

ALM CallManager configuration Manual for CUCM10



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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.

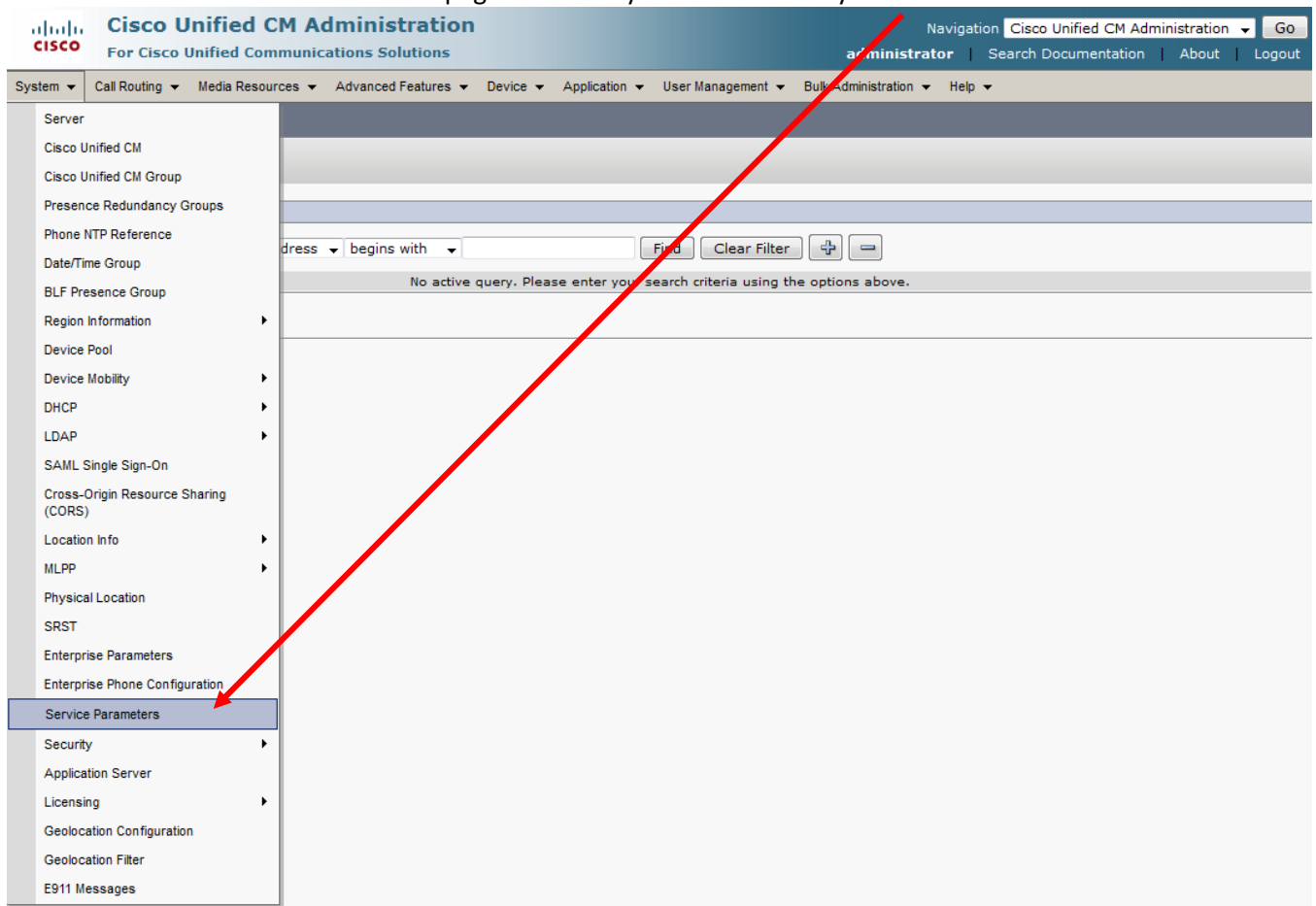
Several steps are required like the configuration of a device/phone and the configuration of a Device Profile and a user.

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*' dropdown is set to '192.168.1.231--CUCM Voice/Video (Active)'. The 'Service*' dropdown is currently set to '-- Not Selected --'. A red arrow points to 'Cisco Extension Mobility (Active)' in the service list. The 'All parameters' dropdown is also set to '-- Not Selected --'. The page includes navigation tabs, a status indicator (Ready), and a 'Save' button.

