioned through Unified CCE, such as media routing domains or scripts, but you cannot edit these.

If your Unified CCMP deployment is connected to an HCS 500, 1000 or 4000 Agent Unified CCE configuration, then the predefined capacity limits of that deployment type will be enforced by Unified CCMP. An error message is displayed if you request a change that exceeds one of these capacity limits, for example, if you try to add a precision queue attribute to an agent that already has the maximum number of attribute memberships. You can see the capacity limits that are enforced by the application using the ICE System Properties tool, under the **Capacity Properties** tab (for more details about the ICE System Properties tool, see the *Administration Guide for Cisco Unified Contact Center Management Portal*).

Resource States

Each provisionable remote resource in Unified CCMP can be in one of five states that indicate its stage in the resource life cycle.



Resource Lifecycle States

Pending Active

When a resource is successfully created or changed using the Unified CCMP 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 CCMP, it has not yet been fully provisioned on the remote system. A resource can be deleted while it is in this state.

A resource can be successfully provisioned in Unified CCMP 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 CCMP 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 CCMP 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 CCMP web application (or when Unified CCMP 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 CCMP 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 CCMP, only set to the state Deleted, as their histories are kept for audit reporting purposes.

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There are two types of resource, remote resources and system resources.

- **Remote resources** (sometimes called dimensions) are the resources that exist on the remote contact center equipment. Some remote resources can be created or edited in Unified CCMP and provisioned onto the remote equipment. Other remote resources can be viewed in Unified CCMP but cannot be created, edited or provisioned from Unified CCMP. All remote resources must be associated with a specific tenant. Agents, skill groups, dialed numbers, bucket intervals and route partitions are examples of remote resources. Agents, skill groups, and dialed numbers are provisionable remote resources. Bucket intervals and route partitions are non-provisionable.
- **System resources** (sometimes called Unified CCMP resources) are the resources that are local to Unified CCMP and are created and managed by Unified CCMP. They are not provisioned onto the remote contact center equipment. System resources may be associated with a tenant but they do not need to be. Users, groups and folders are examples of system resources.

System Resources

You can create and manage the following types of system resource:

- **Folder:** A placeholders in the system for related information. For more information, see [About Folders](#).
- **Group:** A set of Unified CCMP users who share the same security permissions. For more information, see [Groups](#).
- **Information Notice:** The 'Message Of The Day' facility.
- **User:** The contact center members who are permitted to access Unified CCMP. For more information, see [Users](#).

Remote Resources

You can create and manage the following types of remote resource:

- **Agent:** A person who handles customer contacts. For more information, see [About Agents and Supervisor 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, see [About Agent Desktops](#).
- **Agent Team:** A group of agents, managed by one or more supervisors. For more information, see [About Agent Teams](#).
- **Attribute:** User-defined information that can be associated with an agent. It defines the agent's knowledge or experience in a particular area and the level of that knowledge or experience. For more information, see [About Precision Attributes](#).
- **Call Type:** A category of incoming routable task. The call type determines the routing script that is run for the call. For more information, see [About Call Types](#).
- **Department:** A a way of grouping related resources according to user-defined business needs. For more information, see [About Departments](#).
- **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, see [About Device Profiles](#).
- **Dialed Number:** The number dialed by the caller. This helps to determine the call type. For more information, see [About Dialed Numbers](#).
- **Directory Number:** The line connected to an IP Phone. For more information, see [About Directory Numbers](#).
- **Enterprise Skill Group:** A logical grouping of skill groups. These may be from different media routing domains. For more information, see [About Enterprise Skill Groups](#).
- **Expanded Call Variable:** A variable used to pass information about calls. For more information, see [About Expanded Call Variables](#).
- **IP Phone:** An IP device with a single line used by an agent to make and receive calls. For more information, see [About IP Phones](#).

- **IVR Application:** A voice XML (VXML) application that runs on a CVP IVR app server and is used to control call routing. For more information, see [About IVR Apps](#).
- **Label:** A string that is passed to a routing client for each network target. For more information, see [About Labels](#).
- **Media File:** A .wav file that is used by IVR to play back prompts and messages to callers. For more information, see [About Media Files](#).
- **Network VRU Script:** A script used by the voice response unit to play a message to the caller. For more information, see [About Network VRU Scripts](#).
- **Peripheral:** A connected system such as an ACD switch that routes customer phone calls to contact center staff. For more information, see [About Peripherals](#).

You cannot provision a peripheral through Unified CCMP, you can only change its associated user.

- **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, see [About Persons](#).
- **Precision Queue:** A mechanism to define how to route calls to agents depending on the agents' proficiency attributes and availability. Precision queues can be referenced in routing scripts to define how calls are routed. For more information, see [About Precision Queues](#).
- **Service:** A Unified CCE Service, with associated Skill Groups and Peripherals. For more information, see [About Services](#).
- **Skill Group:** A collection of agents with the same skills and assigned to a single media routing domain. For more information, see [About Skill Groups](#).
- **User Variable:** A named object that holds a value - often used in routing scripts. For more information, see [About User Variables](#).

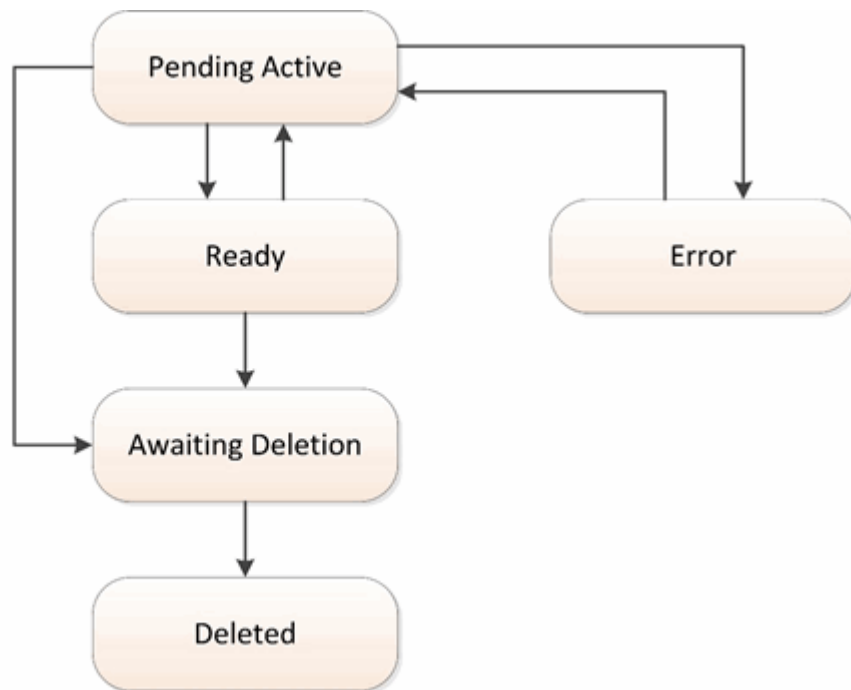
You can view the details of other remote resources that are provisioned through Unified CCE, such as media routing domains or scripts, but you cannot edit these.

If your Unified CCMP deployment is connected to an HCS 500, 1000 or 4000 Agent Unified CCE configuration, then the predefined capacity limits of that deployment type will be enforced by Unified CCMP. An error message is displayed if you request a change that exceeds one of these capacity limits, for example, if you try to add a precision queue attribute to an agent that already has the maximum number of attribute memberships. You can see the capacity limits that are enforced by the application using the ICE System Properties tool, under the **Capacity Properties** tab (for more details about the ICE System Properties tool, see the *Administration Guide for Cisco Unified Contact Center Management Portal*).

Resource States

Each provisionable remote resource in Unified CCMP can be in one of five states that indicate its stage in the resource life cycle.

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



Resource Lifecycle States

● Pending Active

When a resource is successfully created or changed using the Unified CCMP 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 CCMP, it has not yet been fully provisioned on the remote system. A resource can be deleted while it is in this state.

A resource can be successfully provisioned in Unified CCMP 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 CCMP 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 CCMP 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 CCMP web application (or when Unified CCMP 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 CCMP 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 CCMP, only set to the state Deleted, as their histories are kept for audit reporting purposes.

Creating a Resource

For more information about resource properties, see the detailed description for each resource. For system resources, see [System Resources](#) and for remote resources, see [Remote Resources](#).

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.

To create a new resource:

1. In **Resource 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 are returned to **Resource Manager** and the new resource item appears in the resource item list in the **Items** panel.

Viewing and Editing Resources

Viewing and Editing Resources Using the Summary View in the Items Panel

To view a particular resource from the Items panel:

1. In **Resource 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.
3. To view the details for an individual resource, in the **Items** panel, click on the resource you want to view. The resource details are displayed in the **Details** panel.
4. If you want to edit the resource, make the required changes and click **Save**.

Viewing and Editing Resources Using a Resource Filter in the Folder Tree

To view a particular resource from the Folder Tree panel, as follows:

1. In **Resource 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.
2. To view the details for an individual resource, in the Items panel, click on the resource you want to view. The resource details are displayed in the **Details** panel.
3. If you want to edit the resource, make the required changes and click **Save**.

Selecting Resources

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

- **To select one or more resources** to move or delete, select the check boxes to the left of the resource.
- **To view or edit the properties of a single resource**, click on the name of the resource. The properties of the resource will be shown in the Details panel.

For more details about the properties of a specific resource type, see the description for that resource. The location of the relevant information is listed in [System Resources](#) for system resources and [Remote Resources](#) for remote resources.

Viewing Resource Status

To see the current status of a resource:

1. View the resource details (see [Viewing and Editing Resources](#)). The resource status is shown as an icon at the bottom of the details panel. This is green if the resource is Ready, orange if the resource is Pending Active and red if the resource is in the Error state. You may also see information about the status of related resources and memberships.
2. If required, click the status icon to see the status dialog box, showing more information about the status of the resource and of any related resources or memberships. The status dialog box may also contain a **Purge** button if the resource is in the Error state or appears to be stuck in the Pending Active state. You can click this to purge a stuck resource (see [Purging Resources](#)).

Status information is only available for provisionable remote resources (for example, agents, skill groups, precision queues). It is not available for Unified CCMP resources (for example, folders, users, groups) or for remote resources that cannot be provisioned using Unified CCMP (for example, media routing domains or scripts, or resources on systems where provisioning is not supported).

Moving Resources

To move a resource, users 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. 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.

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

To move resources:

1. In **Resource Manager**, 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.
9. A confirmation message is displayed. You will be returned to the main **Resource Manager** page automatically after 5 seconds, or you can click **OK** to return to the main **Resource Manager** page immediately.

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. The user is asked whether related audit data should be moved with the resource, or remain with the deleted resource.

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:

- Dialed Number
- Call Type

- Label
- Network VRU Script
- Scheduled Target
- Routing Script

Unified CCMP 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. The user is asked whether related audit data should be moved with the resource, or remain with the deleted resource.

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 CCMP, by using the Admin Workstation (AW) and changing the Customer Definition ID, the change will be imported into Unified CCMP 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.

The old resource instance will retain its historical audit data. Any new audit data since the change of ownership will be associated with the new resource instance.

Deleting Resources

1. In **Resource Manager**, 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.

For more information about the effect of deleting a specific resource type, see the description for each resource. For system resources, see [System Resources](#) and for remote resources, see [Remote Resources](#).

Purging Resources

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

About Bulk Upload

The Bulk Upload Tool

The bulk upload tool is used for importing large numbers of resource items into Unified CCMP. 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 CCMP.

Resources That Can Be Bulk Uploaded

You can bulk upload the following resources:

- Agents
- Agent desktops
- Agent teams
- Precision attribute
- Call Types
- Departments
- Dialed Numbers
- Enterprise Skill Groups
- Folders
- Labels

- Network VRU Scripts
- Persons
- Precision Queues
- Skill Groups
- Users
- User Variables

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Editing CSV Files

You can use Notepad or any other text-based editor to edit CSV files for use with bulk upload. 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.

Using the Bulk Upload Tool

Starting a Bulk Upload

Uploads exceeding 500 items (per csv file) may cause provisioning requests to fail or remain in a Pending Active state. The effective batch size is controlled by the `IcmReskillingMaxBatchSize` parameter in the provisioning service configuration file located at: **C:\Management Portal\Provisioning\Exony.Provisioning.Service.exe.config**. The default value is 200 and can be adjusted as needed.

To start a bulk upload:

1. Open the **Resource 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.

This path is only used if you have removed the Path column in the CSV file. This option is not available for folders.

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.

Bulk Upload Errors

If something goes wrong during the bulk upload, you may want to pause the upload and check why an item failed. For more information about possible reasons for bulk upload failures, see [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 returns 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 CCMP.

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.
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.

Bulk Upload Data Types

Bulk upload uses the following data types:

- 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.
- CSS means a valid CSS (Cascading Style Sheet) style definition, for example `color:black;`
`background-color: #e08000`
- CSS Styled List
- 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`.

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 Bulk Upload Columns

These columns are common to every bulk upload template file except where stated.

The **Required?** column in the tables below indicates whether the column must be present.

Column Name	Data Type	Required	Description
Path	Path	No	<p>Describes where in the tree the resource will be created. If you want to supply the path in the bulk upload screen, you must remove this column. Use the forward slash ("/") as a delimiter when specifying folders. For example, use / to specify the root folder, /MyTenant to specify a tenant folder and /MyTenant/MyFolder to specify a tenant subfolder.</p> <p>Note: If you leave the column present and do not set a value, bulk upload 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</p>

Column Name	Data Type	Required	Description
			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 CCMP. This must be a unique name. In most cases, this will not be provisioned.
Description	-	No	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.

Bulk Upload Agent Template

This table shows the columns required when bulk uploading Agents.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Settings > Provisioning Settings > Agent State Trace

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid if the tenant is associated with a Unified CCE instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.
DefaultSkillGroup	Enterprise Name	No	The default skill group to be used when the skill group routing is not available. This skill group will be automatically included in the SkillGroupMember field if it is not already present.
PeripheralNumber	Numeric	Yes	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 an Unified CCMP user, as this is a future feature, however it enables you to bind this agent to a domain login name.
AgentStateTrace	Boolean	No	Indicates whether the software collects agent state trace data for the agent. Note: This field can only be set if the Agent State

Column Name	Data Type	Required	Description
			Trace provisioning setting has been selected (Settings > Provisioning Settings > Agent State Trace). The bulk load for the record will fail otherwise.
DomainLoginName	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.
AgentDesktopMember	Enterprise Name	No	The Desktop this Agent will use.
PersonMember	Login 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

Column Name	Data Type	Required	Description
			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.
PrecisionAttributeMember	Enterprise Name and values	No	The attributes that this agent has and the values of each. Assign values using "=" and separate multiple attributes with a semi-colon (;). For example, Spanish=5; MortgageTraining=True for an agent with a proficiency of 5 in Spanish and who is trained in mortgages.

Bulk Upload Agent Desktop Template

This table shows the columns required when bulk loading Agent Desktops.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid if the tenant is associated with a Unified CCE instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.

Column Name	Data Type	Required	Description
WrapupDataIncomingMode	Numeric	No	<p>Indicates whether the agent is allowed or required to enter wrap-up data after an incoming call.</p> <ul style="list-style-type: none"> ▪ 0: Required ▪ 1: Optional ▪ 2: Not allowed ▪ 3: Required with Wrap up Data <p>If value is blank, defaults to 1.</p>
WrapupDataOutgoingMode	Numeric	No	<p>Indicates whether the agent is allowed or required to enter wrap-up data after an outgoing call.</p> <ul style="list-style-type: none"> ▪ 0: Required ▪ 1: Optional ▪ 2: Not allowed <p>If value is blank, defaults to 1.</p>
WorkModeTimer	Numeric	No	<p>The amount of time in seconds (1-7200) allocated to an agent to wrap up the call.</p> <p>If not supplied, defaults to 7200.</p>
RemoteAgentType	Numeric	No	<p>Indicates how mobile agents are handled.</p> <ul style="list-style-type: none"> ▪ 0: No remote access ▪ 1: Use call by call routing

Column Name	Data Type	Required	Description
			<ul style="list-style-type: none"> 2: Use nailed connection 3: Agent chooses routing at login <p>If value is blank, defaults to 0.</p>

Bulk Upload Agent Team Template

This table shows the columns required when bulk loading Agent Teams.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid if the tenant is associated with a Unified CCE instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.
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.

Bulk Upload Call Type Template

This table shows the columns required when bulk loading Call Types.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid if the tenant is associated with a Unified CCE instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.
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: <ul style="list-style-type: none"> ▪ 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.

Bulk Upload Departments Template

There are no extra columns required when bulk loading Departments.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Bulk Upload Dialed Number Template

This table shows the columns required when bulk loading Dialed Numbers.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid if the tenant is associated with a Unified CCE instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.
Dialednumber	SNC	Yes	The string value by which the Agent/IVR Controller identifies the Dialed Number.
RoutingClientMember	Enterprise Name	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.
MediaRoutingDomainMember	Enterprise Name	Yes	The name of the media routing domain.

Bulk Upload Enterprise Skill Group Template

This table shows the columns required when bulk loading Enterprise Skill Groups.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid if the tenant is associated with a Unified CCE instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.
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.

Bulk Upload Folders Template

This table shows the columns required when bulk loading Folders.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Folders do not use the EnterpriseName, EffectiveTo or EffectiveFrom global columns.

Column Name	Data Type	Required	Description
Security	CSS Styled List	No	Allows you to set security on the folder you upload. See below for an example of the syntax for this field.

Security Field Example

DOS-styled syntax example:

```
<USERNAME> : <ROLENAME>; <USERNAME> : <ROLENAME> [ : <MULTIPLEROLENAME> ]
```

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.

Group permissions on a folder cannot be set during bulk upload.

Bulk Upload Label Template

This table shows the columns required when bulk loading Labels.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Labels do not use the `EnterpriseName` global column.

Column Name	Data Type	Required	Description
Label	SNC	Yes	The string value used to identify the label by the routing client.
RoutingClientMember	Enterprise Name	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.
LabelType	Numeric	False	The type of label: <ul style="list-style-type: none"> ▪ 0: Normal ▪ 1: DNIS override ▪ 2: Busy ▪ 3: Ring ▪ 4: Post-Query

Bulk Upload Network VRU Scripts Template

This table shows the columns required when bulk loading Network VRU Scripts.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid if the tenant is associated with a Unified CCE instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.
VRUScriptName	SNC, plus commas (,)	Yes	Up to 39 characters. This is a composite string identifying the micro-application to run, the name of the associated media file (if applicable) and any options that need to be specified for that micro-application.
Timeout	Numeric	Yes	The number of seconds to wait for a response after the script starts executing. This value can range from 0 to 2147483647.
NetworkVruMember	Enterprise Name	Yes	The network VRU to associate with this Network VRU Script.

Bulk Upload Person Template

This table shows the columns required when bulk loading Persons.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Persons do not use the `EnterpriseName` global column.

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid if the tenant is associated with a Unified CCE

Column Name	Data Type	Required	Description
			instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.
EquipmentName	SNC	No	<p>The instance name of the Unified CCE or Unified Communications Manager you want this person added to. This corresponds directly with the equipment instance name that was specified when configured via the Unified CCMP ICE Cluster Configuration utility (see <i>Administration Guide for Unified CCMP</i>).</p> <p>Omit this item or leave it blank to automatically add this Person to all available equipment. To add this Person to multiple equipment instances, specify each of the equipment instance names you want to add this person to, separating each equipment instance with a ";" (semi-colon) character.</p>
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.

Column Name	Data Type	Required	Description
PassPhrase	Password	Depends on setting on underlying equipment	The peripheral login password for the person. At least five characters long. Longer passwords, including numbers and other characters, may be required. Ask your system administrator for details.
SsoEnabled	Y/N	Required only if UCCE is setup in Mixed mode	If the UCCE is in Mixed mode, then the value in this column allows the agents/supervisors to sign in only once to have access to all the Cisco applications.
EmailAddress	SNC	No	Email address of the person.
DigitalChannelEnabled	Y/N	No	To enable this setting, you must enable Single Sign-On (SSO) and provide an email address.

When uploading Person records to a location where both Unified CCE and Unified Communications Manager resources exist, the Person will be attached to all pieces of equipment unless the equipment field is set in the bulk load template.

Bulk Upload Precision Attributes Template

This table shows the columns required when bulk loading Precision Attributes.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid

Column Name	Data Type	Required	Description
			if the tenant is associated with a Unified CCE instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.
AttributeDataType	Numeric	Yes	Type of data to associate with attribute. One of: <ul style="list-style-type: none"> ▪ 3: boolean (true or false only) ▪ 4: proficiency (a numeric range)
MinimumValue	Numeric	No	Minimum value that the attribute can have. Set to 1 by default.
MaximumValue	Numeric	No	Maximum value that the attribute can have. Set to 10 by default.
DefaultValue	Boolean or Numeric, according to AttributeDataType	Yes	Default value to be used when an attribute is assigned to an agent if no explicit value is specified.

Bulk Upload Precision Queues Template

This table shows the columns required when bulk loading Precision Queues.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid if the tenant is associated with a Unified CCE instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.
MediaRoutingDomain	Enterprise Name	Yes	The name of the Media Routing Domain. This cannot be changed after Precision Queue upload.
Steps	-	Yes	Specification of the steps in this precision queue. See below for syntax of this field.
AgentOrdering	Numeric	No	The way to choose an agent to handle the call if more than one agent satisfies the precision queue criteria. One of: 1: agent that has been available the longest 2: most skilled agent 3: least skilled agent
ServiceLevelThreshold	Numeric	No	The service level threshold, in seconds, for allocating the call to a suitable agent using the rules in the precision queue. 0 to 2147483647
ServiceLevelType	Numeric	No	Indicates how to handle abandoned calls in service level calculations. One of:

Column Name	Data Type	Required	Description
			<p>1: ignore abandoned calls</p> <p>2: abandoned calls have negative impact (that is, exceed the service level threshold)</p> <p>3: abandoned calls have positive impact (that is, meet the service level threshold)</p>

Syntax for Precision Queue Steps

The Precision Queue Steps field consists of one or more steps. Each step is broken down into several parts. The parts are

- The **ConsiderIf** Condition (optional). If present, this specifies the circumstances to which the step applies. For example, a step might only apply if there has been a higher than usual number of unanswered calls that day. Do not specify a **ConsiderIf** condition for the last step in a Precision Queue.
- The **condition expressions** (always required for each step). This specifies the attributes an agent must have to receive the call. It may be a simple comparison, or it may involve multiple comparisons linked by "and" or "or". For example, the condition expressions might specify an agent who can speak Spanish, and is trained to sell mortgages and is based in London.
- The **WaitTime** (optional). Specifies the amount of time in seconds to wait before moving on to the next step if the conditions in this step cannot be met. For example, a wait time value of 20 would mean that if no agent matching the conditions for that step was available at the end of 20 seconds, the next step would be considered. If a wait time is not specified then a default of 0 is used. Do not specify a wait time for the last step in a Precision Queue.

To build the Steps field from these components, separate the parts of each step with a colon (:) and separate each step with a semi-colon (;). Do not add a semi-colon at the end of the last step.

The example below shows a Steps field with three steps, The first step has a **WaitTime** expression and the condition expression. The second has a **ConsiderIf** expression and a **WaitTime** expression as well as the condition expression. The third step is the last step, so can only have a condition expression.

Example

Step 1

Specify the time in seconds to wait for the conditions in the step to be met. This ends with a colon as it is part of the step.

```
WaitTime=10:
```

Specify the condition expression to be used. This ends with a semi-colon as it is the end of the step, and another step follows it.

```
Spanish >= 5 && MortgageTrained == True && Location == London;
```

Step 2

Specify the circumstances to consider this step. This ends with a colon as it is part of the step. See the note below for the syntax for the ConsiderIf statement.

```
ConsiderIf=TestforSituation:
```

Specify the time in seconds to wait for the conditions in the step to be met. This ends with a colon as it is part of the step.

```
WaitTime=20:
```

Specify the condition expression to be used. This ends with a semi-colon as it is the end of the step, and another step follows it.

```
Spanish >= 5 && MortgageTrained == True;
```

Step 3

Specify the condition expression to be used if the previous steps have all failed. This has no semi-colon at the end as it is the final step.

```
(Spanish >= 5) || (Spanish >=3 && MortgageTrained == True)
```

This attribute must be the enterprise name of the precision attribute.

