



ALM PRO CallManager configuration Manual for CUCM12



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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.

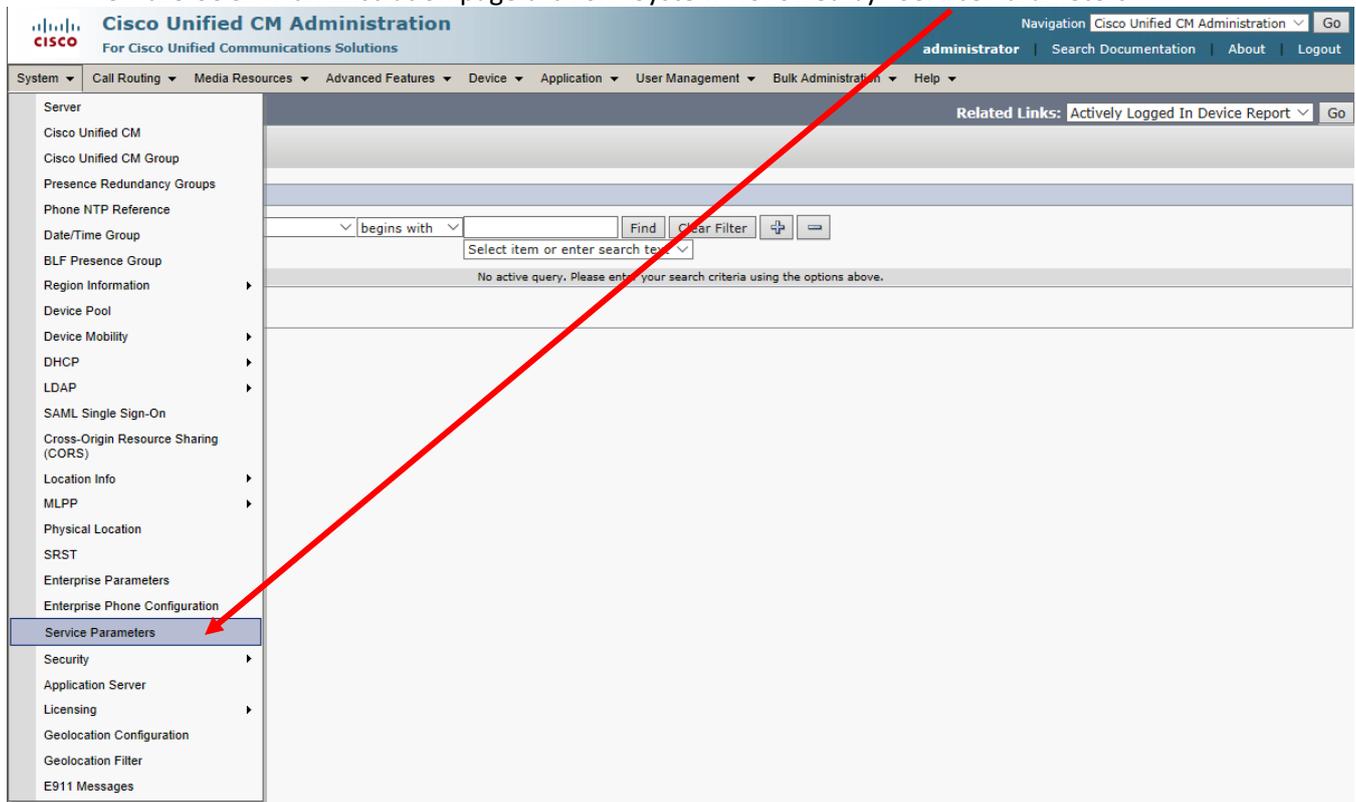
Several steps are required like the configuration of a device/phone and the configuration of a Device Profile and a user.

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

The screenshot shows the 'Service Parameter Configuration' page in Cisco Unified CM Administration. The 'Server' is set to '192.168.1.212--CUCM Voice/Video (Active)'. The 'Service' dropdown is open, showing a list of services. 'Cisco Extension Mobility (Active)' is highlighted, and a red arrow points to it from the text above. Other services listed include Cisco AMC Service, Cisco Audit Event Service, Cisco Bulk Provisioning Service, Cisco CTIManager, Cisco CTL Provider, Cisco CallManager, Cisco CallManager SNMP Service, Cisco Certificate Authority Proxy Function, Cisco DRF Local, Cisco DRF Master, Cisco Database Layer Monitor, Cisco DirSync, Cisco Directory Number Alias Lookup, Cisco Directory Number Alias Sync, Cisco Extended Functions, Cisco IP Manager Assistant, Cisco IP Voice Media Streaming App, Cisco Intercluster Lookup Service, Cisco Location Bandwidth Manager, Cisco Log Partition Monitoring Tool, Cisco Push Notification Service, Cisco RIS Data Collector, Cisco Serviceability Reporter, Cisco TAPS Service, Cisco Tftp, Cisco Trace Collection Service, and Cisco Trust Verification Service.