The screenshot shows the 'Cisco Extension Mobility (Active) Parameters on server 192.168.1.231--CUCM Voice/Video (Active)' page. The 'Server*' dropdown is set to '192.168.1.231--CUCM Voice/Video (Active)' and the 'Service*' dropdown is set to 'Cisco Extension Mobility (Active)'. The page displays a table of parameters with columns for 'Parameter Name', 'Parameter Value', and 'Suggested Value'. The 'Intra-cluster Multiple Login Behavior' parameter is highlighted with a red box. The page includes navigation tabs, a status indicator (Ready), and buttons for 'Save', 'Set to Default', and 'Advanced'.

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.

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.

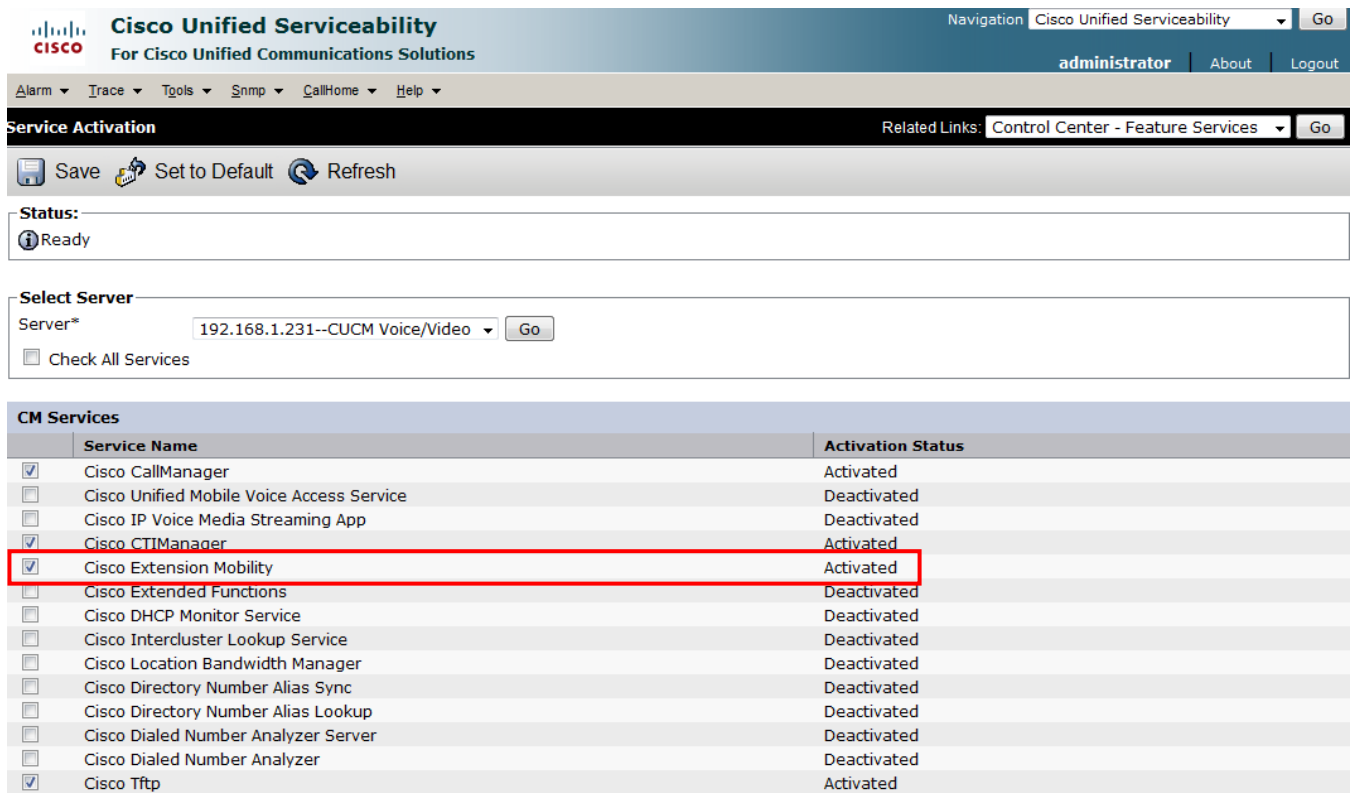
The required setting is “Auto Logout”. This feature will automatically logout or disconnect a user if he/she is already logged into another IP Phone.

