



Infrastructure Configuration

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Cisco Unified Configurator for Collaboration



Note

Assuming a base configuration has been established on the Unified Communications Manager and Unity connection servers, you can reverse sync the configuration and add devices into Prime Provisioning.

Begin your configuration by using Cisco Unified Configurator for Collaboration (CUCC). See the following URL for CUCC package downloads that also contain further information in the embedded online help:

http://www.cisco.com/en/US/solutions/ns340/ns414/ns742/ns816/cisco_validated.html

Infrastructure Provisioning

The Infrastructure Configuration page lets you browse the infrastructure configuration settings of a Call Processor and Unified Message Processor. Through this page, you can add, edit, or delete the configuration settings of a Call Processor and Unified Message Processor.



Note

The Infrastructure Configuration feature applies to Call Processors that are based on Cisco Unified Communications Manager devices and Unified Message Processors that are based on only Cisco Unity Connection.

**Tip**

If you are reverse synchronizing a Cisco BE 6000 that you installed using CUCC, you can use this section for general administration and further customization.

Add Device

Follow this procedure to add devices (applications) to Provisioning.

Procedure

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- Step 1** Choose **Design > Infrastructure Setup**.
- Step 2** In the Infrastructure Setup page, Click **Add** to add devices to Provisioning.
- Step 3** In the Add Device window, select the required application from the drop-down list and enter the necessary information such as Name and IP address.
- Note** For the device name, valid values are space, alphanumeric characters (A-Z, a-z, 0-9), underscore (_), hyphen (-), period (.), and at sign (@).
- Step 4** Click **Save**.
- Devices are added to Provisioning. You will see two status messages appearing at the bottom of the page. One on whether the addition of the device was successful or not, and another on the Test Connection stating whether the connectivity test was successful or not . Devices with multiple applications are added as separate devices in the table.
- Note** While adding Cisco Unity Connection 10.0, you must configure both Unity Connection administrator and Operating System (OS) administrator credentials.
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Infrastructure and User Synchronization

You use the infrastructure synchronization to synchronize the infrastructure data in the devices. The infrastructure synchronization retrieves device information that is used across multiple users.

To synchronize infrastructure configuration products and users:

Procedure

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- Step 1** Choose **Design > Infrastructure Setup**.
- Step 2** Hover over Quick View of the device for which you want to run synchronization.
- Step 3** Do one of the following:
- To initiate Infrastructure Synchronization, click **Start Infrastructure Synchronization**
 - To initiate User Synchronization, click **Start User Synchronization**

The progress of synchronization is displayed in the Quick View under Synchronization Status.

Step 4 Click **View Detailed Logs**.

A synchronization log is created, listing the objects that could not be assigned. It also shows a warning message if an unknown element is received from the device. This log is replaced each time a synchronization occurs.

Note If you see the warning message “Skipped unexpected element,” you can ignore it. The message indicates that Provisioning does not support the item that was sent back from the device.

If the status of an infrastructure or user synchronization does not change for an extended period of time, verify that the Nice service is running. Run the following command to check if the Nice service is running:

```
ps -aef | grep nice
```

If the Nice service is stopped, restart the service, and then restart the infrastructure or user synchronization.

If you wish to manage the Analog Phones, you have to update the `ipt.properties` file. In this file, update the `dfc.ipt.cisco.callmanager.analog_phone_support` to Y and then do the user synchronization. You must restart Provisioning after the user synchronization is completed.

For the list of Cisco Unified Communications Manager objects that Provisioning synchronizes, see [Cisco Unified Communications Manager Objects that Are Synchronized](#).

You use the infrastructure synchronization to synchronize the unified messaging infrastructure data in Provisioning with the Unified Message Processor:

- **SubscriberTemplate**—A Subscriber Template in Cisco Unity, Cisco Unity Connection, and the e-mail message processor.
- **UnifiedMessagingFeatureSpecification**—A class of service in Cisco Unity, Cisco Unity Connection, and the e-mail message processor.

You use the user synchronization to synchronize the unified messaging user data in Provisioning with the Unified Message Processor.

- **UMInfo**—A user in Cisco Unity, Cisco Unity Connection, and Cisco Unity Express in conjunction with their user’s voicemail and e-mail information.
- **VoiceMailInfo**—A user in Cisco Unity, Cisco Unity Connection, and Cisco Unity Express in conjunction with UMInfo and EmailInfo.
- **EmailInfo**—A user in Cisco Unity and Cisco Unity Connection in conjunction with VoiceMailInfo and UMInfo.

**Note**

If during the synchronization of Cisco Unity Express you encounter device connection errors, close all Telnet sessions on the Cisco Unity Express system and restart the synchronization. Cisco Unity Express only allows one Telnet session at a time. Provisioning cannot synchronize with a Cisco Unity Express device that has another telnet session open.

**Note**

IM and Presence 9.0 and higher versions are integrated with Cisco Unified Communications Manager. Due to this, user synchronization will be disabled for IM and Presence 9.0 and higher versions. User information will be directly synchronized from Cisco Unified Communications Manager.

For IM and Presence, use the Infrastructure synchronization to synchronize the User Settings Infrastructure data with Provisioning.

**Note**

After upgrading your Cisco Unified Communications Manager, you must perform User Synchronization manually to synchronize change notification settings.

