

# New Voice XML Phone Configuration for Cisco Unified CallManager (UCM)

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## 1 Configuring the Cisco UCM

The New Voice XML phone application requires access to:

- All Cisco IP phones that are to display alarm information
- The Cisco UCM for translating the alarm phone number into the IP address of the corresponding Cisco IP phone(s)

**IMPORTANT:** The "Cisco AXL Web Service" must be active on the Cisco UCM!

### 1.1 Accessing the Cisco UCM

Log-in to "Cisco Unified CM Administration".



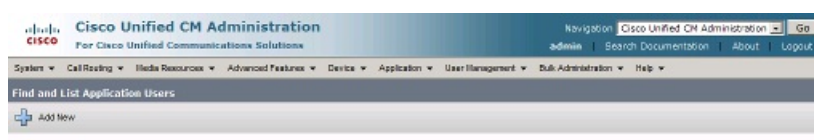
### 1.2 Creating the Application User and Assigning to IP Phones

Creating the application user (with login and password) ensures that the Cisco environment is able to identify the user and grant access. Assigning the user to the individual Cisco IP phones allows the New Voice XML phone application to directly control the phones and e.g. show alarm messages on the display.

Select "Application User" from the drop down menu.



Click on "Add New".



**Application User**

Find Application User where User ID:

No active query. Please enter your search criteria using the options above.

Complete the form and enter the following information:

- User ID (*user name*):  
**newvoice**
- Password/Confirm Password (*same value for both fields*):  
**mobicall**

Next, assign all Cisco IP phones that are to be controlled by the New Voice XML phone application to the list of "Controlled Devices".

Complete the user configuration by clicking on "Save".

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

Navigation: Cisco Unified CM Administration

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**Application User Configuration**  Related Links: [Back To Find/List](#)

**Status**  
Status: Ready

**Application User Information**

User ID\*: newvoice  
 Password:   
 Confirm Password:   
 Digest Credentials:   
 Confirm Digest Credentials:   
 Presence Group\*: Standard Presence group

☐ Accept Presence Subscription  
☐ Accept Out-of-dialog REFER  
☐ Accept Unmatched Notification  
☐ Accept Replaces Header

**Device Information**

Available Devices: SEP000546CAC103, SEP00060DAFBA6F, SEP0011254P961C, SEP001280A54FC7, SEP001380A54FC9

Controlled Devices: SEP000546CAC103, SEP0011254P961C, SEP001BA60EA6A3, SEP0017646C133, SEP001A0266008

Available Profiles:

CTT Controlled Device Profiles:

**CAPF Information**

Associated CAPF Profiles:  [View Details](#)

**Permissions Information**

Groups:     
[View Details](#)

Roles:  [View Details](#)

## 1.3 Creating the User Group and Assigning to Application User

At this stage, the previously created application user is not allowed to access phone number and IP address information on the Cisco UCM. This may be changed by creating a user group with all the required roles (i.e. permissions) and assigning it to the application user.

**REMARK:** As of UCM 9, the name of the "User Group" is changed into "Access Control Group" and is found in the submenu "User Settings".

Select the "User Group" from the drop down menu.

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

Navigation: Cisco Unified CM Administration

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**Cisco Unified CM Administration**  
System version: 8.6.2.20000-2  
 Upgrading Warnings:  
 System is upgrading on Cisco Systems. Please contact technical support if you see this. Please visit the License Report Page for more details.  
 VMware Installation: 1 vCPU Intel(R) Xeon(R) CPU E5620 @ 2.40GHz, disk 1:  
 Last Successful Login: Mar 6, 2013 9:56:38 AM  
 Failed Login Attempts: 1  
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User Management

- Credential Policy Default
- Credential Policy
- Application User
- End User
- Role
- User Group**
- UserPhone Add
- Application User CAPF Profile
- End User CAPF Profile
- SP Reset

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A summary of U.S. laws governing Cisco cryptographic products may be found at our [Export Compliance Product Support](#) web site.

For information about Cisco Unified Communications Manager please visit our [Unified Communications System Documentation](#) web site.

For Cisco Technical Support please visit our [Technical Support](#) web site.

Click on "Add New".

The screenshot shows the 'Find and List User Groups' page in the Cisco Unified CM Administration interface. The 'Add New' button is highlighted with a red circle. The page includes a search bar for finding user groups and a table for listing them.

Enter the new group name **NewVoiceAccess** and click on "Save".

The screenshot shows the 'User Group Configuration' page. The 'Name' field is filled with 'NewVoiceAccess'. The 'Save' button is highlighted with a red circle. The page includes fields for status and user group information.

