

Avaya Solution & Interoperability Test Lab

Application Notes for DuVoice with Avaya IP Office – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for the DuVoice hospitality messaging system to interoperate with Avaya IP Office 6.0. In the compliance testing, DuVoice used the Analog User, TAPI, DevLink, and Configuration Web Service interfaces from Avaya IP Office, and the PUSH interface from Avaya 46xx IP Telephones to provide automated attendant, voicemail, wake-up call, do not disturb, name and user profile template change, room clean status indication, and 911 alerting features.

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 configuration steps required for the DuVoice hospitality messaging system to interoperate with Avaya IP Office 6.0. In the compliance testing, DuVoice used the Analog User, TAPI, DevLink, and Configuration Web Service interfaces from Avaya IP Office, and the PUSH interface from Avaya 46xx IP Telephones to provide automated attendant, voicemail, wake-up call, do not disturb, name and user profile template change, room clean status indication, and 911 alerting features.

The Analog User and TAPI interfaces were used by DuVoice to provide the basic hospitality features such as automated attendant, voicemail, wake-up call, do not disturb, and room clean status indication. In the compliance testing, the DuVoice server used a Dialogic D/4PCI-U PBX Integration Card, with physical connections to Avaya IP Office, and configured as analog users and members of a hospitality hunt group. DuVoice used the TAPI interface to monitor the analog ports. Incoming calls to the hospitality hunt group were delivered over an available analog port to DuVoice. DuVoice used the TAPI events to determine the type of call and hence the service to provide, such as automated attendant for incoming trunk calls, voicemail coverage for redirected call, voicemail, do not disturb, room clean status, and wake-up call scheduling for internal calls.

For the voicemail coverage scenarios, voicemail messages were recorded and saved on DuVoice. The TAPI lineDevSpecific capability was used to activate/deactivate the MWI, and to optionally set the divert setting for do not disturb when requested manually by the guests.

DuVoice also has a Property Management System (PMS) interface, and a PMS simulator was used in the compliance testing to initiate the room check-in, check-out, and move requests to DuVoice. In the compliance testing, two user rights templates were set up on Avaya IP Office for use with check-in and check-out guests. DuVoice used the Configuration Web Service to send updates to Avaya IP Office on the guest name and user rights template as part of the check-in, check-out, and move process.

The DevLink and IP Telephone PUSH interfaces were used by DuVoice to send 911 alerting messages. Upon notified of any user dialing "911" on Avaya IP Office, DuVoice pushed a 911 alerting text message to the display of a predetermined list of Avaya 46xx IP Telephone users.

1.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following on DuVoice:

- Automated attendant navigation for incoming trunk calls, such as transfer to guests and staff.
- Handling of voicemail messages and message waiting lamps for check-out and move requests initiated via the PMS simulator.
- Voicemail recording, logging, and retrieval, with proper message waiting lamp activation/deactivation for users with analog, digital, and IP telephone types.
- Scheduling and delivering of wake-up call requests, including retried attempts and escalation to staff.
- Handling of TAPI events and messages for calls, and setting of MWI and do not disturb divert parameters.
- Handling of maid codes as indication of room clean status from the hospitality hunt group calls.
- Use of Configuration Web Services to update guest name and user rights template associated with check-in, check-out, and move requests from the PMS simulator.
- Use of real-time DevLink events to monitor "911" dialing, and push of 911 alerting text message to an Avaya 4621SW IP Telephone user. The 911 alerting text message included the name and extension of the user making the "911" call.

The serviceability testing focused on verifying the ability of DuVoice to recover from adverse conditions, such as disconnecting and reconnecting the analog cables to DuVoice.

1.2. Support

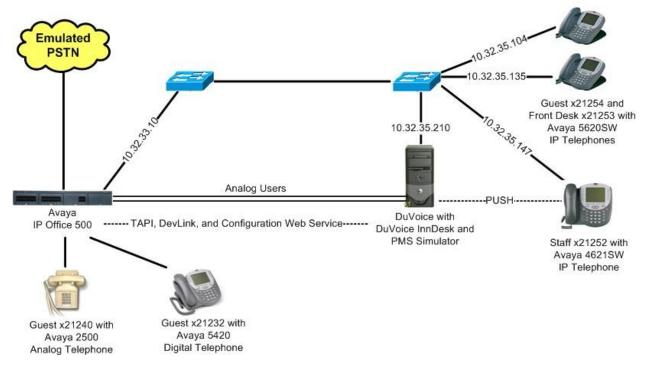
Technical support on DuVoice can be obtained through the following:

- **Phone:** (425) 250-2393
- Email: <u>support@duvoice.com</u>

2. Reference Configuration

The configuration used for the compliance testing is shown below. DuVoice consists of 4-48 port models. In the compliance testing, the 4-port DV4 model was used.

A PMS simulator was used to initiate room check-in, check-out, and move requests to DuVoice. In addition, the DuVoice InnDesk web interface was used to monitor the guest check-in, check-out, and wake-up call status.



3. Equipment and Software Validated

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

Equipment	Software
Avaya IP Office 500	6.0 (8)
Avaya 4621SW IP Telephone (H.323)	2.9
Avaya 5620 IP Telephones	2.9
Avaya 5420 Digital Telephone	NA
 DuVoice DV4 on Microsoft Windows XP Dialogic D/4PCI-U PBX Integration Board InnDesk PMS Simulator 	4.01.027 SR 6.0 1.13 1.0.0.1
Avaya DevLinkAvaya TAPI	1.0.0.5 3.10.0.103

4. Configure Avaya IP Office

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

- Verify IP Office license
- Administer physical analog ports
- Administer hospitality hunt group
- Administer incoming call route
- Administer system voicemail
- Administer voicemail users
- Administer analog user MWI
- Administer user rights
- Administer security service

4.1. Verify IP Office License

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

The Avaya IP Office R6 Manager screen is displayed. From the configuration tree in the left pane, select License > CTI Link Pro to display the CTI Link Pro screen in the right pane. Verify that the License Status is "Valid".

