

# **Administration**

- Unified CCE Administration, on page 1
- Unified CVP Administration, on page 64
- Unified Communication Manager Administration, on page 64
- Single Sign-on Administration, on page 87

# **Unified CCE Administration**

- Provision Unified CCE Using Unified CCDM, on page 1
- Provision Unified CCE Using Administration Workstation, on page 62
- Provision Unified CCE Using Web Administration, on page 63
- Provision Routing Script Using Internet Script Editor, on page 63

# **Provision Unified CCE Using Unified CCDM**

Complete the following procedures to provision the Unified CCE using Unified Contact Center Domain Manager (Unified CCDM).

- CRUD Operations for Unified CCDM Objects, on page 2
- Configure User, on page 4
- Configure Departments, on page 7
- Configure Agents, on page 8
- Configure Agent Desktop, on page 10
- Configure Agent Team, on page 11
- Configure Call Type, on page 13
- Configure Precision Routing, on page 14
- Configure Network VRU Scripts, on page 18
- Configure Dialed Number, on page 20
- Configure Enterprise Skill Group, on page 21

- Configure Expanded Call Variable, on page 23
- Configure ECC Payload, on page 24
- Configure Folder, on page 25
- Configure Group, on page 27
- Configure Label, on page 29
- Configure Person, on page 30
- Configure Supervisors, on page 31
- Configure Service, on page 32
- Configure Skill Group, on page 33
- Configure Route, on page 35
- Agent Re-skilling and Agent Team Manager, on page 35
- Configure User Variable, on page 38
- View the Unified CCDM Version, on page 39
- Bulk Operations Using Unified CCDM, on page 39
- Manage Roles, on page 54
- Configure Gadgets, on page 61

# **CRUD Operations for Unified CCDM Objects**

The following table mentions the Create, Read, Update, and Delete (CRUD) operations for Unified CCDM objects.



Note

Bulk upload supports only the create operation. See Bulk Operations Using Unified CCDM, on page 39. You cannot edit any default resources in CCDM portal.

Object	Create	Read	Update	Delete	Bulk Upload
Bucket Interval, see Configure Call Type, on page 13.		Х			
ECC Variables, see Configure Expanded Call Variable, on page 23.	X	Х	х	X	
Network VRU Script, see Configure Network VRU Scripts, on page 18.	X	Х	Х	X	х

Object	Create	Read	Update	Delete	Bulk Upload
Call Type, see Create a Call Type, on page 13.	X	Х	х	X	х
Dialed Number, see Configure Dialed Number, on page 20.	Х	Х	х	Х	х
Skill Group, see Configure Skill Group, on page 33.	X	X	х	х	х
Folder, see Configure Folder, on page 25.	Х	Х	х	X	х
Group, see Configure Group, on page 27.	X	X	х	X	
Agent, see Configure Agents, on page 8.	X	X	х	X	х
Agent Desktop, see Configure Agent Desktop, on page 10.	X	х	х	Х	х
Agent Team, see Configure Agent Team, on page 11.	X	X	x	X	х
Person, see Configure Person, on page 30.	X	X	х	х	х
User, see Configure User, on page 4.	X	Х	x	X	х
User Variable, see Configure User Variable, on page 38.	Х	Х	х	Х	х
Enterprise Skill Group, see Configure Enterprise Skill Group, on page 21.	Х	Х	х	X	х
Label, see Configure Label, on page 29.	Х	х	х	X	х
Attribute, see Configure Precision Attribute, on page 14.	х	х	х	X	х
Precision Queue, see Configure Precision Queue, on page 16.	Х	Х	х	x	х
Service, see Configure Service, on page 32	Х	X	х	х	

## **Configure User**

Complete the following procedures to configure a user:

- Create Users in Active Directory
- Create User, on page 4
- Assign Roles to Users, on page 5
- Assign Permission to Sub-customer Tenant and User, on page 6
- Edit User, on page 6
- Delete User, on page 6

#### **Create User**



Note

Login as administrator to create tenant/sub customer user.

#### **Procedure**

- **Step 1** In Unified CCDM portal, click burger icon in the top-left corner and select **Security** > **Users**.
- **Step 2** Select the tenant in which you have to create user and click **New**.
- Step 3 Enter Login Name.
- **Step 4** Enter **First Name**, **Last Name** and **Description**.
- **Step 5** From **Culture** drop-down list, select **English** (**United States**) option.
- **Step 6** Check the following check boxes:

#### **Advanced Mode**

- Account Enabled
- · Password Never Expires
- User Cannot Change Password
- Internet Script Editor Enabled (applicable for ISE user)
- **Step 7** In **User Home Folder** field, ensure that selected path is correct.

Ensure that **Create a new folder for this user** check box is unchecked.

- **Step 8** Enter **Password** and **Confirm** the password.
- Step 9 Click Save.

## **Configure an Imported Unified CCE User**

After integration of Unified CCE with Unified CCDM, Unified CCDM import existing Unified CCE users. All imported users are located in default import location, move the imported users to appropriate tenants/folders.

Follow the below steps to configure imported users.

#### **Procedure**

**Step 1** In Unified CCDM, locate the imported Unified CCE user. Edit the username of Unified CCDM as follows:

<username>@<domainname>, where username is a windows username and domainname is a fully qualified windows domain name.

#### **Example:**

iseuser1@testdomain.local

- **Step 2** Select the user to view the details.
- **Step 3** Select **Details** tab and check the following check boxes:
  - Account Enabled
  - · Advanced Mode
  - Internet Script Editor (applicable for ISE user)
- **Step 4** Click **Save** to update the user details for the linked Unified CCDM user.

Note Before you login ISE, if SSO is disabled, you must log in to Unified CCDM portal as imported Unified CCE user. Enter corresponding windows active directory user password in **Password** field.

## **Assign Roles to Users**

Follow the below procedure to assign corresponding roles to the user:

## **Procedure**

- **Step 1** In Unified CCDM portal, click burger icon in the top-left corner and select **Security** > **Users**.
- **Step 2** Select newly created user from the list.
- Step 3 Select Group tab, click Add to Group.
- **Step 4** Select the tenant/folder that has a user you want to assign roles.
- **Step 5** Check **Basic Users** check box to provide basic permission for the tenant.
- **Step 6** Check **Advanced Users** check-box for a tenant/ISE user and click **OK**.

Default, advanced users will have **Browse Dimension** permission.

- **Step 7** Check **Supervisors** check-box for a supervisor user and click **OK**.
- Step 8 Click Save.

## **Assign Permission to Sub-customer Tenant and User**

#### **Procedure**

- Step 1 Log in to CCDM Web portal.
- Step 2 Click burger icon.
- **Step 3** Select **Security** > **Permissions**.
- Step 4 Select the sub-customer tenant and click **Permission** tab, uncheck **Inherit Permissions from /Root** and click

OK.

Repeat this step for  $Unallocated > SCCTenant\ Folder$ .

- **Step 5** Select newly added user and click **Group** tab.
- Step 6 Click Add to Groups.
- **Step 7** Click **Unallocated** > **SCCTenant Folder** and enable **Basic Users** permissions.
- Step 8 Click the sub-customer tenant and assign Advanced Users permissions and click OK.

Default, Advanced User will have Browse Dimension permission.

Step 9 Click Save.

#### **Edit User**

Follow the below procedure to edit user:

#### **Procedure**

- **Step 1** In Unified CCDM portal, click burger icon in the top-left corner and select **Security** > **Users**.
- **Step 2** From the folder tree, select the folder containing the user that you want to edit.
- **Step 3** Select the user you want to edit.
- Step 4 Click Details tab.
- **Step 5** Edit the required details.
- **Step 6** Click **Groups** tab, to add or remove the groups.
- Step 7 Click Save.

## **Delete User**

Follow the below procedures to delete users:

- **Step 1** In Unified CCDM portal, click burger icon in the top-left corner and select **Security** > **Users**.
- **Step 2** From folder tree on left, select the folder containing the user that you want to delete.

- **Step 3** Select the user that you want to delete.
- Step 4 Click Delete and click Yes.

## **Configure Departments**

To configure a department perform the following instructions.

- Create a Department, on page 7
- Edit a Department, on page 7
- Move a Department, on page 7
- Delete a Department, on page 8

## **Create a Department**

#### **Procedure**

- **Step 1** Log in to CCDM portal as Tenant Administrator.
- Step 2 Click the burger icon and select Provisioning > Resource Manager
- Step 3 Select the required Folder from the Tenant. Click Resource and select Department.
- **Step 4** Enter the name of the department and complete the mandatory fields.
- Step 5 Click Save.

## **Edit a Department**

## **Procedure**

- **Step 1** Log in to CCDM portal as Tenant Administrator.
- Step 2 Click the burger icon and select Provisioning > Resource Manager
- **Step 3** Expand the required Folder from the Tenant. Click **Department**.
- **Step 4** Select the department that you want to edit and modify the required fields.
- Step 5 Click Save.

## **Move a Department**

- **Step 1** Log in to CCDM portal as Tenant Administrator.
- Step 2 Click the burger icon and select Provisioning > Resource Manager
- **Step 3** Expand the required Folder from the Tenant. Click **Department**.
- **Step 4** In **Department** tab, check the department you want to move and click **Move**.

**Step 5** Browse to the destination folder you want the department to be moved and click **Save** and click **Ok**.

## **Delete a Department**

#### **Procedure**

- **Step 1** Log in to CCDM portal as Tenant Administrator.
- Step 2 Click the burger icon and select Provisioning > Resource Manager
- **Step 3** Expand the required Folder from the Tenant. Click **Department**.
- **Step 4** In the **Department** tab, Select the department that you want to delete.
- Step 5 Click Delete and click Ok.

## **Configure Agents**

Complete the following procedures for agent configuration:

- Create an Agent, on page 8
- Edit an Agent, on page 9
- Delete an Agent, on page 10

## **Create an Agent**

Complete the following procedure to create an agent:

#### **Procedure**

- **Step 1** Log in to CCDM portal as tenant or sub customer user or Supervisor user.
- **Step 2** Click the burger icon and select **Provisioning**.
- Step 3 Create an agent.
  - For Tenant or Sub customer user, select **Resource Manger**, select the folder that you want to create the agent. Select **Resource** > **Agent**.
  - For Supervisor user, select Agent Team Manager and click New Agent.
- **Step 4** Click the **Details** tab and configure as follows:
  - a) Enter the Agent's Name.
  - b) Enter a Description of the agent.
  - c) Select a Peripheral to create the agent.
  - d) Associate the person with the agent.

You can choose an existing person, or you can create a new person and associate with the agent.

- Select Existing Person: Select an existing person from the drop-down list, . You can search for a specific person by typing a part of their name in the search box. The new agent uses the details specified in that person's Peripheral Login box to log in to their Agent Desk Setting.
- Create New Person: Enter the first name and last (or family) name for the person, and fill in the details they will use to log in to the peripheral. The person is automatically created and associated with the agent.
- e) If Unified CCE is in hybrid mode, check the **SSO** checkbox to make the agent a SSO agent.
- Step 5 To make agent a supervisor, click **Supervisor** tab and check the **Supervisor** checkbox. If supervisor is a non-SSO agent, do the following:
  - a) Associate the agent with a Domain Account (the account the agent uses to log into a computer on the contact center network).
    - **Note** You cannot set up a domain account from Unified CCDM because security rules typically prevent this. Contact your administrator if you are uncertain of the domain account to use.
  - b) Enter part of the account name, click **Find** and then select the correct account.
- **Step 6** Click the **Agent Teams** tab and configure the following:
  - a) Select an agent team to which the agent belongs to. Agents may only be a member of a single team, but a supervisor can supervise multiple teams. Use the Selected Path drop-down list to see agent teams in other folders.
  - b) Click **Add** to associate the team with this agent.
  - c) Check the **Member** check box to make the agent a member of the team.
    - Supervisors can supervise a team without being a member.
  - d) If the agent is a supervisor, select a primary or secondary supervisory role for any team they supervise..

    They may or may not also be a member of this team.
- **Step 7** Click the **Skill Groups** tab and configure the following:
  - a) Select skill groups for the agent to belong to. Use the Selected Path drop-down to change folders.
  - b) Click **Add** to add the agent to the selected skill groups.
- Step 8 Click Save.

#### **Edit an Agent**

Complete the following procedure to view or edit agents.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** In **Resource Manager**, in the folder tree panel, select the folder where you want to edit the agent.
- **Step 4** In **Items** panel, select the agent from the list.
- **Step 5** Edit the agent details.

Clicking a different tab (such as Supervisor or Agent Teams) shows a different set of fields. You can return to previous tabs if necessary.

### Step 6 Click Save.

## **Delete an Agent**

Complete the following procedure to delete an agent.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** In **Resource Manager**, navigate to the folder containing the Agent you want to delete, and view the agents in that folder using the Items panel list view.
- **Step 4** In the Items panel, check the required agent check boxes that you want to delete.
- Step 5 Click Delete.
- **Step 6** Click **Yes** to delete the agent.

## **Configure Agent Desktop**

Complete the following procedures to configure an agent desktop:

- Create an Agent Desktop, on page 10
- Edit an Agent Desktop, on page 10
- Delete an Agent Desktop, on page 11

### **Create an Agent Desktop**

Complete the following procedure to create an agent desktop.

#### **Procedure**

- Step 1 Login to Unified CCDM Portal as Tenant or Sub customer user and select Resource Manager.
- **Step 2** In **Resource Manager**, in the Folder Tree panel, select the folder where you want to create the agent desktop.
- Step 3 Click Resource, and click Agent Desktop.
- **Step 4** Complete the required fields.
- Step 5 Click Save.

#### **Edit an Agent Desktop**

Complete the following procedure to edit an agent desktop.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- Step 3 Select the folder that contains the agent desktop you want to edit, and view the agent desktops in that folder using the Items panel list view.
- **Step 4** In the **Items** panel, click the agent desktop you want to edit.

The details of this agent desktop appears in the Details panel.

- **Step 5** In the **Details** tab, click the appropriate tab and make the required changes.
- Step 6 Click Save.

## **Delete an Agent Desktop**

Complete the following procedure to delete the agent desktop.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select **Provisioning** > **Resource Manager**.
- Step 3 Select the folder that contain the agent desktop you want to delete, and view the agent desktops in that folder using the Items panel list view.
- **Step 4** In the Items panel, check the check box or check boxes of the agent desktops you want to delete.
- Step 5 Click Delete and Click Yes.

**Note** Deletion of agent desktop will remove the associated agent desktops automatically.

## **Configure Agent Team**

Complete the following procedures to configure an agent team:

- Create an Agent Team, on page 11
- Edit an Agent Team, on page 12
- Delete an Agent Team, on page 12

### **Create an Agent Team**

Complete the following procedure to create an agent team:

#### **Procedure**

**Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.

- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** In the folder tree panel, select the folder where you want to create the agent team.
- Step 4 Click Resource, and then click Agent Team.
- **Step 5** Enter a unique name for the team.
- **Step 6** Enter all the required fields to create the agent team.
- **Step 7** To assign agents to the team, check the check boxes of one or more agents in the Agents tab, and click **Add**.
- **Step 8** When you add an agent to the team, you must also check their Member check 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.

