InformaCast integration with CUCM using CTI Route Point

This document explains the integration of InformaCast Paging Server with CUCM using CTI RP with an Example.

Scenario:

Directory Numbers in the CUCM are 1001, 1002, 1003 and 1004.

1003 will dial InformaCast number 1555 to broadcast live audio to 1001,1002 and 1004.

The region is configured to have G.711 µLaw between Informcast CTI RP and Phones.

Configuration Steps:

Step 1:

Create an SNMP public string in CUCM under Cisco Unified Serviceability/Snmp/V1V2/Community String.

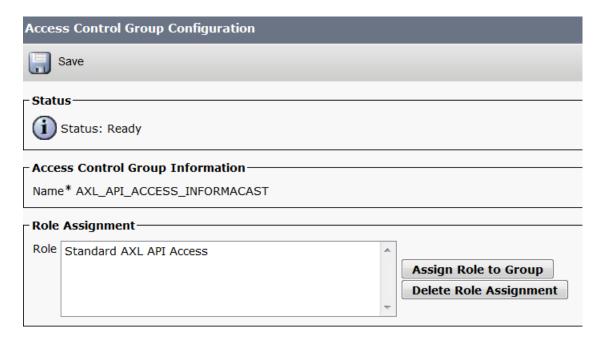
Search Results				
	Community String Name	Access Privileges		
	public	ReadNotifyOnly		

Create CTI Route Point with Directory Number 1555.

Device is trusted		
Device Name*	Informacast_RP	
Description	Informacast_RP	
Device Pool*	G711 ▼	<u>View Details</u>
Common Device Configuration	< None > ▼	View Details
Calling Search Space	< None > ▼	
Location*	Hub_None ▼	
User Locale	< None > ▼	
Media Resource Group List	< None > ▼	
Network Hold MOH Audio Source	< None > ▼	
User Hold MOH Audio Source	< None > ▼	
Use Trusted Relay Point*	Default ▼	
Calling Party Transformation CSS	< None > ▼	
Geolocation	< None > ▼	
■ Use Device Pool Calling Party T	ransformation CSS	
Association		
פאד: Line [1] - 1555 (no partition)	

Step 3:

Create an Access Control Group and assign Role "Standard AXL API Access" to it.



Step 4:

Create an Application user with the following Access Control Groups and Select the created CTI Route Point in Controlled Devices.

- Standard AXL API Access Group (The one Created in Step 3)
- Standard CTI enabled
- Standard CTI Allow Control of Phones supporting Connected Xfer and conf,
- Standard CTI Allow Control of Phones supporting Rollover Mode,

Applicatio	n User Configur	ation			
Save	Delete	Copy 🔓 Add New			
User ID*		informacast			Edit Credential
Password		•••••	•••		
Confirm P	assword	•••••	•••		
Digest Cre	edentials				
Confirm D	Digest Credentials				
BLF Prese	ence Group*	Standard Presence group	•		
Accept	t Presence Subscr	iption			
Accept	t Out-of-dialog RE	FER			
Accept	t Unsolicited Notifi	cation			
Accept	t Replaces Header				
– Davice Ir	nformation——				
Available I		Auto assistantias Tassalata			
Available	Devices	Auto-registration Template SEP0050B67860D5			Device Association
		SEP0CD9969019E6			Find more Route Points
		SEP0CD996901DDA SEPD0574CF720D5		₩	Tind more Route Forms
		**			
Controlled	d Devices	Informacast_RP		_	
				_	
_ Dawniss	iona Informatia				
l .	ions Informatio				
Groups		SS_INFORMACAST ow Control of Phones supporting Co			
		ow Control of Phones supporting Ro		_	to Access Control Group
	Standard CTI En			Rem	ove from Access Control Group
Polos	0		/iew Details		
Roles	Standard AXL A	PI Access ow Control of Phones supporting Conn			
		ow Control of Phones supporting Rollov			
	Standard CTI En	abled	Vious Data	sile.	
			View Deta	IIIS	

Step 5:

Enter the Application user credential, IP address of the CUCM, SNMP community name etc as below in the InformaCast Webpage;

Admin | Telephony | CUCM Cluster | Edit Telephony Configuration

Telephony Configuration

Communications Manager Cluster Description:	CUCM	(required)
Communications Manager Application User:	informacast	(required)
Communications Manager Application Password:	•••••	
Confirm Application Password:	•••••	
	Use Application User	for AXL
Communications Manager AXL User:	informacast	(required)
Communications Manager AXL Password:	•••••	
Confirm AXL Password:	•••••	
AXL IP Address(es):	10.106.104.201	
Communications Manager IP Address(es):	10.106.104.201	(required)
SNMP Community Name:	•••••	
Confirm SNMP Community Name:	•••••	

Step 6:

Got to Recipients and do the "update", this will pull the Phones those are registered to CUCM.

Recipients | Edit Recipient Groups



UPDATE 29 Discover current IP phone information from Communications Manager (may be time consuming).

Step 7:

Create a Recipient Groups with the phones required to be part of the broadcast.