In the example above the Steps field has been separated into sections so you can see how it is constructed. When used in a bulk upload script, enter it as a single string in the same record as the other Precision Queue fields. The ConsiderIf part of the test is not parsed by Unified CCMP but is passed directly to Unified CCE. For more information about the syntax of ConsiderIf expressions, see the Unified CCE documentation at [http://docwiki.cisco.com/wiki/Precision_Routing_Release_9.0\(1\)](http://docwiki.cisco.com/wiki/Precision_Routing_Release_9.0(1)). In the condition expression, you can use the following:

- for joining conditions && (AND) or || (OR)
- for comparisons of Boolean attributes == (is equal to) or != (is not equal to)
- for comparisons of proficiency attributes, == (is equal to), != (is not equal to), < (is less than), <= (is less than or equal to), > (is greater than) >= (is greater than or equal to).

Bulk Upload Skill Group Template

This table shows the columns required when bulk loading Skill Groups.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

Column Name	Data Type	Required	Description
DepartmentMember	Enterprise Name	No	The department that this item belongs to. This field is only valid if the tenant is associated with a Unified CCE instance running Unified CCE version 10.5 or later. Otherwise, an error will be reported if this field is present.
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.
ServiceLevelThreshold	Numeric	No	The service level threshold, in seconds, for the service level. If this

Column Name	Data Type	Required	Description
			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

Column Name	Data Type	Required	Description
			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.
MediaRoutingDomainMember	Enterprise Name	Yes	The Media Routing Domain. This cannot be changed after skill group upload.

Bulk Upload User Variable Template

This table shows the columns required when bulk loading User Variables.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

User Variable does not use the `EnterpriseName` global column.

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: <ul style="list-style-type: none"> ▪ 1 : Service ▪ 2 : Skill Group ▪ 7 : Call Type ▪ 8 : Enterprise Service ▪ 9 : Enterprise Skill Group ▪ 11 : Dialed Number ▪ 14 : Peripheral

Column Name	Data Type	Required	Description
			<ul style="list-style-type: none"> ▪ 16 : Trunk Group ▪ 17 : Route ▪ 20 : Master Script ▪ 21 : Script Table ▪ 29 : Application Gateway ▪ 31 : User Variable
DataType	Numeric	No	<p>A number indicating the Data type of <code>ObjectType</code>. Valid numbers are as follows:</p> <ul style="list-style-type: none"> ▪ 0: Long (default) ▪ 1: Float ▪ 2: Char ▪ 3: Date

Bulk Upload Users Template

This table shows the columns required when bulk loading Users.

Columns that are common to many resources are described in [Global Bulk Upload Columns](#).

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.

Column Name	Data Type	Required	Description
FirstName	SNC	No	The first name of the user.
LastName	SNC	No	The last name of the user.
ChangePasswordOnNextLogon	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.
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 Home Folder 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 be also specified for example, /Folder1/ Admins;/Folder2/ Admins
InternetScriptEditorEnabled	Boolean	No	Whether the user is linked to a Unified CCE user that can access Cisco's Internet Script Editor.

Column Name	Data Type	Required	Description
			<p>If true, the following apply:</p> <ul style="list-style-type: none"> ▪ The login name must correspond to an existing Windows active directory use. ▪ If the installation does not use single sign-on, the specified password must match the password for the corresponding active directory user.
LocalLoginEnabled	Boolean	No	<p>Indicates if the user can login using the Login Name and Password provided. By default, this value is set to disabled.</p>

About Merging

The Merge function enables 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.

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Merging Items

The Merge function is accessed using the **Merge** button in the Items panel of the **Resource Manager** tool.

The Merge function is only supported for Person items. You can use the Merge function to merge a Unified CCE Person and a Unified Communications Manager 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 Resource 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 a row in the **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 Resource 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 displays a confirmation message for you to check that the items being merged are correct. Press the **Confirm** button to commit the changes.

About System Search Folders

If you have a global role that includes the **Browse Search Folders** permission then you may be able to see search system folders containing predefined searches in the **Folder Tree** panel (more information about global roles, see Global Roles). System search folders may exist at root level, or in subfolders, or in both locations.

By default, Unified CCMP is configured with these predefined searches, located in **Search Folders**, immediately below the root folder:

- **Awaiting Deletion:** Shows the user a flat list of all the items in the system that they have permission to see and are currently at Awaiting Deletion status.
- **Error:** Shows the user a flat list of all the items in the system that they have permission to see and are currently at Error status.
- **Pending Active:** Shows the user a flat list of all the items in the system that they have permission to see and are currently at Pending Active status.
- **Recently Modified:** Shows the user a flat list of all the items in the system that they have permission to see and have been modified in the last hour.

Depending on your system configuration, there may also be other search folders containing customized searches at other locations in the hierarchy.

The searches are predefined. You cannot move or delete searches using the functionality in the **Folder Tree** panel or in the **Items** panel.

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The searches are predefined. You cannot move or delete searches using the functionality in the **Folder Tree** panel or in the **Items** panel.

Running a Predefined Search

To run a predefined search:

1. In the **Folder Tree** panel, click 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 the summary entry to show the list of searches in the Items panel that match the search criteria.
3. In the Items panel, click a search to see the search details in the Detail panel.
4. Right-click a search and select refresh to refresh the search results.

Moving Items in Search Results

To move one or more items returned in a search:

1. In the **Folder Tree** panel, identify the search you are interested in.
2. Next, do one of the following:
 - Click 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.
 - Click 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 is displayed, showing the folder tree.
6. Select the location in the folder tree to move the folder or folders to.
7. Click **Save**.

If you move an item, you are moving the actual item, not just the search result.

Viewing or Editing Search Results

If you edit the item, you are editing the actual item, not just the search result.

To view or edit the items returned in a search:

1. In the **Folder Tree** panel, identify the search you are interested in.
2. Next, do one of the following:
 - Click 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.
 - Click 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.

Deleting Items from Search Results

If you delete an item, you are deleting the actual item, not just the search result.

To delete one or more items returned in a search:

1. In the **Folder Tree** panel, identify the search you are interested in.
2. Next, do one of the following:
 - Click 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.
 - Click 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.

Resource Guide

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About Cisco Resource Types

The following is included in each section about the various Cisco resources:

- Each resource type
- How to create, edit and delete that resource type (as applicable)
- Other operations that can be performed on that resource
- The fields that can be set for that resource, and what each field means.

About Agents and Supervisor Agents

Agents

An agent is a person who handles customer contacts on a particular peripheral. Each agent is associated with an Unified CCMP person. Multiple agents can be associated with a single person. For example, someone who provides cover for agent teams on different peripherals will be represented by a separate agent account on each peripheral.

Each agent can be a member of one or more skill groups, which are groups of agents that share a common set of skills. Agents can also be grouped into agent teams, each of which have a supervisor or supervisors.

In order to use non-voice peripherals, agents must be enabled for non-voice use via the administration interfaces for these multi-channel applications. You can create all new agents using Unified CCMP, but to configure agents to use non-voice peripherals, you will need to use the administration interfaces of those peripherals.

Supervisor Agents

A supervisor agent is an agent, often with a user account on Unified CCMP, who can administer specific agents and agent teams. A supervisor agent does not have to be actually assigned as a supervisor to any agent team, but an agent must be a supervisor agent to supervise an agent 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.

If an agent is a supervisor agent, and if the associated Person has an Unified CCMP user account, that user should be added to the Unified CCMP Supervisors security group. This allows Unified CCMP users to edit agents and agent teams. If an agent is a supervisor agent, then the agent must be associated with a domain account before they can have precision attributes associated to them.

When creating supervisors, use the Default Domain feature to coincide with the Unified CCE Non-SSO feature. When Unified CCMP is connected to Unified CCE, the Default Domain can be used to create a user who does not need to use the UPN / email ID to sign in. For more information about the Unified CCE Non-SSO feature, consult your Unified CCE documentation.

To promote an agent to be a supervisor, the Supervisor checkbox in the agent's Person tab must be marked, and the Person Login Name field must be manually populated with a valid Global Catalog (GC) Login in one of the following formats:

1. UPN format, for example, JohnSmith@domain.subdomain.local
2. SAM format, for example, SUBDOMAIN\JohnSmith
3. Login-name-only format, for example, JohnSmith

Login-name-only format is only allowed when a Default Domain has been configured. In this case, when saving the Person details, once validated, the Person Login Name is saved against the Person as it was inputted. However when saving the agent, the system derives the UPN format by appending the default domain to the inputted Person Login Name and then validates that value before saving it against the agent. For example, if the default domain is configured as domain.subdomain.local, then the UPN value is generated as JohnSmith@domain.subdomain.local, which is then validated against the Global Catalog and saved against the agent.]

Regardless of the format used, the system validates the inputted Login Name against the Global Catalog (GC) that was configured for that UCCE cluster. If the inputted value is invalid or if it does not correspond to a valid GC user account on the configured Global Catalog, then the UI does not save the supervisor.

If an agent is a supervisor agent, and if the associated Person has a Unified CCMP user account, that user should be added to the Unified CCMP Supervisors security group. This allows Unified CCMP users to edit agents and agent teams.

If an agent is a supervisor agent, then the agent must be associated with a domain account before they can have precision attributes associated to them.

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.

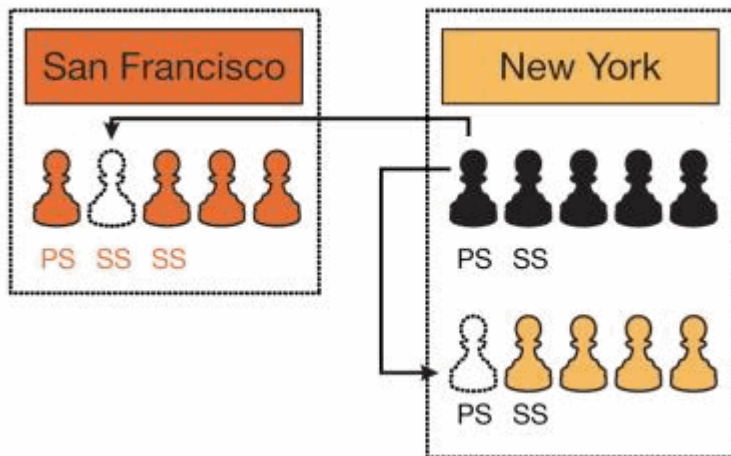
First, ExampleCorp creates two teams (Green and Blue) in New York, and one (Red) in San Francisco. Then it creates five persons in San Francisco and ten Persons in New York, creates an agent associated with each, and adds each agent to a team.

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.



Agent Teams Example

Creating Agents

Multiple agents may be associated with a single person, provided each agent is on a different peripheral. The peripheral login details cannot be edited once the agent has been created.

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 see [About Bulk Upload](#).

Creating an Agent

To create an agent:

1. In **Resource 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 Desktop.
 - 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 the remaining fields as described in the Agent Fields table. Active from and to dates can be set in the Advanced tab.
5. Click **Save**. Once you have created an agent, you can assign that user as the member of an agent team, and to one or more skill groups.

Agent Fields

This table shows the tabs and fields available for agents.

Field	Description	Entry	Default	Required
Details Tab				
Name	<p>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.</p> <p>Note: <i>This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.</i></p>	Unique. Up to 32 characters, letters, numbers, spaces, periods, hyphens, and underscore characters only. Must begin with a letter or number.	Null	Yes
Description	A description of the agent.	Up to 255 characters.	Null	No

Field	Description	Entry	Default	Required
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree.	Yes
Peripheral	The peripheral to be used for the agent.	Select from list.	Default Peripheral	Yes
Create New Person or Select Existing Person option	<p>Only shown when resource is first created. The kind of person to associate this agent with.</p> <p>Create New Person: The agent record is for a new employee, or one who has not previously existed as a Person within Unified CCMP.</p> <p>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.</p>	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

Field	Description	Entry	Default	Required
Create New Person > Login Name	<p>A unique login name for the person to allow them to login to the peripheral.</p> <p>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.</p>	<p>Unique. Up to 255 characters, letters, numbers, underscore and special characters. Must begin with letter or number.</p>	Null	No
Create a New Person > SSO Enabled (only available in Mixed Mode)	<p>Check this box to enable external login for the user. When selected, the password fields are disabled; when cleared, the password fields are enabled.</p> <p>Note: The following fields are visible only for UCCE 15, where Webex Common Identity support is available:</p> <ul style="list-style-type: none"> • IDS – This is the default and the only selectable option when creating a Person. 	Check box	Cleared	Yes

Field	Description	Entry	Default	Required
	<ul style="list-style-type: none"> • Webex Common Identity – This option is displayed but disabled, as CCMP does not allow creating a Common Identity SSO Person. 			
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
Create New Person > Email Address	Email Address of the person	Up to 254 characters. All characters except round brackets are accepted.	Null	No

Field	Description	Entry	Default	Required
Create New Person > Digital Channel Enabled	To enable this setting, you must enable SSO and provide an email address.	Check box to select.	Cleared	No
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 > SSO Enabled	<p>Select SSO to associate an existing SSO Person.</p> <p>For a non-SSO Person, clear the SSO option and the Person dropdown displays the list of non-SSO Persons.</p> <p>When SSO is enabled:</p> <p>Note: The following options appear only for UCCE 15, where Webex Common Identity support is available.</p> <ul style="list-style-type: none"> • IDS – Select this option to associate an existing IDS Person. • Webex Common Identity – Select this option to associate an existing Common Identity 	Check box	Cleared	Yes

Field	Description	Entry	Default	Required
	<p>Person imported into CCMP from UCCE.</p> <p>The Person dropdown list is populated based on the selected option</p>			
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
Description	The person's description.	Up to 255 characters.	Null	No
Login Name	<p>A unique login name for the person associated with this agent to allow them to login to the peripheral.</p> <p>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</p>	Unique. Up to 255 characters, letters, numbers, and special characters.	Null	Yes

Field	Description	Entry	Default	Required
	<i>(such as CTI OS) is not case-sensitive.</i>			
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	Cleared	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
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	Check this box if an agent is to be considered a supervisor agent. This does not require that they supervise a team.	Check box	Cleared	No

Field	Description	Entry	Default	Required
Supervisor Tab				
Supervisor	<p>Check this box if an agent is to be considered a supervisor agent. This does not require that they supervise a team.</p> <p><i>For an Agent assigned to a Non-SSO Person, the Supervisor tab only displays the Supervisor checkbox. All other fields and checkboxes are not available when a Default Domain has been configured for Unified CCE 22.5 or newer versions.</i></p>	Check box	Cleared	No
<p>For an Agent associated to a Non-SSO Person, the Supervisor tab only displays the Supervisor checkbox. All other fields and checkboxes are not available when a Default Domain has been configured for Unified CCE 11.5 or newer versions.</p>				
Associate with Domain Account	<p>Associates a supervisor agent with an existing domain account (the account used to log onto the network and to WebView).</p> <p>Note: The supervisor agent must be associated with a domain account before they can have attributes assigned to them.</p>	Check box	Cleared	No
Login Name	The domain login name to be used by the supervisor agent.	Existing domain login name. Select from list of possibilities	Null	If Associate with Domain



Field	Description	Entry	Default	Required
		by typing part of the login name.		Account checked
SSO Enabled	SSO Enabled by default.	Check box	Null	No
SSO Disabled	SSO Enabled by default.	Check box	Null	No
Mixed Mode	Check this box to enabled SSO.	Check box	Cleared	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.	Cleared	No
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				

Field	Description	Entry	Default	Required
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.	<p>Select from lower list of available skill groups and click Add to include the agent in the selected skill groups. To remove the agent from an existing skill group, select from upper list and click Remove.</p> <p>To set the default skill group for the agent, firstly, ensure that the agent is in the required skillgroup as above, then select the Default check box beside the skill group. To revert the default skill group for this agent to the system default, clear the selected Default check box.</p>	Null	No
Attributes Tab				
Attribute	The attribute or attributes associated with the agent. Changes to an agent's attribute association take place immediately	Select from lower list of available attributes and click Add to associate the agent with the	Null	No

Field	Description	Entry	Default	Required
	<p>within the agent's current session.</p> <p>Note: <i>If the agent is a supervisor agent, they must be associated with a domain account before they can have attributes assigned to them.</i></p>	<p>checked attributes. To remove an agent association with an existing attribute, select from upper list and click Remove.</p> <p>To specify the value for an attribute associated with the agent, select the value from the drop-down list in the value column.</p>		
Advanced Tab				
Enterprise Name	<p>The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name.</p> <p>Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.</p>	<p>Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.</p>	<p>Auto-generated from the name.</p>	<p>No</p>

Field	Description	Entry	Default	Required
Department	(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.5 or later). The department that this resource is associated with.	Select from the drop-down list of available departments.	None	No
Agent ID	The internal extension number that can be used to call the agent.	Up to 11 digits.	Auto-generated	No
Agent Desktop	The desktop settings to be associated with the agent.	Select from list of available agent desktops.	None	No
State Trace	<p>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 System Settings > Provisioning Settings > Agent State Trace Enabled).</p> <p>Note: Cisco state that tracking agent state data puts additional load on UCCE. Please consult the Cisco documentation</p>	Check box	Cleared	No

Field	Description	Entry	Default	Required
	before using this feature. Also note that this option is not available in the Resource Management Gadget.			
Active From Date	The date from which the agent will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which the agent will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric. If this resource type has default keys defined in a custom data template, there will be a an initial entry for each default key.	Either an entry for each default key, or null if no default keys.	No
Value	The value to associate with this key.	Up to 500 characters. To add a new custom data key-value pair, complete both	Null	No, for predefined default keys. Yes if new key

Field	Description	Entry	Default	Required
		<p>fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.</p>		being defined.

Adding Agents 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.

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:

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

1. In **Resource Manager**, go to the folder containing the agent you want to update, and view the agents in that folder using the Items panel list view.
2. In the Items panel, click 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 the **Agent Teams** tab. The upper box shows a list of teams the agent is currently assigned to, and the lower box shows a list of teams available in the current folder. You can see the agent 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.

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

6. Click **Save**.

Editing Agents

To edit agents:

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.

1. In **Resource Manager**, go 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 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 Agents

Deleting an agent or agent supervisor automatically removes that agent from any associated teams or skill groups, including multi-channel skill groups.

Deleting an agent or supervisor agent deletes the associated person as long as there are no other agents or supervisor agents associated with the person. If the person is associated with other agents or supervisor agents, it is not deleted until all associated agents or supervisor agents are deleted.

If an agent is logged in when they are deleted, the agent moves to an error state. To fix this, delete the agent again after they have logged out.

To delete one or more agents:

1. In **Resource Manager**, go 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.
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.

About Agent Desktops

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.

When you create an agent 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 agent desktop. New agent records are automatically assigned this default unless you specify otherwise when creating an agent.

Creating Agent Desktops

In addition to creating agent desktops one at a time, you can also bulk load agent desktop records previously output to a CSV (comma separated values) file. For more information see [About Bulk Upload](#).

To create an agent desktop record:

1. In **Resource 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 the remaining fields as described in the Agent Desktop Fields table.

5. Click **Save**.

Agent Desktop Fields

This table shows the tabs and fields available for agent desktops.

Field	Description	Entry	Default	Required
Details Tab				
Name	<p>A unique name for the record.</p> <p>Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.</p>	<p>Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p>	Null	Yes
Description	<p>A description of the desktop.</p>	<p>Up to 255 characters.</p>	Null	No
Path	<p>Only shown when resource is first created. The location in the</p>	<p>Click on the drop-down arrow to show the folder tree, then select</p>	<p>Current location in folder tree.</p>	Yes

Field	Description	Entry	Default	Required
	folder tree where the resource is to be created.	the required location.		
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


Field	Description	Entry	Default	Required
Outgoing Work Mode	Indicates whether the agent is allowed or required to enter work mode after an outgoing call.	Select from list.	Required	Yes
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. One of <ul style="list-style-type: none"> ▪ Local Only: mobile agent call routing is not required. 	Local Only	Yes


Field	Description	Entry	Default	Required
		<ul style="list-style-type: none"> <li data-bbox="676 259 852 528">▪ Call by Call Routing: the mobile agent is called individually for each call. <li data-bbox="676 562 852 949">▪ Nailed Connection Routing: the mobile agent is called at login and remains connected until log off. <li data-bbox="676 983 852 1451">▪ Agent Chooses At Login: the mobile agent can choose the one of the two mobile agent call routing types at login. <p data-bbox="624 1491 847 1839">For information about configuring mobile agents, see <i>Administration Guide for Cisco Unified Contact Center Management Portal</i>.</p>		
Details Tab > Miscellaneous				
Auto Answer	Indicates calls to the agent are	Checked or Cleared	Cleared	No

Field	Description	Entry	Default	Required
	automatically answered.			
Idle Reason Required	Indicates the agent must enter a Not Ready reason before entering the Idle state.	Checked or Cleared	Cleared	No
Logout Reason Required	Indicates the agent must enter a reason before logging out.	Checked or Cleared	Cleared	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 Cleared	Cleared	No
Silent Monitor Audible Indication	Specifies whether to indicate that silent monitoring has begun by a click.	Checked or Cleared	Cleared	No
Silent Monitor Warning Message	Specifies whether to indicate that silent monitoring has begun with a message box on the agent's desktop.	Checked or Cleared	Cleared	No
Available After Incoming	Whether the agent is to be automatically considered available after handling an incoming call.	Checked or Cleared	Cleared	No

Field	Description	Entry	Default	Required
Available After Outgoing	Whether the agent is to be automatically considered available after handling an outgoing call.	Checked or Cleared	Cleared	No
Remote Login Without Desktop	Allows the agent to log in to the contact center without using an agent desktop.	Checked or Cleared	Cleared	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.	Cleared	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				
Enterprise Name	The name used to identify the item on the remote equipment. Leave blank to auto-	Unique. Up to 32 characters, letters, numbers, and underscore characters only.	Auto-generated from the name.	No

Field	Description	Entry	Default	Required
	<p>generate a unique name.</p> <p>Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.</p>	Must begin with letter or number.		
Department	(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.5 or later). The department that this resource is associated with.	Select from the drop-down list of available departments.	None	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	Either leave Forever checked, or uncheck	Forever	No

Field	Description	Entry	Default	Required
	deleted from the system.	Forever and select date from calendar.		
Custom Data Tab				
Key	The key for this custom data item.	<p>Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p> <p>If this resource type has default keys defined in a custom data template, there will be an initial entry for each default key.</p>	Either an entry for each default key, or null if no default keys.	No
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p>	Null	No, for predefined default keys. Yes if new key being defined.

Field	Description	Entry	Default	Required
		<p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.</p>		

Editing Agent Desktops

To edit the details of an agent desktop:

1. In **Resource Manager**, go 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.
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 Agent Desktops

An agent desktop cannot be deleted if it is being referenced by an agent record or if it is the default desktop.

To delete one or more agent Desktops:

1. In **Resource Manager**, go 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.
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.

About Agent Teams

To see agent teams you will need to be an Unified CCMP user linked to an ICM Person with an Agent who is a supervisor and has either primary or secondary supervisor roles within one or more teams. You will then be able to see Agent teams for which they are a supervisor within the current security context.

An agent team is a group of individuals that can be managed by a supervisor. Agents are assigned to agent teams individually. When configuring agent teams, be aware of the following rules:

- An agent cannot be a member of more than one team.
- An agent team can have a single primary supervisor, or no primary supervisor.
- An agent team can have any number of secondary supervisors.
- An agent team can have multiple secondary supervisors but only one primary supervisor.
- A supervisor for an agent team may be a member of that agent team, but does not need to be a member.

Creating 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, see [About Bulk Upload](#).

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.

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.

Creating an Agent Team

To create an agent team:

1. In **Resource 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 the remaining fields as described in the Agent Teams Fields table.
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.
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.

8. Click **Save**.



Agent Team Fields

This table shows the tabs and fields available for agent teams.

