

Configure LDAP as a Directory Contact Source for Cisco Jabber using Cisco Directory Integration

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Introduction

This document provides instructions on how correctly configure Lightweight Directory Access Protocol (LDAP) as a Directory Contact source for Cisco Jabber on all platforms. This article also introduces the concept of Cisco Directory Integration (CDI).

Contributed by Fareed Warrad, Cisco TAC Engineer.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco Jabber 11.8 or higher
- General knowledge of Jabber Configuration File
- General knowledge Cisco Unified Communications Manager (CUCM) Web page

Components Used

This document is not restricted to specific software and hardware versions.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

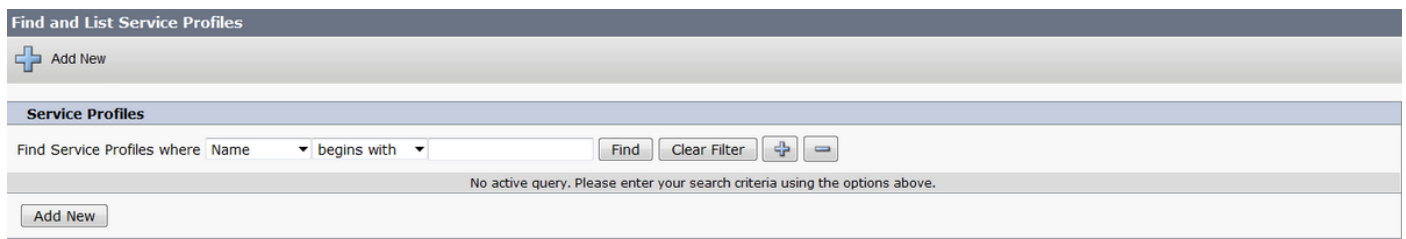
Background Information

Previously Jabber relied on two types of Directory Integrations, Bridged Directory Integration or Basic Directory Integration (BDI) and Enhanced Directory Integration (EDI). Enhanced Directory Integration was a Windows exclusive, and was only used in situations where you wanted to specify a specific LDAP configuration. The reason behind this is because for Windows, Directory Integration is automatic. Windows connects to your domain controller, and authenticates with your Windows username and password. BDI on the other hand were for all other platforms such as Mac, Android and IOS

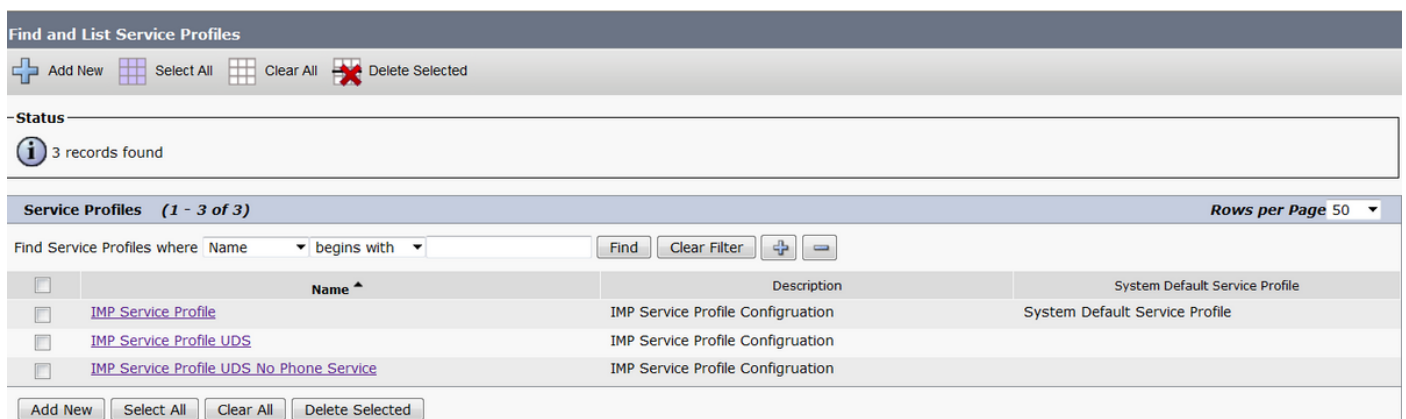
In Cisco Jabber, the Jabber Development team removed support for BDI and created CDI which is essentially EDI. This means for all Cisco Jabber 11.8 clients and higher, no matter what platform Jabber administrators can now have one set of configuration for Directory Contact Source for all of their users irrespective of what platform they use. This means that for plenty of Jabber Admins who only configured only BDI in their Jabber environment due to the fact that they had Windows users on the Domain, they experience issues such as not being able to connect to the LDAP server in Jabber on non-Windows platforms. This guide shows how to configure CDI in the Service Profile and in the Jabber Configuration extended markup language (XML) File.

