



# Cisco Jabber Deployment for Multiple CUCM and IMP clusters using single Expressway-E and C.

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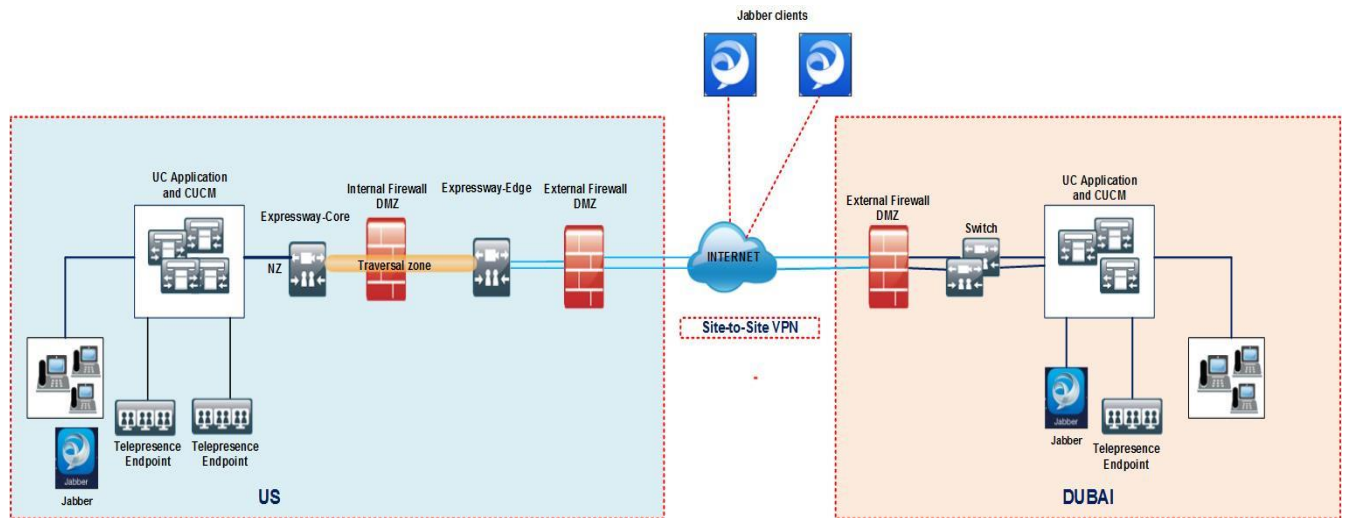
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## Introduction:

In this document we will show how to implement Cisco Jabber MRA deployment for multiple clusters. In this project we have one Expressway-Core and one Expressway edge server which are located in the United States of America and they have their local CUCM cluster for registration of Cisco IP phones and Jabber clients. They have their IMP cluster for IM and chat services. They are running Cisco Jabber client and registering over MRA because they have Cisco Expressway edge solutions for Mobile and remote access. Recently they have opened a new office in Dubai and connected through a VPN to their new office and have a local CUCM cluster and IMP cluster for Dubai local users. They have the same Active Directory for both sides and they want to implement Cisco Jabber registration over MRA for Dubai users without adding any new Expressway into the network, they will use the United States Expressway solution to register Dubai Jabber clients.

## Network Diagram



## Devices used for this deployment:

### United states HQ:

1. CUCM Publisher: 10.10.15.10
2. CUCM Subscriber: 10.10.15.11
3. IMP Publisher: 10.10.15.14
4. Expressway-core: 10.10.15.20
5. Expressway Edge: 10.10.15.33 and (Public Ip: 78.100.91.93)
6. Domain name : abc.com

## Version Details:

U.S	
Name	Version
CUCM	10.X
IMP	10.X
Expressway	8.6.X

## Dubai Remote location:

1. CUCM Publisher: 10.20.34.14
2. CUCM Subscriber: 10.20.34.23
3. IMP Publisher: 10.20.34.16
4. Domain name : abc.com

## Version Details:

Dubai	
Name	Version
CUCM	11.x
IMP	11.x

## Configuration and Implementation:

We need to follow below procedure for implementing a multi-cluster jabber deployment.

- 1) Advertise SRV , A and PTR records for both sides
- 2) ILS trunk between Dubai and US cucm clusters
- 3) Intercluster-peering between Dubai and US IMP clusters

- 4) Integrate Active directory with Dubai CUCM
- 5) Expressway Core configuration

## What is Service Discovery?

Jabber utilizes Service Discovery to determine

- cloud, on premise OR hybrid
- inside OR outside corporate network
- service location
- configuration retrieval
- service subscription



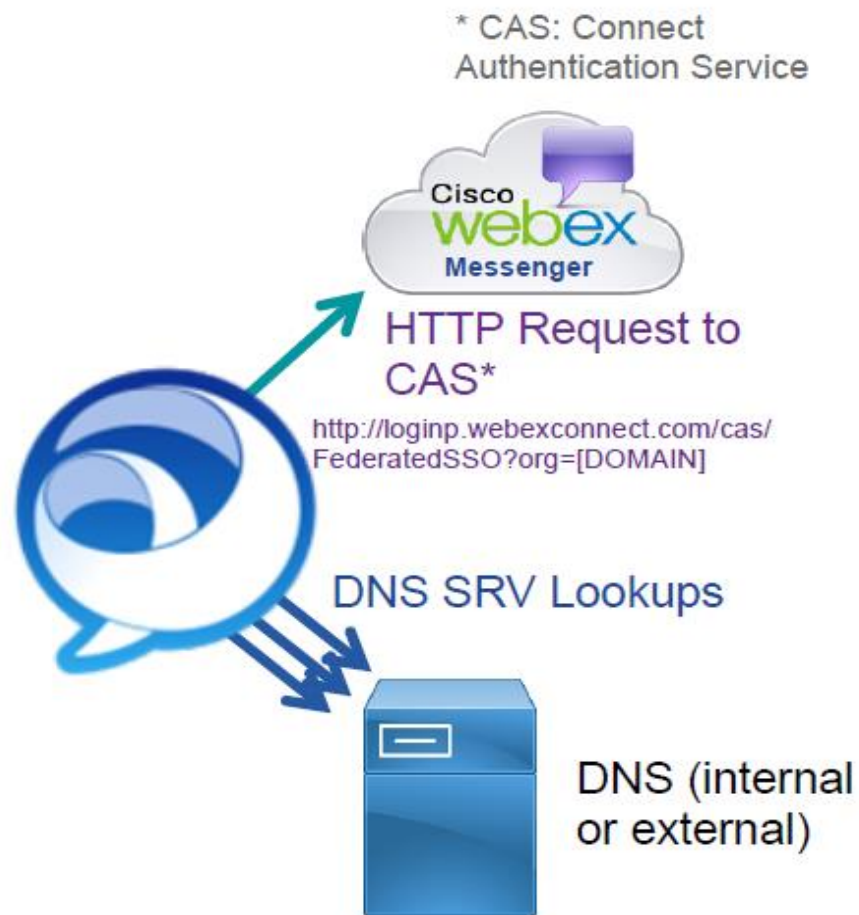
## Jabber sends HTTP and DNS Queries

- Jabber sends all requests (HTTP request & DNS queries) simultaneously
- The record returned with the highest priority will be used for connection to service

- Jabber also evaluates returned responses to determine if it is inside or outside the organization (Edge Detection).

