



ALM – CallManager configuration manual
For CM version 4



RSconnect B.V.
P.O. Box 442
6800 AK
Arnhem
The Netherlands
T: +31 (0) 6 429 128 98
E: info@rsconnect.net
W: www.rsconnect.net

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Configuration Manual ALM

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

Only the CallManager 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.

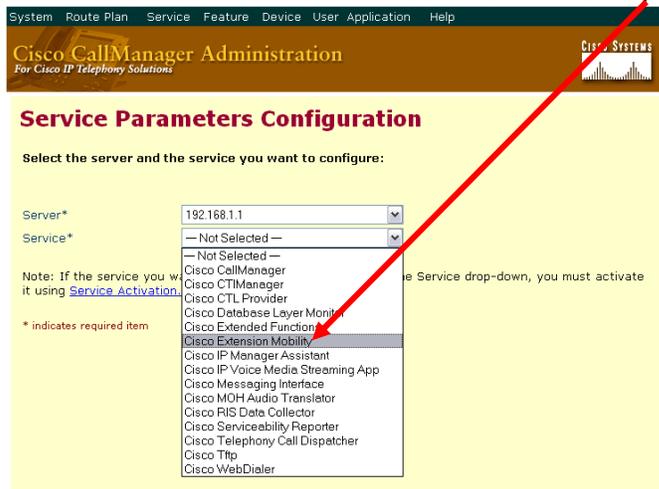
CallManager System Settings

System settings

- On the CallManager Administration page click on "Feature" followed by "Service Parameters"



- Select the Cisco Extension Mobility Service



System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

Cisco Systems

Service Parameters Configuration

[Select Another Server/Service Parameters for all servers](#)

Current Server : 192.168.1.1

Current Service: Cisco Extension Mobility 

Status: Ready

All parameters apply to the current server except those in the Clusterwide group(s)

Clusterwide Parameters (Parameters that apply to all servers)

Parameter Name	Parameter Value	Suggested Value
Enforce Maximum Login Time*	False	False
Maximum Login Time (Hours:Minutes)*	8:00	8:00
Maximum Concurrent Requests*	3	3
Multiple Login Behavior*	Auto Logout	Multiple Logins Not Allowed
Alphanumeric User ID*	True	True
Remember the Last User Logged In*	True	False

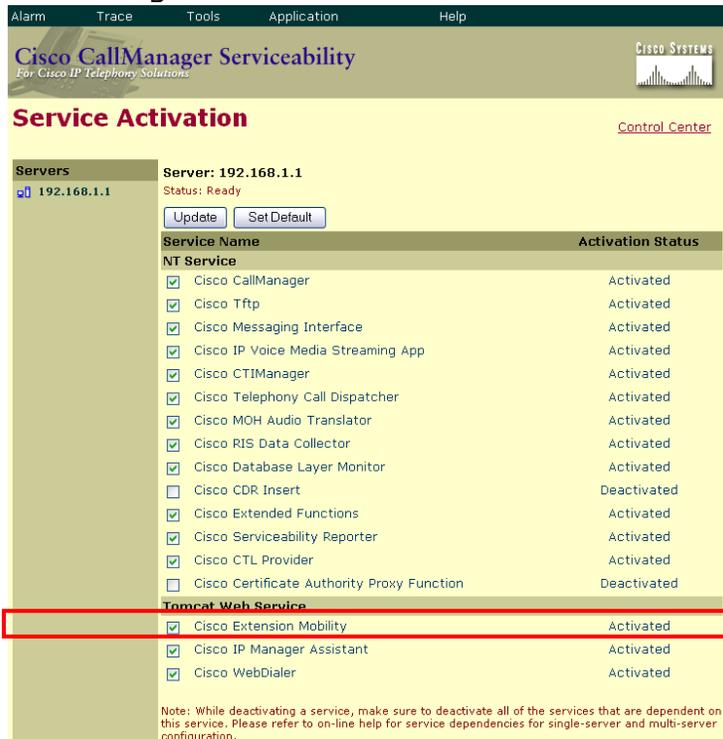
* indicates required item
 Click for More Information.

