

I. Introduction

This InformaCast 8.2.0 Integration Guide provides general instructions for integration of the **VOIP-600 Series Phone** with a Singlewire InformaCast EX and Singlewire InformaCast LPI (Legacy Paging Interface) on Cisco Call Manager installation. Please read this instruction set completely before making any changes to the system. For detailed VOIP-600 Series Phone setup instructions, please consult the **VOIP-600 Series Phone Manual** and the **VOIP-600 Cisco UCM Integration Guide**.

II. Prerequisites

- Cisco Unified Communications Manager (CUCM), version 8.0 or higher pre-installed and functional
- **VOIP-600 Series Phone** registered to receive calls and DTMF via CUCM
- Singlewire InformaCast EX and Legacy Paging Interface (LPI) pre-installed with a working Media Termination Point configured in CUCM.

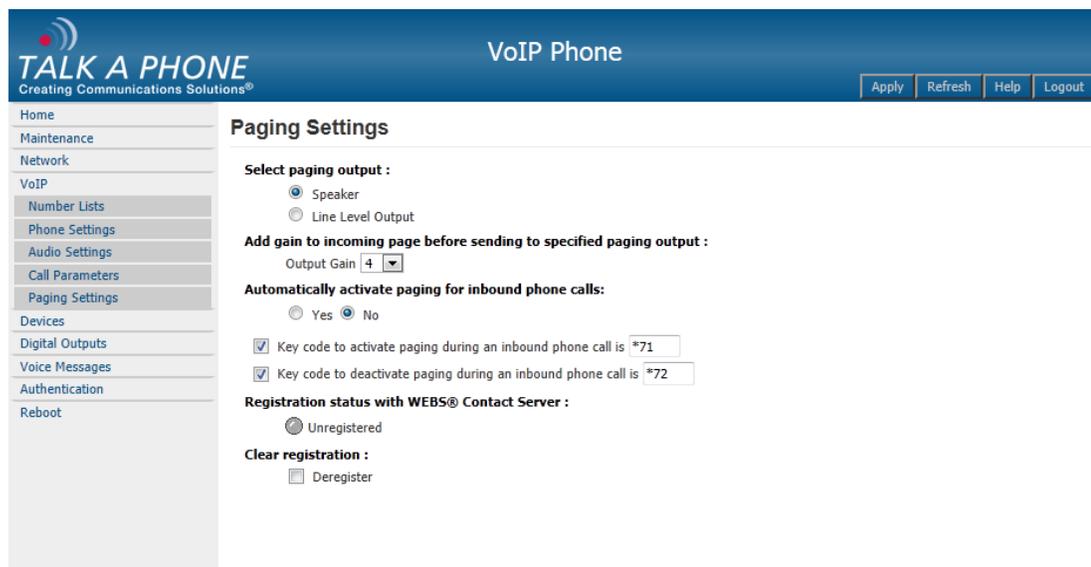
For further information, please see the Singlewire InformaCast LPI Installation and User Guide: http://www.singlewire.com/pdf/LPI_Install_User_Guide.pdf

- Network access to the Singlewire InformaCast EX Server and **VOIP-600 Series Phone**

III. VOIP-600 Configuration

Before configuring the **VOIP-600** to initiate broadcasts via DTMF, complete the steps outlined in the **VOIP-600 Cisco UCM Integration Guide**, and verify that the VOIP-600 is able to receive calls.

1. In the VOIP-600 main menu, select **VOIP > Paging Settings**.



2. Enter the following fields on the **Paging Settings** page. Then click **Apply**.

Select Paging Output:

Choose the correct output for the audio signal.

Add gain to incoming page before sending to specified output:

Output Gain: Range from 1-20, default setting is 20

Automatically activate paging for inbound Phone calls:

Select No, as we need to use DTMF tones to be able to select specific devices.