Priority	Service	HTTP Request / DNS SRV
1	WebEx Messenger	HTTP CAS lookup
2	Unified CM 9.x	_cisco-uds._tcp.<domain_name>
3	Cisco Presence 8.x	_cuplogin._tcp.<domain_name>
4	Cisco Expressway	_collab-edge._tls.<domain_name>

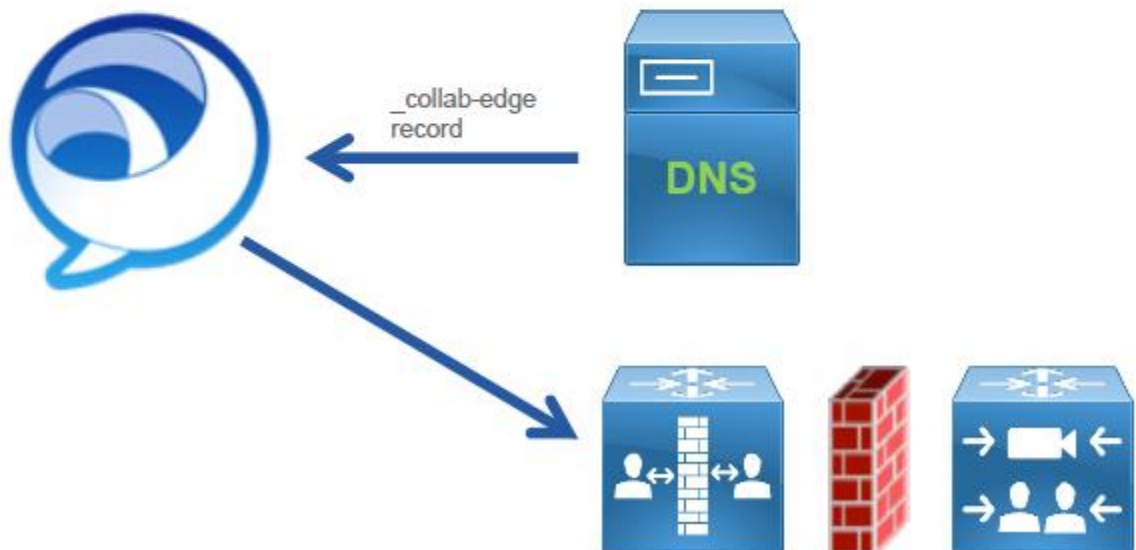
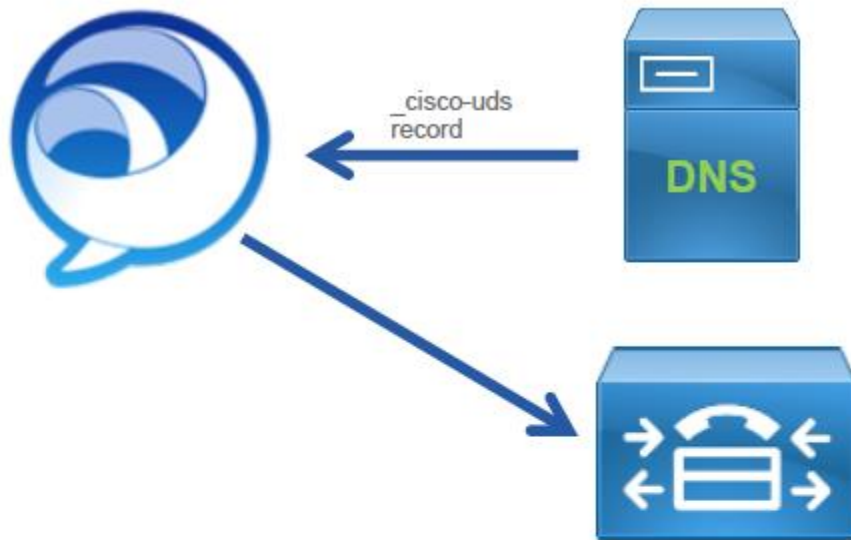
} DNS Queries



## Edge Detection

- Edge Detection determines whether Jabber is inside or outside the organization
- If Jabber is inside the organization it will send traffic directly to UC Manager

- If Jabber is outside the organization, it will transform all traffic and send via
- Expressway (MRA)
- NOTE: If in cloud mode, Jabber will always send WebEx Messenger traffic directly to the cloud





## SRV, PTR and A Records:

A records in Internal DNS server:

FQDN	IP Address
DU-CUCMPUB.abc.com	10.20.34.14
DU-CUCMSUB.abc.com	10.20.34.23
DU-IMPPUB.abc.com	10.20.34.16
US-CUCMPUB.abc.com	10.10.15.10
US-CUCMSUB.abc.com	10.10.15.11
US-IMPPUB.abc.com	10.10.15.14
US-expec.abc.com	10.10.15.20
US-expe.abc.com	10.10.15.33

## SRV Records in Internal Server:

SRV	FQDN
_cisco-uds._tcp.abc.com	DU-CUCMPUB.abc.com
_cisco-uds._tcp.abc.com	DU-CUCMSUB.abc.com
_cisco-uds._tcp.abc.com	US-CUCMPUB.abc.com
_cisco-uds._tcp.abc.com	US-CUCMPUB.abc.com
_cuplogin._tcp.abc.com	US-IMPPUB.abc.com
_cuplogin._tcp.abc.com	DU-IMPPUB.abc.com