🕼 Avaya IP Office R6 Manager IP5	i00-Dev [6.0(8)]		
File Edit View Tools Help : 🎗 😂 - 🚂 🏊 🛄 📰 🚺 🖌	IP500-Dev 📄 💼	License	💌 CTI Link Pro	
IP Offices	H	CTI Link P	Pro	☆ • X √ < >
 License (130) 1600 Series Phones 3rd Party IP Endpoints Advanced Edition Advanced Small Comm AUDIX Voicemail Avaya IP endpoints CCC Agent Rostering CCC Agents CCC Agents CCC Cosigner (users) CCC Server CCC Supervisors CCC Supervisors CCC CR Designer CCC Supervisors CCC CR Designer CCC Super Server CCC Super Server CCC Supervisors CCC Supervisors CCC Supervisors CCC Supervisors CCC Supervisors CCC Super Server CCC Supervisors CCC Super Server CCC Supervisors <	Licenses License Key License Type License Status Instances Expiry Date	yGzJa25JAKSYDzzOCe99oj4lMbh CTI Link Pro Valid 255 Never	MNUol1	

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4.2. Administer Physical Analog Ports

From the configuration tree in the left pane, select **Extension**, followed by the specific extension corresponding to the first analog port that is physically connected to DuVoice, in this case "21246".

The Analogue Extension screen is displayed. Select the Analogue tab. In the Equipment Classification section, select IVR Port, and retain the default values in the remaining fields.

🜃 Avaya IP Office R6 Mana	ager IP500-Dev [6.0(8)]			
File Edit View Tools	Help IP500-Dev IZ Analo	 Extension ogue Extension: 31 21246* 	31 21246	■ ■ + × × < >
8004 21231 1 21232 2 21233 3 21234 4 21235 5 5 21236 6 21237 7 21238 8 21239 2 2 21241 2 2 21241 2 2 21241 2 2 21241 2 2 2 21241 2 2 2 21243 2 2 2 21244 2 2 2 21244	Extn Analogue Equipment Classification Quiet Headset Paging Speaker Standard Telephone Door Phone 1 Door Phone 2 VIR Port FAX Machine	Flash Hook Pulse Width Vise System Default Minimum Width Maximum Width Message Waiting Lamp In None	s 20 🗘 500 🗘	ms ms.
- 40 31 21246 - 40 31 21246 - 40 32 21247 - 50 8005 21250 - 50 8006 21251		Hook Persistency Disconnect Pulse Width		100 🔹 ms 800 🔹 ms

From the configuration tree in the left pane, select **User**, followed by the user corresponding to the first analog extension from above. In this case, the user is "21246".

👫 Avaya IP Office R6 Ma	nager IP500-Dev [6,0(8)]	
File Edit View Tools	Help IP500-Dev User Extn21246	 21246 Extn21246 S: 21246* M → X ✓ < >
User (25) Angle State St	Button Programming Menu Programming Mobility Personal Directory	Phone Manager Options Hunt Group Membership Announcements
 25002 ager 21231 Extn 21233 Extn 21234 Extn 21235 Extn 21235 Extn 21236 Extn 21237 Extn 21238 Extn 21238 Extn 21239 Extn 21239 Extn 21239 Extn 21239 Extn 21241 Extn 21243 Extn 21243 Extn 	Name VM Port 1 Password	umbers Telephony Forwarding Dial In Voice Recording
21246 Extn 21247 Extn 21250 Extn 21251 Extn 21253 Extn 21253 Extn 21232 Extn	Priority 5 System Phone Rights None Profile Basic User	✓

Select the User tab, and enter a descriptive Name.

Select the Voicemail tab, and uncheck Voicemail On, as shown below.

🖬 Avaya IP Office R6 Mai	nager IP500-Dev [6.0(8)]	
File Edit View Tools	Help	
1 2 🖻 - 🖬 🖬 💽 🖬	🔝 🛹 🚋 į IP500-Dev 🛛 🔽 User	• 21246 Extn21246
IP Offices	Extn21246: 21246*	☆ - × < >
User (25)	Button Programming Menu Programming Mobility Phone Manage Personal Directory	
	User Voicemail DND ShortCodes Source Numbers Teleph	ony Forwarding Dial In Voice Recording
21231 Extr	Voicemail Code	Voicemail On
21234 Extn 21235 Extn	Confirm Voicemail Code	🔲 Voicemail Help
21235 Extr	Voicemail Email	Voicemail Ringback
		Voicemail Email Reading
21236 EXII 21239 Extn 21241 Extn 21241 Extn	- Voicemail Email	UMS Web Services
21245 Extr 21245 Extr 21246 Extr 21246 Extr 21247 Extr	Off ○ Copy ○ Forward ○ Alert	

Select the **Telephony** tab, followed by the **Call Settings** sub-tab. Uncheck the **Call Waiting On** field, as shown below.

👫 Avaya IP Office R6 Mai	nager IP500-Dev [6.0(8)]		
File Edit View Tools : 🏨 📸 - 属 🗛 💽 📰	Help	- Here	 21246 Extn21246
		• User	
IP Offices	Button Programming Menu Pro Personal Directory		 Hunt Group Membership Announcements orwarding Dial In Voice Recording Call Waiting On Call Waiting On Answer Call Waiting On Hold (Analogue) Busy On Held Offhook Station
21245 Extn 21246 Extn 21247 Extn 21247 Extn 21250 Extn	Transfer Return Time (secs) Call Cost Mark-Up	Off 🔹	

Select the Supervisor Settings sub-tab. Check the Cannot be Intruded field, as shown below.

Repeat this section for all analog ports that are physically connected to DuVoice. In the compliance testing, two analog ports with extensions "21246" and "21247" were physically connected and modified.

👫 Avaya IP Office R6 Mai	nager IP500-Dev [6.0(8)]	f			
File Edit View Tools		💌 User	2124	6 Extn21246	
IP Offices	12	Extn21246: 2124	6*	🚽 - 🗙	✔ < >
User (25)	Personal Directory	Programming Mobility Phone M. ShortCodes Source Numbers T		it Group Membership Announ	cements
 21231 Extn 21233 Extn 21234 Extn 21235 Extn 21236 Extn 21236 Extn 21237 Extn 21238 Extn 21238 Extn 	Call Settings Supervisor Se Login Code Login Idle Period (secs) Monitor Group	<none></none>		Force Login Force Account Code Force Authorization Code	
21239 Extn 21241 Extn 21243 Extn 21245 Extn 21246 Extn 21247 Extn 21250 Extn	Coverage Group Status on No-Answer Reset Longest Idle Time	<none> Logged On (No change)</none>		Outgoing Call Bar Inhibit Off-Switch Forward, Can Intrude Cannot be Intruded	/Transfer
21251 Extn 21252 Extn	C External Incoming			Can Trace Calls	

4.3. Administer Hospitality Hunt Group

From the configuration tree in the left pane, right-click on **HuntGroup** and select **New** from the pop-up list to add a new hunt group. This hunt group will be used to deliver calls to DuVoice for the hospitality features. Enter desired values for the **Name** and **Extension** fields, and retain the default values in the remaining fields.

