

I. Introduction

This InformaCast 8.2.0 Integration Guide provides general instructions for integration of the **VOIP-500 Series Phone/WEBS Paging Modules** 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-500 Series Phone setup instructions, please consult the **VOIP-500 Series Phone Manual** and the **VOIP-500 Cisco UCM 8.x Integration Guide**.

II. Prerequisites

- Cisco Unified Communications Manager (CUCM), version 8.0 or higher pre-installed and functional
- **VOIP-500 Series Phone/WEBS Paging Modules** 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.

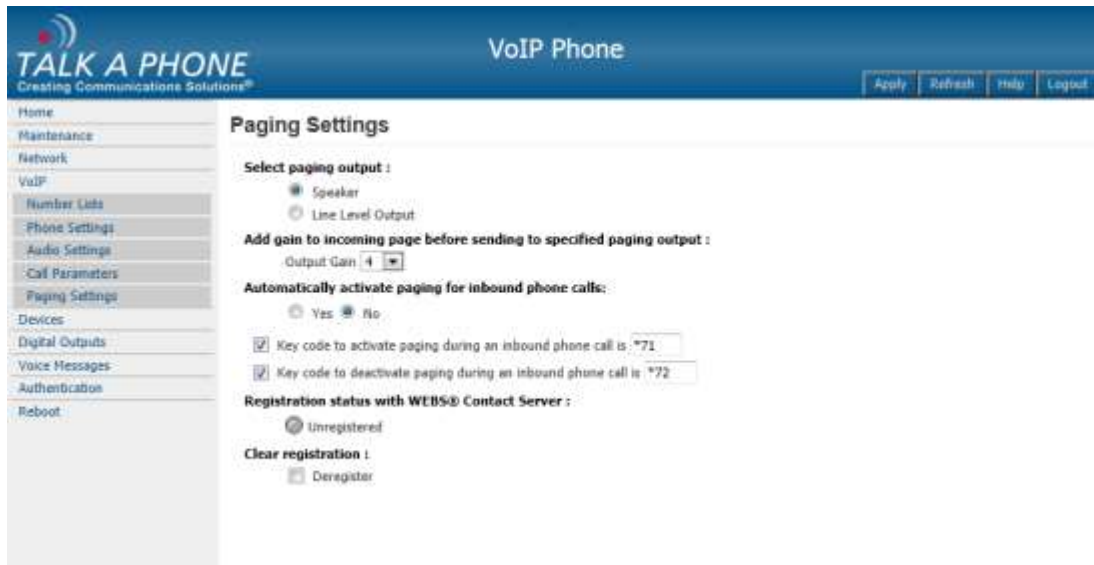
For further information, please see the Singlewire InformaCast LPI Installation and User Guide:
http://www.singlewire.com/pdf/LPI_Install_User_Guide.pdf

- Network access to the Singlewire InformaCast EX Server and **VOIP-500 Series Phone/WEBS Paging Module**

III. Talk-A-Phone VOIP-500 Series Phone/Paging Modules Configuration

Before configuring the **VOIP-500** to initiate broadcasts via DTMF, complete the steps outlined in the **VOIP-500 Cisco UCM 8.x Integration Guide**, and verify that the VOIP-500 is able to receive calls.

