

ALM PRO CallManager configuration Manual for CUCM9



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Configuration manual ALM

This manual describes the configuration steps to complete the ALM settings for a user.

Only the Cisco® Unified Communications Manager (CUCM) part of the installation will be discussed in this manual.

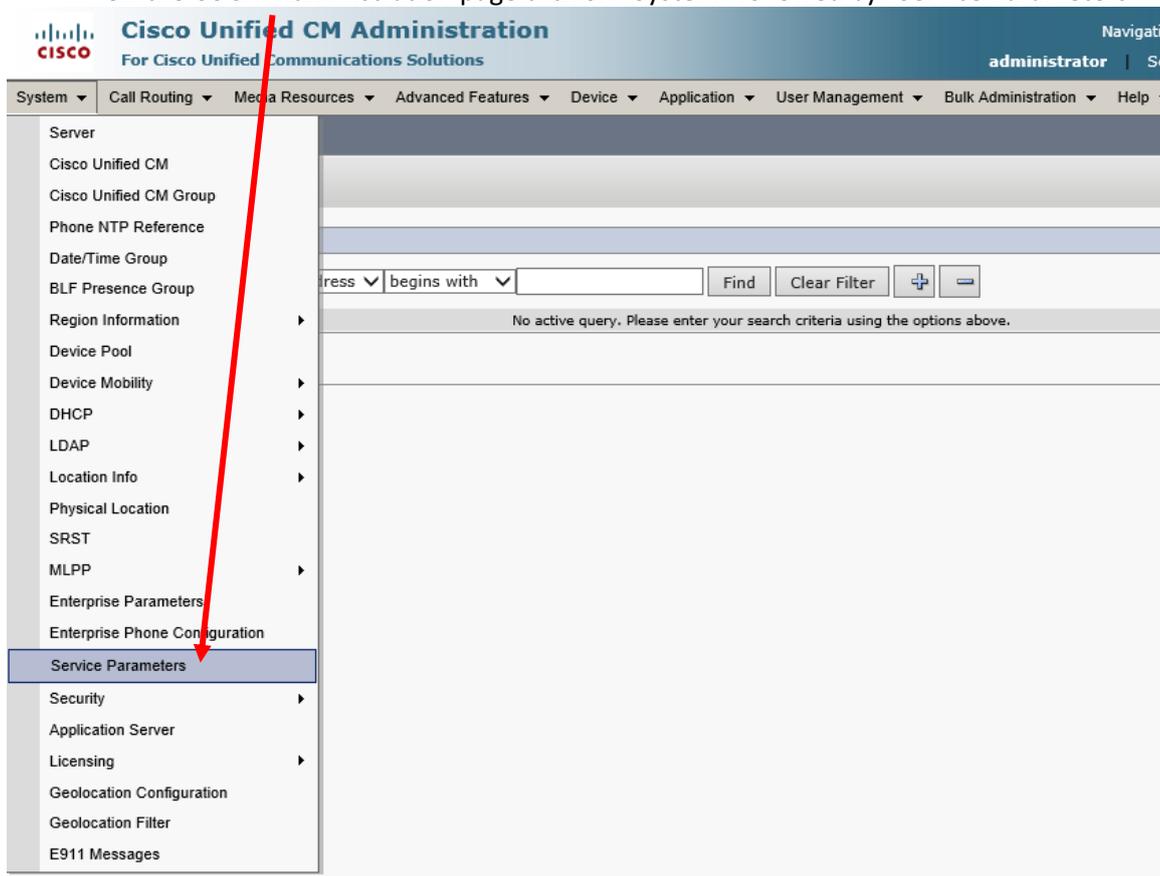
Several steps are required like the configuration of a device/phone and the configuration of a Device Profile and a user.

This manual does not contain instructions on how to configure Partitions, CallingSearchSpaces and other phone and user settings.

System settings

Log on to the Cisco Unified CM Administration page

- On the CUCM Administration page click on “System” followed by “Service Parameters”



- Select the Publisher / Primary CUCM Server
- Select the Cisco Extension Mobility Service

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration

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

Service Parameter Configuration

Status
Status: Ready

Select Server and Service

Server* 192.168.1.81 (Active)

Service* -- Not Selected --

All parameters -- Not Selected --

- Cisco AMC Service (Active)
- Cisco Audit Event Service (Active)
- Cisco Bulk Provisioning Service (Active)
- Cisco CTIManager (Inactive)
- Cisco CTL Provider (Inactive)
- Cisco CallManager (Active)
- Cisco CallManager SNMP Service (Inactive)
- Cisco Certificate Authority Proxy Function (Inactive)
- Cisco DRF Local (Active)
- Cisco DRF Master (Active)
- Cisco Database Layer Monitor (Active)
- Cisco DirSync (Inactive)
- Cisco Extended Functions (Inactive)
- Cisco Extension Mobility (Active)**
- Cisco IP Manager Assistant (Inactive)
- Cisco IP Voice Media Streaming App (Inactive)
- Cisco Log Partition Monitoring Tool (Active)
- Cisco Messaging Interface (Inactive)
- Cisco RIS Data Collector (Active)
- Cisco Serviceability Reporter (Active)
- Cisco TAPS Service (Inactive)
- Cisco Tftp (Active)
- Cisco Trace Collection Service (Active)
- Cisco Trust Verification Service (Active)
- Cisco WebDialer Web Service (Active)

*- indicates required item.
**The Set-to-Default button restores all parameters that have been modified to their original default values.