Click on Edit in the User List section to add members.

🜃 Avaya IP Office R6 Manage	er IP500-Dev [6.0(8)]					
File Edit View Tools He	elp					
i 🚨 📨 - 🖬 🖃 🔝 🖬	🖌 🛹 🐸 📔 IP500-Dev	HuntGroup	-	25555 KnoahSoft ACD		
IP Offices	s 🛛	equential Group <hunt< th=""><th>Grou</th><th>up:0>:*</th><th>🗳 - × 🗸</th><th> < ></th></hunt<>	Grou	up:0>:*	🗳 - × 🗸	< >
BOOTP (6) Operator (3) IP500-Dev System (1) F7 Line (26) Control Unit (6) Second Seco	Hunt Group Voicemail Fallbac Name Extension Ring Mode Overflow Mode Hold Music Source Agent's Status on No-Answer Applies To - User List Extension Name	k Queuing Voice Recording And DuVoice Main 22000 Sequential Group No Change None		ments CCR Agent Group No Answer Time (secs) Overflow Time (secs) Voicemail Answer Time (secs) Overflow Group List Group Name	System Default (15) Off 45	
RAS Location Request (Edit Remove	٥.	L	Add Remove	

The **Select Members** screen is displayed. Select the entries with **Extn** values matching to the physical analog ports from **Section 4.2**, and click the **Append** button to move the selected entries to the right.

Available Us Name	ers (24/24) Extn		Member Order	s[2/2] Enabled	Name	Extn
agent1	25001		1		VM Port 1	21246
agent2	25002		2		VM Port 2	21247
Extn21231	21231					CICIL.
Extn21232	21232					
Extn21233	21233					
Extn21234	21234					
Extn21235	21235					
Extn21236	21236					
Extn21237	21237					
Extn21238	21238	-				
Extn21239	21239	Add Befor	e			
Extn21240	21240	Add After				
Extn21241	21241	Append				
Extn21243	21243	-				
Extn21245	21245	Remove				
Extn21250	21250					
Extn21251	21251					
Extn21252	21252					
Extn21253	21253					
Extn21254	21254					
sip28001	28001					
sip28002	28002					
VM Port 1	21246					
VM Port 2	21247					

The Sequential Group screen is displayed and updated with the selected members.

🜃 Avaya IP Office R6 Manag	er IP500-Dev [6.0(8)]					. 🗆 🛛
File Edit View Tools Hi İ 💐 🗃 - 🔒 🗛 💽 📰 🚺	elp V 🍛 🗄 IP500-Dev	 HuntGroup 	- 2	25555 KnoahSoft ACD		
IP Offices	🗹 s	equential Group <	luntGrou	p:0>:*	🚽 - × 🗸	< >
	Name Extension Ring Mode Overflow Mode Hold Music Source	ck Queuing Voice Recordin DuVoice Main 22000 Sequential Group No Change None	g Announcer	No Answer Time (secs) Overflow Time (secs) Voicemail Answer Time (secs)	System Default (15) Off 45	 * *
Service (0) ⊕ RAS (1) ⊕ ↑ Incoming Call Route (3) ⊕ WanPort (0) → ↓ Directory (0)		me Port 1 Port 2		Overflow Group List Group Name		

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👫 Avaya IP Office R6 Manag	er IP500-Dev [6.0(8)]			
File Edit View Tools H	elp V V J IP500-Dev Z S	 HuntGroup equential Group <h< li=""> </h<>	25555 KnoahSoft ACD IntGroup:0>:*	≝ - X √ < >
	Hunt Group Voicemail Fallba Voicemail Code Confirm Voicemail Code Voicemail Email Voicemail Email Off Copy	ck Queuing Voice Recording	Announcements Voicemail On Voicemail Help Broadcast UMS Web Services Alert	

Select the Voicemail tab, and make sure Voicemail On is unchecked, as shown below.

Select the Queuing tab, and uncheck Queuing On, as shown below.

🜃 Avaya IP Office R6 Manag	er IP500-Dev [6.0(8)]	
IP Offices	Sequential Group <huntgroup:0>: *</huntgroup:0>	💾 • X 🗸 < >
K BOOTP (6) Operator (3) TF500-Dev System (1) Tf Line (26) Control Unit (6) Extension (30) User (25) HuntGroup (2) System (200 Main Short Code (66)	Hunt Group Voicemail Fallback Queuing Voice Recording Announcements Queuing On Queue Length No Limit Image: Coll on Agent Answer Image: Coll on Agent Answer Queue Type Assign Call On Agent Answer Image: Coll on Agent Answer Image: Coll on Agent Answer Calls In Queue Threshold Image: Coll on Agent Answer Image: Coll on Agent Answer Image: Coll on Agent Answer Calls In Queue Threshold Image: Coll on Agent Answer Image: Coll on Agent Answer Image: Coll on Agent Answer	

4.4. Administer Incoming Call Route

If necessary, create an incoming call route to route incoming calls to the hospitality hunt group. In the compliance testing, the existing incoming call route for the ISDN PRI line can route to any five digit extensions on IP Office.

As shown in the screen below, the **Incoming Number** for the ISDN PRI line "9" is "73285XXXX", which uses five single digit wildcards "X" allowing the last five digits to be any number.

👫 Avaya IP Office R6 Man	ager IP500-Dev [6.0(8)]			
File Edit View Tools : 🎎 📨 - 属 🛋 💽 📰	Help	Incoming Call Route	• 9 73285XXXXX	
IP Offices	H	9 73285XXXXX		📸 • 🗙 • < >
K BOOTP (6) Operator (3) Operator (3) System (1) F(7) Line (26) Control Unit (6) Service (0) Service (0) RAS (1) O 73285XXXXX WanPort (0) Directory (0)	Standard Voice Recording Bearer Capability Line Group Id Incoming Number Incoming Sub Address Incoming CLI Locale Priority Tag Hold Music Source	Destinations Any Voice 9 73285XXXXX		

In the **Destinations** tab, the use of "#" in the **Destination** field enables the routing to be based on the "XXXXX" from the **Incoming Number** field from above. Therefore, incoming calls to "7328522000" will be routed to the hospitality hunt group configured in **Section 4.3**.