Field	Description	Entry	Default	Required
Details Tab				
Name	<p>A unique name for the record.</p> <p>Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.</p>	<p>Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p>	Null	Yes
Description	<p>A description of the team.</p>	<p>Up to 255 characters.</p>	Null	No
Path	<p>Only shown when resource is first created. The location in the folder tree where the resource is to be created.</p>	<p>Click on the drop-down arrow to show the folder tree, then select the required location.</p>	<p>Current location in folder tree.</p>	Yes

Field	Description	Entry	Default	Required
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
Agent 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 desktop. To remove existing agents from this desktop, select from upper list and click Remove .	Null	No
Advanced Tab				
Enterprise Name	The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name. Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	From Name and Peripheral	Yes

Field	Description	Entry	Default	Required
	under some circumstances, will not affect the Unified CCMP name.			
Department	(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.5 or later). The department that this resource is associated with.	Select from the drop-down list of available departments.	None	No
Active From Date	The date from which the team will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which the team will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric. If this resource type has default keys defined in a custom data template, there will be a an	Either an entry for each default key, or null if no default keys.	No

Field	Description	Entry	Default	Required
		initial entry for each default key.		
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete</p>	Null	No, for predefined default keys. Yes if new key being defined.

Field	Description	Entry	Default	Required
		the entry or edit the key field. You can only edit the value field.		

Editing Agent Teams

To edit an agent team:

1. In **Resource Manager**, go 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.
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 Agent Teams

To delete one or more agent teams:

1. In **Resource Manager**, go 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.
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.

About 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 or scripts are active for that call type at any time.

Call Types and Dialed Number Associations

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.

Call Types and Routing Scripts

Because the call type determines which routing script is run for a call, the call type defines call treatment.

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 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 see [About Bulk Upload](#).

Creating a Call Type

To create a call type:

1. In **Resource 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 the remaining fields as described in the Call Type Fields table.
5. Click **Save**. Once you have created a call type you can reference it in a dialed number configuration through Unified CCE.

Call Type Fields



This table shows the tabs and fields available for call types.

Field	Description	Entry	Default	Required
Details Tab				

Field	Description	Entry	Default	Required
Name	<p>A unique name for the record.</p> <p>Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.</p>	<p>Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p>	Null	Yes
Description	A description of the record.	Up to 255 characters.	Null	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree.	Yes
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	Select from Use Global, None, and Use Specified.	Use global setting	No

Field	Description	Entry	Default	Required
	threshold other than the system default.	For Use specified, you must also enter a number in seconds between 1 and 2147483647.		
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
Advanced Tab				
Enterprise Name	The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name. Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Auto-generated	Yes

Field	Description	Entry	Default	Required
Department	(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.5 or later). The department that this resource is associated with.	Select from the drop-down list of available departments.	None	No
Active From Date	The date from which this Call Type will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which this Call Type will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric. If this resource type has default keys defined in a custom data template, there will be an initial entry for each default key.	Either an entry for each default key, or null if no default keys.	No

Field	Description	Entry	Default	Required
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit the key</p>	Null	No, for predefined default keys. Yes if new key being defined.

Field	Description	Entry	Default	Required
		field. You can only edit the value field.		

Editing Call Types

To edit the details of an agent desktop:

1. In **Resource Manager**, go to the folder containing the call type you want to edit, and view the call types in that folder using the Items panel list view.
2. In the Items panel, click on the call type you want to edit. The details of this call type 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 a Call Type

You cannot delete the default call type.

Deleting a call type automatically removes it from any dialed number mappings in which it is referenced.

To delete one or more call types:

1. In **Resource Manager**, go 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.
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.

About Departments

A department is a grouping of related resources according to user-defined business needs. You can create a department, then add various resources to it, to reflect your particular organization.

The following resources can be added to a department:

- Agents
- Agent desktops
- Agent teams
- Precision attributes
- Call types

- Dialed numbers
- Enterprise skill groups
- Network VRU scripts
- Persons
- Precision queues
- Services
- Skill groups

For example, you may create a department called **Sales** then include in it all the agents, agent teams, call types, dialed numbers and skill groups that relate to the sales function. A resource can only be included in one department.

Department resources can only be created on tenants that are associated with a Unified CCE instance running Unified CCE version 10.0 or later. To add a resource to a department or remove a resource from a department, you must edit the resource you want to add or remove, not the department. A resource created in a small contact center enabled tenant or folder is by default mapped to the associated small contact center department.

Creating Departments

In addition to creating departments one at a time, you can also bulk load department records previously output to a CSV (comma separated values) file. For more information see [About Bulk Upload](#).

Creating a Department

To create a department:

1. In **Resource Manager**, in the Folder Tree panel, select the folder where you want to create the department.
2. In the Folder Tree panel, click Resource, and then click **Department**.
3. Enter a unique name of up to 32 characters for the department. This must consist of alphanumeric characters, periods, and underscores only.
4. Complete the remaining fields as described in the Department Fields table.
5. Click **Save**.

Department Fields

This table shows the tabs and fields available for departments.

Field	Description	Entry	Default	Required
Details Tab				

Field	Description	Entry	Default	Required
Name	<p>A unique name for the record.</p> <p>Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.</p>	<p>Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p>	Null	Yes
Description	<p>A description of the record.</p>	<p>Up to 255 characters.</p>	Null	No
Path	<p>Only shown when resource is first created. The location in the folder tree where the resource is to be created.</p>	<p>Click on the drop-down arrow to show the folder tree, then select the required location.</p>	<p>Current location in folder tree.</p>	Yes
Advanced Tab				
Enterprise Name	<p>The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name.</p> <p>Note: If the item is created by importing from the remote equipment, this name</p>	<p>Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.</p>	From Name	Yes

Field	Description	Entry	Default	Required
	will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.			
Active From Date	The date from which this Department will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which this Department will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No

Editing Departments

To add a resource to a department or remove a resource from a department, you must edit the resource you want to add or remove, not the department.

To edit a department:

1. In **Resource Manager**, go to the folder containing the department you want to edit, and view the departments in that folder using the Items panel list view.
2. In the Items panel, click on the department you want to edit. The details of this department are displayed in the Details panel.
3. Click through the tabs and edit the fields you want to change.
4. Click **Save**.

Deleting Departments

You cannot delete a department that has any resources associated with it. All resources must be removed from the department before it can be deleted.

To delete one or more departments:

1. In **Resource Manager**, go to the folder containing the departments you want to delete, and view the departments in that folder using the Items panel list view.
2. In the Items panel, check the box or boxes of the departments to be deleted.
3. Click **Delete**.
4. In the **Delete Departments** dialog box, click **OK**. The departments will be deleted.

About Device Profiles

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 Communications Manager users. A device profile may contain a number of directory number mappings.

Creating Device Profiles

Creating a Device Profile

To create a device profile:

1. In **Resource 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 **Persons** tab, optionally add associated users that may use the device profile by checking the boxes of those persons and clicking **Add**.
5. Complete the remaining fields as described in the Device Profile Fields table.
6. Click **Save**.

Device Profile Fields



This table shows the tabs and fields available for the Device Profile resource.

Field	Description	Entry	Default	Required
Details Tab				
Name	A unique name for the device profile.	Unique. Up to 32 characters, alphanumeric,	Null	Yes

Field	Description	Entry	Default	Required
	<p>Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.</p>	<p>period, and underscore characters only. Must begin alphanumeric.</p>		
Description	A description of the record.	Up to 255 characters.	Null	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree.	Yes
Directory Numbers Tab				
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	Null	No

Field	Description	Entry	Default	Required
		directory number association from this device profile, select the directory number from the upper list and click Remove .		
Index	The port on the IP Phone that the line is plugged into.	Numeric.	Next in sequence.	No
Persons Tab				
Persons	The persons to be associated with the device profile.	To associate a person with this device profile, select a user from the lower list of available users and click Add . To remove a person association from this device profile, select the person from the upper list and click Remove .		
Advanced Tab				
Enterprise Name	he name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name. Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the	Unique. Up to 50 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	-	-

Field	Description	Entry	Default	Required
	Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.			
Active From Date	The date from which this device profile will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which this device profile will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric. If this resource type has default keys defined in a custom data template, there will be an initial entry for each default key.	Either an entry for each default key, or null if no default keys.	No
Value	The value to associate with this key.	Up to 500 characters. To add a new custom data key-value pair, complete both	Null	No, for predefined default keys. Yes if new key

Field	Description	Entry	Default	Required
		<p>fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.</p>		being defined.

Deleting Device Profiles

To delete one or more device profiles:

1. In **Resource Manager**, go 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.
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 is deleted.

About Dialed Numbers

A dialed number 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 Dialed Numbers

The order of the entries in the dialed number mapping table reflects the order in which call types are processed for the dialed number.

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 see [About Bulk Upload](#).

To create a dialed number:

1. In **Resource 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. For wild card dialed numbers, follow the pattern below:
 - **7xx**
5. Complete the remaining fields as described in Dialed Number Fields table.
6. Click **Add** to specify the call types and other dialing information to be associated with this dialed number.
7. Click **Save**.

Dialed Number Fields

This table shows the tabs and fields available for dialed numbers.



The Self Care tab is only shown for existing resources. It is not shown when the resource is first created.

Field	Description	Entry	Default	Required
Details Tab				
Name	<p>A unique name for the record.</p> <p>Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.</p>	<p>Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p>	Null	Yes
Description	<p>A description of the record.</p>	<p>Up to 255 characters.</p>	Null	No

Field	Description	Entry	Default	Required
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree.	Yes
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
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. Note: 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. Note: Cannot be edited after dialed number has been created.	Cisco_Voice	Yes

Agent Desktops Tab


Field	Description	Entry	Default	Required
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				
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	Null	No


Field	Description	Entry	Default	Required
		number, select from upper list and click Remove .		
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.	<p>Either click:</p> <ul style="list-style-type: none"> ▪ Add to add a details for a new call type <p>or select an existing call type from list and click:</p> <ul style="list-style-type: none"> ▪ Edit to edit existing call type details ▪ Remove to delete existing call type details <p>The Call Type dialog box is displayed.</p> <p>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.</p>	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.	<p>Select one of the options.</p> <ul style="list-style-type: none"> ▪ 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.	<p>Select one of the options.</p> <ul style="list-style-type: none"> ▪ All: route all calls regardless of CED ▪ None: route calls with no CED. ▪ CED: route calls with this CED only. <p>If you choose None, you can also optionally check one or both of:</p>	All	Yes

Field	Description	Entry	Default	Required
		<ul style="list-style-type: none"> ▪ None Required: caller wasn't asked for any CED ▪ None Entered: caller was asked for CED but didn't respond 		
Advanced Tab				
Enterprise Name	<p>The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name.</p> <p>Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.</p>	<p>Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.</p>	<p>Auto-generated from the name.</p>	<p>No</p>

Field	Description	Entry	Default	Required
Department	(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.5 or later). The department that this resource is associated with.	Select from the drop-down list of available departments.	None	No
Active From Date	The date from which the dialed number will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which the dialed number will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Self Care Tab				
Self Care Enabled	Indicates whether self care is available for this dialed number.	Check box to enable self care.	Cleared	No
Add Label	Self-care label mapping	Start typing the name of a label (see labels tab) to see a list of matching labels. Select from list and click Add .	Null	No
Call Routing Mechanism	The mechanism used for call routing. One of:	Select from list.	Maximum Active Calls	Yes

Field	Description	Entry	Default	Required
	Maximum Active Calls Weighting			
Custom Data Tab				
Key	The key for this custom data item.	<p>Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p> <p>If this resource type has default keys defined in a custom data template, there will be a an initial entry for each default key.</p>	Either an entry for each default key, or null if no default keys.	No
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to</p>	Null	No, for predefined default keys. Yes if new key being defined.

Field	Description	Entry	Default	Required
		<p>confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.</p>		

Editing Dialed Numbers

To edit the details of an agent desktop:

1. In **Resource Manager**, go to the folder containing the dialed number you want to edit, and view the dialed numbers in that folder using the Items panel list view.
2. In the Items panel, click on the call type you want to edit. The details of this dialed number 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 Dialed Numbers

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 **Resource Manager**, go 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.
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.

Managing Distribution of Calls to a Dialed Number

To manage the way in which calls to a dialed number are distributed between its labels:

1. In the Items panel click on the dialed number to be modified.
2. In the Details panel, select the **Self Care** tab.
3. Check the **Self Care Enabled** check box to begin distributing calls as specified.
4. Enter the name of a label (or enter the first few characters and select the correct label from the list that appears) and click **Add**. All labels added in this way will automatically have Self Care enabled.
5. Select a call routing mechanism to be used. The options are:
 - **Maximum Active Calls:** Calls will be distributed to the label with the highest priority. When its maximum active call limit is reached, calls will be distributed to the label with the next highest priority.
 - **Weighting:** Calls will be distributed between labels in the percentages specified.
6. Specify for each label either the maximum number of active calls or the percentage of calls that should be distributed to it.
7. Click **Save**. You will be required to reenter your password to confirm the new settings.

About Directory Numbers

A directory number is an extension line which is attached to an IP phone.

Creating Directory Numbers

Creating a Directory Number

To create a directory number:

1. In Resource 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 the remaining fields as described in the Directory Number Fields table.
5. Click **Save**.


Directory Number Fields

This table shows the tabs and fields available for directory numbers.

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 alphanumeric.	Null	Yes
Description	A description of the record.	Up to 255 characters.	Null	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree.	Yes
Contact Center Enabled	Determines whether a Device Target must be created on the Unified CCE for this number.	<p>Check box.</p> <p>This check box must be selected for:</p> <ul style="list-style-type: none"> ▪ Any directory number added using a separate provisioning system 	Cleared	No

Field	Description	Entry	Default	Required
		<ul style="list-style-type: none"> Any directory number that will be used by mobile agents. 		
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 Directory 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 clear to enter number of 1-24 digits manually in the Number Pattern text box.	Checked	Yes
Active From Date	The date from which this directory number will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which this directory number will be	Either leave Forever checked, or uncheck Forever and select	Forever	No

Field	Description	Entry	Default	Required
	deleted from the system.	date from calendar.		
Custom Data Tab				
Key	The key for this custom data item.	<p>Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p> <p>If this resource type has default keys defined in a custom data template, there will be a an initial entry for each default key.</p>	Either an entry for each default key, or null if no default keys.	No
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p>	Null	No, for predefined default keys. Yes if new key being defined.

Field	Description	Entry	Default	Required
		<p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.</p>		

Deleting Directory Numbers

To delete one or more directory numbers:

1. In Resource Manager, go 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.
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.

About Enterprise Skill Groups

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 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 see [About Bulk Upload](#).

Creating an Enterprise Skill Group

To create an enterprise skill group:

1. In Resource 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 the remaining fields as described in the Enterprise Skill Group Fields table.
5. To assign skill groups to the group, click the **Add** button below the Skill Groups box and select one or more skill groups.

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

6. Click **Save**.



Enterprise Skill Group Fields

This table shows the tabs and fields available for enterprise skill groups.

Field	Description	Entry	Default	Required
Details Tab				
Name	<p>A unique name for the record.</p> <p>Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some</p>	<p>Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin alphanumeric.</p>	Null	Yes

Field	Description	Entry	Default	Required
	circumstances, may not change the name shown here.			
Description	A description of the skill group.	Up to 255 characters.	Null	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree.	Yes
Skill Groups Tab				
Skill Groups	Skill groups associated with this enterprise skill group.	Select from lower list of available skill groups and click Add to include the checked skill groups. To remove existing skill groups, select from upper list and click Remove .	Null	No
Advanced Tab				
Enterprise Name	<p>he name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name.</p> <p>Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes</p>	Unique. Up to 50 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Auto-generated	No

Field	Description	Entry	Default	Required
	to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.			
Department	(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.5 or later). The department that this resource is associated with.	Select from the drop-down list of available departments.	None	No
Active From Date	The date from which this device profile will be active within the system.	Select date from calendar.	Current Date	No
Active To Date	The date after which this device profile will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric. If this resource type has default keys defined in	Either an entry for each default key, or null if no default keys.	No

Field	Description	Entry	Default	Required
		a custom data template, there will be an initial entry for each default key.		
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p>	Null	No, for predefined default keys. Yes if new key being defined.

Field	Description	Entry	Default	Required
		<p>Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.</p>		

Editing Enterprise Skill Groups

To edit the details of an agent desktop:

1. In **Resource Manager**, go to the folder containing the enterprise skill group you want to edit, and view the enterprise skill group in that folder using the Items panel list view.
2. In the Items panel, click on the call type you want to edit. The details of this enterprise skill group 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 Enterprise Skill Groups

To delete one or more enterprise skill groups:

1. In Resource Manager, go 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.
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.

About Expanded Call Variables

An expanded call variable (ECC) is a named object which is used by a VRU script to exchange call information with the Unified CCE.

You cannot edit default expanded call variables. You can only create and delete them.

Creating Expanded Call Variables

Creating an Expanded Call Variable

To create an expanded call variable:

1. In **Resource 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 the remaining fields as described in the Expanded Call Variable Fields table. Active from and to dates can be set in the **Advanced** tab.
4. Click **Save**.

Expanded Call Variable Fields

This table shows the tabs and fields available for expanded call variables.


Field	Description	Entry	Default	Required
Details Tab				
Name	A unique name for the call variable.	Unique. Up to 27 characters, letters, numbers, periods, and underscore characters only. Must begin with letter or number. Will be automatically prefixed with 'user.' by the system.	Null	Yes
Description	A description of the call variable.	Up to 255 characters.	Null	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree.	Yes
Maximum Length	The maximum length of the	A whole number between 1 and 210.	Null	Yes


Field	Description	Entry	Default	Required
	value of the call variable, in bytes.			
Provided by Cisco	Whether the call variable provided by Cisco. This is normally determined by the system.	Check box	Cleared	No
Persistent	Whether the variable is written to the historical database with the TCD/RCD record.	Check box	Cleared	No
Enabled	Whether the call variable is currently enabled.	Check box	Cleared	No
ECC Array	Whether the variable is an array.	Check box	Cleared	No
Maximum Array Size	The maximum number of elements in the array represented by the call variable.	Up to 255	Null	If ECC Array checked

Note: The total amount of space used by all expanded call variables on an instance must not exceed 2000 bytes. Each scalar (non-array) variable uses 5 + Maximum Length bytes. Each array variable uses 5 + (Maximum Length + 1) x Maximum Array Size bytes. The number of bytes used by a variable may be more than the number of characters or digits in the variable value. For example, a scalar variable may contain 10 characters, but occupy 15 bytes.

Advanced Tab

Active From Date	The date from which this variable will be active within the system.	Select date from calendar.	Current Date	Yes
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Field	Description	Entry	Default	Required
Active To Date	The date after which this variable will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	<p>Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p> <p>If this resource type has default keys defined in a custom data template, there will be an initial entry for each default key.</p>	Either an entry for each default key, or null if no default keys.	No
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest</p>	Null	No, for predefined default keys. Yes if new key being defined.

Field	Description	Entry	Default	Required
		<p>the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.</p>		

Deleting Expanded Call Variables

To delete one or more expanded call variables:

1. In **Resource Manager**, go 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.
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.

About ECC Payloads

Expanded call context variables (ECC) store values associated with the contact. Typically, ECC values are passed from leg to leg on the call. After a value is assigned, the value is recorded in the Termination Call Variable for every Termination Call Detail Segment. However, this depends on how each new call segment is created. If it does not involve translation routes or the Unified CCE, and is outside the original peripheral, ECC variables, like all call variables, cannot be propagated.

In a system integrated with Unified CCE, ECC payloads can be invaluable in managing ECC variable space. Each payload can be up to 2000 bytes in size, allowing for easier transfer and storage of ECC variables. There are two formulae to determine how many bytes each ECC payload would require based on the ECC variables associated with the payload. Each formula has a max limit. The size of the ECC Payload must be below the limit defined for both calculations.

Routing Client:

Payload Size = Sum(Scalar Size) + Sum(Array size)

when Scalar size = 5 + Max Length

when Array Size = 5 + (1 + Max Length) * Max array size

Payload Size must be <= 2000 Bytes

CTI Server:

Scalar size = ECC Variable Enterprise Name length + Max Length + 4

Array Size = (5 + Max Length + ECC Variable Enterprise Name Name length) * Max array size

Payload Size = Sum(Scalar Size) +Sum(Array size)

Payload Size must be <= 2500 Bytes

Both limits must be validated to be less than the respective limit.

ECC Payloads cannot be created in Packaged CCE environments. Systems integrated with Packaged CCE cannot create, edit, or delete ECC Payloads.

Creating ECC Payloads

Creating an ECC Payload

To create an ECC payload:

1. In **Resource Manager**, in the Folder Tree panel, select the folder where you want to create the ECC payload.
2. In the Folder Tree panel, click **Resource**, and then click **ECC Payload**.
3. Complete the remaining fields as described in the ECC Payload Fields table. Active from and to dates can be set in the **Advanced** tab.
4. Click **Save**.

ECC Payload Fields

Field	Description	Entry	Default	Required
Details Tab				
Name	The name of the payload.	Unique. Up to 27 characters, letters, numbers, period, 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 payload.	Up to 255 characters	Null	No
Members Tab				
Add or remove the ECC variables to the list to associate with the ECC payload. Each payload has a limit of 2000 bytes. If the payload exceeds this capacity, remove excess variables from the payload until under this limit.				
Advanced Tab				
Enterprise Name	<p>The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name.</p> <p>Note: <i>If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.</i></p>	<p>Unique. Up to 32 characters, letters, numbers, periods, and underscore characters only. Must begin with letter or number.</p>	Auto generated	No
Date From	The date from which the payload is active in the system.	Select date from calendar.	Null	No
Forever	Check box to ensure the payload has no expiration date.	Click the checkbox.	Null	No
Date To	The date after which the payload should be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No

Deleting ECC Payloads

To delete one or more expanded call context payloads:

1. In **Resource Manager**, go to the folder containing the ECC payloads you want to delete, and view the payloads in that folder using the Items panel list view.
2. In the Items panel, check the box or boxes of the expanded call variable payloads to be deleted.
3. Click **Delete**.
4. In the Delete ECC Payload dialog box, click **OK**. The expanded call variable payloads are deleted.

About IP Phones

A IP phone (or telephone) is the IP device that the contact center agent uses to make or receive calls. The IP phone 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 CCMP or entered manually through the user interface.

Using Unified CCMP with Other Provisioning Systems

When using a separate provisioning system to add IP phones to a Unified Communications Manager, 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 use Unified CCMP to make any other changes to phones on that Unified Communications Manager.

Advanced Information

The Unified CCMP web application automatically links or adds default additional information to Unified CCE as follows:

- Links the Unified Communications Manager calling search space from the tenant owning folder
- Links the Unified Communications Manager route partition from the tenant owning folder
- Links the Unified Communications Manager location from the parent folder
- Links the Unified Communications Manager 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).

Creating IP Phones

To create an IP phone:

1. In **Resource 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 the remaining fields as described in [IP Phone Fields](#).
5. Optionally add directory numbers by checking the boxes of numbers to add and clicking **Add**.
6. Click **Save**.


IP Phone Fields

This table shows the tabs and fields available for IP phones.


Field	Description	Entry	Default	Required
Details Tab				
Name	A unique name for the device profile.	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin alphanumeric.	Null	Yes
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree.	Yes
Description	A description of the record.	Up to 128 characters.	Null	No
Communications Manager	The Communications Manager to be	Select from the list of Communications Managers	Default Communications Manager	Yes

	associated with the IP Phone.	available for the tenant.		
Peripheral	The Peripheral to be associated with the IP Phone.	Select from the list of Peripherals associated with the selected Unified Communications Manager.	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 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				

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 device profile, 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.	Numeric.	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 this device profile will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which this device profile will be deleted from the system.	Either leave Forever checked, or uncheck Forever and	Forever	No

		select date from calendar.		
Custom Data Tab				
Key	The key for this custom data item.	<p>Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p> <p>If this resource type has default keys defined in a custom data template, there will be a an initial entry for each default key.</p>	Either an entry for each default key, or null if no default keys.	No
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the</p>	Null	No, for predefined default keys. Yes if new key being defined.

cross to undo the change.

To delete an existing key-value pair, rest the mouse briefly on the entry, select the **delete** icon (), then click **OK** to confirm the deletion.

Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.

Related Information

- [About IP Phones](#)
- [Deleting an IP Phone](#)
- [IP Phone Fields](#)
- [More About IP Phones](#)

Deleting IP Phones

To delete one or more IP phones:

1. In **Resource Manager**, go 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.
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.

