

Avaya Solution & Interoperability Test Lab

Application Notes for Syn-Apps SA-Announce with Avaya IP Office and Avaya 9600 and 96x1 Series IP Deskphones -Issue 1.0

Abstract

These Application Notes describe the steps required to integrate Syn-Apps SA-Announce with Avaya IP Office and Avaya 9600 and 96x1 Series IP Deskphones. Syn-Apps SA-Announce is a paging and mass notification solution that integrates with Avaya IP Office via SIP trunks to provide audio, text, and graphic notification across an organization. Syn-Apps SA-Announce delivers real-time, pre-recorded or scheduled announcements to Avaya 9600 and 96x1 IP Deskphones using the Push API. Audio announcements can also be delivered to the Syn-Apps C2 Ceiling Speaker.

Readers should pay attention to Section 2, in particular the scope of testing as outlined in Section 2.1 as well as the observations noted in Section 2.2, to ensure that their own use cases are adequately covered by this scope and results.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

These Application Notes describe the steps required to integrate Syn-Apps SA-Announce with Avaya IP Office and Avaya 9600 and 96x1 Series IP Deskphones. Syn-Apps SA-Announce is a paging and mass notification solution that integrates with Avaya IP Office via SIP trunks to provide audio, text, and graphic notifications across an organization. Syn-Apps SA-Announce delivers real-time, pre-recorded or scheduled announcements to Avaya 9600 and 96x1 IP Deskphones using the Push API. Audio announcements can also be delivered to the Syn-Apps C2 Ceiling Speaker.

Avaya 9600 and 96x1 Series IP Deskphones running H.323 software subscribe to Syn-Apps SA-Announce to receive XML-based data pushed by SA-Announce. The data is sent by SA-Announce in the form of alerts via Multicast traffic to the Avaya IP deskphones.

2. General Test Approach and Test Results

This section details the general approach to the testing, what was covered, and results of the testing. If the testing was successfully concluded but it was necessary to implement workarounds or certain non-critical features did not work, it should be noted in **Section 2.2**.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

The interoperability compliance test included feature and serviceability testing. The feature testing focused on sending audio, text, and graphic notification alerts from Syn-Apps SA-Announce to Avaya 9600 and 96x1 IP Deskphones using the Push API. When a call was placed to SA-Announce, the appropriate notification alert was sent to all the Avaya IP deskphones, including the V2 Ceiling Speaker, when appropriate. The extension dialed determined which notification alert was triggered.

The serviceability testing focused on verifying that SA-Announce comes back into service after re-connecting the Ethernet connect or rebooting the server.

2.1. Interoperability Compliance Testing

Interoperability compliance testing covered the following features and functionality:

- Established a SIP trunk between SA-Announce and IP Office.
- Subscribed Avaya 9600 and 96x1 IP Deskphones to SA-Announce for notification alerts using the Push Interface API.
- Verified Avaya 9600 and 96x1 IP Deskphones running H.323 software, including the following phone types: 9611, 9620, 9621, 9630, 9641, and 9650.

JAO; Reviewed:	Solution & Interoperability Test Lab Application Notes	2 of 34
SPOC 10/3/2014	©2014 Avaya Inc. All Rights Reserved.	Syn-Apps-IPO9

- Verified audio alerts to the Syn-Apps V2 Ceiling Speaker.
- Verified various types of alerts and notification sent by SA-Announce to Avaya IP Deskphones, including:
 - Weather Alerts
 - Amber Alerts
 - Emergency Alerts
 - Audio Alerts
 - RecordNPlay Notifications
- Proper system recovery after a restart of the SA-Announce server and loss of IP connectivity.

2.2. Test Results

All test cases passed with the following observation:

 Due to an issue between the Syn-Apps Paging Relay and Avaya 9600 Series IP Deskphones, the Paging Relay is not supported as part of this solution.

2.3. Support

For technical support on SA-Announce or V2 Ceiling Speaker, contact Syn-Apps support via phone, email, or website.

