



Create Users for Hybrid Deployment

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Enable Synchronization

To ensure that contact data in your directory server is replicated to Cisco Unified Communications Manager, you must synchronize with the directory server. Before you can synchronize with the directory server, you must enable synchronization.

Procedure

- Step 1** Open the **Cisco Unified CM Administration** interface.
 - Step 2** Select **System > LDAP > LDAP System**.
The **LDAP System Configuration** window opens.
 - Step 3** Locate the **LDAP System Information** section.
 - Step 4** Select **Enable Synchronizing from LDAP Server**.
 - Step 5** Select the type of directory server from which you are synchronizing data from the **LDAP Server Type** drop-down list.
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What to Do Next

Specify an LDAP attribute for the user ID.

Specify an LDAP Attribute for the User ID

When you synchronize from your directory source to Cisco Unified Communications Manager, you can populate the user ID from an attribute in the directory. The default attribute that holds the user ID is `sAMAccountName`.

Procedure

Step 1 Locate the **LDAP Attribute for User ID** drop-down list on the **LDAP System Configuration** window.

Step 2 Specify an attribute for the user ID as appropriate and then select **Save**.

Important If the attribute for the user ID is other than `sAMAccountName` and you are using the default IM address scheme in Cisco Unified Communications Manager IM and Presence Service, you must specify the attribute as the value for the parameter in your client configuration file as follows:

The EDI parameter is `UserAccountName`.

```
<UserAccountName>attribute-name</UserAccountName>
```

The BDI parameter is `BDIUserAccountName`.

```
<BDIUserAccountName>attribute-name</BDIUserAccountName>
```

If you do not specify the attribute in your configuration, and the attribute is other than `sAMAccountName`, the client cannot resolve contacts in your directory. As a result, users do not get presence and cannot send or receive instant messages.

Specify an LDAP Attribute for the Directory URI

On Cisco Unified Communications Manager release 9.0(1) and later, you can populate the directory URI from an attribute in the directory.

Before You Begin

[Enable Synchronization.](#)

Procedure

Step 1 Select **System > LDAP > LDAP Directory**.

Step 2 Select the appropriate LDAP directory or select **Add New** to add an LDAP directory.

Step 3 Locate the **Standard User Fields To Be Synchronized** section.

Step 4 Select one of the following LDAP attributes from the **Directory URI** drop-down list:

- **msRTCSIP-primaryuseraddress**—This attribute is populated in the AD when Microsoft Lync or Microsoft OCS are used. This is the default attribute.
- **mail**

Step 5 Select **Save**.

Perform Synchronization

After you add a directory server and specify the required parameters, you can synchronize Cisco Unified Communications Manager with the directory server.

Procedure

Step 1 Select **System > LDAP > LDAP Directory**.

Step 2 Select **Add New**.
The **LDAP Directory** window opens.

Step 3 Specify the required details on the **LDAP Directory** window.
See the [Cisco Unified Communications Manager Administration Guide](#) for more information about the values and formats you can specify.

Step 4 Create an LDAP Directory Synchronization Schedule to ensure that your information is synchronized regularly.

Step 5 Select **Save**.

Step 6 Select **Perform Full Sync Now**.

Note The amount of time it takes for the synchronization process to complete depends on the number of users that exist in your directory. If you synchronize a large directory with thousands of users, you should expect the process to take some time.

User data from your directory server is synchronized to the Cisco Unified Communications Manager database. Cisco Unified Communications Manager then synchronizes the user data to the presence server database.

Assign Roles and Groups

For all deployment types assign users to the **Standard CCM End Users** group.

Procedure

Step 1 Open the **Cisco Unified CM Administration** interface.

Step 2 Select **User Management > End User**
The **Find and List Users** window opens.

Step 3 Find and select the user from the list.
The **End User Configuration** window opens.

Step 4 Locate the **Permission Information** section.

Step 5 Select **Add to Access Control Group**.

The **Find and List Access Control Groups** dialog box opens.

- Step 6** Select the access control groups for the user.
At a minimum you should assign the user to the following access control groups:

- **Standard CCM End Users**
- **Standard CTI Enabled**—This option is used for desk phone control.