Related Information

- [About IP Phones](#)

- [Creating an IP Phone](#)
- [Deleting an IP Phone](#)
- [IP Phone Fields](#)
- [More About IP Phones](#)

About IVR Apps

A IVR app is a voice XML (VXML) application that runs on a CVP IVR app server and is used to control call routing. IVR apps can be created using Cisco Unified Call Studio.

Unified CCMP enables you to upload an existing IVR app to a CVP IVR app server and to edit the IVR app details.

IVR apps are uploaded as zip files that contain the various application components. One zip file can contain more than one IVR app.

Creating IVR Apps

This process creates an Unified CCMP IVR app resource and uploads the associated IVR app file to an IVR app server. The IVR app file must already exist and be formatted as a .zip file. The IVR app file may contain more than one IVR app, and if so, multiple Unified CCMP IVR app resources will be created.

To create (upload) an IVR app:

1. In **Resource Manager**, in the Folder Tree panel, select the folder where you want to create the IVR app resource. This folder must be located on a tenant that has a remote equipment mapping to a CVP Operations Console.
2. In the Folder Tree panel, click **Resource**, and then click **IVR App**. If the IVR App option is not available, then check that the selected folder is on a tenant that is mapped to a CVP Operations Console.
3. If you want to change the location in the Unified CCMP folder tree where the IVR app will be created, click the drop-down arrow beside **Path** and select the new location.
4. Select the IVR app server or servers where you want the IVR app to be uploaded to.
5. Click **Add Files** (may appear as **Browse** in some older browsers), select a .zip file containing one or more IVR apps to be uploaded and click **Open**. The selected file is added to the list of files to be uploaded. You can click **Add Files** (or **Browse**) again to add more files if required, or **Cancel** to remove a file from the list to be uploaded.
6. Click **Save** to upload the files to the selected IVR app servers. As each file is uploaded, you will see the upload status.
7. If an upload succeeds, the file is unzipped and each IVR app in the file is copied to the IVR app server. The corresponding resources or resources (one for each IVR app in the file) will be imported into Unified CCMP in the next import cycle. If an upload fails, you can rest the mouse briefly on the upload status to see more information.

IVR App Fields

This table shows the tabs and fields available for IVR apps.

Field	Description	Entry	Default	Required
Details Tab				
Name	A unique enterprise name for the record.	Unique. Up to 100 characters.	Null	Yes
Description	A description of the IVR app.	Up to 255 characters.	Null	No

Editing IVR Apps

To edit an IVR app:

IVR apps can only exist on tenants that have a remote equipment mapping to a CVP Operations Console.

1. In **Resource Manager**, go to the folder containing the IVR app you want to edit, and view the IVR apps in that folder using the Items panel list view.
2. In the Items panel, click on the IVR app you want to edit. The details of this IVR app are displayed in the Details panel.
3. Make your required changes, then click **Save**.

Deleting IVR Apps

To delete an IVR app:

1. In Resource Manager, go to the folder containing the IVR apps you want to delete, and view the IVR apps in that folder using the Items panel list view.
2. In the Items panel, select the check boxes beside the IVR app or apps to be deleted.
3. Click **Delete**.
4. In the confirmation dialog box, click **OK**. The selected IVR apps are deleted.

About Labels

In Unified CCE the label represents a string that is passed to a routing client for each network target. Unified CCMP automatically creates labels for many high level operations, but the functionality is included for specific label creation such as blind transfers. The only supported network target is device target.

Creating Labels

To create a label:

1. In **Resource 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 can only contain alphanumeric characters, periods and underscores.
4. Complete the remaining fields as described in [Label Fields](#).
5. Click **Save**.


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 see [About Bulk Upload](#).

Label Fields


This table shows the tabs and fields available for labels.

Field	Description	Entry	Default	Required
Details Tab				
Name	A unique name for the record. Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.	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 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
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree	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				
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 variable will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which this variable will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No

Label Type	The type of label.	Select from the drop-down	Normal	No
Self Care Tab				
Self Care Enabled	Indicates whether self care is available for this label.	Check box to enable self care	Cleared	No
Custom Data Tab				
Key	The key for this custom data item.	<p>Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.</p> <p>If this resource type has default keys defined in a custom data template, there will be a an initial entry for each default key.</p>	Either an entry for each default key, or null if no default keys.	No
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to</p>	Null	No, for predefined default keys. Yes if new key being defined.

confirm the change, or the cross to undo the change.

To delete an existing key-value pair, rest the mouse briefly on the entry, select the **delete** icon (), then click **OK** to confirm the deletion.

Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.

The Self Care tab is only shown for existing resources. It is not shown when the resource is first created.

Editing Labels

To edit the details of an agent desktop:

1. In **Resource Manager**, go to the folder containing the label you want to edit, and view the labels in that folder using the Items panel list view.
2. In the Items panel, click the label you want to edit. The details of this label are displayed in the Details panel.
3. In the Details panel, click the appropriate tab and make the desired changes.
4. Click **Save**.

Deleting Labels

To delete one or more labels:

1. In **Resource Manager**, go to the folder containing the labels you want to delete, and view the labels in that folder using the Items panel list view.
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.

About Media Files

A media file is a **.wav** file that is used by IVR to play back prompts and messages to callers. Media files are stored on CVP media servers.

Unified CCMP enables you to upload media files to CVP media servers in the Unified CCMP cluster, and to change the audio associated with an existing media files.

Media File Fields

This table shows the tabs and fields available for media files. These fields are available when the media file is edited.

Field	Description	Entry	Default	Required
Details Tab				
Name	A unique enterprise name for the record.	Unique. Up to 100 characters.	The name of the uploaded media file. Changing this value after the media file is uploaded does not affect the file name of the media file on the media file server.	Yes
Description	A description of the media file.	Up to 255 characters.	Null	No
File Name	Not shown when resource is first created. The name of the media file on the media file server.	Read only.	The remote name of the uploaded	Yes

			media file.	
Remote Path	The path on the media file server where the media file is stored.	Read only.	The remote location of the uploaded media file.	Yes
Media Tab				
Servers	The media file server or servers where the new media file is be uploaded to.	Select the media file server or servers from the list.	None	Yes
New audio file	The new media file to upload.	Click Add Files (or Browse), select a media file to be uploaded and click Open .	None	Yes

Creating Media Files

To create (upload) a media file:

1. In **Resource Manager**, in the Folder Tree panel, select the folder where you want to create the media file resource. This folder must be located on a tenant that has a remote equipment mapping to a CVP Operations Console.
2. In the Folder Tree panel, click **Resource**, and then click **Media File**. If the Media File option is not available, then check that the selected folder is on a tenant that is mapped to a CVP Operations Console.
3. If you want to change the location in the Unified CCMP folder tree where the media file will be created, click the drop-down arrow beside **Path** and select the new location.
4. Select the media file server or servers where you want to the media file to be uploaded to.
5. In **Remote Path**, specify the location where the files are be uploaded to. This is a folder location on the media file server. You may include "/" characters to denote subfolders. If the folder does not exist, it will be created. Note that Unified CCMP does not validate this field, and if it is invalid, the upload will fail.
6. Click **Add File**, select a .wav media file and click **Open**. The .wav files must be either μ -Law 8-bit or A-law 8-bit format. The selected file is added to the list of files to be uploaded. You can click **Add File** again to add more files if required, or **Cancel** to remove a file from the list to be uploaded.

7. Click **Upload** to upload the media files to the specified location on the selected media file servers. As each media file is uploaded, you will see the upload status.
8. If an upload succeeds, the media file resource is available immediately in Unified CCMP and on the CVP server. If an upload fails, you can rest the mouse briefly on the upload status to see more information.

Editing Media Files

To edit a media file:

Media files can only exist on tenants that have a remote equipment mapping to a CVP Operations Console.

1. In **Resource Manager**, go to the folder containing the media file you want to edit, and view the media files in that folder using the Items panel list view.
2. In the Items panel, click on the media file you want to edit. The details of this media file are displayed in the Details panel.
3. To change the name of the media file resource in Unified CCMP, in the **Details** tab, enter the new name in the **Name** field. You can view **File Name** (the file name on the media file server) and **Remote Path** (the path on the media file server) but cannot change them.
4. To change the media file associated with this resource, in the **Media** tab, click the drop-down by **Servers** and select the server or servers you want to upload the new media file to. Then click **Add Files** (may appear as **Browse** in some older browsers), locate the media file to upload, and click **Open**.
5. Click **Save** to replace the existing media file with the new one. After the upload completes, you will see the upload status.
6. If an upload fails, you can rest the mouse briefly on the upload status to see more information.

Deleting Media Files

To delete one or more media files:

1. In **Resource Manager**, go to the folder containing the media files you want to delete, and view the media files in that folder using the Items panel list view.
2. In the Items panel, select the check boxes beside the media file or files to be deleted.
3. Click **Delete**.
4. In the confirmation dialog box, click **OK**. The selected media files will be deleted.

About Network VRU Scripts

A Network Voice Response Unit (VRU) script is a script that runs on a network VRU (a telecommunications computer that responds to voice or caller-entered touch-tone digits). One or more network VRU scripts may

be called by a Unified ICME routing script to handle the interaction with the caller and route the call appropriately.

About Unified CVP Micro-Applications

Network VRU scripts invoke Unified CVP micro-applications which are used to provide prompts, collect user responses and play **.wav** files while callers are queuing. Network VRU scripts can invoke the following micro-applications.

- **Play Media (PM):** Plays a message that is contained in a media file or streaming audio file. This may be used, for example, to play a welcome message, or to play music while the caller is in a queue.
- **Play Data (PD):** Retrieves data from a storage area and plays it to the caller in a specific format, called a data play back type. This data may be, for example, information retrieved from a database, or information entered by the caller.
- **Get Digits (GD):** Plays a media file and retrieves one or more digits from the caller. For example, this micro-application may be used to prompt a caller to enter a password.
- **Menu (M):** Plays a menu media file and retrieves a single digit from the caller. This is similar to the Get Digits micro-application, but it only accepts a single digit, and also checks that it is valid. This micro-application may be used, for example, to offer the caller several options in a menu, and retrieve the option chosen by the caller.
- **Get Speech (GS):** Collects voice or tone dialing (DTMF) input from the caller. This micro-application may be used, for example, to retrieve a spoken "Yes" or "No" response from the caller or to detect that the caller has pressed the # key.
- **Capture (CAP):** Captures and stores data about the call at that point in the routing script. The data collected can be used for analysis purposes.

Use the Capture micro-application sparingly. It places a heavy processing load on the system, and may capture a lot of data that is not required along with data that is useful. Overuse of the Capture micro-application may reduce the call handling capability of the system.

About Network VRU Script Configuration

To define the network VRU script configuration you need to specify:

- **The network VRU script name**, a composite string containing the micro-application to run, the associated media file (if required by the micro-application) and any parameters required by the micro-application. The value specified for the network VRU script name is used to derive the name to be used for the media file when it is uploaded.
- **The configuration parameters** to be passed to the Network VRU Script when it runs. This is a string, and the format depends on the micro-application specified.
- **The audio file** to upload and associate with the Network VRU Script (where applicable). When the audio file is uploaded, it will be named with the media file name specified in the VRU script name string. If you specify an incorrectly formatted network VRU script name string, you will not be able to upload the audio file.

The audio file cannot be specified when the network VRU script is first created. You must first create the network VRU script item, then edit it to specify the audio files.

Creating Network VRU Scripts

To create a network VRU script:

1. In **Resource Manager**, in the **Folder Tree** panel, select the folder where you want to create the network VRU script.
2. In the Folder Tree panel, click **Resource**, and then click **Network VRU Script**.
3. Enter a unique name of up to 32 characters for the network VRU script. This can only contain alphanumeric characters, periods and underscores.
4. Complete the remaining fields as described in Network VRU Script Fields. You will not be able to upload an audio file when you first create the network VRU script.
5. Click **Save**.

In addition to creating network VRU scripts one at a time, you can also bulk load network VRU script records previously output to a CSV (comma separated values) file. For more information see [About Bulk Upload](#).

Network VRU Script Fields

This table shows the tabs and fields available for network VRU scripts.


Field	Description	Entry	Default	Required
Details Tab				
Name	A unique name for the record. Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the	Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Null	Yes


	enterprise name, but under some circumstances, may not change the name shown here.			
Description	A description of the record.	Up to 255 characters.	Null	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree.	Yes
Network VRU	The network VRU to associate with this Network VRU Script.	Select from list of available Network VRUs. If you do not have permission to access at least one Network VRU then you will not be able to create a Network VRU Script and will see a warning message instead.	Default Network VRU	Yes
VRU Script Name	The name of the VRU Script.	Up to 39 characters. This is a composite string identifying the micro-application to run, the name of the associated media file (if applicable) and any options that need to be specified for that micro-application. The format of this string is specified in the <i>Configuration and Administration Guide for Cisco</i>	Null	Yes

		<p><i>Unified Customer Voice Portal</i>, section "Writing scripts for Unified CVP".</p> <p>The VRU Script name must be unique on the Network VRU.</p>		
Configuration Parameter	A string to be passed to the Network VRU when the script runs to specify static options in the script.	<p>Up to 255 characters. The contents of this string depend on the micro-application that is specified as part of the VRU Script Name field above.</p> <p>The format of this string is specified in the <i>Configuration and Administration Guide for Cisco Unified Customer Voice Portal</i>, section "Writing scripts for Unified CVP".</p>	Null	No
Timeout	The number of seconds to wait for a response after the script starts executing.	0 to 2147483647.	0	Yes
Interruptible	Whether the execution of the script can be interrupted.	Check box. Select if the script execution can be interrupted, for example, when an agent becomes free to handle a call.	Unselected	No
Overridable	Whether the script can override the	Check box. Select if the script is	Unselected	No

	interruptible status during execution.	allowed to make itself interruptible or non-interruptible while executing.		
Audio Tab (not available when item is first created)				
New Audio File	The file information of the audio file to associate with the VRU script.	Click Add File(s) (or Browse), and locate the required .wav file on your system. Click Save to upload the .wav file to the server.	Null	No
Advanced Tab				
Enterprise Name	<p>The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name.</p> <p>Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.</p>	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	From Name	Yes
Department	(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances	Select from the drop-down list of available departments.	None	No

	running Unified CCE version 10.5 or later). The department that this resource is associated with.			
Active From Date	The date from which this Network VRU Script will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which this Network VRU Script will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric. If this resource type has default keys defined in a custom data template, there will be a an initial entry for each default key.	Either an entry for each default key, or null if no default keys.	No
Value	The value to associate with this key.	Up to 500 characters. To add a new custom data key-value pair, complete both fields, and click Add . You can have a maximum of ten custom data key-value pairs.	Null	No, for predefined default keys. Yes if new key being defined.

To edit an existing key-value pair, rest the mouse briefly on the entry, select the **edit** icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.

To delete an existing key-value pair, rest the mouse briefly on the entry, select the **delete** icon (), then click **OK** to confirm the deletion.

Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.

Associating an Audio File with a Network VRU Script

To set or change the audio file associated with a network VRU script:

1. In **Resource Manager**, go 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.
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 and click Add Files(s) (may appear as **Browse** in some older browsers). Go to the folder on your machine where the audio file is stored, select the audio file and click **Open**.
4. Click **Save** to upload the .wav file and save any other changes to the network VRU script.

If **Save** is not enabled, then either the VRU script name specified on the Details tab is incorrectly formatted or the associated micro-application does not require an audio file.

The audio file will be saved under the name specified for the media file in the VRU script name field, and will replace any previous audio file.

If an upload error is reported, contact your system administrator to ensure that Unified CVP Media File Upload has been correctly configured on your system (see the *Installation and Configuration Guide* for Cisco Unified Contact Center *Management Portal* for more details).

Editing Network VRU Scripts

To edit a network VRU script:

1. In **Resource Manager**, go 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.
2. In the Items panel, click on the network VRU script you want to edit. The details for this network VRU script are displayed in the Details panel.
3. In the Details panel, click on the appropriate tab and make the desired changes.
4. If you want to add or change the audio file associated with this network VRU script, select the **Audio** tab and click **Add File(s)** (may appear as **Browse** in some older browsers). Go to the folder on your machine where the audio file is stored, select the audio file and click **Open**.
5. Click **Save**.

If **Save** is not enabled, then either the VRU script name specified on the Details tab is incorrectly formatted or the associated micro-application does not require an audio file.

If you change the audio file, it will be saved under the name specified for the media file in the VRU script name field, and will replace any previous audio file.

If an upload error is reported when you try to change the audio file, contact your system administrator to ensure that Unified CVP Media File Upload has been correctly configured on your system (see the *Installation and Configuration Guide for Cisco Unified Contact Center Management Portal* for more details).

Deleting Network VRU Scripts

To delete one or more network VRU scripts:

1. In **Resource Manager**, go to the folder containing the network VRU scripts you want to delete, and view the network VRU scripts in that folder using the Items panel list view.
2. In the Items panel, select the network VRU scripts to be deleted.
3. Click **Delete**.
4. In the **Delete Network VRU Script** dialog box, click **OK**. The selected network VRU scripts will be deleted.

About Peripherals

A peripheral is a connected system such as an ACD switch that routes customer phone calls to contact center staff.

You can use Resource Manager to view and edit the properties of a peripheral.

Unified CCMP 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 CCMP, or edit any other fields.

Editing Peripherals

To edit a peripheral:

1. In **Resource Manager**, go to the folder containing the peripheral you want to edit, and view the peripherals in that folder using the Items panel list view.
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

This table shows the tabs and fields available for peripherals.

Field	Description	Entry	Default	Required
Details Tab				
Name	A unique name for the peripheral. Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Name used by Unified CCE	Yes

	change the name shown here.			
Description	A description of the peripheral.	You cannot change this value in Unified CCMP.	Null	-
Advanced Tab				
Enterprise Name	<p>The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name.</p> <p>Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.</p>	You cannot change this value in Unified CCMP.	-	-
Application User	A user on the Unified Communications Manager, with whom new phones will be associated.	Select date from calendar.	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 CCMP.	-	-
Active To Date	The date after which the peripheral should be deleted from the system.	You cannot change this value in Unified CCMP.	-	

About Persons

In Unified CCMP, each person item represents a single physical person who handles call center customer contacts. This person may optionally have a user account on Unified CCMP.

Each person is associated with one or more agents, and has one associated agent for each peripheral the person uses.

Creating Persons

To create a person:

1. In **Resource 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 the remaining fields as described in Person Fields. Active from and to dates can be set in the **Advanced** tab.
6. Click **Save**.

Once created, a person's Unified CCMP account details cannot be edited via the person. You must edit the user directly. A person cannot be linked with an existing Unified CCMP user account.

In addition to creating agents one at a time, you can also bulk load person records previously output to a CSV (comma separated values) file. For more information see [About Bulk Upload](#).

Person Fields

This table shows the tabs and fields available for persons.

To associate a person with more than one agent, each agent must be on a different peripheral. Persons may be created on multiple pieces of equipment. Common properties are inherited from those entered on the Details tab unless specifically over-written using the Equipment tab.

Field	Description	Entry	Default	Required
Details Tab				
Reset Details on All Equipment	Only shown (with informational message) if person	Select to enable First Name, Last Name,	Clear	No

	<p>details are not the same on all items of linked equipment. If shown, but not selected, First Name, Last Name, Description and Login Name fields are disabled, as there is no common value to show.</p> <p>Note: This is not an error, although you may want to change this.</p>	<p>Description and Login Name fields. Enter the required values then click Save. This allows you to quickly reset the details for all linked equipment to the details on this page.</p>		
First Name	The person's first name. Disabled if Reset check box is shown but not selected.	Up to 32 characters. Letter, period, and hyphen characters accepted.	Null	Yes
Last Name	The person's last name. Disabled if Reset check box is shown but not selected.	Up to 32 characters. Letter, period, and hyphen characters accepted.	Null	Yes
Description	A description of the person. Disabled if Reset check box is shown but not selected.	Up to 255 characters.	Null	No
Login Name	A unique login name for the person to allow them to login to the peripheral. Disabled if Reset check box is shown but not selected.	Unique. Up to 255 characters.	Null	Yes

	<p>Note: Peripheral login names are not case sensitive. For example, "joe_smith" and "JOE_SMITH" are the same. Also, login names for agent login to agent desktop software (such as CTI OS) are not case-sensitive either.</p>			
SSO Enabled (only available in Mixed Mode)	<p>Check this box to enable external login for the user.</p> <p>When SSO is enabled, the SSO Type options are displayed.</p> <p>Note: The IDS and Webex Common Identity fields are shown only in UCCE 15, where Webex Common Identity support is available.</p> <ul style="list-style-type: none"> • IDS – This is the default and the only selectable option when creating a Person. • Webex Common Identity – This option is displayed but 	Check box to select.	Cleared	No

	<p>disabled during Person creation. CCMP does not allow creating a Common Identity SSO Person. You can only associate a Common Identity Person imported from UCCE when creating an Agent.</p> <p>When SSO is enabled, the password fields are disabled. When SSO is cleared, the password fields are enabled.</p>			
Password	The password that the person uses to log in to the system.	Longer passwords, including numbers and other characters, may be required. Ask your system administrator for details.	Null	Depends on setting on underlying equipment
Confirm Password	The same as for the Password field. This ensures that the person is not prevented from logging in by	Same as password	Null	Depends on setting on underlying equipment

	typographical errors made when setting his or her password.			
Email Address	Email Address of the person	Up to 254 characters. All characters except round brackets are accepted.	Null	No
Digital Channel Enabled	To enable this setting, you must enable SSO and provide an email address.	Check box to select.	Cleared	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree	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	Check box to select, and then check the required Unified Communications Manager equipment. Click on the icon to edit the login	Cleared	No

	Managers to add the person to.	details for the equipment.		
Equipment Tab > Equipment Fields Dialog Box				
First Name	Person's first name on this equipment.	Up to 32 characters.	Same as First Name of Person	Yes
Last Name	Person's last name on this equipment.	Up to 32 characters.	Same as Last Name of Person	Yes
Description (UCCE Equipment only)	A description of the person.	Up to 255 characters.	Same as Description of Person	No
Login Name	Person's login name on this equipment.	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Same as Login Name of Person	Yes
Reset Password (UCCE only)	Select to reset password on this equipment.		Clear	No
Login Enabled (UCCE only)	Select to enable login on this equipment.		Clear	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	Hyperlink	None	No



to manage their teams.

Portal Tab > Choose a User dialog box

Choose a User	<p>The kind of user to associate the person with. Options are:</p> <ul style="list-style-type: none"> ▪ 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. Any Unicode character is valid, except single quote ('), double quote (") and Unicode characters in the "Symbol, Other" category.	Null	Yes
Create User option > Password	The password that the user will use to log in to the Portal.	Unique. At least five letters long. Longer passwords, including	Null	If creating a new user.

		numbers and other characters, may be required. Ask your system administrator for details.		
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.
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 creating a new 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	If required, click Add then select security group from folder tree. Repeat to add user to more groups. Click	None	No

	assign a user to groups you have permission to modify.	Save to save details and amend user's security groups.		
Advanced Tab				
Department	(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.5 or later). The department that this resource is associated with.	Select from the drop-down list of available departments.	None	No
Active From Date	The date from which the person will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which the person will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric. If this resource type has default keys defined in a	Either an entry for each default key, or null if no default keys.	No

		<p>custom data template, there will be an initial entry for each default key.</p>		
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit the key field. You can</p>	Null	No, for predefined default keys. Yes if new key being defined

	only edit the value field.		
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Changing Passwords

To edit a person's details:

1. In **Resource Manager**, go to the folder containing the person you want to update, and view the persons in that folder using the Items panel list view.
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 **Details** tab, check the **Reset Password** check box.
4. Enter a new password and confirm.
5. Click **Save**.

You cannot edit a password of a Person that uses SSO, as they login externally and so do not have password stored on the system. Checking the **SSO Enabled** check box in the **Details** tab will hide the reset password check box.

Deleting Persons

To delete one or more persons:

1. In **Resource Manager**, go 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.
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.

About Precision Attributes

A precision attribute (also referred to as an attribute) is some user-defined information that can be associated with an agent. It defines the agent's knowledge or experience in a particular area and the level of that knowledge or experience. A precision attribute has a name, which identifies the attribute, and a value, which indicates the level an agent has attained for that attribute.