In this example, Group 1 for Directory Numbers 1001, 1002 and 1004.

Recipients | Edit Recipient Groups | Add Recipient Group

Name	Group1	(required)
Tags		Add A Tag ▼

Select Recipients



Step 8:

Go to Dial Cast and Configure the Dialing Pattern for the Group 1. Dialing Pattern nothing but the CTI RP Number created.



Step 9:

This is an Important Step. InformaCast can send the commands for broadcast either using JTAPI or HTTP.

Here below explains both the methods, "Option A" for JTAPI and "Option B" for HTTP.

Customers can select either Option A or B. Prefer configuring "Option A" because it doesn't need any changes in the enterprise parameters.

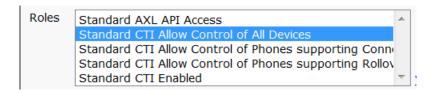
Option A - JTAPI METHOD

Check the "Send Commands to Phones by JTAPI"

Admin | Broadcast Parameters



Associate role "Standard CTI allow control for all Devices" to the application user created in step 4.



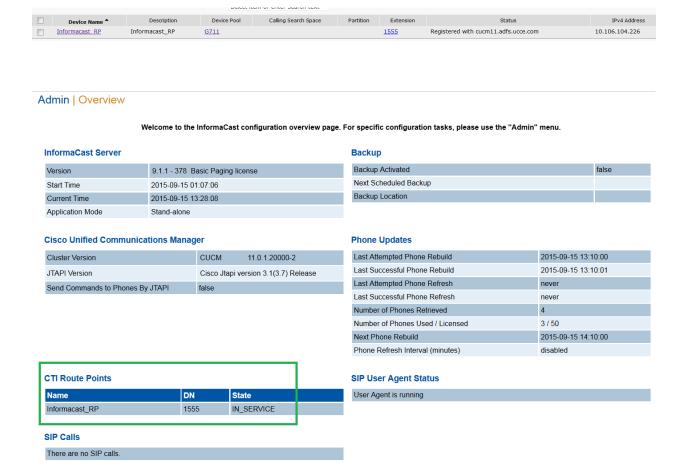
Option B - HTTP Method

- Enable Web access for supported IP Phones and reset phones.
- Configure the URL "http://<InformaCast IP>:8081/InformaCast/phone/auth" for Secured Authentication URL and URL Authentication under CUCM Enterprise Parameters Configuration.

By completing the all 9 Steps above, User 1003 can dial InformaCast number 1555 then broadcast live audio to all phones in the Group 1.

Troubleshooting

➤ Verify the CTI Route Point shows IN_SERVICE and the CTI RP is registered in CUCM.



To see the active calls;

InformaCast -	Calling Terminal Di	agnostics					
CTI Ports							
NAME	TERMINAL STATE	REGISTERE	D ON	MARKED FOR DELETION	DN	ACTIVE CALLS	USER DESCRIPTION
CTI Route Points							
NAME		DN	STATE	ACTIVE CALLS			
Informacast_RP		2555	IN_SERVICE	Call ID : 11121/1 Calling :	2005 Called : 2555		

Logs:-

- > CTI Manager and Call Manager Logs from CUCM
- Summary Log, Performance Log from InformaCast

Help | Support

Your version of help is dependent on your version of Communications Manager. InformaCast Basic Paging requires that your version of Communications Manager be 8.5 or later

If you have Communications Manager 8.5 or later, you can contact Cisco directly for help: http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html or click the Help icon and view InformaCast's installation and user guide.

If you have a version of Communications Manager previous to 8.5, you have the following options:

- Click the Try icon to start your 60-day free trial of InformaCast Advanced Notification
- Click the **Buy** icon to obtain a demonstration, subscription, or purchased license for InformaCast Advanced Notification

Support links

- Calling Terminal Diagnostics
- Log Tool Collects and analyzes Singlewire log files for errors.
- Summary Log
- Performance Log
- <u>SIP Stack Log</u> (used when detailed logging is inactive)
- <u>SIP Stack Debug Log</u> (used when detailed logging is active)
 - Packet Capture from Informacast:

Here below the procedure to collect the packet capture from InformaCast.

- a. Connect to the CLI of the InformaCast over SSH.
- b. To start the Capture Enter the command "sudo capturePackets <File Name>"
- c. Use CTrl+C to stop the capture.
- d. To transfer the file to the SFTP;sftp <username>@<IP address of the SFTP Server>Put <filename>

Example:

admin@singlewire:~\$

```
admin@singlewire:~$ sudo capturePackets siptest.cap
tcpdump: listening on eth0, link-type EN10MB (Ethernet), capture size 1500 bytes
admin@singlewire:~$ ls
siptest.cap
```

```
admin@singlewire:~$ sftp cisco@10.106.104.247
Authenticated with partial success.
cisco@10.106.104.247's password:
Hello, I'm freeFTPd 1.0Connected to 10.106.104.247.
sftp> put siptest.cap
Uploading siptest.cap to /siptest.cap
siptest.cap 100% 4226 4.1KB/s 00:00
sftp>
```