In the CUCM several Service Parameters for the Extension(s)Mobility service must be changed.

The screenshot shows the 'Cisco Extension Mobility (Active) Parameters on server 192.168.1.212--CUCM Voice/Video (Active)' page. The 'Server' is '192.168.1.212--CUCM Voice/Video (Active)' and the 'Service' is 'Cisco Extension Mobility (Active)'. The parameters are listed in a table with columns for Parameter Name, Parameter Value, and Suggested Value. The 'Intra-cluster Multiple Login Behavior' parameter is highlighted with a red box. The table also includes clusterwide parameters that apply to all servers.

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 *	Multiple Logins Not Allowed	Multiple Logins Not Allowed
Remember the Last User Logged In *	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.

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

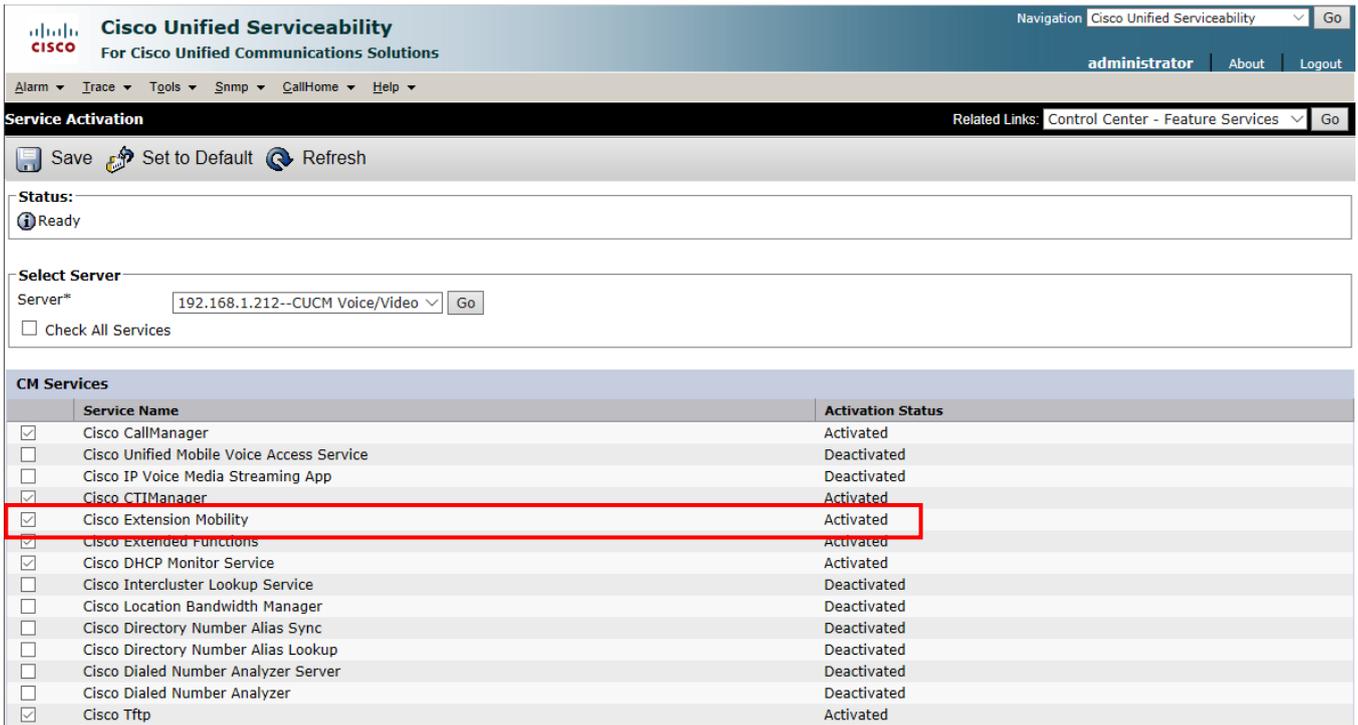
The required setting is “**Auto Logout**”. This feature will automatically logout or disconnect a user if he/she is already logged into another IP Phone.

So this setting will automatically logoff a user if he/she is already logged on at another 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. The 'Service Activation' section is active, showing a status of 'Ready'. The 'Select Server' dropdown is set to '192.168.1.212--CUCM Voice/Video'. Below this is a table of 'CM Services' with their activation status. The 'Cisco Extension Mobility' service is highlighted with a red box and is shown as 'Activated'.

