

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

Table of Contents

- [1. Configuring the Cisco UCM](#)
- [2. Configuring the New Voice XML Phone Application](#)
- [3. Testing the New Voice XML Phone Application](#)
- [4. Supported UCM Versions and Cisco IP Phones](#)

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".

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".

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.

All rights reserved.

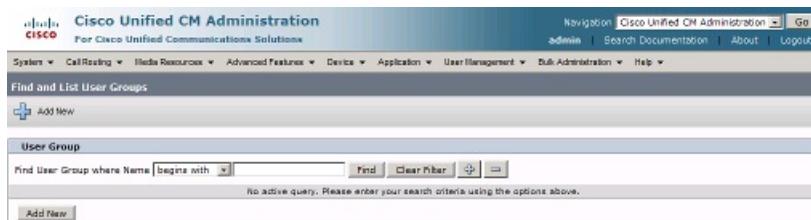
This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

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

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

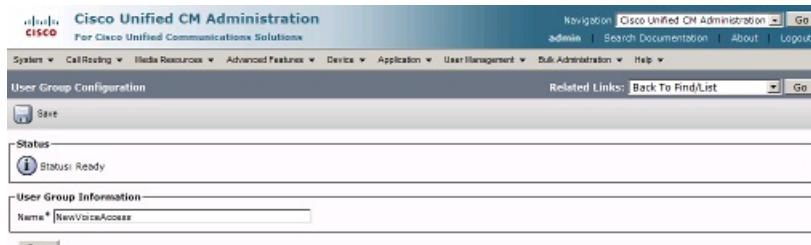
For Cisco Technical Support please visit our [Technical Support](#) web site.

Click on "Add New".



The screenshot shows the 'Find and List User Groups' page. The navigation bar at the top includes 'Cisco Unified CM Administration', 'admin', 'Search Documentation', 'About', and 'Logout'. The main content area has a search bar with 'Find User Group where Name begins with' and a 'Find' button. Below it is a message: 'No active query. Please enter your search criteria using the options above.' At the bottom is a 'Add New' button.

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



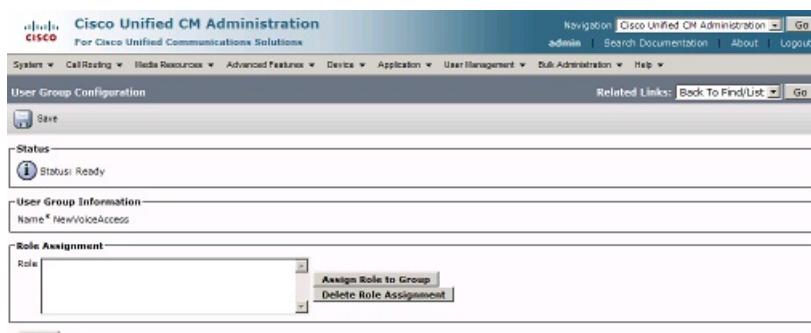
The screenshot shows the 'User Group Configuration' page. The navigation bar at the top includes 'Cisco Unified CM Administration', 'admin', 'Search Documentation', 'About', and 'Logout'. The main content area has a 'Status' section with 'Status Ready' and a 'User Group Information' section with 'Name' set to 'NewVoiceAccess'. At the bottom are 'Save', 'Delete', 'Copy', and 'Add New' buttons.

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 with the 'Related Links' dropdown menu open. The 'Assign Role to User Group' option is highlighted with a red circle. The main content area includes a 'Status' section with '0 records found', a 'User Group Information' section with 'Name' set to 'NewVoiceAccess', and a 'User' section with a search bar and buttons for 'Add End Users to Group', 'Add App Users to Group', 'Select All', 'Clear All', and 'Delete Selected'. At the bottom are 'Save', 'Delete', 'Copy', and 'Add New' buttons.

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



The screenshot shows the 'User Group Configuration' page. The 'Assign Role to Group' button in the 'User' section is highlighted with a red circle. The main content area includes a 'Status' section with '0 records found', a 'User Group Information' section with 'Name' set to 'NewVoiceAccess', and a 'Role Assignment' section with a dropdown menu showing 'Role' and buttons for 'Assign Role to Group' and 'Delete Role Assignment'. At the bottom are 'Save', 'Delete', 'Copy', and 'Add New' buttons.

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 RealtimeAndTrace Collection**

Click on "Add Selected".



The screenshot shows the 'Find and List Roles' page. The navigation bar at the top includes 'Cisco Unified CM Administration', 'admin', 'Search Documentation', 'About', and 'Logout'. The main content area has buttons for 'Selected All', 'Clear All', 'Add Selected', and 'Close'. Below it is a 'Status' section with '0 records found'.