1. In the VOIP-500 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.

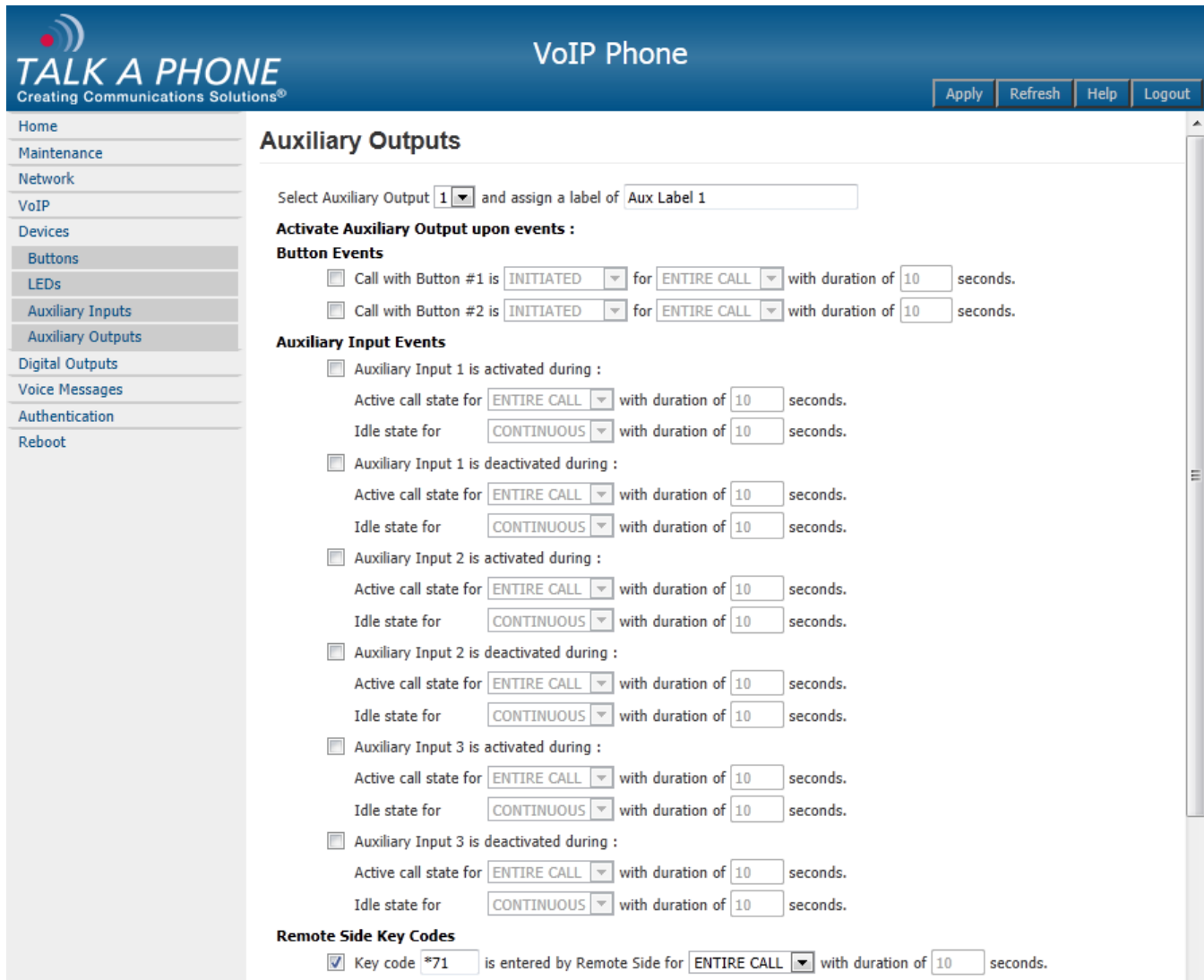
 - Add gain to incoming page before sending to specified output:**
Output Gain: Range from 1-20, default setting is 20

 - 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-500** may need to be configured to activate the amplifier. From the **VOIP-500** Main Menu select **Devices > Auxiliary Outputs**.



The screenshot shows the 'VoIP Phone' configuration page for 'Auxiliary Outputs'. The left sidebar contains navigation links: Home, Maintenance, Network, VoIP, Devices, Buttons, LEDs, Auxiliary Inputs, Auxiliary Outputs (selected), Digital Outputs, Voice Messages, Authentication, and Reboot. The main content area is titled 'Auxiliary Outputs' and includes the following sections:


- Select Auxiliary Output:** A dropdown menu set to '1' and a text box for 'Aux Label 1'.
- Activate Auxiliary Output upon events:**
 - Button Events:** Two checkboxes for 'Call with Button #1' and 'Call with Button #2'. Each is configured with 'INITIATED' for the event, 'ENTIRE CALL' for the state, and a duration of '10' seconds.
 - Auxiliary Input Events:** Three pairs of checkboxes for 'Auxiliary Input 1', 'Auxiliary Input 2', and 'Auxiliary Input 3'. Each pair includes 'activated during' and 'deactivated during' options. Each is configured with 'ENTIRE CALL' for the state and a duration of '10' seconds.
- Remote Side Key Codes:** A checked checkbox for 'Key code *71' is entered by Remote Side for 'ENTIRE CALL' with a duration of '10' 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 than those previously used.
6. Select **Authentication** from the **VOIP-500 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.