Precision attribute values can be:

- Boolean (the agent either has that attribute or does not have that attribute)
- Graded according to proficiency (the agent has attained a specific grade of expertise in that attribute).

Precision attributes are used in precision queues to define rules for routing calls.

Attributes can only be created on tenants that are associated with a Unified CCE instance running Unified CCE version 9.0 or later.

Examples

A precision attribute called `Mortgage_Training` may be defined with a boolean value to indicate whether an agent has been trained to sell mortgages. This attribute can then be associated with a number of agents, and for each agent, the value of the Mortgage Training attribute can be set to either True or False, depending on whether the agent has had the training or not.

Another example could be a precision attribute called `Spanish_Speaker` with a proficiency value to indicate how fluent the agent is in the Spanish language. If an agent does not speak Spanish, then this attribute can be set to 1 (the lowest possible proficiency value). If the agent is a native Spanish speaker, the attribute can be set to 10 (the highest possible proficiency value). If the agent knows some Spanish but is not very fluent, the attribute could be set to 5.

Creating Precision Attributes

To create a precision attribute:

1. In **Resource Manager**, in the **Folder Tree** panel, select the folder where you want to create the precision attribute.
2. In the Folder Tree panel, click **Resource**, and then click **Precision Attribute**.
3. Enter a unique name for the precision attribute.
4. Complete the remaining fields as described in [Precision Attribute Fields](#).
5. To assign agents to the precision attribute, on the **Agents** tab check the boxes of one or more agents, and click on **Add** above the list. For each agent you add, click on the drop-down arrow in the Value column to select the value of that precision attribute for that agent.

The **Selected Path** drop-down at the top enables you to select agents from other folders to associate with the precision attribute. If you change the precision attribute type on the Details tab after you have assigned precision attribute values to agents, a warning message will be displayed and all agent attribute values will be reset to the default value for the new precision attribute type.

6. Click **Save** to create the precision attribute and assign it to the specified agents.

In addition to creating precision attributes one at a time, you can also bulk load precision attribute records previously output to a CSV (comma separated values) file. For more information see [About Bulk Upload](#).

Precision Attribute Fields



This table shows the tabs and fields available for precision attributes.

Field	Description	Entry	Default	Required
Details Tab				

Name	<p>A unique name for the record.</p> <p>Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.</p>	<p>Unique. Up to 32 characters, alphanumeric, period, and underscore characters only.</p>	Null	Yes
Description	<p>A description of the attribute.</p>	<p>Up to 255 characters.</p>	Null	No
Path	<p>Only shown when resource is first created. The location in the folder tree where the resource is to be created.</p>	<p>Click on the drop-down arrow to show the folder tree, then select the required location.</p>	<p>Current location in folder tree.</p>	Yes
Data Type	<p>The data type of the attribute value.</p>	<p>Select from list. Values are:</p> <ul style="list-style-type: none"> ▪ Boolean: The value can be True or False ▪ Proficiency: The value can be a whole number between 1 	Boolean	Yes

		and 10 (1 is least proficient and 10 is most proficient).		
Default Value	The default value to be used when this attribute is associated with an agent.	Select from list.	True (Boolean attributes) or 1 (proficiency attributes)	Yes
Agent Tab				
Agents	Agents associated with this attribute.	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				
Enterprise Name	The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name. Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	Auto-generated	Yes

	on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.			
Department	(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.5 or later). The department that this resource is associated with.	Select from the drop-down list of available departments.	None	No
Active From Date	The date from which the attribute will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which the attribute will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric. If this resource type has default keys defined in a custom data template, there will be a an initial entry	Either an entry for each default key, or null if no default keys.	No

		for each default key.		
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.</p>	Null	<p>No, for predefined default keys.</p> <p>Yes if new key being defined.</p>

Editing Precision Attributes

To edit a precision attribute:

1. In **Resource Manager**, go to the folder containing the precision attribute you want to edit, and view the precision attributes in that folder using the Items panel list view.
2. In the Items panel, click on the precision attribute you want to edit. The details of this precision attribute are displayed in the Details panel.
3. Click through the tabs and edit the fields you want to change.
4. To remove a precision attribute from one or more agents, click on the **Agents** tab and check the boxes of the agents you wish to remove the precision attribute from. Click **Remove**.
5. To change the precision attribute value associated with an agent, click on the **Agents** tab, locate the agent you want modify, click on the drop-down arrow beside the precision attribute value and select the new value.
6. Click **Save**.

Deleting Precision Attributes

You cannot delete a precision attribute that is included in a precision queue. This reference must be removed before the precision attribute can be deleted.

To delete one or more precision attributes:

1. In **Resource Manager**, go to the folder containing the precision attributes you want to delete, and view the precision attributes in that folder using the **Items** panel list view.
2. In the **Items** panel, check the box or boxes of the precision attributes to be deleted.
3. Click **Delete**.
4. In the **Delete Attributes** dialog box, click **OK**. The precision attributes will be deleted.

Deleting a precision attribute automatically removes the attribute association from any agents that were associated with that precision attribute.

About Precision Queues

A precision queue is a mechanism that defines how to route calls to agents depending on each agent's proficiency attributes and availability. Precision queues can be referenced in routing scripts to define how calls are routed.

Precision Queues can only be created on tenants that are associated with a Unified CCE instance running Unified CCE version 10.5 or later.

Precision Queue Steps

A precision queue contains one or more precision queue steps. Each step includes:

- Some criteria defining a set of agent attributes that must be satisfied when choosing an agent to receive the call
- A time to wait for a suitable agent to become available, after which the criteria specified in the next step are considered instead (this feature is not available for the last step, since there is no next step after the last step).

Typically, the criteria specified in successive steps will get progressively less stringent. For example, the first step may specify that:

- The agent has been trained to sell mortgages (for example, Mortgage_Training is True)
- The agent is an excellent Spanish speaker (for example, Spanish_Speaker >= 8)
- The call will be held for up to 120 seconds waiting for an agent meeting these criteria to become available.

The next step is only considered if no agent becomes available in that time, and may specify that:

- The agent has been trained to sell mortgages (for example, Mortgage_Training is True)
- The agent can speak Spanish (for example, Spanish_Speaker >= 3)
- The call will be held for up to 300 seconds waiting for an agent meeting these criteria to become available.

The final step may specify that the call can be routed to any available agent who can speak Spanish at any level (for example, Spanish_Speaker >= 1).

Consider If Conditions

Any step except the last step can have a Consider If condition associated with it. A Consider If condition allows you to specify additional criteria about the call to determine whether the step is relevant for that category of call.

For example, a Consider If expression may be used to include a specific step only if more than 100 calls of a certain type have been received in the last 24 hours.

The Consider If expression is passed directly to Unified CCE and validated there. For more information about Consider If expressions, see the Unified CCE documentation in the Cisco Unified Contact Center Enterprise Features Guide.

Expressions

Each step consists of:

- One or more expressions
- The rules for combining those expressions.

An expression defines a set of requirements an agent must satisfy in order to receive the call. Expressions in a step can be combined using *AND* (both the latest expression and the previous one must be satisfied) or *OR* (either the latest expression or the previous one, or both, must be satisfied).

For example, a step may have two expressions, one specifying some skills an agent may have, and the other specifying some qualifications an agent may have. If these two expressions are combined in a step using AND, calls will only be routed to agents that have both the specified skills and the specified training. But if the expressions are combined using OR, calls can be routed to agents with either the skills or the training or both.

Attribute Comparisons

Each expression consists of:

- One or more attribute comparisons
- The rules for combining those attribute comparisons.

An attribute comparison is an attribute, a value and a rule for the comparison. Some typical attribute comparisons are:

- Spanish_Speaker >= 8
- Mortgage_Training = True.

Like expressions in a step, attributes in an expression can be combined using AND or OR.

Tip for Constructing Steps, Expressions and Attribute Comparisons

To keep your steps and expressions simple, you may like to:

- Group your **attribute comparisons** into **expressions** using **AND** (for example, an expression is made up of *AttributeComparison1 AND AttributeComparison2 AND AttributeComparison3*)
- Group your **expressions** into **steps** using **OR** (for example, a step is made up of *Expression1 OR Expression2 OR Expression3*)

Creating Precision Queues

To create a precision queue:

1. In **Resource Manager**, in the Folder Tree panel, select the folder where you want to create the precision queue.
2. In the Folder Tree panel, click **Resource**, and then click **Precision Queue**.
3. Enter a unique name for the precision queue.
4. Complete the remaining fields as described in [Precision Queue Fields](#).
5. Click **Save** to create the precision queue.

In addition to creating precision queues one at a time, you can also bulk load precision queue records previously output to a CSV (comma separated values) file. For more information see [About Bulk Upload](#).

Precision Queue Fields

This table shows the tabs and fields available for precision queues.

Field	Description	Entry	Default	Required
Details Tab				
Name	<p>A unique name for the precision queue.</p> <p>Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.</p>	Unique. Up to 50 characters, letters, numbers, periods, and underscore characters only. Must begin with letter or number.	Null	Yes

Description	A description of the precision queue.	Up to 255 characters.	Null	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree	Yes
Agent Order	The agent to allocate to a call if more than one agent satisfies the criteria in the precision queue.	Select from list. Values are: <ul style="list-style-type: none"> ▪ Longest Available Agent ▪ Most Skilled Agent ▪ Least Skilled Agent 	Longest Available Agent	No
Service Level Type	Optionally, use to indicate how to handle abandoned calls in service level calculations.	Select from: <ul style="list-style-type: none"> ▪ Ignore Abandoned Calls: do not include abandoned calls in the calculation. ▪ Abandoned Calls have Negative Impact: abandoned calls count as having exceeded the service level threshold. ▪ Abandoned Calls have 	Ignore Abandoned Calls	No

		<p>Positive Impact: abandoned calls count as having been promptly answered.</p>		
Service Level Threshold	The service level threshold, in seconds, for allocating the call to a suitable agent using the rules in the precision queue.	0 to 2147483647.	Null	No
Steps Tab				
Add Step	Button to add a new precision step to the precision queue. A step consists of one or more conditional expressions.	<p>Click to add another step to the list of steps. You can also change the order of steps by clicking on a step name and dragging the step to a new position in the list.</p> <p>Note: If you rearrange the steps, the steps in the sequence are renumbered starting with Step 1.</p>	Null	Yes
Wait Time	The time in seconds to wait before moving on to the next step if the criteria in this step cannot be satisfied.	<p>0 to 2147483647.</p> <p>Note: Not applicable to last step in sequence.</p> <p>Note: If the steps are reordered as above, and the last step changes, the wait time is removed from</p>	0 (Not applicable to last step)	Yes, if precision queue has more than one step.

		the new last step, and the old last step is given a wait time of 0.		
Step <n>	The name and definition of the <i>n</i> th step in the list.	<p>The definition shows the details of the step and the number of agents that currently meet the criteria for that step. A warning is shown if fewer agents meet the criteria for a step than met the criteria for the previous step.</p> <p>Click on the name of a step to display a dialog box to edit the conditional expressions in that step. When you have finished editing the expressions in that step, click OK to save the step.</p>	Null	Yes
Steps Tab > Add Step				
Consider If	Criteria that determines whether the step is executed	<p>Optionally, enter a scripting condition that will be evaluated to determine whether this step is considered for the call. If the condition is present but not satisfied by the call, the call passes to the next step in the precision queue. The scripting condition is validated by the remote equipment.</p> <p>Only the following scripting objects are</p>	Null	No

		<p>valid in a Consider If expression:</p> <ul style="list-style-type: none"> ▪ Call ▪ PQ ▪ Skillgroup ▪ ECC ▪ PQ Step ▪ Call Type ▪ custom functions <p>For more information about Consider If expressions, see the <i>Cisco Unified Contact Center Enterprise Features Guide</i>.</p>		
Add Expression	Button to add a new expression to the precision step. An expression consists of one or more attribute comparisons.	<p>Create an expression containing one or more attribute comparisons. The first attribute comparison is ready to complete. Click Add Attribute to optionally add more attribute comparisons. For each attribute comparison, complete the fields as described for Add Attribute.</p> <p>For each expression except the first, also click on the drop-down beside the expression number to choose how this expression contributes to the results of the step:</p>	Null	Yes

		<ul style="list-style-type: none"> ▪ AND – the step will be satisfied if an agent is found that satisfies this expression and also satisfies the previous expressions in the step ▪ OR (default) – the step will be satisfied if an agent is found that satisfies this expression even if that agent does not satisfy the previous expressions in the step. <p>Click X to remove the expression from the step.</p>		
Add Attribute	<p>Button to add a new attribute comparison to the expression. An attribute comparison consists of an attribute, a comparison type and a comparison value.</p>	<p>Click to add a new attribute comparison as follows:</p> <ul style="list-style-type: none"> ▪ Click in the first box and start typing some characters to see a list of attributes that contain those characters. ▪ Choose the attribute you want from the drop-down list 	Null	Yes

- Move to the next box and choose the comparison type from the following:

$==$:
equal to
this
value

$!=$: not
equal to
this
value

$<$: less
than
this
value

$<=$:
less
than or
equal to
this
value

$>$:
greater
than
this
value

$>=$:
greater
than or
equal to
this
value

- Move to the final box and choose the value you want to compare against.

Note: The last four comparison types

above are only valid for proficiency attribute types.

For each attribute in the expression except the first, also click on the drop-down to the left of the attribute to choose how this attribute comparison contributes to the results of the expression:

- **AND** (default)
 - the expression will be satisfied if an agent is found that satisfies this attribute comparison and also satisfies the previous attribute comparisons in the expression
- **OR** – the expression will be satisfied if an agent is found that satisfies this attribute comparison even if that agent does not satisfy the previous attribute comparisons in the expression.

Click **X** to remove the attribute comparison from the expression.

Advanced Tab

Enterprise Name

The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name.

Note. If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.

Unique. Up to 32 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.

Autogenerated

Yes

Department



(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version

Select from the drop-down list of available departments.

None

No

	10.5 or later). The department that this resource is associated with.			
Bucket Interval	The count of Answered or Abandoned calls that are used as intervals for the Call Type.	Select from list of available bucket intervals.	System Default	No
Active From Date	The date from which the precision queue should be active in the system.	Select date from calendar.	Current date	Yes
Active To Date	The date after which the precision queue should be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric. If this resource type has default keys defined in a custom data template, there will be a an initial entry for each default key.	Either an entry for each default key, or null if no default keys.	No

Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit the key field. You can only edit the value field.</p>	Null	No , for predefined default keys. Yes if new key is being defined.
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Editing Precision Queues

To edit a precision queue:

1. In **Resource Manager**, go to the folder containing the precision queue you want to edit, and view the precision queue in that folder using the Items panel list view.
2. In the Items panel, click on the precision queue you want to edit. The details of this attribute are displayed in the Details panel.
3. Click through the tabs and edit the fields you want to change.
4. Click **Save**.

Deleting Precision Queues

You cannot delete a precision queue that is referenced in a routing script. This reference must be removed before the precision queue can be deleted.

To delete one or more precision queues:

1. In **Resource Manager**, go to the folder containing the precision queues you want to delete, and view the precision queues in that folder using the Items panel list view.
2. In the Items panel, check the box or boxes of the precision queues to be deleted.
3. Click **Delete**.
4. In the **Delete Precision Queue** dialog box, click **OK**. The precision queue will be deleted.

About Services

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 Services

To create a service:

1. In **Resource 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 can only contain alphanumeric characters, periods and underscores.
4. Complete the remaining fields as described in [Service Fields](#).
5. Click **Save**.

Service Fields

This table shows the tabs and fields available for services.

Field	Description	Entry	Default	Required
Details Tab				
Name	A unique name for the record. Note: This may not be the same as the name	Unique. Up to 32 characters, alphanumeric, period, and underscore	Null	Yes

	<p>by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.</p>	<p>characters only. Must begin with alphanumeric.</p>		
Description	A description of the record.	Up to 255 characters.	Null	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree	Yes
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
Service Level Type	How the service level is calculated.	<p>Select from drop-down:</p> <ul style="list-style-type: none"> ▪ Default: Use the default specified for the peripheral 	Default	Yes



- **Ignore Abandoned Calls:** 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

For services associated with non-voice MRDs or associated with Peripherals that have a ClientType of 30 (Enterprise Agent) or ClientType of 51 (System PG), only the **Default** and **Ignore Abandoned Calls** options are available.

For services associated with a Communications

		Manager, this is always Ignore Abandoned Calls.		
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. If this field is negative, the value of the Service Level Threshold field in the Peripheral table is used.	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				
Enterprise Name	The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name. Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	From Name	Yes

	<p>the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.</p>			
Department	<p>(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.5 or later). The department that this resource is associated with.</p>	<p>Select from the drop-down list of available departments.</p>	None	No
Peripheral Number	<p>The number to be specified for this service at the peripheral.</p>	0 to 999999999.	Null	Yes
Media Routing Domain	<p>The media routing domain associated with this service.</p>	Select from list.	Null	Yes
Active From Date	<p>The date from which this service should be active within the system</p>	Select date from calendar.	Current Date	Yes
Active To Date	<p>The date after which this service should be deleted from the system</p>	<p>Either leave Forever checked, or uncheck Forever and select date from calendar.</p>	Forever	No
Custom Data Tab				
Key	<p>The key for this custom data item.</p>	<p>Unique. Up to 50 characters, alphanumeric, period, and underscore characters only.</p>	<p>Either an entry for each default key, or null if no</p>	No

		<p>Must begin with alphanumeric.</p> <p>If this resource type has default keys defined in a custom data template, there will be an initial entry for each default key.</p>	default keys.	
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default</p>	Null	No, for predefined default keys. Yes if new key being defined.

	keys you cannot delete the entry or edit the key field. You can only edit the value field.	
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Editing Services

To edit the details of an agent desktop:

1. In **Resource Manager**, go to the folder containing the service you want to edit, and view the services in that folder using the Items panel list view.
2. In the Items panel, click on the service you want to edit. The details of this service 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 Services

To delete one or more services:

1. In **Resource Manager**, go to the folder containing the services you want to delete, and view the services in that folder using the Items panel list view.
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.

About Skill Groups

A skill group is a collection of agents that share a common set of skills that enable them to handle a particular type of task. For example, a skill group could define a group of agents who are proficient at providing technical support for a particular product. 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.

Unified CCMP does not support sub-skill groups (skill groups defined as a subset of a parent skill group).

Creating Skill Groups

To create a skill group:

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

- In the Folder Tree panel, click **Resource**, and then click **Skill Group**.
- Enter a unique name for the group.
- Complete the remaining fields as described in Skill Group Fields.
- 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.

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

- 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.

When a new skill group is added, if there is no associated route then business logic will add a new default route. There must always be at least one route associated to a skill group, therefore you will not be able to delete the last route on the skill group.

- Click **Save**.

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 see [About Bulk Upload](#).

Skill Group Fields


This table shows the tabs and fields available for skill groups.


Field	Description	Entry	Default	Required
Details Tab				
Name	<p>A unique name for the skill group.</p> <p>Note: This may not be the same as the name by which the item is known on the remote equipment (Enterprise Name on the Advanced tab). Changing this name will not change the enterprise name or the name on the remote equipment. Changes to the name</p>	<p>Unique. Up to 32 characters, letters, numbers, periods, and underscore characters only. Must begin with letter or number.</p>	Null	Yes

	on the remote equipment will be reflected in the enterprise name, but under some circumstances, may not change the name shown here.			
Description	A description of the skill group.	Up to 255 characters.	Null	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree	Yes
Peripheral	The peripheral to be used for the agents in the skill group.	Select from list	Null	Yes
Media Routing Domain	A description of how contact is made.	Select from list	Cisco_Voice	No
Contact Center 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: The default is Ignore Abandoned Calls.	Use Global Setting	No
Service Level Threshold	The threshold, in seconds, for the	0 to 2147483647.	Null	No

	Unified CCE service level.			
Agents Tab				
Agents	Agents associated with this skill group.	<p>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.</p> <p>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.</p>	Null	No
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	<p>The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name.</p> <p>Note: If the item is created by importing from the remote equipment, this name will match the Unified CCMP name (Name on the Details tab). Changes to the name on the remote equipment will be reflected here, but under some circumstances, will not affect the Unified CCMP name.</p>	Unique. Up to 32 characters, letters, numbers, and underscore characters only. Must begin with letter or number.	From Name and Peripheral	Yes
Department	(Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.5 or later). The department that this resource is associated with.	Select from the drop-down list of available departments.	None	No
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 this Skill Group should be active within the system	Select date from calendar.	Current Date	Yes
Active To Date	The date after which this Skill Group	Either leave Forever checked, or uncheck	Forever	No

	should be deleted from the system	Forever and select date from calendar.		
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and underscore characters only. Must begin with alphanumeric.	Either an entry for each default key, or null if no default keys.	No
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (</p>	Null	Yes

) , then click **OK** to confirm the deletion.

Editing Skill Groups

To edit a skill group:

1. In **Resource Manager**, go 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.
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 **Delete** beside the route you want to remove. The route is deleted, and the association with the skill group is removed when the changes to the skillgroup are saved.

There must always be at least one route associated to a skill group, therefore you will not be able to delete the last route on the skill group.

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

Deleting Skill Groups

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 **Resource Manager**, go 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.
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.

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

About User Variables

A user variable is a named object which can hold a value up to 28 characters long. User variables are used in routing scripts. User variable fields like Code text, Persistent checkbox, Description, Active to date are editable.

User variables referenced by a script cannot be deleted.

Creating User Variable

To create a user variable:

1. In **Resource 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 the remaining fields as described in [User Variable Fields](#). Active from and to dates can be set in the **Advanced** tab.

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**.



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 see [About Bulk Upload](#).

User Variable Fields

This table shows the tabs and fields available for user variables.

Field	Description	Entry	Default	Required
Details Tab				
Code Text	The name of the user variable.	Up to 28 characters, consisting of letters, numbers, and underscores only. Automatically prefixed with 'user' by the	Null	Yes

		system upon saving.		
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	No
Persistent	Whether the user variable retains value across Central Controller restarts.	Check box	Checked	No
Description	A description of the record.	Up to 255 characters.	Null	No
Path	Only shown when resource is first created. The location in the folder tree where the resource is to be created.	Click on the drop-down arrow to show the folder tree, then select the required location.	Current location in folder tree.	Yes
Advanced Tab				
Active From Date	The date from which this variable will be active within the system.	Select date from calendar.	Current Date	Yes
Active To Date	The date after which this variable will be deleted from the system.	Either leave Forever checked, or uncheck Forever and select date from calendar.	Forever	No
Custom Data Tab				
Key	The key for this custom data item.	Unique. Up to 50 characters, alphanumeric, period, and	Null	No

		underscore characters only. Must begin with alphanumeric.		
Value	The value to associate with this key.	<p>Up to 500 characters.</p> <p>To add a new custom data key-value pair, complete both fields, and click Add. You can have a maximum of ten custom data key-value pairs.</p> <p>To edit an existing key-value pair, rest the mouse briefly on the entry, select the edit icon () and make your changes. Then select the tick to confirm the change, or the cross to undo the change.</p> <p>To delete an existing key-value pair, rest the mouse briefly on the entry, select the delete icon (), then click OK to confirm the deletion.</p> <p>Note: For predefined default keys you cannot delete the entry or edit</p>	Null	Yes

	the key field. You can only edit the value field.		
--	---	--	--

Deleting User Variables

1. In **Resource Manager**, go 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.
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.