## A records in External DNS Server:

FQDN	IP Address
US-expe.abc.com	78.100.91.93

## SRV Records in External DNS Server:

SRV	FQDN
_collab-edge._tls.domain.com	US-expe.abc.com

**Note:** Do same PTR records for all the UC servers.

## ILS:

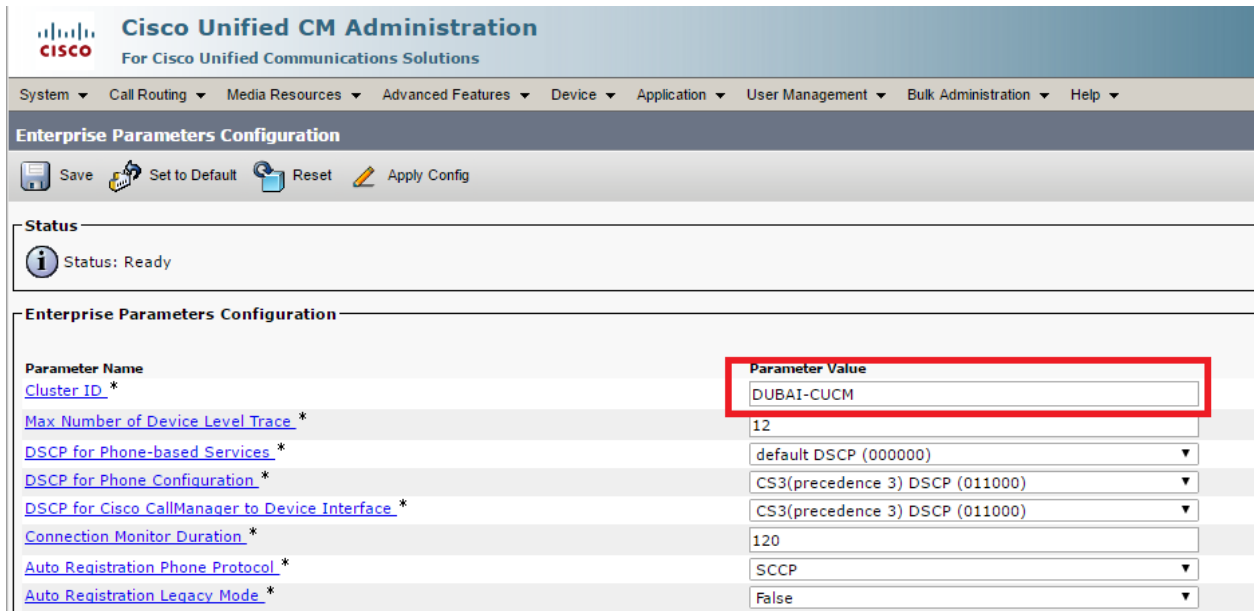
When the Intercluster Lookup Service (ILS) is configured on multiple clusters, ILS updates Cisco Unified Communications Manager with the current status of remote clusters in the ILS network. The ILS cluster discovery service allows Cisco Unified Communications Manager to learn about remote clusters without the need for an administrator to manually configure connections between each cluster. The ILS URI Replication feature enables ILS to exchange directory URI catalogs with the other clusters in an ILS network. URI Replication provides support for Intercluster URI dialing. ILS runs on a cluster-wide basis. When you configure ILS on one cluster node, ILS propagates that configuration to the other nodes in the cluster.

## DUBAI CUCM Configuration:

### ILS Configuration:

- 1) Change Cluster ID

Go to system > Enterprise perimeter > cluster id = Dubai-cucm

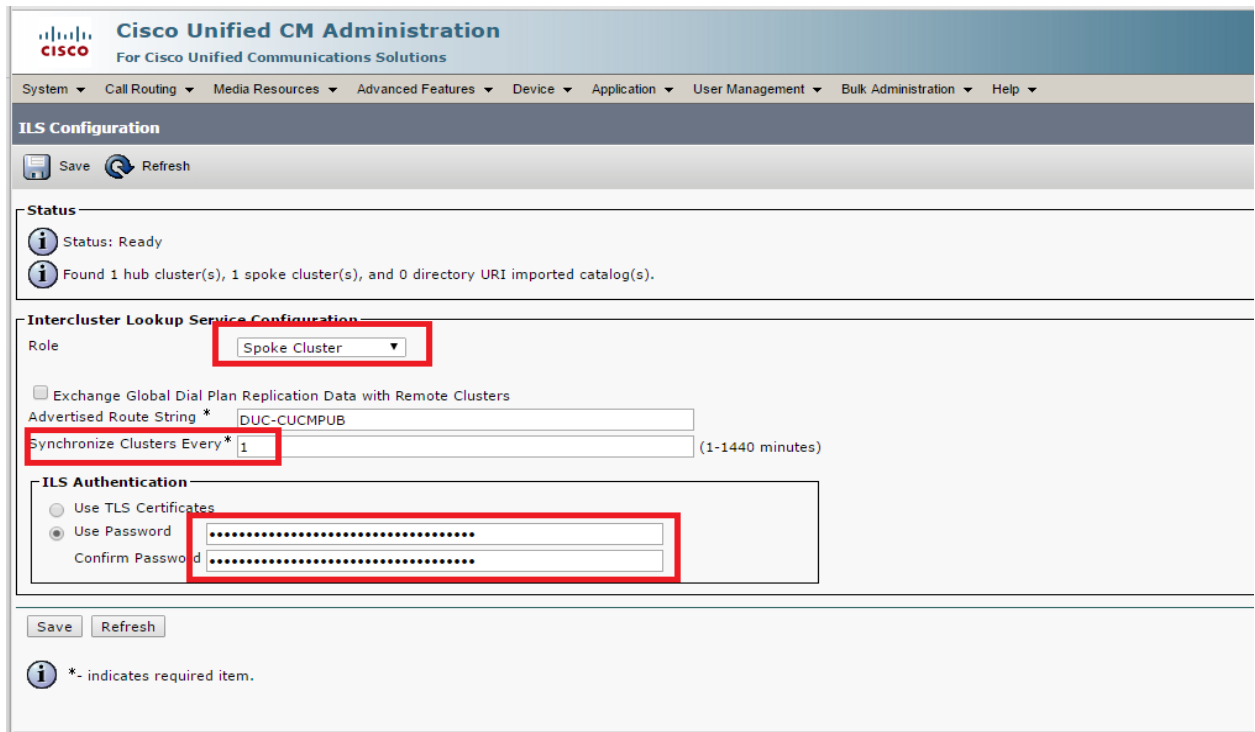
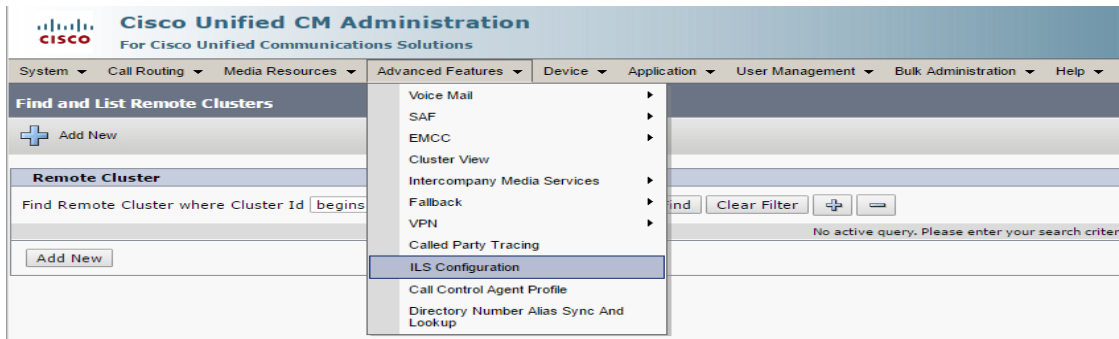


The screenshot displays the Cisco Unified CM Administration web interface. The top navigation bar includes 'System', 'Call Routing', 'Media Resources', 'Advanced Features', 'Device', 'Application', 'User Management', 'Bulk Administration', and 'Help'. The main heading is 'Enterprise Parameters Configuration'. Below this, there are buttons for 'Save', 'Set to Default', 'Reset', and 'Apply Config'. A 'Status' section shows 'Status: Ready'. The 'Enterprise Parameters Configuration' table lists various parameters and their values. The 'Cluster ID' parameter is highlighted with a red box, showing its value as 'DUBAI-CUCM'.