- **Phone:** (866) 664-6071
- Email: <u>support@syn-apps.com</u>
- Web: <u>http://www.syn-apps.com/support</u>

3. Reference Configuration

Figure 1 illustrates a sample configuration consisting of Syn-Apps SA-Announce and Syn-Apps V2 Ceiling Speaker with Avaya IP Office and 9600/96x1 IP Series IP Telephones. SA-Announce was the trusted push server to which the Avaya IP deskphones subscribed. SA-Announce integrated with IP Office via a SIP trunk interface. Calls were routed to SA-Announce, and based on the dialed digits, the appropriate audio, text, and graphic notification alert would be sent to the Avaya IP deskphones using the Avaya Push Interface API.



Figure 1: Syn-Apps SA-Announce and Syn-Apps V2 Ceiling Speaker with Avaya IP Office and Avaya 9600/96x1 Series IP Deskphones

4. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Equipment/Software	Release/Version
Avaya IP Office 500 V2	9.0.2.0 (Build 860)
Avaya 9600 Series IP Deskphones	3.212A (H.323)
Avaya 96x1 Series IP Deskphones	6.3116 (H.323)
Syn-Apps SA-Announce	9.0.11
Syn-Apps V2 Ceiling Speaker	6.2.2

Note: Testing was performed with IP Office 500 v2 R9.0, but it also applies to IP Office Server Edition R9.0. Note that IP Office Server Edition requires an Expansion IP Office 500 v2 R9.0 to support analog or digital endpoints or trunks. IP Office Server Edition does not support TAPI Wave or Group Voicemail.

5. Configure Avaya IP Office

This section provides the procedures for configuring Avaya IP Office. The procedures include the following areas:

- Verify IP Office license
- Obtain LAN IP address
- Enable SIP trunks
- Administer SIP line
- Administer incoming call route
- Administer short code
- Administer H.323 stations subscribing to SA-Announce (i.e., Trusted Push Server)

5.1. Verify IP Office License

From a PC running the Avaya IP Office Manager application, select **Start** \rightarrow **Programs** \rightarrow **IP Office** \rightarrow **Manager** to launch the Manager application. Select the appropriate IP Office system and log in with the appropriate credentials.

The **Avaya IP Office R9 Manager** screen is displayed. From the configuration tree in the left pane, select **License**. Verify that the **SIP Trunk Channels** license is "Valid", and that the **Instances** value is sufficient for the desired maximum number of simultaneous faxes.

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Service (0)	RAS LRQ Support (Rapid Response)	_KKPzAvKEGCyOFeF18os_06cXOVRszIM	255	Valid	
Incoming Call Route (5)	IP500 Universal PRI (Additional cha	0ntqlI6yMXI_KGCLfMrm526FdScEEJ2m	255	Valid	=
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Directory (0)	SIP Trunk Channels	ly11xs6i5GpcAELGW8E5_PiArCuAGccc	255	Valid	
	VCM Channel Migration	B4MB@ay8gAEiUuBvHfL16ArEeyEqrLdW	255	Valid	
Firewall Profile (1)	IP500 Voice Networking Channels	aT1LTVbn5DhDqxmAv_r4ggrQwTx0UCL1	4	Valid	
Account Code (0)	IP500 Upgrade Standard to Profess	u4B673d6SOGDG7_rvoe3HmwCYIpgjw09	255	Obsolete	
License (77)	IP500 Voice Networking Channels	NqN3mwLvEDKq4s8Ati88xd8hvjcOdL@c	255	Valid	
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5.2. Obtain LAN IP Address

From the configuration tree in the left pane, select **System** to display the **System** screen for the IP Office 500 V2 in the right pane. Select the **LAN1** tab, followed by the **LAN Settings** sub-tab in the right pane. Note that IP Office can support SIP trunks on the LAN1 and/or LAN2 interfaces. The compliance testing used the LAN1 interface.

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5.3. Enable SIP Trunks

Select the VoIP sub-tab. Ensure that SIP Trunks Enable is checked as shown below.

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5.4. Administer SIP Line

From the configuration tree in the left pane, right-click on Line and select New \rightarrow SIP Line from the pop-up list to add a new SIP line. Select the SIP Line tab and verify that the Check OOS checkbox is not selected. SA-Announce does not respond to SIP Options messages so by deselecting this field, IP office would not take down the SIP trunk if a response to the SIP Options message is not received. Although, this field is deselected, IP Office still sends a periodic SIP Options message.