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

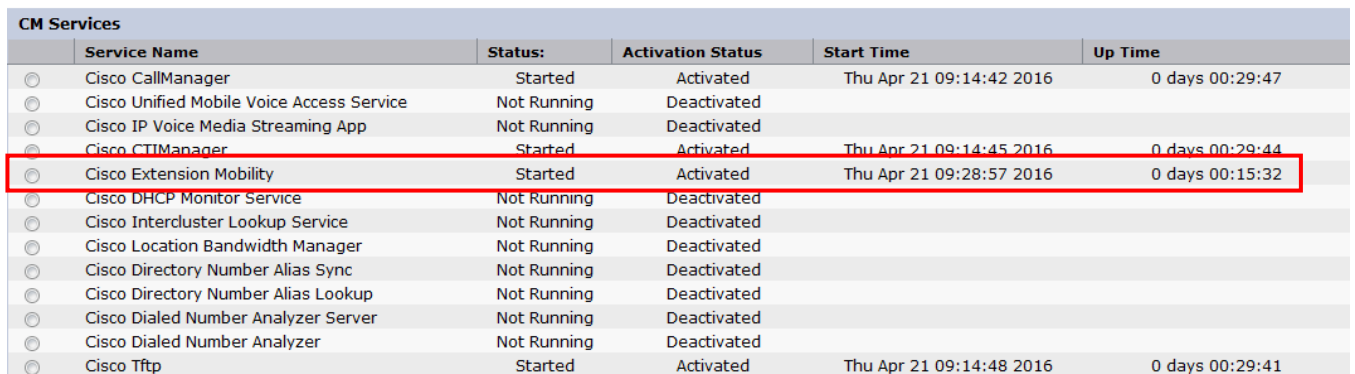
Verify the Cisco Extension Mobility Service is activated on all CallManager Servers.



The screenshot shows the Cisco Unified Serviceability interface. At the top, it says "Cisco Unified Serviceability For Cisco Unified Communications Solutions". The user is logged in as "administrator". The "Service Activation" section is active, showing a status of "Ready". The "Select Server" dropdown is set to "192.168.1.231--CUCM Voice/Video". Below this is a table of "CM Services" with the following data:

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 type="checkbox"/> Cisco Extended Functions	Deactivated
<input type="checkbox"/> Cisco DHCP Monitor Service	Deactivated
<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.



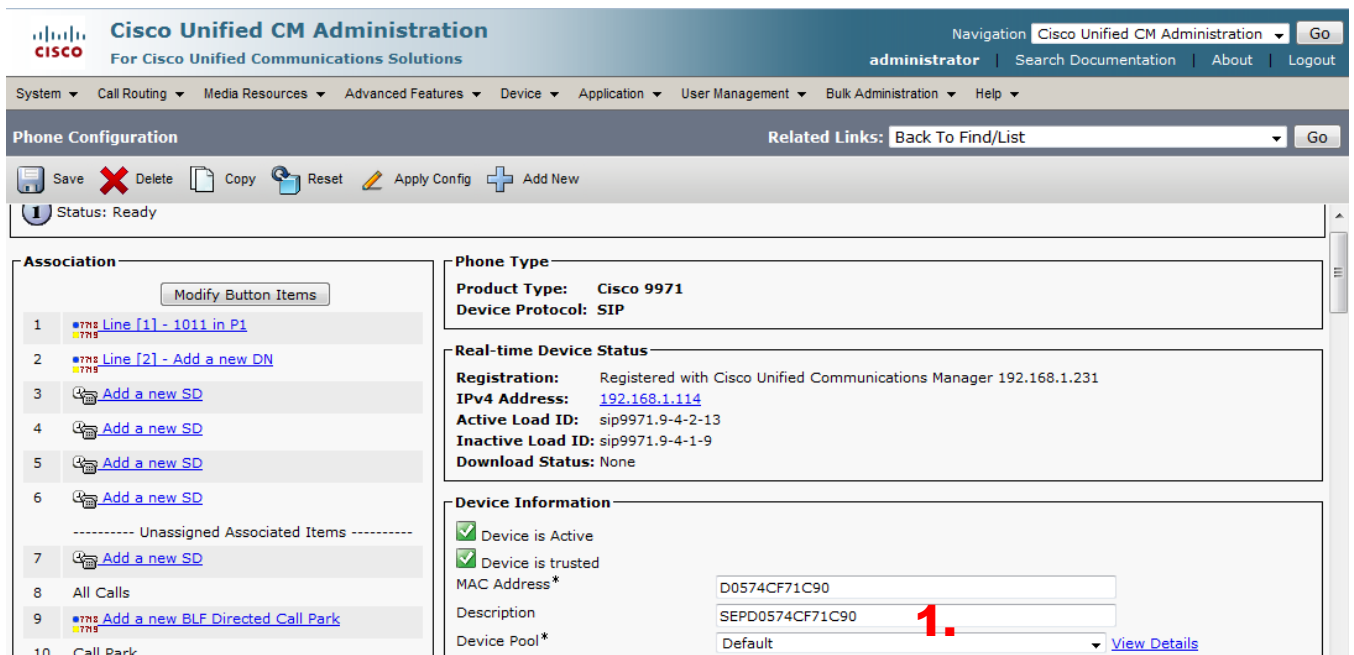
The screenshot shows the "CM Services" table with the following data:

Service Name	Status	Activation Status	Start Time	Up Time
<input type="radio"/> Cisco CallManager	Started	Activated	Thu Apr 21 09:14:42 2016	0 days 00:29:47
<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	Thu Apr 21 09:14:45 2016	0 days 00:29:44
<input type="radio"/> Cisco Extension Mobility	Started	Activated	Thu Apr 21 09:28:57 2016	0 days 00:15:32
<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 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	Thu Apr 21 09:14:48 2016	0 days 00:29:41

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.



Cisco Unified CM Administration
For Cisco Unified Communications Solutions

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

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

Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Apply Config Add New

Status: Ready

Association Modify Button Items

1	778 Line [1] - 1011 in P1
2	778 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	778 Add a new BLF Directed Call Park
10	Call Park

Phone Type

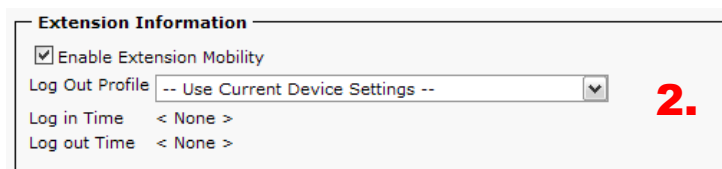
Product Type: Cisco 9971
Device Protocol: SIP

Real-time Device Status

Registration: Registered with Cisco Unified Communications Manager 192.168.1.231
IPv4 Address: 192.168.1.114
Active Load ID: sip9971.9-4-2-13
Inactive Load ID: sip9971.9-4-1-9
Download Status: None

Device Information

Device is Active
 Device is trusted
MAC Address* D0574CF71C90
Description SEPD0574CF71C90 **1.**
Device Pool* Default View Details



Extension Information

Enable Extension Mobility

Log Out Profile -- Use Current Device Settings -- **2.**

Log in Time < None >

Log out Time < None >

Product Specific Configuration Layout

	Parameter Value	Override Common Settings
<input type="checkbox"/> Disable Speakerphone		
<input type="checkbox"/> Enable Group Listen		
<input type="checkbox"/> Enable Mute Feature		<input type="checkbox"/>
Forwarding Delay*	Disabled	
PC Port *	Enabled	
Settings Access*	Enabled	<input type="checkbox"/>
Gratuitous ARP*	Disabled	
PC Voice VLAN Access*	Enabled 3.	
Video Capabilities*	Disabled	<input type="checkbox"/>
Web Access*	Enabled 4.	<input checked="" type="checkbox"/>
Enable Power Save Plus	Sunday Monday Tuesday	<input type="checkbox"/>
Phone On Time	00:00	<input type="checkbox"/>
Phone Off Time	24:00	<input type="checkbox"/>
Phone Off Idle Timeout*	60	<input type="checkbox"/>
<input type="checkbox"/> Enable Audible Alert		<input type="checkbox"/>
EnergyWise Domain		<input type="checkbox"/>
EnergyWise Endpoint Security Secret		<input type="checkbox"/>
<input type="checkbox"/> Allow EnergyWise Overrides		<input type="checkbox"/>
Span to PC Port*	Disabled	
Logging Display*	PC Controlled	
Load Server		<input type="checkbox"/>
Recording Tone*	Disabled	

Subscribed Cisco IP Phone Services for SEP001A2F8DFA32

Save ? Help

Status
i Add successful

Service Subscription: Extension Mobility

Service Information

Service Name*

ASCII Service Name* **5.**

Subscribed Services

[Subscribe a New Service](#)