If an agent is a supervisor, a drop-down list appears in the right-hand column.

- **Step 9** Specify whether the agent has a supervisory role for this particular team.
- Step 10 Click Save.

## **Edit an Agent Team**

Complete the following procedure to edit an agent team.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- Step 3 Select the folder that contain the agent team you want to edit, and view the agent teams in that folder using the Items panel list view.
- **Step 4** In the **Items** panel, click the agent team you want to edit.

The details of this agent team appear in the Details panel.

- **Step 5** Click through the tabs and edit the fields you want to change.
- **Step 6** To remove agents from a team, click the **Agents** tab and check the check boxes of the agents you wish to remove from the team and click **Remove**.
- Step 7 Click Save.

#### **Delete an Agent Team**

Complete the following procedure to delete an agent team

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- Step 3 Select the folder that contains the agent teams you want to delete, and view the agent teams in that folder using the Items panel list view.

- **Step 4** In **Items** panel, check the check box or check boxes of the agent teams you want to delete.
- Step 5 Click Delete.

Delete Agent Teams confirmation dialog box appears.

**Step 6** Click **Yes** to delete the agent teams.

## **Configure Call Type**

- Create a Call Type, on page 13
- Edit a Call Type, on page 13
- Delete a Call Type, on page 14

## **Create a Call Type**

Complete the following procedure to create a call type.

### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- **Step 3** In folder tree panel, select a folder where you want to create the call type.
- **Step 4** Click **Resource**, and then click **Call Type**.
- **Step 5** Enter the following details:
  - a) In Name field, enter the unique name.
  - b) Select **Bucket Interval** from the drop-down list.

**Note** The bucket interval is the count of answered or abandoned calls that are used as intervals for the Call Type. The default value is system default.

- c) Select Service Level Threshold from the drop-down list.
- d) Select **Service Level Type** from the drop-down list.
- Step 6 Click Save.

## **Edit a Call Type**

Complete the following procedure to edit a call type.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.

- Step 3 Select the folder that contain call types that you want to delete, and view the call types in that folder using the Items panel list view.
- **Step 4** In **Items** panel, select the call types you want to edit.
- **Step 5** Click through the tabs and edit the fields you want to change.
- Step 6 Click Save.

### **Delete a Call Type**

Complete the following procedure to delete a call type.



Note

You cannot delete the default call type.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- Step 3 Select the folder containing the call types you want to delete and under Summary in Items panel list view click **Call Type** .
- **Step 4** In **Items** panel, select the call types you want to delete.
- Step 5 Click Delete and click Yes.

## **Configure Precision Routing**

Complete the following procedures to configure precision routing.

- Configure Precision Attribute, on page 14
- Assign Precision Attribute to an Agent, on page 16
- Configure Precision Queue, on page 16
- Create Routing Scripts, on page 18

## **Configure Precision Attribute**

Complete the following procedures to configure precision attribute.

- Create Precision Attribute, on page 14
- Edit Precision Attribute, on page 15
- Delete Precision Attribute, on page 15

## Create Precision Attribute

Complete the following procedure to create a precision attribute.

Step 1	Log in to Unified CCDM Portal as Tenant or Sub Customer user.
Step 2	Click the burger icon and select <b>Provisioning</b> > <b>Resource Manager</b> .
Step 3	Select the required tenant to create precision attribute.
Step 4	Click Resource, and click Precision Attribute.
Step 5	Provide a Name for the precision attribute. For example, <b>ENGLISH</b> .
Step 6	Enter the Description for the precision attribute.
Step 7	Select the Data Type for the precision attribute. For example, <b>Proficiency</b>
Step 8	Select the <b>Default Value</b> from the drop-down list.
Step 9	Click Save.

#### Edit Precision Attribute

Complete the following procedure to edit a precision attribute.

### **Procedure**

- Step 1 Log in to Unified CCDM Portal as Tenant or Sub Customer user.
   Step 2 Click the burger icon and select Provisioning > Resource Manager.
   Step 3 In Resource Manager, select the folder containing the precision attribute you want to edit, and view the precision attributes in that folder using the Items panel list view.
   Step 4 In the Items panel, click the precision attribute you want to edit.
  - The details of this precision attribute appears in the Details panel.
- **Step 5** In the Details panel, click the appropriate tab and make the desired changes.
- Step 6 Click Save.

**Note** The precision attribute of a data type cannot be modified once it is assigned. However, the default value of the data type can be modified.

## Delete Precision Attribute

Complete the following procedure to delete a precision attribute.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** In **Resource Manager**, select the folder containing the precision attribute you want to delete, and view the precision attributes in that folder using the Items panel list view.

- **Step 4** In **Items** panel, check the check boxes of the precision attributes that you want to delete.
- Step 5 Click Delete.

**Note** You cannot delete the precision attribute if it is referenced by a precision queue, remove the reference to delete the precision attribute.

Step 6 Click Yes.

#### **Assign Precision Attribute to an Agent**

Complete the following procedure to assign the precision attribute to an agent.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- Step 3 In Resource Manager, navigate to the folder containing the agent to which you want to assign the precision attribute and view the agent in that folder using the Items panel list view.
- **Step 4** In the Items panel, click the agent to which you want to assign the precision attribute.

The details of this agent appear in the Details panel.

- **Step 5** In the Details panel, click **Precision Attribute**. Check the check box against the precision attribute tab and click **Add**.
- Step 6 Click Save.

Note

The supervisor agent must be associated with a domain account before they can have precision attributes assigned to them.

## **Configure Precision Queue**

Complete the following procedures to configure precision queue.

- Create Precision Queue, on page 16
- Edit Precision Queue, on page 17
- Delete Precision Queue, on page 17

#### Create Precision Queue

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** Select the required tenant to create the precision queue.

**Step 4** Click **Resource**, and click **Precision Queue**.

A new page appears.

- **Step 5** Complete the required fields
- **Step 6** Select the **Steps** tab and click **Step1**. A new page appears.
- Step 7 In the Expression 1 field, provide the attribute name and select the operation from the drop-down list and also select Proficiency level from the drop-down list. For example, Attribute = **ENGLISH**, Operation is >, and Proficiency level is **6**.

**Note** Based on the requirement, we can add the attribute, expression and steps.

- Step 8 Click OK.
- Step 9 Click Save.

#### Edit Precision Queue

Complete the following procedure to edit a Precision Queue.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- Step 3 In Resource Manager, select the folder containing the Precision Queue you want to edit, and view the Precision Queue in that folder using the Items panel list view.
- **Step 4** In the Items panel, click the Precision Queue that you want to edit.

The details of this Precision Queue appears in the Details panel.

- **Step 5** In the Details panel, click the appropriate tab and make the desired changes.
- Step 6 Click Save.

#### Delete Precision Queue

Complete the following procedure to delete the Precision Queue.



Note

You cannot delete a precision queue that is referenced in a routing script, remove the reference to delete the precision queue.

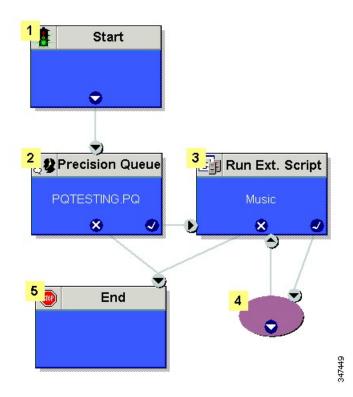
- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select **Provisioning** > **Resource Manager**.

- Step 3 In Resource Manager, navigate to the folder containing the Precision Queue you want to delete and view the Precision Queue in that folder using the Items panel list view.
- **Step 4** In the Items panel, check the check boxes of the Precision Queue that you want to delete.
- Step 5 Click Delete.
- Step 6 Click Yes.

### **Create Routing Scripts**

See the following illustration to create routing scripts:

Figure 1: Create Routing scripts



# **Configure Network VRU Scripts**

- Create Network VRU Script, on page 18
- Edit Network VRU Scripts, on page 19
- Delete Network VRU Scripts, on page 19

## **Create Network VRU Script**

Complete the following procedure to set up the network VRU script.

#### **Procedure**

**Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.

- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** Select the folder where you want to create the network VRU Script.
- Step 4 Select Resource, and click Network Vru Script.
- **Step 5** Complete fields as follows:
  - a) Name\* (Required)- Enter a unique name that will identify the script.

#### **Example:**

Play\_Welcome

- b) Network VRU\* (Required) Select the Network VRU from the drop-down list.
- c) VRU Script Name\* (Required)- Enter the name of the script as it is known on the Unified CVP.
- d) Configuration Parameter (Optional)- A string used by Unified CVP to pass additional parameters to the IVR Service. The content of string depends on the micro-application to be accessed.
- e) Timeout\* (Required)- Enter a number to indicate the number of seconds for the system to wait for a response from the routing client after directing it to run the script.
- f) Interruptible (Optional)- This check box indicates whether or not the script can be interrupted; for example, when an agent becomes available to handle the call.

Note

- System generates a default Enterprise Name in **Advance** tab.
- You cannot upload an audio file, when you first create the network VRU script.

## Step 6 Click Save.

### **Edit Network VRU Scripts**

Complete the following procedure to edit Network VRU details and associate an audio file with a VRU script:

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- **Step 3** Select the folder containing the **Network VRU script** you want to edit.
- Step 4 In the Items panel, click the Network VRU script you want to edit.
- Step 5 Click the Audio tab.
- **Step 6** Click **Browse** and select the audio file from your hard drive.
- Step 7 Click Upload.
- **Step 8** After the file has uploaded, click **Save**.

## **Delete Network VRU Scripts**



Note

You cannot delete the dialed number that is referenced in a script. This reference should be removed to delete the dialed number.

Step 1 Log in to Unified CCDM Portal as Tenant or Sub Customer user.
 Step 2 Click the burger icon and select Provisioning > Resource Manager.
 Step 3 Select the folder containing the Network VRU script you want to delete.
 Step 4 In the Items panel, click the Network VRU script you want to delete.
 Step 5 Select the Delete option.
 Step 6 Click Yes, to delete the Network VRU script.

## **Configure Dialed Number**

Complete the following procedures for dialed number configuration:

- Create a Dialed Number, on page 20
- Edit a Dialed Number, on page 20
- Delete a Dialed Number, on page 21

### **Create a Dialed Number**

Complete the following procedure to create one or more dialed numbers.

#### **Procedure**

- Step 1 Log in to Unified CCDM Portal as Tenant or Sub Customer user.Step 2 Click the burger icon and select Provisioning > Resource Manager.
- **Step 3** Select the folder where you want to create the dialed number.
- Step 4 Click Resource, and then click Dialed Number.
- **Step 5** Enter unique name of up to 32 characters for the dialed number.

This should consist alphanumeric characters, periods, and underscores only.

For wild card dialed number follow the pattern below:

### **Example:**

7xx

- **Step 6** Complete fields as for the dialed number Fields.
- **Step 7** Click **Add** to specify the call types and other dialing information to be associated with this dialed number.
- Step 8 Click Save.

### **Edit a Dialed Number**

Complete the following procedure to edit the dialed numbers.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- Step 3 Select the folder where you want to edit, and view the dialed number in that folder using the **Items panel** list view
- **Step 4** In the **Items panel**, select the dialed numbers that you want to edit.
- **Step 5** After modification, click **Save**.

#### **Delete a Dialed Number**

Complete the following procedure to delete one or more dialed numbers.



Note

You cannot delete the dialed number that is referenced in a script, remove the reference to delete the dialed number.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- Step 3 Select the folder containing the dialed numbers that you want to delete, and view the dialed numbers in that folder using the Items panel list view.
- **Step 4** In **Items** panel, select the dialed numbers to be deleted.
- Step 5 Click Delete.
- Step 6 Click Yes.

# **Configure Enterprise Skill Group**

Complete the following procedures for enterprise skill group configuration:

- Create an Enterprise Skill Group, on page 21
- Edit an Enterprise Skill Group Configuration, on page 22
- Delete an Enterprise Skill Group, on page 22

#### **Create an Enterprise Skill Group**

Complete the following procedure to create an enterprise skill group.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** Select the folder where you want to create the enterprise skill group.
- Step 4 Click Resource, and then click Enterprise Skill Group.
- **Step 5** Enter a unique name for the group.
- **Step 6** Enter all the required fields to create an enterprise skill group.
- **Step 7** To assign skill groups to the group, click **Add** and select one or more skill groups.
- Step 8 Click Save.

## **Edit an Enterprise Skill Group Configuration**

Complete the following procedure to edit an enterprise skill group.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- **Step 3** In the folder tree panel, select the folder where you want to edit, and view the enterprise skill groups in that folder using the **Items panel** list view.
- **Step 4** In the **Items panel**, select the enterprise skill groups that you want to edit.
- **Step 5** After modification, click **Save**.

#### **Delete an Enterprise Skill Group**

Complete the following procedure to delete an enterprise skill group.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- Step 3 Select 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.
- **Step 4** In the **Items** panel, check the check box or check boxes of the enterprise skill groups you want to delete.
- Step 5 Click Delete.
- Step 6 Click Yes.

## **Configure Expanded Call Variable**

Complete the following procedures to configure an expanded call variable.

- Create an Expanded Call Variable, on page 23
- Edit an Expanded Call Variable, on page 23
- Delete an Expanded Call Variable, on page 24

## **Create an Expanded Call Variable**

Complete the following procedure to create an expanded call variable.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** Select the folder where you want to create the expanded call variable.
- Step 4 Click Resource, and then click Expanded Call Variable.
- **Step 5** Enter the required information in the following fields:
  - a) In **Name** field, enter the unique name.
  - b) In **Description** field, enter the description.
  - c) In **Maximum Length** field, enter the maximum length of call variable.
  - d) Optional, check Persistent check-box.
  - e) Optional, check **Enabled** check-box.
  - f) Optional, check ECC Array check-box.
- **Step 6** In **Advanced** tab, set the end date for the call variable.

**Note** Uncheck **Forever** check-box to set the end date.

Step 7 Click Save.

#### **Edit an Expanded Call Variable**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** Select the folder where you want to modify the expanded call variable.
- Step 4 Click Expanded Call Variable in the items panel.
- **Step 5** Select the Expanded Call Variable to modify.
- **Step 6** Modify the fields in Details tab as required.

## Step 7 Click Save.

## **Delete an Expanded Call Variable**

Complete the following procedure to delete expanded call variable.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** Select the folder containing the expanded call variables you want to delete, and view the expanded call variables.
- **Step 4** In **Items** panel, select the expanded call variables that you want to delete.
- Step 5 Click Delete.
- Step 6 Click Yes.

## **Configure ECC Payload**

Complete the following procedures to configure an expanded call variable.