If desired, the hospitality hunt group can be selected from the **Destination** drop-down to route all incoming trunk calls to DuVoice.

🌃 Avaya IP Office R6 Man	ager IP	2500-Dev [6.0(8)]			
File Edit View Tools 	Help	/ 🚋 į IP500-Dev 🔹	Incoming Call Route	• 9 73285XXXXX	
IP Offices		97	3285XXXXX		🖶 • 🗙 • < >
■ # BOOTP (6)	Stand	ard Voice Recording Destinations			
⊕	0	TimeProfile	Destination	Fallbac	k Extension
😟 🤜 System (1)	•	Default Value	#	*	~

4.5. Administer System Voicemail

From the configuration tree in the left pane, select **System > IP500-Dev** to display the **IP500-Dev** screen in the right pane. Select the **Voicemail** tab in the right pane.

For **Voicemail Type**, select "Group Voicemail" from the field drop-down list. For **Voicemail Destination**, select the name of the hospitality hunt group from **Section 4.3**.

🜃 Avaya IP Office R6 Man	ager IP500-Dev [6.0(8)]			
File Edit View Tools : گ 📂 - 🕞 🔺 💽 📰	Help	 System 	• IP500-Dev	
IP Offices		IP500-Dev	IP300-DEV	<
 ■ & BOOTP (6) ■ Ø Operator (3) ■ IP500-Dev 	VCM CCR System LAN1 LAN2 DNS	Voicemail Telephony Directo	ory Services System Events	SMTP SMDR Twinning
		Group Voicemail DuVoice Main	Message:	s Button Goes To Visual Voice
⊕ ~ Control Unit (6) ⊕ & Extension (30) ⊕ 1 User (25) ⊕ ∰ HuntGroup (3)	Voicemail IP Address Backup Voicemail IP Address	10 · 32 · 35 · 10 0 · 0 · 0 · 0		
Short Code (66) Service (0) As (1)	Voicemail Channel Reservation Unreserved Channels 259			
Tincoming Call Route WanPort (0) Oirectory (0) Time Profile (0)	Auto-Attendant 0 Announcements 0	Voice Recording 0 Mailbox Access 0	Mandatory Voice Recording	0

4.6. Administer Voicemail Users

From the configuration tree in the left pane, select the first user that will be using DuVoice for voicemail. In this case, the user is "21240". Enter a descriptive **Name**.

vaya IP Office R6 Man Edit View Tools	Help	000-DEV [0.0(0)	Л							
🖻 - 🖌 💽 🖬	1	- 🔄 🗄 IP	500-De	v	- L	Jser		▼ 21240 E	xtn21240		
IP Offices	12				Extn2	1240: 212	240*			🗗 - 🗙	✓ <
Extension (30)		Programmin al Directory	V. III CONTRACTOR	nu Program	nming 🛛 M	Nobility Phon	e Manager O	otions Hunt	Group Me	mbership Announ	cements
25001 agent	User	Voicemail	DND	ShortC	odes So	ource Numbers	Telephony	Forwarding	Dial In	Voice Recording	
- 25002 agent - 21231 Extn2 - 21232 Extn2 - 21232 Extn2 - 21234 Extn2 - 21234 Extn2 - 21235 Extn2 - 21236 Extn2	Confir				uest2124 oom 2124						
21237 Extn2 21238 Extn2 21239 Extn2 21239 Extn2	Exten Locale			2	1240					~	
21239 Extr2 21240 Extr2 21241 Extr2	Priorit			5						×	
	Syster	m Phone Rig	jhts	N	one					*	
	Profile			В	asic User] Recept	2 - 4-200				~	

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🐮 Avaya IP Office R6 Man	ager IP500-Dev [6,0(8)]	
File Edit View Tools	Help	
	🚹 🗸 🖾 📜 IP500-Dev 🛛 👱 User	21240 Extn21240
IP Offices	Extn21240: 21240*	📸 • 🗙 🗸 < >
in	Button Programming Menu Programming Mobility Phone Mana Personal Directory	ager Options Hunt Group Membership Announcements
NoUser	User Voicemail DND ShortCodes Source Numbers Tele	phony Forwarding Dial In Voice Recording
25002 agent 21231 Extn2	Voicemail Code	Voicemail On
21232 Extn2	Confirm Voicemail Code	🗌 Voicemail Help
21233 Extn2 21234 Extn2	Voicemail Email	🗌 Voicemail Ringback 👌
21235 Extn2 21236 Extn2		Voicemail Email Reading
21236 Extn2 21237 Extn2	1	UMS Web Services
21238 Extn2	Voicemail Email	
21239 Extn2 21240 Extn2 21241 Extn2 21241 Extn2	Off Ocpy OForward OAlert	

Select the Voicemail tab. Check Voicemail On, and uncheck Voicemail Help, as shown below.

Select the Forwarding tab. Uncheck and unselect all fields, as shown below.

👫 Avaya IP Office R6 Mana	ager IP500-Dev [6.0(8)]
File Edit View Tools	Help
: 2 🖙 - 🖬 🛋 🔝 📰	🚹 🛹 🔄 į IP500-Dev 🔹 User 🔹 21240 Extn21240 🔹
IP Offices	🗹 Extn21240: 21240* 🖆 - 🗙 🗸 < >
Extension (30) Ser (25) Nollser 25001 agent	Button Programming Menu Programming Mobility Phone Manager Options Hunt Group Membership Announcements Personal Directory
- 25002 agent 21231 Extn2 21232 Extn2 21232 Extn2 21233 Extn2	Follow Me Number
	Forward Unconditional
	Forward Number Forward Hunt Group Calls Forward Internal Calls
	Forward On Busy
	Forward Internal calls

Repeat this section for all users using DuVoice for voicemail, including all guests, front desk, and staff. In the compliance testing, the voicemail users consisted of one front desk with extension "21253", three guests with extensions "21232, 21240, and 21254", and one staff with extension "21252", as shown below in the left pane.