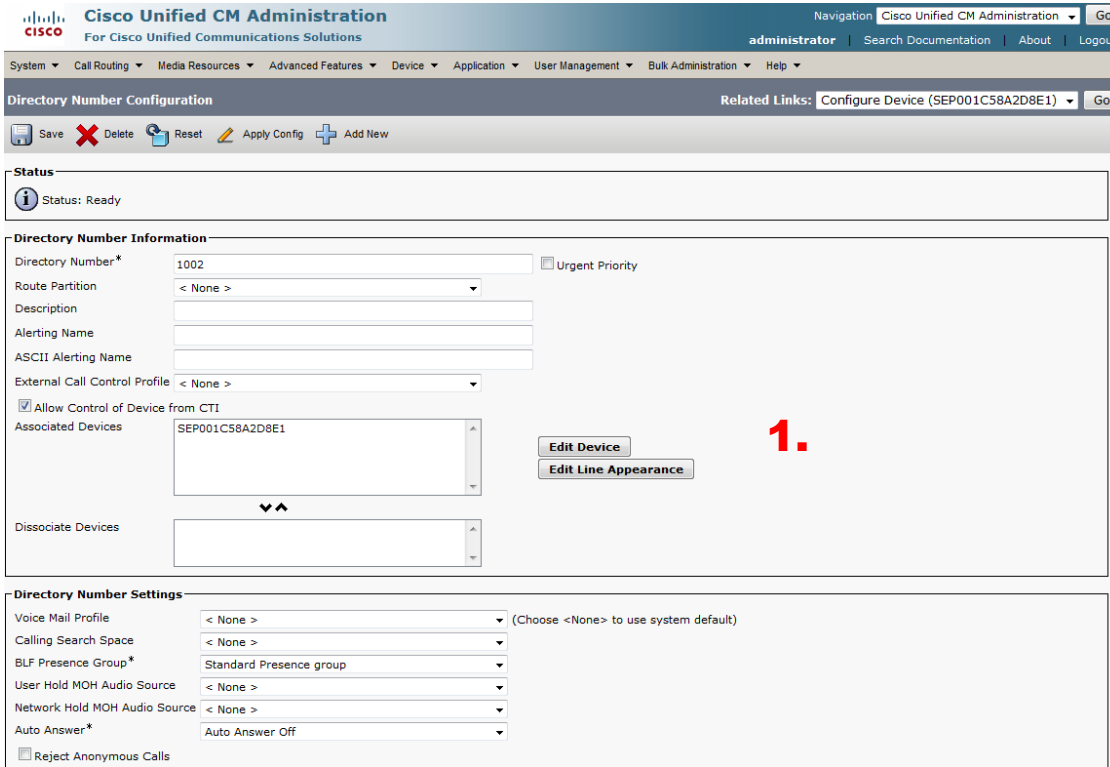
i [Extension Mobility](#)

Unsubscribe Delete

i *- 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 | Go

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

1.

Dissociate Devices:

Directory Number Settings

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

Calling Search Space: < None >

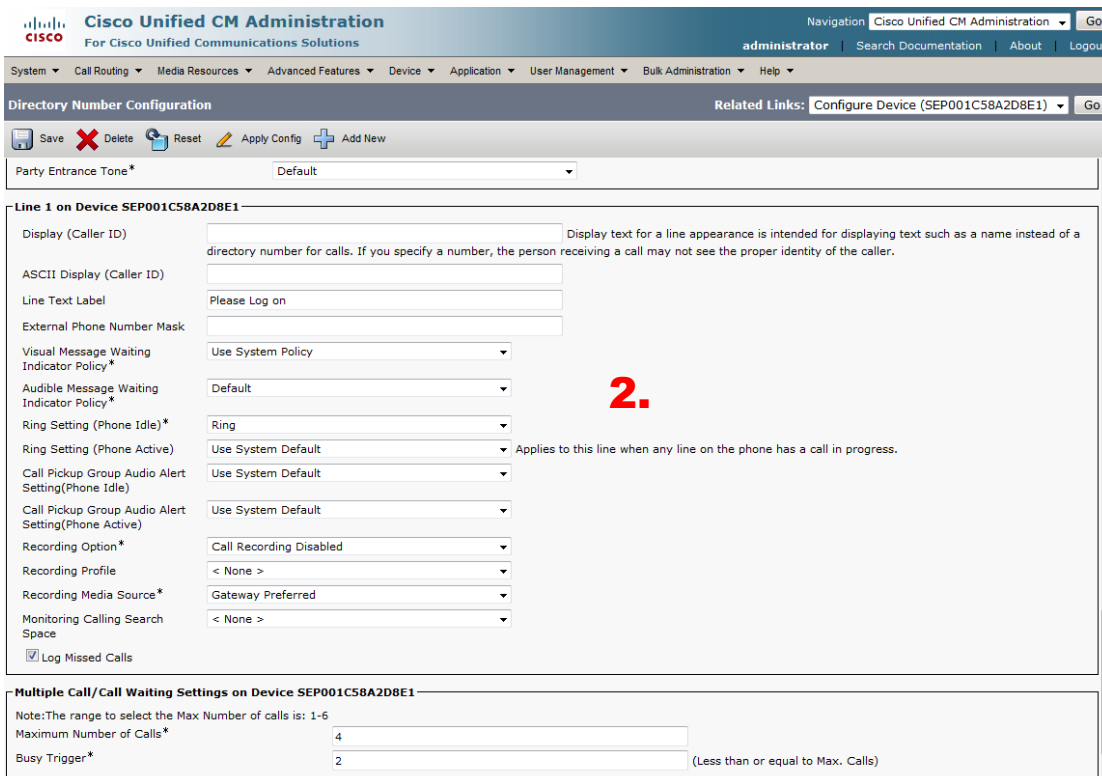
BLF Presence Group*: Standard Presence group