Parameter Name	Parameter Value
<a href="#">Cluster ID</a> *	DUBAI-CUCM
<a href="#">Max Number of Device Level Trace</a> *	12
<a href="#">DSCP for Phone-based Services</a> *	default DSCP (000000) ▼
<a href="#">DSCP for Phone Configuration</a> *	CS3(precedence 3) DSCP (011000) ▼
<a href="#">DSCP for Cisco CallManager to Device Interface</a> *	CS3(precedence 3) DSCP (011000) ▼
<a href="#">Connection Monitor Duration</a> *	120
<a href="#">Auto Registration Phone Protocol</a> *	SCCP ▼
<a href="#">Auto Registration Legacy Mode</a> *	False ▼

## 2) ILS configuration

- Advanced services > ILS Configuration
- Select spoke cluster > add hub cluster ip address
- Set time 1 second for synchronization
- Set common password for both sides



## 3) Cluster view:

Go to advance services > cluster view > you will see US cucm > click > check TFTP and UDS services > add TFTP ip address inside the TFTP server

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

### Remote Cluster Service Configuration

Save ~~X~~ Delete + Add New

**Status**  
Status: Ready

**Remote Cluster Information**  
Cluster Id\* KW-CUCM  
Description  
Fully Qualified Name\* CUCM-Pub.diyarme.com  
Version

**Remote Cluster Service Information**

Enable	Service	Remote Activated	Address-1	Address-2
<input type="checkbox"/>	EMCC	False		
<input type="checkbox"/>	PSTN Access	False		
<input type="checkbox"/>	RSVP Agent	False		
<input type="checkbox"/>	TFTP**	True	10.10.15.10	10.10.15.11
<input type="checkbox"/>	LBM	False		
<input type="checkbox"/>	UDS	Not Applicable	10.10.15.10	10.10.15.11

Enable All Services Disable All Services Update EMCC Remote Cluster Now

Remote Cluster Service Manually Override Configuration - Google Chrome

<https://10.20.34.14/ccadmin/remotecusterserviceoverrideedit.do?key=46d06a96-71ed-40b7>

### Remote Cluster Service Manually Override Configuration

Save Close ? Help

**Status**  
Status: Ready

**Manually Override Configuration**

Service: TFTP

Use automatically determined remote service addresses

Address-1  
Address-2  
Address-3

Manually configure remote service addresses

Address-1

Address-2

Address-3

**Security Configuration**

Note: If your cluster is secure please click the checkbox. By default it will be treated as non-secure.

Cluster is Secure

Save Close

\*- indicates required item.

# US CUCM Configuration:

## ILS Configuration:

### 4) Change Cluster ID

Go to system > Enterprise perimeter> cluster id = US-cucm

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Enterprise Parameters Configuration**

Save Set to Default Reset Apply Config

**Status**  
Status: Ready

**Enterprise Parameters Configuration**

Parameter Name	Parameter Value
<a href="#">Cluster ID</a> *	KW-CUCM
<a href="#">Max Number of Device Level Trace</a> *	12
<a href="#">DSCP for Phone-based Services</a> *	default DSCP (000000)
<a href="#">DSCP for Phone Configuration</a> *	CS3(precedence 3) DSCP (011000)
<a href="#">DSCP for Cisco CallManager to Device Interface</a> *	CS3(precedence 3) DSCP (011000)
<a href="#">Connection Monitor Duration</a> *	120
<a href="#">Auto Registration Phone Protocol</a> *	SCCP
<a href="#">Auto Registration Legacy Mode</a> *	False
<a href="#">BLF For Call Lists</a> *	Disabled

### 5) ILS configuration

- Advanced services > ILS Configuration
- Select Hub cluster > add hub cluster ip address
- Set time 1 second for synchronization
- Set common password for both sides

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Find and List Remote Clusters**

+ Add New

**Remote Cluster**

Find Remote Cluster where Cluster Id begins

Add New

- Voice Mail
- SAF
- EMCC
- Cluster View
- Intercompany Media Services
- Fallback
- VPN
- Called Party Tracing
- ILS Configuration**
- Call Control Agent Profile
- Directory Number Alias Sync And Lookup

Find Clear Filter

No active query. Please enter your search criteria

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**ILS Configuration**

Save Refresh

**-Status-**  
Found 1 hub cluster(s), 1 spoke cluster(s), and 0 directory URI imported catalog(s).

**-Intercluster Lookup Service Configuration-**

Role: Hub Cluster

Register to Another Hub...

Exchange Global Dial Plan Replication Data with Remote Clusters

Advertised Route String \* CUCM-Pub.abc.com

Synchronize Clusters Every \* 1 (1-1440 minutes)

**ILS Authentication**

Use TLS Certificates

Use Password

Confirm Password

Save Refresh

\*. indicates required item.

## 6) Cluster view:

Go to advance services > cluster view > you will see US cucm > click > check TFTP and UDS services > add TFTP ip address inside the TFTP server

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation Cisco U administrator | Search

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Remote Cluster Service Configuration**

Save Delete Add New

**-Status-**  
Status: Ready

**-Remote Cluster Information-**

Cluster Id\* ABU-DHABI-CUCM  
Description  
Fully Qualified Name\* DUC-CUCMPUB  
Version

**-Remote Cluster Service Information-**

Enable	Service	Remote Activated	Address-1	Address-2	Address-3
<input type="checkbox"/>	EMCC	False			
<input type="checkbox"/>	PSTN Access	False			
<input type="checkbox"/>	RSVP Agent	False			
<input checked="" type="checkbox"/>	TFTP **	True	10.20.34.14	10.20.34.23	
<input type="checkbox"/>	LBM	False			
<input checked="" type="checkbox"/>	UDS	Not Applicable	10.20.34.14	10.20.34.23	

Enable All Services | Disable All Services | Update EMCC Remote Cluster Now

**Remote Cluster Service Manually Override Configuration**

Save Close Help

**- Status -**  
 Status: Ready

**- Manually Override Configuration -**  
 Service: TFTP

Use automatically determined remote service addresses  
 Address-1  
 Address-2  
 Address-3

Manually configure remote service addresses  
 Address-1: 10.20.34.14  
 Address-2: 10.20.34.23  
 Address-3:

**- Security Configuration -**  
 Note: If your cluster is secure please click the checkbox. By default it will be treated as non-secure.  
 Cluster is Secure

Save Close

\* - indicates required item.

After completing the ILS configuration check the user home cluster status

In this project I have one username for testing [su.sharma@diyarme.com](mailto:su.sharma@diyarme.com)

This user is part of both cluster because of same active directory but Dubai is the main home cluster of this user so we need to check using script our ILS is configured correct .

