Cisco Unified Communications Manager configuration for integration with IM and Presence Service

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User and Device Configuration on Cisco Unified Communications Manager before Integration Task List

Before you configure Cisco Unified Communications Manager for integration with the IM and Presence Service, make sure that the following user and device configuration is completed on Cisco Unified Communications Manager.
Table 1: Task List to Configure Users and Devices on Cisco Unified Communications Manager Before Integration with IM and Presence Service

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modify the User Credential Policy</td>
<td>This procedure is applicable only if you are integrating with Cisco Unified Communications Manager Release 6.0 or later.Cisco recommends that you set an expiration date on the credential policy for users. The only type of user that does not require a credential policy expiration date is an Application user.Cisco Unified Communications Manager does not use the credential policy if you are using an LDAP server to authenticate your users on Cisco Unified Communications Manager. <strong>Cisco Unified CM Administration &gt; User Management &gt; Credential Policy Default</strong></td>
</tr>
<tr>
<td>Configure the phone devices, and associate a Directory Number (DN) with each device</td>
<td>Check Allow Control of Device from CTI to allow the phone to interoperate with the client. <strong>Cisco Unified CM Administration &gt; Device &gt; Phone</strong></td>
</tr>
<tr>
<td>Configure the users, and associate a device with each user</td>
<td>Ensure that the user ID value is unique for each user. <strong>Cisco Unified CM Administration &gt; User Management &gt; End User.</strong></td>
</tr>
<tr>
<td>Associate a user with a line appearance</td>
<td>This procedure is applicable only to Cisco Unified Communications Manager Release 6.0 or later. <strong>Cisco Unified CM Administration &gt; Device &gt; Phone</strong></td>
</tr>
<tr>
<td>Add users to CTI-enabled user group</td>
<td>To enable desk phone control, you must add the users to a CTI-enabled user group. <strong>Cisco Unified CM Administration &gt; User Management &gt; User Group</strong></td>
</tr>
</tbody>
</table>

**Note**
Because menu options and parameters may vary by Cisco Unified Communications Manager releases, see the Cisco Unified Communications Manager documentation that applies to your release.

**Related Topics**
- [LDAP Directory Integration](#)

**Configure Inter-Presence Group Subscription Parameter**

You enable the Inter-Presence Group Subscription parameter to allow users in one Presence Group to subscribe to the availability information for users in a different presence group.
Restriction
You can only enable the Inter-Presence Group Subscription parameter when the subscription permission for the default Standard Presence Group, or any new Presence Groups, is set to Use System Default. To configure Presence Groups, choose Cisco Unified CM Administration > System > Presence Groups.

Procedure

Step 1 Choose Cisco Unified CM Administration > System > Service Parameters.
Step 2 Choose a Cisco Unified Communications Manager node from the Server menu.
Step 3 Choose Cisco CallManager from the Service menu.
Step 4 Choose Allow Subscription for Default Inter-Presence Group Subscription in the Clusterwide Parameters (System - Presence) section.
Step 5 Click Save.

Tip You no longer have to manually add the IM and Presence Service as an Application Server on Cisco Unified Communications Manager:

- When you add or remove a node on the system topology management GUI, the node is automatically added to or removed from the Application Server list on Cisco Unified Communications Manager.
- When you configure the Cisco Unified Communications Manager publisher on IM and Presence Service from Cisco Unified CM IM and Presence Administration > System > CUCM Publisher, the IM and Presence Service node is automatically added to the Application Server list on Cisco Unified Communications Manager.

What to Do Next
Proceed to configure a SIP trunk on Cisco Unified Communications Manager.

SIP Trunk Configuration on Cisco Unified Communications Manager

The port number that you configure for the SIP Trunk differs depending on the version of the IM and Presence Service that you are deploying. For IM and Presence Service release 9.0(x) and later, configure the port number 5060 for the SIP Trunk.
Configure SIP Trunk Security Profile for IM and Presence Service

Procedure

Step 1 Choose Cisco Unified CM Administration > System > Security > SIP Trunk Security Profile.
Step 2 Click Find.
Step 3 Click Non Secure SIP Trunk Profile.
Step 4 Click Copy and enter CUP Trunk in the Name field.
Step 5 Verify that the setting for Device Security Mode is Non Secure.
Step 6 Verify that the setting for Incoming Transport Type is TCP+UDP.
Step 7 Verify that the setting for Outgoing Transport Type is TCP.
Step 8 Check to enable these items:
  • Accept Presence Subscription
  • Accept Out-of-Dialog REFER
  • Accept Unsolicited Notification
  • Accept Replaces Header
Step 9 Click Save.

