



# Configure Directory Integration in On-Premises Deployments

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Configure directory integration in an on-premises deployment so that user data in Cisco Unified Communications Manager is synchronized with your corporate directory. You can also configure Cisco Unified Communications Manager to proxy authentication to your directory server when users sign in to the client.

- [Synchronize with the Directory Server, page 1](#)
- [Authenticate with the Directory Server, page 3](#)

## Synchronize with the Directory Server

Directory server synchronization ensures that contact data in your directory server is replicated to Cisco Unified Communications Manager.

### Enable Synchronization

The first step to synchronize with a directory server is to enable synchronization on Cisco Unified Communications Manager.

#### Procedure

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- 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.

**Related Topics**

[v9.1: LDAP system setup](#)

[v8.6\(1\): LDAP System Configuration](#)

## 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**

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- 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`, you must specify the attribute as the value for the `BDIUserName` parameter in your client configuration file as follows:
- ```
<BDIUserName>attribute-name</BDIUserName>
```
- 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.
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## Perform Synchronization

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

**Before You Begin**

If your environment includes a presence server, you should ensure the following feature service is activated and started before you synchronize with the directory server:

- Cisco Unified Presence: **Cisco UP Sync Agent**
- Cisco Unified Communications Manager IM and Presence: **Cisco Sync Agent**

This service keeps data synchronized between the presence server and Cisco Unified Communications Manager. When you perform the synchronization with your directory server, Cisco Unified Communications Manager then synchronizes the data with the presence server. However, the **Cisco Sync Agent** service must be activated and started.

### Procedure

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- 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** Select **Save**.
- Step 5** 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.
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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.

### Related Topics

- [v9.1: LDAP directory setup](#)
- [v8.6\(1\): LDAP Directory Configuration](#)

## Authenticate with the Directory Server

You should configure Cisco Unified Communications Manager to authenticate with the directory server. When users log in to the client, the presence server routes that authentication to Cisco Unified Communications Manager. Cisco Unified Communications Manager then proxies that authentication to the directory server.

### Procedure

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- 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**.
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### Related Topics

- [v9.1: LDAP authentication setup](#)
- [v8.6\(1\): LDAP Authentication Configuration](#)