Cisco Unified CM Administration
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Service Parameter Configuration

Related Links: Parameters for All Servers

Status
Status: Ready

Select Server and Service

Server* 192.168.1.81 (Active)

Service* Cisco Extension Mobility (Active)

All parameters apply only to the current server except parameters that are in the cluster-wide group(s).

Cisco Extension Mobility (Active) Parameters on server 192.168.1.81 (Active)

Parameter Name	Parameter Value	Suggested Value
Clusterwide Parameters (Parameters that apply to all servers)		
Enforce Intra-cluster Maximum Login Time *	False	False
Intra-cluster Maximum Login Time *	8:00	8:00
Inter-cluster Maximum Login Time *	10:00	10:00
Intra-cluster Multiple Login Behavior *	Auto Logout	Multiple Logins Not Allowed
Alphanumeric User ID *	True	True
Remember the Last User Logged In *	False	False
Clear Call Logs on Intra-Cluster EM *	False	False

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

*- indicates required item.
**The Set-to-Default button restores all parameters that have been modified to their original default values.

In the CUCM several Service Parameters for the ExtensionMobility service must be changed.

One of the required settings is the “Intra-Cluster Multiple Login Behaviour”. This will control the procedure of the login request.

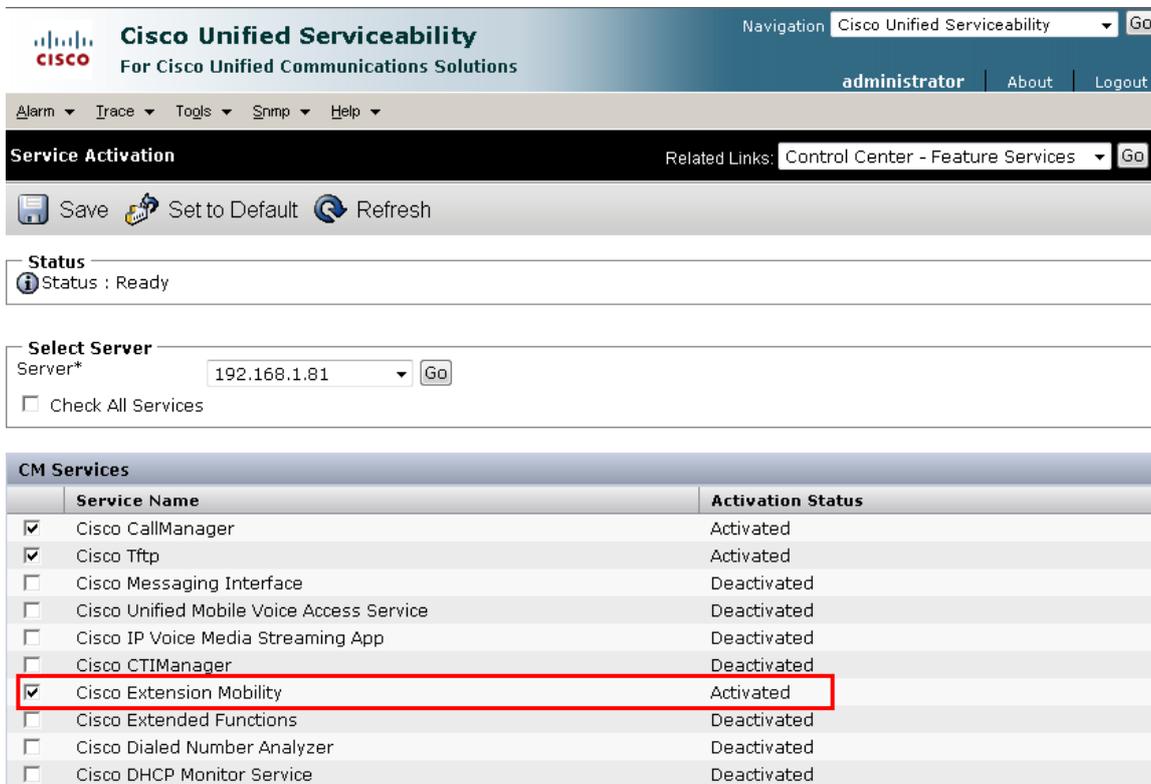
The required setting is “Auto Logout”. This feature will automatically logout or disconnect a user if he/she is already logged into an other IP Phone.