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 | Go

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

Party Entrance Tone*: Default

Line 1 on Device SEP001C58A2D8E1

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: Please Log on **2.**

External Phone Number Mask:

Visual Message Waiting Indicator Policy*: Use System Policy

Audible Message Waiting Indicator Policy*: Default

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)

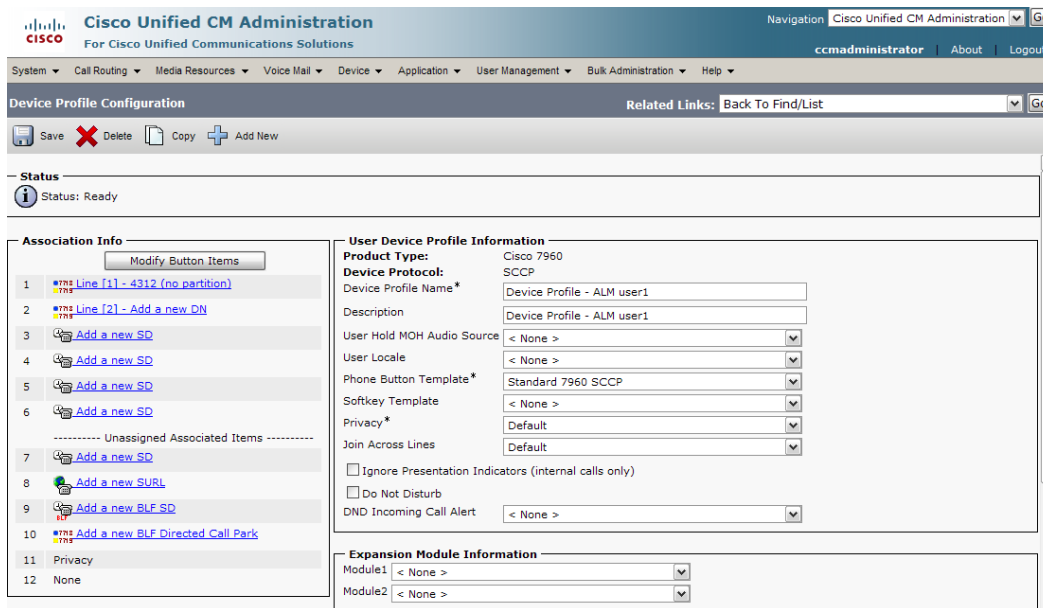
The “Line Text Label” field is the text which is displayed on the phone to identify a phone or a user. Because the phone in this example is only an internal phone and can only be used in combination with ExtensionMobility and ALM.

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.