Service Name	Activation Status
<input checked="" type="checkbox"/> Cisco CallManager	Activated
<input type="checkbox"/> Cisco Unified Mobile Voice Access Service	Deactivated
<input type="checkbox"/> Cisco IP Voice Media Streaming App	Deactivated
<input checked="" type="checkbox"/> Cisco CTIManager	Activated
<input checked="" type="checkbox"/> Cisco Extension Mobility	Activated
<input checked="" type="checkbox"/> Cisco Extended Functions	Activated
<input checked="" type="checkbox"/> Cisco DHCP Monitor Service	Activated
<input type="checkbox"/> Cisco Intercluster Lookup Service	Deactivated
<input type="checkbox"/> Cisco Location Bandwidth Manager	Deactivated
<input type="checkbox"/> Cisco Directory Number Alias Sync	Deactivated
<input type="checkbox"/> Cisco Directory Number Alias Lookup	Deactivated
<input type="checkbox"/> Cisco Dialed Number Analyzer Server	Deactivated
<input type="checkbox"/> Cisco Dialed Number Analyzer	Deactivated
<input checked="" type="checkbox"/> Cisco Tftp	Activated

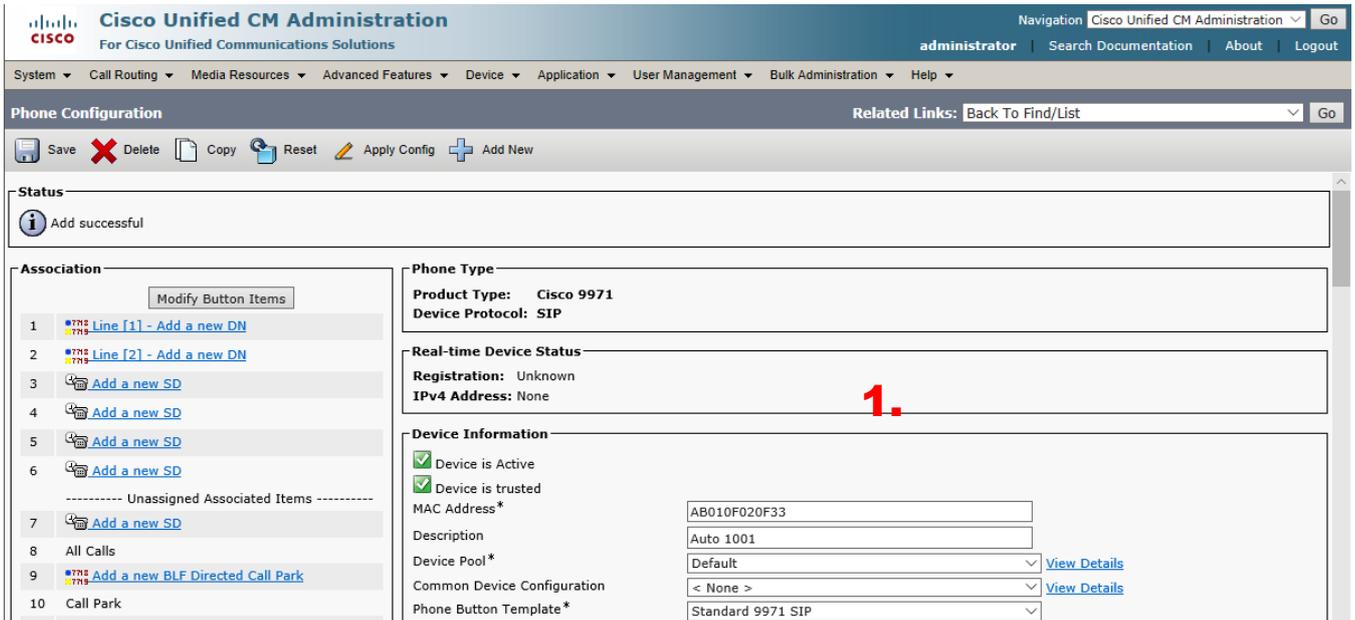
Verify the Cisco Extension Mobility Service is running on all CallManager Servers.

CM Services						
	Service Name	Status:	Activation Status	Start Time	Up Time	
<input type="radio"/>	Cisco CallManager	Started	Activated	Mon Jan 8 14:31:39 2018	0 days 04:11:00	
<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	Started	Activated	Mon Jan 8 14:31:42 2018	0 days 04:10:57	
<input type="radio"/>	Cisco Extension Mobility	Started	Activated	Mon Jan 8 14:47:54 2018	0 days 03:54:45	
<input type="radio"/>	Cisco DHCP Monitor Service	Started	Activated	Mon Jan 8 14:31:47 2018	0 days 04:10:52	
<input type="radio"/>	Cisco Intercluster Lookup Service	Not Running	Deactivated			
<input type="radio"/>	Cisco Location Bandwidth Manager	Not Running	Deactivated			
<input type="radio"/>	Cisco Directory Number Alias Sync	Not Running	Deactivated			
<input type="radio"/>	Cisco Directory Number Alias Lookup	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	Mon Jan 8 14:31:48 2018	0 days 04:10:51	

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.