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Select the **Transport** tab in the right pane. For **ITSP Proxy Address**, enter the IP address of SA-Announce. Retain the default values for the remaining fields. Note that the SIP transport protocol and port are specified in this screen. For the compliance test, the SIP trunk support UDP transport on port 5060.



Select the **SIP URI** tab, and click **Add** to display the **New Channel** section.

Enter the wildcard character "*" for Local URI. Enter the SIP line number for Incoming Group and Outgoing Group. Set Max Calls per Channel to the desired maximum number of calls to support. Retain the default values in the remaining fields.

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Solution & Interoperability Test Lab Application Notes ©2014 Avaya Inc. All Rights Reserved. The screen is updated as shown below.

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Select the **VoIP** tab. For **Codec Selection**, select "Custom" and select the applicable G.711 codec variant in the expanded list.

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5.5. Administer Incoming Call Route

From the configuration tree in the left pane, right-click on **Incoming Call Route**, and select **New** from the pop-up list to add a new route. For **Line Group Id**, select the incoming group number from **Section 5.4**, which corresponds to the SIP line, in this case "17".

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Select the **Destinations** tab. For **Destination**, enter "." to match any dialed number.

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5.6. Administer Short Code

From the configuration tree in the left pane, right-click on **Short Code** and select **New** from the pop-up list to add a new short code for calls to SA-Announce. In the compliance testing, extensions were assigned to each notification alert on SA-Announce. For example, 61000 was assigned to the Emergency Alert, 61001 was assigned to an Audio Alert, and 61002 was assigned to a RecordNPlay Alert.

For **Code**, enter "610N;". For **Feature**, select "Dial" from the drop-down list. For **Telephone Number**, enter "." to match any number. For **Line Group Id**, enter the outgoing group number from **Section 5.4**, which corresponds to the SIP line.

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5.7. Administer H.323 Stations Subscribing to Syn-Apps SA-Announce

This section covers the configuration of an H.323 station on IP Office. To create a H.323 station, an **Extension** and **User** needs to be added in IP Office.

From the configuration tree in the left pane, right-click on **Extension** and select New \rightarrow H323 **Extension** from the pop-up list to add a new H.323 extension. Enter the desired extension for the **Base Extension** field as shown below. In this example, the H.323 station was assigned extension *60000*.

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Select the **VoIP** tab and retain the default values in the all fields. During the compliance test, SA-Announce supported the G.711mu-law codec.

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From the configuration tree in the left pane, right-click on **User** and select **New** from the pop-up list. Enter desired values for the **Name** and **Full Name** fields. For the **Extension** field, enter the H.323 extension created above. Specify the **Password** used for the station to register with IP Office. Re-enter the password in the **Confirm Password** field. The additional tabs may be customized with additional features for the user.



Repeat the above procedure for each H.323 station that will subscribe to SA-Announce.

6. Configure Avaya 9600 and 96x1 Series IP Deskphones

SA-Announce uses the Avaya Push Interface API to send audio, text, and graphic notifications to Avaya IP deskphones. To authorize SA-Announce as a Trusted Push Server, the Push Interface settings in the **46xxsettings.txt** file must be configured properly. In turn, the Avaya IP deskphones must retrieve those settings during start-up. The procedures include:

- Download and modify the 46xxsettings.txt file.
- Copying the 46xxsettings.txt file to the SD card on Avaya IP Office.
- Setting the HTTP server on the Avaya IP deskphone to the Avaya IP Office IP address.

6.1. Download and Modify 46xxsettings.txt File

From Avaya IP Office Manager, navigate to File \rightarrow Advanced \rightarrow Embedded File Management as shown below.

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•		• III]	Initial Cor	nfiguratio	n			OK		Cancel		Help
Re	ady													F:

In **Embedded File Management**, navigate to **System** \rightarrow **Primary**. Right-mouse click on the 46xxsettings.txt file as shown in the image below. Download the file to the PC.