In the Cisco CallManager several Service Parameters for the ExtensionMobility service can be changed. One of the required settings is the "Multiple Login Behavior". 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 'Service Activation' page for server 192.168.1.1. The 'Tomcat Web Service' section is highlighted with a red box, showing the following services and their activation status:

Service Name	Activation Status
<input checked="" type="checkbox"/> Cisco CallManager	Activated
<input checked="" type="checkbox"/> Cisco Tftp	Activated
<input checked="" type="checkbox"/> Cisco Messaging Interface	Activated
<input checked="" type="checkbox"/> Cisco IP Voice Media Streaming App	Activated
<input checked="" type="checkbox"/> Cisco CTIManager	Activated
<input checked="" type="checkbox"/> Cisco Telephony Call Dispatcher	Activated
<input checked="" type="checkbox"/> Cisco MOH Audio Translator	Activated
<input checked="" type="checkbox"/> Cisco RIS Data Collector	Activated
<input checked="" type="checkbox"/> Cisco Database Layer Monitor	Activated
<input type="checkbox"/> Cisco CDR Insert	Deactivated
<input checked="" type="checkbox"/> Cisco Extended Functions	Activated
<input checked="" type="checkbox"/> Cisco Serviceability Reporter	Activated
<input checked="" type="checkbox"/> Cisco CTL Provider	Activated
<input type="checkbox"/> Cisco Certificate Authority Proxy Function	Deactivated
Tomcat Web Service	
<input checked="" type="checkbox"/> Cisco Extension Mobility	Activated
<input checked="" type="checkbox"/> Cisco IP Manager Assistant	Activated
<input checked="" type="checkbox"/> Cisco WebDialer	Activated

Note: While deactivating a service, make sure to deactivate all of the services that are dependent on this service. Please refer to on-line help for service dependencies for single-server and multi-server configuration.

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



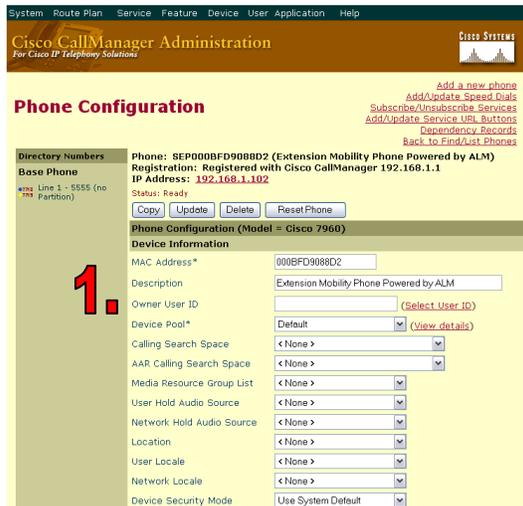
The screenshot shows the 'Control Center' page for server 192.168.1.1. The 'Tomcat Web Service' section is highlighted with a red box, showing the following services and their status:

Service Name	Status	Activation Status
NT Service		
<input type="radio"/> Cisco CallManager	▶	Activated
<input type="radio"/> Cisco Tftp	▶	Activated
<input type="radio"/> Cisco Messaging Interface	▶	Activated
<input type="radio"/> Cisco IP Voice Media Streaming App	▶	Activated
<input type="radio"/> Cisco CTIManager	▶	Activated
<input type="radio"/> Cisco Telephony Call Dispatcher	▶	Activated
<input type="radio"/> Cisco MOH Audio Translator	▶	Activated
<input type="radio"/> Cisco RIS Data Collector	▶	Activated
<input type="radio"/> Cisco Database Layer Monitor	▶	Activated
<input type="radio"/> Cisco CDR Insert	■	Deactivated
<input type="radio"/> Cisco Extended Functions	▶	Activated
<input type="radio"/> Cisco Serviceability Reporter	▶	Activated
<input type="radio"/> Cisco CTL Provider	▶	Activated
<input type="radio"/> Cisco Certificate Authority Proxy Function	■	Deactivated
Tomcat Web Service		
<input checked="" type="radio"/> Cisco Extension Mobility	N/A	Activated
<input type="radio"/> Cisco IP Manager Assistant	N/A	Activated
<input type="radio"/> Cisco WebDialer	N/A	Activated

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 exist on the PC a user can always login manually on the phone.