- Create an ECC Payload, on page 24
- Edit an ECC Payload, on page 25
- Delete an ECC Payload, on page 25

#### **Create an ECC Payload**

Complete the following procedure to create an ECC Payload.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the Cisco icon and select **Gadget** > **Open App**. Create an App if it is not already created. For more information, see Configure Gadgets, on page 61.
- **Step 3** Select an **ECC payload** resource from the search bar list.
- Step 4 Click the New icon.
- **Step 5** On the **Details** tab, enter the required information:
  - a) In the Name field, provide a name for the ECC Payload.
  - b) In the **Description** field, provide a suitable description for the ECC Payload.
- **Step 6** To add the Expanded Call Variable to the ECC Payload, on the **Expanded Call Variable** tab, click **Show Available**. Select the available call variable and add it to the ECC payload.
- **Step 7** On the **Advanced** tab, enter the Enterprise name and set the end date for the ECC payload.

## Step 8 Click Save.

## **Edit an ECC Payload**

## **Procedure**

Step 1	Log in to Unified CCDM Portal as Tenant or Sub Customer user.
Step 2	Click the Cisco icon and select <b>Gadget</b> > <b>Open App</b> .
Step 3	Select an ECC payload resource from the search bar list.
Step 4	Select the ECC payload to be modified.
Step 5	Modify the fields in the <b>Details</b> tab as required.
Step 6	Add or remove the ECC variable as required.
Step 7	Click Save.

## **Delete an ECC Payload**

## **Procedure**

Step 1	Log in to Unified CCDM Portal as Tenant or Sub Customer user.
Step 2	Click the Cisco icon and select <b>Gadget</b> > <b>Open App</b> .
Step 3	Select the ECC payload resource from the search bar list.
Step 4	Select the ECC payload to be deleted and click Delete.
Step 5	Click <b>OK</b> to confirm the changes.

# **Configure Folder**

Complete the following procedures for folder configuration:

- Create Folders, on page 25
- Rename a Folder, on page 26
- Move Folder, on page 26
- Delete Folder, on page 26

## **Create Folders**

Complete the following procedures to create folders:

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** Select the folder/tenant where you want to create the new folder.
- Step 4 Click System, and then click Folder.
- **Step 5** In the Name field enter a name for the new folder.
- **Step 6** In the Description field enter any explanatory text for the folder, this is optional.
- **Step 7** If required, uncheck the **Inherit Permissions** check box to make this folder a policy root that does not inherit security permissions from its parent folder.
- **Step 8** Check the **Create Another** check box if you want to create more folders at the same point in the tree structure.
- **Step 9** Click **Save** to save the new folder in the tree.

#### Rename a Folder

#### **Procedure**

In **Resource Manager**, right-click the folder in the Folder Tree panel and select **Rename Folder** and enter the required name.

#### **Move Folder**

Complete the following procedure to move a folder:

## **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- **Step 3** In the Items panel, click **Folders**.
- **Step 4** Check the folder(s) check box that you want to move.
- Step 5 Click Move.
- **Step 6** In the folder tree, select the location that you want to move the folders.
- Step 7 Click Save.

You can also use drag and drop option to move folders.

### **Delete Folder**

Complete the following procedures to delete a folder:

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- **Step 3** In the Items panel, click **Folders**.
- **Step 4** Check the folder(s) check boxes that you want to delete.
- Step 5 Click Delete.
- **Step 6** In the Delete folder dialog, select **Yes**.

## **Configure Group**

Complete the following procedure for group configuration:

- Create a Group, on page 27
- Edit a Group, on page 27
- Move a Group, on page 28
- Delete a Group, on page 28

## **Create a Group**

Complete the following procedure to create a group.

### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Administrator/Tenant /Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- **Step 3** Select the folder or the tenant where you want to create the new group.
- Step 4 Click System, and then click Group
- **Step 5** Enter the following details:
  - a) In the Name field enter the name for the new group.
    - Groups in different folders may have the same name.
  - b) 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.
  - c) If you want to create more than one group, check the **Create Another** check box (to remain on the Create a new group page after you have created this group).
  - d) Click Save.

#### **Edit a Group**

Complete the following procedure to edit or view group details.

- **Step 1** Log in to Unified CCDM Portal as Administrator/Tenant /Sub Customer user.
- Step 2 Click the burger icon and select Provisioing > Resource Manager.
- Step 3 Select the folder that contain groups that you want to modify, and view the group in that folder using the Items panel list view.
- **Step 4** In the **Items panel**, select the group that you want to edit.
- **Step 5** Edit the group details as required.
- **Step 6** Click the **Members** tab to add or remove the members of the group.
- **Step 7** Click the **Groups** tab to add or remove the group from other groups.
- Step 8 Click Save.

## Move a Group

Complete the following procedure to move a group.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Administrator/Tenant /Sub Customer user.
- Step 2 Click the burger icon and select **Provisioing** > **Resource Manager**.
- Step 3 Select the folder that contain groups that you want to move, and view the group in that folder using the Items panel list view.
- **Step 4** In the **Items panel**, select the group to be moved.
- Step 5 Click Move.
- **Step 6** Navigate to the tenant or the folder you want to move the group to.
- Step 7 Click Save.

## **Delete a Group**

Complete the following procedure to delete a group.

- **Step 1** Log in to Unified CCDM Portal as Administrator/Tenant/Sub Customer user.
- Step 2 Click the burger icon and select Provisioing > Resource Manager.
- Step 3 Select the folder that contain groups that you want to delete, and view the group in that folder using the Items panel list view.
- **Step 4** In the **Items panel**, select the group that you want to deleted.
- **Step 5** Click **Delete** and confirm the deletion when prompted.

## **Configure Label**

Complete the following procedures for label configuration:

- Create a Label, on page 29
- Edit a Label, on page 29
- Delete a Label, on page 29

#### **Create a Label**

Complete the following procedure to create a label.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning > Resource Manager**.
- **Step 3** Select the folder where you want to create the label.
- Step 4 Click Resource, and click Label.
- **Step 5** Complete all fields for the label.
- Step 6 Click Save.

#### **Edit a Label**

Complete the following procedure to edit a label.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select **Provisioning** > **Resource Manager**.
- Step 3 Select the folder containing the labels that you want to edit, and view the labels in that folder using the **Items** panel list view.
- **Step 4** In the **Items panel**, select the labels that you want to edit.
- **Step 5** After modification, Click **Save**.

## **Delete a Label**

Complete the following procedure to delete a label.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.

- Step 3 Select the folder containing the labels you want to delete, and view the labels in that folder using the Items panel list view.
- **Step 4** In the Items panel, check the check box or check boxes of the labels you want to delete.
- Step 5 Click Delete.
- **Step 6** In the Delete Labels dialog box, click **Yes**.

## **Configure Person**

Complete the following procedures to configure a person:

- Create a Person, on page 30
- Edit a Person, on page 30
- Delete a Person, on page 31

#### **Create a Person**

Complete the following procedure to create a person.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user or Supervisor user.
- **Step 2** Click the burger icon and select **Provisioning**.
- **Step 3** Create a person.
  - For Tenant or Sub customer user, select **Resource Manger**, select the folder that you want to create the agent. Select **Resource** > **Person**.
  - For Supervisor user, select Agent Team Manager and click New Person.
- **Step 4** Complete the required fields for person.
- **Step 5** Select **Equipment** tab, select the Unified Contact Center Enterprise.
- **Step 6** Set Active from and to dates in the **Advanced** tab.
- Step 7 Click Save.

**Note** After you create a person, you cannot edit the Unified CCDM account details for a person through another person. You must edit the Unified CCDM account details directly.

You cannot link a person with an existing Unified CCDM user account.

### **Edit a Person**

Complete the following procedure to edit a person.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub-Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- Step 3 Select the folder containing the persons that you want to edit, and view the person in that folder using the **Items panel** list view.
- **Step 4** In the **Items panel**, select the persons that you want to edit.
- **Step 5** Optional, reset the password as follows:
  - a) Select **Details** tab.
  - b) Check **Reset Password** check box.
  - c) Enter new password and confirm.
- Step 6 After modification, Click Save.

#### **Delete a Person**

Complete the following procedure to delete a person.



Note

Deletes all the agents associated with the person.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select **Provisioning** > **Resource Manager**.
- Step 3 Select folder containing the person or persons you want to delete the persons in that folder using the Items panel list view.
- **Step 4** In the Items panel check the check box or check boxes of the person or persons you want to delete.
- Step 5 Click Delete.
- **Step 6** Click **Yes** to delete the person.

## **Configure Supervisors**

Complete the following procedure to configure a supervisor.

## Before you begin

This is applicable for Sub-customer users of Small Contact Center Deployment that requires Supervisor to associate with Domain account.

- 1. Select Security > Sub-customer Tenant.
- 2. Select User Tab > User and click Change Permission.

- 3. Check Full Permission check-box for the Sub customer tenant and click OK.
- **4.** Add this sub-customer tenant to **Advanced Group**.

- **Step 1** Log in to the CCDM portal as Tenant/Sub Customer User and select **Resource Manager**.
- Step 2 In Resource Manager, select the folder that contains the agent that you want as a supervisor or create a new agent to configure supervisor, see Create an Agent, on page 8.
- Step 3 Click Supervisor tab and and check the Supervisor checkbox. This does not require that they supervise a team. If supervisor is a non-SSO agent, 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 later versions.

You cannot set up a domain account from Unified CCDM because security rules typically prevent this. Contact your administrator if you are uncertain of which domain account to use.

Step 4 Click Save.

Note

## **Configure Service**



Note

Complete the following procedures to configure service:

- Create Service, on page 32
- Edit Service, on page 33
- Delete Service, on page 33

#### **Create Service**

Complete the following procedure to create service:

- **Step 1** Log in to Unified CCDM Portal as Tenant.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** Select the folder that you want to create service from the left-hand side panel.
- **Step 4** In **Resource** drop-down list, select **Service** option.
- **Step 5** Complete the required fields.
- Step 6 Goto Advanced tab, choose Cisco\_Voice from Media Routing Domain drop-down list.
- **Step 7** Goto **Skillgroups** tab, check the skill group that you want to add and click **Add**.
- Step 8 Click Save.

#### **Edit Service**

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant.
- Step 2 Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** Navigate to the folder that you want to edit or view service from the left-hand side panel.

Displays the list of all the services in items panel.

- **Step 4** Click on the service that you want to edit.
- **Step 5** After editing click **Save**.

#### **Delete Service**

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant.
- Step 2 Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** Select the folder that you want to delete service from the left-hand side panel.
- **Step 4** Check the service from the list that you want to delete.
- Step 5 Click Delete and click Yes.

## **Configure Skill Group**

Complete the following procedures to configure skill group:

- Create a Skill Group, on page 33
- Edit a Skill Group, on page 34
- Delete a Skill Group, on page 34

## **Create a Skill Group**

Complete the following procedure to create a skill group.



Note

When you create a skill group, a default route is created.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.

- **Step 3** In the folder tree panel, select the folder where you want to create the skill group.
- Step 4 Click Resource, and click Skill Group.
- **Step 5** Enter a unique name for the group.
- **Step 6** Select **Agents** tab, check the agent(s) check box and click **Add**.
- Step 7 Click Save.

## **Edit a Skill Group**

Complete the following procedure to edit a skill group.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning > Resource Manager**.
- Step 3 Select the folder containing the skill group that you want to edit, and view the skill groups in that folder using the Items panel list view.
- **Step 4** In the Items panel, click the skill group you want to edit.

The details of this skill group display in the Details panel.

- **Step 5** Click the tabs and edit the fields you want to change.
- **Step 6** Optional, to remove agents from a skill group, select **Agents** tab and select the agents you want to remove from the team.
- Step 7 Click Remove.
- Step 8 Optional, to remove the route association from a skill group, select **Route** tab and click **Delete** for which route you want to delete.
- Step 9 Optional, to edit the details of an existing route associated with the skill group, select **Route** tab and click **Edit** for which route you want to delete. Click **Update**.
- Step 10 Click Save.

### **Delete a Skill Group**

Complete the following procedure to delete a skill group.



Note

You cannot delete the skill group that is referenced in a script, remove the reference to delete the skill group.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select **Provisioning > Resource Manager**.
- Step 3 Select the folder containing the skill groups you want to delete, and view the skill groups in that folder using the Items panel list view.

**Step 4** In the Items panel, select the skill groups you want to delete.

**Note** Ensure that skillgroup is not mapped to any services.

Step 5 Click Delete.

Delete Skill Groups page appears.

Step 6 Click Yes.

The skill groups are deleted.

## **Configure Route**

Step 9

Complete the following procedure to configure a route.

## **Procedure**

Step 1	Log in to Unified CCDM Portal as Tenant or Sub Customer user.
Step 2	Click the burger icon and select <b>Provisioning</b> > <b>Resource Manager</b> .
Step 3	In the folder tree panel, select the folder where you want to create the route.
Step 4	In the Folder Tree panel, click <b>Skill Group</b> .
Step 5	Choose the skill group for which you are creating a route.
Step 6	Select Routes tab.
Step 7	In Route Name field, enter a unique name that will identify the script.
Step 8	Click Add.

# **Agent Re-skilling and Agent Team Manager**

Click Save.

You can login as user with supervisor role to perform agent re-skilling and agent team manager.

Before performing these tasks ensure that the user is created. To create user, see Create User, on page 4 and to assign supervisor role, see Assign Roles to Users, on page 5.

## Configure Supervisor for Agent Re-skill and Agent Team Manager in CCDM

Step 1	Log in to the Unified CCDM Portal as administrator.
Step 2	Click the burger icon and select <b>Provisioning &gt; Resource Manager</b> .
Step 3	Click on resource and select <b>Agent</b> resource.
Step 4	Select an agent for the supervisor.
Step 5	In <b>Supervisor</b> tab, check the checkbox for supervisor and click <b>Save</b> .
Step 6	In <b>Person</b> tab, select the <b>goto person</b> icon.

Step /	In <b>Portal</b> tab, click the portal account and click the existing user.
Step 8	Select the tenant and select supervisor user from the list of users.
Step 9	Click next icon. Displays <b>User's Group</b> dialog box.
Step 10	Make sure supervisor group is added to the user and click <b>Save</b> .
Step 11	Click Save.

Log in to Unified CCDM Portal as administrator.

## **Associating Supervisor Agent to Agent Team**

Step 1

Step 6

## **Procedure**

•	
Step 2	Click the burger icon and select <b>Provisioning</b> > <b>Resource Manager</b> .
Step 3	Click resource and select <b>Agent</b> resource.
Step 4	Select the Supervisor agent.
Step 5	In the Agent Team tab, select agent teams that you want to add and click Add.

In Supervisory Role column, Select Primary from the drop-down list and click Save.

## **View Skill Group**

Complete the following procedure to view a skill group.