Security

- [About Users, Groups, and Roles](#)
- [About Users](#)
- [Managing Users](#)
- [Managing ISE Enabled Users](#)
- [Managing Groups](#)
- [Managing Permissions](#)
- [Managing Roles](#)
- [Managing Global Roles](#)

Security Features

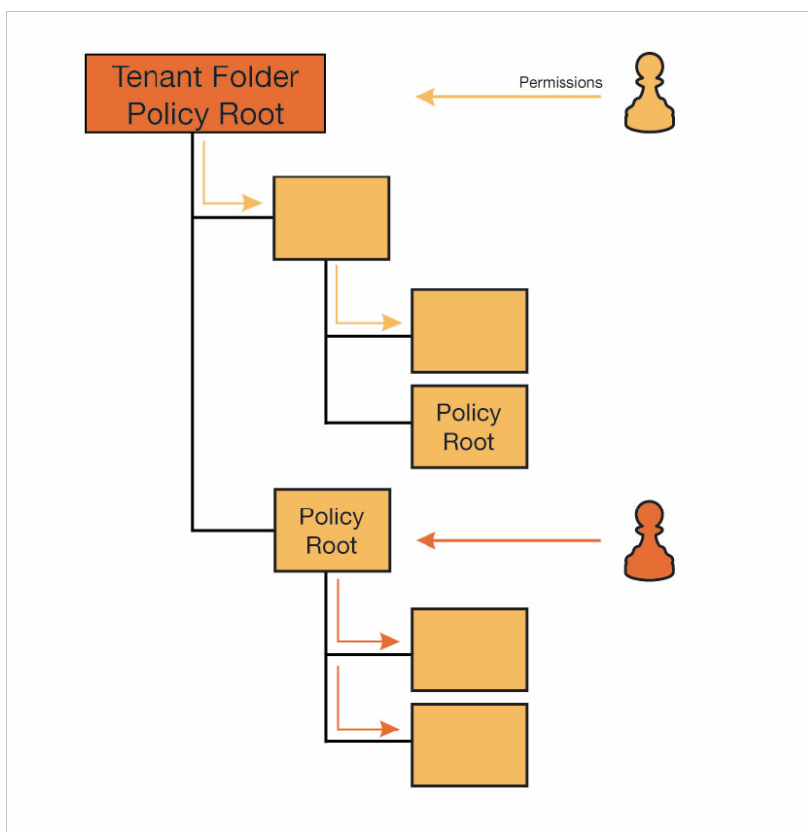
Security and the Folder Structure

Security management in Unified CCMP 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.



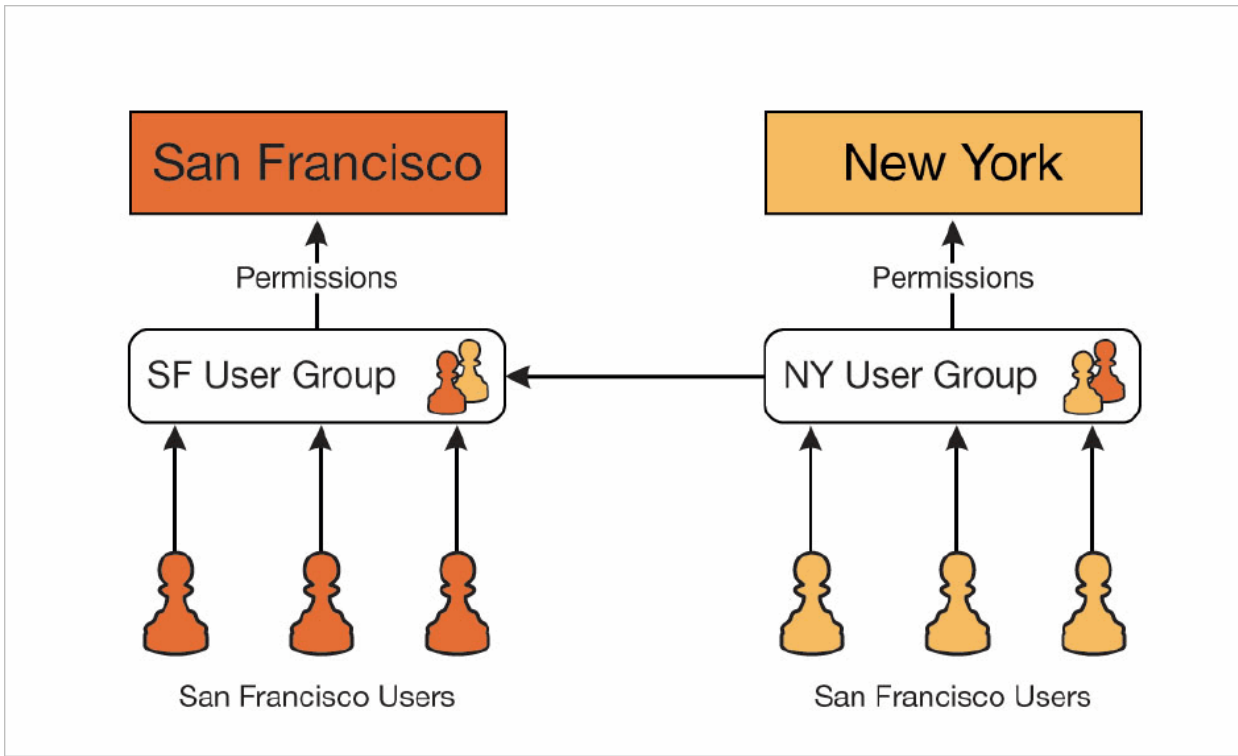
Folders and Security Policies

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.

About 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.



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 using the User Manager (see [Users](#)) and the Group Manager (See [Groups](#)).

About 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 in the security settings (see [Changing the 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.

About 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 Permissions Manager tool (see [Global Roles](#) 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 [Roles](#) 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.

About 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.
- **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.

About Security Management Tools

Unified CCMP provides the following functions to manage security.

Field	Description
Global Roles	Allows you to create and manage global roles, and to assign these global roles to users and groups. See Global Roles .

Roles	<p>Allows you to create and manage folder roles. See Roles.</p> <p>Note: Use Security Permissions Manager to assign folder roles to users or groups for specific folders.</p>
Users	<p>Allows you to create and manage users, and to view the folder roles and global roles they have. See Users.</p>
Groups	<p>Allows you to create and manage groups, and to view the folder roles and global roles they have. See Groups.</p>
Security Permissions Manager	<p>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. See Security Permissions.</p> <p>Note: Use Global Roles to assign global roles to users and groups.</p>

Users

Unified CCMP allows advanced mode users with appropriate permissions to create and manage users, and to view the folder roles and global roles they have.

Unified CCMP 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.


Important things to note:

- The folder that contains a user account does not affect the permissions of that user.
- To change the permissions (folder roles) a user has on specific folders, use Security Permissions Manager (see [Security Permissions](#)).
- For auto-provisioned users, the timezone of the user is the default report time zone. If the user is not auto-provisioned, the the Timezone of a new user is set to the timezone of the user creating it. This can be changed in User Settings page at a later time.

Users

Starting the User Manager

To start the User Manager:

1. Click the "Hamburger" icon () in the menu bar, to show the tools menu.
2. Select **Security > Users**.

Creating a User

You can also create a user in **Resource Manager** (in the Folder Tree panel, select **System > User**).

To create a user:

1. In User Manager, select the folder in which you want to create the new user.
2. Click the **New** option. The **Create a New User** page will open.
3. 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 CCMP.

There are specific requirements on the format of the login name for:

- **All users in installations that use external login authentication:** For users in installations that use external Windows login authentication, the *down-level logon name* format (for example **testdomain\user1**) must be used. The login name must correspond to an existing Windows Active Directory user, and must be formatted as **<domain-name\username>**, where **<username>** is the Windows username and **<domain-name>** is the NetBIOS domain name. The login name must exactly match the details in the corresponding Active Directory entry.
- **ISE-enabled users in all installations:** For ISE users, external login is not supported. However, the username must still be in the **<domain-name>@<username>** format, where **<username>** is the Windows username and **<domain-name>** is the fully qualified domain name.

The ISE users are local, and the application no longer validates the username and password against the Active Directory.

- In the **Password** field enter the password for the new user. This field is not present in installations that use external login authentication. The user's password cannot be the same as their login name, and must meet any password restrictions that are specified by the system administrator in **Settings > Security Settings**. Additionally, for an ISE-enabled user, the password must match the password for the corresponding Windows active directory user.
- In the **Confirm Password** field re-enter the selected password.

- In the **First Name** and **Last Name** fields enter the details of the user.
- 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.
- If required, select **Create a new folder for this user**, 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**.

Basic users will only be able to view their home folder.

4. Select any of the following check boxes which are applicable:

- Select the **Advanced Mode** check box to choose whether you are using the standard or advanced mode user interface. In advanced mode your home page shows your personalized gadget layout, which you can configure and customize with the gadgets of your choice to help you carry out the tasks you do regularly. In standard mode your home page shows a predefined set of reports if available, or, if not, your team management page.
- Select the **Account Enabled** check box to ensure that the user is live in the system. If Cleared the new user account will be saved in the system, but the user will not be able to login.
- Select the **Local Login Enabled** check box to allow the user to login to the system using Local 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).

The **User cannot change password** checkbox is always unchecked for a user created using the **Copy** method.

- Select the **Internet Script Editor Enabled** check box to specify that this user is ISE-enabled (see [About ISE Enabled Users](#)). This also creates a linked Unified CCE user that can access Cisco's Internet Script Editor using Unified CCMP security partitioning. If you select **Internet Script Editor Enabled** you must also ensure that:
 - The **Login Name** is in the format specified above for ISE-enabled users
 - The user has the **Browse Dimensions** permission on the folders containing the scripts and resources that the linked Unified CCE user needs to be able to access in Cisco's Internet Script Editor.
 - The user logs into Unified CCMP using local login, as windows authentication is not supported by ISE.

5. If you wish to create more than one user, select the **Create Another** check box.

6. Click **Save**.

ADFS and Microsoft Entra ID users can be created automatically if the **Ex Auto Create User** check box is selected in the System Properties Manager in ICE, provided

the configuration is correct. For more information, see the *Unified CCMP ICE* document.

Editing User Details

You can also edit a user in **Resource Manager** by clicking on the user in the Items panel (list view).

To edit user details in User Manager:

1. In **User Manager**, select the folder containing the user to be edited.
2. Click on the user. A page showing the user details opens.
3. Edit details as desired. The password can be changed from the **Password** tab, and the user can be added or removed from groups using the **Groups** tab.

You cannot change a password if the user has logged in using external login authentication, as passwords are not stored within Unified CCMP.

Moving a User

To move a user in User Manager:

1. Click the **Move** option. The **Move a user** page will open.
2. Go to the folder you want to move the user to.
3. Click **Save**.

You can also move a user in **Resource 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. Select the check box beside the user to be deleted.
2. Click the **Delete** option and confirm the deletion when prompted.

You can also delete a user in **Resource 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 with all their settings, group memberships and roles:

1. Click on the **Copy** option. A dialog displaying empty user fields will be displayed.
2. Fill in the details of the new user.
3. Click the **Copy** button on the dialog.

Viewing User Permissions

To see permissions of a user (folder roles and global roles):

- Click 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.

The Access option does not show whether these permissions have been assigned directly to the user or through group memberships.

If there is an **asterisk (*)** beside a folder role or global role in the list, then that permission is not currently active. This can happen if the user inherits the permission by being a member of a group that has the permission, but the group is not enabled.


Changing User Permissions

- To change the permissions (folder roles) a user has in a folder, use the Security Permissions Manager tool (see [Security Permissions](#)).
- To change the global roles that a user has, use the Global Role Manager (see [Global Roles](#)).

For ease of maintenance, it is recommended that you assign user permissions to groups, not to individual users.

Changing Groups of Users

To change the group of a user:

1. Select the **Groups** tab for the user.
2. From the **Groups** tab, you can remove the user from groups by clicking on the **Delete** icon () beside each group.
3. You can add the user to new groups, as follows:
 - Click the **Add to Group** button. A dialog box opens.
 - Go 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.
4. Click **Close** and **Save**.

Fields Available when Creating a User

Field	Description	Entry	Default	Required
Login Name	A unique login name for the Portal user.	Unique. Up to 255 characters. Any Unicode character is valid.	Null	Yes

		<p>Additionally, for an Internet Scrip Editor enabled user, the login name must correspond to an existing Windows active directory user. This name must be formatted as <username>@<domainname>, where <username> is the Windows username and <domainname> is the fully qualified Windows domain name, for example, iseuser1@testdomain.local. The login name must exactly match the details in the corresponding Active Directory entry.</p>		
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 email address of the user.	Up to 255 characters. Must be a valid email address in the format name@domain.extension.	Null	No
Culture	The language and location setting for this user.	Select from the drop-down list	Culture setting of the user creating the new user	Yes
Description	A description of the Portal user.	Up to 500 characters.	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

Local Login Enabled	Indicates whether this user can login to the system using Local Login.	Must be in the format "username@domain".	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
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 . Note: Even with a password that never expires, if a user does not log in within a specified time limit, the account is disabled. By default, this time limit is 120 Days.	Null	No
User cannot change password	Indicates whether the user can 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
Internet Script Editor Enabled	Indicates whether the user is linked to a Unified CCE user.	Check this box to create a linked Unified CCE user that can access Cisco's Internet Script Editor using the security settings of this	Cleared	No

		<p>Unified CCMP user. In this case, the following apply:</p> <ul style="list-style-type: none"> ▪ The login name must correspond to an existing Windows active directory user. ▪ If the installation does not use single sign on, the specified password must match the password for the corresponding active directory user. 		
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
Password	The password that the user will use to log in to the system.	<p>Only required if the installation does not use single sign on.</p> <p>The password of the user cannot be the same as their Login Name, and must meet any password restrictions that are specified by the system administrator in Settings > Security Settings.</p> <p>Additionally, for an Internet Script Editor enabled user, the password must match the password for the corresponding Windows active directory user.</p>	Null	Yes, if local login is enabled
Confirm Password	The same as for the Password field. This ensures that the user is	Only required if the installation does not use single sign on.	Null	Yes, if local login is enabled

	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.		
--	--	--	--	--


Fields Available when Editing a User

Field	Description	Entry	Default	Required
Details Tab				
Login Name	A unique login name for the Portal user.	<p>Unique. Up to 255 characters. Any Unicode character is valid.</p> <p>Additionally, for an Internet Scrip Editor enabled user, the login name must correspond to an existing Windows active directory user. This name must be formatted as <username>@<domainname>, where <username> is the Windows username and <domainname> is the fully qualified Windows domain name, for example, iseuser1@testdomain.local.</p>	Current value	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 email address of the user.	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 500 characters.	Null	No
User Home Folder	The home folder of the user.	From the folder tree, select the location of the home folder that the user will be taken to on login.	/	Yes
Allow User to Enable Advanced Mode	Indicates whether this user has advanced mode functionality.	Check this box to specify whether the user has advanced mode functionality. Cannot be selected until the user is a member of an advanced group. To use the expert UI or toggle between expert and basic view the user will also need to have advance user task permissions.	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
Internet Script Editor Enabled	Indicates whether the user is linked to a Unified CCE user.	Check this box to create a linked Unified CCE user that can access Cisco's Internet Script Editor using the security settings of this Unified CCMP user. In this case, the following apply: <ul style="list-style-type: none"> ▪ The login name must correspond to an existing Windows active directory use. 	Cleared	No
ISE Password	The ISE password of the Portal User.	The password must match the password for the corresponding Windows active directory user.	Null	No

Password Tab (only present if the installation does not use single sign on)

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.	The password of the user cannot be the same as their Login Name, and must meet any password restrictions that are specified by the system administrator in Settings > Security Settings . Additionally, for an Internet Script Editor enabled user, the password must match the password for the corresponding Windows active directory user.	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. User Exceeded Maximum Login Attempts is hidden in Single Sign-On mode.	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 after the number of days specified in Settings > Security Settings > Password Expiry . Note: Even	Null	No

		with a password that never expires, if a user does not log in within a specified time limit, the account is disabled. By default, this time limit is 120 Days.		
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 Tab				
Groups	Add this user to a group or remove this user from a group.	To add user to a group, click Add to Group , go to the folder that contains the group, then select the group and click OK . To remove a user from a group, click the  beside the group you want to remove the user from.	Null	No

Managing ISE Enabled Users

About ISE Enabled Users

ISE enabled users are Unified CCMP users that are linked to Unified CCE users. When the linked Unified CCE user runs Cisco's Internet Script Editor (ISE), Unified CCMP security is applied to the scripts and resources shown. So the Unified CCE user is only able to access the ISE scripts and resources that the linked Unified CCMP user is able to access.

There are two ways to create a linked Unified CCE and Unified CCMP user so that Unified CCMP security can be applied to ISE scripts and resources. Normally, you will create the user in Unified CCMP, specify that it is ISE-enabled, and Unified CCMP will automatically create the linked Unified CCE user (see [Creating a User](#)). But if a suitable user already exists in Unified CCE, Unified CCMP will automatically import it. You can then configure the user as ISE-enabled in Unified CCMP.

For more information about configuring ISE to use Unified CCMP security and creating ISE enabled users, see *Administration Guide for Unified CCMP*, chapter Remote Resource Provisioning, section Partitioned Internet Script Editor.

Configuring Imported UCCE Users for ISE Integration

Existing Unified CCE administrator users are automatically imported into Unified CCMP in a format which supports Internet Script Editor (ISE) partitioning. These Unified CCMP users need to be configured before the corresponding Unified CCE users can use the ISE for partitioned editing.

To configure an imported Unified CCE user for partitioned ISE access:

1. In **User Manager** or **Resource Manager**, locate the user to be edited. The user name will be formatted as **<username>@<domainname>**, where **<username>** is the Windows user name and **<domainname>** is the fully qualified Windows domain name. An example of an imported user name could be **iseuser1@testdomain.local**. The imported user will be in your default import location unless you have moved the user after the import.
2. Click the user to view the details.
3. On the **Details** tab, select **Account Enabled** to enable the user.
4. Give this user **Browse Dimensions** permission on the Unified CCE folders and resources that they need to access using the Cisco Internet Script Editor. You can do this in one of the following ways:
 - Select the **Groups** tab and add the user to a group that already has the required permissions.
 - Alternatively, after you have finished the remaining steps in this section, in **User Manager** select the check box beside the user, then click **Change Permissions**. Identify a suitable folder role that includes **Browse Dimensions**, and assign it to this user for each of the folders containing the scripts and resources you want this linked user to be able to access.
5. Click **Save** to update the user details for the linked Unified CCMP user.
6. If your Unified CCMP installation does not use single sign on, then before this user can be used to access ISE, you must log in to Unified CCMP as this user, and supply a password when prompted. This password must be the same as the password for the corresponding Windows active directory user. If your Unified CCMP installation uses single sign on, this step is not required.

For more info about ISE enabled users, see [About ISE Enabled Users](#) and *Administration Guide for Unified CCMP*.

Groups

About Groups


Unified CCMP enables advanced mode users with appropriate permissions to create and manage groups, and to view the folder roles and global roles they have.

Unified CCMP 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. To change the permissions (folder roles) a group has on specific folders, use Security Permissions Manager (see [Security Permissions](#)).

Starting the Group Manager

To start the User Manager:

1. Click the "**Hamburger**" icon () in the menu bar, to show the tools menu.
2. Select **Security > Groups**.

Creating Groups

To create a group:

1. In **Group Manager**, select the folder in which to create the new group.
2. Click the **New** option. The **Create a new group** page opens.
3. 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.
4. Click **Save**.

You can also create a group in Resource Manager (in the Folder Tree panel, select **System > Group**).

Editing Group Details

To edit group details:

1. Click on the group to be edited. A page showing the group details opens.
2. 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.

You can also edit a group in **Resource Manager** by clicking on the group in the **Items** panel (list view).

Moving a Group

To move a group:

1. Select the check box beside the group to be moved.
2. Click **Move**. The **Move a group** page opens.
3. Go to the folder you want to move the group to.
4. Click **Save**.

Alternatively, click on the group name and click the **Move** option from the details page.

You can also move a group in Resource 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. Check the group to be deleted's check box.
2. Click the Delete option and confirm the deletion when prompted.

You can also delete a group in Resource Manager by checking the box beside the group in the Items panel (list view) and selecting **Delete**.

Viewing Group Permissions

To view the permissions of a group (folder roles and global roles):

1. Click on the group. A page showing the group details will open.
2. 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.

The Access option does not show whether these permissions have been assigned directly to the group or are inherited through membership of other groups.

If there is an asterisk (*) beside a folder role or global role in the list, then that permission is not currently active. This may be:
because the folder role or global role is not enabled
because the group has inherited the permission by being a member of a larger group that has the permission, but the larger group is not enabled
because the group is not enabled.

Changing Group Permissions

- To change the permissions (folder roles) members of a group have in a folder, use the Security Permissions Manager (see [Security Permissions](#)).
- To change the global roles that members of a group have, use the Global Role Manager (see [Global Roles](#)).

Changing the Members in a Group

To change the members of a group:

1. Select the **Members** tab of the group to be changed.
2. To remove members, click on the **Delete** (🗑️) icon beside their names.
3. To add members:
 - Click the **Add Members** button. A pop-up will open.
 - Go 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.
4. Click **Close and Save**.

You can also change the members in a group in **Resource 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. Select the **Groups** tab.
2. To remove the group from other groups it is a member of, click the **Delete** icon (🗑️) by the group.
3. To add the group to other groups:
 - Click the **Add to Group** button. A dialog box will open.
 - Go 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.
4. Click **Close and Save**.

You can also change the groups a group belongs to in **Resource Manager** by clicking on the group in the Items panel (list view).



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	Null	Yes

		characters only. Must begin with letter or number.		
Description	A description of the group.	Up to 255 characters.	Null	No

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				
Members	Add members to this group or remove members from this group.	To add one or more members to this group, click Add Members , go to the folder that contains the users to add, then select the user or users and click OK .	Null	No

		To remove a user member from this group, click  beside the user you want to remove from the group.		
Groups				
Groups	Add this group to another group or remove this group from another group.	To add one or more members to this group, click Add Members , go to the folder that contains 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

Security Permissions

About Security Permissions


Unified CCMP allows advanced mode users with appropriate permissions to:

- View the folder-based roles assigned to users and groups for a particular folder
- Assign folder-based 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-based role
- View and edit users
- View and edit groups.

You cannot use the Security Permissions Manager to assign global roles to users and groups. Use the Global Role Manager to assign global roles to users and groups.

Starting the Security Permissions Manager

To start the Security Permissions Manager:

1. Click the "**Hamburger**" icon () in the menu bar, to show the tools menu.
2. Select **Security > Permissions**.

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 Permissions Manager to assign folder roles to users or groups:

1. In **Security Permissions Manager** select the folder that contains the users or groups you want to assign folder roles to.
2. Perform one of the following actions:
 - Click the Users tab to see the users in that folder
 - Click the Groups tab to see the groups in that folder.
3. Check the box or boxes beside the users or groups that you want to edit the permissions for.
4. Click **Change Permissions** to change the folder roles for the selected users or groups.
5. 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.
6. 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.
7. Check the **Change Permissions for Subfolders** if you want to copy the changed permissions to the subfolders of the selected folder also.
8. Click **Save** to see a summary of the folder roles that will be changed.
9. Click **Confirm** to apply the new folder roles.

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 the inheritance rule for a folder:

1. In **Security Permissions Manager** select the folder to change the inheritance.
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 Permissions Manager**, select a folder 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 tasks you want to add to the folder role, and uncheck the tasks you want to remove from the folder role.
4. 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 [Editing a Folder Role](#)).

Editing User Details

To edit user details in Security Permissions Manager:

1. In **Security Permissions Manager**, select the folder that contains the user you want to edit. Click the **Users** tab to see the users in that folder.
2. Edit the user details as described in [Editing User Details](#).
3. Click **Save**.

Editing Group Details

To edit group details in Security Permissions Manager:

1. In **Security Permissions Manager** select the folder that contains the group you want to edit. Click the **Groups** tab to see the groups in that folder.

2. Edit the group details as described in [Editing Group Details](#).
3. Click **Save**.

Roles

About The Role Manager

The Role Manager is only available to advanced mode users.

The Role Manager enables you to create and manage folder roles.

You cannot use the Role Manager to assign folder roles to users and groups. Use the Security Permissions Manager to assign folder roles to users or groups for specific folders.

About Folder Roles

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 CCMP 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 'Resource Manager' task along with tasks like 'Provision Agent', 'Provision Agent Desktop', depending on which resources the folder role allows users to manage.

Important things to note:

- By default, only host administrators can manage folder roles.
- To grant users roles on specific folders, use the Security Permissions Manager instead (see [Security Permissions](#)).
- 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.

Starting the Role Manager

To start the Role Manager so you can manage folder-based roles:

1. Click the "**Hamburger**" icon () in the menu bar, to show the tools menu.
2. Select **Security > 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. Select 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 Permissions Manager** tool (see [Security Permissions](#)).