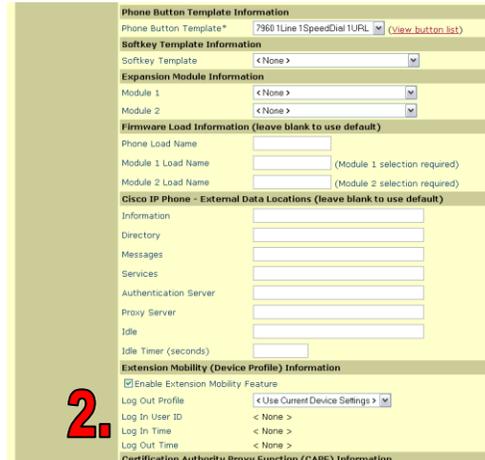


Phone Configuration

Phone: SEP000FD9088D2 (Extension Mobility Phone Powered by ALM)
 Registration: Registered with Cisco CallManager 192.168.1.1
 IP Address: 192.168.1.102
 Status: Ready

Device Information

MAC Address* 000BFD9088D2
 Description Extension Mobility Phone Powered by ALM
 Owner User ID (Select User ID)
 Device Pool* Default (View details)
 Calling Search Space <None >
 AAR Calling Search Space <None >
 Media Resource Group List <None >
 User Hold Audio Source <None >
 Network Hold Audio Source <None >
 Location <None >
 User Locale <None >
 Network Locale <None >
 Device Security Mode Use System Default



Phone Button Template Information

Phone Button Template* 7960 Line1SpeedDial1URL (View button list)

Softkey Template Information

Softkey Template <None >

Expansion Module Information

Module 1 <None >
 Module 2 <None >

Firmware Load Information (leave blank to use default)

Phone Load Name
 Module 1 Load Name (Module 1 selection required)
 Module 2 Load Name (Module 2 selection required)

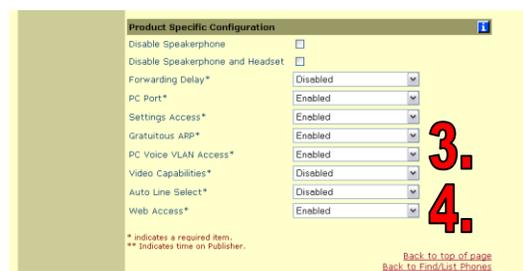
Cisco IP Phone - External Data Locations (leave blank to use default)

Information
 Directory
 Messages
 Services
 Authentication Server
 Proxy Server
 Idle
 Idle Timer (seconds)

Extension Mobility (Device Profile) Information

Enable Extension Mobility Feature
 Log Out Profile <Use Current Device Settings >
 Log In User ID <None >
 Log In Time <None >
 Log Out Time <None >

Certification Authority Proxy Function (CAPF) Information



Product Specific Configuration

Disable Speakerphone
 Disable Speakerphone and Headset
 Forwarding Delay* Disabled
 PC Port* Enabled
 Settings Access* Enabled
 Gratuitous ARP* Enabled
 PC Voice VLAN Access* Enabled
 Video Capabilities* Disabled
 Auto Line Select* Disabled
 Web Access* Enabled

* indicates a required item.
 ** indicates time on publisher.