#### **Procedure**

Step 1	Log in to Unified CCDM portal as supervisor.
Step 2	Click the burger icon and select <b>Provisioning</b> > <b>Agent Re-Skilling</b> .
Step 3	From the <b>Skill Group</b> drop-down list, select the skill group you want to view.
	Displays a list of agents for the selected skill group.
Step 4	Click the <b>Goto Agent</b> icon to modify the agent details

## Add an Agent to Skill Group

Complete the following procedure to add an agent to a skill group.

Step 1	Log in to Unified CCDM portal as supervisor.
Step 2	Click the burger icon and select $Provisioning > Agent Re-Skilling$ .
Step 3	Select <b>Skill Group</b> from the drop-down list.
	Displays a list of agents for the selected skill group.

**Step 4** In My Agents on Peripheral list, select the agents you want to add to the skill group, then click Add.

**Note** You can search agents using a search bar with a part of agent's name.

Step 5 Click Save.

## **Remove an Agent from Skill Group**

Complete the following procedure to remove an agent from a skill group.

#### **Procedure**

- **Step 1** Log in to Unified CCDM portal as supervisor.
- Step 2 Click the burger icon and select Provisioning > Agent Re-Skilling.
- **Step 3** Select a skill group to remove an agent or agents.
- **Step 4** In the top list, select the agents to remove from the skill group using the check boxes.
- **Step 5** You enter part of an agent's name into the search box, and then click **Search** to filter the list of agents by the specified search string.
- **Step 6** Click **Remove** to remove the agents from this skill group.
- **Step 7** Click **Save** to save your changes, or **Cancel** to leave the details as they were before you started.

## **View Agent Team**

Login as a supervisor user and complete the following procedure to view Agent team

### **Procedure**

- **Step 1** Log in to Unified CCDM portal as supervisor.
- Step 2 Click the burger icon and select Provisioning > Agent Team manager.
- Step 3 Select the Agent team drop-down list and select the agent team you want to view.

Displays the list of agents for the selected agent team.

## **Modify Agent Team**

Complete the following procedure to modify an agent's team:

- **Step 1** Log in to Unified CCDM portal as supervisor.
- Step 2 Click the burger icon and select Provisioning > Agent Team Manager.
- **Step 3** From the **My Agent Team** drop-down list, select the agent team to which agent belongs.
- **Step 4** Click the **Goto Agent** icon to modify the agent details.

- **Step 5** Select **Agent Team** tab.
  - Displays the current membership of agent with the agent team.
- **Step 6** Optional, check the agent team check box that you want to remove and click **Remove**.
- **Step 7** Optional, select the agent team from the list that you want to add and click **Add**.

**Note** You can add an agent as a member of that team, check the **Member** check box. Otherwise, you can also add an agent as primary or secondary supervisor, if they are supervisor agent.

Step 8 Click Save.

# **Configure User Variable**

Complete the following procedure for user variable configuration:

- Create a User Variable, on page 38
- Edit a User Variable, on page 38
- Delete a User Variable, on page 39

### **Create a User Variable**

Complete the following procedure to create a user variable.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- **Step 3** In folder tree panel, select the folder where you want to create the user variable.
- **Step 4** Click **Resource** and click **User Variable**
- **Step 5** Complete the required fields for user variable.
- **Step 6** Set Active from and to dates in **Advanced** tab.
- Step 7 Click Save.

#### **Edit a User Variable**

Complete the following procedure to edit a user variable.

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- **Step 2** Click the burger icon and select **Provisioning** > **Resource Manager**.
- Step 3 Select the folder containing the user variables that you want to edit, and view the user variables in that folder using the **Items panel** list view.
- **Step 4** In the **Items panel**, select the user variables that you want to edit.

**Step 5** After modification, Click **Save**.

## **Delete a User Variable**

Complete the following procedure to delete a user variable.

#### **Procedure**

- **Step 1** Log in to Unified CCDM Portal as Tenant or Sub Customer user.
- Step 2 Click the burger icon and select Provisioning > Resource Manager.
- Step 3 Select the folder containing the user variables you want to delete, and view the user variables in that folder using the Items panel list view.
- **Step 4** In Items panel, check the check box or check boxes of the user variables you want to delete.
- Step 5 Click Delete.
- **Step 6** In the Delete User Variables dialog box, click **Yes**.

The user variables are deleted.

## **View the Unified CCDM Version**

Complete the following procedure to view the Unified CCDM version.

## **Procedure**

- **Step 1** In the Settings page, click **Settings**.
- Step 2 Click About.

View the Unified CCDM version installed on your system.

# **Bulk Operations Using Unified CCDM**

The bulk upload tool is used for importing large numbers of resource items into Unified CCDM. It is used to generate resources such as Agents or Skill Groups by filling in resource attributes using the standard CSV format. All CSV files require headers that dictate where each value goes. These headers are provided by templates that can be downloaded from the appropriate Bulk Upload page in Unified CCDM. You can bulk upload the following resources:

- Agents
- Agent desktop
- Agent team
- Call Type
- Department
- Dialed Number

- Enterprise Skill Group
- Skill Group
- User Variable
- Folder
- Network VRU Script
- Label
- Person
- User
- Precision Attribute
- Precision Queue

## **Bulk Upload for Unified CCDM**

Complete the following procedure to bulk upload Unified CCDM:

## **Procedure**

- **Step 1** Log in to Unified CCDM portal as Tenant or Sub-Customer.
- **Step 2** Click the burger icon and select **Provisioing** > **Resource Manager**.
- **Step 3** Click the required folder.
- Step 4 Click 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 appears.

- Step 5 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.
- **Step 6** Open the template in the editor you require (such as Notepad) and begin to enter your data or paste it from another source.

For detailed information on Bulk Upload templates, please refer to User Guide for Cisco Unified Contact Center Domain Manager

- **Step 7** Return to the Bulk Upload Control page and make sure the path is set correctly.
  - Note This path is only used if you removed the Path column in the CSV file. This option is not available for folders, dashboard layouts or dashboard styles.
- **Step 8** Browse to the CSV file into which you just entered the data.
- Step 9 Click Upload.

A progress bar at the bottom of the screen displays the upload progress.

**Note** Do not upload more than 500 items per CSV file.

## **Templates for Creating CSV Files**

## **Data types**

The following data types are used for creating CSV files:

- Standard Naming Convention (SNC). This is alphanumeric data with no exclamation marks or hyphens, although underscores are permitted.
- BOOLEAN values can be one of the following:
  - TRUE.
  - FALSE.
  - Empty field. Leaving these fields empty defaults the field to FALSE.
- Y/N is similar to BOOLEAN however it can only contain the values Y or N.
- Date format is the universal date format < Year>-<Month>-<Day> for example 2006-08-30.
- Any Data Type marked with a hyphen (-) implies that there are no constraints on what you can put in the field (except for the constraints imposed by the built-in CSV format).
- When 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, for example Skillgroup1; Skillgroup2; Skillgroup3.

## Global Template Columns

These columns are common to every template file except where stated. The **Required?** column indicates whether the column can be removed entirely.

Column Name	Data Type	Required?	Description	
Path	Path	No	Describes where in the tree the resource will be created. you wish to supply the path in the bulk upload screen, yo must remove this column.  Note  If you leave the column present and do not set a value, it attempts to upload into the Roo directory, which is valid for items such as folders, but not for resources such as agent o skill group. If you remove the column completely, the resources upload into the folder you were working in when you initiated the bulk upload.	
Name	SNC	Yes	The name of the resource in the Unified CCDM system. This must be a unique name. In most cases, this is not provisioned.	
Description	_	Yes	Describes the dimension being created. This is never provisioned.	

Column Name	Data Type	Required?	Description	
EnterpriseName	SNC	No	The name for the resource being created. This field is provisioned. 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 is 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 is treated as a UTC date.	

# Department Template

Column Name	Data Type	Required?	Description
EnterpriseName	SNC	No	The name for the Department being created. This field is provisioned. If you leave it blank an Enterprise name is generated for you.
Name	SNC	Yes	The name of the Department in the Unified CCDM system. This must be a unique name. In most cases, this is not provisioned.
EffectiveFrom	Date	No	The date from which the resource is active. The default is the current date. Note This date is not localized, and is 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 is treated as a UTC date.

## Person Template

Column Name	Data Type	Required?	Description
-------------	-----------	-----------	-------------

EquipmentName	SNC	No	The instance name of the Unified CCE or Unified CM you want this person added to. This name corresponds directly with the equipment instance name that was specified when configured through the Unified CCDM Cluster Configuration utility.
FirstName	SNC	Yes	The first name of the person.
LastName	SNC	Yes	The last name of the person.
LoginName	SNC	Yes	The peripheral login name for the person.
PassPhrase	Password	Yes	The peripheral login password for the person.
DepartmentMember	Enterprise Name	No	The department that this person represents.

# Agent Template

Column Name	Data Type	Required?	Description
PeripheralNumber	Numeric	No	The service number as known at the peripheral.
PeripheralName	SNC	No	The name identifying the agent on the associated peripheral.
Supervisor	Boolean	No	Indicates whether the agent is a supervisor. The Supervisor column name does not create a Unified CCDM system user but it allows you to bind this agent to a domain login name.
AgentStateTrace	Y/N	No	Indicates whether the software collects agent state trace data for the agent.
DomainLogin	NETBIOS Login Name	If Agent is a supervisor	The login name for the domain user this agent is associated with. The login name often uses the form <domain>\<username></username></domain>
DomainUserName	NETBIOS Username	If Agent is a supervisor	The username of the domain user this agent is associated with.
PeripheralMember	Enterprise Name-PG name	Yes	The peripheral to assign this agent to.

Column Name	Data Type	Required?	Description
AgentDesktopMember	Enterprise Name	No	The desktop this agent will use.
PersonMember	Enterprise Name	Yes	The person that this agent represents.
AgentTeamMember	Enterprise Name	No	The team this agent belongs to. The team must be on the same peripheral otherwise provisioning will fail. This column may also be subject to capacity limitations. For example, there may only be so many agents allowed in a team and that team has already reached its capacity.
SkillGroupMember	Enterprise Name	No	The skill group or skill groups this agent belongs to. The skill groups must be on the same peripheral otherwise provisioning fails. To specify multiple skill groups, separate each skill group with a semi-colon (;) character.
DepartmentMember	Enterprise Name	No	The department that this agent represents.
PrecisionAttributeMember	Enterprise Name and Values	No	The attributes that agent has and the values of each. Assign values using '=' and separate each attributes with a semicolon(;).  Example: Spanish=5, MortgageTraining=True
DefaultSkillGroup	Enterprise Name	No	

## Agent Desktop Template

Column Name	Data Type	Required?	Description
-------------	-----------	-----------	-------------

WrapupDataIncomingMode	Numeric	No	Indicates whether the agent is allowed or required to enter wrap-up data after an inbound call.  0: Required  1: Optional  2: Not allowed  3: Required with Wrap up Data. If value is blank, it assigns default value to 1
WrapupDataOutgoingMode	Numeric	No	Indicates whether the agent is allowed or required to enter wrap-up data after an outbound call.  0: Required  1: Optional  2: Not allowed  3: Required with Wrap up Data. If value is blank, it assigns default value to 1
WorkModeTimer	Numeric	No	The amount of time in seconds (1-7200) allocated to an agent to wrap up the call.  Default value will be 7200.
RemoteAgentType	Numeric	No	Indicates how mobile agents are handled.  0: No remote access  1: Use call by call routing  2: Use nailed connection  3: Agent chooses routing at login  4: Required with Wrap up Data If value is blank, it assigns default value to 1
DepartmentMember	Alpha Numeric	No	The department that this agent desktop represents

# Agent Team Template

Column Name	Data Type	Required?	Description
PeripheralMember	Enterprise Name- PG name	Yes	The peripheral to assign this agent team to.

DialedNumberMember	Enterprise Name	No	The dialed number to use for this agent team.
DepartmentMember	Enterprise Name		The department that this agent team represents.

# Call Type Template

Column Name	Data Type	Required?	Description
ServiceLevelType	Numeric	No	Indicates how the system software calculates the service level for the skill group. If this field is 0, Unified CCE uses the default for the associated Peripheral/MRD pair. Valid numbers are as follows: 0 or blank: Use Default 1: Ignore Abandoned Calls 2: Abandoned Call Has Negative Impact 3: Abandoned Call Has Positive Impact.
ServiceLevelThreshold	Numeric	No	The service level threshold, in seconds, for the service level. If this field is negative, the value of the Service Level Threshold field in the Peripheral table is used.
DepartmentMember	Enterprise Name	No	The department that agent team represents.

# Dialed Number Template

Column Name	Data Type	Required?	Description
Dialed Number	SNC	Yes	The string value by which the Agent/IVR Controller identifies the dialed number.
RoutingClient Member	SNC	Yes	The name of the routing client (such as NIC or PG) that this number should use to submit routing requests to the Unified CCE.

Column Name	Data Type	Required?	Description
MediaRouting DomainMember	SNC	Yes	The name of the media routing domain.
DepartmentMember	Enterprise Name	No	The department that agent team represents.

# Skill Group Template

Column Name	Data Type	Required?	Description
PeripheralNumber	Numeric	No	The service number as known at the peripheral.
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.
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 field is negative, it uses the value of the Service Level Threshold field in the peripheral table.
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 are:
			0 = Use Default
			1 = Ignore Abandoned Calls
			2 = Abandoned Call Has Negative Impact
			3 = Abandoned Call Has Positive Impact
DefaultEntry	Numeric	No	Typical entries are 0 (zero). Any records with a value greater than 0 are considered a default skill group for configuration purposes. Unified CCE uses records with the value of 1 as the default target skill group.
PeripheralMember	Enterprise Name	Yes	The peripheral to assign this skill group to.
MediaRoutingDomainMember	Numeric	Yes	You cannot change this column name after skill group upload.

DepartmentMember	Enterprise Name	Yes	The departr	ment that this skill group represents.
RouteMember	SNC	No	supply a list	associated with this skill group. To t of routes, separate the routes in the semi-colon (;).  The specified route or routes must not already exist. They will be created as part of the bulk upload of the skill group.

# Enterprise Skill Group Template

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 10.0 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.

# User Variable Template

Column Name	Data Type	Required?	Description
ObjectType	Numeric	Yes	A number indicating the type of object with which to associate the variable. Select 31 (User Variable) if you choose to not associate the user variable with an object. The valid numbers are:
			1: Service
			2: Skill Group
			7: Call Type
			8: Enterprise Service
			9: Enterprise Skill Group
			11: Dialed Number
			14: Peripheral
			<b>16:</b> Trunk Group
			<b>17:</b> Route
			20: Master Script
			21: Script Table
			29: Application Gateway
			31: User Variable

## Label Template

Column Name	Data Type	Required?	Description
RoutingClientMember	SNC	Yes	The name of the routing client (NIC or PG), this number is used to submit the routing request to Unified CCE.
LableType	Numeric	False	The type of label:
			• 0: Normal
			• 1: DNIS Overide
			• 2: Busy
			• 3: Ring
			• 4: Post-Query
			• 5: Resource

Column Name	Data Type	Required?	Description
Label	SNC	False	The string value used to identify the label by the routing client.