Manager - Embedded	File Management - devco	on-ipo [9.0.2.0 build 86	0) [Administrator]
File Edit View Help			
Folders	File	S	46xxsettings.txt
Folders	File Name 1400Boot25.bin 1400LngR10v09Packi 1400LngR10v11Packi 1400R32.bin 1400R32.bin 1403R03.BIN 1403R04.bin 1403R05.bin 2410_R6.bin 2420_R6.bin 4601dbte1_82.bin 4602dbte1_82.bin 4602dbte1_82.bin 4602dbte1_82.bin 4602dbte1_82.bin 5410_R6.bin 5410_R6.bin 5410_R6.bin 5410_R6.bin	S Size 79464 01 79464 01 103081 130542 130954 18099 177352 178120 178756 178838 66962 77011 768993 764865 765393 C4865 765393 Upload Upload	46xxsettings.txt Name: 46xxsettings.txt Date Modified : 11/03/2014 20:05:22 Size (bytes): 136,665 Attributes Read-only Read-only Hidden Image: Archive System Total Files In Current Folder 316 Total Space Used (bytes): 2,308,505,600 Space Remaining (bytes): 1,649,934,336
Ready	5420_R6.bin 5601bte1810.bin 5602dbte1806.bin 9500BootR14.bin 9500BootR15.bin 9500R27.BIN 9500R37.bin	Download Delete Ctrl+D Copy Ctrl+ Paste Ctrl- 20544 182873 180403 tot472 tot472	Del +C +V • III Help

On the PC running the Avaya IP Office Manager application, open the 46xxsettings.txt file and locate the PUSH INTERFACE SETTINGS. Edit the following parameters as follows:

- SET TPSLIST 192.168.100.205
- SET SUBSCRIBELIST <u>http://192.168.100.205/SA-</u> <u>Announce/PhoneServices/AvayaPhoneRegistration.aspx</u>

Note: Use the appropriate SA-Announce IP address and URL that corresponds to the customer's network.

Below are the Push Interface settings in the 46xxsettings.txt file.

```
##
## These settings are used to administer the Push interface.
## These parameters are not supported on 16cc SIP phones.
##
##
    The list of all the Trusted Push Servers.
   If set to "/", all servers are allowed.
##
   If set to null or blank, Push is disabled.
##
SET TPSLIST 192.168.100.205
##
##
    The list of all the Subscription Servers.
SET SUBSCRIBELIST http://192.168.100.205/SA-
Announce/PhoneServices/AvayaPhoneRegistration.aspx
##
##
```

Under the 46xx PUSH INTERFACE SETTINGS section, configure the following additional parameters:

- SET PUSHCAP 222
- SET WMLHOME <u>http://support.avaya.com/elmodocs2/avayaip/9600/home.wml</u>

Note: The WMLHOME parameter may be configured on a per phone type basis in the 46xxsettings.txt file. Make sure that the WMLHOME parameter is set under each phone type in the 46xxsettings.txt file or set the parameter in a section of the file where it would apply to all phone types as shown below. In other words, if the WMLHOME parameter is only set for 9650 phone type, the parameter would not be set for all other phone types, and text and graphic notifications would not be pushed to those phones.

```
##
## These settings are used to administer the Push interface
##
   The TCP port number for the telephone's HTTP server.
##
## (80-65535). The default is 80.
## SET PUSHPORT 80
##
##
  Push capabilities settings. PUSHCAP consists of 3 bits
   (each 0, 1, or 2). The rightmost bit controls the Top
##
##
    Line push mode. The middle bit controls the Web
##
    Browser push mode. The leftmost bit controls the Audio
##
    push mode.
##
##
    When PUSHCAP is set to 000, all push modes are disabled
##
    When PUSHCAP is set to 111, barge in only is allowed in
##
    all push modes.
##
##
    When PUSHCAP is set to 222, both barge in and normal
##
##
   pushes are allowed in all push modes.
SET PUSHCAP 222
SET WMLHOME http://support.avaya.com/elmodocs2/avayaip/9600/home.wml
##
```

After all the updates are made, save the 46xxsettings.txt file.

Return to Embedded File Management and upload the edited 46xxsettings.txt file to the memory card on IP Office.

Set the HTTP server on the Avaya IP deskphones to the IP address of IP Office.

After making the changes, click **File** \rightarrow **Save Configuration** from the Manager application for the changes to take effect on IP Office.

7. Configure Syn-Apps SA-Announce

This section provides the procedures for configuring SA-Announce. The procedures include the following areas:

- Configuring SIP trunk parameters
- Specify supported Avaya IP phone types
- Configure Groups

Access the Syn-Apps SA-Announce web interface using the URL "<u>http://ip-address</u>" in an Internet browser window, where "ip-address" is the IP address of the SA-Announce server. Log in using the appropriate credentials.