So this setting will automatically logoff a user if he/she is already logged on at an other extension.

All the other settings may be changed depending on the situation.

Service settings

Verify the Cisco Extension Mobility Service is activated on all CallManager Servers.



The screenshot shows the Cisco Unified Serviceability interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified Serviceability For Cisco Unified Communications Solutions". The user is logged in as "administrator". Below the navigation bar, there are tabs for "Alarm", "Trace", "Tools", "Snmp", and "Help". The main content area is titled "Service Activation" and includes a "Related Links" section with a dropdown menu set to "Control Center - Feature Services". There are buttons for "Save", "Set to Default", and "Refresh".

Under the "Status" section, it shows "Status : Ready".

Under the "Select Server" section, the "Server*" dropdown is set to "192.168.1.81" and there is a "Go" button. There is also a checkbox for "Check All Services".

The "CM Services" table is displayed below, showing a list of services and their activation status. The "Cisco Extension Mobility" service is highlighted with a red box and is marked as "Activated".

	Service Name	Activation Status
<input checked="" type="checkbox"/>	Cisco CallManager	Activated
<input checked="" type="checkbox"/>	Cisco Tftp	Activated
<input type="checkbox"/>	Cisco Messaging Interface	Deactivated
<input type="checkbox"/>	Cisco Unified Mobile Voice Access Service	Deactivated
<input type="checkbox"/>	Cisco IP Voice Media Streaming App	Deactivated
<input type="checkbox"/>	Cisco CTIManager	Deactivated
<input checked="" type="checkbox"/>	Cisco Extension Mobility	Activated
<input type="checkbox"/>	Cisco Extended Functions	Deactivated
<input type="checkbox"/>	Cisco Dialed Number Analyzer	Deactivated
<input type="checkbox"/>	Cisco DHCP Monitor Service	Deactivated

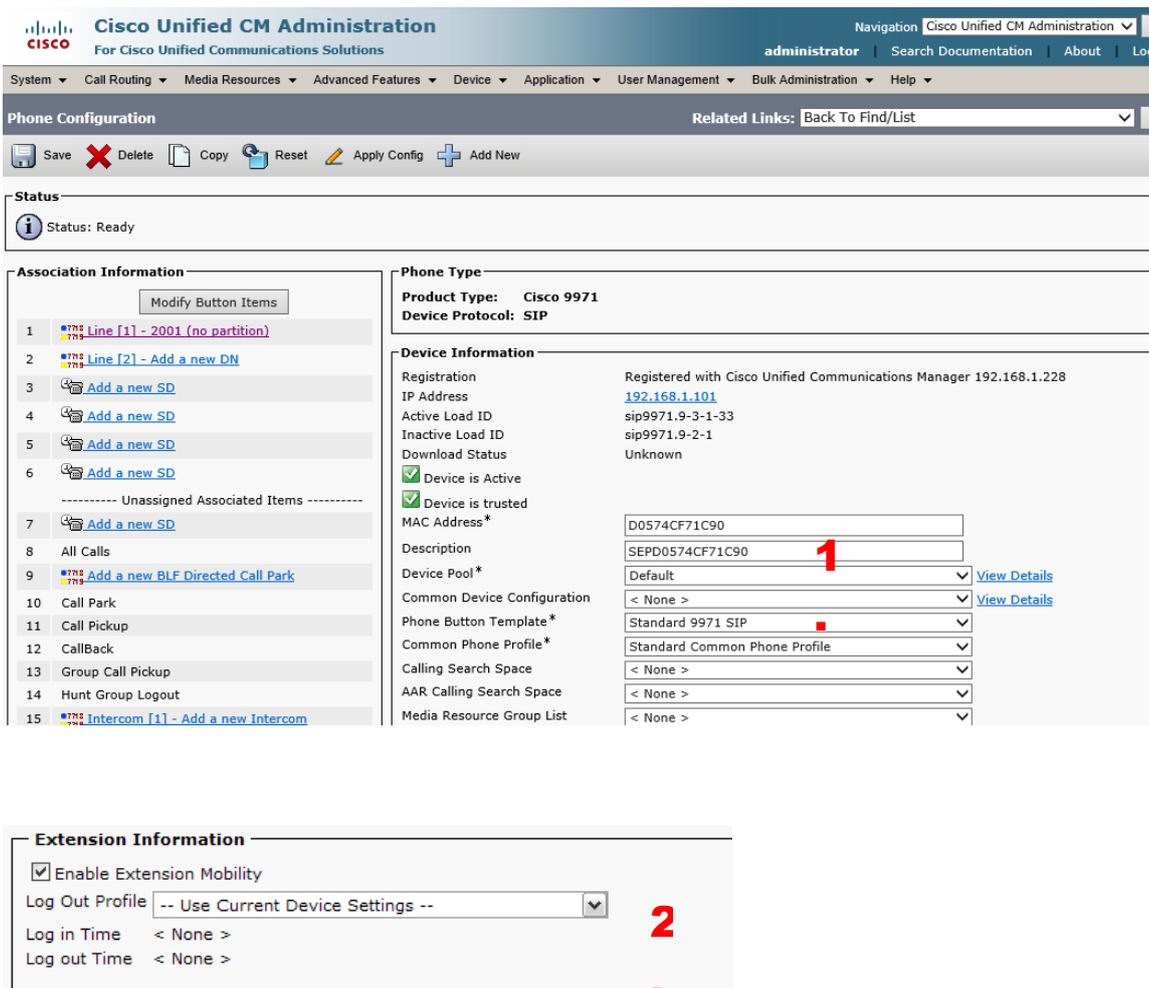
Verify the Cisco Extension Mobility Service is running on all CallManager Servers.