## Network VRU Script Template

Column Name	Data Type	Required?	Description
NetworkVruMember	SNC	Yes	The network VRU to associate with this Network VRU Script.
VruScriptName	SNC	Yes	Represent the VRU Script Name
DepartmentMember	Enterprise	No	The department that is Network VRU represent.
Timeout	Numeric	Yes	The number of seconds to wait for a response after the script starts executing.

## Folder Template



Note

Folders do not use the Enterprise Name, Effective To or Effective From global columns.

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

## User Template



Note

Users use only the 'Path' and 'Description' global columns from the Global Template

Column Name	Data Type	Required?	Description
LoginName	SNC	Yes	Login name of the user that will be used for application logon
Password	Password	Yes	Password for the new user account
AdvancedMode	Boolean	No	Determines if the user is advanced or not
FirstName	SNC	No	The first name of the user

Column Name	Data Type	Required?	Description
LastName	SNC	No	The last name of the user
ChangePasswordOn NextLogon	Boolean	No	Determines if after the initial logon the user should be prompted to reset their password
PasswordNeverExpires	Boolean	No	Determines if the password for this user will ever expire
HomeFolder	Path	No	The folder path to the folder which will be used as the users home folder
CreateNewUserFolder	Boolean	No	Determines whether a new folder should be created for the user home folder in the HomeFolder location
Groups	Group Name(s)	No	A semi colon separated list of Group names (including their path) to which the user will be added. Since group names are not unique the path must also be specified for example, /Folder1/Admins;/Folder2/Admins
InternetScriptEditorEnabled	Boolean	No	Whether the user is linked to a Unified CCE user that can access Cisco's Internet Script Editor. If true, the following apply:
			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

# Precision Attribute Template

The following table includes the columns that are required for loading bulk precision attributes.

Column Name	Data Type	Required?	Description
AttributeDataType	Numeric	Yes	Type of data to associate with one of the following attributes:
			3: Boolean (true or false only)
			4: Proficiency (a numeric range)
DefaultValue	Boolean or Numeric, according to Attribute Data Type	Yes	Default value to be used when an attribute is assigned to an agent if no explicit value is specified.

Column Name	Data Type	Required?	Description
DepartmentMember	Enterprise Name	No	The department that this attribute represents.

## Precision Queue Template

The following table includes the columns that are required for loading bulk precision queues.

Column Name	Data Type	Required?	Description
Steps	_	Yes	Specification of the steps in this precision queue. See Syntax for Precision Queue Steps, on page 53
AgentOrdering	Numeric	Yes	If more than one agent satisfies the precision queue criteria agents are chosen in the following order to handle the call:
			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 from 0 to 2147483647.
ServiceLevelType	Numeric	No	Abandoned calls in service level calculations, calls are handled in the following order:
			1: Ignore abandoned calls.
			2: Abandoned calls have negative impact (that is, exceed the service level threshold).
			3: Abandoned calls have positive impact (that is, meet the service level threshold).

Column Name	Data Type	Required?	Description
DepartmentMember	Enterprise Name	No	The department that this precision queue represents.

## Syntax for Precision Queue Steps

The Precision Queue Steps field consists of one or more steps. Each step is divided into the following parts:

- **Consider If** condition (optional, but not valid if there is only one step, and not valid for the last step if there is more than one step). If it is present, this condition specifies the circumstances to which the step applies. For example, a step might apply only if there has been a higher than usual number of unanswered calls for the day.
- **Condition Expressions** (always required for each step). This condition specifies the attributes that 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.
- Wait Time (always required, except for the last step) this condition specifies the amount of time in seconds to wait before moving on to the next step if the conditions in this step cannot be satisfied. For example, a wait time value of 20 means that if no agent that matches the conditions for that step is available at the end of 20 seconds, the next step is considered.



Note

To build the Steps field from these components, separate each step with a semicolon (;) and separate the parts of each step with a colon (:) as example shown below:

**Example**: ENGLISH1==5:WaitTime=22;ENGLISH1==5:WaitTime=20;ENGLISH==5

"English1" and "English" indicates the Enterprise Name of Precision Attribute.

The following example shows a Steps field with three steps. The first step has a **Wait Time** expression and the condition expression. The second has a **Consider If** expression and a **Wait Time** expression as well as the condition expression. The third step is the last step, so it has only a condition expression.

## First Step:

Specify the time in seconds to wait for the conditions in the step to be satisfied. This syntax is a part of the step, so it ends with a colon.

WaitTime=10:

Specify the condition expression to be used. This syntax is the end of the step, so it ends with a semicolon.

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

### **Second Step:**

Specify the circumstances to consider this step. This syntax is part of the step, so it ends with a colon. See the note below for the syntax for the Consider If statement.

ConsiderIf=TestforSituation:

Specify the time in seconds to wait for the conditions in the step to be satisfied. This syntax is a part of the step, so ends with a colon.

```
WaitTime=20:
```

Specify the condition expression to be used. This syntax is the end of the step, so it ends with a semicolon.

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

## Third Step:

Specify the condition expression to be used if all previous steps fail.

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

# Manage Roles

Roles are collections of tasks that can be grouped together and applied to users or groups. Like tasks, roles can be folder-based, containing a collection of folder-based tasks, or global, containing a collection of global tasks. Folder roles always apply to folders. A user that has a particular folder role can perform all the tasks in that role on the items in that folder. A user with a global role can perform all the tasks for that global role.

#### **Default Roles**

Following default roles are provided in the system:

- · 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 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 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.

## **Create a Global Role**

Complete the following procedure to create a global role.

- **Step 1** Log in to CCDM portal as administrator.
- Step 2 Click the burger icon and select Security > Roles > Global Roles.
- Step 3 Click New.
- **Step 4** In Name field, enter new role name that reflects the permissions or category of the user it is intended.
- **Step 5** Optional, in **Description** field, enter description. It can be summary of the permissions granted.

- **Step 6** Select the tasks you want to enable the role.
- Step 7 Click Save.

## **Assign a Global Role**

Complete the following procedure to assign users with global roles.

#### **Procedure**

- **Step 1** Login as administrator and configure the following, to grant or remove global permissions:
  - a) In Global Roles window, select the global role that you want to assign to users or groups.
  - b) Click Members.
  - c) Click Add Members.
  - d) In folder tree panel, select the folder that has users or groups you want to assign.

**Note** You can use the fields at the top to filter the view such as only users, only groups, or to search for specific names.

e) Check the check box for the newly added members.

**Note** You can select users and groups from multiple folders.

- f) Click **OK**.
- g) Click Save.
- **Step 2** Click delete icon and click **Confirm**, to remove a user or group from this global role.

## **Edit a Global Role**

Complete the following procedure to edit a global role.

- **Step 1** Login as administrator and select **Security** > **Roles** > **Global Roles**.
- **Step 2** Select the global role that you want to edit.
- **Step 3** Select **Details** tab and change the details if required.
- **Step 4** Check **Enabled** check box to ensure that global role is available to users.
- **Step 5** Check **Hidden** check box if you want to hide global roles from system users.
- **Step 6** Select **Tasks** tab and check the tasks that you want to add and uncheck the tasks that you want to remove from the global role.
- Step 7 Click Save.

#### Delete a Global Role

Complete the following procedure to delete a global role.

#### **Procedure**

- **Step 1** Login as System Administrator and click **Global Roles** in Security.
- **Step 2** In Global Roles window, check the required global role check box you want to delete and click **Delete**.
- **Step 3** Click **OK** to confirm the deletion.

### **Create a Folder Role**

Complete the following procedure to create a folder role.

#### **Procedure**

- **Step 1** Login the CCDM Portal as System Administrator.
- **Step 2** Click the burger icon and select **Security** > **Roles**.
- Step 3 In Roles window, click New.
- **Step 4** In Name field, enter new role name that reflects the permissions or category of the user it is intended.
- **Step 5** Optional, in **Description** field, enter description. It can be summary of the permissions granted.
- **Step 6** Select the tasks you want to enable the role.
- Step 7 Click Save.

#### **Assign a Folder Role**

Complete the following procedure to assign a folder role.

- **Step 1** Login the CCDM Portal as Administrator and click **Security** > **Permissions**.
- **Step 2** In Security Manager, click the location in the folder tree that contains the users or groups you want to assign folder roles to. Then, do one of the following:
  - Click the **Users** tab to see the users in that folder. (or)
  - Click the **Groups** tab to see the users in that folder.
- **Step 3** Check the check boxes beside the users or groups that you want to edit the permissions for.
- **Step 4** Click **Change Permissions** to change the folder roles for the selected users or groups.
- Step 5 If you see a message that states that the current folder is inheriting permissions, and you want to stop this process and set different permissions for this folder, click **Edit Item Security**, and then click **OK** to confirm the action. Click **Cancel** if you do not want to set different permissions for the folder.

- **Step 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 side of the screen, and one or more folder roles from the right side of the screen.
- Step 7 Check the Change Permissions for Subfolders check box if you want to copy the changed permissions to the subfolders of the selected folder also.
- **Step 8** Click **Save** to see a summary of the folder roles that you changed.
- **Step 9** Click **Confirm** to apply the new folder roles.

#### **Edit a Folder Role**

Complete the following procedure to edit a folder role.

## **Procedure**

- **Step 1** Login the CCDM Portal as Administrator and click **Roles** under **Security**.
- **Step 2** In Role Manager, click the name of the folder role you want to edit.
- **Step 3** Check the tasks you want to add to the folder role, and uncheck the tasks you want to remove from the folder role.
- **Step 4** Click **Save** to save your changes.

#### **Delete a Folder Role**

Complete the following procedure to delete a folder role:

#### **Procedure**

- **Step 1** To delete a folder role, in Role Manager, check the check box beside the folder role you want to delete.
- Step 2 Click Delete, and then click OK.

You cannot delete a folder role that is still being used.

## **Global Role Tasks**

Global roles such as Basic, Advanced, Host and System Administrator are applied to users or groups of users, enabling them to access the same set of functions on all the folders to which they have access. The following table displays a list of all available tasks configurable for a global role, accessed through Security > Global.

Global Task Name	Comments	Basic	Advanced
Security Manager	Displays Security Manager and Security Manager options on the user's tools page.		x
Service Manager	Displays Service Manager on the tools page.		х
System Manager	Displays System Manager on the tools page.		x

Global Task Name	Comments	Basic	Advanced
Advanced User	Displays a check box on the user settings page, enabling access to Advanced User mode, which displays the tools page on startup.		х
Manage site	Allows the user to save system settings, security settings, reporting settings, and provisioning settings on the Settings page.		
Self skill	Allows the user to save system settings, security settings, reporting settings, and provisioning settings on the Settings page.		
Browse Roles	Allows the user to view folder-based roles within Role Manager and Security Manager.		X
Manage Roles	Allows the user to create, modify, and delete folder-based roles within Security Manager > Role Manager.		
Browse Global Roles	Allows the user to view global roles in Global Security Manager.		х
Manage Global Roles	Allows the user to add, modify, and delete global roles using Global Security Manager.		
Browse Global Security	Enables Global Security Manager within the Security Manager tool on the home page. Access is view-only. Roles are unable to be edited.		х
Manage Global Security	Displays the Global Security Manager option within Security Manager tool on the tools page enabling the user to view and edit global security roles.		
Browse Dimension type	Allows the user to select dimension types (such as Agent or Call Type) from an Item Type drop-down when creating a Parameter Set in Reports.	Х	х
Bulk Import Dimensions	Allows the user to select dimension types (such as Agent or Call Type) from an Item Type drop-down when creating a Parameter Set in Reports.		х
Provision Agent	Allows the user to create and manage an Agent using System Manager, or Agent Team Manager, provided the user also has granted permission to Manage Dimensions on the specified folder, and Browse Connected Systems is enabled.	X	x

Global Task Name	Comments	Basic	Advanced
Provision Agent Desktop	Allows the user to add an Agent Desktop, through the New > Resource Items menu within System Manager, provided the user also has granted permission to Manage Dimensions on the specified folder, and Browse Connected Systems is enabled.		х
Provision Agent Team	Allows the user to add an Agent Team item to a folder, through the New > Resource Items menu within System Manager.	X	х
Provision Call Type	Allows the user to add a new Call Type to a folder using the System Manager, New > Resource Items menu.		х
Provision Dialed Number	Allows the user to provision new dialed Numbers.		Х
Provision Directory Number	Allows the user to provision new directory numbers.		х
Provision Enterprise Skill Group	Allows the user to provision new Enterprise skill groups.		X
Provision Expanded Call Variable	Allows the user to create an Expanded Call Variable and manage its settings and active dates through System Manager > New Resource.		х
Provision Label	Allows the user to create labels through System Manager > Resource Folder > Resource Item.		х
Provision Person	Allows the user to provision a person using System Manager or Service Manager, provided the user also has granted permission to Manage Dimensions on the specified folder, and Browse Connected Systems is enabled.		x
Provision Service	Allows the user to provision and manage a service, including setting Service Level Type, associated Skill Groups, and peripherals, using System Manager.		Х
Provision Skill Group	Allows the user to manage skill groups using System Manager, Skill Group Manager (within Service Manager) provided the user also has given permission to Manage Dimensions on the folder where the skill group is located.		x
Provision User Variable	Allows the user to provision a user-defined variable using System Manager.		х

## **Folder-Based Roles**

You can apply roles to a specific folder, so that users that are assigned the folder-based role have access to the task-based permissions specified only for that folder. The following table lists the tasks available to create a folder-based role, using Security Manager > Role Manager. The Basic, Supervisor, and Advanced columns indicate whether the task is enabled by default for these preconfigured roles in Unified CCDM.

Name	Comments	Basic	Supervisor	Advanced
<b>Folder Settings</b>			1	1
Browse Folders	Allows the user to see a folder in the folder tree.	x		X
Manage Folders	Allows the user to edit, create, and remove folders in the specified folder.			X
Users and Security				
Browse Users	Allows the user to view the details of all users in the specified folder.	x		X
Manage Users	Allows the user to modify settings of users within the specified folder.		x	X
Reset passwords	Allows the user to reset the password of other users within the specified folder.			х
Manage Tenants	Allows the user to manage the tenant items within the specified folder.			
Manage Security	Allows the user to modify security permissions on the selected folder. Access to the Security Manager tool is required.			x
<b>Dimensions and Prefixes</b>				
Browse Dimensions	Allows the user to list system resources in the specified folder.	x		x
Manage Dimension	Allows the user to edit, move, and delete dimensions such as agents, agent teams, or skill groups in the specified folder using System Manager.		x	x
Manage Dimension Memberships	Allows the user to add, modify, and delete dimension memberships.			
Clone Dimensions	Allows user to copy agents.		X	
Browse Prefixes	Allows the user to browse automatic resource movement prefixes in the specified folder on the prefix details tab of a tenant item in the System Manager.			х

Manage Prefixes	Allows the user to add and remove		
	automatic resource movement prefixes		
	in the specified folder on the prefix		
	details tab of a tenant item in the		
	System Manager.		