🌃 Avaya IP Office R6 Manager II	2500-Dev [6.0)	8)]							
	/ 🕹 📔 IP500-I	Dev	• User	4050 04050	and a second	:53 Front212			
IP Offices	Button Program	ning Mer		1253: 21253		tions Hunt (ership	< >
NoUser 25001 agent1	Announcements User Voicema	1	al Directory	Course Numbers	Telephopu	Forwarding	Dial In	/oice Decording	
- 1 = 25002 agent2 - 1 21231 Extn21231 - 1 21233 Extn21233	Name			ShortCodes Source Numbers Telephony Forwarding Dial In Voice Recordin Front21253					^
	Password Confirm Password		****						
21237 Extn21237 21238 Extn21238 21239 Extn21238	Full Name								
21241 Extn21241 21243 Extn21243	Extension Locale		21253					~	
	Priority		5					~	-
	System Phone I	Rights	None					~	
	Profile			ser eptionist ble SoftPhone				*	

4.7. Administer Analog User MWI

For voicemail users with analog telephones, the MWI setting on the analog extension may need modification, depending on the type of analog telephone. Refer to [2] for details on the specific analog telephone types requiring the MWI setting. In the compliance testing, one guest had an analog telephone type 2500, which required an update to the MWI setting.

From the configuration tree in the left pane, select **Extension**, followed by the extension corresponding to the analog user. In this case, the extension is "21240". In the **Message Waiting Lamp Indication Type** section, select "On" from the drop-down list, as shown below.

👫 Avaya IP Office R6 Manager I	P500-Dev [6.0(8)]			
File Edit View Tools Help	🖌 🥶 📔 IP500-Dev	Extension	25 21240	
IP Offices	🛃 Analog	gue Extension: 25 212	240*	📸 • 🗙 🗸 < >
 Extension (30) 8004 21231 21232 21233 3 21234 4 21235 5 21236 6 21237 7 21238 8 21239 	Extn Analogue Equipment Classification Quiet Headset Paging Speaker Standard Telephone Door Phone 1	Flash Hook Pulse Use Syster Minimum W Maximum V	m Defaults Vidth 20	s ms ·
- 25 21240 - 26 21241 - 27 21242 - 28 21243	Door Phone 2 IVR Port FAX Machine	Message Waiting	g Lamp Indication Type –	v

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4.8. Administer User Rights

From the configuration tree in the left pane, right-click on User Rights, and select New to create a new user rights template. Enter a desired Name to designate user rights for guests in the check-in state.

🜃 Avaya IP Office R6 Manager	IP 500-De	ev [6.0(8)]						
File Edit View Tools Help : 🏂 🗁 + 属 🏊 💽 📰 🚺	🗸 🕹	IP500-Dev	💌 User Ri	ights	Cher	ckIn	•	
IP Offices	1		<us< th=""><th>er Rights:0</th><th>>*</th><th></th><th>🖻 - × ~</th><th> < ></th></us<>	er Rights:0	>*		🖻 - × ~	< >
BOOTP (6) Operator (3) IF500-Dev System (1) f Line (26) Control Unit (6) Control Unit (6) Control Unit (6) Service (3) Sort Code (66) Service (0) RAS (1) Conting Call Route (3) WanPort (0) Directory (0) Time Profile (0) Girectory (0) Time Profile (1) If Proute (1) Control Code (1) License (130) License (130) Service (0)		CheckIn	Button Programming	Phone Manager	Not part	User Rights membership of User Rights of User Rights	Voicemail	

Repeat this section to create the desired number of user rights templates for guests in various states. In the compliance testing, two user rights templates with names of "CheckIn" and "CheckOut" were created, as shown below in the left pane.

🜃 Avaya IP Office R6 Manager I	IP500-Dev [6.0(8)]	
File Edit View Tools Help : 🏂 🗁 - 属 📄 💽 📰 🔔	V 🔄 📔 IP500-Dev 🔹 User Rights 🔹 CheckIn	
IP Offices	🗄 Checkin 🗃 - 🗙 🗸	< >
Short Code (66) Service (0) AS (1)	User ShortCodes Button Programming Phone Manager Telephony User Rights membership Voicemail	- -
 	Locale Not part of User Rights	
Time Profile (0)	Priority 5 Not part of User Rights	•
 Image: Account Code (1) Image: Icense (130) Image: Icense (0) Image: Icense (0) Image: Icense (0) 	Do not disturb Do not disturb Not part of User Rights	
Gerkennen Gerkennen Gerkennen Gerkennen Gerkennen Gerkennen Gerkennen Gerkout		

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4.9. Administer Security Service

From the Avaya IP Office R6 Manager screen, select File > Advanced > Security Settings from the top menu. Select the proper IP Office system, and log in with the appropriate security user credentials.

The Avaya IP Office R6 Manager – Security Administration screen is displayed. From the configuration tree in the left pane, select Security > Services to display the Service : Configuration screen in the right pane. For Service Security Level, select "Unsecure + Secure" as shown below. The additional "Secure" level is needed for the Configuration Web Service interface.

👫 Avaya IP Office R6 Manage	r - Security Administr	ration - IP500-Dev [6.0 (8)]	
File Edit View Tools Hel : 2. 💭 🗁 🚽 🛋 🛄 🔝 🕼	p		
Security Settings	Service : Con	figuration	□ + × ✓ < >
 General General System (1) Go Services (4) Rights Groups (5) Service Users (4) 	Service Details Name Host System Service TCP Port Service Security Level	Configuration IP500-Dev 50804, 50805 Unsecure + Secure	

5. Configure Avaya 46xx IP Telephones

This section provides the procedures for configuring the Avaya 46xx IP Telephones to support the PUSH interface. The procedures include the following areas:

- Administer common parameters
- Administer specific phone parameters
- Reboot telephones

5.1. Administer Common Parameters

From the appropriate HTTP and TFTP servers serving the 46xx IP Telephones, locate the **46xxsettings.txt** file. Navigate to the **COMMON SETTINGS** section, under the **WML BROWSER SETTINGS** sub-section, set **WMLPORT** to "8090". Navigate to the **PUSH INTERFACE SETTINGS** sub-section, and set the **TPSLIST** and **SUBSCRIBELIST** parameters as shown below, where "10.32.35.210" is the IP address of the DuVoice server.

```
##
                                               ##
##
                                               ##
                  COMMON SETTINGS
##
                                               ##
              Applies to all telephones
##
##
   This section contains the common settings used to
## enable and administer the 'Web' application. These
   parameters are not supported on 16cc SIP phones.
##
   The TCP port number of your HTTP proxy server
##
## SET WMLPORT 8080
SET WMLPORT 8090
##
## 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 135.20.21.20
##
##
   The list of all the Subscription Servers.
## SET SUBSCRIBELIST http://135.20.21.21/subscribe
SET TPSLIST 10.32.35.210:8090
SET SUBSCRIBELIST http://10.32.35.210:8090/
```

5.2. Administer Specific Phone Parameters

Navigate to the relevant specific phone parameters section, in this case **SETTINGS4621**. Under the **WML BROWSER SETTINGS** subsection, set the **WMLHOME** parameter as shown below, where "10.32.35.210" is the IP address of the DuVoice server, and "8090" is the **WMLPORT** value from **Section 5.1**.