VoIP Phone

Apply
Refresh
Help
Logout

Home

Maintenance

Network

VoIP

Devices

Buttons

LEDs

Auxiliary Inputs

Auxiliary Outputs

Digital Outputs

Voice Messages

Authentication

Reboot

Authentication

Authentication for HTTP Management Interface :

Username

Password

Confirm Password

DTMF Authentication Code :

Guard Access Code *4* *

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

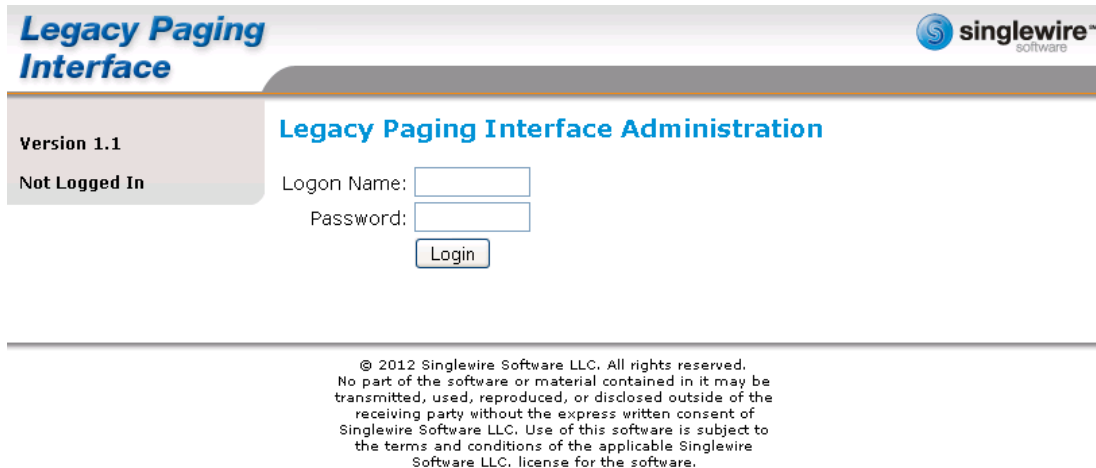
Password


Confirm Password

IV. Singlewire InformaCast Legacy Paging Interface Basic Configuration

Basic instructions for integrating a **VOIP-500 Series Phone/WEBS Paging Module** with Singlewire InformaCast Legacy Paging Interface Unified Call Manager 8.0.3a are included. Advanced setup of Singlewire InformaCast Legacy Paging Interface or InformaCast EX features is outside the scope of this document.

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:

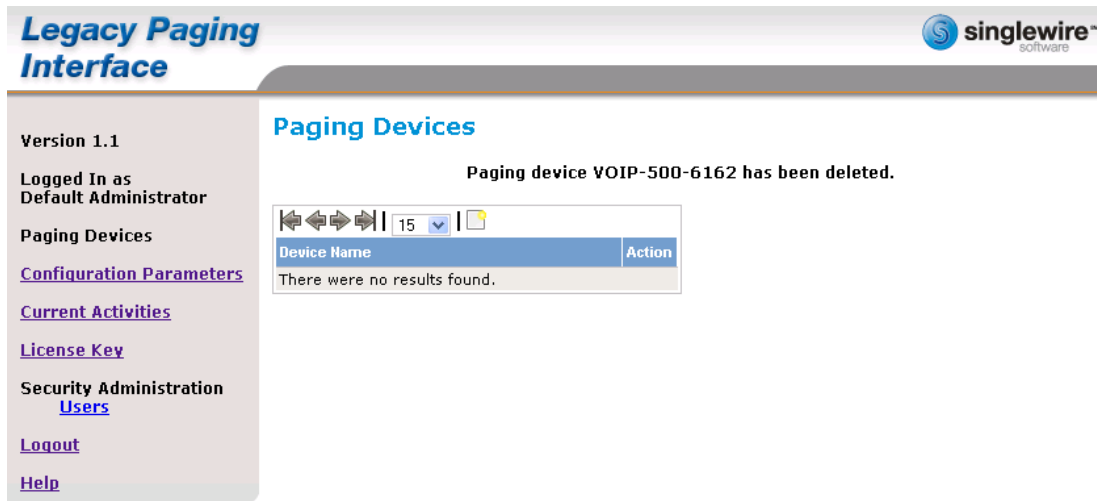
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2. Login to Singlewire LPI Administration:



The screenshot shows the 'Legacy Paging Interface Administration' page. The left sidebar contains a navigation menu with links: [Paging Devices](#), [Configuration Parameters](#), [Current Activities](#), [License Key](#), [Security Administration Users](#), [Logout](#), and [Help](#). The main content area has a title 'Legacy Paging Interface Administration' and a welcome message: 'Welcome to the Legacy Paging Interface administration page. Use the menu on the left to access administrative functions..'. Below the text is a large graphic with the text 'Legacy Paging Interface from Singlewire Software' and an image of various microphones and a blue Ethernet cable.

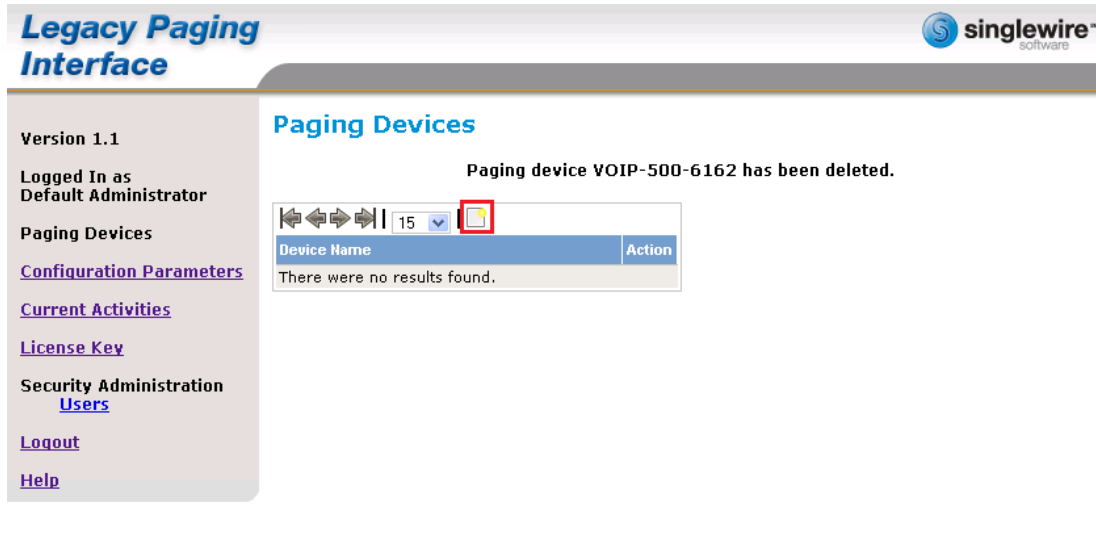
3. Before being able to broadcast to the **VOIP-500 Series Phone/WEBS Paging Module**, Paging Devices and paging zones must first be added to LPI. Begin by selecting **Paging Devices** in the LPI menu:



The screenshot shows the 'Legacy Paging Interface Paging Devices' page. The left sidebar is identical to the previous screenshot. The main content area has a title 'Paging Devices' and a message: 'Paging device VOIP-500-6162 has been deleted.'. Below the message is a table with a search bar and a table header. The search bar contains '15' and a dropdown arrow. The table header has two columns: 'Device Name' and 'Action'. Below the header, the text 'There were no results found.' is displayed.