From the drop-down menu "Related link" select "Assign Role to User Group" and click on "Go".

The screenshot shows the 'User Group Configuration' page. The 'Related Links' dropdown menu is open, and 'Assign Role to User Group' is selected. The 'Go' button is highlighted with a red circle. The page includes fields for status and user group information.

There are currently no roles assigned. Continue by clicking on "Assign Role to Group".

The screenshot shows the 'Role Assignment' page. The 'Assign Role to Group' button is highlighted with a red circle. The page includes a table for listing roles and buttons for adding and deleting role assignments.

The list of roles appears. If this is not the case, click on "Find" to display the list.

Activate the following roles in the list:

- **Standard AXL API Access**
- **Standard CCM Admin Users**
- **Standard RealtimeAndTraceCollection**

Click on "Add Selected".

The screenshot shows the 'Find and List Roles' page. The 'Add Selected' button is highlighted with a red circle. The page includes a table for listing roles and buttons for adding and deleting roles.

41 records found

Role (1 - 41 of 41) Rows per Page: 50

Find Role where Name begins with Find Clear Filter

Select item or enter search text

Name	Application	Description	Copy
<input checked="" type="checkbox"/> Standard AXI API Access	Cisco Call Manager AXI Database	Access the AXI APIs	
<input type="checkbox"/> Standard Admin Rep Tool Admin		Administer CAR	
<input type="checkbox"/> Standard Audit Log Administration	Cisco Call Manager Serviceability	Serviceability Audit Log Administration	
<input checked="" type="checkbox"/> Standard CCM Admin Users		All users with access to CCM web site	
<input type="checkbox"/> Standard CCM End Users		Access to CCM User Option Pages	
<input type="checkbox"/> Standard CCM Feature Management	Cisco Call Manager Administration	Standard CCM Feature Management	
<input type="checkbox"/> Standard CCM Gateway Management	Cisco Call Manager Admin	Standard CCM Gateway Management	
<input type="checkbox"/> Standard Packet Sniffing	Cisco Call Manager Administration	Access to CCM Pages for Enabling Sniffing	
<input checked="" type="checkbox"/> Standard RealtimeAndTraceCollection	Cisco Call Manager Serviceability	Realtime and Trace Collection	
<input type="checkbox"/> Standard SERVICEABILITY	Cisco Call Manager Serviceability	Standard Serviceability	
<input type="checkbox"/> Standard SERVICEABILITY Administration	Cisco Call Manager Administration	Administer all aspects of Serviceability system	
<input type="checkbox"/> Standard SERVICEABILITY Administration	Cisco Call Manager Dialed Number Analyser	Administer all aspects of Serviceability system	
<input type="checkbox"/> Standard SERVICEABILITY Administration	Cisco Call Manager Serviceability	Administer all aspects of Serviceability system	
<input type="checkbox"/> Standard SERVICEABILITY Read Only	Cisco Call Manager Dialed Number Analyser	Read access to all Serviceability resources	
<input type="checkbox"/> Standard SERVICEABILITY Read Only	Cisco Call Manager Serviceability	Read access to all Serviceability resources	
<input type="checkbox"/> Standard System Service Management	Cisco Call Manager Serviceability	Standard System Service Management	

Select All Clear All Add Selected Close

Click "Save" to ensure the assigned roles are stored. Select "User Group" from the drop-down menu "Related Link" and click on "Go".

Cisco Unified CM Administration

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User Group Configuration Related Link: User Group Go

Save

Status: Status: Ready

User Group Information: Name: NewVoiceAccess

Role Assignment:

Role	Action
Standard AXI API Access	<input type="checkbox"/>
Standard CCM Admin Users	<input type="checkbox"/>
Standard RealtimeAndTraceCollection	<input type="checkbox"/>

Assign Role to Group Delete Role Assignment

Save

Click on "Add App Users to Group".

Cisco Unified CM Administration

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User Group Configuration Related Link: Back To Find/List Go

Save Delete Copy Add New

Status: 0 records found

User Group Information: Name: NewVoiceAccess

User Rows per Page: 50

Find User where User ID begins with Find Clear Filter

No active query. Please enter your search criteria using the options above.

Add End Users to Group Add App Users to Group Select All Clear All Delete Selected

Save Delete Copy Add New

Enter "newvoice", the ID of the previously created application use, and click on "Find". In the shown list, activate the found entry and click on "Add Selected".

Find and List Application Users

Select All Clear All Add Selected Close

Status: 1 records found

Application User (1 - 1 of 1) Rows per Page: 50

Find Application User where User ID begins with newvoice Find Clear Filter

User ID	Copy
<input checked="" type="checkbox"/> newvoice	

Select All Clear All Add Selected Close

Click on "Save" to store all changes to the user group.