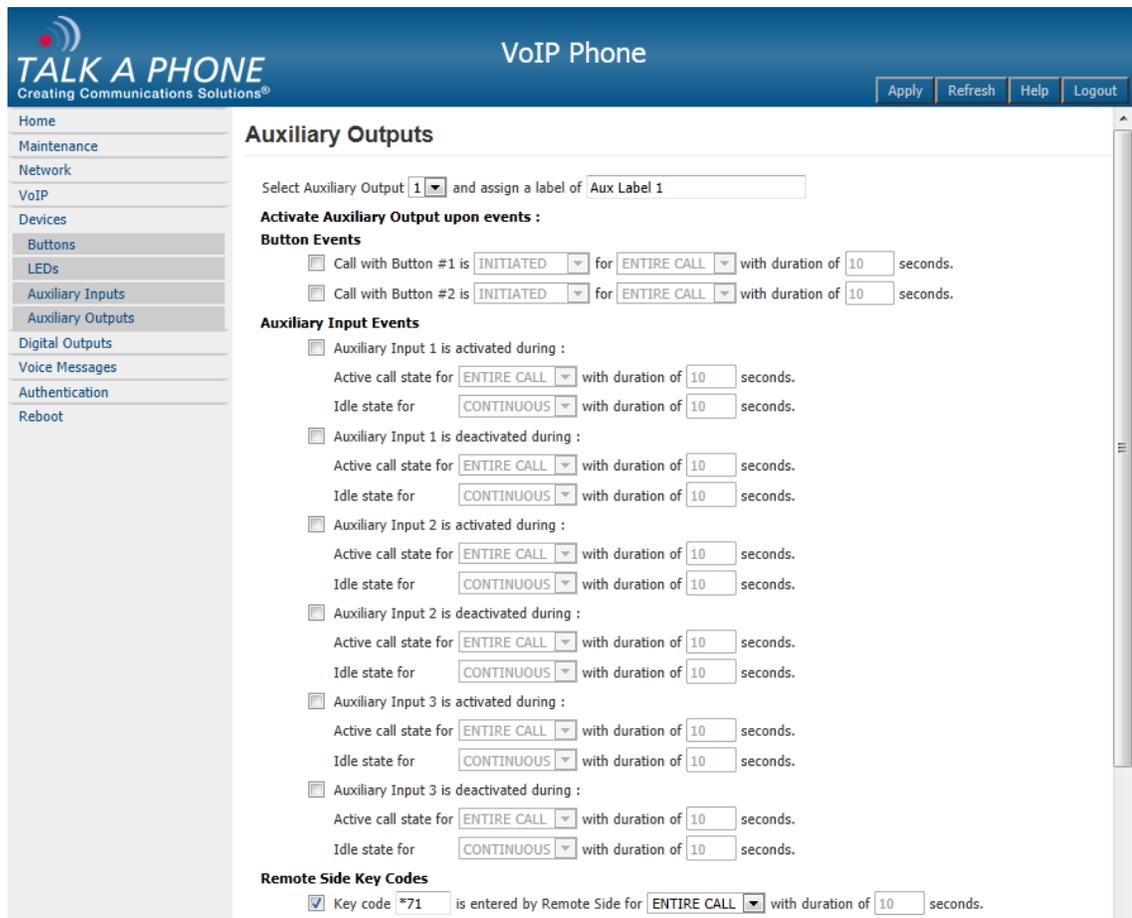
Key code to activate paging during an inbound call is:

Select this check box and enter desired code.

Key code to deactivate paging during an inbound call is:

Select this check box if needed and enter desired code.

3. If Line Level Output was selected in step 2 then the **VOIP-600** may need to be configured to activate the amplifier. From the **VOIP-600** Main Menu select **Devices > Auxiliary Outputs**.



TALK A PHONE VoIP Phone
 Creating Communications Solutions®

Apply Refresh Help Logout

Home
 Maintenance
 Network
 VoIP
 Devices
 Buttons
 LEDs
 Auxiliary Inputs
 Auxiliary Outputs
 Digital Outputs
 Voice Messages
 Authentication
 Reboot

Auxiliary Outputs

Select Auxiliary Output and assign a label of

Activate Auxiliary Output upon events :

Button Events

Call with Button #1 is for with duration of seconds.

Call with Button #2 is for with duration of seconds.

Auxiliary Input Events

Auxiliary Input 1 is activated during :

Active call state for with duration of seconds.

Idle state for with duration of seconds.

Auxiliary Input 1 is deactivated during :

Active call state for with duration of seconds.

Idle state for with duration of seconds.

Auxiliary Input 2 is activated during :

Active call state for with duration of seconds.

Idle state for with duration of seconds.

Auxiliary Input 2 is deactivated during :

Active call state for with duration of seconds.

Idle state for with duration of seconds.

Auxiliary Input 3 is activated during :

Active call state for with duration of seconds.

Idle state for with duration of seconds.

Auxiliary Input 3 is deactivated during :

Active call state for with duration of seconds.

Idle state for with duration of seconds.