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- Click the link to add a new Paging Device.



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 Devices

Paging device VOIP-500-6162 has been deleted.

Navigation: [Back] [Forward] [Refresh] [15] [Add] [Delete]

Device Name	Action
There were no results found.	

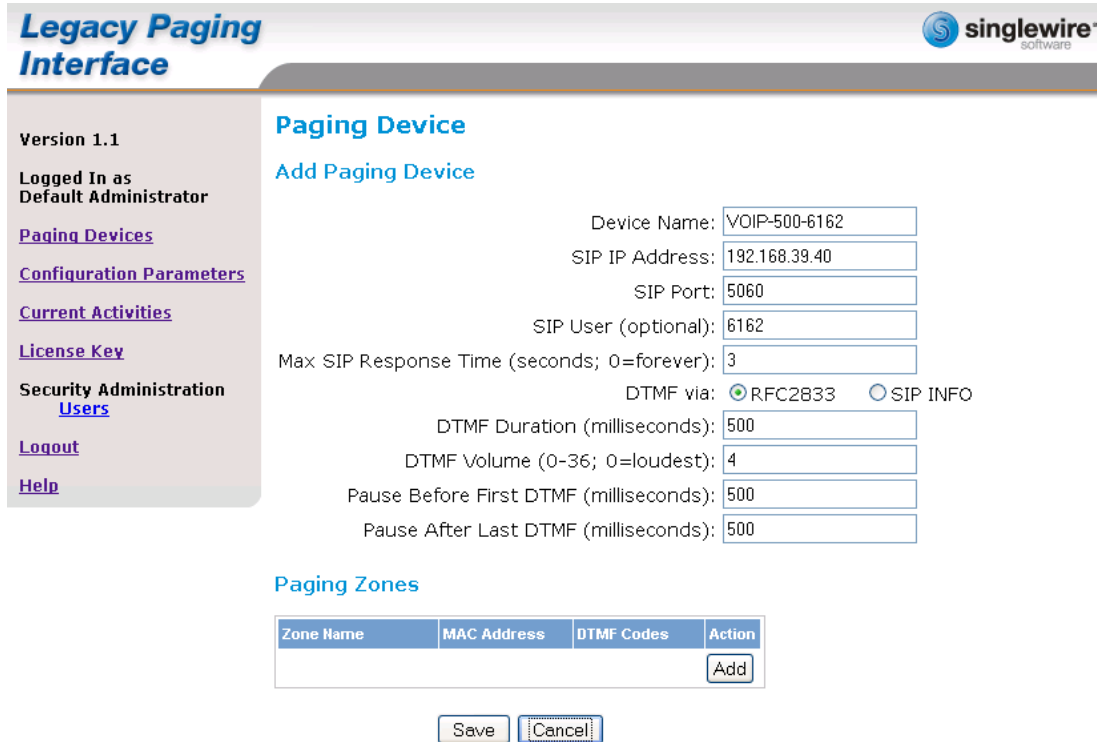
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5. Enter the following fields to create a new Paging Device:

Device Name: A unique name for each **VOIP-500 Series Phone/WEBS Paging Module**.

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

SIP User: The extension associated with the **VOIP-500 Series Phone/WEBS Paging Module**.



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-500 Series Phone/WEBS Paging Module**. They are not for specific zone control.