Editing a Folder Role

To edit a folder role:

1. In **Role Manager**, click the folder role you want to edit.
2. Select the tasks you want to add to the folder role, and clear the tasks you want to remove from the folder role.
3. Click **Save** to save your changes.

Deleting a Folder Role

To delete a folder role, in **Role Manager**, select the folder role you want to delete, click **Delete**, and then **OK**.

You will not be able to delete a folder role that is still being used.

Global Roles

About The Global Role Manager

The Global Role Manager is only available to advanced mode users.

The Global Role Manager enables you to create and manage global roles, and to assign these global roles to users and groups.

About Global Roles

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 'Resource Manager' task has the

potential to access Resource Manager 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 CCMP are determined by the requirements of the different categories of user who will be working within that system.

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.

Global roles 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.

Starting the Global Role Manager

To start the Global Role Manager:

1. Click the "**Hamburger**" icon () in the menu bar, to show the tools menu.
2. Select **Security > Roles**. This starts the Role Manager, which manages folder-based roles.
3. In the Role Manager menu bar, click **Global Roles**.

Creating a Global Role

To create a global role:

1. In the **Global 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.
4. Select the tasks to be included in this global role.
5. Click **Save**.

Assigning a Global Role

To grant or remove global permissions:

1. In the **Global Role Manager**, click the global role to be assigned to users or groups. The properties of the global role are displayed.
2. Click the **Members** tab.

To remove a user or group from this global role:

- 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. Go 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. Select the required members. You can select users and groups from multiple folders. Then click **OK**.
4. Close and **Save**.

Editing a Global Role

To edit a global role:

1. In the **Global Role Manager**, click the global role to be edited.
2. Click the **Details** tab and change the details if required.
3. On the **Tasks** tab select the tasks you want to add to the global role, and clear the tasks you want to remove from the global role.
4. Click **Save** to save your changes.

Deleting a Global Role

To delete a global role:

1. In the **Global Role Manager**, select the global role you want to delete and click **Delete**.
2. Click **OK** to confirm the deletion.

You will not be able to delete a global role that still has members.

Standard Gadgets Guide

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CVP Resource Upload Gadget

The CVP Resource Upload gadget enables you to upload media files to CVP media servers in your system, and to change the audio associated with existing media files.

The mediafiles and IVR apps must be uploaded into a folder that is associated with a CVP resource. A media file is a .wav file that is used by IVR to play back prompts and messages to callers. Media files are stored on CVP media servers. Snippet about media files. IVR apps are uploaded as zip files that contain the various application components. One zip file can contain more than one IVR app.

Uploading a Mediafile

To upload a mediafile:

1. Open the CVP Resource Upload Gadget. From the **Type** drop-down, select **Mediafile**.
2. Select **Create**.
3. From the folder tree, select a folder that is associated with a CVP resource to upload your mediafile into.
4. Click **Next** in the bottom right hand corner.
5. Select the media file server or servers where you want to the media file to be uploaded to.
6. In **Remote Path**, specify the location where the files are be uploaded to. This is a folder location on the media file server. You may include "/" characters to denote subfolders. If the folder does not exist, it will be created. Note that Unified CCMP does not validate this field, and if it is invalid, the upload fails.
7. Click **Add File**, select a **.wav** media file and click **Open**. The **.wav** files must be either μ -Law 8-bit or A-law 8-bit format. The selected file is added to the list of files to be uploaded. You can click **Add File** again to add more files if required, or **Cancel** to remove a file from the list to be uploaded.
8. Click **Upload** to upload the media files to the specified location on the selected media file servers. As each media file is uploaded, you will see the upload status.
9. If an upload succeeds, the media file resource is available immediately in Unified CCMP and on the CVP server. If an upload fails, you can rest the mouse briefly on the upload status to see more information.

Editing a Mediafile

You can replace the audio associated with an existing media file with a new one.

To edit a mediafile:

1. Open the CVP Resource Upload Gadget. From the **Type** drop-down, select **Mediafile**.
2. Select **Edit**.

3. Select the folder containing the mediafile you want to edit, and select the mediafile from the list of available files.
4. Click **Next** in the bottom right hand corner.
5. Click the drop-down by **Servers** and select the server or servers you want to upload the new media file to. Then click **Add Files**, locate the media file to upload, and click **Open**.
6. Click **Upload** to replace the existing media file with the new one. After the upload completes, you will see the upload status.
7. If an upload fails, you can rest the mouse briefly on the upload status to see more information.

Uploading an IVR App

To upload an IVR app:

1. Open the CVP Resource Upload Gadget. From the **Type** drop-down, select **IVR App**.
2. From the folder tree, select a folder that is associated with a CVP resource to upload your IVR App into.
3. Click **Next** in the bottom right hand corner.
4. Select the IVR app server or servers where you want the IVR app to be uploaded to.
5. Click **Add Files** (may appear as **Browse** in some older browsers), select a **.zip** file containing one or more IVR apps to be uploaded and click **Open**. The selected file is added to the list of files to be uploaded. You can click **Add Files** (or **Browse**) again to add more files if required, or **Cancel** to remove a file from the list to be uploaded.
6. Click **Upload** to upload the files to the selected IVR app servers. As each file is uploaded, you will see the upload status.
7. If an upload succeeds, the file is unzipped and each IVR app in the file is copied to the IVR app server. The corresponding resources or resources (one for each IVR app in the file) will be imported into Unified CCMP in the next import cycle. If an upload fails, you can rest the mouse briefly on the upload status to see more information.

Security Requirements for the CVP Resource Upload Gadget

To use gadgets and apps, you need the following permissions:

- To browse gadgets and add them to your home page or run them from an app, a folder-based role that includes **Browse Gadgets**.
- To browse and open apps containing gadgets, a folder-based role that includes **Browse Apps**.

To use the CVP Resource Upload gadget you need:

- To view the site details, a folder-based role that includes **Browse Dimensions** on the Unified CCMP folder that contains the site.
- To modify the site details, a folder-based role that includes **Manage Dimensions** on the Unified CCMP folder that contains the site.

About the Resource Manager Gadget

The Resource Manager gadget (not to be confused with the [Resource Manager provisioning tool](#)) enables you to remotely configure and administer the resources in your contact center system that you have permission to access.

There are two views:

- The **resource grid** view, which lists the resources available and some of their properties. This view can be filtered by resource type or by folder location, or both.
- The **resource detail** view, which shows the details for an individual resource. Users with suitable permissions can also update resources.

Initially the Resource Manager gadget opens in a resource grid view showing the skill groups in your home folder. On subsequent logins, you will see the resource grid that you last viewed.

The current release of the Resource Manager gadget does not support the ability to edit all resource types. If you select an unsupported resource type, the Create, Delete and Move buttons will be disabled, and the Details and Advanced tabs will be displayed in read only. You can still use the classic Resource Manager (previously called System Manager) to view and edit all resources.

About Resources

Resources are the items in the contact center system which can be viewed and updated using Unified CCMP.

There are two types of resource, remote resources and system resources.

- **Remote resources** (sometimes called **dimensions**) are the resources that exist on the remote contact center equipment. Some remote resources can be created or edited in Unified CCMP and provisioned onto the remote equipment. Other remote resources can be viewed in Unified CCMP but cannot be created, edited or provisioned from Unified CCMP. All remote resources must be associated with a specific tenant. Agents, skill groups, dialed numbers, bucket intervals and route partitions are examples of remote resources. Agents, skill groups, and dialed numbers are provisionable remote resources. Bucket intervals and route partitions are non-provisionable.
- **System resources** (sometimes called **Unified CCMP resources**) are the resources that are local to Unified CCMP and are created and managed by Unified CCMP. They are not provisioned onto the remote contact center equipment. System resources may be associated with a tenant but they do not need to be. Users, groups and folders are examples of system resources.

Security Requirements for the Resource Manager Gadget

To use gadgets and apps, you need the following permissions:

- To browse gadgets and add them to your home page or run them from an app, a folder-based role that includes **Browse Gadgets**.

- To browse and open apps containing gadgets, a folder-based role that includes **Browse Apps**.

To use the Resource Manager gadget you need:

- A folder-based role that includes Browse Dimensions to list remote resources in the resource grid and to view their details.
- a folder-based role that includes Manage Dimensions to edit or delete remote resources.
- a global role that includes the appropriate Provision tasks to edit or delete remote resources. For example, to edit agents, you need a global role that includes Provision Agents.

Supported Resources

The Resource Manager gadget supports the following resources.

- [Agents](#)
- [Agent Desktop](#)
- [Agent Teams](#)
- [Call Types](#)
- [Categories](#)
- [Departments](#)
- [Device Profiles](#)
- [Dialed Numbers](#)
- [Dialed Numbers](#)
- [Directory Numbers](#)
- [Enterprise Skill Groups](#)
- [Expanded Call Variables](#)
- [IP Phones](#)
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- [Users](#)
- [User Variables](#)

Creating Resources in the Resource Manager Gadget

You can create a new resource from the resource grid view. Optionally, you can create several resources of the same type one after the other, either from a blank form each time, or from a pre-populated form where the common details from the previous resource are already completed for you.

Creating a Single Resource

To create a resource:

1. In the resource grid, make sure that the resource type filter is one of **Show All** (if not in proxy mode) or the resource type that you want to create.
2. Click **New**. If the resource type filter is **Show All**, choose the resource type you want to create from the list provided. You will see a tabbed form where you can supply the details for the new resource.
3. Click on each tab in turn and complete the details on that tab. The tabs and the details required will depend on the resource type.
4. Click **Save** to save the resource. The resource is created and the resource grid is displayed.

Creating Multiple Similar Resources

To create multiple similar resources:

1. Create the first resource as described above, but instead of selecting **Save**, select click the drop-down beside Save, and select one of:
 - **Save and Reset Form** to save the resource and stay in the resource creation dialog. All fields will be blank. Complete the fields as required.
 - **Save and Copy** to save the resource and stay in the resource creation dialog. Unique fields will be blank (for example, Name, Enterprise Name, First Name and Last Name for a person) but common fields will be pre-populated with the values you specified for the previous resource. Complete the unique fields and change any other fields as required.
2. Click **Save**, **Save and Reset Form**, or **Save and Copy**, depending on what you want to do after this resource is saved.

Entering Data in Resource Manager Fields

The Resource Manager gadget uses some common field types for entering data.

Search Filter

The search filter appears in many places where a list of resources is shown. It enables you to specify a name or partial name to reduce the number of resources shown in the list and make it easier to locate the resource you require.

You may also be able to apply a folder filter to restrict the number of resources shown to those in a particular folder.


To filter the list of resources by name:

- Type a name or partial name in the search box, then click **Search** to see only the matching items.

To filter the list of resources by folder:

- Click the drop-down (where available) and select the folder you want to use for the filter. Only the items available in that folder will be shown.

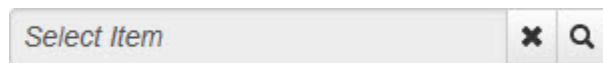
To choose extra filters:

- Click the new filter icon  to filter by column. You can either choose options from the drop-down, or enter the filter manually. Apply the filter. A yellow indicator appears to show that the filter is active, and the grid displays the filtered results.

To clear the filter and show all items:


- Click in the search box, click **X** to clear the field, then click **Search** again.

Resource Selector




The resource selector enables you to select a resource from a list of resources. You must follow these instructions to select a resource. You cannot enter text directly in the field.

To select a resource:

- Click  to open a new dialog box showing a list of items. If the list is long, there will be a search filter so you can restrict the number of items shown. Select the item you require from the list. This populates the resource selector with your choice.

To clear a resource selection:

- Click the  beside the value.

Occasionally, the resource selector is used to select a mandatory field. In that case, the  is not shown, as it is not valid to leave the selection empty.

Association Grid

The association grid enables you to associate resources of one type with resources of another type, for example, to associate agents with agent teams. In some cases, you may also be able to specify information about the association. For example, when you associate a precision attribute with an agent, you can specify the value of the attribute for that agent.

To choose an item to associate:

- Click **Show Available** to see the items that are available to add, and select the required item. The item is added to the items in the association grid.

To delete an existing association:

- Click the **X** beside the item in the list of associated items.

To refresh the list of available items:

- If you delete an item from the association grid, the grid will automatically update itself.

To restrict the number of items shown in the associations grid or in the list of available items:

- Type a name or partial name in the search filter (where provided), then click **Search**. The list of available items may also include a resource type filter or a folder filter or both. Click on the drop-down arrow beside the filter to view the available options and to select the resource type or folder to use to restrict the list of available items.


To close the list of available items when you have finished:

- Click **Hide Available**.

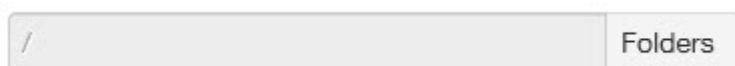
To specify information about the association (only available in some grids):

- In the grid, click the value you want to set, then enter or select the required value. Values that you cannot change are shaded.

To choose extra filters:

- Click the new filter icon  to filter per column. You can either choose options from the drop-down, or enter the filter manually. Once you have applied the filter, a yellow indicator appears to show that the filter is active, and the grid displays the filtered results.

Folder Tree



The folder tree enables you to select a folder in the file structure. You must follow these instructions to select a folder. You cannot enter text directly in the field.

To select a folder:

- Click the drop-down arrow to show the folder tree in a new dialog box, and view the tenants (🏠) and folders (📁) in it. If necessary, click ▶ to expand subfolders, or ◀ to collapse them. Click the tenant or folder you require.

Drop-Down List



The drop-down list enables you to select a single item from a predefined list of items. You must follow these instructions to select an item. You cannot enter text directly in the field.

To select an item from the list:

- Click anywhere the drop-down list field to show the list of items. Click on the item you require. If you start typing a name in the list, that item will be selected automatically.

Viewing And Editing Resource Details and Status

You can use the resource grid to select a resource to view or edit.

Viewing and Editing Resources

To view or edit a resource:

1. Click on the resource in the resource grid. The resource grid is replaced with a tabbed view showing the details for the selected resource. The title of the resource manager gadget changes to show the name of the selected resource.
2. Click on each tab to see the properties of the resource. The tabs and the details shown will depend on the resource type.
3. If you want to edit the resource, make your changes.
4. To return to the resource grid and save your changes, click **Save**.
5. To return to the resource grid without saving your changes, click **Cancel** at the bottom of the resource form.

Viewing Resource Status Information

To view resource status information:

View resource status information in one of two ways.

- To see the current status of a resource, view the resource as described above. The current status of the resource is shown at the bottom of the gadget.

- If more than one resource may contribute to the status (for example a person and the associated agents each have their own status), the least successful status is shown.
- If the resource has an error status, you can hover over the status icon to see the details of the error. If errors in multiple resources have contributed to the error status, up to three errors are shown.
- To see the complete status history for the resource, select the **History** tab. You can filter the details by date and event type. For some resource types, there may be other filter options too.

Viewing Resources in the Resource Grid

In the resource grid, users can

- Apply a resource type filter to show only resources of a single type
- Apply a folder filter to show only resources in a single folder and subfolders
- Apply a search filter containing a name or partial name to reduce the number of resources shown in the list and make it easier to locate the resource you require.
- Sort the resources by any of the listed properties.
- Create, delete, rename, and move folders.


Applying Resource Type Filters

To apply a resource type filter:

1. Click the drop-down arrow beside **Filter**, and select the resource type you want to use for the filter.
2. To view resources of all types, select **Show All**. The filter text is updated to show the resource type you selected, and the resource grid is updated to show only those resources.

Applying Folder Filters

To apply a folder filter:

1. Click  and select the folder you want to use for the filter. The folder location is updated to show the folder you selected. If you want to include items in subfolders as well, select **Search children and subfolders**. The resource grid is updated to show only the items in the folder that you specified.
2. If you select a folder that is itself a resource type filter (for example, **/Tenant1/Boston/Agent Team** is an agent team filter in the **/Tenant1/Boston** folder) the resource type filter is also updated to show the resource type you selected.
3. Click anywhere in the resource grid to close the folder tree and reactivate the resource grid. You will not be able to do anything else in the resource grid until the folder tree has been closed.

Applying Search Filters

To apply a search filter:

- In the search box at the top of the grid on the right, type a name or partial name, followed by **Enter**. The resource grid is updated to show only the items that match the name or partial name.

To clear the search filter, click in the search box , click **X** to clear the field, then click **Enter**.


Sorting Resources

To sort the resources:

1. Click on a column heading in the resource grid to sort the resource grid by the values in that column.
2. Click on a column again to reverse the sort order.

Managing Folders


To manage folders:

1. To create a folder, right-click where you want to create the new folder, and select **Create Folder**. Enter a name for the new folder.
2. To delete a folder, right-click on the folder you want to be deleted, and select **Delete Folder**. A dialog box opens, prompting you to review changes. Click **Confirm** to continue.
3. To rename a folder, right-click on the folder you want to rename, and select **Rename Folder**. Type in the new name for the folder.
4. To move a folder, select the folder you want to move, and drag it to where you want to move it to. When  appears you can drop the folder into position.

Moving Resources

Users can use the resource grid to select one or more resources to move to a different folder.


To move resources:

1. Make sure that the resource or resources you want to move are shown in the resource grid.
2. Select the check box beside the resource or resources that you want to move. You can select the check box in the column heading to select all resources in the grid.
3. Click  , then click the drop-down arrow beside the folder location and select the folder you want to move the resource or resources to. Click **OK**.
4. You will see a dialog box showing the progress of the move. It will display **Item(s) Moved** when the move is complete. To close it, click **X**.

Deleting Resources

Users can use the resource grid to select one or more resources to delete.

To delete a resource:

1. Make sure that the resource or resources you want to delete are shown in the resource grid.
2. Select the check box beside the resource or resources that you want to delete. You can select the check box in the column heading to select all resources in the grid.
3. Click , then click **OK**.
4. You will see a dialog box showing the progress of the deletion. It closes automatically when the deletion is complete.

Agents

Agents are created and edited using the Peripheral tab on the [person](#) resource. See [Persons and Agents](#).

Agent Desktops

Agent desktops associate a set of permissions or characteristics with specific agents.

For more information, see [About Agent Desktops](#).

Agent Desktop Properties

For more information, see [Agent Desktop Fields](#).

Details Tab

Shows the item details.

- **Folder:** Only shown when the item is first created. The folder in which to create the item.
- **Name:** The name used to identify the item in Unified CCMP.

This may not be the same as the name by which the item is known on the remote equipment. Changing this name will not change the name on the remote equipment.
- **Description:** A description of the item.
- **Ring no answer time:** The number of seconds before a call is redirected if not answered.
- **Ring no answer dialed number:** A resource selector showing the dialed number for a new re-route destination if there is no answer. The selection list consists of the dialed numbers configured for the system.
- **Logout non-activity time:** The number of seconds the system will wait before logging out an inactive agent in the not ready state. Leave blank to disable the timer.

- **Incoming work mode:** Indicates whether the agent can enter work mode after an incoming call. One of:
 - **Optional**
 - **Required**
 - **Not Allowed**
 - **Optional with Wrap-Up Data**
- **Outgoing work mode:** Indicates whether the agent can enter work mode after an outgoing call. One of:
 - **Optional**
 - **Required**
 - **Not Allowed**
- **Wrap-up time:** The amount of time in seconds allocated to an agent to wrap up the call.
- **Assist call method:** Indicates the type of call to use for a supervisor assistance call.
- **Emergency call method:** Indicates the type of call to use for an emergency call.
- **Recording Mode:** Specifies whether calls are routed through the Peripheral Interface Manager (PIM)
- **Remote Agent Type:** Indicates how mobile agent call routing is handled. One of
 - **Local Only:** Mobile agent call routing is not required.
 - **Call by Call Routing:** The mobile agent is called individually for each call.
 - **Nailed Connection Routing:** The mobile agent is called at login and remains connected until log off.
 - **Agent Chooses At Login:** The mobile agent can choose one of the two mobile agent call routing types at login. For information about configuring mobile agents, see *Administration Guide for Cisco Unified Contact Center Management Portal*.
- **Miscellaneous:** Select as many of the following options as required:
 - **Auto answer:** Calls to the agent are automatically answered.
 - **Idle reason required:** The agent must enter a Not Ready reason before entering the Idle state.
 - **Logout reason required:** The agent must enter a reason before logging out.
 - **Auto record on emergency:** A request to record the call is automatically sent when an emergency call request starts.
 - **Silent Monitor Audible Indication:** Specifies whether to indicate that silent monitoring has begun by a click.
 - **Silent Monitor Warning Message:** A message box is displayed on the agent's desktop when silent monitoring begins.
 - **Available after Incoming:** The agent is automatically available after handling an incoming call.

- **Available after Outgoing:** The agent is automatically available after handling an outgoing call.
- **Remote Login Without Desktop:** The agent can log in to the contact center without using an agent desktop.
- **Outbound Access:** If agents can make outbound calls, specifies the type of outbound calls they can make. Select zero, one or more of:
 - **International**
 - **National**
 - **Local private network**
 - **Operator assisted**
 - **PBX**
 - **Agent to Agent**
 - **Non ACD Calls**
 - **Initiate Supervisor Calls Allowed**

Agents Tab

Shows the agents that are associated with this agent desktop.

- **Agents:** A list of agents associated with this agent desktop. This is an association grid.

Advanced Tab

Shows the advanced properties.

- **Enterprise Name:** The name used to identify the item on the remote equipment. Leave blank to auto-generate a unique name.
- **Active From Date:** The date from which the item will be active within the system.
- **Active To Date:** The date after which the item will be deleted from the system. Either leave **Forever** selected, or clear **Forever** and select a date from calendar.
- **Department:** The department that the item is associated with. Select from the drop-down list. Only shown for tenants that are not small contact center tenants, and are associated with Unified CCE instances running Unified CCE version 10.0 or later.

History Tab

Shows the event history for this item. Not shown when the item is first created.

- **Date from:** The date of the earliest events to include in the list.
- **Date to:** The date of the most recent events to include in the list.
- **Type:** The type of event to include in the list. Select from the drop-down list.

To change the event history display

- Enter the date range and type of events you are interested in, then click **Search** to see the selected events.

Custom Data Tab

Shows the custom data.

- **Key:** The key for this custom data item.
- **Value:** The value to associate with this key. If default keys for the resource type are defined in a custom data template, an initial value for each default key will be present.

To add a new custom data key-value pair

- Complete both fields, and click **Add**. A resource can have a maximum of ten custom data key-value pairs.

To edit a custom data value

- Click the value you want to change, and enter the new value.

To delete a key-value pair

- Click the X beside the entry, then click **OK** to confirm the deletion.

You cannot delete the entry or edit the key field for default keys. You can only edit the value field.

Agent Teams

About Agent Teams

An agent team is a group of individuals that can be managed by a supervisor. Agents are assigned to agent teams individually.

For more information, see [About Agent Teams](#).

Agent Team Properties

For more information, see [Agent Team Fields](#).

Call Types

About 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 or scripts are active for that call type at any time.

Call Types and Dialed Number Associations

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.

Call Types and Routing Scripts

Because the call type determines which routing script is run for a call, the call type defines call treatment.

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.

Call Type Properties

For more information, see [Call Type Fields](#).

Category

About Categories

A category is a mechanism that can be used to define groups of related items.

Category Properties

Details Tab

Shows the item details.

- **Folder:** Only shown when the item is first created. The folder in which to create the item.
- **Name:** The name used to identify the item in Unified CCMP.
- **Description:** A description of the item.
- **Type:** The category type.

Resources Tab

Shows the resources that are associated with this category.

- **Resources:** A list of resources associated with this category. This is an association grid.

Advanced Tab

Shows the advanced properties.

- **Active From Date:** The date from which the item will be active within the system.
- **Active To Date:** The date after which the item will be deleted from the system. Either leave **Forever** selected, or clear **Forever** and select a date from calendar.

History Tab

Shows the event history for this item. Not shown when the item is first created.

- **Date from:** The date of the earliest events to include in the list.
- **Date to:** The date of the most recent events to include in the list.
- **Type:** The type of event to include in the list. Select from the drop-down list.

To change the event history display

- Enter the date range and type of events you are interested in, then click **Search** to see the selected events.