Remote Side Key Codes

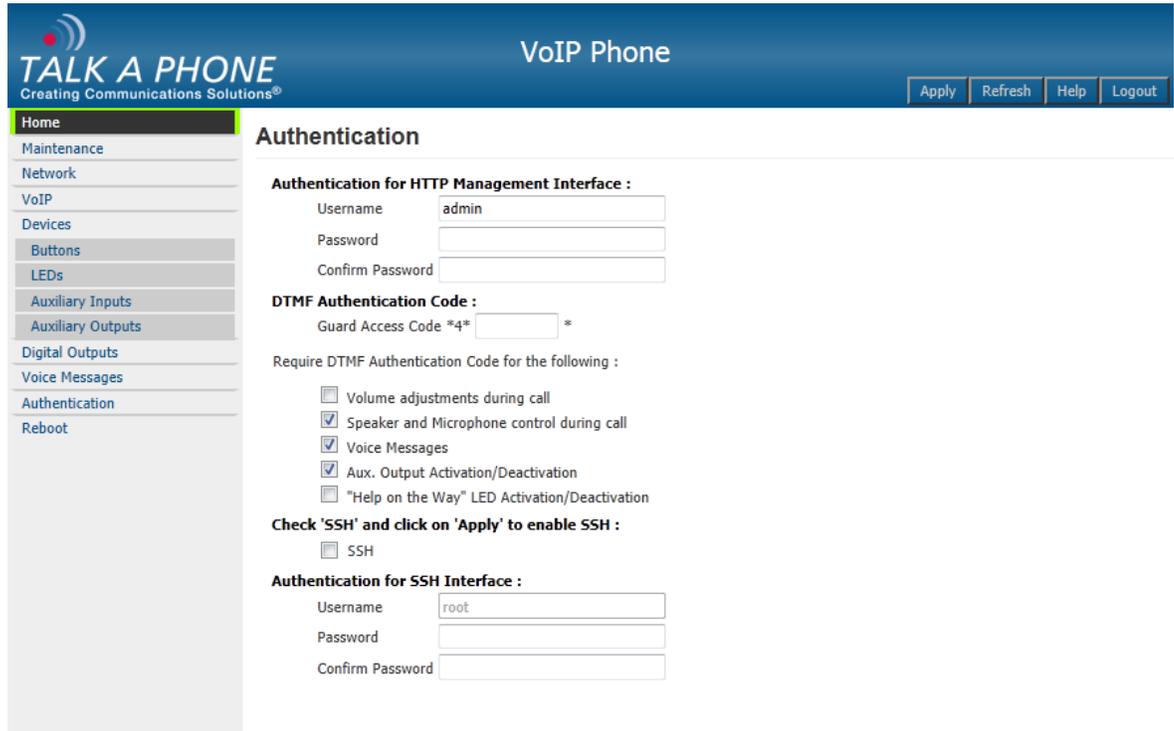
Key code *71 is entered by Remote Side for with duration of seconds.

4. From the dropdown menu at the top of the page select the Auxiliary Output that is being used to activate the amplifier.
5. Under **Activate Auxiliary Output upon events**, scroll down to **Remote Side Key Codes**. Check the box and then enter the key code to activate the amplifier. This cannot be the same as the code used in Step 2. Click Apply. If the strobe light should be activated as well, select auxiliary 2 from the drop down list at the top and repeat step 5; make sure to use a different activation code then those previously used.
6. Select **Authentication** from the **VOIP-600** Main Menu.
7. Authentication to activate Auxiliary Outputs can be enabled if desired. Complete the following steps and then click **Apply**.

DTMF Access Code:

Guard Access Code always begins with *4* and then the code desired followed by a *.

Aux. Output Activation/Deactivation: If authentication is desired check this box.



The screenshot shows the 'VoIP Phone' web interface. The top navigation bar includes 'Apply', 'Refresh', 'Help', and 'Logout' buttons. A left sidebar menu lists various system settings, with 'Authentication' selected. The main content area is titled 'Authentication' and contains the following sections:

- Authentication for HTTP Management Interface :**
 - Username: admin
 - Password: [input field]
 - Confirm Password: [input field]
- DTMF Authentication Code :**
 - Guard Access Code *4* [input field] *
- Require DTMF Authentication Code for the following :**
 - Volume adjustments during call
 - Speaker and Microphone control during call
 - Voice Messages
 - Aux. Output Activation/Deactivation
 - "Help on the Way" LED Activation/Deactivation
- Check 'SSH' and click on 'Apply' to enable SSH :**
 - SSH
- Authentication for SSH Interface :**
 - Username: root
 - Password: [input field]
 - Confirm Password: [input field]

IV. Singlewire InformaCast Legacy Paging Interface Basic Configuration

1. Using a web browser, connect to the Singlewire LPI Server.

Legacy Paging Interface 

Version 1.1
Not Logged In

Legacy Paging Interface Administration

Logon Name:
Password:

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2. Login to Singlewire LPI Administration:

3. Before being able to broadcast to the **VOIP-600 Series Phone**, Paging Devices and paging zones must first be added to LPI. Begin by selecting **Paging Devices** in the LPI menu:

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- Click the link to add a new Paging Device.

The screenshot shows the 'Legacy Paging Interface' for Singlewire software. The main content area is titled 'Paging Devices' and displays a message: 'Paging device VOIP-500-6162 has been deleted.' Below this message is a table with a header row containing 'Device Name' and 'Action'. The table body contains the text 'There were no results found.' To the left of the table is a navigation bar with a dropdown menu set to '15' and a red box highlighting a small square icon (likely for adding a device). A sidebar on the left contains navigation links: 'Version 1.1', 'Logged In as Default Administrator', 'Paging Devices', 'Configuration Parameters', 'Current Activities', 'License Key', 'Security Administration Users', 'Logout', and 'Help'.