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User Group Configuration Related Link: Back To Find/List Go

Save Delete Copy Add New

Status: 1 records found

User Group Information:



Name: [NewVoiceAccess]

User (1 - 1 of 1) Rows per Page: 50

Find user where: [User ID] begins with [ ] Find Clear Filter [ ]

User ID	Full Name	Permission
[ ]	[ ]	[ ]

[Add End Users to Group](#)
[Add App Users to Group](#)
[Select All](#)
[Clear All](#)
[Delete Selected](#)

[Save](#)
[Delete](#)
[Copy](#)
[Add New](#)

The application user is now allowed to access the Cisco UCM and to retrieve all required information.

## 1.4 Creating the New Voice Alarm Service

Select "Phone Services" from the drop down menu.

Cisco Unified CM Administration

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

**Cisco Unified CM Administration**

System version: 8.6.2.20000-2

**Upcoming Warnings:**  
 System is approaching an End-of-Life status. Please contact your account manager for more details.  
 Please visit the License Report Page for more details.

VMware Installation: 1 vCPU Intel(R) Xeon(R) CPU E5620 @ 2.40GHz, disk 1: 80Gbytes

Last Successful Login: Mar 5, 2013 2:44:35 PM

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For information about Cisco Unified Communications Manager please visit our [Unified Communications System](#).

For Cisco Technical Support please visit our [Technical Support](#) web site.

Device Settings

- Device Defaults
- Firmware Load Information
- Default Device Profile
- Device Profile
- Phone Button Template
- Softkey Template
- Phone Services**
- SIP Profile
- Common Device Configuration
- Common Phone Profile
- Remote Destination Profile
- Feature Control Policy
- Recording Profile
- SIP Normalization Script

click on "Add new".

Cisco Unified CM Administration

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**Find and List IP Phone Services**

[Add New](#)

IP Phone Service

Find IP Phone Service where: [IP Phone Service] begins with [ ] Find Clear Filter [ ]

No active query. Please enter your search criteria using the options above.

[Add New](#)

Complete the form and enter the following information:

- Service Name / ASCII Service Name (*same value for both fields*):  
**New Voice Alarm**
- Service Description:  
**New Voice Alarm Processing Application**
- Service URL / Secure-Service URL (*same value for both fields*):  
**http://<MobiCall Server>nvxmlphone/dev/start?dev=#DEVICENAME#**
- Service Category:  
**XML Service**
- Service Type:  
**Standard IP Phone Service**
- Service Vendor:  
**New Voice**

Make sure to enable the service and activate "Enterprise Subscription" if the service is to be available on all (company-wide) IP phones. If the service should only be available on some distinct phones, disable "Enterprise Subscription" and assign the service individually to the corresponding IP phones.

Click on "Save".

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**IP Phone Services Configuration**

Related Links: [Back To Find/List](#) [Go]

[Save](#)

Status: Ready

Service Information	
Service Name*	New Voice Alarm
ASCII Service Name*	New Voice Alarm
Service Description	New Voice Alarm Processing Environment
Service URL*	http://10.20.203.100/nvxmlphone/dev/start?dev=#DEV
Secure-Service URL	http://10.20.203.100/nvxmlphone/dev/start?dev=#DEV
Service Category*	XHL Service
Service Type*	Standard IP Phone Service
Service Vendor	New Voice
Service Version	
<input checked="" type="checkbox"/> Enable <input checked="" type="checkbox"/> Enterprise Subscription	

- Save -

In case company-wide service availability is activated, make sure to click on "Update Subscriptions". It may also be necessary to reset and/or restart the IP phones to make the "New Voice Alarm" service appear on the telephone screen.

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**IP Phone Services Configuration** Related Links: Back To Find/List Go

Save X Delete Update Subscriptions Add New

Status: Add successful

Service Information	
Service Name*	New Voice Alarm
ASCII Service Name*	New Voice Alarm
Service Description	New Voice Alarm Processing Environment
Service URL*	http://10.20.203.100/nvxmlphone/dev/start?dev=#DEV
Secure-Service URL	http://10.20.203.100/nvxmlphone/dev/start?dev=#DEV
Service Category*	XHL Service
Service Type*	Standard IP Phone Service
Service Vendor	New Voice
Service Version	
<input checked="" type="checkbox"/> Enable	

**Service Parameter Information**  
 Parameters: 

New Parameter  
 Edit Parameter  
 Delete Parameter

- Save - Delete Update Subscriptions Add New

On a 9971 model, the alarm service will look as follows:



On a 7970 model, the alarm service will look as follows:



## 2. Configuring the New Voice XML phone application

### 2.1 First Initialisation

Whenever the New Voice web is installed or the XML phone application has been updated, a (re-)initialisation must be carried by entering the following commands in the command line:

```
> cd /D d:\nv_web\nvapps\nvxmlphone
> app\console nvxmlphone:init
```

This operation will (re-)initialise the XML phone database and generate/update the file **nvxmlphone.ini**.