If you provision users with secure phone capabilities, do not assign the users to the **Standard CTI Secure Connection** group.

Certain phone models require additional control groups, as follows:

- Cisco Unified IP Phone 9900, 8900, or 8800 series or DX series, select **Standard CTI Allow Control of Phones supporting Connected Xfer and conf.**
- Cisco Unified IP Phone 6900 series, select **Standard CTI Allow Control of Phones supporting Rollover Mode.**

- Step 7** Select **Add Selected**.
The **Find and List Access Control Groups** window closes.

- Step 8** Select **Save** on the **End User Configuration** window.
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Authentication Options

Enable SAML SSO in the Client

Before You Begin

- If you do not use Cisco WebEx Messenger, enable SSO on Cisco Unified Communications Applications 10.5.1 Service Update 1—For information about enabling SAML SSO on this service, read the *SAML SSO Deployment Guide for Cisco Unified Communications Applications, Release 10.5*.
- Enable SSO on Cisco Unity Connection version 10.5—For more information about enabling SAML SSO on this service, read *Managing SAML SSO in Cisco Unity Connection*.
- If you use Cisco WebEx Messenger, enable SSO on Cisco WebEx Messenger Services to support Cisco Unified Communications Applications and Cisco Unity Connection—For more information about enabling SAML SSO on this service, read about *Single Sign-On* in the *Cisco WebEx Messenger Administrator's Guide*.

For more information about enabling SAML SSO on this service, read about *Single Sign-On* in the *Cisco WebEx Messenger Administrator's Guide*.

Procedure

- Step 1** Deploy certificates on all servers so that the certificate can be validated by a web browser, otherwise users receive warning messages about invalid certificates. For more information about certificate validation, see *Certificate Validation*.
- Step 2** Ensure Service Discovery of SAML SSO in the client. The client uses standard service discovery to enable SAML SSO in the client. Enable service discovery by using the following configuration parameters: `ServicesDomain`, `VoiceServicesDomain`, and `ServiceDiscoveryExcludedServices`. For more information about how to enable service discovery, see *Configure Service Discovery for Remote Access*.
- Step 3** Define how long a session lasts.
A session is comprised of cookie and token values. A cookie usually lasts longer than a token. The life of the cookie is defined in the Identity Provider, and the duration of the token is defined in the service.
- Step 4** When SSO is enabled, by default all Cisco Jabber users sign in using SSO. Administrators can change this on a per user basis so that certain users do not use SSO and instead sign in with their Cisco Jabber username and password. To disable SSO for a Cisco Jabber user, set the value of the `SSO_Enabled` parameter to `FALSE`. If you have configured Cisco Jabber not to ask users for their email address, their first sign in to Cisco Jabber may be non-SSO. In some deployments, the parameter `ServicesDomainSsoEmailPrompt` needs to be set to `ON`. This ensures that Cisco Jabber has the information required to perform a first-time SSO sign in. If users signed in to Cisco Jabber previously, this prompt is not needed because the required information is available.
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Related Topics

[Single Sign-On](#)

[Managing SAML SSO in Cisco Unity Connection](#)

[SAML SSO Deployment Guide for Cisco Unified Communications Applications](#)

Authenticate with the LDAP Server

Perform this procedure if you want to enable LDAP authentication so that end user passwords are authenticated against the password that is assigned in the company LDAP directory. LDAP authentication gives system administrators the ability to assign an end user a single password for all company applications. This configuration applies to end user passwords only and does not apply to end user PINs or application user passwords. When users sign in to the client, the presence service routes that authentication to Cisco Unified Communications Manager. Cisco Unified Communications Manager then sends that authentication to the directory server.

Procedure

- Step 1** Open the **Cisco Unified CM Administration** interface.
- Step 2** Select **System > LDAP > LDAP Authentication**.
- Step 3** Select **Use LDAP Authentication for End Users**.
- Step 4** Specify LDAP credentials and a user search base as appropriate.
See the *Cisco Unified Communications Manager Administration Guide* for information about the fields on the **LDAP Authentication** window.

Step 5 Select **Save**.