Refer to [2] for additional information on configuring SA-Announce.

File Edit View History Bookmarks Tools Help								
Syn-Apps SA-Announce × +								
(3 192.168.100.205/SA-Annou	← ④ 192. 168. 100. 205/SA-Announce/Login.aspx?ReturnUrl=http%3a%2f%2f マ C Soogle A <							
Anost Visited () Getting Started	Most Visited 🗍 Getting Started							
SA-Announce								
Groups Schedules	Services Settings Help)		Log On				
Create / Edit Groups	Rend Text Message	Message Browser		_				
Use this option to create and edit	Use this option to send a text	Use this option to browse						
Create / Edit Groups	Send Text Message	Message Browser						
			Login					
User:								
Password:	-							
' 😜 Login								

7.1. Configure SIP Trunk Parameters

Navigate to Services \rightarrow Broadcast Services \rightarrow Advanced Settings to configure SIP trunk parameters. Select *sipTransportType* in the Select a Setting field as shown below. Set the Setting Value field to *udp*. Click Save.

SA-AI	nnounce						
Groups	Schedules	Services	Settings	Help			Log Off administrator
[
Broadca	ast Services	E Ser	ver Redundancy	y			
Use this option	to manage the	Use this	option to manage				
broadcaster and se	cheduler services.	serve	rs in the cluster.				
Broadcast	Services	Serve	r Redundancy				
					Services >	Broadcast Service	s
Capricas Cat	tings Email	Cattings	Amber Alert	Mea	thar Alart	Advanced Settings	Log Level
Services Ser	cings Emails	Settings	Alliper Alere	wea	and Alere		Log Level
Manage the Service	as and Settings						
Manage the Service	es and settings						
Advanced Set	tings						
Advanced Set	ungo						
\wedge							
(\cdot)							
	WARNING: Char	nging advance	ed settings can o	ause s	vstem instab	ility. Generally these	settings should not be
	altered except w	hen directed	by support or th	ne man	ual. Some se	tting changes require	e further action be
	taken in order fo	or the setting	change to take	affect	IE Broadcast	ter Service Restart), th	ese will be noted in the
	description.						
	Select a Setting:	sip		e		-	
	-						
	Setting Descript	ion: The S	IP transport typ	e (Allov	ved values: u	udp, tcp).	
		(defa	ult: udp)				
		Broad	dcaster Restart F	Require	d		
	Setting Value:	udp					🐣 Save

Next, select *sipStartMediaOnAnswer* in the **Select a Setting** field and set the **Setting Value** field to *False* as shown below. Click **Save**.

SA-AI	nnounce						
Groups	Schedules	Services	Settings	Help			Log Off administrator
S Broadcast Services Use this option to manage the broadcaster and scheduler services. Broadcast Services		Use this serve Serve	ver Redundancy option to manage rs in the cluster. r Redundancy	1	Services >>	> Broadcast Services	
Services Set	tings Email :	Settings	Amber Alert	Wea	ther Alert	Advanced Settings	Log Level
Manage the Service	es and Settings						
Advanced Set	Advanced Settings Advanced Settings WARNING: Changing advanced settings can cause system instability. Generally these settings shou altered except when directed by support or the manual. Some setting changes require further actitaken in order for the setting change to take affect (IE Broadcaster Service Restart), these will be n description. Select a Setting: sipStartMediaOnAnswer Setting Description: If on the SIP engine will startMedia when onAnswer is hit, otherwise when onConnected is hit. Set to true on Avava					ttings should not be further action be se will be noted in the	
	Setting Value:	(defau	e				

Finally, select *sipStartMediaOnSecondAnswer* in the **Select a Setting** field and set the **Setting Value** field to *False* as shown below. Click **Save**.