Configuration with the Service Profile

Step 1. To access the service profile in CUCM navigate to **User Management > User Settings > Service Profile**.



Step 2. Select **Find**.



Step 3. For some environments, if Cisco Jabber 11.8 is not being used, you can duplicate the current Service Profile. The administrator can choose to delete the older ones later. Select the current working profile (in this case it's Instant Messaging and Presence (IMP) Service Profile).

Service Profile Configuration Related Links: [Back To Find/List](#)

Status

i Status: Ready

Service Profile Information

Name*

Description

Make this the default service profile for the system

Step 4. Select **Copy** and change the name of the profile to differentiate it. For this case it is IMP Service Profile CDI. Uncheck the **Make this the default service profile for the system** option and select **Save**.

Service Profile Configuration Related Links: [Back To Find/List](#)

Status

i Add successful

Service Profile Information

Name*

Description

Make this the default service profile for the system

Step 5. Navigate to the **Unified Communications (UC) Service** page to make the appropriate changes. Then select **User Management > User Settings > UC Service > Find**

Find and List UC Services

Status

i 9 records found

UC Service (1 - 9 of 9) Rows per Page 50

Find UC Service where: Name begins with

<input type="checkbox"/>	Name ^	UC Service Type	Product Type	Host/IP Address	Port	Protocol
<input type="checkbox"/>	AD Directory	Directory	Directory	14.48.44.10	389	TCP
<input type="checkbox"/>	CTI Service for CUCM Pub	CTI	CTI	14.48.44.25	2748	TCP
<input type="checkbox"/>	CTI Service for CUCM Sub	CTI	CTI	14.48.44.26	2748	TCP
<input type="checkbox"/>	Cisco Unity MailStore Exchange Pub	MailStore	Exchange	14.48.44.30	143	TCP
<input type="checkbox"/>	Cisco Unity MailStore Exchange Sub	MailStore	Exchange	14.48.44.31	143	TCP
<input type="checkbox"/>	UC Voicemail Service for Pub	Voicemail	Unity Connection	14.48.44.30	443	HTTP
<input type="checkbox"/>	UC Voicemail Service for Sub	Voicemail	Unity Connection	14.48.44.31	443	HTTP
<input type="checkbox"/>	Unified CM (IM and Presence) PUB	IM and Presence	Unified CM (IM and Presence)	14.48.44.35		
<input type="checkbox"/>	Unified CM (IM and Presence) SUB	IM and Presence	Unified CM (IM and Presence)	14.48.44.36		

Step 6. In this example, Directory type is AD Directory. Under Product Type it is listed as Directory and is no longer supported in Cisco Jabber 11.8 or above so change the name to AD Directory CDI.

UC Service Configuration Related Links: [Back To Find/List](#)

Status

Status: Ready

UC Service Information

UC Service Type: **Directory**

Product Type*

Name*

Description

Host Name/IP Address*

Port

Protocol

*- indicates required item.

Step 7. Change the Product Type to **Enhanced Directory**, uncheck **Use Secure Connection** unless you want to use secure connection, then select **Save**.

UC Service Configuration Related Links: [Back To Find/List](#)

Status

Update successful

UC Service Information

UC Service Type: **Directory**

Product Type*

Name*

Description

Host Name/IP Address*

Port

Protocol

Connection Type*

[Use Secure Connection](#)

[Use Wildcards](#)

[Disable Secondary Number Lookups](#)

[Uri Prefix](#)

[Phone Number Masks](#)

Step 8. Chose the connection type and pick the correct port for the connection type. **Global Catalog** = 3268, and **LDAP** = 389. Global Catalog is much faster than LDAP and does not cause any timeouts but it has to be configured on the LDAP server in order to function.