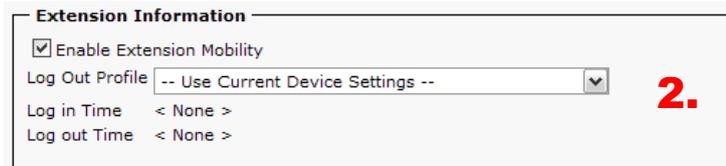
The screenshot shows the Cisco Unified CM Administration interface for configuring a phone. The 'Phone Configuration' page is open, showing the 'Association' table on the left and configuration details on the right. A red '1.' is placed over the 'IPv4 Address: None' field in the 'Real-time Device Status' section.

Line	Configuration
1	Line [1] - Add a new DN
2	Line [2] - Add a new DN
3	Add a new SD
4	Add a new SD
5	Add a new SD
6	Add a new SD
----- Unassigned Associated Items -----	
7	Add a new SD
8	All Calls
9	Add a new BLF Directed Call Park
10	Call Park

Phone Type
 Product Type: Cisco 9971
 Device Protocol: SIP

Real-time Device Status
 Registration: Unknown
 IPv4 Address: None

Device Information
 Device is Active
 Device is trusted
 MAC Address*: AB010F020F33
 Description: Auto 1001
 Device Pool*: Default [View Details](#)
 Common Device Configuration: < None > [View Details](#)
 Phone Button Template*: Standard 9971 SIP



The screenshot shows the 'Extension Information' section of the phone configuration page. A red '2.' is placed over the 'Log Out Profile' dropdown menu.

Extension Information
 Enable Extension Mobility
 Log Out Profile: -- Use Current Device Settings --
 Log in Time: < None >
 Log out Time: < None >

Product Specific Configuration Layout

 **Parameter Value** **Override Enterprise/Common Phone Profile 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"/>
Console Access*	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	
PC Voice VLAN Access*	Enabled	
Web Access*	Disabled	<input type="checkbox"/>

3. **4.**

Subscribed Cisco IP Phone Services for SEP001A2F8DFA32

 Save  Help

Status

 Add successful

Service Subscription: Extension Mobility

Service Information

Service Name* **5.**

ASCII Service Name*

Subscribed Services

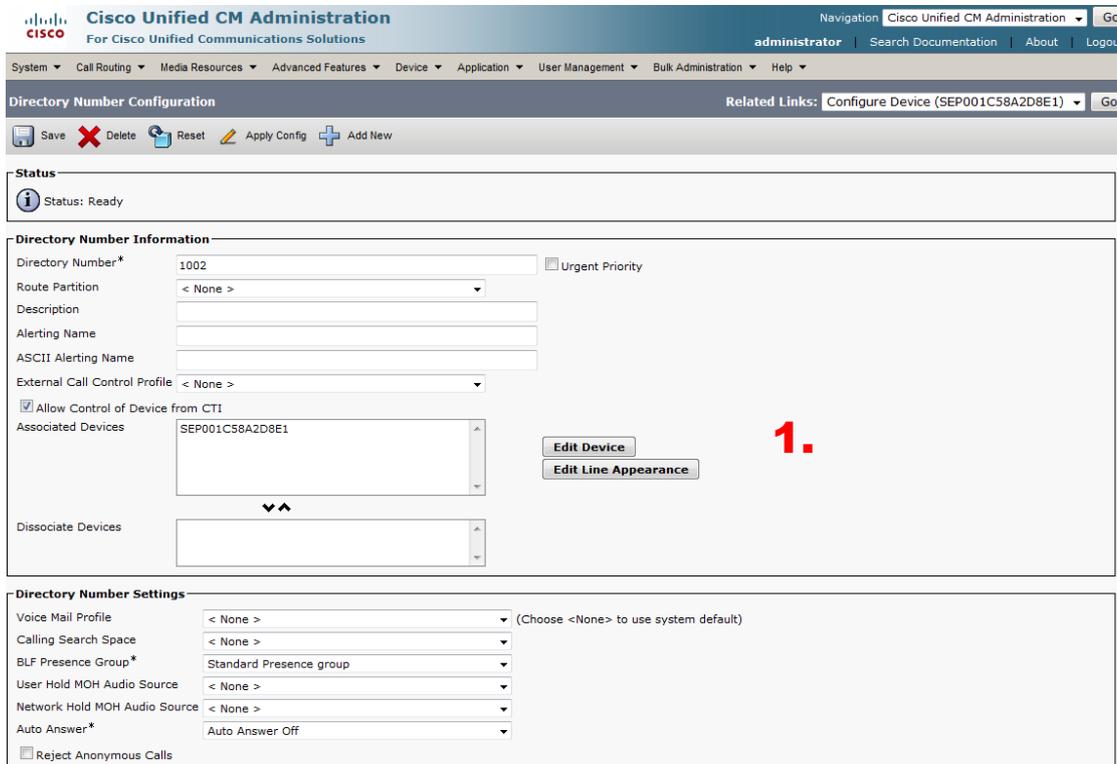
[Subscribe a New Service](#)