# **Configure Gadgets**

You can perform the following operations to configure gadgets:

- Create Gadget, on page 61
- Edit Gadget, on page 61
- Delete Gadget, on page 62

## **Create Gadget**

## **Procedure**

- **Step 1** Login to the CCDM portal as tenant or sub-customer user.
- Step 2 Click Gadget.
- **Step 3** Select **Add Gadget** from the drop-down list.
- Step 4 Click Resource Manager.
- **Step 5** Click the burger icon and select a tenant.
- **Step 6** Select a resource from the search bar list.

The list includes Agent, Agent Desktop, Agent Team, Call Type, Department, Dialed number, Enterprise Skill Group, Expanded Call Variable, Label, Network Vru Script, Person, Precision Attribute, Precision Queue, Service, Skill Group, and User Variable.

**Step 7** Click **Gadget** > **Save App**, enter a name for the gadget and browse a folder to save the gadget.

## **Edit Gadget**

- **Step 1** Login to the CCDM portal as tenant or sub-customer user.
- **Step 2** Click **Gadget** and select **Open App**, choose the app that you have created.
- **Step 3** Select the gadget you want to modify.
- **Step 4** Select the required tenant and required resource to modify the gadget.
- **Step 5** Click **App Name** > **Save App**, click **Yes** to save the modified fields.

## **Delete Gadget**

## **Procedure**

- **Step 1** Login to the CCDM portal as tenant or sub-customer user.
- **Step 2** Click **Gadget** > **Open App** and select an app.
- **Step 3** Select the gadget that you want delete from the app and click **Delete**.
- **Step 4** Click **Save** to save the app.

Note To delete an app, click **Gadget** > **Delete App** and click **OK**.

# **Provision Unified CCE Using Administration Workstation**

Complete the following procedures to provision Unified CCE using Administration Workstation.



Note

- The base configuration that you upload using the ICMdba tool will automatically provision other required elements of Unified CCE.
- Administration Workstations can support remote desktop access. But, only one user can access workstation at a time. Unified CCE does not support simultaneous access by several users on the same workstation.

# **Set up Agent Targeting Rules**

Complete the following procedure to configure individual agent targeting rules.

- Step 1 In the Configuration Manager, navigate to Configure ICM > Targets > Device target > Agent Targeting Rule or navigate to Tools > List Tools > Agent Targeting Rule.
- **Step 2** In the ICM Agent Targeting Rules dialog box, click **Retrieve**.
- Step 3 Click Add.
- **Step 4** Enter a name for the rule.
- **Step 5** Choose a peripheral where the rule will be associated.
- **Step 6** Choose **Agent Extension** from the Rule Type drop-down list.
- **Step 7** Choose one or more routing clients that can initiate the route request.
- **Step 8** Enter the agent extension range.
- Step 9 Click Save.

# **Provision Unified CCE Using Web Administration**

• Set Up Reason Code, on page 63

## **Set Up Reason Code**

Complete the following procedure to set up the reason code.

#### **Procedure**

- Step 1 Login to the CCE Web Administration page, click Manage and select Reason Codes.
- **Step 2** Click **New** on the List of Reason Codes page to open the New Reason Code page.
- **Step 3** Complete fields as follows:
  - a) In **Text** field, enter the relevant text for the reason code.
  - b) In **Code** field, enter a unique positive number.
  - c) Optional, in **Description** field, enter the description for the reason code.
- **Step 4** Save the reason code to return to the List page, where a message confirms the successful creation.

# **Provision Routing Script Using Internet Script Editor**

Complete the following procedure to log in to ISE:

## **Procedure**

- **Step 1** Launch Internet Script Editor iscriptEditor.exe.
- **Step 2** Enter your Username, Password and Domain.

#### **Example:**

If ISE user is in format iseuser1@domain.com then username will be iseuser1 and domain will be domain.com

- Step 3 Click Connection.
- **Step 4** Enter the AW Server Address, Port, and ICM Instance Name.
- Step 5 Click OK.
- Step 6 Click OK.

Upgrade Internet Script Editor, if necessary.

**Note** After login, you will see only the script items that the linked Unified CCDM user has access to view.

# **Unified CVP Administration**

• Provisioning Unified CVP Using Unified CCDM, on page 64

# **Provisioning Unified CVP Using Unified CCDM**

- Uploading the Media File, on page 64
- Uploading the IVR Script, on page 64

## **Uploading the Media File**

## **Procedure**

- Step 1 Log into CCDM Portal.
- **Step 2** In **Resource Manager**, navigate to the CVP assigned default import tenant.
- **Step 3** Click **Resource** and select **Mediafile**.
- **Step 4** Select the media server on which the file has to be uploaded.
- **Step 5** Click **Add file(s)** to add media files.
- Step 6 Click Save.

# **Uploading the IVR Script**

#### **Procedure**

- **Step 1** Log into the CCDM Portal
- **Step 2** In **Resource Manager**, select the CVP assigned default import tenant.
- Step 3 Click Resource and select IVR app.
- **Step 4** Select the VXML servers on which the IVR script has to be uploaded.
- **Step 5** Click **Add file(s)** to add IVR files (.zip files).
- Step 6 Click Save.

# **Unified Communication Manager Administration**

# **Provision Unified Communications Manager Using UCDM**

- CRUD Operations for UCDM Objects, on page 65
- Provisioning Contact Center Server and Contact Center Services, on page 67

- Configure SIP Trunks, on page 69
- Configure Route Groups, on page 71
- Configure Route List, on page 73
- Configure Route Patterns, on page 74
- Configure Directory Number Inventory and Lines, on page 77
- Configure Phones, on page 78
- Configure Regions, on page 80
- Configure Class of Service, on page 82
- Configure Cisco Unified CM Group, on page 75
- Configure Device Pool, on page 76
- Associate Phone to Application User, on page 83
- Disassociate Unified Communication Manager from UCDM, on page 84
- Built-in-Bridge, on page 84
- Bulk Operations Using UCDM, on page 85
- Increase the SW MTP and SW Conference Resources, on page 86

# **CRUD Operations for UCDM Objects**

Following table provides an information of create, update or delete operations for UCDM objects.



Note

Bulk upload is supported only for create operations. See, CRUD Operations for UCDM Objects, on page 65

Object	Create	Read	Update	Delete	Bulk Upload
Contact Center Servers	х	х	x	x	x
See, Configure Contact Center Servers, on page 67					
Contact Center Services	х	х	X	X	х
See, Configure Contact Center Services, on page 68					

Object	Create	Read	Update	Delete	Bulk Upload
SIP Trunks	X	X	X	X	X
See, Configure SIP Trunks, on page 69					
Route Group	X	X	X	X	X
See, Configure Route Groups, on page 71					
Route List	X	x	X	X	X
See, Configure Route List, on page 73					
Route Patterns	X	x	X	X	X
See, Configure Route Patterns, on page 74					
Directory Number and Lines	x	х	x	x	х
See, Configure Directory Number Inventory and Lines, on page 77					
Phones	X	x	x	X	X
See, Configure Phones, on page 78					
Regions	X	x	x	X	X
See, Configure Regions, on page 80					
Class of Service	X	X	x	X	X
See, Configure Class of Service, on page 82					
Device Pools	X	X	x	X	X
See, Configure Device Pool, on page 76					

## **Provisioning Contact Center Server and Contact Center Services**

This section describes the procedure to configure contact center servers and services. Configuring server enables CUCM to communicate with Contact Center during call transfer from agent to agent and routing a call back to the customer voice portal (CVP). Configuring services enables internal service calls to be routed to CUBE for contact center process.

## **Configure Contact Center Servers**

A Contact Center Server can be configured only for the customer assigned to a specific Cisco Unified Communications Manager.

- Add Contact Center Servers, on page 67
- Edit Contact Center Servers, on page 68
- Delete Contact Center Servers, on page 68

### Add Contact Center Servers

#### **Procedure**

- Step 1 Login to the UCDM server using provider or reseller admin credentials.
   Step 2 Set the hierarchy according to the customer level.
   Step 3 Select Services > Contact Center > Servers.
- Step 4 Click Add.
- **Step 5** Enter the contact center server name.
- **Step 6** Select the appropriate CUCM from the **CUCM** drop-down list.
- **Step 7** Enter the transfer conference pattern number.

This creates a CTI Route Point and associates with the default application user (pguser).

**Step 8** Enter the network VRU pattern.

This creates route pattern associated with CVP trunk and CUBE trunk.

- **Step 9** Expand SIP trunk section and configure the CVP trunk.
  - a) Select **CVP** trunk from **Trunk Destination Type** drop-down list.
  - b) Expand **Destination Addresses** and enter the trunk destination address and trunk destination port.
  - c) Select the appropriate trunk security profile from the drop-down list.
- **Step 10** Expand SIP trunk section and configure the CUBEE trunk.
  - a) Select **CUBEE** trunk from **Trunk Destination Type** drop-down list.
  - b) Expand **Destination Addresses** and enter the trunk destination address and trunk destination port.
  - c) Select the appropriate trunk security profile from the drop-down list.
- Step 11 Click Save.

#### Edit Contact Center Servers

## **Procedure**

- **Step 1** Login to the UCDM server using provider or reseller admin credentials.
- **Step 2** Set the hierarchy according to the customer level.
- **Step 3** Select **Services** > **Contact Center** > **Servers**.
- **Step 4** Click the contact center server that you want to edit and modify the required fields.

**Note** You cannot change contact center server name.

Step 5 Click Save.

## Delete Contact Center Servers

## Before you begin

Delete the contact center service and parameters associated with contact center server.

## **Procedure**

- **Step 1** Login to the UCDM server using provider or reseller admin credentials.
- **Step 2** Set the hierarchy according to the customer level.
- **Step 3** Select **Services** > **Contact Center** > **Servers**.
- **Step 4** Click the contact server that you want delete.
- Step 5 Click Save.

## **Configure Contact Center Services**

- Add Contact Center Services, on page 68
- Edit Contact Center Services, on page 69
- Delete Contact Center Services, on page 69

## Add Contact Center Services

- **Step 1** Login to the UCDM server using provider or reseller admin credentials.
- **Step 2** Set the hierarchy to the customer or site level.
- **Step 3** Select Services > Contact Center > Service.
- Step 4 Click Add.

- **Step 5** Enter the contact center service name
- **Step 6** Select the associated contact center server name from the drop-down list.
- **Step 7** Expand **Internal Service Numbers** section, enter the service number pattern (pattern that is used to route internal service calls to the CUBE).
- Step 8 Click Save.

Note

Adding Contact center server and services in UCDM creates application user, Trunk, CTI route point, Route group, Route Pattern as default configuration.

For additional CTI Route Points, see Set Up CTI Route Point

## Edit Contact Center Services

### **Procedure**

- **Step 1** Log in to the Unified CDM server using provider or reseller admin credentials.
- **Step 2** Set the hierarchy according to the customer level.
- **Step 3** Select **Services** > **Contact Center** > **Services**.
- **Step 4** Click the contact center service that you want to edit and modify the required fields.

**Note** You cannot change contact center service name.

Step 5 Click Save.

## Delete Contact Center Services

## **Procedure**

- **Step 1** Log in to the Unified CDM server using provider or reseller admin credentials.
- **Step 2** Set the hierarchy according to the customer level.
- **Step 3** Select **Services** > **Contact Center** > **Services**.
- **Step 4** Click the contact center service that you want to delete.
- Step 5 Click Delete.

# **Configure SIP Trunks**

- Add SIP Trunks, on page 70
- Edit SIP Trunks, on page 70
- Delete SIP Trunks, on page 71

#### **Add SIP Trunks**

## **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- **Step 3** Navigate to **SIP Trunks**:
  - For provider or reseller administrator **Device Management** > **CUCM** > **SIP Trunks**
  - For customer administrator **Device Management** > **Advanced** > **SIP Trunks**
- **Step 4** Click **Add** to create SIP trunk.
- **Step 5** Perform the following, In **Device Information** tab:
  - a) Choose required IP address from CUCM drop-down list that you want to add SIP trunk.
  - b) Enter a unique SIP trunk name in **Device Name** field.
  - c) Choose **Device Pool** from the drop-down list.
  - d) Check Run On All Active Unified CM Nodes check-box, if required.
- **Step 6** Goto **SIP Info** tab and perform the following:
  - a) Click **Add** icon in **Destination** panel.
  - b) Enter destination IP address in Address IPv4 field.

**Note** To create the SIP trunk from CUCM to CVP, CUBE or any other destinations, enter IP addresses of respective devices.

- c) Change **Port**, if required.
- d) Enter **Sort Order** to prioritize multiple destinations.

**Note** Lower sort order indicates higher priority.

- e) Choose an appropriate option from SIP Trunk Security Profile drop-down list.
- f) Choose **sip profile** from the drop-down list.

Repeat this step to add another trunk.

## Step 7 Click Save.

## **Edit SIP Trunks**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- **Step 3** Navigate to **SIP Trunks**:
  - For provider or reseller administrator **Device Management** > **CUCM** > **SIP Trunks**

- For customer administrator **Device Management** > **Advanced** > **SIP Trunks**
- **Step 4** Click the SIP trunk that you want to edit and modify the required fields.
- Step 5 Click Save.

#### **Delete SIP Trunks**

### **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- **Step 3** Navigate to **SIP Trunks**:
  - For provider or reseller administrator **Device Management** > **CUCM** > **SIP Trunks**
  - For customer administrator **Device Management** > **Advanced** > **SIP Trunks**
- **Step 4** Click the SIP trunk that you want to delete.
- Step 5 Click Delete.

# **Configure Route Groups**

## Before you begin

Ensure SIP Trunks are configured. See, Configure SIP Trunks, on page 69.

Perform the following instruction to configure route groups.

- Add Route Group, on page 71
- Edit Route Group, on page 72
- Delete Route Group, on page 72

## **Add Route Group**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- **Step 3** Navigate to **Route Groups**:
  - For provider or reseller administrator **Device Management** > **CUCM** > **Route Groups**
  - For customer administrator **Device Management** > **Advanced** > **Route Groups**

- **Step 4** Click **Add** to create route group.
- **Step 5** Choose required IP address from **CUCM** drop-down list to add route group.
- **Step 6** Enter a unique name in **Route Group Name** field.
- Step 7 Click Add icon in Members panel.
- **Step 8** Choose an appropriate SIP trunk from **Device Name** drop-down list.

**Note** When a SIP trunk is selected, it will select all the ports on the device.

Step 9 Click Save.

## **Edit Route Group**

## **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- **Step 3** Navigate to **Route Groups**:
  - For provider or reseller administrator **Device Management** > **CUCM** > **Route Groups**
  - For customer administrator **Device Management** > **Advanced** > **Route Groups**
- **Step 4** Click the route group from the list that you want to edit and modify required fields.
- Step 5 Click Save.