Configure LDAP Server Synchronization

Procedure

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- Step 1** Choose **Design > User Provisioning Setup**.
- Step 2** From the Domains table, select a Domain and click **Edit**.
- Step 3** In the Domain Configuration page, select an LDAP Server.
- Step 4** In the LDAP Settings pane, you configure the information Provisioning gets from the LDAP server. (For descriptions of the fields in this page, see).
- Step 5** For all the changes on the LDAP server to be synchronized to Provisioning, select the following:
- Mode—**Authentication and Synchronization**.
 - Update existing user details—**All fields**.
 - Action when LDAP users deleted—**Delete user only**.
 - User Search base—Enter a user search base.
 - Filter query for synchronization—Synchronize all users.
- Step 6** Click **Save**.
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To schedule synchronization, set the **Synchronization Interval** and **Synchronization Start Date** in the LDAP Settings pane.

After saving the Domain Configuration page, select the Domain and hover over Quick view. Select **Start LDAP Synchronization**.

After an LDAP synchronization, a report is created. The report lists the operations that could not be performed during synchronization. Operation failure can be due to incorrect data entered into the LDAP server or incorrect user settings.

**Note**

You cannot delete an LDAP server which is associated to a Domain. You must remove the LDAP server from the Domain to delete it.

Table 1: LDAP Settings Fields

Field	Description
Mode	<ul style="list-style-type: none"> • Authentication Only—The LDAP server is used only for user authentication. • Authentication and Synchronization—The LDAP server is used both to provide user authentication and to obtain user information.
Update Existing User Details	<ul style="list-style-type: none"> • All fields—If any user information is changed in the LDAP server, the same information is updated in Provisioning. • Do not update—User information in Provisioning is not updated when there are changes to the user information in the LDAP server.
Action when LDAP users deleted	<ul style="list-style-type: none"> • Do not delete—When a user is deleted in the LDAP server, the corresponding user in Provisioning is not deleted. • Delete user only—When a user is deleted in the LDAP server, the corresponding user is deleted in Provisioning alone. • Delete user with services—When a user is deleted in the LDAP server, only the corresponding user service is deleted in the device and in Provisioning. The user is not deleted in the device, but deleted in Provisioning.
User Search Base	<p>The user search base. Provisioning searches for users under the base. CN-Users, DC-Cisco, DC-com.</p> <p>This search base is used only for LDAP synchronization; it is not used for authentication.</p> <p>In the Microsoft Active Directory server, you can use the command <code>dsquery user</code> to list the complete user search base.</p>

Field	Description
Field Mapping	<p>Lists which user fields in Cisco Unified Communications Manager correspond to certain LDAP user fields. The only fields you can configure in Provisioning are the following:</p> <ul style="list-style-type: none"> • Contact phone number—Select either telephone number or ipPhone. • Contact email—Select either mail or sAMAccountName. • User ID—User ID can be mapped to the following fields in LDAP server: <ul style="list-style-type: none"> ◦ employeeNumber ◦ mail ◦ sAMAccountName ◦ telephoneNumber ◦ userPrincipalName
Filter Query for Synchronization	<ul style="list-style-type: none"> • Synchronize all users—All users will be synchronized. • Simple query—You can configure a query by using a combination of the following fields: <ul style="list-style-type: none"> ◦ User ID ◦ Department ◦ Contact phone number ◦ Contact email <p>You can use an asterisk (*) for a partial string search.</p> • Advanced query—You can enter any LDAP query; for example: (&(sAMAccountName=johndoe)(department=Cisco*)(mail=john@cisco.com)).

The table below lists the field mapping between Provisioning and the LDAP server. The data in the specified Provisioning field is synchronized with the user data in the corresponding LDAP field.

Table 2: LDAP Field Mapping

Provisioning Field	LDAP Field
Phone Number	telephoneNumber or ipPhone number.
Email	mail or sAMAccountName.

Provisioning Field	LDAP Field
User ID	User ID can be mapped to the following fields in LDAP server: <ul style="list-style-type: none">• employeeNumber• mail• sAMAccountName• telephoneNumber• userPrincipalName
First Name	givenName.
Last Name	sn.

Delete Device

To completely remove a device from Provisioning, you must delete it through the Infrastructure Setup page.

Note the following points when you are deleting a device:

- No active released orders, including unrecoverable or recoverable errors.
- No active batch projects.
- No synchronizations in progress.

If these conditions are not met, a message appears on the page when you attempt to delete a device. Avoid performing any activities until the deletion is complete.

- Before deleting a AAA server, make sure it is not assigned to a Domain.
- There must not be any pending orders on the device. You do not need to be in maintenance mode to delete the device capability. However, if another capability is already configured on the router, system must be in maintenance mode to remove the other capability.

Procedure

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- Step 1** Put Provisioning in maintenance mode.
 - Step 2** Choose **Design > Infrastructure Setup**.
 - Step 3** In the Infrastructure Setup page, select the device you want to delete and click **Delete**.
 - Step 4** In the confirmation dialog box, click **OK** to confirm deletion.
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Enable Cisco Jabber Services

You can enable Cisco Jabber services for devices in Prime Collaboration Provisioning. Cisco Jabber services allow you to interact with instant messaging and availability.

**Note**

Cisco Jabber service is available for Cisco Unified Communications Manager 9.1.1 and above version, and Cisco Unified Presence only.

Procedure

Step 1 Choose **Deploy > Unified Communication Services**.

Step 2 In the Unified Communication Services page, click **Enable**.

Step 3 Enter the SIP Profile, Service Profile, Softkey template fields and Service Parameter information, and click **Apply**. You can click **View Order** to see the order details in the User Record page. The date when the Jabber Service is enabled appears.

Note After you enable Cisco Jabber service for a call processor, you cannot edit or disable it.