CM Services						
	Service Name	Status:	Activation Status	Start Time	Up Time	
<input type="radio"/>	Cisco CallManager	Started	Activated	Wed Jul 3 14:13:06 2013	0 days 02:49:19	
<input type="radio"/>	Cisco Messaging Interface	Not Running	Deactivated			
<input type="radio"/>	Cisco Unified Mobile Voice Access Service	Not Running	Deactivated			
<input type="radio"/>	Cisco IP Voice Media Streaming App	Not Running	Deactivated			
<input type="radio"/>	Cisco CTIManager	Not Running	Deactivated			
<input type="radio"/>	Cisco Extension Mobility	Started	Activated	Wed Jul 3 14:22:57 2013	0 days 02:39:28	
<input type="radio"/>	Cisco DHCP Monitor Service	Not Running	Deactivated			
<input type="radio"/>	Cisco Intercluster Lookup Service	Not Running	Deactivated			
<input type="radio"/>	Cisco Location Bandwidth Manager	Not Running	Deactivated			
<input type="radio"/>	Cisco Dialed Number Analyzer Server	Not Running	Deactivated			
<input type="radio"/>	Cisco Dialed Number Analyzer	Not Running	Deactivated			
<input type="radio"/>	Cisco Tftp	Started	Activated	Wed Jul 3 14:13:09 2013	0 days 02:49:16	

Device settings

The following settings are a required field on every phone or device:

- 1) **Description:** Administrative field to identify each phone in the system
- 2) **Enable Extension Mobility Feature:** to activate the possibility to logon to this specific phone
- 3) **PC Voice VLAN Access:** is a required field and must always be enabled. This field enables the ALM to detect the phone.
- 4) **Web Access Enabled:** is a required field and must always be enabled.
- 5) Optional the Extension Mobility (XML) service can be activated on the phone, when the ALM application does not start or does not exists on the PC a user can always login manually on the phone.



The screenshot displays the Cisco Unified CM Administration interface for configuring a phone. The 'Phone Configuration' page shows the following details:

- Status:** Ready
- Association Information:** A list of 15 items, including line configurations and call services.
- Phone Type:** Product Type: Cisco 9971, Device Protocol: SIP
- Device Information:**
 - Registration: Registered with Cisco Unified Communications Manager 192.168.1.228
 - IP Address: 192.168.1.101
 - Active Load ID: sip9971.9-3-1-33
 - Inactive Load ID: sip9971.9-2-1
 - Download Status: Unknown
 - Device is Active:
 - Device is trusted:
 - MAC Address*: D0574CF71C90
 - Description: SEPD0574CF71C90 (highlighted with a red '1')
 - Device Pool*: Default (View Details)
 - Common Device Configuration: < None > (View Details)
 - Phone Button Template*: Standard 9971 SIP
 - Common Phone Profile*: Standard Common Phone Profile
 - Calling Search Space: < None >
 - AAR Calling Search Space: < None >
 - Media Resource Group List: < None >
- Extension Information:**
 - Enable Extension Mobility: (highlighted with a red '2')
 - Log Out Profile: -- Use Current Device Settings --
 - Log in Time: < None >
 - Log out Time: < None >