Repeat this section for all relevant 46xx IP Telephone types. In the compliance testing, the 4621SW IP Telephone was used for testing the push of 911 alerting text message.

```
****************
#
# SETTINGS4621
#
##
## The WMLHOME setting is used to enable and
## administer the 'Web' Application.
##
## The WMLIDLEURI setting acts as an idle screen when the
## phone has been idle (see WMLIDLETIME value). By default
## this URL is NULL ("") and this screen is not activated.
##
## NOTE:
## Avaya hosts a web site for IP Phones.
## The WMLHOME and WMLIDLEURI parameters are set up
## to point your IP telephones to this hosted site.
## To enable access to this site, remove the "## "
   from the SET WMLHOME ... and SET WMLIDLEURI ... lines.
##
##
   To change the web site that your phones point to,
##
   replace the provided URL in the SET WMLHOME .. and
## SET WMLIDELURI ...lines with the URL of your site.
##
## SET WMLHOME http://support.avaya.com/elmodocs2/avayaip/4620/home.wml
## SET WMLIDLEURI http://support.avaya.com/elmodocs2/avayaip/4620/idle.wml
##
SET WMLHOME http://10.32.35.210:8090/
GOTO END
```

5.3. Reboot Telephones

Manually reboot the 46xx IP Telephones to pick up the new settings.

6. Configure DuVoice

This section provides the procedures for configuring DuVoice. The procedures include the following areas:

- Administer TAPI driver
- Shutdown server
- Administer setup wizard
- Administer TAPI integration
- Administer connectors
- Administer hospitality
- Administer push server
- Administer mailboxes
- Startup server

6.1. Administer TAPI Driver

From the DuVoice server, select **Start > Control Panel**, and double-click on the **Phone and Modem Options** icon (not shown below). In the **Phone and Modem Options** screen, select the **Advanced** tab. Select the **Avaya IP Office TAPI2 Service Provider** entry, and click **Configure**.

Phone and Modem Options	? 🗙
Dialing Rules Modems Advanced	
The following telephony providers are installed on this	computer:
Providers:	
Avaya IP Office TAPI2 Service Provider Microsoft H.323 Telephony Service Provider Microsoft HID Phone TSP Microsoft Multicast Conference TAPI Service Provider NDIS Proxy TAPI Service Provider TAPI Kernel-Mode Service Provider Unimodem 5 Service Provider	
Add Remove C	onfigure
OK Cancel	Apply

The Avaya TAPI2 configuration screen is displayed. For Switch IP Address, enter the IP address of Avaya IP Office. Select the radio button for Third Party, and enter the IP Office password into the Switch Password field. Reboot the DuVoice server.

Switch IP Address	10.32.33.10	Cancel
🔿 Single User		
User Name		
User Password		
 Third Party 		
Switch Password		
	Ex Directory Users	

6.2. Shutdown Server

From the DuVoice server, select **Start > All Programs > DuVoice > Server Control**. The **Server Control** screen is displayed. Select **Shutdown** to stop the server, in order to make subsequent configuration changes.

Server Control	
System Information Computer Name: D9PTMW81	OK
System State: The system is running.	Startup
Product Information	Shutdown
DV2000 DuVoice Corporation Copyright (c) 2000-2010 Serial number: 8060	Options
Installation Date: 2010/04/13	
Installation Date: 2010/04/13 Version: 4.01.027 Hotfix: None	

6.3. Administer Setup Wizard

From the DuVoice server, select **Start > All Programs > DuVoice > System Configuration**. The **Wizard Start** screen is displayed upon initial access. Click **Next**.



The Site Information screen is displayed next. Enter desired values for Name and Site telephone number, and click Next.

Site Information			×
	Enter the required site inform in if you are using any type o Required Name: Site telephone number:	Avaya Lab (908) - 8485601	
	Optional Fax telephone number: Address:	() - City:	
DuVoice	State or Province:	Zip or Postal Code	
	< Back	Next > Cancel Help	_

The PBX Selection screen is displayed. Select the Avaya IPOffice entry, and click Next.

	your particular switch listed select (Seneric.	
	Name	Modified	~
	Alcatel Millenium	05/01/2009 11:57:00	
A Country of the second se	Avaya Definity 3 Digit Mode Code	05/01/2009 11:57:00	
	Avaya Definity 4 Digit Mode Code	05/01/2009 11:57:00	
	Avaya Definity G3 Calista	05/01/2009 11:57:00	<u> </u>
	Avaya Digital	05/01/2009 11:57:00	
	Avaya IPOffice	05/01/2009 11:57:00	
	Avaya Magix	05/01/2009 11:57:00	
- And	Avaya Magix (2&3 Digit)	05/01/2009 11:57:00	
	Avaya Partner ACS	05/01/2009 11:57:00	
	Avaya Partner II	05/01/2009 11:57:02	
and the second se	AvayaIPOfficeInband	05/01/2009 11:57:02	
	AvayaPartnerAcsMt	05/01/2009 11:57:02	
DuVoice	AvayaPartnerAcsMtTrans	05/01/2009 11:57:02	
Duvoice	Centrex SMDI	05/01/2009 11:57:02	
	Comdial DXP-DSU	07/29/2009 10:22:40	
	Exeutone(4digit)	05/01/2009 11:57:02	1
	Fuiitsu 9600 (SMDI)	05/01/2009 11:57:02	×

The Voice Ports screen is displayed next. For each physically connected port to Avaya IP Office, enter the corresponding analog port extension from Section 4.2, and the hospitality hunt group extension from Section 4.3, as shown below. Click Next, followed by Finish in the subsequent screen to complete the wizard.