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5. Enter the following fields to create a new Paging Device:

Device Name: A unique name for each **VOIP-600 Series Phone**.

SIP IP Address: The IP Address of the CUCM server.

SIP User: The extension associated with the **VOIP-600 Series Phone**.

Legacy Paging Interface singlewire™ software

Version 1.1

Logged In as Default Administrator

- [Paging Devices](#)
- [Configuration Parameters](#)
- [Current Activities](#)
- [License Key](#)
- Security Administration**
- [Users](#)
- [Logout](#)
- [Help](#)

Paging Device

[Add Paging Device](#)

Device Name:

SIP IP Address:

SIP Port:

SIP User (optional):

Max SIP Response Time (seconds; 0=forever):

DTMF via: RFC2833 SIP INFO

DTMF Duration (milliseconds):

DTMF Volume (0-36; 0=loudest):

Pause Before First DTMF (milliseconds):

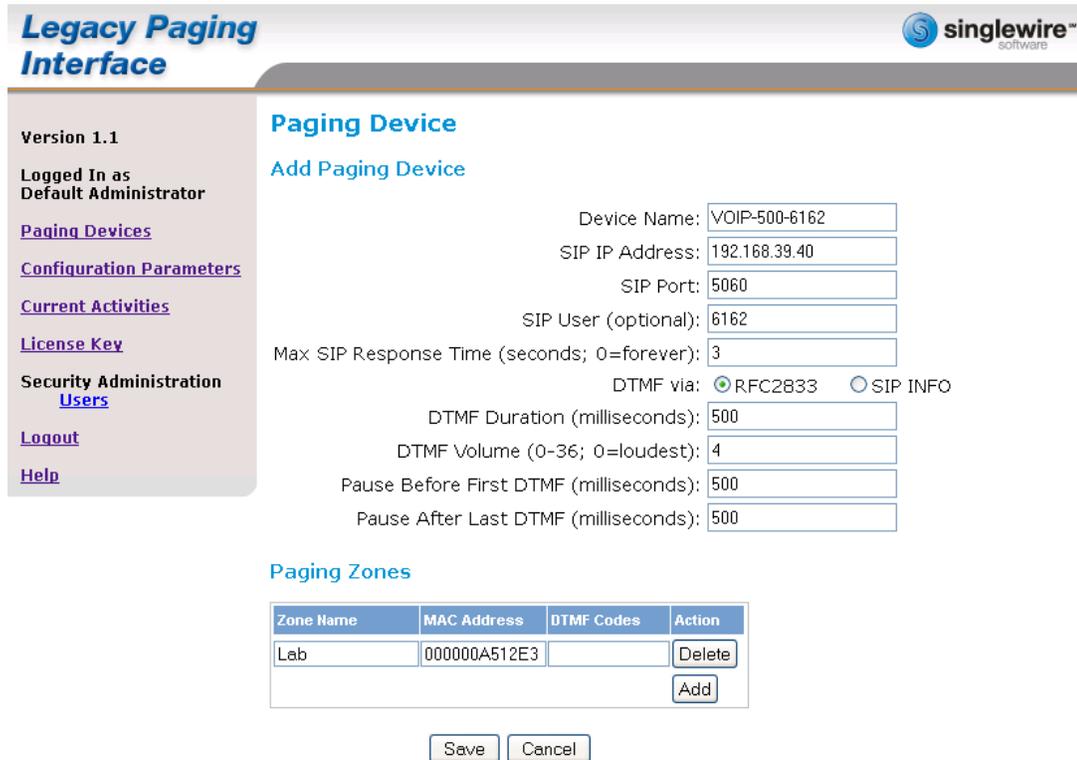
Pause After Last DTMF (milliseconds):

Paging Zones

Zone Name	MAC Address	DTMF Codes	Action
			<input type="button" value="Add"/>

- Now click on **Add** to create a new paging zone. A new zone will be created and assigned a MAC address. Enter a Zone Name and DTMF code(s) then click **Save**. See Section III Steps 2, 5, 7 for codes that will need to be entered here. For Example *11**12**72*

A paging zone must be used to provide the DTMF tones necessary to enable paging or activate an auxiliary output on the **VOIP-600 Series Phone**. They are not for specific zone control.