Product Specific Configuration Layout

	?	Param	Override Common Settings
<input type="checkbox"/> Disable Speakerphone			
<input type="checkbox"/> Disable Speakerphone and Headset			
PC Port *		Enabled	
Back USB Port*		Enabled	<input type="checkbox"/>
Side USB Port*		Enabled	<input type="checkbox"/>
Cisco Camera *		Disabled	<input type="checkbox"/>
Video Capabilities*		Disabled	<input type="checkbox"/>
Enable/Disable USB Classes		Mass Storage Human Interface Device Audio Class	<input type="checkbox"/>
SDIO *		Disabled	<input type="checkbox"/>
Bluetooth *		Enabled	<input type="checkbox"/>
Wifi *		Enabled	<input type="checkbox"/>
Bluetooth Profiles*		Handsfree Human Interface Device	<input type="checkbox"/>
Settings Access*		Enabled	<input type="checkbox"/>
Gratuitous ARP*		Disabled	<input type="checkbox"/>
PC Voice VLAN Access*		Enabled	<input type="checkbox"/>
Web Access*		Enabled	<input checked="" type="checkbox"/>
Show All Calls on Primary Line*		Disabled	<input type="checkbox"/>
Days Display Not Active		Sunday Monday Tuesday	<input type="checkbox"/>
Display On Time		07:30	<input type="checkbox"/>

Subscribed Cisco IP Phone Services for SEP001A2F8DFA32

Save Help

Status
Add successful

Service Subscription: Extension Mobility

Service Information

Service Name* Extension Mobility

ASCII Service Name* Extension Mobility

Subscribed Services

[Subscribe a New Service](#)

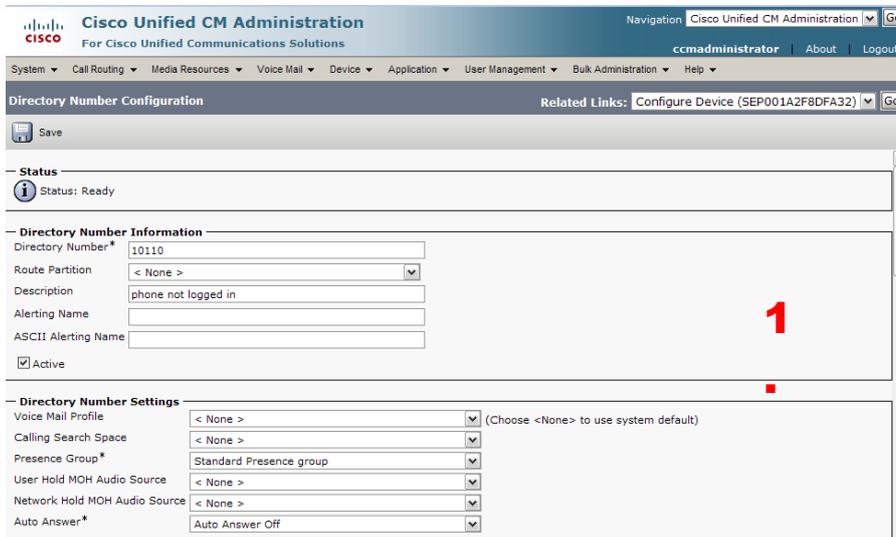
[Extension Mobility](#)

Unsubscribe Delete

*- indicates required item.

Line settings

Every phone requires a line to place and accept calls. This is not a required field for the ALM to function correctly.



Directory Number Configuration

Save

Status: Ready

Directory Number Information

Directory Number* 10110

Route Partition <None >

Description phone not logged in

Alerting Name

ASCII Alerting Name

Active

Directory Number Settings

Voice Mail Profile <None > (Choose <None> to use system default)

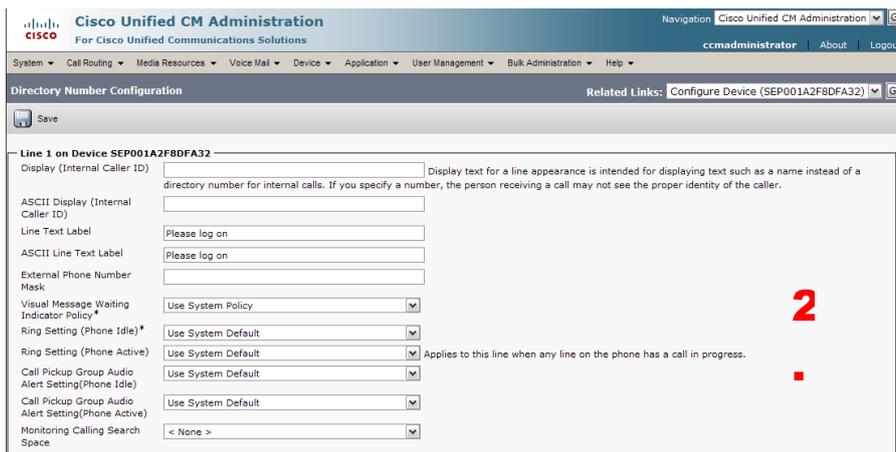
Calling Search Space <None >

Presence Group* Standard Presence group

User Hold MOH Audio Source <None >

Network Hold MOH Audio Source <None >

Auto Answer* Auto Answer Off



Line 1 on Device SEP001A2F8DFA32

Display (Internal Caller ID) Display text for a line appearance is intended for displaying text such as a name instead of a directory number for internal calls. If you specify a number, the person receiving a call may not see the proper identity of the caller.