### Assign Home cluster for user:

Dubai cucm publisher > user management > end user

**Cisco Unified CM Administration**  
 For Cisco Unified Communications Solutions

System Call Routing Media Resources Advanced Features Device Application User Management Bulk Administration Help

**Find and List Users**

+ Add New

**User**

Find User where First name begins with

Add New

- Application User
- End User
- User/Phone Add
- SIP Realm
- User Settings
- Self-Provisioning
- Assign Presence Users

Go inside the su.sharma user and select the home cluster

- Make sure check box of home cluster and presence is checked
- Device profile is associated with this user

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**End User Configuration**

Save  Delete  Add New

User Profile: Use System Default( "Standard (Factory Default) U" ▾ [View Details](#)

**Convert User Account**

Convert LDAP Synchronized User to Local 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: DUC-ABU ▾ [View Details](#)

**Device Information**

Controlled Devices: CSFsushant, SEP0057D2D142C5, TCTSUSHANT

Available Profiles: [Empty]

**Device Association**

Line Appearance Association for Presence

## Testing ILS Trunk

Example URL: <https://<ucm>/cucm-uds/clusterUser?username=<username>>

<https://10.10.15.10/cucm-uds/clusterUser?username=su.sharma>

I checked home cluster for su.sharma from US cucm but you can see su.sharma actual home cluster is Dubai cucm and after running the script it's showing actual home cluster cucm address that's means our ILS link is working perfect