## **Delete Route Group**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- **Step 3** Navigate to **Route Groups**:
  - For provider or reseller administrator **Device Management** > **CUCM** > **Route Groups**
  - For customer administrator **Device Management** > **Advanced** > **Route Groups**
- **Step 4** Click the route group from the list that you want to delete.
- Step 5 Click Delete.

# **Configure Route List**

## Before you begin

Ensure Route Groups are configured. See, Configure Route Groups, on page 71.

Perform the following instructions to configure route list:

- Add Route List, on page 73
- Edit Route List, on page 73
- Delete Route List, on page 74

#### **Add Route List**

#### **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- Step 3 Navigate to Route List:
  - For provider or reseller administrator **Device Management** > **CUCM** > **Route List**
  - For customer administrator **Device Management** > **Advanced** > **Route List**
- **Step 4** Click **Add** to create route list.
- **Step 5** Choose required IP address from **CUCM** drop-down list to add route list.
- **Step 6** Enter a unique route list name in **Name** field.
- Step 7 Click Add icon in Route Group Items panel.
- Step 8 Choose the route group from Route Group Name drop-down list.
- Step 9 Click Save.

#### **Edit Route List**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- Step 3 Navigate to Route List:
  - For provider or reseller administrator **Device Management** > **CUCM** > **Route List**
  - For customer administrator **Device Management** > **Advanced** > **Route List**
- **Step 4** Click the route list from the list that you want to edit and modify the required fields.

## Step 5 Click Save.

## **Delete Route List**

#### **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- **Step 3** Navigate to **Route List**:
  - For provider or reseller administrator **Device Management** > **CUCM** > **Route List**
  - For customer administrator **Device Management** > **Advanced** > **Route List**
- **Step 4** Click the route list from the list that you want to delete.
- Step 5 Click Delete.

# **Configure Route Patterns**

## Before you begin

Ensure Route Lists are configured. See Configure Route List, on page 73.

Perform the following instructions to configure route patterns:

- Add Route Pattern, on page 74
- Edit Route Patterns, on page 75
- Delete Route Pattern, on page 75

#### **Add Route Pattern**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- **Step 3** Navigate to **Route Patterns**:
  - For provider or reseller administrator Device Management > CUCM > Route Patterns
  - For customer administrator **Device Management** > **Advanced** > **Route Patterns**
- **Step 4** Click **Add** to create route pattern.
- **Step 5** Perform the following, In **Pattern Defination** tab:
  - a) Choose required IP address from **CUCM** drop-down list that you want to add route pattern.

- b) Enter a unique name in Route Pattern field.
- c) Choose either route list or trunk from respective drop-down list, in **Destination (Only Choose Route List or Gateway)** panel.

## Step 6 Click Save.

## **Edit Route Patterns**

### **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- Step 3 Navigate to Route Patterns:
  - For provider or reseller administrator **Device Management** > **CUCM** > **Route Patterns**
  - For customer administrator **Device Management** > **Advanced** > **Route Patterns**
- **Step 4** Click the route pattern from the list that you want to edit and modify the required fields.
- Step 5 Click Save.

#### **Delete Route Pattern**

## **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
- Step 3 Navigate to Route Patterns:
  - For provider or reseller administrator **Device Management** > **CUCM** > **Route Patterns**
  - For customer administrator **Device Management** > **Advanced** > **Route Patterns**
- **Step 4** Click the route pattern from the list that you want to delete.
- Step 5 Click Delete.

# **Configure Cisco Unified CM Group**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to the node where Unified Communication Manager is configured.

- Step 3 Navigate to Unified CM Groups.
  - For provider or reseller administrator Device Management > CUCM > Unified CM Groups
  - For customer administrator **Device Management** > **Advanced** > **Unified CM Groups**
- **Step 4** Enter unique Unified CM group name in Name field.
- Step 5 Click Add icon in Unified CM Group items panel.
- Step 6 Enter Priority.
- Step 7 Choose appropriate CUCM from Selected Cisco Unified Communications Manager field.
- Step 8 Click Save.

## **Configure Device Pool**

Ensure that Cisco Unified CM Group is configured. See, Configure Cisco Unified CM Group, on page 75.

- Add Device Pool, on page 76
- Edit Device Pool, on page 77
- Delete Device Pool, on page 77

### **Add Device Pool**

- **Step 1** Login to Cisco Unified Communications Domain Manager as provider/reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to node where CUCM is configured.
- **Step 3** Navigate to **Device pool**:
  - For provider/reseller Device Management > CUCM > Device Pools
  - For customer admin **Device Management** > **Advanced** > **Device Pools**
- Step 4 Click Add.
- **Step 5** Choose **Network Device List** from the drop-down list.
- **Step 6** In **Device Pool Settings** tab:
  - a) Enter Device Pool Name.
  - b) Choose call manager group from Cisco Unified Communication Manager drop-down list.
- **Step 7** Goto **Roaming Sensitive Settings** tab:
  - a) Choose **Date/Time Group** from drop-down list.
  - b) Choose **Region** from drop-down list.
  - c) Choose **SRST Reference** from drop-down list
- Step 8 Click Save.

## **Edit Device Pool**

## **Procedure**

- **Step 1** Login to Cisco Unified Communications Domain Manager as provider/reseller or customer admin.
- **Step 2** Navigate to **Device pool**:
  - For provider/reseller **Device Management** > **CUCM** > **Device Pools**
  - For customer admin **Device Management** > **Advanced** > **Device Pools**
- **Step 3** Click device pool from the list that you want to edit and modify the required fields.
- Step 4 Click Save.

#### **Delete Device Pool**

#### **Procedure**

- **Step 1** Login to Cisco Unified Communications Domain Manager as provider/reseller or customer admin.
- Step 2 Navigate to Device pool:
  - For provider/reseller **Device Management** > **CUCM** > **Device Pools**
  - For customer admin **Device Management** > **Advanced** > **Device Pools**
- **Step 3** Click device pool from the list that you want to delete.
- Step 4 Click Delete.

# **Configure Directory Number Inventory and Lines**

- Add Directory Number Inventory, on page 77
- Edit Lines, on page 78
- Delete Lines, on page 78

## **Add Directory Number Inventory**

## Before you begin

Ensure Site dial plan is created, see Add Site Dial Plan.

#### **Procedure**

**Step 1** Login to Cisco Unified Communication Domain Manager as a provider, reseller or customer.

- **Step 2** Ensure that hierarchy path is set to appropriate customer.
- Step 3 Navigate to Dial Plan Management > Customer > Number Management > Add Directory Number Inventory.
- **Step 4** Choose **Site** from drop-down list that you want to add directory numbers.
- **Step 5** Enter **Starting Extension** value.
- **Step 6** If you want to set the range, enter **Ending Extension** value.
- Step 7 Click Save.

Newly added directory number to inventory does not add directory number to Cisco Unified Communication Manager unless it is associated with a phone.

#### **Edit Lines**

## **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as a provider, reseller or customer.
- **Step 2** Ensure that hierarchy path is set to appropriate customer.
- **Step 3** Navigate to **Subscriber Managemet** > **Lines**.
- **Step 4** Click line from the list that you want to edit and modify the required fields.
- Step 5 Click Save.

#### **Delete Lines**

## **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as a provider, reseller or customer.
- **Step 2** Ensure that hierarchy path is set to appropriate customer.
- **Step 3** Navigate to **Subscriber Managemet** > **Lines**.
- **Step 4** Click line from the list that you want to delete.
- Step 5 Click Delete.

# **Configure Phones**

## Before you begin

Ensure Directory Number Inventory is created, see Add Directory Number Inventory, on page 77 Perform the following instructions to configure phones:

- Add Phones, on page 79
- Edit Phones, on page 80

• Delete Phones, on page 80

## **Add Phones**

Perform the following to add phone for provider, reseller or customer.

- Add Phones as Provider or Reseller, on page 79
- Add Phones as Customer, on page 79

## Add Phones as Provider or Reseller

## **Procedure**

Step 1	Login to Cisco Unified Communication Domain Manager as provider or reseller .
Step 2	Ensure that hierarchy is set to appropriate site.
Step 3	Navigate to <b>Subscriber Management &gt; Phones</b> .
Step 4	Click Add.
Step 5	Enter a unique <b>Device Name</b> with the prefix SEP.
	Example:
	SEPA1B2C3D4E5F6
Step 6	Choose <b>Product Type</b> from the drop-down list.
Step 7	Choose <b>Device Protocol</b> from the drop-down list.
Step 8	Choose Calling Search Space from drop-down list.
Step 9	Choose <b>Device Pool</b> from drop-down list.
Step 10	Choose <b>Location</b> from drop-down list.
Step 11	Goto <b>Lines</b> tab and perform the following:
	a) Click <b>Add</b> icon in <b>Lines</b> panel to add line.
	b) Choose directory number from <b>Pattern</b> drop-down list, in <b>Dirn</b> panel.
	c) Choose <b>Route Partition Name</b> from drop-down list.
Step 12	Click Save.

## Add Phones as Customer

Step 1	Login to Cisco Unified Communication Domain Manager as customer.
Step 2	Ensure that hierarchy is set to appropriate site.
Step 3	Navigate to <b>Subscriber Management &gt; Phones</b> .
Step 4	Click Add.
Step 5	Choose <b>Product Type</b> from the drop-down list.
Step 6	Choose <b>Protocol</b> from the drop-down list.

**Step 7** Enter a unique **Device Name** with the prefix SEP.

## **Example:**

SEPA1B2C3D4E5F6

- **Step 8** Choose **Calling Search Space** from drop-down list.
- **Step 9** Goto **Advanced Information** tab and perform the following:
  - a) Choose **Device Pool** from drop-down list.
  - b) Choose Location from drop-down list.
- **Step 10** Goto **Lines** tab and perform the following:
  - a) Click Add icon in Lines panel to add line.
  - b) Choose directory number from Pattern drop-down list, in Dirn panel.
  - c) Choose Route Partition Name from drop-down list.
- Step 11 Click Save.

## **Edit Phones**

#### **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer.
- **Step 2** Ensure that hierarchy is set to appropriate site.
- **Step 3** Navigate to **Subscriber Management** > **Phones**.
- **Step 4** Click phone from the list that you want to edit and modify the required field.
- Step 5 Click Save.

## **Delete Phones**

## **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer.
- **Step 2** Ensure that hierarchy is set to appropriate site.
- **Step 3** Navigate to **Subscriber Management** > **Phones**.
- **Step 4** Click phone from the list that you want to delete.
- Step 5 Click Delete.

# **Configure Regions**

- Add Regions, on page 81
- Edit Regions, on page 81
- Delete Regions, on page 81

## **Add Regions**

## **Procedure**

Step 1 Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin. Step 2 Ensure that hierarchy is set to the node where Unified Communication Manager is configured. Step 3 Navigate to **Device Management** > **CUCM** > **Regions**. Step 4 Click Add. Step 5 Choose CUCM from the drop-down list. Step 6 Enter unique region name in Name field. Step 7 Expand Related Regions. Step 8 Choose Use System Default from Immersive Video Bandwidth (Kbps) drop-down list. Step 9 Keep the default selection in Audio Bandwidth (Kbps) drop-down list. Step 10 Choose Use System Default from Video Bandwidth (Kbps) drop-down list. Step 11 Choose Use System Default from Audio Codec Preferrence drop-down list. Default codec is G.711.

## **Edit Regions**

Step 12

Step 13

## **Procedure**

Click Save.

Choose Region Name from drop-down list.

Step 1	Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
Step 2	Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
Step 3	Navigate to <b>Device Management</b> > <b>CUCM</b> > <b>Regions</b> .
Step 4	Click the regions from the list that you want to edit and modify the required fields.
Sten 5	Click Save

## **Delete Regions**

Step 1	Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
Step 2	Ensure that hierarchy is set to the node where Unified Communication Manager is configured.
Step 3	Navigate to <b>Device Management</b> > <b>CUCM</b> > <b>Regions</b> .
Step 4	Click the region that you want to delete.

## Step 5 Click Delete.

# **Configure Class of Service**

Use this procedure to create a new Calling Search Space (CSS) or edit an existing CSS that is tied to a site. The CSS can be used as a Class of Service (COS) for a device or line, or any of the other templates that rely on COS to filter different features.

- Add Class of Service, on page 82
- Edit Class of Service, on page 83
- Delete Class of Service, on page 83

## **Add Class of Service**

#### **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to valid site under customer.
- Step 3 Navigate Dial Plan Management > Site > Class of Service
- Step 4 Click Add.
- **Step 5** Enter unique Class of Service Name.

This name can use alphanumeric characters, periods, underscores, hyphens and spaces, it should not exceed 50 characters. You can also make use of macros that are available in the system to create a Class Of Service name. Macros allow you to dynamically add site IDs, customer IDs, and other types of information to the CSS.

## **Example:**

Cu1-24HrsCLIP-PT-{{macro.HcsDpSiteName}}

- **Step 6** Expand **Member** panel to add partition.
- **Step 7** Choose partition from drop-down list under **Selected Partitions** column.

Note

- Click **Add** icon to add more partitions, repeat this step to add desired members to this Class of Service.
- Add Cu<CUSTOMER\_ID>CC<CC\_SERVER\_ID>-Xfer4CCServer-PT to the Class of Service partition member list.

## Step 8 Click Save.

#### **Edit Class of Service**

## **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to valid site under customer.
- Step 3 Navigate Dial Plan Management > Site > Class of Service
- **Step 4** Click Class of Service from the list that you want to edit and modify the required fields.
- Step 5 Click Save.

#### **Delete Class of Service**

#### **Procedure**

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer admin.
- **Step 2** Ensure that hierarchy is set to valid site under customer.
- Step 3 Navigate Dial Plan Management > Site > Class of Service
- **Step 4** Click Class of Service from the list that you want to delete.
- Step 5 Click Delete.

# **Associate Phone to Application User**

## Before you begin

Phones should be added, see Add Phones, on page 79

- **Step 1** Login to Cisco Unified Communication Domain Manager as provider, reseller or customer.
- **Step 2** Ensure that hierarchy is set to appropriate site.
- Step 3 Navigate to Subscriber Management > Agent Lines.
- **Step 4** Click **Add** to add new agent line.
- **Step 5** Choose **Phones** from **Device Type** drop-down list.
- **Step 6** Choose device from **Device Name** drop-down list.
- **Step 7** Choose **Line** from drop-down list.
- **Step 8** Choose **Application User** from drop-down list.
- Step 9 Click Save.

# **Disassociate Unified Communication Manager from UCDM**

To retain Unified Communication Manager configurations, perform the following before deleting the customer:

#### **Procedure**

- Step 1 Login to UCDM as provider or reseller.Step 2 Choose the customer from hierarchy that you want to disassociate CUCM.
- Step 3 Navigate to Device Management > CUCM > Servers.
- **Step 4** Click the CUCM that you want to disassociate.
- Step 5 Click Remove icon in Network Addresses panel.
- Step 6 Click Save.