ASCII Display (Internal Caller ID)

Line Text Label Please log on

ASCII Line Text Label Please log on

External Phone Number Mask

Visual Message Waiting Indicator Policy* Use System Policy

Ring Setting (Phone Idle)* Use System Default

Ring Setting (Phone Active) Use System Default Applies to this line when any line on the phone has a call in progress.

Call Pickup Group Audio Alert Setting (Phone Idle) Use System Default

Call Pickup Group Audio Alert Setting (Phone Active) Use System Default

Monitoring Calling Search Space <None >

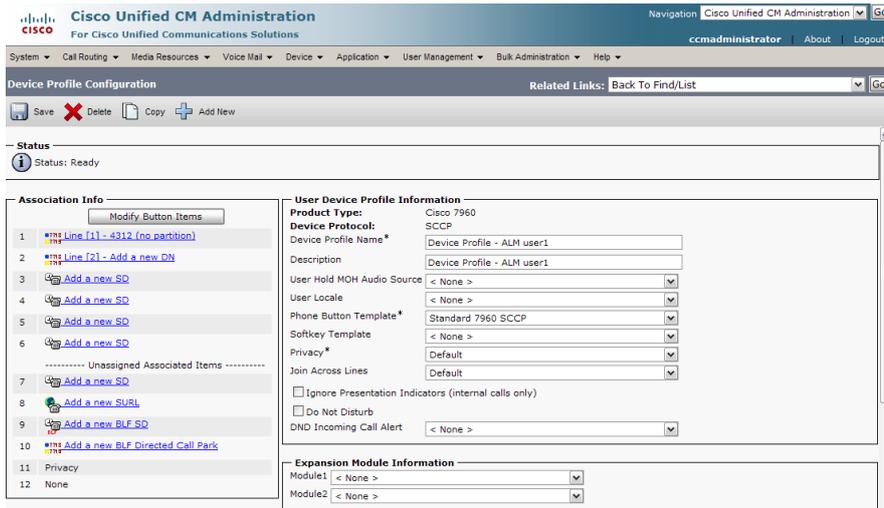
The “Line Text Label” field is the text which is displayed on the phone to identify a phone or a user. Because the phone in this example is only an internal phone and can only be used in combination with ExtensionMobility and ALM.

Using an internal Partition and CallingSearchSpaces the phone can be restricted to only dial internal numbers. This will prevent unauthorized usage of the phone if no user has logged on. This way the costs can be reduced.

Device profile

A User Device Profile is the profile which will be loaded on the phone when a user logs in using ALM. The settings which were previously configured on the phone will not be available anymore.

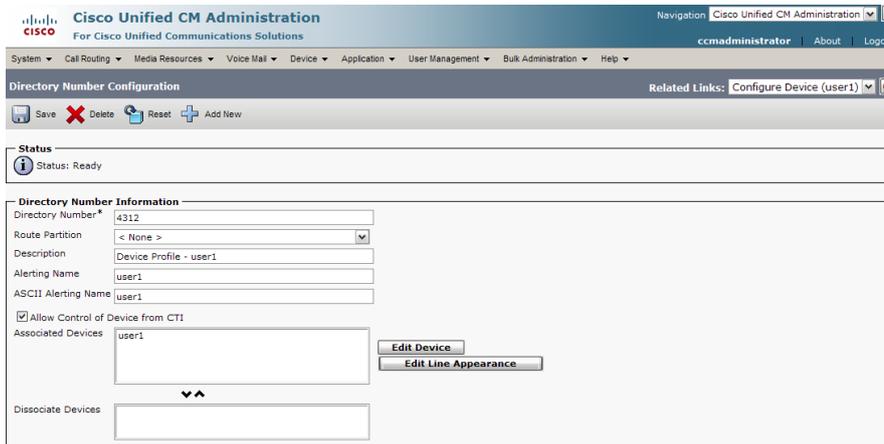
- Optional the Extension Mobility IP Phone service can be activated on the phone, when the ALM application does start on the PC a user can always login manually on the phone.



The screenshot shows the 'Device Profile Configuration' page in Cisco Unified CM Administration. The page is for a Cisco 7960 device. The 'User Device Profile Information' section is expanded, showing fields for Device Protocol (SCCP), Device Profile Name (Device Profile - ALM user1), Description (Device Profile - ALM user1), User Hold MOH Audio Source (< None >), User Locale (< None >), Phone Button Template* (Standard 7960 SCCP), Softkey Template (< None >), Privacy* (Default), and Join Across Lines (Default). There are also checkboxes for 'Ignore Presentation Indicators (internal calls only)' and 'Do Not Disturb', and a dropdown for 'DND Incoming Call Alert' set to '< None >'. An 'Expansion Module Information' section at the bottom shows Module1 and Module2 both set to '< None >'. On the left, there is a list of lines with options to 'Add a new SD' or 'Add a new SURF'.