SA-Annou	nce							
Groups S	chedules	Services	Settings	Help			Log Off administrat	tor
Broadcast Sen Use this option to man broadcaster and schedule Broadcast Servic	vices age the rr services.	Use this server	ver Redundancy option to manage rs in the cluster. r Redundancy					
					Services >	> Broadcast Service	s	_
Services Settings	Email Sett	tings ,	Amber Alert	Weat	ther Alert	Advanced Setting	5 Log Level	
Manage the Convices and	Cattings							
manage the services and	Settings							
Advanced Settings WAR altere taken descr	NING: Changir ed except wher n in order for ti ription.	ng advance n directed l he setting o	d settings can c by support or th change to take a	ause sj e man affect (/stem instabi ual. Some se IE Broadcast	lity. Generally these tting changes requir er Service Restart), th	settings should not be e further action be lese will be noted in th	e he
Selec	t a Setting: ng Description:	sipS If on t the se on for (Allow (defau	StartMediaOnS the SIP engine w cond time, othe r Avaya systems t red values: true, ult: false)	Secor vill star rwise that hi false).	tMedia when on the first o ave shuffling	▼ n onAnswer is hit inAnswer. Set to turned on		
Settir	ng Value:	Fals	e				👌 Save	

7.2. Specify Supported Avaya IP Phone Types

Specify the Avaya IP phone types that will receive SA-Announce notifications using the Push API. Navigate to **Settings** \rightarrow **IP Endpoint Setup** \rightarrow **XML Phones** and select the phone types in the **Available** section and move them to the **Selected** section. Click **Apply Changes**.

SA-Announce						
Groups Schedules	Services Settings	Help			Log Off adn	<u>ainistrator</u>
User Management Use this option to create users and manage their permissions. User Management	Multicast Settings Use this option to manage th multicast settings for SA-Annou Multicast Settings	he unce.	o manage IP ttings. t Setup			
				Settings >> IP Endpoint Se	tup	
XML Phones Multicast Phon	es Desktop Client Syr	yn-Apps IP Valcom	CyberData	Alertus Everbridge	Facebook Twitter	
Manage the system settings						
XML Enabled Phones Available 9621 -		Se 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	elected 1610 - 1611G - 1620C - 1620C - 1630G - 1630G - 1640G - 1641G - 1641G - 1650C -			

Specify the Avaya IP phone types that will receive SA-Announce notifications via multicast traffic. Navigate to **Settings** \rightarrow **IP Endpoint Setup** \rightarrow **Multicast Phones** and select the phone types in the **Available** section and move them to the **Selected** section. Click **Apply Changes**.

SA-Announce)			
Groups Schedules	Services Settings H	Help		Log Off administrator
User Management Use this option to create users and manage their permissions. User Management	Multicast Settings Use this option to manage the multicast settings for SA-Announce Multicast Settings	LP Endpoint Setup Use this option to manage IP endpoint settings. IP Endpoint Setup		
			Settings >> IP Endpoint Setup	
XML Phones Multicast Pho	nes Desktop Client Syn-	-Apps IP Valcom CyberData	Alertus Everbridge Facebook	Twitter
Manage the system settings				
Available 9621 -	5	 ✓ ✓		A

7.3. Configure Groups

This section covers the configuration of notification groups, inlcuding: Emergency, Audio, and RecordNPlay Alerts. Navigate to **Groups** \rightarrow **Create** / **Edit Groups**. Click on **New Group** to add a group of IP endpoints that will receive this alert when triggered. Note that the configuration below is displayed after the group had already been added. To add an Emergency Alert, provide a **Group Name** (e.g., *Emergency Alert* – 61000). Set the **Group Type** to *Emergency Alert* and specify the **Line Number** (e.g., 61000). When 61000 is dialed, the call is routed over the SIP trunk to SA-Announce. Based on the dialed number, SA-Announce will trigger this Emergency Alert. Under **Misc Settings**, the **Emergency** checkbox is selected so that this emergency alert would interrupt any active calls on phones that receive this alert. This Emergency Alert Settings, Timed Mode was selected and set to '1' so that the recording specified in the **Wav File to Play** field would play one time only. In addition, SA-Announce would push the text in the **Text to Send** field to the phone displays.