# **Built-in-Bridge**

Built-in-Bridge (BIB) is not enabled by default for the phones. It is disabled at the system level as it is not used by all the customer by default. It is used only by the customers having Contact Center.

The provider has to perform the following procedures to enable BIB for the customers having contact center.



Note

Create a new Field Display Policies at the customer level and add Built-in Bridge to the list.

- Configure the Built-in-Bridge, on page 84
- Enable or Disable the Built-in-Bridge, on page 85

## Configure the Built-in-Bridge

- Step 1 Login to Cisco Unified Communication Domain Manager as provider.
- **Step 2** Navigate **Role Management** > **Field Display Policies**.
- **Step 3** Ensure that hierarchy is set to the appropriate customer.
- **Step 4** Select the **SubscriberPhoneMenuItemProvider**.
- **Step 5** In the details page, go to **Action** menu and click **Clone**.
- **Step 6** Enter **SubscriberPhoneMenuItemProvider** as the name.
- Step 7 Select relation/SubscriberPhone from the Target Model Type drop-down list.
- **Step 8** Expand **Groups** section and enter **Phone** for Title.
- Step 9 Select builtInBridgeStatus from the Available list and click Select.
- Step 10 Click Save.

## **Enable or Disable the Built-in-Bridge**

## Before you begin

Ensure that you configure Built-in-Bridge. See, Configure the Built-in-Bridge, on page 84.

#### **Procedure**

- Step 1 Login to Cisco Unified Communication Domain Manager as a provider.
- **Step 2** Ensure that hierarchy is set to the appropriate customer.
- **Step 3** Navigate **Subscriber Management** > **Phones** and select the appropriate phone.
- **Step 4** In the **Phone** tab:
  - To enable BIB choose **On** from the **Built in Bridge** drop-down list.
  - To disable BIB choose **Off** from the **Built in Bridge** drop-down list.
- Step 5 Click Save.

# **Bulk Operations Using UCDM**

The bulk upload option is used for importing large numbers of resource items into Cisco Unified Communications Domain Manager (UCDM). It is used to generate resources for UCDM objects by filling in the resource attributes using the standard .xlsx format. All .xlsx 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 UCDM.

There are three ways to provision the bulk upload:

- 1. HCS Intelligent Loader (HIL)
- 2. Cisco Unified Communications Domain Manager Administrative tools/bulkloader
- 3. Cisco Unified Communications Domain Manager REST API

For more information on provisioning bulk upload, see *Cisco Unified Communications Domain Manager, Bulk Provisioning Guide*. You can find this guide on the **Component Documentation** tab here:http://www.cisco.com/c/en/us/support/unified-communications/hosted-collaboration-solution-version-10-6-1/model.html#~tab-solution-documentation.

## Cisco Unified Communications Domain Manager Administration Tools/Bulkloader

- Export Bulk Load, on page 86
- Bulk Load Sheets, on page 86
- Perform Bulk Upload, on page 86

## Export Bulk Load

#### **Procedure**

- **Step 1** Login to Unified Communication Domain Manager as provider, reseller or customer.
- **Step 2** Ensure the hierarchy is set to appropriate level for required UCDM object.
- **Step 3** Goto the required form of any UCDM object that supports bulk load.
- Step 4 Click Action and click Export Bulk Load Template in submenu.
- **Step 5** Save Bulk load Template in .xlsx format in your local drive.

#### **Bulk Load Sheets**

An exported bulk load template is a workbook containing a single sheet and serves as the basis for bulk loading. A workbook can also be created that contains more than one sheet as a tabbed workbook.

For tabbed workbooks, bulk load transactions are carried out from the leftmost sheet or tab to the rightmost. For example, if a site is to be added under a customer, the customer sheet tab should be to the left of the associated site.

The spreadsheet workbook is in Microsoft Excel .xlsx format. The maximum file upload size is 4GB. You can enter any name for the workbook or enter the same filename and load the file multiple times, although it is appropriate to use different names.

To bulk load data, preliminary steps need to be carried out. Verify existing information on the sheet and determine required information in order to complete the required data and prepare the spreadsheet.

## Perform Bulk Upload

## **Procedure**

- **Step 1** Login to Unified Communication Domain Manager as provider, reseller or customer.
- **Step 2** Ensure the hierarchy is set to appropriate level for required UCDM object.
- Step 3 Navigate to Administrative Tools > Bulk Load.
- **Step 4** Click **Browse** to open file upload dialog box.
- Step 5 Click Bulk Load File.

**Note** If you want to check the status of bulk load, navigate to **Administrative Tools** > **Transactions**.

## Increase the SW MTP and SW Conference Resources

#### **Procedure**

**Step 1** Login to the **CUCM Administration** web page.

- Step 2 Under the System tab, select the Service Parameter.
- **Step 3** Select the CUCM server from the drop-down list.
- Step 4 Select the Cisco IP Voice Media Streaming App service.
- **Step 5** Modify the Conference Bridge (CFB) parameters and the Media Termination Point (MTP) parameters field as following:
  - SW CFB:

Default total conference parties: 48 (16 CFB 3-party sessions)

Maximum conference parties: 256 (85 CFB 3-party sessions)

• SW MTP:

Default total MTP parties: 48 (24 MTP sessions with 2-parties per session)

Maximum MTP parties: 512 (256 MTP sessions)

# **Single Sign-on Administration**

# Set up the System Inventory for Single Sign-On

Set up the System Inventory before configuring the Cisco Identity Service (Cisco IdS) and the components for single sign-on. By default, the System Inventory displays a list of all AWs, Routers, and Peripheral Gateways in the deployment.

The Principal AW (Admin Workstation) is responsible for managing background tasks that are run periodically to sync configuration with other solution components, such as SSO management, Smart Licensing, etc.

Select the Principal AW to manage to register the components with the Cisco IdS and enabling them for SSO. Add the remaining SSO-capable machines to the System Inventory, and select the default Cisco IdS for each of the SSO-capable machines.

## **Procedure**

- **Step 1** In Unified CCE Administration, navigate to **Features** > **Single Sign-On**.
- **Step 2** Set the Principal AW:
  - a) Click the AW that you want to be the Principal AW.

**Note** If the AW is coresident with the Router, you can set the Principal AW on the Router.

The **Edit AW** popup window opens.

- b) Check the **Principal AW** check box on the General tab.
- c) Enter the Unified CCE Diagnostic Framework Service domain, username, and password.

These credentials must be for a domain user who is a member of the Config security group for the instance. These credentials must be valid on all CCE components in your deployment (Routers, PGs, AWs, and so on).

- d) Click Save.
- **Step 3** Add the SSO-capable machines to the System Inventory:
  - a) Click **New**.
    - The **Add Machine** popup window opens.
  - b) From the **Type** drop-down, select one of the following types of machines:
    - Finesse Primary
    - CUIC, LD, IdS Publisher, if you're using coresident deployment applicable for 2000 agent reference design.
    - Unified Intelligence Center Publisher, if you're using a standalone Unified Intelligence Center
    - Identity Service Primary, if you're using a standalone Cisco IdS
  - c) In the **Hostname** field, enter the FQDN, IP address, or hostname of the machine.

**Note** If you don't enter the FQDN, the system converts the value you enter to FQDN.

- d) Enter the machine's Administration credentials.
- e) Click Save.

The machine and its related Subscriber or Secondary machine are added to the System Inventory.

- f) Repeat this procedure to add all of the SSO-capable machines in the deployment.
- **Step 4** Select the default Identity Service for each of the following machines:
  - All Unified CCE AW servers
  - · Finesse Primary and Secondary
  - Unified Intelligence Center Publisher and Subscriber

**Note** If you're using a coresident CUIC, LD, Ids Publisher and Subscriber, you don't need to set the default Cisco IdS for those machines.

In a standalone deployment, select the Cisco IdS that's deployed on the same Data Center Side (A or B) as the machine that you're configuring. For example, in the Reference Deployment:

- Select the Identity Service Publisher (IdS A) for AW-HDS-DDS 1, AW-HDS 3, Finesse 1 Pub, Finesse 2 Pub, CUIC Pub, and CUIC Sub 1.
- Select the Identity Service Subscriber (Ids B) for AW-HDS-DDS 2, AW-HDS 4, Finesse 1 Sub, Finesse 2 Sub, CUIC Sub 2, and CUIC Sub 3.

For details on the Reference Deployment, see *Solution Design Guide for Cisco Unified Contact Center Enterprise* at https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-implementation-design-guides-list.html.

- a) Click a machine to open the **Edit Machine** popup window.
- b) Click the Search icon next to **Default Identity Service** to open the **Select Identity Service** popup window.
- c) Enter the machine name for the Cisco IdS in the Search field and choose the Cisco IdS from the list.
- d) Click Save.

# **Configure the Cisco Identity Service**

The Cisco Identity Service (Cisco IdS) provides authorization between the Identity Provider (IdP) and applications.

When you configure the Cisco IdS, you set up a metadata exchange between the Cisco IdS and the IdP. This exchange establishes a trust relationship that then allows applications to use the Cisco IdS for single sign-on. You establish the trust relationship by downloading a metadata file from the Cisco IdS and uploading it to the IdP. You can then select settings related to security, identify clients of the Cisco IdS service, and set log levels and, if desired, enable Syslog format.

#### **Procedure**

Step 1 In Administration, navigate to Features > Single Sign-On.

**Note** Use a log in name in the format *username@FQDN* to log in to the Administration.

Step 2 Click Identity Service Management.

### **Result:**

The Cisco Identity Service Management window opens.

- **Step 3** Enter your user name, and then click **Next**.
- **Step 4** Enter your password, and then click **Sign In**.

The Cisco Identity Service Management page opens, showing the **Nodes**, **Settings**, and **Clients** icons in the left pane.

Step 5 Click Nodes.

The **Nodes** page opens to the overall Node level view and identifies which nodes are in service. The page also provides the **SAML Certificate Expiry** details for each node, indicating when the certificate is due to expire. The node **Status** options are **Not Configured**, **In Service**, **Partial Service**, and **Out of Service**. Click a status to see more information. The star to the right of one of the Node names identifies the node that is the primary publisher.

- Step 6 Click Settings.
- Step 7 Click IdS Trust.
- Step 8 To begin the Cisco IdS trust relationship setup between the Cisco IdS and the IdP, click **Download Metadata**File to download the file from the Cisco IdS Server.
- Step 9 Click Next.
- **Step 10** To upload the trusted metadata file from your IdP, browse to locate the file.

The **Upload IdP Metadata** page opens and includes the path to the IdP. When the file upload finishes, you receive a notification message. The metadata exchange is now complete, and the trust relationship is in place.

- **Step 11** Clear the browser cache.
- **Step 12** Enter the valid credentials, when page is redirected to IdP.
- Step 13 Click Next.

The **Test SSO Setup** page opens.

Step 14 Click Test SSO Setup.

A message appears telling you that the Cisco IdS configuration has succeeded.

Step 15 Click Settings.

## Step 16 Click Security.

## Step 17 Click Tokens.

Enter the duration for the following settings:

- **Refresh Token Expiry** -- The default value is 10 hours. The minimum value is 2 hours. The maximum is 24 hours.
- Authorization Code Expiry -- The default value is 1 minute, which is also the minimum. The maximum is 10 minutes.
- Access Token Expiry -- The default value is 60 minutes. The minimum value is 5 minutes. The maximum is 120 minutes.
- **Step 18** Set the **Encrypt Token** (optional); the default setting is **On**.
- Step 19 Click Save.
- Step 20 Click Keys and Certificates.

The Generate Keys and SAML Certificate page opens and allows you to:

- Regenerate the **Encryption/Signature key** by clicking **Regenerate**. A message appears to say that the Token Registration is successful and advises you to restart the system to complete the configuration.
- Regenerate the SAML Certificate by clicking Regenerate. A message appears to say that the SAML certificate regeneration is successful.
- Step 21 Click Save.
- Step 22 Click Clients.

The **Clients** page identifies the existing Cisco IdS clients, providing the client name, the client ID, and a redirect URL. To search for a particular client, click the Search icon above the list of names and type the client's name.

- **Step 23** To add a client:
  - a) Click Add Client.
  - b) Enter the client's name.
  - c) Enter the Redirect URL. To add more than one URL, click the plus icon.
  - d) Click **Add** (or click **Clear** and then click the X to close the page without adding the client).
- **Step 24** To edit or delete a client, highlight the client row and click the ellipses under **Actions**. Then:
  - Click **Edit** to edit the client's name, ID, or redirect URL. On the **Edit Client** page, make changes and click **Save** (or click **Clear** and then click the X to close the page without saving edits).
  - Click **Delete** to delete the client.
- Step 25 Click Settings.
- **Step 26** From the **Settings** page, click **Troubleshooting** to perform some optional troubleshooting.
- Step 27 Set the local log level by choosing from Error, Warning, Info (the default), Debug, or Trace.
- **Step 28** To receive errors in Syslog format, enter the name of the Remote Syslog Server in the Host (Optional) field.
- Step 29 Click Save.

You can now:

• Register components with the Cisco IdS.

• Enable (or disable) SSO for the entire deployment.

# **Register Components and Set Single Sign-On Mode**

If you add any SSO-compatible machines to the System Inventory after you register components with the Cisco IdS, those machines are registered automatically.

## Before you begin

- Configure the Cisco Identity Service (Cisco IdS).
- Disable popup blockers. It enables viewing all test results correctly.
- If you are using Internet Explorer, verify that:
  - It is not in the Compatibility Mode.
  - You are using the fully qualified domain name of AW to access the CCE Administration (for example, https://<FQDN>/cceadmin).

#### **Procedure**

- **Step 1** In the Unified CCE Administration, navigate to **Features** > **Single Sign-On**.
- **Step 2** Click the **Register** button to register all SSO-compatible components with the Cisco IdS.

The component status table displays the registration status of each component.

If a component fails to register, correct the error and click **Retry**.

Step 3 Click the **Test** button. When the new browser tab opens, you may be prompted to accept a certificate. In order for the page to load, accept any certificates. Then, when presented with a log in dialog, log in as a user with SSO credentials.

The test process verifies that each component has been configured correctly to reach the Identity Provider, and that the Cisco IdS successfully generates access tokens. Each component that you are setting up for SSO is tested.

The component status table displays the status of testing each component.

If a test is unsuccessful, correct the error, and then click **Test** again.

Test results are not saved. If you refresh the page, run the test again before enabling SSO.

- **Step 4** Select the SSO mode for the system from the **Set Mode** drop-down menu:
  - Non-SSO: This mode disables SSO for all agents and supervisors. Users log in using existing Active Directory-based local authentication.
  - Hybrid: This mode allows you to enable agents and supervisors selectively for SSO.
  - SSO: This mode enables SSO for all agents and supervisors.

The component status table displays the status of setting the SSO mode on each component.

If the SSO mode fails to be set on a component, correct the error, and then select the mode again.