Role (1 - 41 of 41)				Rows per Page		
Find Role where		Name	begins with	Find	Clear Filter	Print
Select item or enter search text						
	Name	Application	Description	Copy		
<input checked="" type="checkbox"/>	Standard AXAPI Access	Cisco Call Manager AXI Database	Access the AXI APIs			
<input type="checkbox"/>	Standard Admin Rep Tool Admin		Administrator 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 Administration	Standard CCM GM Management			
<input type="checkbox"/>	Standard CCM Network Management					
<input type="checkbox"/>	Standard CCM 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	Administrator all aspects of Serviceability system			
<input type="checkbox"/>	Standard SERVICEABILITY Administration	Cisco Call Manager Administration	Administrator all aspects of Serviceability system			
<input type="checkbox"/>	Standard SERVICEABILITY Administration	Cisco Call Manager Administration	Administrator all aspects of Serviceability system			
<input type="checkbox"/>	Standard SERVICEABILITY Read Only	Cisco Call Manager Serviceability	Administrator all aspects of Serviceability system			
<input type="checkbox"/>	Standard SERVICEABILITY Read Only	Cisco Call Manager Cisco Number Analysis	Read access to all Serviceability resources			
<input type="checkbox"/>	Standard System Service Management	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			

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



The screenshot shows the Cisco Unified CM Administration interface. The top navigation bar includes links for Cisco Unified CM Administration, admin, Search Documentation, About, and Logout. The main menu has categories like System, Call Rating, Media Resources, Advanced Features, Device, Application, User Management, Bulk Administration, and Help. The 'User Group Configuration' page is displayed, with the 'User Group' tab selected. A context menu is open over the 'Standard AXL API Access' role assignment, showing options to 'Assign Role to Group' and 'Delete Role Assignment'.

Click on "Add App Users to Group".

Cisco Unified CM Administration For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Administration - Go

admin | Search Documentation | About | Logout

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

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

Status: 0 records found

User Group Information

Name:

User

Find User where begins with Find Clear Filter

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

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 <input type="text" value="50"/>	<input type="button" value="Print"/>
Find Application User where User ID begins with <input type="text" value="newvoice"/>		<input type="button" value="Find"/>	<input type="button" value="Clear Filter"/>
<input type="checkbox"/>	User ID <input type="text" value="newvoice"/>	<input type="button" value="Copy"/>	<input type="button" value="Print"/>
<input type="checkbox"/>	newvoice	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
<input type="button" value="Select All"/> <input type="button" value="Clear All"/> <input type="button" value="Add Selected"/> <input type="button" value="Close"/>			

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

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Administration Go
admin | Search Documentation | About | Logout

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

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

States
 1 records found

User Group Information

Name* [NewVoiceAccess]

User (1 - 1 of 1)		Rows per Page 50
Find User where User ID begins with <input type="text"/> Find Clear Filter <input type="button"/>		
<input type="checkbox"/>	User ID	Full Name
<input type="checkbox"/>	newvoice	newvoice
<input type="button"/> Add End Users to Group <input type="button"/> Add App Users to Group <input type="button"/> Select All <input type="button"/> Clear All <input type="button"/> Delete Selected		
<input type="button"/> Save <input type="button"/> Delete <input type="button"/> Copy <input type="button"/> 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

Navigation Cisco Unified CM Administration Go

admin | Search Documentation | About | Logout

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

Device | Application | User Management | Bulk Administration | Help |

Cisco Unified CM Administration

System version: 8.6.2.20000-2

Licencing Warnings: System is operating on Demo Licenses. Please update now. Please visit the License Report Page for more details.

VMware Installation: 1 vCPU Intel(R) Xeon(R) CPU E5620 @ 2.40GHz, disk 1: 80Gbytes, 4GB RAM

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

Copyright © 1999 - 2011 Cisco Systems, Inc. All rights reserved.

This product contains cryptographic features and is subject to United States and local country laws governing products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, end users and local country laws. By using this product you agree to comply with applicable laws and regulations product immediately.

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

Navigation Cisco Unified CM Administration Go

admin | Search Documentation | About | Logout

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

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".

Cisco Unified CM Administration

Navigation Cisco Unified CM Administration Go

admin | Search Documentation | About | Logout

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

IP Phone Services Configuration

Related Links: Back To Find/List Go

Save

Status 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/mxmlphone/dev/start?dev=#DEV
Secure-Service URL	http://10.20.203.100/mxmlphone/dev/start?dev=#DEV
Service Category*	XML Service
Service Type*	Standard IP Phone Service
Service Vendor	New Voice
Service Version	
<input checked="" type="checkbox"/> Enable	
<input checked="" type="checkbox"/> Enterprise Subscription	

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.

Cisco Unified CM Administration

IP Phone Services Configuration

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/mxmlphone/dev/start?dev=#DEV
Secure-Service URL	http://10.20.203.100/mxmlphone/dev/start?dev=#DEV
Service Category*	XML Service
Service Type*	Standard IP Phone Service
Service Vendor	New Voice
Service Version	
<input checked="" type="checkbox"/> Enable	

Service Parameter Information

Parameters	<input type="button" value="New Parameter"/> <input type="button" value="Edit Parameter"/> <input type="button" value="Delete Parameter"/>
------------	--

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