Legacy Paging Interface



Version 1.1

Logged In as
Default Administrator

[Paging Devices](#)

[Configuration Parameters](#)

[Current Activities](#)

[License Key](#)

[Security Administration](#)
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[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):

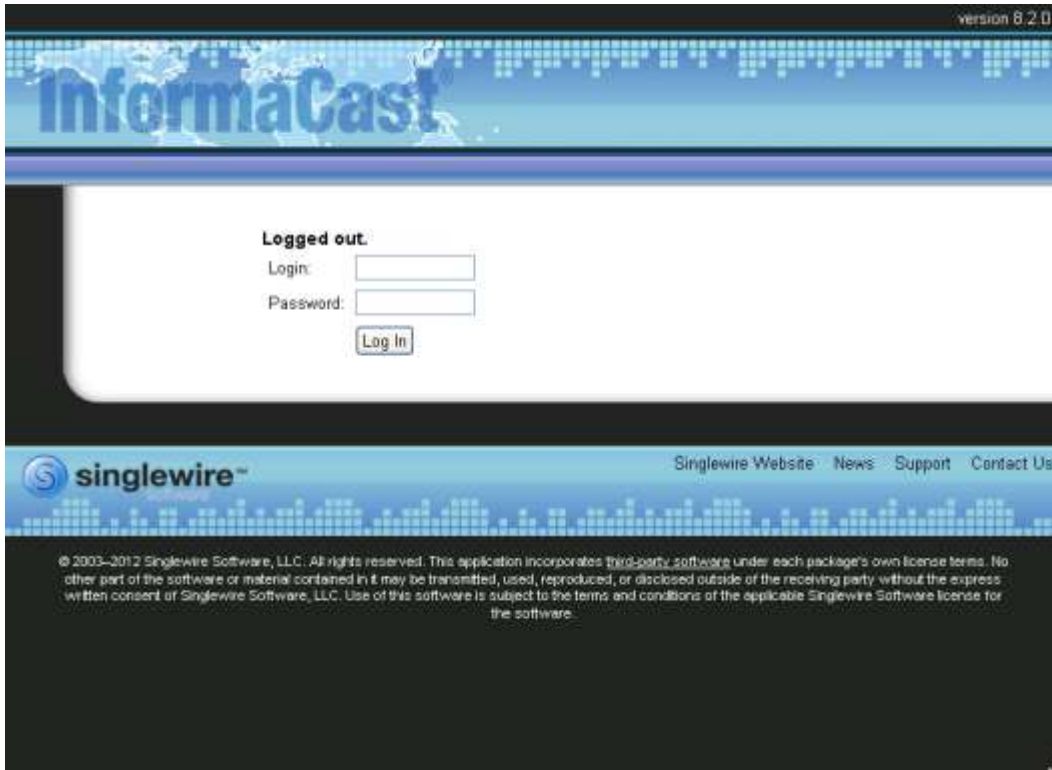
Pause Before First DTMF (milliseconds):

Pause After Last DTMF (milliseconds):

Paging Zones

Zone Name	MAC Address	DTMF Codes	Action
Lab	000000A512E3		Delete
			Add

- 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.



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.



The screenshot shows the InformaCast EX 8.2.0 web interface. The top navigation bar includes links for Home, Messages, Recipients, Speakers, Bells, Admin, Plugins, and Help. The main content area is titled 'Speakers | Edit IP Speakers | Add IP Speaker'. The 'Add IP Speaker' form contains the following fields:

- IP Speaker Name: (required)
- Speaker Description:
- Dial Code: (numeric shortcut for optional phone interface)
- MAC Address: (required, 12 hex digits)
- Volume:

Buttons for 'CANCEL' and 'ADD' are located at the bottom of the form. The footer of the interface includes the Singlewire logo and links for Singlewire Website, News, Support, and Contact Us.

11. Click **Add**.



version 8.2.0

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):