SA-Announce	Services Settings Helm			Log Off administrator			
Groups Schedules	Services Settings rielp						
🚮 Create / Edit Groups	Send Text Message	Message Browser					
Use this option to create and edit	Use this option to send a text	Use this option to browse					
SA-Announce paging groups. Create / Edit Groups	SA-Announce paging groups. message to a group of phones. recent text messages. Create / Edit Groups Send Text Message Message Browser						
Groups >> Create / Edit Groups							
General Email IP Phone	s Desktop Clients IP Speal	kers Paging Relays Legacy	'IP				
Salact Crown To Edity							
Emerge	ency Alert - 61000						
Group General Settings							
Group Type: Emergency	Alert (id = 1)	🕒 🗖 Tweet when activat	ed ALERE 🗹 Amber Alerts 07738				
Server Group: <none></none>	V						
,	_	Notify Facebook fri	ends Weather Alerts 1034025	FIPS			
Group Phone		Emergency Alert Settings					
Line Number: 610	00	_					
		Alert Mode: Voice Mode:	Play Once: Timed Mode: M	1			
Mice Sottings		Way File to Play: SevereW	eatherAlert way	_			
Misc Settings							
Use Security Code:							
Send Caller-Id:		This is	an Emergency Alert.				
Emergency: IM		This is	only a test				
		Text to Send:					
🔷 New Group 🚳	Copy Group 🛛 😽 Sa	ave Group 🛛 🥥 Delete	Group 🗾 🚺 Test Group	🍬 Restart			

Solution & Interoperability Test Lab Application Notes ©2014 Avaya Inc. All Rights Reserved. Next, navigate to the **IP Phones** tab, select the IP office extensions that should receive the Emergency Alerts as shown below.

SA-Announce	2					
Groups Sche	dules Services Settings	Help				
Use this option to create and SA-Announce paging grou	ps Send Text Message edit Use this option to send a te message to a group of phon Sand Text Message	e Message Browser at Use this option to browse recent text messages. Message Browser				
Croupe >> Create / Edit Croupe						
			Groups >> Create / cuit Groups			
General Email IP	Phones Desktop Clients I	P Speakers Paging Relays Legacy I	IP			
Select Group To Edit:	Emergency Alert - 61000	•				
Group IP Phones Dynamic Group:	evices)	Arrange List By: Extension	Filter:			
Available 77301 / 00:1B:4F:55: Extension Not Set / 0	70:09 / 9620D03C / Default 00:1B:4F:74:CF:ED / 9611GD01A	Selected	F8:DE:68 / 9611GD01A / Default E8:FC:BE / 9620D01A / Default 5F:97:EF / 9641GD01A / Default 4B:C1:A7 / 9650D01A / Default ED:E6:54 / 9630D01A / Default F6:69:A5 / 9621GD01A / Default			
🗣 New Group	🍬 Copy Group 引	Save Group 🥥 Delete G	íroup 🎵 Test Group 👒 Restart			

Lastly, in the **IP Speakers** tab, select the V2 Ceiling Speaker so that the emergency audio announcement would be heard over the speaker. Click **Save Group**.

Note: The configuration of the V2 Ceiling Speaker is outside the scope of these Application Notes. Please refer to [2] for instructions.

SA-Announce	lular Capicar Cattings	Halp				Log Off administrator
Create / Edit Group Use this option to create and e SA-Announce paging group Create / Edit Groups	os Send Text Mess dit s. Send Text Mess Send Text Mess Send Text Mess Send Text Mess	age a text hones.	Message Browser Use this option to browse recent text messages.			
Groups >> Create / Edit Groups Send Text Message Message Browser						
General Email IP	Phones Desktop Clients	IP Speakers	Paging Relays Lega	cy IP		
Select Group To Edit:	mergency Alert - 61000		•			
Group IP Speakers Dynamic Group:	vices)	Arrange List Name Name / Direc	By:	IP Address	Filter: Ex: John to view names conta	Filter
Available			Selected 00:20:f7:00:ab:f3	9 / / Ceiling Spe	aker v2 / 192.168.100.191	
🛸 New Group	🍬 Copy Group	🥾 🛛 Save Gr	oup 🥥 Delete	e Group	7 Test Group	🕸 Restart

The procedure for adding a Normal and RecordNPlay notification is similar to the Emergency Alert, except for the **General** tab, which is shown below. The **IP Phones** and **IP Speakers** tabs should also be configured as shown above.

Below is an example of a Normal group, which allows a real-time audio message to be delivered directly to the Avaya IP deskphones and V2 Ceiling Speaker.