[Back to top of page](#)
[Back to Find/List Phones](#)



Subscribe Cisco IP Phone Services for SEP00123F06BC1F

Service Subscription: New

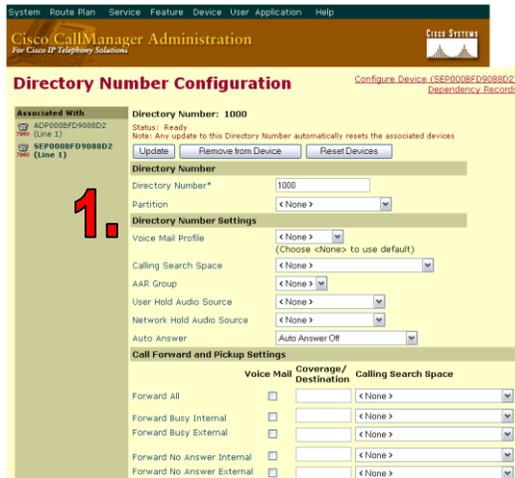
Status: Subscription Removed
 Continue

Select a Service* EMobility Login/Out
 Service Description
 EMobility Login/Out

* indicates required item
 Notes:
 If you are using a language other than English for Service Name text, make sure the correct character set (shown below) is selected. Text displays incorrectly if the wrong character set is selected. (English characters are included in all character sets.)
 Character Set Western European (Latin1)

Line settings

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



1.

System | Route Plan | Service | Feature | Device | User | Application | Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

Directory Number Configuration [Configure Device \(SEP0008FD9088D2\)](#) [Dependency Records](#)

Associated With
ADP0008FD9088D2 (Line 1)
SEP0008FD9088D2 (Line 1)

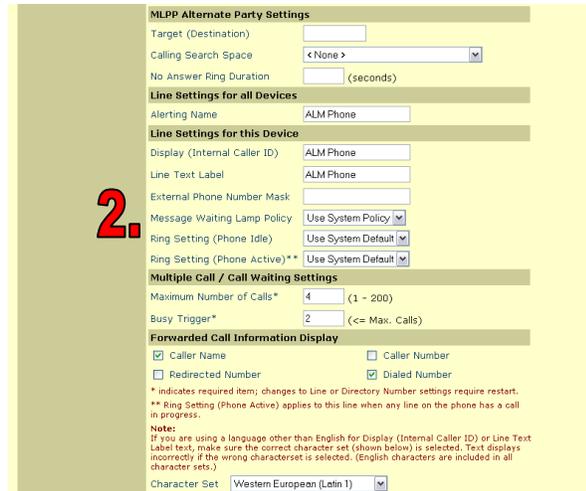
Directory Number: 1000
Status: Ready
Note: Any update to this Directory Number automatically resets the associated devices
Updates | Remove from Device | Reset Devices

Directory Number
Directory Number* 1000
Partition <None>

Directory Number Settings
Voice Mail Profile <None>
Calling Search Space <None>
AAR Group <None>
User Hold Audio Source <None>
Network Hold Audio Source <None>
Auto Answer Auto Answer Off

Call Forward and Pickup Settings

	Voice Mail	Coverage/ Destination	Calling Search Space
Forward All	<input type="checkbox"/>	<None>	<None>
Forward Busy Internal	<input type="checkbox"/>	<None>	<None>
Forward Busy External	<input type="checkbox"/>	<None>	<None>
Forward No Answer Internal	<input type="checkbox"/>	<None>	<None>
Forward No Answer External	<input type="checkbox"/>	<None>	<None>



2.

MLPP Alternate Party Settings

Target (Destination)

Calling Search Space <None>

No Answer Ring Duration (seconds)

Line Settings for all Devices
Alerting Name ALM Phone

Line Settings for this Device
Display (Internal Caller ID) ALM Phone
Line Text Label ALM Phone
External Phone Number Mask
Message Waiting Lamp Policy Use System Policy
Ring Setting (Phone Idle) Use System Default
Ring Setting (Phone Active)** Use System Default

Multiple Call / call Waiting Settings
Maximum Number of Calls* 4 (1 - 200)
Busy Trigger* 2 (<= Max. Calls)

Forwarded Call Information Display
 Caller Name Caller Number
 Redirected Number Dialed Number

* indicates required item; changes to Line or Directory Number settings require restart.
** Ring Setting (Phone Active) applies to this line when any line on the phone has a call in progress.