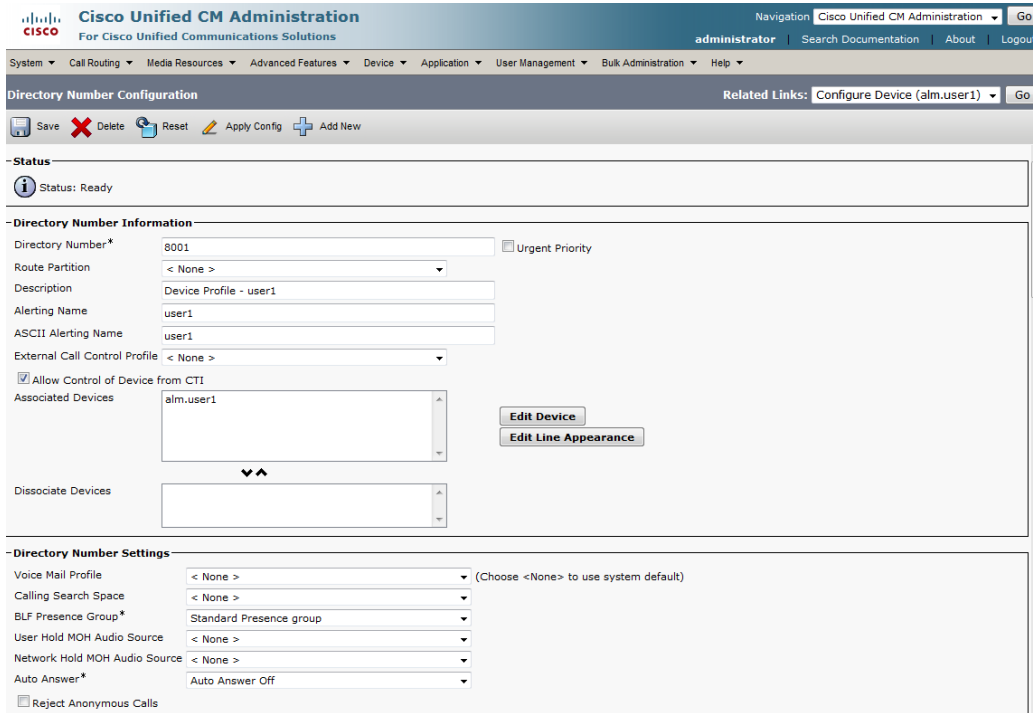


The screenshot shows the Cisco Unified CM Administration interface for Device Profile Configuration. The page title is "Device Profile Configuration" and it includes a navigation menu at the top with options like System, Call Routing, Media Resources, Voice Mail, Device, Application, User Management,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

- Status:** Shows "Status: Ready".
- Association Info:** A list of 12 items, including "Line [1] - 4312 (no partition)", "Line [2] - Add a new DN", and several "Add a new SD" entries.
- 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
 - Options: 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

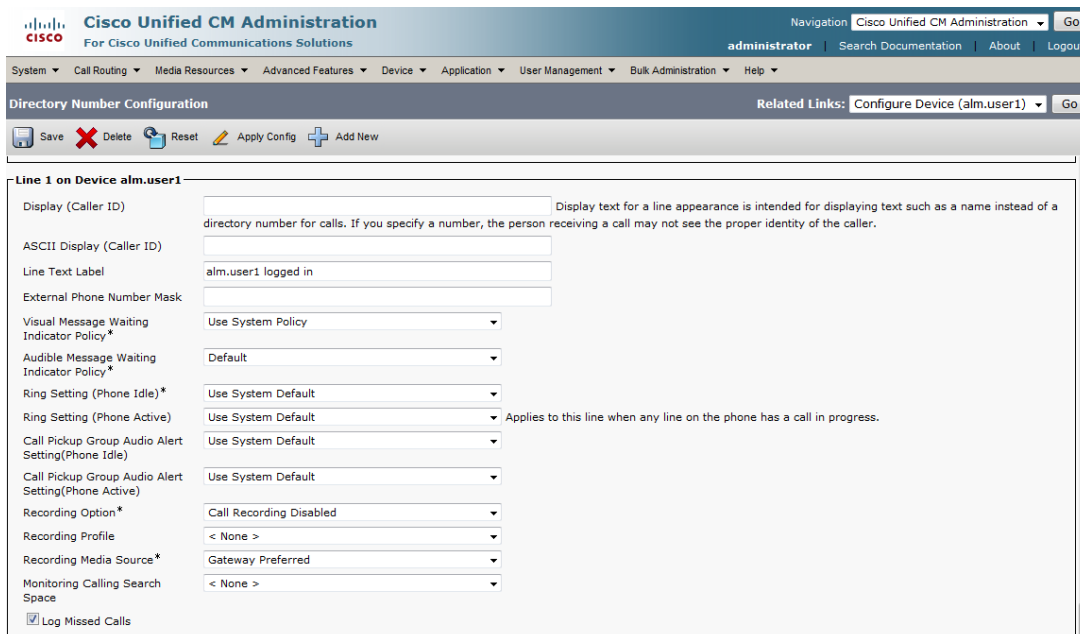
The Directory Number Configuration will be loaded on the specific phone when a user logs on.



The screenshot shows the 'Directory Number Configuration' page in Cisco Unified CM Administration. The page is titled 'Directory Number Configuration' and includes a 'Related Links' section with 'Configure Device (alm.user1)'. The main configuration area is divided into two sections:

- Directory Number Information:**
 - Directory Number*: 8001 (with an 'Urgent Priority' checkbox)
 - 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 (with 'Edit Device' and 'Edit Line Appearance' buttons)
 - Dissociate Devices: (empty list)
- Directory Number Settings:**
 - Voice Mail Profile: < None > (with note: '(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.