Legacy Paging Interface singlewire™ software

Version 1.1

Logged In as Default Administrator

- [Paging Devices](#)
- [Configuration Parameters](#)
- [Current Activities](#)
- [License Key](#)
- [Security Administration](#)
- [Users](#)
- [Logout](#)
- [Help](#)

Paging Device

Add Paging Device

Device Name:

SIP IP Address:

SIP Port:

SIP User (optional):

Max SIP Response Time (seconds; 0=forever):

DTMF via: RFC2833 SIP INFO

DTMF Duration (milliseconds):

DTMF Volume (0-36; 0=loudest):

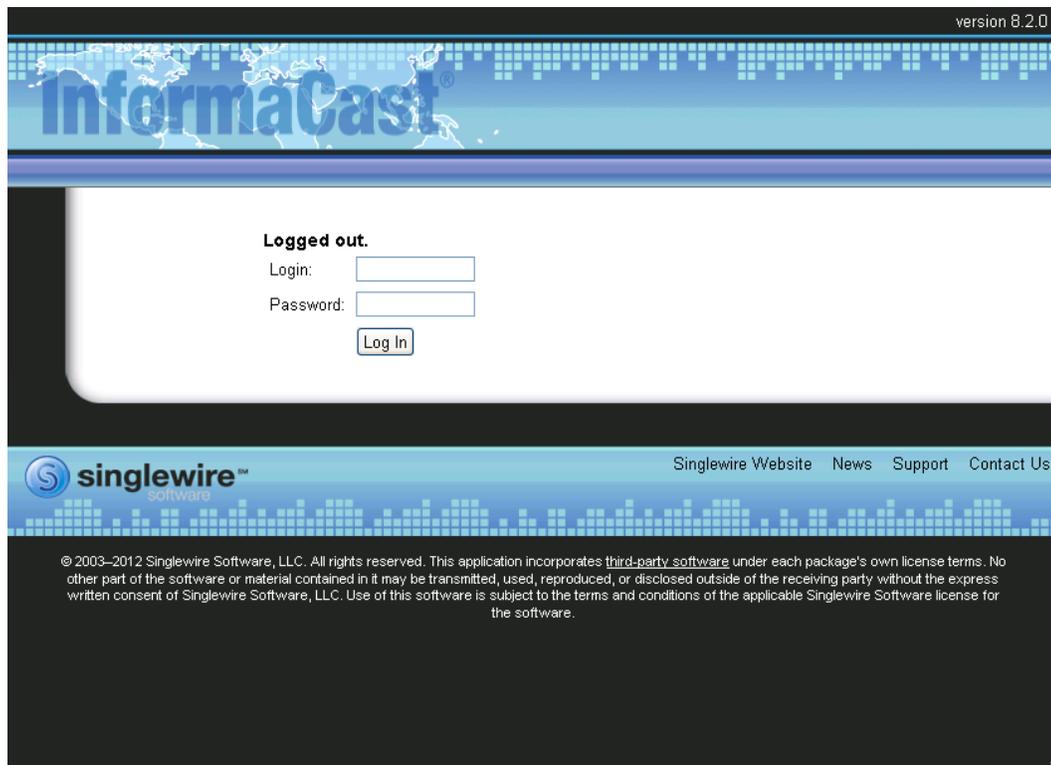
Pause Before First DTMF (milliseconds):

Pause After Last DTMF (milliseconds):

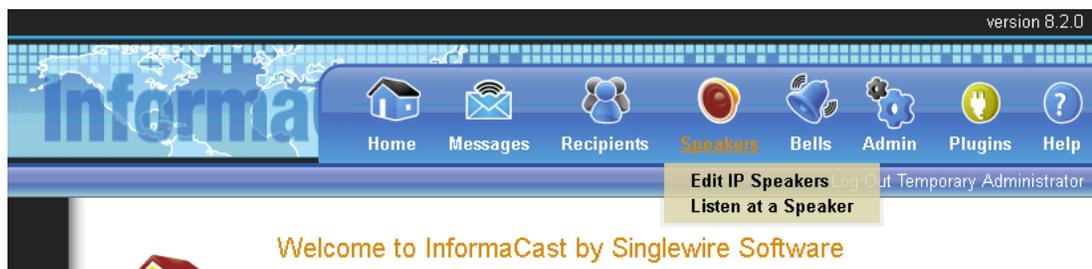
Paging Zones

Zone Name	MAC Address	DTMF Codes	Action
Lab	000000A512E3		Delete

- Using a web browser, connect to the Singlewire InformaCast Server.



- From the Singlewire InformaCast Homepage select **IP Speakers**>**Edit IP Speakers**.



9. Click **Add** to add a new IP Speaker to represent LPI.

version 8.2.0

InformaCast

Home Messages Recipients Speakers Bells Admin Plugins Help

Log Out Temporary Administrator

Speakers | Edit IP Speakers

Edit IP Speakers
Listen at a Speaker

No changes made.

Filter: < no filter > Does

There are no IP Speakers known to InformaCast.

ADD +

Reboot IP Speakers

SELECTED SPEAKERS Only selected speakers will be rebooted. The number of selected speakers is shown above.