Note:
If you are using a language other than English for Display (Internal Caller ID) or Line Text Label text, make sure the correct character set (shown below) is selected. Text displays incorrectly if the wrong character set is selected. (English characters are included in all character sets.)

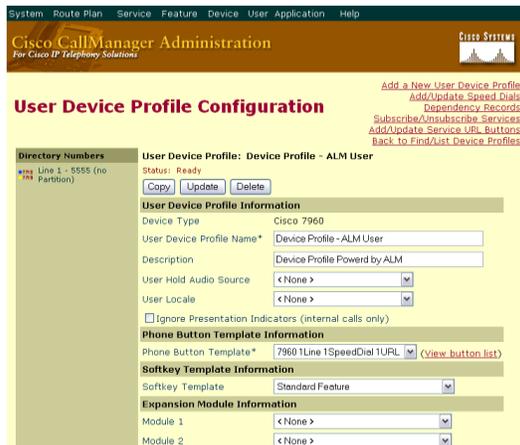
Character Set Western European (Latin 1)

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.

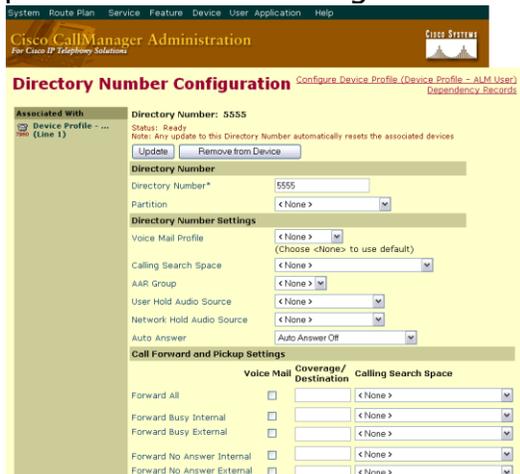
- Optional the Extension Mobility service can be activated on the phone, when the ALM application does start on the PC a user can always login manually on the phone.



The screenshot shows the 'User Device Profile Configuration' page in Cisco CallManager Administration. The page title is 'User Device Profile Configuration' and the sub-title is 'User Device Profile: Device Profile - ALM User'. The status is 'Ready'. There are buttons for 'Copy', 'Update', and 'Delete'. The 'User Device Profile Information' section includes fields for 'Device Type' (Cisco 7960), 'User Device Profile Name*' (Device Profile-ALM User), 'Description' (Device Profile Powered by ALM), 'User Hold Audio Source' (<None>), and 'User Locale' (<None>). There is a checkbox for 'Ignore Presentation Indicators (internal calls only)'. The 'Phone Button Template Information' section includes 'Phone Button Template*' (7960 1Line 1SpeedDial 1URL) and a '(View button list)' link. The 'Softkey Template Information' section includes 'Softkey Template' (Standard Feature). The 'Expansion Module Information' section includes 'Module 1' and 'Module 2', both set to '<None>'. There are navigation links at the top right: 'Add a New User Device Profile', 'Add/Update Speed Dials', 'Dependency Records', 'Subscribe/Unsubscribe Services', 'Add/Update Service URLs', and 'Buttons', and a 'Back to Find/List Device Profiles' link.

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 CallManager Administration. The page title is 'Directory Number Configuration' and the sub-title is 'Directory Number: 5555'. The status is 'Ready'. There are buttons for 'Update' and 'Remove from Device'. The 'Directory Number' section includes 'Directory Number*' (5555) and 'Partition' (<None>). The 'Directory Number Settings' section includes 'Voice Mail Profile' (<None>), 'Calling Search Space' (<None>), 'AAR Group' (<None>), 'User Hold Audio Source' (<None>), 'Network Hold Audio Source' (<None>), and 'Auto Answer' (Auto Answer Off). The 'Call Forward and Pickup Settings' section includes a table with columns for 'Voice Mail', 'Coverage/ Destination', and 'Calling Search Space'. The rows are: 'Forward All', 'Forward Busy Internal', 'Forward Busy External', 'Forward No Answer Internal', and 'Forward No Answer External'. Each row has a checkbox, a dropdown menu for 'Coverage/ Destination', and a dropdown menu for 'Calling Search Space'. There are navigation links at the top right: 'Configure Device Profile (Device Profile - ALM User)' and 'Dependency Records'.