 [Extension Mobility](#)

 *- 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

Navigation: Cisco Unified CM Administration | administrator | Search Documentation | About | Logout

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

Related Links: [Configure Device \(SEP001C58A2D8E1\)](#) | Go

Save | Delete | Reset | Apply Config | Add New

Status
Status: Ready

Directory Number Information

Directory Number* 1002 Urgent Priority

Route Partition < None >

Description

Alerting Name

ASCII Alerting Name

External Call Control Profile < None >

Allow Control of Device from CT1

Associated Devices SEP001C58A2D8E1

[Edit Device](#) **1.**

[Edit Line Appearance](#)

Dissociate Devices

Directory Number Settings

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

Calling Search Space < None >

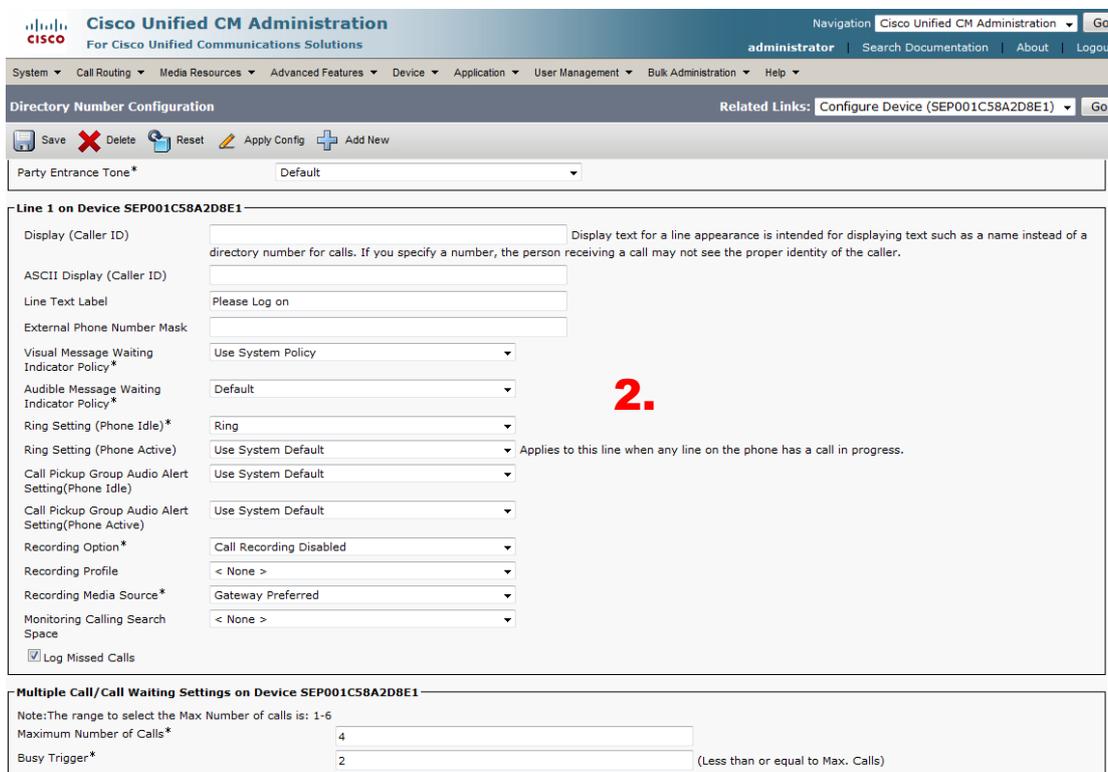
BLF Presence Group* Standard Presence group

User Hold MOH Audio Source < None >

Network Hold MOH Audio Source < None >

Auto Answer* Auto Answer Off

Reject Anonymous Calls



Directory Number Configuration

Navigation: Cisco Unified CM Administration | administrator | Search Documentation | About | Logout

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Related Links: [Configure Device \(SEP001C58A2D8E1\)](#) | Go

Save | Delete | Reset | Apply Config | Add New

Party Entrance Tone* Default

Line 1 on Device SEP001C58A2D8E1

Display (Caller ID) directory number for calls. If you specify a number, the person receiving a call may not see the proper identity of the caller.