UC Service Configuration Related Links: [Back To Find/List](#) [Go](#)

Save
 Delete
 Copy
 Reset
 Apply Config
 Add New

Status

Update successful

UC Service Information

UC Service Type: Directory
 Product Type*
 Name*
 Description
 Host Name/IP Address*
 Port
 Protocol
 Connection Type*
 Use Secure Connection
 Use Wildcards
 Disable Secondary Number Lookups
 Uri Prefix
 Phone Number Masks

*- Indicates required item.

Step 9. Navigate to **User Management > User Settings > Service Profile > Find**. Select the new profile created earlier and scroll down to Directory Profile section.

Directory Profile

Primary
 Secondary
 Tertiary
 Use UDS for Contact Resolution
 Use Logged On User Credential
 Username
 Password
 Search Base 1
 Search Base 2
 Search Base 3
 Recursive Search on All Search Bases
 Search Timeout (seconds)*
 Base Filter (Only used for Advance Directory)
 Predictive Search Filter (Only used for Advance Directory)

Step 10. Change the **Primary Server** to the new UC Service and select **Save**.

Service Profile Configuration Related Links: [Back To Find/List](#) [Go](#)

Save
 Delete
 Copy
 Add New

Status

Update successful

Service Profile Information

Name*
 Description
 Make this the default service profile for the system

Step 11. Assign the end users the new Service Profile. Once assigned, upgrade to Cisco Jabber 11.8 to make the Directory connection work. Select **User Management > End User > Find > Select a user**.

Find and List Users

+ Add New Select All Clear All Delete Selected

Status

1.3 records found

User (1 - 13 of 13) Rows per Page 50

Find User where: First name begins with Find Clear Filter

User ID	First Name	Last Name	Department	Directory URI	User Status
awarrad	Anis	Warrad		AWarrad@farewarr.com	Active LDAP Synchronized User

Service Settings

Home Cluster

Enable User for Unified CM IM and Presence (Configure IM and Presence in the associated UC Service Profile)

Include meeting information in presence (Requires Exchange Presence Gateway to be configured on CUCM IM and Presence server)

[Presence Viewer for User](#)

UC Service Profile: Use System Default("IMP Service Profile") [View Details](#)

Change the UC Service Profile to the new one we created and click Save.

Service Settings

Home Cluster

Enable User for Unified CM IM and Presence (Configure IM and Presence in the associated UC Service Profile)

Include meeting information in presence (Requires Exchange Presence Gateway to be configured on CUCM IM and Presence server)

[Presence Viewer for User](#)

UC Service Profile: IMP Service Profile CDI [View Details](#)

Configuration with the Jabber Configuration File

Below is the sample standard configuration for CDI with Simple Authentication & No Secure Socket Layer (SSL) in the Jabber Configuration File. If SSL is needed change the False to a True in the <UseSSL></UseSSL> tag.

```
<?xml version="1.0" encoding="utf-8"?>
<config version="1.0">

<Directory>

    <DirectoryServerType>AD</DirectoryServerType>
    <PresenceDomain>farewarr.com</PresenceDomain>
    <PrimaryServerName>x.x.x.x</PrimaryServerName>
    <ServerPort1>PortNumberHere</ServerPort1>
    <ConnectionUsername>usernamehere</ConnectionUsername>
    <ConnectionPassword>passwordhere</ConnectionPassword>
<UseSSL>False</UseSSL> <SearchBase1>CN=users,DC=farewarr,DC=com</SearchBase1> </Directory>
</config>
```

After changes are made, upload file to the Trivial File Transfer Protocol (TFTP) server and restart the TFTP service on all TFTP nodes. Sign out of Jabber and sign back in for the changes to take effect.

Verify

There is currently no verification procedure available for this configuration.

Troubleshoot

There is currently no specific troubleshooting information available for this configuration.

Related Information

- [Directory Integration](#)
- [Technical Support & Documentation - Cisco Systems](#)