Voice Ports			×
	of each por below. Ent- will help with If You do no	n will be configured for 4 voice mail ports. If you know the exten rt enter it in the space provided by clicking the ports extension fi tering the extension numbers is required for some integrations ar th resolving integration issues. Not know the extensions leave them blank, they can be entered la Configuration.	
	Number	Extension	Hunt group
	Port 1	21246	22000
	Port 2	21247	22000
	Port 3		
-	Port 4		
DuVoice	•		
		< <u>B</u> ack	Next > Cancel Help

6.4. Administer TAPI Integration

From the DuVoice server, select **Start > All Programs > DuVoice > System Configuration**. The **Enter Password** screen is displayed. Enter the appropriate password.

ОК
Cancel

The **System Configuration** screen is displayed next. Select **Integrations > TAPI Integration** from the top menu.

tion
ocation
ocation
ocation
ocation.

The **TAPI Configuration** screen is displayed. For **TAPI Provider**, select **Avaya IPOffice**. Retain the default values in the remaining fields.

ОК
Consel
Cancel
Busy Prefix
#*
,

6.5. Administer Connectors

The **System Configuration** screen is displayed again. Select **Features > Connectors** from the top menu.

Password Define Ports	Integrations Loo	cations Features	Tools Help		
Port Number	Extension	Hunt Group	PBX Template	Default Mailbox	Location
🛣 Voice Port Number 1	21246	22000	Avaya IPOffice	991	Default Location
🛣 Voice Port Number 2	21247	22000	Avaya IPOffice	991	Default Location
🛣 Voice Port Number 3	0		Avaya IPOffice	991	Default Location
🛣 Voice Port Number 4	0		Avaya IPOffice	991	Default Location
Ready					NUM

The **Connectors** screen is displayed. Select **IP Office > User Configuration** from the left pane, to display the **User Configuration** screen in the right pane. For **IP address**, enter the IP address of Avaya IP Office. Enter the appropriate Avaya IP Office security user credentials for **Service User Name** and **Service Password**. Retain the default values in the remaining fields.

This connector is used to establish a Configuration Web Service connection to Avaya IP Office, for update of guest user names and user rights template.

Connectors				
System Details IP Office User Configuration Devlink ShoreTel Univerge / Sphere	User Configuration Location IP address Service User Name Service Password TCP/IP Port Retries	Default Location 10 . 32 . 3 50805 3 ÷	33 . 10	Enabled
			OK	Cancel Apply

Select **IP Office > Devlink** from the left pane, to display the **Devlink** screen in the right pane. For **Password**, enter the password for the Avaya IP Office Monitor and Call Status application. For **IP address**, enter the IP address of Avaya IP Office.

This connector is used to establish a DevLink connection to Avaya IP Office, for monitoring of any users initiating "911" calls.

Connectors			
System Details IP Office User Configuration Devlink	De∨link		
ShoreTel Univerge / Sphere	Password	******	
	IP address	10 . 32 . 33 . 10	
		ОК С	Cancel Apply

6.6. Administer Hospitality

From the **System Configuration** screen shown in **Section 6.5**, select **Features > Hospitality** from the top menu. The **Hospitality Configuration** screen is displayed. Select **Maid Codes** from the left pane, to display the **Maid Codes** screen in the right pane.

Check the desired **PMS Digit** to be used, and enter the desired **Display Text**. The digits can be used by the maids to indicate the room clean status, upon dialing into the hospitality hunt group and selecting the appropriate option.

Hospitality Configurat	tion	
General Language Maid Codes Phone Control ⊕ PMS	Maid Codes Valid codes PMS Digit Display Text Image: One of the original structure Image: One of the origon structure Image: O	PMS Digit: Digit sent to the PMS to signify a specific room clean status. Maid can dial the code only if the box is checked. Display Text: The text to use whenever the system displays the room clean status. Leave blank if not used.
	6 7 8 9 Current settings: Default Reset Automation On check-out, set to: Dirty Every night, set to: Dirty	Reset: Load the default display text for the active PMS protocol.

Select Phone Control from the left pane, to display the Phone Control screen in the right pane.

For **PBX Type**, select "Avaya IP Office". In the **Auto-set phone state on** section, check **Check-in** and **Check-out**, and select the corresponding drop-down values as shown below. In the **User group restrictions / call restriction values** section, enter two entries as shown below. For **Display Text**, enter descriptive values. For **PBX Value**, enter the corresponding user rights template name from **Section 4.8**. Retain the default values in the remaining fields.

Hospitality Configuration	n				
General Language Maid Codes Phone Control € PMS	PBX Type: Avaya IP Office	• T	Call accouting Type:none Enabled:no change Disabled:no change Vodavi-specific settings Outdial prefix: 470 actions, right-click any row to display a menu.		
	Auto-set phone state on Check-in: Check In Check-out: Check Out User group restrictions / call restrict To edit an entry, left-click on it.	Voc			
	Display Text	PBX Value	PMS Value		
	Check In Check Out	CheckIn CheckOut			
	Active PMS: Hilton OnQ (ONQ)	JE)	ОК	Cancel Apply	

6.7. Administer Push Server

From the System Configuration screen shown in Section 6.5, select Features > Push Server from the top menu. The Push Server Configuration screen is displayed.

In the Server Configuration section, enter the IP address of the DuVoice server in Server IP.

In the Push On section, uncheck Answer.

In the **Hunt Groups and 911** section, select "911" from the drop-down list. For each Avaya 46xx IP Telephone that will be used for receiving 911 alerting text messages, enter the telephone extension in the **Extension** field, and click **Add phone** to move the extension to the box in the right. In the compliance testing, the 911 alerting test messages were pushed to an Avaya 4621SW IP Telephone with extension "21252".

Retain the default values in the remaining fields.

Server Configuration		OK
✓ Push server enabled Port number: 8090	Switch IP: 10 . 32 . 33 . 10	Cancel
Password: password	Server IP: 10 . 32 . 35 . 210	
Push On	IP Phones Extension IP Address	Add
T Ring Answer		Delete
Push 911 clear messages		
✓ Persistent 911 alerts Initial Delay 30 ∴ Repeat Delay 20		

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6.8. Administer Mailboxes

From the DuVoice server, select **Start > All Programs > DuVoice > Mailbox Administration**. The **Enter Password** screen is displayed. Enter the appropriate password.

. ОК
Cancel

The Mailbox Administration screen is displayed. Select Mailbox > Create from the top menu.