ALL SPEAKERS This will attempt to reboot all speakers that have registered with InformaCast, whether they are listed on this page or are "new" speakers.

Adjust Volume of IP Speakers

Volume Adjustment: < select one >

SELECTED SPEAKERS Only selected speakers will have their volume adjusted. The number of selected speakers is shown above.

ALL SPEAKERS This will attempt to adjust the volume of all configured speakers.

10. Enter the following fields to create a new IP Speaker:

IP Speaker Name: A unique name for each paging zone created in Singlewire LPI.

Speaker Description: A description of the paging zone.

MAC Address: The MAC address assigned to the paging zone in step 6.

Volume: This has no effect on a device that is using the LPI.

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InformaCast

Home Messages Recipients Speakers Bells Admin Plugins Help

Log Out Temporary Administrator

Speakers | Edit IP Speakers | Add IP Speaker

IP Speaker Name: (required)

Speaker Description:

Dial Code: (numeric shortcut for optional phone interface)

MAC Address: (required, 12 hex digits)

Volume:

CANCEL ADD

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11. Click **Add**.

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Home Messages Recipients Speakers Bells Admin Plugins Help

Log Out Temporary Administrator

Speakers | Edit IP Speakers

LPI-VOIP-500-6162 added.

Filter: < no filter > Does Apply

1 IP Speakers, unfiltered (0 selected):

	Name	Description and Status	Dial Code	Vol	MAC address	Action
<input type="checkbox"/>	LPI-VOIP-500-6162	LPI-VOIP-500-6162 Status: Registered at Thu Nov 15 14:46:47 CST 2012, IP=192.168.39.30		10	000000a512e3	EDIT DELETE TEST

Reboot IP Speakers

SELECTED SPEAKERS Only selected speakers will be rebooted. The number of selected speakers is shown above.

ALL SPEAKERS This will attempt to reboot all speakers that have registered with InformaCast, whether they are listed on this page or are "new" speakers.

12. Next click on **Recipients**

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Home Messages Recipients Speakers Bells Admin Plugins Help

Log Out Temporary Administrator

Recipients | Edit Recipient Groups

UPDATE Discover current IP phone information from Communications Manager (may be time consuming).

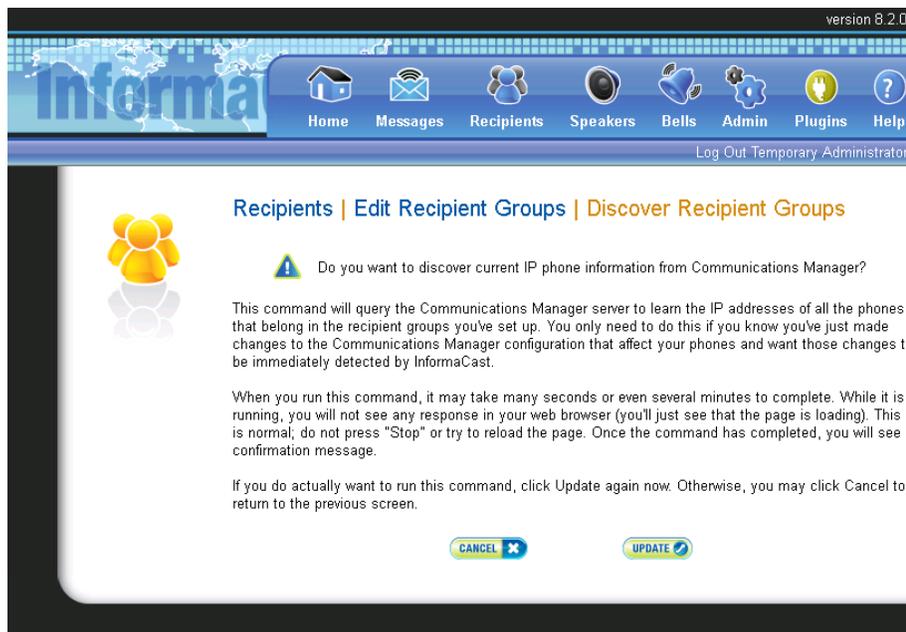
SHOW ALL Show Defunct Phones

Name	Dial Code	Phones	Other Recipients	Speakers	Action
(All Recipients)	*	1	0	1	EDIT COPY DELETE

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- Click on **Update** and then click **Update** again. This process may take a few minutes do not refresh or navigate away from this page until the process completes. The default (All Recipients) group should now reflect an additional IP speaker.



- To create a new Recipients Group click **Add**.