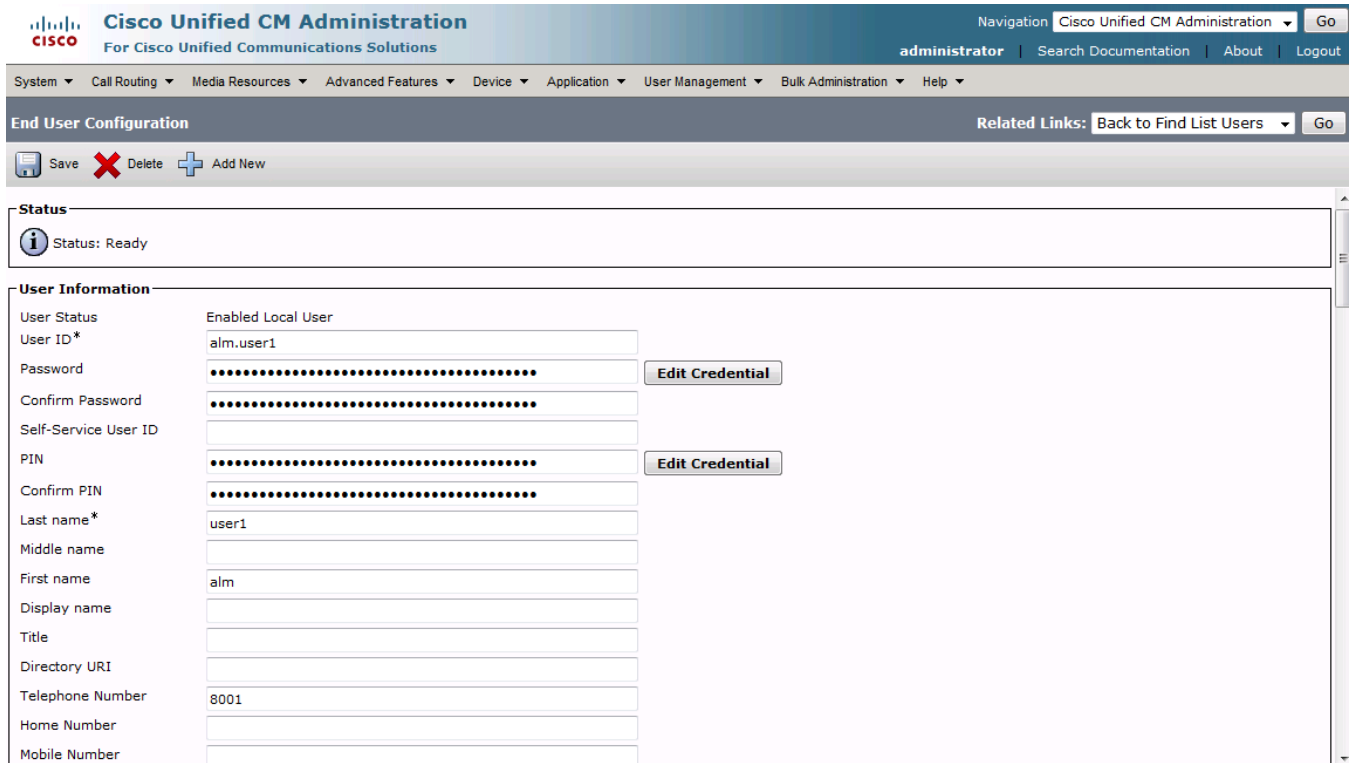
The screenshot shows the 'Line 1 on Device alm.user1' configuration page in Cisco Unified CM Administration. The page is titled 'Line 1 on Device alm.user1' and includes a 'Related Links' section with 'Configure Device (alm.user1)'. The main configuration area is divided into two sections:

- Line 1 on Device alm.user1:**
 - Display (Caller ID): (empty text field) (with note: '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): (empty text field)
 - Line Text Label: alm.user1 logged in
 - External Phone Number Mask: (empty text field)
 - 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 (with note: '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

Creating a user

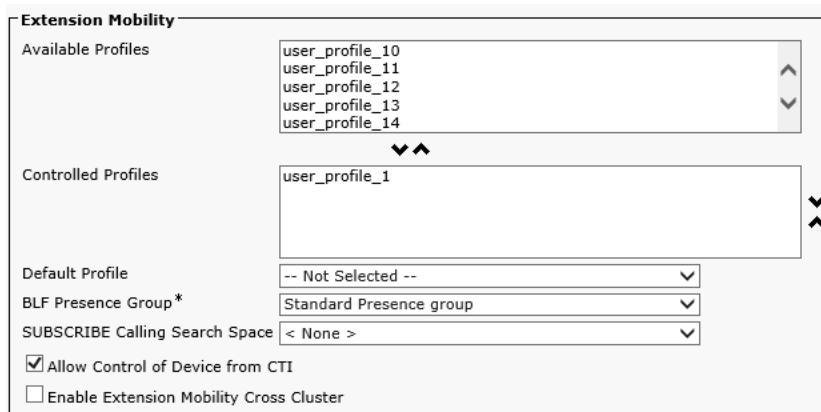
The UserID is a required field, this field is the username which is send to the CallManager when a user logs in.

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