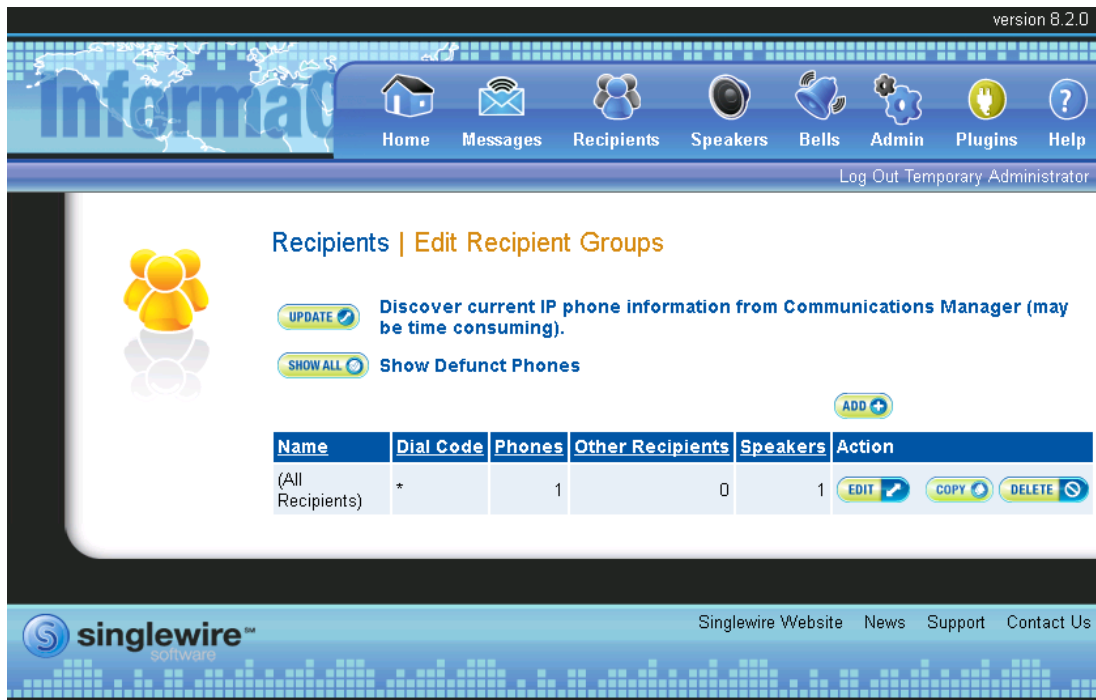
Name	Description and Status	Dial Code	Vol	MAC address	Action
<input type="checkbox"/> LPI-VOIP-500-6162	LPI-VOIP-500-6162 Status: Registered at Thu Nov 15 14:46:47 CST 2012, IP=192.168.39.30		10	000000a512e3	EDIT DELETE TEST

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**



version 8.2.0

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

ADD

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

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13. 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.




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

version 8.2.0


Informa

Home Messages Recipients Speakers Bells Admin Plugins Help

Log Out Temporary Administrator



Recipients | [Edit Recipient Groups](#)

[Edit Recipient Groups](#) Recipient group members updated


[Edit Tags](#)

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

[SHOW ALL](#) Show Defunct Phones

[ADD](#)

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


Singlewire Website [News](#) [Support](#) [Contact Us](#)

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



The screenshot shows the InformaCast EX 8.2.0 web interface. The top navigation bar includes icons for Home, Messages, Recipients, Speakers, Bells, Admin, Plugins, and Help. The main content area is titled "Recipients | Edit Recipient Groups | Add Recipient Group". On the left is an icon representing a group of people. The form contains the following fields:

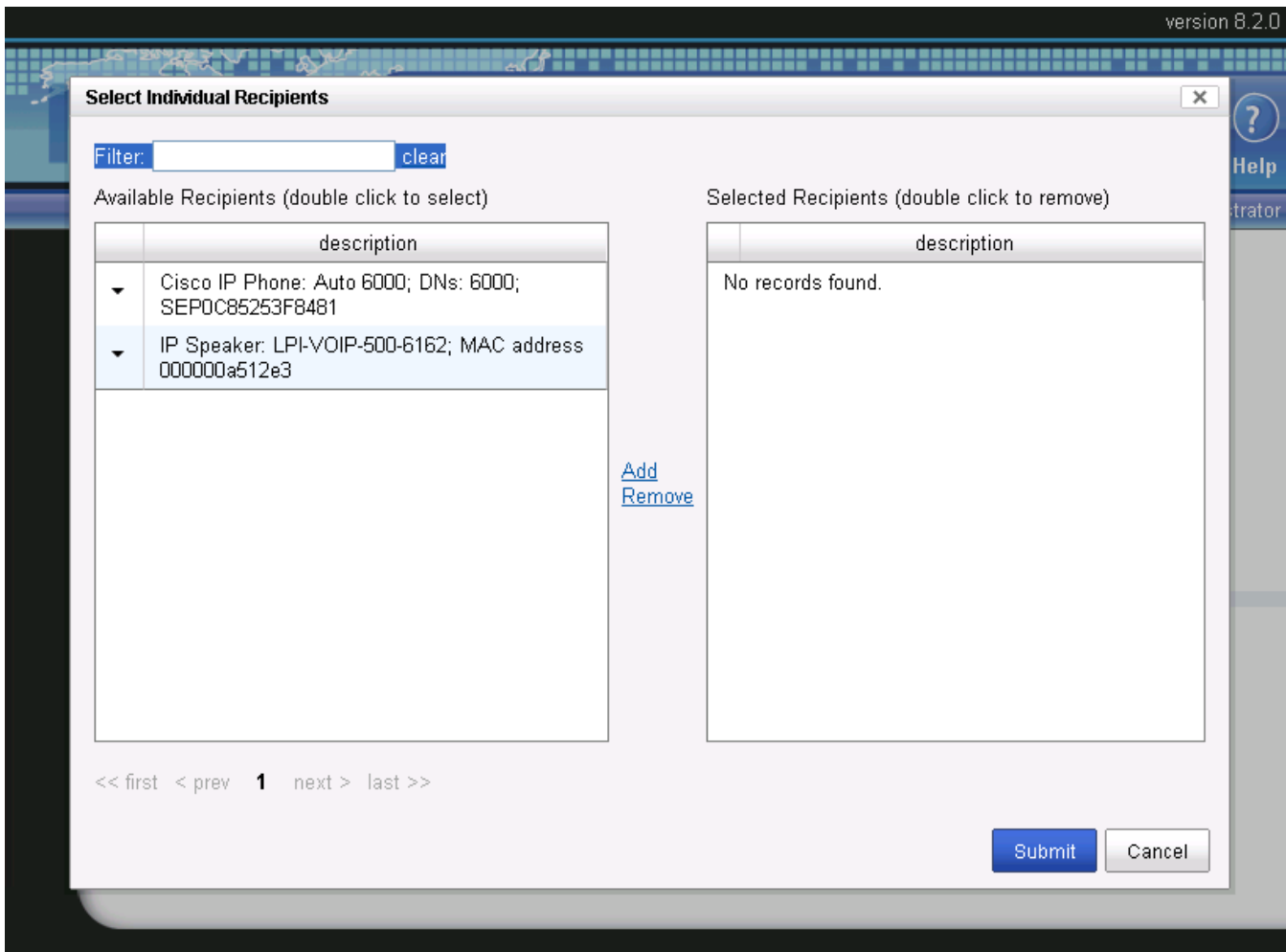
- Name:** LPI-VOIP-500-6162 (required)
- Dial Code:** (empty)
- Tags:** (empty) with an "Add A Tag" dropdown menu.

Below the form is the "Select Recipients" section with the following options:

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

A note states: "Exclusions are only available when the Recipient Group is Filtered by Recipient Groups or Rules." At the bottom of the form are buttons for VIEW, CANCEL, and 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 shows the InformaCast web interface. At the top, there is a navigation bar with icons for Home, Messages, Recipients, Speakers, Bells, and Admin. The main content area is titled "Recipients | Edit Recipient Groups | Add Recipient Group". On the left, there is a sidebar with a group of people icon. The main form has three fields: "Name" (LPI-VOIP-500-6162), "Dial Code", and "Tags". Below the form, there are options to "Select Recipients" (Individually, Filter with Recipient Groups, Filter with Rules, Exclusions) and a "VIEW" button. The "Individually" option is selected, and the "VIEW" button is highlighted.

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

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

results per page

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



version 8.2.0

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

Recipients:

Recipient Groups (pick one or more):

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-500-6162	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)