15. Enter a Name for the new Recipient Zone, then Select **Individually** and click **Edit**.

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Home Messages Recipients Speakers Bells Admin Plugins Help

Log Out Temporary Administrator

Recipients | Edit Recipient Groups | Add Recipient Group

Name LPI-VOIP-500-6162 (required)

Dial Code

Tags Add A Tag

Select Recipients

Individually EDIT

Filter with Recipient Groups EDIT

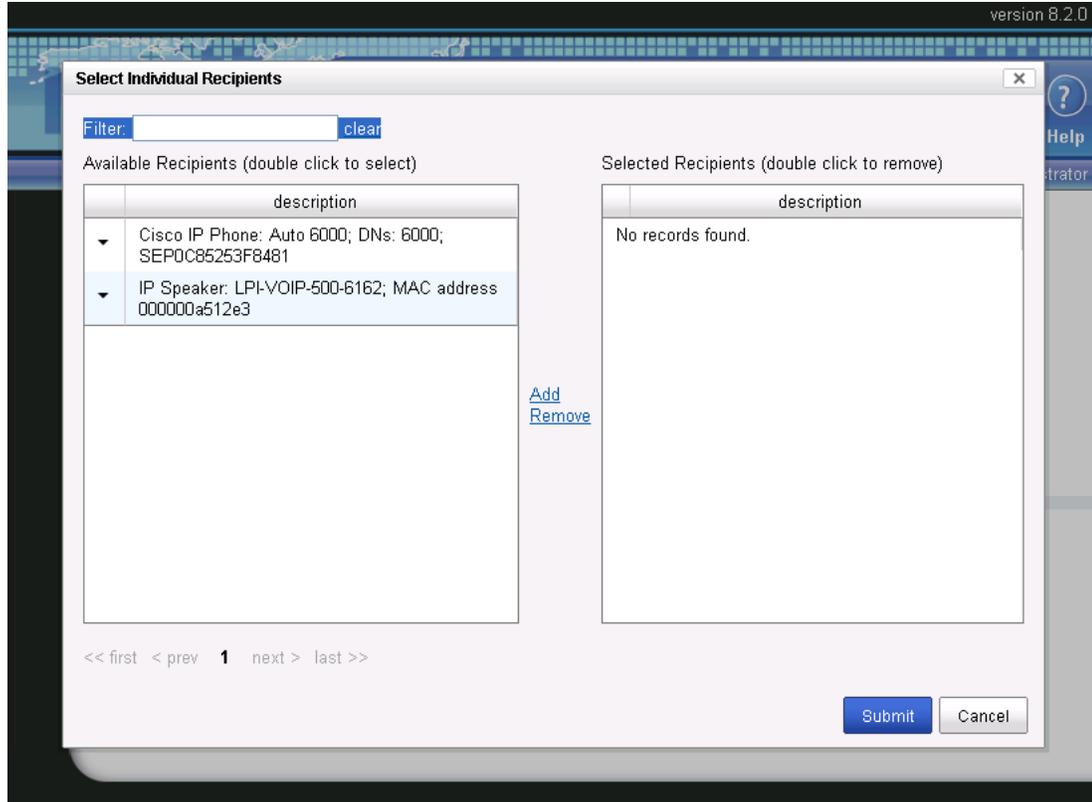
Filter with Rules

Exclusions EDIT

Exclusions are only available when the Recipient Group is Filtered by Recipient Groups or Rules.

VIEW CANCEL UPDATE

16. Select the IP Speakers on the left, and then click **Add** to move them to the right. Click **Submit** once the IP Speakers have been added.



17. Click **Update**.

The screenshot displays the InformaCast web application interface. At the top, there is a navigation bar with icons for Home, Messages, Recipients, Speakers, Bells, and Admin. Below the navigation bar, the main content area is titled "Recipients | Edit Recipient Groups | Add Recipient Group". On the left side, there is a sidebar with a group of people icon. The main form contains the following fields:

- Name:** LPI-VOIP-500-6162 (required)
- Dial Code:** (empty field)
- Tags:** (empty field) with an "Add A Tag" dropdown menu.

Below the form, there is a section titled "Select Recipients" with the following options:

- Individually** (EDIT)
- Filter with Recipient Groups** (EDIT)
- Filter with Rules**
- Exclusions** (EDIT)

A summary line shows: "IP Speaker: LPI-VOIP-500-6162; MAC address 000000a512e3". A note below the options states: "Exclusions are only available when the Recipient Group is Filtered by Recipient Groups or Rules." At the bottom of the form, there are three buttons: "VIEW", "CANCEL", and "UPDATE".

18. The new Recipient Group will now be shown.



version 8.2.0

Home Messages Recipients Speakers Bells Admin Plugins Help

Log Out Temporary Administrator

Recipients | Edit Recipient Groups

LPI-VOIP-500-6162 saved.

UPDATE Discover current IP phone information from Communications Manager (may be time consuming).