File Configuration M	Aailbox T	emplates I	Help					
± All	Mailbox	Extension	First name	Type	Description	Location	New messages	Last login
🗄 Type	0	21253	Operator	Standard	Operator	Default Location	0	0000/00/00 00:00:00
🗄 Language	991	991	System Reserved	System	Main Greetings	Default Location	0	0000/00/00 00:00:00
Search Results	999	999	System Reserved	System	Disconnect	Default Location	0	0000/00/00 00:00:00
	9000	9000	System Reserved	Standard	Fax Storage	Default Location	0	0000/00/00 00:00:00
								1 (1) 1
	<							

The Create Mailbox screen is displayed next. For Mailbox Number, enter the first voicemail user extension from Section 4.6, in this case "21240". For Mailbox Type, select "Guest" for guest users, and "Standard" for front desk and staff users.

Create Mailbox		
Mailbox Number	21240	
Create Based On:		
Mailbox Type	Guest	
C Mailbox Tem	plate AudioText	<u></u>
Guest mailbox.		
	OK	Cancel

The Create Mailbox 21240 screen is displayed next. Enter desired values for Password, First Name, and Last Name, and retain the default values in the remaining fields.

Create Mailbox 21240	2 <u> </u>
Create Mailbox 21240	Owner Information Extension 21240 Password Properties First Name Guest Last Name DuVoice Greeting Options Image Options Image Tutorial Complete
	Call Blocking On

Repeat this section for all voicemail users from Section 4.6, as shown below.

File Configuration M	lailbox T	emplates I	Help					
Ŧ All	Mailbox	Extension	First name	Туре	Description	Location	New messages	Last login
Ð Type	0	21253	Operator	Standard	Operator	Default Location	0	0000/00/00 00:00:00
🗄 Language	991	991	System Reserved	System	Main Greetings	Default Location	0	0000/00/00 00:00:00
- Search Results	999	999	System Reserved	System	Disconnect	Default Location	0	0000/00/00 00:00:00
Recently Created 212 Selected 212 212 212 212	9000	9000	System Reserved	Standard	Fax Storage	Default Location	0	0000/00/00 00:00:00
	21232	21232	Guest21232	Guest		Default Location	0	2010/13/04 14:30:54
	21240	21240	Guest21240	Guest		Default Location	0	2010/13/04 14:30:54
	21252	21252	Staff21252	Standard		Default Location	0	2010/13/04 13:50:05
	21253	21253	Front21253	Standard		Default Location	0	0000/00/00 00:00:00
	21254	21254	Guest21254	Guest		Default Location	0	2010/13/04 14:30:5
	<							

6.9. Startup Server

From the DuVoice server, select **Start > All Programs > DuVoice > Server Control**. The **Server Control** screen is displayed. Select **Startup** to start the server.

System Information	1	ОК
Computer Name:	D9PTMW81	
System State:	The system is not running.	Startup
		Ll Shutdowr
^p roduct Informatio	n	
DV2000	. 🔨	Options
DuVoice Corpora		Options
	0-2010	Options
DuVoice Corpora Copyright (c) 200	0-2010)60	Options
DuVoice Corpora Copyright (c) 200 Serial number: 80	0-2010)60 2010/04/13	Options
DuVoice Corpora Copyright (c) 200 Serial number: 80 Installation Date:	0-2010)60 2010/04/13	Options

7. General Test Approach and Test Results

The feature test cases were performed manually. Calls were made from the PSTN and from local users to the hospitality hunt group, with different options selected for extension transfer, voice message retrieval, and wake-up call schedule. The PMS simulator was used to manually send check-in and check-out requests to DuVoice, and the DuVoice InnDesk was used to monitor the guest check-in, check-out, and wake-up call status.

The serviceability test cases were performed manually by disconnecting and reconnecting the analog cables to DuVoice.

All test cases were executed and passed.

8. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya IP Office and DuVoice.

8.1. Verify Port Activity

From the DuVoice server, select **Start > All Programs > DuVoice > Port Activity**. The **Port Activity View** screen is displayed. Verify that the physically connected analog ports **1** and **2**, **TAPI**, and **PBXS** are all in the idle state, as shown below. Also verify that **PUSH** is in either the idle or the started state.

🖀 Port Activity Vi	ew	
File View Tools		
1: IDLE Calls[0] ID[N	None] 11:20 4/13/2010	
2: IDLE Calls[0] ID[N	None] 11:20 4/13/2010	
3: IDLE Calls[0] ID[N	lone] 11:20 4/13/2010	
4: IDLE Calls[0] ID[N	lone] 11:20 4/13/2010	
TAPI: 11:20 04/13 Idle	Ng	
PUSH: 11:20 04/13 St	tarted	
VeMail: 11:22 04/13 D	isabled	
VeMail Reply: 11:21 0	4/13 Disabled	
PBXS: 11:21 04/13 Idl	e	
Total Hours: 9836	Calls In: 0	Calls Out: 0

8.2. Verify Analog Integration

Place an incoming call from the PSTN to the hospitality hunt group. Verify that the calling party hears the greeting announcement from DuVoice. Enter the extension of a guest user, and verify that the call is transferred to the guest user.

8.3. Verify TAPI Integration

Place an incoming call from the PSTN to the hospitality hunt group, and leave a voice message for a guest user. Verify that the MWI is turned on for the guest user.

Place a call from the guest user to the hospitality hunt group. Verify that DuVoice recognizes the calling party as a voicemail user. Verify that the voice message can be retrieved, and that the MWI is turned off.

8.4. Verify Configuration Web Service Integration

Use the PMS simulator to perform a guest check-in request. Verify that the guest name and user right template is updated automatically on Avaya IP Office as part of the check-in process.

8.5. Verify PUSH Integration

Dial "911" from any guest user on Avaya IP Office. Verify that a 911 alerting text message is pushed to the Avaya 4621SW IP Telephone user configured in **Section 6.7**.

9. Conclusion

These Application Notes describe the configuration steps required for DuVoice to successfully interoperate with Avaya IP Office. All feature and serviceability test cases were completed.

10. Additional References

This section references the product documentation relevant to these Application Notes.

- 1. *IP Office 6.0 Documentation CD*, February 2010, available at <u>http://support.avaya.com</u>.
- 2. *System Reference Guide*, 3rd Edition, Version 4.01.026, March 2010, available on the DuVoice server as part of the installation.

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