← → ↻  <https://10.10.15.10/cucm-uds/clusterUser?username=su.sharma>

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<clusterUser version="10.5.1" uri="https://10.10.15.10/cucm-uds/clusterUser?username=su.sharma">
  <result found="true" uri="https://DUC-CUCMPUB.abc.com:8443/cucm-uds/user/Su.Sharma" version="11.0.1"/>
  <homeCluster serversUri="https://DUC-CUCMPUB.abc.com:8443/cucm-uds/servers/<DUC-CUCMPUB.abc.com>"></homeCluster>
  <homeClusterDetails>
    <selfProvisioningSecureMode>true</selfProvisioningSecureMode>
    <adminProvisionMode>false</adminProvisionMode>
  </homeClusterDetails>
</clusterUser>
```



## Intercluster Peering:

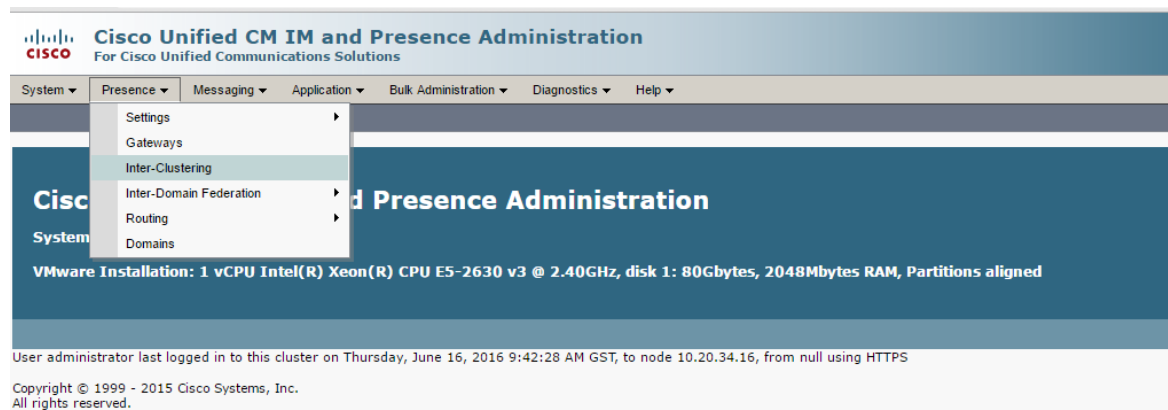
This Intercluster peer functionality allows users in one Cisco Unified Presence cluster to communicate and subscribe to the availability information of users in a remote Cisco Unified Presence cluster within the same domain. Keep in mind that if you delete an Intercluster peer from one cluster, then you must also delete the corresponding peer in the remote cluster. Cisco Unified Presence uses the AXL/SOAP interface to retrieve user information for the home cluster association. Cisco Unified Presence uses this user information to detect if a user is a local user (user on the home cluster), or a user on a remote Cisco Unified Presence cluster within the same domain. Cisco Unified Presence uses the XMPP interface for the subscription and notification traffic. If Cisco Unified Presence detects a user to be on a remote cluster within the same domain, Cisco Unified Presence reroutes the messages to the remote cluster.

### Dubai IMP server Configuration:

You need to know the below information to establish a Intercluster-peering between Two IMP cluster.

- IMP PUB address
- AXL username and Password

Presence > Inter-clustering



Add ip address, username and password.

**Inter-cluster Peer Configuration**

Save

**Status**

Status: Ready

**Inter-cluster Peer Configuration**

Configure an inter-cluster IM and Presence (IM/P) Service peer. This will enable the transmission of instant messages/presence status across multiple IM/P Service clusters.

Peer Address*	<input type="text" value="10.10.15.14"/>
AXL Username*	<input type="text" value="administrator"/>
AXL Password*	<input type="password" value="....."/>
Confirm AXL Password*	<input type="password" value="....."/>
Protocol	<input type="text" value="TCP"/>

Verification: check the status

**Inter-cluster Peer Configuration**

Save Delete Add New Force Manual Sync

Configure an inter-cluster IM and Presence (IM/P) Service peer. This will enable the transmission of instant messages/presence status across multiple IM/P Service clusters.

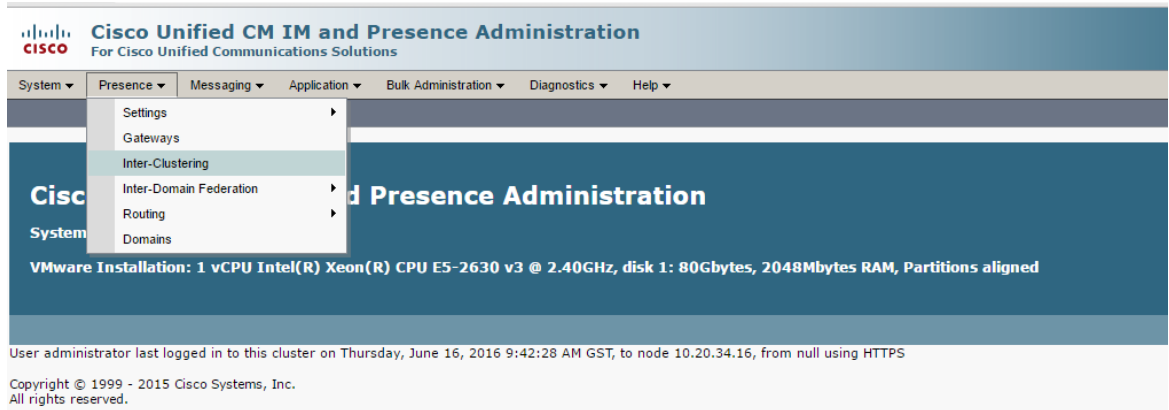
Peer Address*	<input type="text" value="10.10.15.14"/>
AXL Username*	<input type="text" value="administrator"/>
AXL Password*	<input type="password" value="....."/>
Confirm AXL Password*	<input type="password" value="....."/>
Protocol	<input type="text" value="TCP"/>

**Inter-cluster Peer Status**

Test	Result
Peer Connectivity	Reachable
Peer Compatibility	Compatible
Default Domain	Domains match
Peer IM Address Scheme	IM Address Schemes match
Cluster ID	Cluster ID is unique
IM/P Service Version	10.5.1.10000(8)
CUCM Publisher Version	10.5.1.10000(7)
High Availability Server States	High Availability of peer not enabled
Associated Users	258
Certificate Status	Connection is secure <a href="#">▶ Details</a>

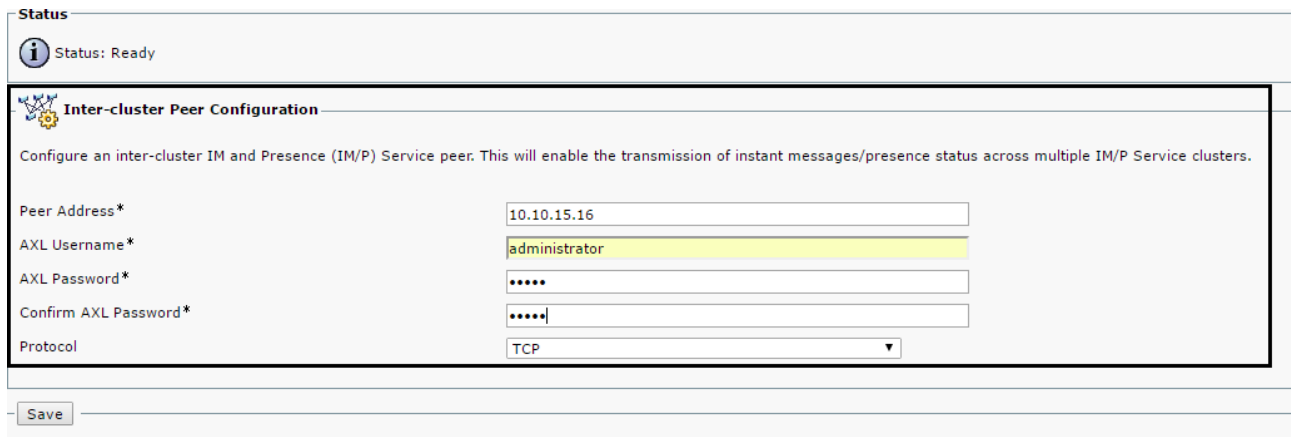
## US IMP Server Configuration:

Presence > Inter-clustering



The screenshot shows the Cisco Unified CM IM and Presence Administration web interface. The top navigation bar includes 'System', 'Presence', 'Messaging', 'Application', 'Bulk Administration', 'Diagnostics', and 'Help'. The 'Presence' menu is expanded, showing options for 'Settings', 'Gateways', 'Inter-Clustering' (which is highlighted), 'Inter-Domain Federation', 'Routing', and 'Domains'. Below the navigation bar, the page title is 'Cisco Unified CM IM and Presence Administration'. A status bar indicates 'VMware Installation: 1 vCPU Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz, disk 1: 80Gbytes, 2048Mbytes RAM, Partitions aligned'. At the bottom, a log entry states: 'User administrator last logged in to this cluster on Thursday, June 16, 2016 9:42:28 AM GST, to node 10.20.34.16, from null using HTTPS'. Copyright information for 1999-2015 Cisco Systems, Inc. is also present.