SHOW ALL Show Defunct Phones

PREVIOUS Page 1 of 1 NEXT Jump to page: GO Show 50 results per page Filter:

ADD

Name	Dial Code	Phones	Other Recipients	Speakers	Action
(All Recipients)	*	1	0	1	EDIT COPY DELETE
LPI-VOIP-500-6162		0	0	1	EDIT COPY DELETE

PREVIOUS Page 1 of 1 NEXT Jump to page: GO Show 50 results per page

19. To send a test broadcast select **Messages**.



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Home Messages Recipients Speakers Bells Admin Plugins Help

Log Out Temporary Administrator

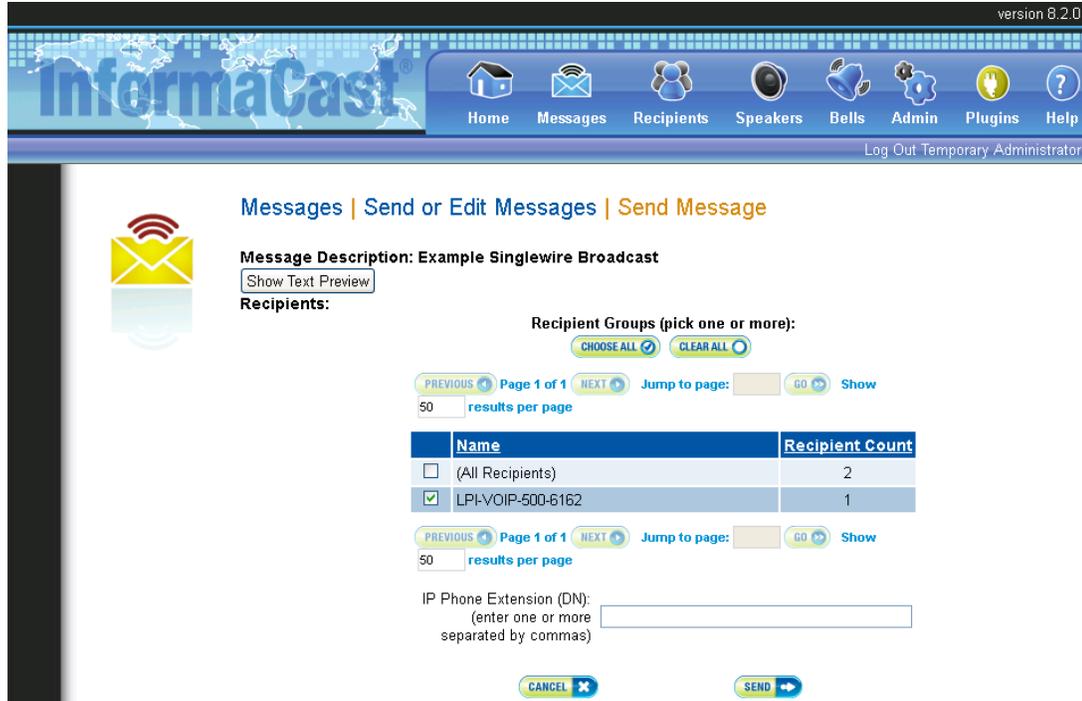
Messages | Send or Edit Messages

PREVIOUS Page 1 of 1 NEXT Jump to page: GO Show 50 results per page Filter:

ADD

Description	Display Short Text	Type	Action
(Example Ad-Hoc Broadcast)	This is an ad-hoc broadcast.	Ad-Hoc Audio §	SEND EDIT COPY DELETE
Example failed mail server	Email is down at \$(time) on \$(date)	Text §	SEND EDIT COPY DELETE
Example Hammer	This is a broadcast of an industrial sounding hammer	Text and Pre-Recorded Audio §	SEND EDIT COPY DELETE
Example Humoctopus Alert	There is a Humoctopus in the building! --This is only a test--	Text and Pre-Recorded Audio ° §	SEND EDIT COPY DELETE
Example Live Audio Broadcast		Live Audio °	SEND EDIT COPY DELETE
Example Monthly Meeting	Monthly company wide meeting is at 8:00. Press the details soft-key.	Text §	SEND EDIT COPY DELETE

20. Click **Send** next to the audio message of your choice. Select the Recipients, and then click **Send**.



version 8.2.0

Home Messages Recipients Speakers Bells Admin Plugins Help

Log Out Temporary Administrator

Messages | Send or Edit Messages | Send Message

Message Description: Example Singlewire Broadcast

Show Text Preview

Recipients:

Recipient Groups (pick one or more):

CHOOSE ALL CLEAR ALL

PREVIOUS Page 1 of 1 NEXT Jump to page: GO Show

50 results per page

	Name	Recipient Count
<input type="checkbox"/>	(All Recipients)	2
<input checked="" type="checkbox"/>	LPI-VOIP-600-6162	1

PREVIOUS Page 1 of 1 NEXT Jump to page: GO Show

50 results per page

IP Phone Extension (DN):
 (enter one or more separated by commas)

CANCEL SEND