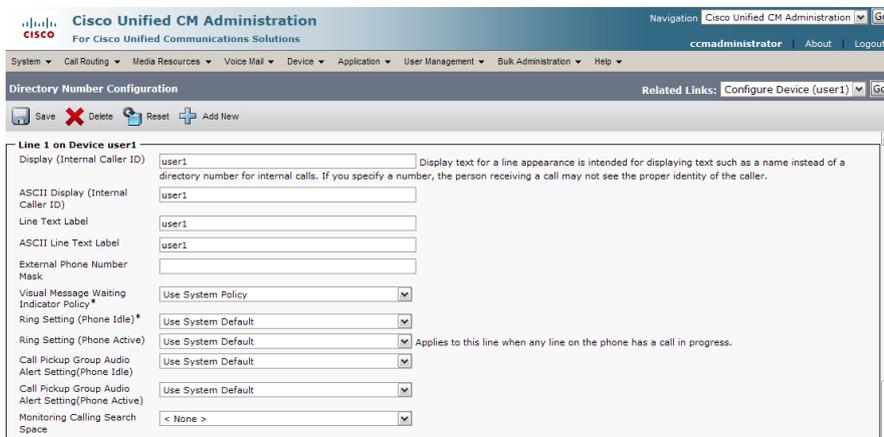
Device profile directory number settings

The Directory Number Configuration will be loaded on the specific phone when a user logs on.



The screenshot shows the 'Directory Number Configuration' page. The 'Directory Number Information' section is expanded, showing fields for Directory Number* (4312), Route Partition (< None >), Description (Device Profile - user1), Alerting Name (user1), ASCII Alerting Name (user1), and Associated Devices (user1). There is a checkbox for 'Allow Control of Device from CTI' which is checked. Below the Associated Devices field are 'Edit Device' and 'Edit Line Appearance' buttons. There is also a 'Dissociate Devices' field.

All basic user settings can be configured in the field above. So a DN, Partition and CallingSearchSpace, also the forwards to voicemail or another internal or external destination can be configured on the phone.