What to Do Next
Proceed to configure the SIP trunk on Cisco Unified Communication Manager

Configure SIP Trunk for IM and Presence Service

You only configure one SIP trunk between a Cisco Unified Communications Manager cluster and an IM and Presence Service cluster. After you configure the SIP trunk, you must assign that SIP trunk as the IM and Presence PUBLISH Trunk on Cisco Unified Communications Manager by choosing Cisco Unified CM Administration > System > Service Parameters.

In the Destination Address field, enter a value using one of the following formats:
  • Dotted IP Address
  • Fully Qualified Domain Name (FQDN)
  • DNS SRV

If high availability is configured for the IM and Presence cluster, multiple entries should be entered in the Dotted IP Address or FQDN to identify the various nodes in the cluster. DNS SRV cannot be used for an IM and Presence cluster if high availability is configured.

Before You Begin
  • Configure the SIP Trunk security profile on Cisco Unified Communications Manager.
Read the Presence Gateway configuration options topic.

**Procedure**

**Step 1** Choose `Cisco Unified CM Administration > Device > Trunk`.

**Step 2** Click `Add New`.

**Step 3** Choose `SIP Trunk` from the Trunk Type menu.

**Step 4** Choose `SIP` from the Device Protocol menu.

**Step 5** Choose `None` for the Trunk Service Type.

**Step 6** Click `Next`.

**Step 7** Enter `CUPS-SIP-Trunk` for the Device Name.

**Step 8** Choose a device pool from the Device Pool menu.

**Step 9** In the SIP Information section at the bottom of the window, configure the following values:

a) In the Destination Address field, enter the Dotted IP Address, or the FQDN, which can be resolved by DNS and must match the SRV Cluster Name configured on the IM and Presence node.

b) Check the **Destination Address is an SRV** if you are configuring a multinode deployment.

   In this scenario, Cisco Unified Communications Manager performs a DNS SRV record query to resolve the name, for example `_sip._tcp.hostname.tld`. If you are configuring a single-node deployment, leave this checkbox unchecked and Cisco Unified Communications Manager will perform a DNS A record query to resolve the name, for example `hostname.tld`.

   In both scenarios, the Cisco Unified Communications SIP trunk Destination Address must resolve by DNS and match the SRV Cluster Name configured on the IM and Presence node.

c) Enter 5060 for the Destination Port.

d) Choose **Non Secure SIP Trunk Profile** from the SIP Trunk Security Profile menu.

e) Choose **Standard SIP Profile** from the SIP Profile menu.

**Step 10** Click `Save`.

**Troubleshooting Tip**

If you modify the DNS entry of the Publish SIP Trunk SRV record by changing the port number or IP address, you must restart all devices that previously published to that address and ensure each device points to the correct IM and Presence Service contact.

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**Related Topics**

- Configure Cluster-Wide DNS SRV Name for SIP Publish Trunk
- Configure SIP Trunk Security Profile for IM and Presence Service, on page 4
- Configure SIP Publish Trunk on IM and Presence Service
- Presence Gateway Configuration Option
Verify Required Services Are Running on Cisco Unified Communications Manager

Procedure

**Step 1**  On Cisco Unified Communications Manager, choose **Cisco Unified Serviceability > Tools > Control Center - Feature Services**.

**Step 2**  Choose a Cisco Unified Communications Manager node from the Server menu.

**Step 3**  Make sure that the following services are running:

- Cisco CallManager
- Cisco TFTP
- Cisco CTIManager
- Cisco AXL Web Service (for data synchronization between IM and Presence and Cisco Unified Communications Manager)

**Tip**  To turn on a service on Cisco Unified Communications Manager, choose **Cisco Unified Serviceability > Tools > Service Activation**.