Add ip address, username and password.



The screenshot displays the 'Inter-cluster Peer Configuration' form. At the top, the status is 'Ready'. The form title is 'Inter-cluster Peer Configuration' with a gear icon. Below the title, a description reads: 'Configure an inter-cluster IM and Presence (IM/P) Service peer. This will enable the transmission of instant messages/presence status across multiple IM/P Service clusters.' The form contains the following fields:

- Peer Address\*: 10.10.15.16
- AXL Username\*: administrator
- AXL Password\*: [masked with dots]
- Confirm AXL Password\*: [masked with dots]
- Protocol: TCP

A 'Save' button is located at the bottom left of the form.

Verification: check the status

Test	Result
Peer Connectivity	✓ Reachable
Peer Compatibility	✓ Compatible
Default Domain	✓ Domains match
Peer IM Address Scheme	✓ IM Address Schemes match
Cluster ID	✓ Cluster ID is unique
IM/P Service Version	✓ 10.5.1.10000(8)
CUCM Publisher Version	✓ 10.5.1.10000(7)
High Availability Server States	⚠ High Availability of peer not enabled
Associated Users	👤 258
Certificate Status	🔒 Connection is secure ▶ Details

Last update -- 10:19:54 AM

## Expressway-Core Configuration:

MRA is already configured for US Cluster we need to add configuration for multiple deployment

The screenshot shows the Cisco Expressway-C configuration interface. The 'Configuration' menu is open, and the path 'Unified Communications > Unified CM servers' is highlighted with red boxes. The main content area shows system information for 'DUC-VCSC-ABU', including up time (33 days 1 hour 59 minutes), software version (X8.7.2), and IP address (10.20.34.17). The 'Rich media session calls' section shows 0 sessions. The 'Monitored resource usage' section shows 0% current usage.

Add Dubai cucm server directly in call manager.

Configuration > Unified communication > unified CM servers > Add cucm server

Unified CM servers

You are here: Configuration > Unified Communications > Unified C

Publisher address	Username	TLS verify mode	Nodes discovered by this lookup	Actions
<input type="checkbox"/> 10.20.34.14	administrator	Off	10.20.34.23, 10.20.34.14	<a href="#">View/Edit</a>

[New](#) [Delete](#) [Select all](#) [Unselect all](#) [Refresh servers](#)

Click Refresh servers to refresh the details of the nodes associated with the selected a

Currently found Unified CM nodes					
Publisher address	Name	Protocol	Version	Status	
10.20.34.14	10.20.34.14	TCP	11.0.1	TCP, Active	
10.20.34.14	10.20.34.23	TCP	11.0.1	TCP, Active	

Related tasks

- [Configure IM and Presence Service nodes](#)
- [Configure Unity Connection Servers](#)

Configuration > Unified communication > IMP Server > Add IMP server.

You are here: Configuration > Unified Communication

IM and Presence

Publisher address
<input type="checkbox"/> 10.20.34.16

[New](#) [Delete](#) [Select all](#)

Currently found IM and

Publisher address	Version	Status
10.20.34.16	11.0.1	XMPP router: Inactive (see Unified Communications status)

[Configure Unified CM servers](#)  
[Configure Unity Connection Servers](#)

- Protocols >
- Authentication >
- Call routing >
- Traversal Subzone >
- Zones >
- Domains >
- Unified Communications** >
- Dial plan >
- Bandwidth >
- Call Policy >
- Configuration
- Deployments
- Unified CM servers
- IM and Presence Service node**
- Unity Connection servers
- Jabber Guest servers
- Identity providers (IdP)
- Export SAML data

Click Refresh servers to refresh the details of the nodes ass

The screenshot shows the Cisco Expressway-C configuration interface. At the top, the Cisco logo and 'Cisco Expressway-C' are displayed. Below this is a navigation menu with tabs for 'Status', 'System', 'Configuration', 'Applications', 'Users', and 'Maintenance'. The 'Configuration' tab is selected, and the 'IM and Presence Service nodes' section is highlighted with a red box. This section contains a table with the following data:

Publisher address	Username	TLS verify mode
<input type="checkbox"/> 10.20.34.16	administrator	Off

Below the table are buttons for 'New', 'Edit', 'Select all', 'Delete', and 'Refresh'. Another red box highlights the 'Currently found IM and Presence Service nodes' section, which contains a table with the following data:

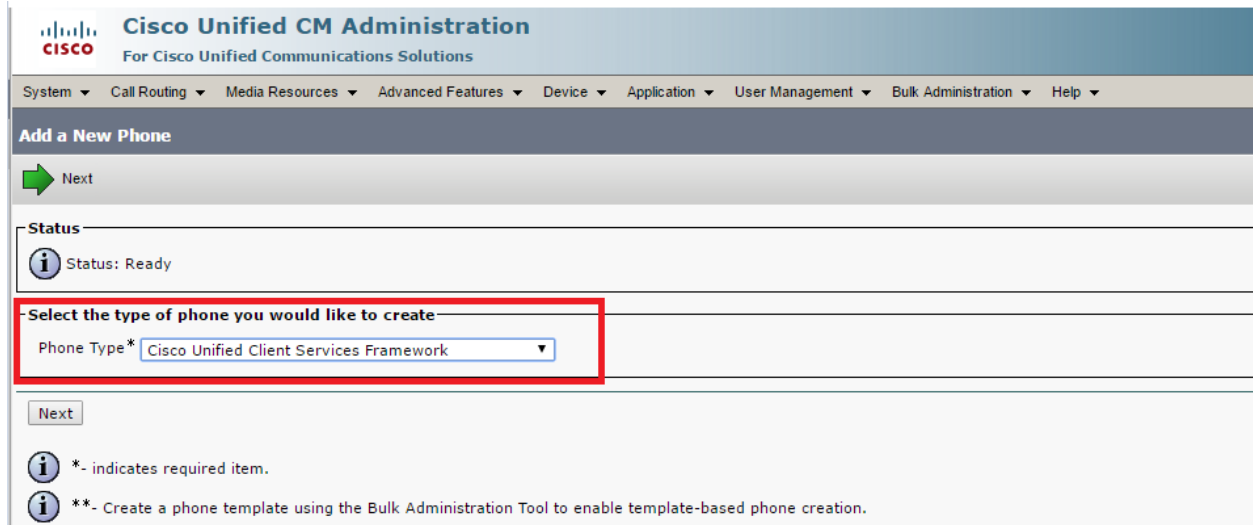
Publisher address	Name	Version
10.20.34.16	10.20.34.16	11.0.1