Departments

About Departments

A department is a grouping of related resources according to user-defined business needs. You can create a department, then add various resources to it, to reflect your particular organization.

For more information, see [About Departments](#).

Department Properties

For more information, see [Department Fields](#).

Device Profiles

About Device Profiles

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 Communications Manager users. A device profile may contain a number of directory number mappings.

For more information, see [About Device Profiles](#).

Device Profile Properties

For more information, see [Device Profile Fields](#).

Dialed Numbers

About Dialed Numbers

A dialed number 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.

For more information, see [About Dialed Numbers](#).

Dialed Number Properties

For more information, see [Dialed Number Fields](#).

Directory Numbers

About Directory Numbers

A directory number is an extension line which is attached to an IP phone.

For more information, see [About Directory Numbers](#).

Directory Number Properties

For more information, see [Directory Number Fields](#).

Enterprise Skill Groups

About Enterprise Skill Groups

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.

For more information, see [About Enterprise Skill Groups](#).

Enterprise Skill Group Properties

For more information, see [Enterprise Skill Group Fields](#).

Expanded Call Variables

About Expanded Call Variables

An expanded call variable (ECC) is a named object which is used by a VRU script to exchange call information with the Unified CCE.

You cannot edit default expanded call variables. You can only create and delete them.

For more information, see [About Expanded Call Variables](#).

Expanded Call Variable Properties

For more information, see [Expanded Call Variable Fields](#).

IP Phones

About IP Phones

A IP phone (or telephone) is the IP device that the contact center agent uses to make or receive calls.

For more information, see [About IP Phones](#).

IP Phone Properties

For more information, see [IP Phone Fields](#).

Labels

About Labels

In Unified CCE the label represents a string that is passed to a routing client for each network target. Unified CCMP will automatically create labels for many high level operations but the functionality is included for specific label creation such as blind transfers. The only supported network target is device target.

For more information, see [About Labels](#).

Label Properties

For more information, see [Label Fields](#).

Network VRU Scripts

About Network VRU Scripts

A network Voice Response Unit (VRU) script is a script that runs on a network VRU (a telecommunications computer that responds to voice or caller-entered touch-tone digits). One or more network VRU scripts may be called by a Unified ICME routing script to handle the interaction with the caller and route the call appropriately.

For more information, see [About Network VRU Scripts](#).

About Unified CVP Micro-Applications

Network VRU scripts invoke Unified CVP micro-applications which are used to provide prompts, collect user responses and play .wav files while callers are queuing. Network VRU scripts can invoke the following micro-applications.

- **Play Media (PM):** Plays a message that is contained in a media file or streaming audio file. This may be used, for example, to play a welcome message, or to play music while the caller is in a queue.
- **Play Data (PD):** Retrieves data from a storage area and plays it to the caller in a specific format, called a data play back type. This data may be, for example, information retrieved from a database, or information entered by the caller.
- **Get Digits (GD):** Plays a media file and retrieves one or more digits from the caller. For example, this micro-application may be used to prompt a caller to enter a password.
- **Menu (M):** Plays a menu media file and retrieves a single digit from the caller. This is similar to the Get Digits micro-application, but it only accepts a single digit, and also checks that it is valid. This micro-application may be used, for example, to offer the caller several options in a menu, and retrieve the option chosen by the caller.
- **Get Speech (GS):** Collects voice or tone dialing (DTMF) input from the caller. This micro-application may be used, for example, to retrieve a spoken "Yes" or "No" response from the caller or to detect that the caller has pressed the # key.
- **Capture (CAP):** Captures and stores data about the call at that point in the routing script. The data collected can be used for analysis purposes.

Use the Capture micro-application sparingly. It places a heavy processing load on the system, and may capture a lot of data that is not required along with data that is useful. Overuse of the Capture micro-application may reduce the call handling capability of the system.

About Network VRU Script Configuration

To define the network VRU script configuration you need to specify:

- The network VRU script name, a composite string containing the micro-application to run, the associated media file (if required by the micro-application) and any parameters required by the micro-application. The value specified for the network VRU script name is used to derive the name to be used for the media file when it is uploaded.
- The configuration parameters to be passed to the Network VRU Script when it runs. This is a string, and the format depends on the micro-application specified.
- The audio file to upload and associate with the Network VRU Script (where applicable). When the audio file is uploaded, it will be named with the media file name specified in the VRU script name string. If you specify an incorrectly formatted network VRU script name string, you will not be able to upload the audio file.

The audio file cannot be specified when the network VRU script is first created. You must first create the network VRU script item, then edit it to specify the audio file.

For more information about the Unified CVP micro-applications, the corresponding VRU script name strings and the configuration parameters, see the Feature Guide - Writing Scripts for Cisco Unified Customer Voice Portal, downloadable from http://www.cisco.com/en/US/products/sw/custcosw/ps1006/tsd_products_setup_series_home.html.

Network VRU Script Properties

For more information, see [Network VRU Script Fields](#).

Persons and Agents

About Persons

In Unified CCMP, each person item represents a single physical person who handles call center customer contacts. This person may optionally have a user account on Unified CCMP.

Each person is associated with one or more agents, and has one associated agent for each peripheral the person uses.

For more information, see [About Persons](#).

About Agents and Supervisor Agents

Agents

An agent is a person who handles customer contacts on a particular peripheral. Each agent is associated with an Unified CCMP person. Multiple agents can be associated with a single person. For example, someone who provides cover for agent teams on different peripherals will be represented by a separate agent account on each peripheral.

For more information, see the Agents section of About Agents and Supervisor Agents.

Supervisor Agents

A supervisor agent is an agent, often with a user account on Unified CCMP, who can administer specific agents and agent teams. A supervisor agent does not have to be actually assigned as a supervisor to any agent team, but an agent must be a supervisor agent to supervise an agent team.

For more information, see the Supervisor Agents section of About Agents and Supervisor Agents.

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

If an agent is a supervisor agent, and if the associated Person has an Unified CCMP user account, that user should be added to the Unified CCMP Supervisors security group. This allows Unified CCMP users to edit agents and agent teams. If an agent is a supervisor agent, then the agent must be associated with a domain account before they can have precision attributes associated to them.

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.

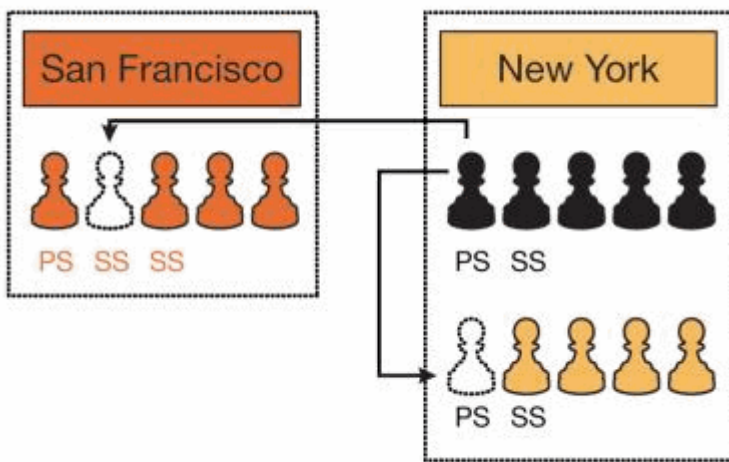
First, ExampleCorp creates two teams (Green and Blue) in New York, and one (Red) in San Francisco. Then it creates five persons in San Francisco and ten Persons in New York, creates an agent associated with each, and adds each agent to a team.

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.



Agent Teams Example

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

If an agent is a supervisor agent, and if the associated Person has a Unified CCMP user account, that user should be added to the Unified CCMP Supervisors security group. This allows Unified CCMP users to edit agents and agent teams. If an agent is a supervisor agent, then the agent must be associated with a domain account before they can have precision attributes associated to them.

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.

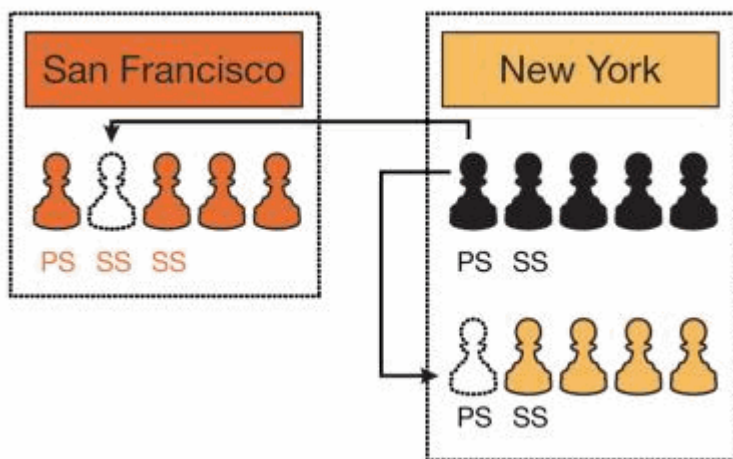
First, ExampleCorp creates two teams (Green and Blue) in New York, and one (Red) in San Francisco. Then it creates five persons in San Francisco and ten Persons in New York, creates an agent associated with each, and adds each agent to a team.

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.



Agent Teams Example

Person and Agent Properties

For more information, see [Person Fields](#).

Precision Attributes

About Precision Attributes

A precision attribute (also referred to as an attribute) is some user-defined information that can be associated with an agent. It defines the agent's knowledge or experience in a particular area and the level of that knowledge or experience. A precision attribute has a name, which identifies the attribute, and a value, which indicates the level an agent has attained for that attribute.

For more information, see [About Precision Attributes](#).

About Auto-Attributes

Auto-attributes are only available if the optional Unified CCMP Service Management component has been purchased and installed.

An auto-attribute is associated with a precision queue. It is a system calculated attribute that stores an agent's proficiency value based on their performance in that precision queue. Unified CCMP Service Management automatically updates the attribute value to reflect the ongoing performance of the agent.

You can onboard agents to an auto-attribute within a precision queue using the Precision Queue Auto Sync Onboarding Gadget. See [Precision Queue Auto Sync Onboarding Gadgets](#).

Precision Attribute Properties

Tabs and Fields

For more information about tabs and fields, see [Precision Attribute Fields](#).

Precision Queues

A precision queue is a mechanism that defines how to route calls to agents depending on each agent's proficiency attributes and availability. Precision queues can be referenced in routing scripts to define how calls are routed. For more information, see [About Precision Queues](#).

Precision Queues can only be created on tenants that are associated with a Unified CCE instance running Unified CCE version 10.5 or later.

Precision Queue Properties

Tabs and Fields

For more information, see [Precision Queue Fields](#).

Services

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.

Service Properties

Tabs and Fields

For more information, see [Service Fields](#).

Skill Groups

A skill group is a collection of agents who share a common set of skills that enable them to handle a particular type of task. For example, a skill group could define a group of agents who are proficient at providing technical support for a particular product. Agents are assigned one or more skills by associating the agent with the desired skill groups.

For more information, see [About Skill Groups](#)

Skill Group Properties

Tabs and Fields

For more information, see [Skill Group Fields](#).

Users

A user is an Unified CCMP portal user with an Unified CCMP login. A user may be associated with a person resource but it does not need to be.

User Properties

Details Tab

Shows the item details.

- **Folder:** Only shown when the item is first created. The folder in which to create the item.
- **Login Name:** A unique login name for the Portal user. Any Unicode character is valid. Additionally, for an Internet Script Editor enabled user, the login name must correspond to an existing Windows active directory user. This name must be formatted as <domainname>@<username>, where <username> is the Windows username and <domainname> is the fully qualified Windows domain name, for example, iseuser1@testdomain.local
- **Password:** The password for this user. The password cannot be the same as Login Name and must meet any password restrictions that are specified by the system administrator in **Settings > Security Settings**. Additionally, for an Internet Script Editor enabled user, the password must match the password for the corresponding Windows active directory user.
- **Confirm Password:** Must be the same as for Password.
- **First Name:** The first name of the Unified CCMP portal user.
- **Last Name:** The last name of the Unified CCMP portal user.
- **Email:** The user's email address. Must be a valid email address in the format **name@domain.extension**.
- **Description:** A description of the item.
- **Culture:** The language and location setting for this user.
- **User Home Folder:** The user's home folder. The user is positioned here when they log on.
- **Create a new folder for this user:** Only shown when user is first created. Select to create a new folder for the user below the specified User Home Folder. The name of the new folder will be the specified Login Name followed by the default folder suffix specified in **Settings > Security Settings > User Folder Suffix**.
- **Advanced Mode:** Indicates whether this user has advanced mode functionality.
- **Account Enabled:** Indicates whether this user is currently active on the system. The user will not be able to login to Unified CCMP if this is not set.
- **Local Login Enabled:** Indicates that the user can access Unified CCMP using local login.
- **Internet Script Editor Enabled:** Indicates that the user can access Cisco's Internet Script Editor using the security settings of this Unified CCMP user.

- **ISE Password:** Only shown when **Internet Script Editor Enabled** is selected. The ISE password of the Unified CCMP portal user. The password must match the password for the corresponding Windows active directory user.

The following fields are only shown on the **Details** tab when a user is first created. For existing users, they are shown on a separate **Password** tab.

- **User must change password at next logon:** Indicates that this password is only valid for a single login. If set the user will be forced to change their password the next time they log in to Unified CCMP.
- **Password Never Expires:** Indicates that the password will never expire. If not set, the password will expire after the number of days specified in **Settings > Security Settings > Password Expiry**.
- **User cannot change password:** Indicates that the user cannot change their password. If not set, the user can change their password using **Settings > Change Password**.

Password Tab

Shows the password details for this user. This tab is not shown when a user is first created (the required information is shown on the Details tab). This tab is not shown at all if the installation uses single sign-on.

- **Reset Password:** Select to reset the user's password to a value of your choice, for example, if the user has forgotten their password or been locked out of the system because they have entered their password incorrectly several times. If you set this, you may also want to set **User must change password at next logon** to force the user to choose a new password when they next log in.
- **Password:** Only shown if **Reset Password** is selected.
- **Confirm Password:** Must be the same as for **Password**.
- **User Exceeded Maximum Login Attempts:** Set if the user has exceeded the number of incorrect login attempts specified in **Settings > Security > Login attempts before lockout**.
- **Password Never Expires:** Indicates that the password will never expire. If not set, the password will expire after the number of days specified in **Settings > Security Settings > Password Expiry**.

Even with a password that never expires, if a user does not log in within a specified time limit, the account is disabled. By default, this time limit is 120 Days.

- **User cannot change password:** Indicates that the user cannot change their password. If not set, the user can change their password using Settings > Change Password.
- **User must change password at next logon:** Indicates that this password is only valid for a single login. If set the user will be forced to change their password the next time they log in to Unified CCMP.

Groups Tab

Shows the groups that are associated with this user.

- **Groups:** A list of groups associated with this user. This is an association grid.

User Variables

A user variable is a named object which can hold a value up to 40 characters long.

For more information, see [About User Variables](#).

User Variable Properties

Tabs and Fields

For more information, see [User Variable Fields](#).

System Administration Tasks

- [About Administrator Tasks](#)
- [Agent and Group Related Tasks](#)
- [Contact Routing Tasks](#)

About Administrator Tasks

This section identifies the main tasks that users with tenant administrator permissions perform in Unified CCMP. 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 Desktops	<p>An Agent Desktop associates 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.</p> <p>You can create a Default Desktop that is the set of permissions automatically assigned to all new agents unless overridden.</p>	Manage Agent Desktops page
Create Agents and Agent Supervisors. Assign desk settings to agents.	<p>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.</p> <p>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.</p>	Manage Agents page
Create Skill Groups and assign agents to skill groups.	<p>A skill group is a collection of agents that share a common set of skills. Skill groups are one of the primary devices for call routing.</p>	Manage Skill Groups page

	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 email.	
Create Agent Teams. Assign agents and supervisors to teams.	Agent teams allow you to associate a set of agents with a specific supervisor. This association 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. 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 relate 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	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	Manage Dialed Numbers page

Dialed
Numbers.

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.

Troubleshooting

- [Common Problems](#)
- [Remote System Troubleshooting](#)

Common Problems

This section enables you to quickly troubleshoot common problems.

Resource Problems

The connection to Unified CCE is down but resources are still being successfully updated

The success message you see on saving a resource indicates only that the change has been made within Unified CCMP. This change still needs to be propagated into Unified CCE / Unified CCH.

If, for any reason, Unified CCE / Unified CCH cannot be updated, provisioning a resource will still display a success message, but that resource will then enter the **Pending Active** or **Error** states, rather than becoming Ready.

The resource I created stays in the Pending Active state and never becomes Ready

First, check the **Advanced** tab and ensure that the resource does not have an **Active From** date in the future.

A resource may stay in the **Pending Active** state (in other words, provisioned on Unified CCMP but not on Unified CCE / Unified CCH) either because the system is busy or because the provisioning server is offline.

If the resource's **History** tab shows that the system has unsuccessfully attempted to make changes to Unified CCE / Unified CCH, then the system is probably just busy. You can use the [Activity Monitor](#) to view the status of the provisioning queue.

If the resource's **History** tab shows that no attempts have been made, the provisioning server may be offline and your system administrator should be made aware of the problem.

The agent I created/edited stays in Pending Active/Error but no problem can be found

Because agent resources require person resources, problems with the agent may reflect problems with the underlying person.

For example, if the person has an **Active From** date in the future then the agent will not provision even if the agent's **Active From** date is not in the future.

An agent is in an error state because it could not be deleted while still logged in

If an agent is deleted while the agent is logged in, the deletion cannot be completed and the agent moves to the error state. This can also happen if the agent was logged in and the agent expires because the **Active To** date was reached.

To fix this, do one of:

- When the agent has logged out, delete the agent again.

- View the agent in **Resource Manager** and click **Save** to reinstate it. Note that if you do this, you will also need to reinstate their skill groups, precision attributes and agent teams as these relationships will already have been deleted.

I can't edit my agents and skill groups

To edit agents and skill groups, you need to have security permissions that allow you to see the peripheral that they belong to. If you do not have these permissions, you will not be able to modify your agents.

Speak to your system administrator to ensure you have **Browse Dimensions** permissions on the folder containing the peripheral your agents belong to.

I can't see any resources in Resource Manager

If you can see no resources in **Resource Manager** then you probably do not have **Browse Dimensions** security privileges on any folders. If you believe that you should have **Browse Dimensions** permissions, contact your system administrator.

I can't create or edit resources

If you are unable to provision resources, you may not have **Manage Dimensions** privileges on the folder you are trying to provision resources in, or you may not have the global permissions to provision some types of resource. If you believe that you should have these permissions, contact your system administrator.

When trying to create a resource I get the error: Unable to create the resource - The specified field already exists

This occurs when the resource you are trying to create shares with an existing resource a field that must be unique, such as the login name for a person or the number for a dialed number.

You can create your new resource by changing the field that conflicts, for example changing a person's login name from JSmith to JohnSmith. Before you do, make sure that the conflict does not mean that someone else has already created the resource you are trying to create.

If no duplicate resource appears to exist, this may indicate that the resource has been deleted. Deleted resources are kept in the system for audit purposes so a new resource cannot conflict with an old one.

I cannot see an item's related resources (such as agents for an agent team)

This is probably because the related resources are located in a folder that you do not have **Browse Dimensions** security privileges on.

If you think that you should be able to see the related resources, contact your system administrator, who may either provide you with **Browse Dimensions** privileges on the appropriate folder or move the related resources into a folder that you have those privileges on.

When trying to create a resource I get the error: Provisioning on this equipment is disabled

This error occurs when the tenant for which you are attempting to create resources has not been specified as a provisionable tenant.

You can still provision this tenant in the normal way, through the ICM.

I get a 'Server Error' when running a report

If you get a server error when running a report, check whether the Stack Trace contains the text **Cannot impersonate user for data source 'Portal'**.

If so, this indicates that the cryptographic password was incorrectly typed during installation of Unified CCMP. Contact your system administrator.

User Problems

Basic user has no agent or skill group options

Either the user has not been set to be the supervisor of a team, or the user does not have **Manage Resources** permissions on their home folder.

1. First, check whether the user is a supervisor of a team:
 1. In **Resource Manager**, go to the folder containing the user and click on the name of the associated person to view their details.
 2. Click on the **Agents** tab to see the associated agents.
 3. Click on the details icon for an agent to see its properties.
 4. Ensure that the agent is set to be a supervisor on the **Supervisor** tab.
 5. Ensure that the agent is set as a team supervisor on the **Agent Teams** tab.
2. If the associated agent is set to be a supervisor, it is likely that the user does not have **Manage Resources** permissions on their home folder.
 1. Check that the user's home folder is the same as the folder that they are in. If the user has recently been moved to another folder, their home folder may not have been updated.
 2. Check that the user has **Manage Resources** permissions on their home folder.

Remote System Troubleshooting

A resource may report an error on the History tab. Some of these errors indicate provisioning problems on Unified CCE. This section lists the [Unified CCE Error Numbers](#) and the [Unified Communications Manager Error Numbers](#).

Unified CCE Error Numbers

- **-9982** - Cannot connect to central controller
- **-9976** - General error relating to an invalid submission to Unified CCE (may be caused by a resource with the same name or number already existing, a capacity limit being breached or an internal validation error occurring)
- **-9958** - Exclusive update access was not granted to the central database because another user is doing an update

- **-9955** - Exclusive access to the router denied because no logger is currently available
- **-9922** - Exclusive access to the router denied because the router is busy
- **-9921** - Exclusive access to the router denied because the logger is not responding to router version pings
- **-9919** - Exclusive access to the router denied because the router has not initialized its configuration
- **-1** - General error which may be caused by missing or invalid values attempting to be sent to Unified CCE
- **0** - IcmNoError
- **1** - Exception_Fatal
- **2** - Exception_Transaction
- **5** - Exception_Version
- **6** - Exception_Build_Number
- **10** - Exception_DB
- **11** - Exception_DB_ChangeStamp
- **12** - Exception_DB_DuplicateObject
- **13** - Exception_DB_ObjectNotExists
- **14** - Exception_DB_Validation
- **20** - Exception_Security
- **21** - Exception_Security_Login
- **22** - Exception_Security_NotOnPeripheral
- **23** - Exception_Security_AgentDisabled
- **24** - Exception_Security_AppRegister
- **25** - Exception_Security_AccessDeny
- **31** - Exception_TimeOut
- **32** - Exception_Network
- **33** - Exception_Invalid_State
- **34** - Exception_ThreadInterrupted
- **100** - CmsUnknownException
- **200** - Cms_SystemError
- **4052** - Cannot insert or update pattern. A DN exists with the same pattern and partition.
- **35139** - Route Partition Name has invalid format. It should contain letters, numbers, underscore and dash, minimum length is 1 and max length is 50. Regular expression used to validate: `^[a-zA-Z0-9_]{1,50}$`.

- **40049** - Skill Groups on CUCM or UCCE System or Agent Routing Services Peripherals and CISCO_VOICE must use ICM Picks the Agent
- **40062** - You do not have permission to create this object. It should be created by the Application that owns the media type on which you are attempting to create this object
- **80000** - JRequester_Request_TimeOut
- **80001** - Invalid_REM_Format
- **80002** - Invalid_JRequester_State
- **80003** - Network_Link_Down
- **80004** - RemoteClient_Request_TimeOut
- **80005** - JRequester_InvalidArgument
- **80006** - JRequester_ThreadInterrupted

Unified Communications Manager Error Numbers

- **Less than 5000 - DBL Exception Code:** These are errors that directly correspond to DBL Exception error codes. Please refer to the documentation for the DBLException class for explanations of these errors.
- **5000 - Unknown Error:** An unknown error occurred while processing the request. This can be due to a problem on the server, but can also be caused by errors in the request.
- **5002 - Unknown Request Error:** This error occurs if the user agent submits a request that is unknown to the API.
- **5003 - Invalid Value Exception:** This error occurs if an invalid value is detected in the XML request.
- **5004 - AXL Unavailable Exception:** This error occurs if the AXL service is too busy to handle the request at that time. The request should be sent again at a later time.
- **5005 - Unexpected Node Exception:** This error occurs if the server encounters an unexpected element. For example, if the server expects the next node to be <name>, but encounters <protocol>, then this error is returned. These errors are always caused by malformed requests that do not adhere to the latest AXL Schema.