## 2.2 XML Phone Application Settings

The configuration of the XML phone application is stored in the file **nvxmlphone.ini**. To open the file, enter the following command in the command line:

```
> npi nvxmlphone
```

Ensure that in the section "Cisco" the settings "CiscoUser" and "CiscoPassword" match with the previously created application user (on the Cisco UCM). Ensure also that the "CiscoUcmAddress" and the "MobiCallAddress" are correctly set.

**IMPORTANT:** Do NOT set the "CiscoUcmAddress" on MobiCall systems that are not connected to a Cisco environment. Leave empty or maintain the the default value.

## 2.3 Manual Registration of Cisco IP Phones

The registration of Cisco IP phones is usually done periodically (every hour) by the XML phone application. It may nevertheless become useful to do this manually, especially if there is no time to wait for the automatic update (e.g. during first time installation or Cisco environment changes).

Enter following commands in the command line:

```
> cd /D d:\nv_web\nvapps\nvxmlphone
> app\console nvxmlphone:cisco:register
```

## 3. Testing the New Voice XML Phone Application

### 3.1 Accessing the Phone Alarm List

### 3.2 Executing an XML Phone Text Alarm

### 3.3 Executing an XML Phone Image Alarm

### 3.4 Executing an XML Phone Camera Alarm

### 3.4 Executing an XML Phone Application Alarm

*This alarm type is currently not supported*

## 4. Supported Cisco UCM Versions and Cisco IP Phones

### 4.1 Cisco UCM Versions

Version	Supported
6.x and older	no
7.x	unsure (registration should work, alarm processing untested)
8.x	yes
9.x	yes

### 4.2 Display Image Sizes and Color Depths

**IMPORTANT:** All phone models in the table below where "no" is indicated in the column "PNG-File" will only support alarms in plain text!

Phone Model	Normal (W x H)	Wide (W x H)	Type	PNG-File
7905G	N/A	N/A	Gray (1bit)	no
7906G	N/A	N/A	Gray (1bit)	no

7911G	N/A	N/A	Gray (1bit)	no
7912G	N/A	N/A	Gray (1bit)	no
7931G	N/A	N/A	Gray (1bit)	no
7920	128 x 59	N/A	Gray (1bit)	no
7921G	176 x 140	N/A	Color (16bit)	yes
7925G	176 x 140	N/A	Color (16bit)	yes
7925G-EX	176 x 140	N/A	Color (16bit)	yes
7926G	176 x 140	N/A	Color (16bit)	yes
7940G	176 x 140	N/A	Color (16bit)	yes
7960G	176 x 140	N/A	Color (16bit)	yes
7937G	255 x 128	N/A	Gray (2bit)	no
7941G	298 x 144	320 x 144	Gray (4bit)	yes
7941G-GE	298 x 144	320 x 144	Gray (4bit)	yes
7942G	298 x 144	320 x 144	Gray (4bit)	yes
7961G	298 x 144	320 x 144	Gray (4bit)	yes
7961G-GE	298 x 144	320 x 144	Gray (4bit)	yes
7962G	298 x 144	320 x 144	Gray (4bit)	yes
7945G	298 x 156	320 x 156	Color (16bit)	yes
7965G	298 x 156	320 x 156	Color (16bit)	yes
7970G	298 x 168	320 x 168	Color (12bit)	yes
7971G-GE	298 x 168	320 x 168	Color (12bit)	yes
7975G	298 x 168	320 x 168	Color (16bit)	yes
Communicator	298 x 168	N/A	Color (24bit)	yes
6921	396 x 81	N/A	Monochrome	no
6961	396 x 81	N/A	Monochrome	no
6941	396 x 162	N/A	Monochrome	no
6945	396 x 162	N/A	Monochrome	no
9971	498 x 289	N/A	Color (24bit)	yes
9951	498 x 289	N/A	Color (24bit)	yes
8941	498 x 289	N/A	Color (24bit)	yes
8945	498 x 289	N/A	Color (24bit)	yes
8961	498 x 289	N/A	Color (24bit)	yes