At the bottom, there is a 'Related tasks' section with two links: 'Configure Unified CM servers' and 'Configure Unity Connection Servers'.

**Note:** Before there is US cucm added and now we added Dubai cucm and imp cluster in same default deployment.

## Verification:

We will test jabber for window



**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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### Add a New Phone

Next

**Status**

**i** Status: Ready

**Select the type of phone you would like to create**

Phone Type\*

Next

**i** \*- indicates required item.

**i** \*\*- Create a phone template using the Bulk Administration Tool to enable template-based phone creation.

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### Phone Configuration

Save

**Status**  
Status: Ready

**Phone Type**  
Product Type: Cisco Unified Client Services Framework  
Device Protocol: SIP

**Device Information**

Device is trusted

Device Name\* CSFsushant

Description CSFsushant

Device Pool\* -- Not Selected -- [View Details](#)

Common Device Configuration < None > [View Details](#)

Phone Button Template\* -- Not Selected --

Common Phone Profile\* Standard Common Phone Profile [View Details](#)

Calling Search Space < None >

AAR Calling Search Space < None >

Media Resource Group List < None >

User Hold MOH Audio Source < None >

Network Hold MOH Audio Source < None >

Location\* Hub\_None

AAR Group < None >

User Locale < None >

Network Locale < None >

Built In Bridge\* Default

Device Mobility Mode\* < None >

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### Find and List Phones

Related Links: [Actively Logged In](#)

**Status**  
4 records found

**Query Information**  
Searching on a directory number may show the same device name multiple times depending on the number of lines configured per device.

**Phone (1 - 4 of 4)**

Find Phone where  begins with

Select item or enter search text

<input type="checkbox"/>	Device Name(Line)	Description	Device Pool	Extension	Partition	Device Protocol	Status	IP Address
<input type="checkbox"/>	CSFsushant(1)	Sushant Sharma	DUC_ABUDHABI-DP	678	Internal_PT	SIP	None	None
<input type="checkbox"/>	SEP0057D2D142C5(1)	Sushant Sharma	DUC_ABUDHABI-DP	678	Internal_PT	SIP	Registered with 10.20.34.23	10.20.31.50
<input type="checkbox"/>	SEP1C6A7AE12779(1)	SEPFCD8B3E91146	DUC_ABUDHABI-DP-TP	678	Internal_PT	SIP	None	None
<input type="checkbox"/>	ICTSUSHANTI(1)	Sushant Sharma	DUC_ABUDHABI-DP	678	Internal_PT	SIP	Registered with 10.20.34.23	10.10.15.20

User management > End user > Find Sushant



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Application User

- End User
- User/Phone Add ▶
- SIP Realm
- User Settings ▶
- Self-Provisioning
- Assign Presence Users

Save Delete Add New

**-Status-**  
 Status: Ready

**-User Information-**  
User Status Active LDAP Synchronized User  
User ID\* Su.Sharma  
Self-Service User ID   
PIN    
Confirm PIN   
Last name\* Sharma  
Middle name  
First name Sushant  
Display name Sushant Sharma  
Title Network Engineer  
Directory URI  
Telephone Number +971 22035678  
Home Number  
Mobile Number +971 567360147  
Pager Number  
Mail ID Su.Sharma@diyarme.com  
Manager User ID  
Department DME Network - Abu Dhabi

Check Home cluster for su.sharma username:

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### End User Configuration

Save **X** Delete **+** Add New

Department: DME Network - Abu Dhabi  
User Locale: < None >  
Associated PC:  
Digest Credentials:  
Confirm Digest Credentials:  
User Profile: Use System Default( "Standard (Factory Default) U" [View Details](#)

### Convert User Account

Convert LDAP Synchronized User to Local User

### Service Settings

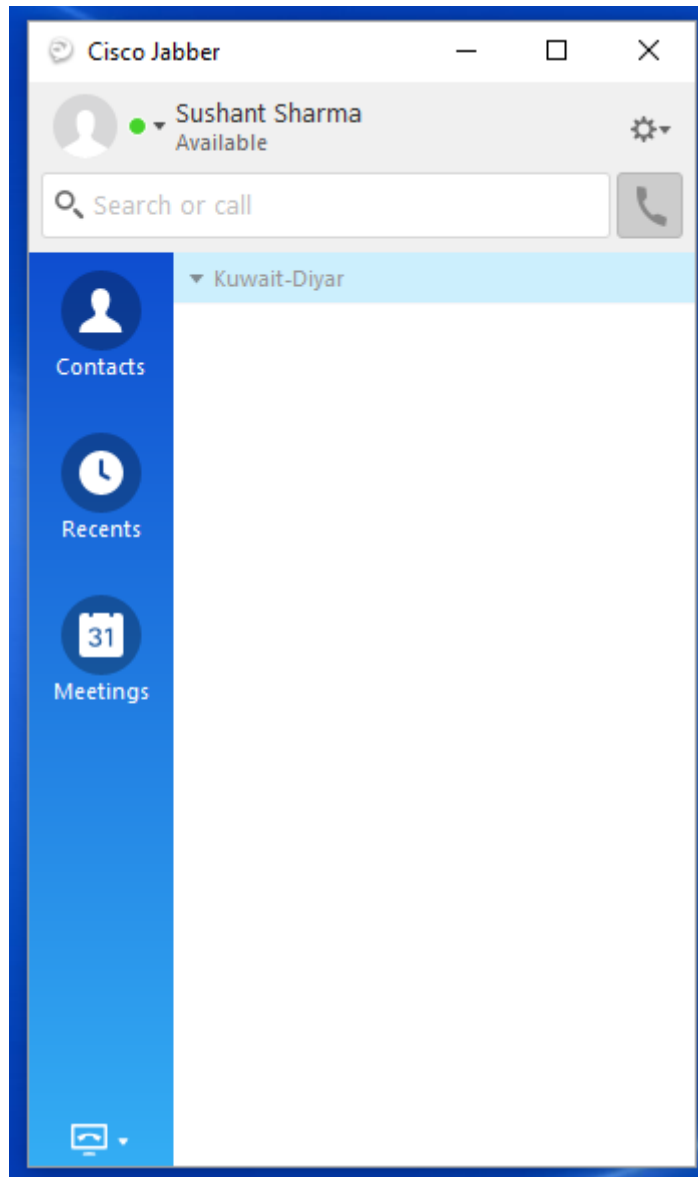
Home Cluster  
 Enable User for Unified CM IM and Presence (Configure IM and Presence in the associated UC Service Profile)  
 Include meeting information in presence(Requires Exchange Presence Gateway to be configured on CUCM IM and Presence server)  
[Presence Viewer for User](#)  
UC Service Profile: DUC-ABU [View Details](#)

### Device Information

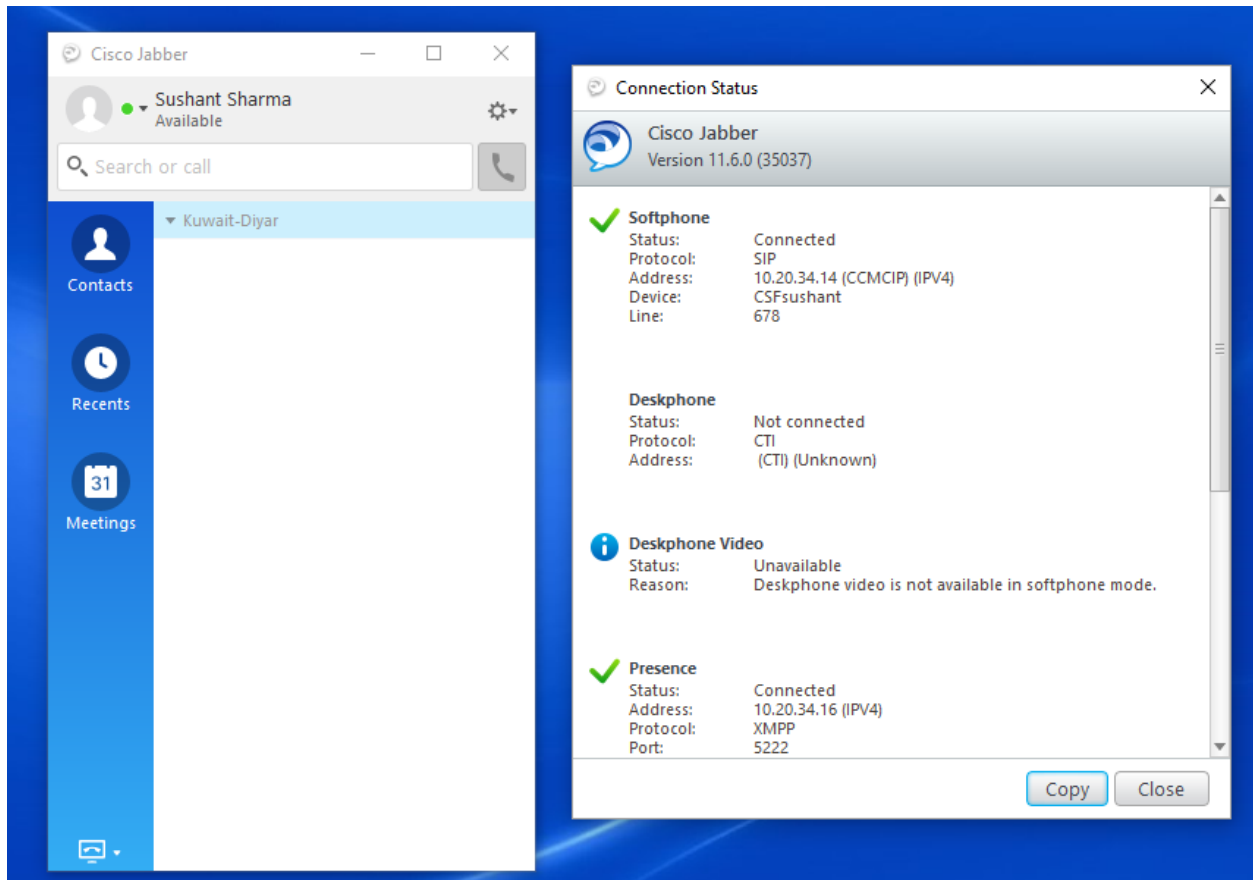
Controlled Devices: CSFsushant  
SEP0057D2D142C5  
TCTSUSHANT  
Available Profiles:

**Device Association**  
**Line Appearance Association for Presence**

Launch cisco jabber and add username and password.



You can see cisco jabber is registered with cucm and IMP server located in Dubai region



\*\*\*\*\* END OF THIS DOUCUMENT\*\*\*\*\*