All basic users 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.

Line Settings for all Devices

Alerting Name

Line Settings for this Device

Display (Internal Caller ID)

Line Text Label

External Phone Number Mask

Message Waiting Lamp Policy

Ring Setting (Phone Idle)

Ring Setting (Phone Active)**

Multiple Call / Call Waiting Settings

Maximum Number of Calls* (1 - 200)

Busy Trigger* (<= Max. Calls)

Forwarded Call Information Display

Caller Name Caller Number

Redirected Number Dialed Number

* indicates required item; changes to Line or Directory Number settings require restart.
 ** Ring Setting (Phone Active) applies to this line when any line on the phone has a call in progress.

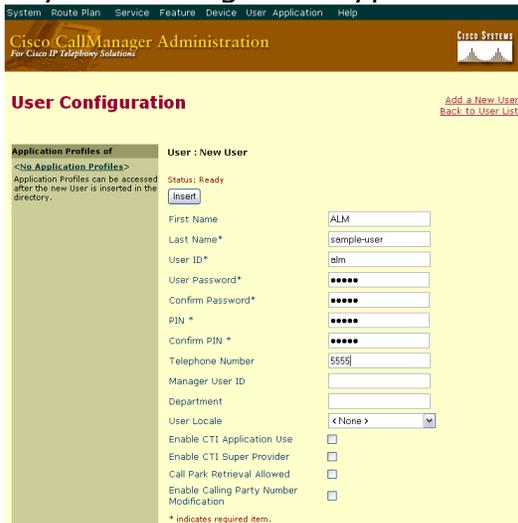
Note:
 If you are using a language other than English for Display (Internal Caller ID) or Line Text Label text, make sure the correct character set (shown below) is selected. Text displays incorrectly if the wrong character set is selected. (English characters are included in all character sets.)

Character Set

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 'User Configuration' page in Cisco CallManager Administration. The user is 'New User'. The 'User ID' field is filled with 'alm'. The 'First Name' is 'ALM'. The 'Last Name' is 'sample-user'. The 'User Password' and 'Confirm Password' are masked with dots. The 'PIN' and 'Confirm PIN' are also masked. The 'Telephone Number' is '5555'. The 'Department' is set to '<None>'. There are several checkboxes for enabling features like CTI Application Use, CTI Super Provider, Call Park Retrieval Allowed, and Calling Party Number Modification, all of which are currently unchecked. A red arrow points to the 'Add a New User' link in the top right corner.

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.

Click on the "Extension Mobility" link to attach a DeviceProfile.



The screenshot shows the 'User Configuration' page for the user 'ALM sample-user'. The 'Status' is 'Insert Completed'. The 'First Name' field is filled with 'ALM'. A red arrow points to the 'Extension Mobility' link in the 'Application Profiles of ALM' section on the left side of the page.

Use the search function to select the DeviceProfile created in the previous screen for this specific user.

System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CLOSE SYSTEMS

Extension Mobility

[User Configuration](#)
[Add a New User](#)
[Back to User List](#)

Profiles assigned to: alm (sample-user, ALM)

Status: Ready

Available Profile List Filters

Find profiles where:

User Device Profile Profile Name begins with

Filter Active

1 available device profile(s) listed at last search.
0 device profile(s) controlled at last search.
0 device profile(s) selected currently.

Enable Authentication Proxy Rights

Available Profiles

Check All on Page Check All in Search No Default Profile No Primary Extension

Type	Profile Name	Description	Default Profile	Primary Ext.	Extension
<input checked="" type="checkbox"/>	Device Profile - ALM User	Device Profile powered by ALM	<input type="radio"/>	<input type="radio"/>	5555

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;
- Integration of the Cisco CallManager with Microsoft Active Directory has not been tested yet but should work without any issues;
- The UserID is not case-sensitive;