ASCII Display (Caller ID)

Line Text Label Please Log on

External Phone Number Mask

Visual Message Waiting Indicator Policy* Use System Policy

Audible Message Waiting Indicator Policy* Default **2.**

Ring Setting (Phone Idle)* Ring

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

Recording Option* Call Recording Disabled

Recording Profile < None >

Recording Media Source* Gateway Preferred

Monitoring Calling Search Space < None >

Log Missed Calls

Multiple Call/Call Waiting Settings on Device SEP001C58A2D8E1

Note: The range to select the Max Number of calls is: 1-6

Maximum Number of Calls* 4

Busy Trigger* 2 (Less than or equal to Max. Calls)

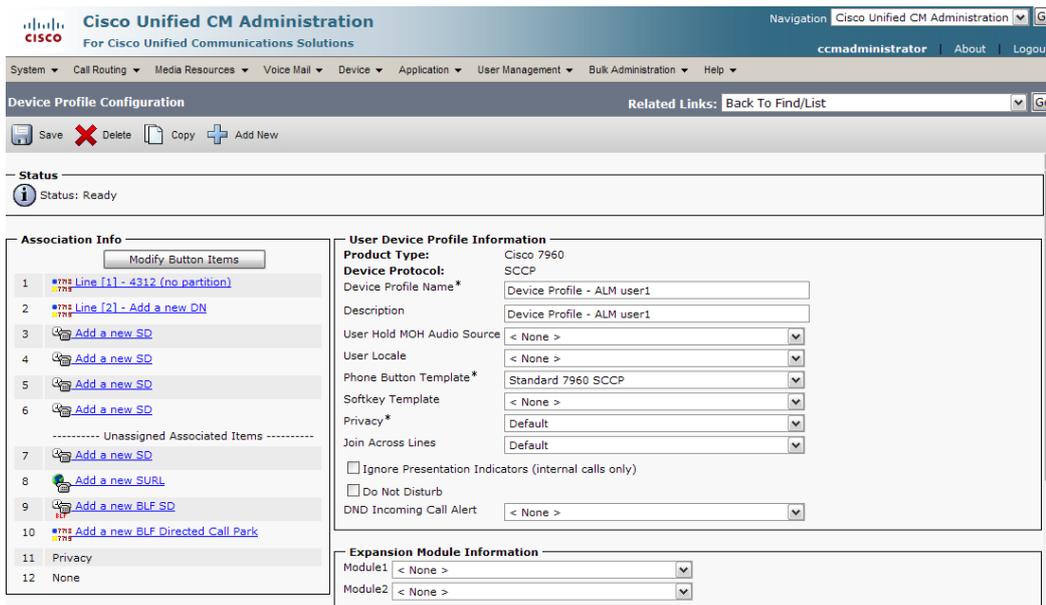
The "Line Text Label" field is the text which is displayed on the phone to identify a phone or a user. Because the phone in this example is only an internal phone and can only be used in combination with ExtensionMobility and ALM.

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.

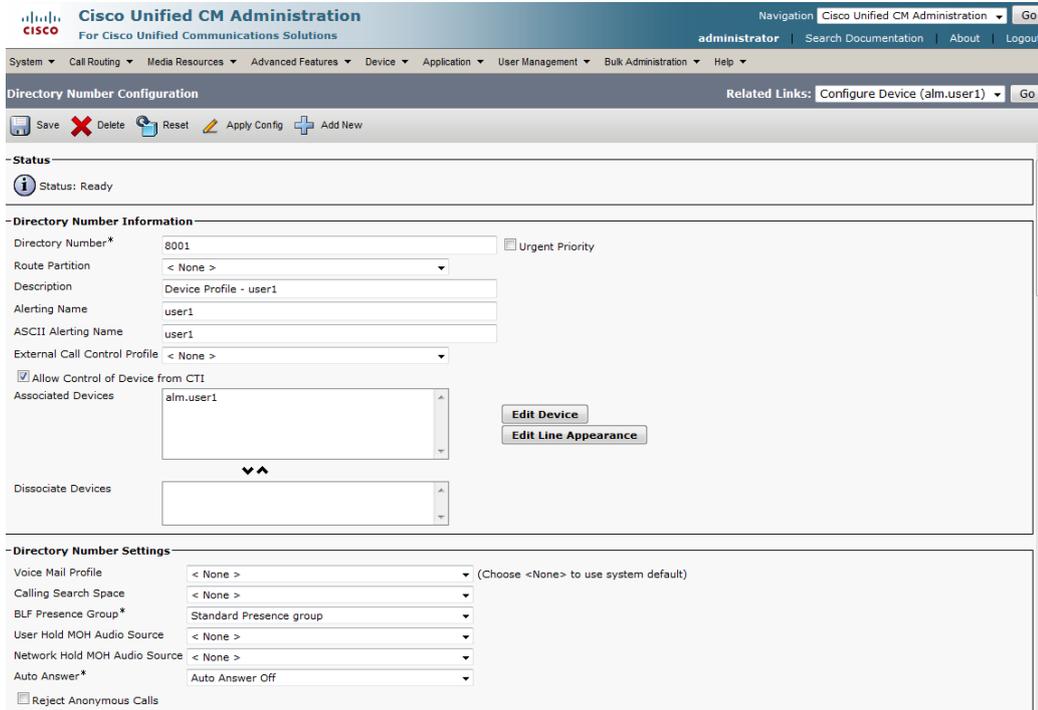


The screenshot shows the Cisco Unified CM Administration interface for Device Profile Configuration. The page title is "Device Profile Configuration" and it includes a navigation menu at the top with options like System, Call Routing, Media Resources, Voice Mail, Device, Application, User Management, Bulk Administration, and Help. The main content area is divided into several sections:

- Status:** Shows "Status: Ready".
- Association Info:** A table with 12 rows. Row 1 is "Line [1] - 4312 (no partition)". Row 2 is "Line [2] - Add a new DN". Rows 3-6 are "Add a new SD". Row 7 is "Add a new SD" under "Unassigned Associated Items". Row 8 is "Add a new SURL". Row 9 is "Add a new BLF SD". Row 10 is "Add a new BLF Directed Call Park". Row 11 is "Privacy". Row 12 is "None".
- User Device Profile Information:**
 - Product Type: Cisco 7960
 - 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
 - Join Across Lines: Default
 - Ignore Presentation Indicators (internal calls only)
 - Do Not Disturb
 - DND Incoming Call Alert: < None >
- Expansion Module Information:**
 - Module1: < None >
 - Module2: < None >

Device profile directory number settings

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



Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration | administrator | Search Documentation | About | Logout

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

Directory Number Configuration Related Links: Configure Device (alm.user1) | Go

Save Delete Reset Apply Config Add New

-Status-
Status: Ready

-Directory Number Information-

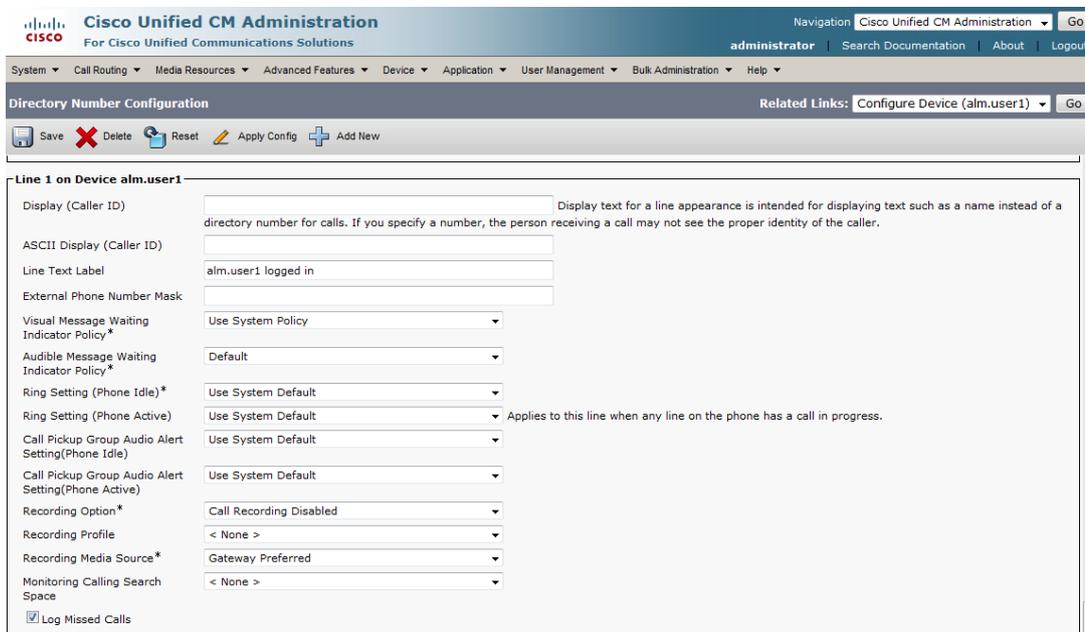
Directory Number* 8001 Urgent Priority
 Route Partition < None >
 Description Device Profile - user1
 Alerting Name user1
 ASCII Alerting Name user1
 External Call Control Profile < None >
 Allow Control of Device from CTI
 Associated Devices alm.user1
 Dissociate Devices

Edit Device Edit Line Appearance

-Directory Number Settings-

Voice Mail Profile < None > (Choose <None> to use system default)
 Calling Search Space < None >
 BLF Presence Group* Standard Presence group
 User Hold MOH Audio Source < None >
 Network Hold MOH Audio Source < None >
 Auto Answer* Auto Answer Off
 Reject Anonymous Calls

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.