SA-Announce				
Groups Schedules	Services Settings Help			Log Off administrator
Create / Edit Groups Use this option to create and edit SA-Announce paging groups. Create / Edit Groups	Send Text Message Use this option to send a text message to a group of phones. Send Text Message	Wessage Browser Use this option to browse recent text messages. Message Browser		
			Groups >>> Create / Edit Groups	
General Email IP Phone:	s Desktop Clients IP Speak	ters Paging Relays Legacy	Ib	
Group General Settings Group Type: Normal Server Group: Normal	(id = 2)	<u>.</u>		
Group Phone		Group Opening Tone		
Line Number: 6100	01	Select Tone: <a>None>		
Misc Settings Use Security Code: Send Caller-Id: Emergency:				
🔹 New Group 🔹 Copy Group 🖏 Save Group 🥥 Delete Group 🐄 Restart				

Below is an example of a RecordNPlay group, which allows an audio message to be recorded and then delivered directly to the Avaya IP deskphones and V2 Ceiling Speaker.

SA-Announce					Log Off administrator
Groups Schedules	Services Settings Help				
🔗 Create / Edit Groups	Send Text Message	Message Browser			
Use this option to create and edit	Use this option to send a text	Use this option to brows	e		
SA-Announce paging groups. Create / Edit Groups	message to a group of phones. Send Text Message	recent text messages. Message Browser			
			Groups >> Creat	te / Edit Groups	
General Email IP Phones	Desktop Clients IP Speak	kers Paging Relays	Legacy IP		
Select Group To Edit: Depart	N Diay 61002	-			
, jrecold	11-F1ay - 01002				
Group General Settings					
Group Type: RecordNPIa	(id = 3)				
Server Group:	·				
STADIES					
Group Phone		Group Opening Tone			
Line Number: 6100	2	Select Tone: <pre></pre>			
Misc Settings					
Use Security Code:					
Send Caller-Id:					
Emergency:					
🔷 New Group 🚳	Copy Group 🛛 👌 Sa	ave Group 🛛 🖉 🛛	elete Group	👊 Rest	art

8. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya IP Office and Syn-Apps SA-Announce.

1. In the SA-Announce web interface, navigate to Services \rightarrow Broadcast Services \rightarrow Services and verify that the Broadcaster and Scheduler Services are *running* as shown below.

SA-Announce				
Groups Schedules	Services Settings Help	Log Off administrator		
Broadcast Services Use this option to manage the	Use this option to manage			
broadcaster and scheduler services. Broadcast Services	servers in the cluster. Server Redundancy			
		Services >> Broadcast Services		
Services Settings Emai	l Settings Amber Alert Wea	ther Alert Advanced Settings Log Level		
Manage the Services and Settings				
Service Controls Use the Start, Stop, Restart buttons below to start or stop the Broadcaster (paging) and Scheduler services. Use the Refresh Phones button to update the phone information from Call Manager. Broadcaster Service The SA-Announce Broadcaster service is running.				
Scheduler Service The SA-Announce Scheduler service is running. Start Ø Stop Restart @ Refresh Status Refresh Data				

2. Launch Avaya IP Office System Status and log in using the appropriate credentials. The IP Office System Status screen is displayed. Expand Trunks in the left pane and select the SIP line from Section 5.4, in this case "17". Verify that the SIP trunks are in the *Idle* state as shown below.



3. Place a call to an SA-Announce group and verify that the appropriate alert is sent to the Avaya IP deskphones that are configured to receive them via the Push interface.

9. Conclusion

These Application Notes describe the steps required to integrate Syn-Apps SA-Announce with Avaya IP Office and Avaya 9600 and 96x1 Series IP Deskphones. Syn-Apps SA-Announce delivered audio, text, and graphic notification to Avaya 9600 and 96x1 IP Deskphones using the Push Interface API. All test cases passed with observations noted in **Section 2.2**.

10. References

This section references the Avaya documentation relevant to these Application Notes. The Avaya product documentation is available at <u>http://support.avaya.com</u>.

- [1] Avaya IP Office Manager, Release 9.0, Issue 9.01, September 2013, Document Number 15-601011.
- [2] *Syn-Apps SA-Announce Notification System User Manual for Avaya*® *Version 9.0.13,* available at <u>http://www.syn-aps.com/support</u>.

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