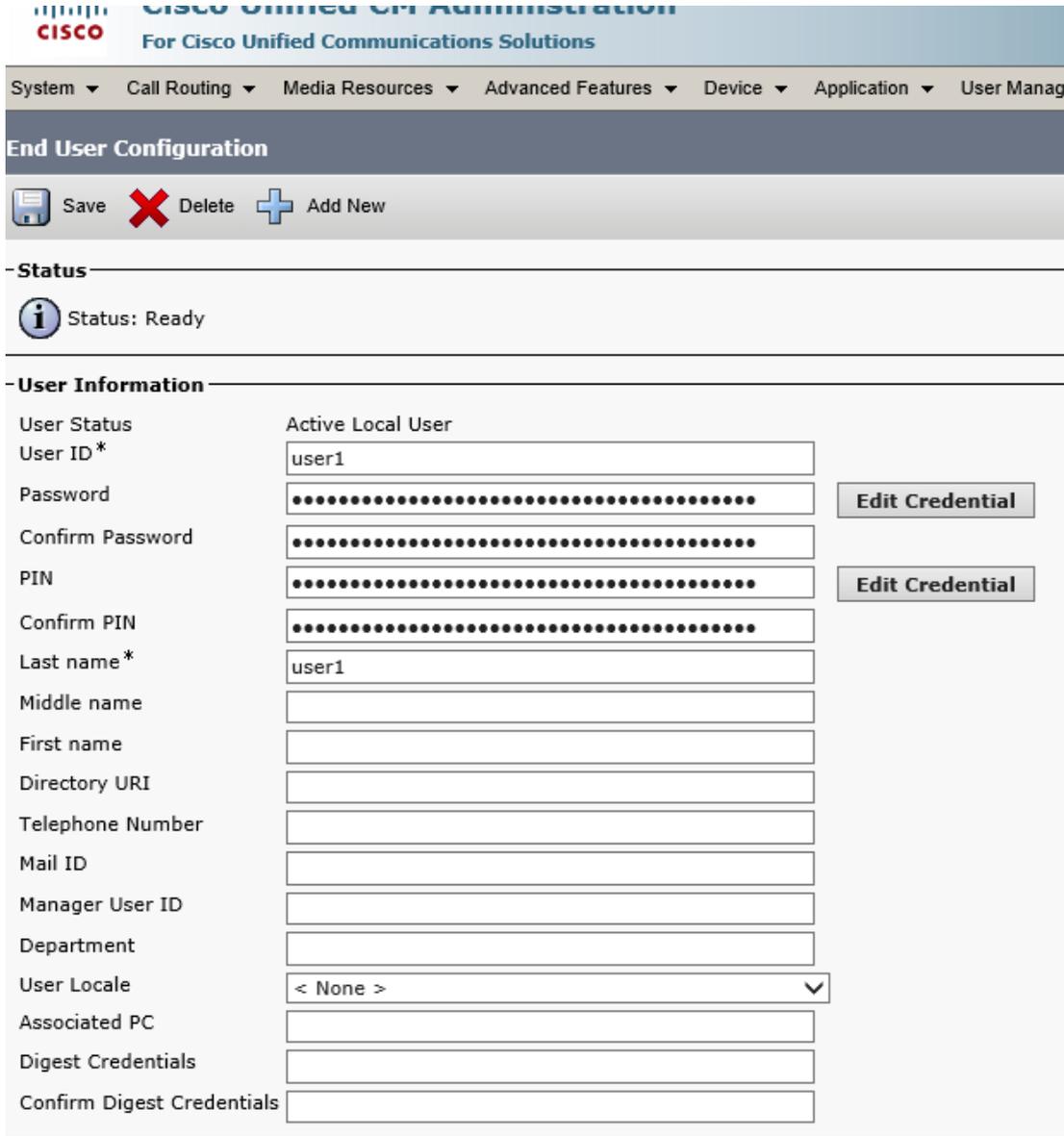


The screenshot shows the 'Line 1 on Device user1' configuration page. It contains various settings for the line, including: Display (Internal Caller ID) (user1), ASCII Display (Internal Caller ID) (user1), Line Text Label (user1), ASCII Line Text Label (user1), External Phone Number Mask, Visual Message Waiting Indicator Policy* (Use System Policy), Ring Setting (Phone Idle)* (Use System Default), Ring Setting (Phone Active) (Use System Default), Call Pickup Group Audio Alert Setting (Phone Idle) (Use System Default), Call Pickup Group Audio Alert Setting (Phone Active) (Use System Default), and Monitoring Calling Search Space (< None >). A note states: 'Display text for a line appearance is intended for displaying text such as a name instead of a directory number for internal calls. If you specify a number, the person receiving a call may not see the proper identity of the caller.'

Creating a user

The UserID is a required field, this field is the username which is send to the CallManager when a user logs in.

The ALM application will send this username to the system so the user does not have to enter their username manually on the phone anymore using the keypad.



The screenshot shows the Cisco Unified CM Administration interface for End User Configuration. The breadcrumb trail is: System > Call Routing > Media Resources > Advanced Features > Device > Application > User Management. The page title is "End User Configuration". Below the title are buttons for Save, Delete, and Add New. The "Status" section shows "Status: Ready". The "User Information" section contains the following fields:

User Status	Active Local User	
User ID*	user1	
Password	Edit Credential
Confirm Password	
PIN	Edit Credential
Confirm PIN	
Last name*	user1	
Middle name		
First name		
Directory URI		
Telephone Number		
Mail ID		
Manager User ID		
Department		
User Locale	< None >	▼
Associated PC		
Digest Credentials		
Confirm Digest Credentials		

The previously created DeviceProfile has to be attached to a user so the system knows which profile has to be loaded on the phone based on the entered UserID.

Scroll down to the "Extension Mobility" field to attach the DeviceProfile.

Extension Mobility

Available Profiles

- user_profile_10
- user_profile_11
- user_profile_12
- user_profile_13
- user_profile_14

Controlled Profiles

- user_profile_1

Default Profile

-- Not Selected --

BLF Presence Group*

Standard Presence group

SUBSCRIBE Calling Search Space

< None >

Allow Control of Device from CTI

Enable Extension Mobility Cross Cluster

Q & A

This Q&A provides an overview of commonly asked questions about the ALM.

- The device and the profile can have the same DN, this does not affect the operation of the ALM;
- If the device has no DN, this will not affect the operation of the ALM;
- From release 3 and up ALM supports multiple profiles;
- Access to the webpage of the phone is only required for automatic phone detection;
- Using a phone with no PC Port is supported, refer to the administration and configuration manual for more information;
- all phones with support for EM are supported by ALM;
- The UserID is not case-sensitive;
- ALM 4 and up supports EMCC;

Ordering Information

Please send your quotation requests to sales@rsconnect.net along with the number of licenses you require.

1 license is required for 1 PC/Phone combination, the license is not user or phone based.
If two employees use 1 computer in combination with 1 IP Phone you will require 1 license.

Additional Information

For any additional information please contact or visit:

- United Kingdom: +44 203 608 8259
- Other countries: +31 88 1221 800
- <http://www.rsconnect.net>
- sales@rsconnect.net