Cisco Unified CM Administration
For Cisco Unified Communications Solutions

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Directory Number Configuration Related Links: Configure Device (alm.user1) | Go

Save Delete Reset Apply Config Add New

Line 1 on Device alm.user1

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

ASCII Display (Caller ID)

Line Text Label alm.user1 logged in

External Phone Number Mask

Visual Message Waiting Indicator Policy* Use System Policy

Audible Message Waiting Indicator Policy* Default

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

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Recording Profile < None >

Recording Media Source* Gateway Preferred

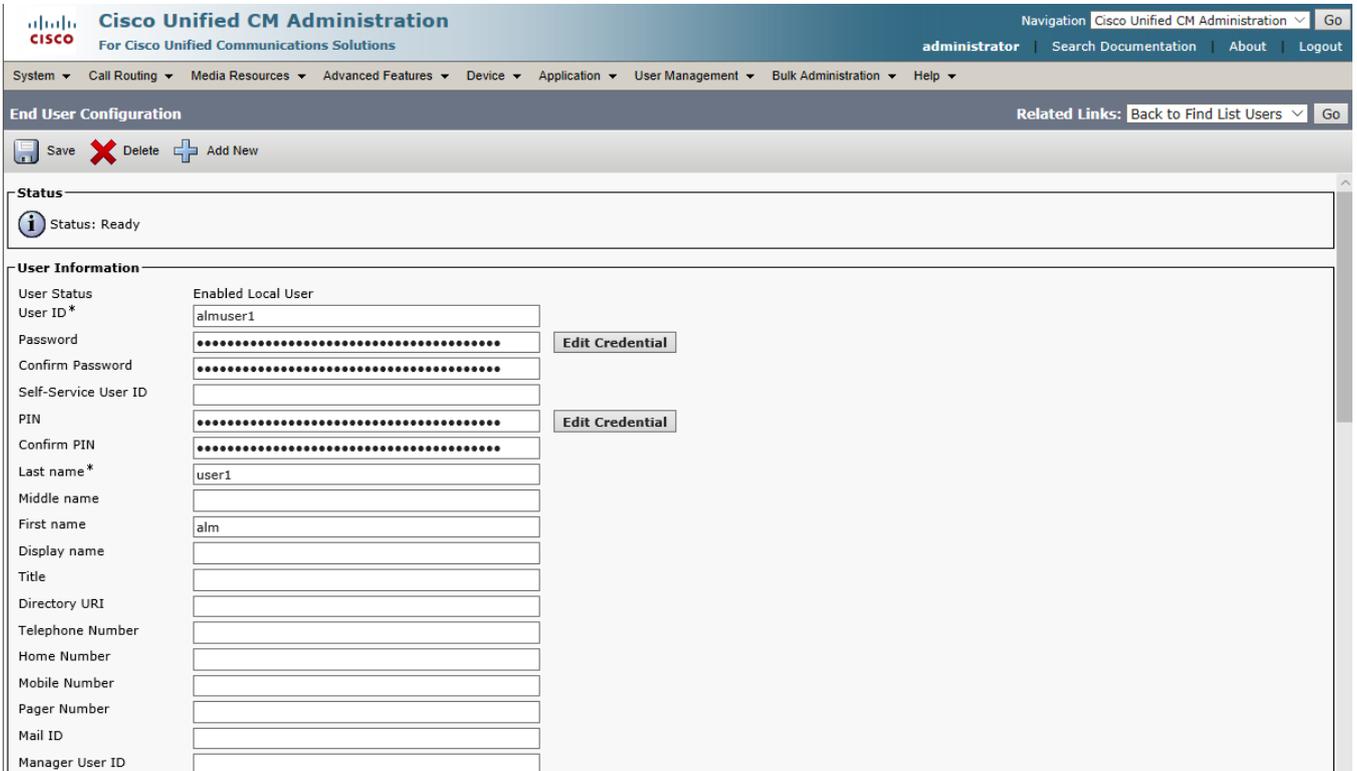
Monitoring Calling Search Space < None >

Log Missed Calls

Creating a user

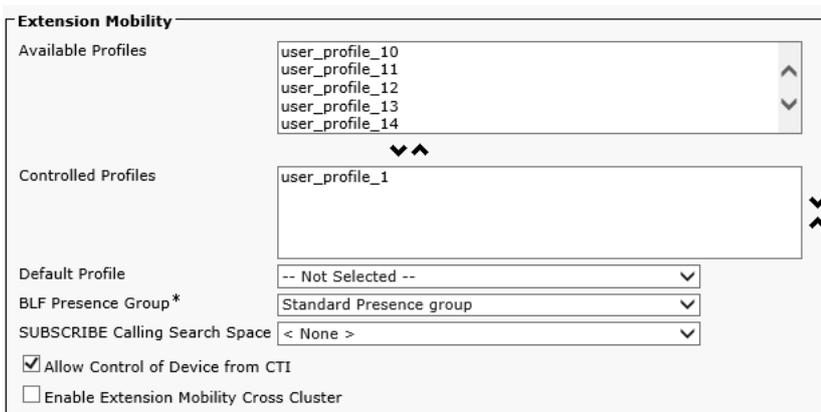
The UserID is a required field, this field is the username which is send to the CallManager when a user logs in.

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 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.



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