

Avaya Solution & Interoperability Test Lab

# **Application Notes for configuring Capita Secure Information Solutions DS3000 with Avaya IP Office R9.0 using SIP Trunks - Issue 1.0**

#### Abstract

These Application Notes describe the configuration steps for provisioning Capita Secure Information Solutions DS3000 to interoperate with Avaya IP Office R9.0.

Readers should pay particular attention to the scope of testing as outlined in Section 2.1, as well as 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 configuration steps for provisioning DS3000 from Capita Secure Information Solutions to interoperate with Avaya IP Office R9.0 using SIP trunks to make calls between the DS3000 and the Avaya IP Office. The DS3000 is an Integrated Communication Control System that is used by emergency service customers for answering 999/112 calls and then from the same application using radio communication (TETRA digital radio or analogue PMR) to pass details to mobile resources.

As a radio dispatch deployment with basic PTN/PSTN the DS3000 acts as an end Private Branch Exchange (PBX) and performs call prioritisation and distribution to DS3000 operators as defined by the profile in which they have logged in to the DS3000 application. In this type of configuration the DS3000 has one primary connection to the Avaya IP Office, a SIP connection over SIP trunks. The DS3000 supports basic call control including hold and transfer.

# 2. General Test Approach and Test Results

The interoperability compliance testing evaluates the ability of the DS3000 application to make and receive calls to and from IP Office endpoints. All calls destined for the DS3000 both locally and from the PSTN are routed to the DS3000 over SIP trunks between the DS3000 and IP Office.

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.

### 2.1. Interoperability Compliance Testing

The interoperability compliance testing focuses on various technical testing scenarios to verify the usage of DS3000 with the Avaya solution In addition, serviceability tests were also performed to assess the reliability and accuracy of the joint solution. The testing focused on the following types of calls:

- **Calls to IP Office Endpoints** Ensure that calls can be made to IP Office extensions from the DS3000.
- **Calls to DS3000 Operators** Ensure that calls can be made to the DS3000 operators from IP Office extensions.
- **Calls to PSTN from DS3000 Operators** Ensure that calls can be made from the DS3000 to PSTN across the SIP trunk through IP Office.
- **Calls from PSTN into DS3000 Operators** Ensure that calls can be made to the DS3000 from the PSTN by calling into IP Office and across the SIP trunk to the DS3000.
- Hold/transfer and conference functionality Verify that calls can be placed on hold and transferred and conferenced.
- Caller information is preserved on all calls to/from DS3000 Ensure that the correct CLID information is preserved.
- **Failover testing** Verify the behaviour of DS3000 application under different simulated LAN failure conditions on the Avaya platform.

**Note**: All test cases were performed using the following set types:

- Ext 4201 (2420 Digital deskphone).
- Ext 4210 (Analog deskphone).
- Ext 4220 (9630 H323 deskphone).

### 2.2. Test Results

All test cases passed with the following issue observed.

- 1. If an IP Office phone calls to Operator A and wishes to be transferred to Operator B Using the "Transfer PABX" function on the DS3000 Operators console transfer of the call cannot be completed using standard "Trans Call" functionality on the DS3000 Operators console works perfectly.
- 2. When transferring to an IP Office set that is CFNA to voicemail- when the operator then hears VM and decides to go back to the original caller the call to the voicemail appears not to drop and that call remains up. A CANCEL or BYE is not sent by the DS3000. This is because the DS3000 does not send a BYE during a "recall" once the call has been answered.
- 3. DS3000 does not support SIP updates and when a call is transferred the CLID is not updated upon completion of the transfer.

#### 2.3. Support

Support from Avaya is available by visiting the website <u>http://support.avaya.com</u> and a list of product documentation can be found in **Section 9** of these Application Notes. Technical support for the Capita DS3000 product can be obtained as follows.

- Tel: +44 (0) 8456 041999
- Email: csis.info@capita.co.uk

### 3. Reference Configuration

**Figure 1** shows the setup for compliance testing Capita's DS3000 with IP Office using SIP signalling over SIP trunks to pass callers from IP Office extensions to the DS3000 Operators.

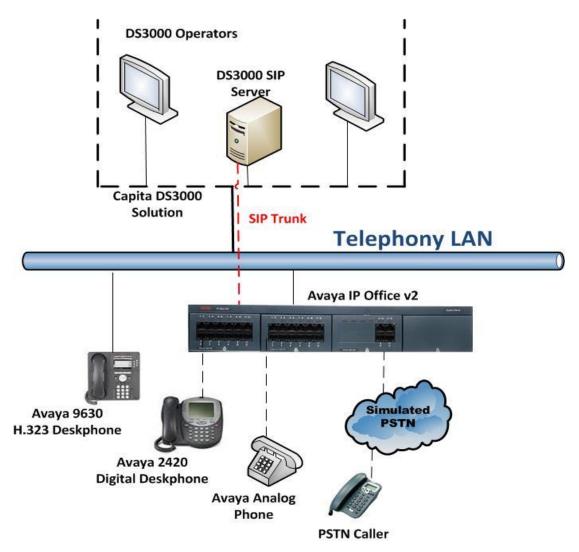


Figure 1: Connection of Capita DS3000 with Avaya IP Office R9.0

PG; Reviewed: SPOC 10/15/2014

# 4. Equipment and Software Validated

The following equipment and software was used for the compliance test.

Device Description	Versions Tested
Avaya IP Office V2	R9.0 build 946
Avaya 9620 H323 Deskphone	H.323 Release s3.186a
Avaya 2420 Digital Deskphone	R2.5
Avaya Analog Phone	N/A
Capita DS3000 Solution Kit (DSX Converged	Release 2x Series
Versions)	
- Aculab Dual Redundant SIP Server	V6.5.13

# 5. Configure Avaya IP Office

It is assumed that a fully functioning IP office is in place with the necessary licensing. The configuration and verification operations illustrated in this section were all performed using Avaya IP Office Manager. The information provided in this section describes the configuration of IP Office for this solution. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 9**. The configuration operations described in this section can be summarized as follows:

- Launch Avaya IP Office Manager
- Configure SIP Trunks
- Configure Short Codes
- Save Configuration

**Note:** The configuration of PSTN trunks and routes are outside the scope of these Application Notes.

#### 5.1. Launch Avaya IP Office Manager

Open the Avaya IP Office Manager by double clicking on the shortcut (not shown). The **Select IP Office** window is opened, showing the IP Office that is available to connect to. Tick the IP Office and enter the correct credentials and click on **OK**.

🌃 Avaya IP Office Ma	nager			
File Edit View To	ools Help			
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	🖀 Select IP Office			
	Name IP Address Type Ve	rsion Edition		
	Release 9.0			
	✓ IPOPG_R9 10.10.40.50 IP 500 V2 9.0	DOLUGION TO Office	1	
	POPG_R9 10.10.40.50 IP 500 V2 9.0	1.5.0 Duild 941 TP Office	J	
		Configuration Servi	ce User Login	
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#### 5.2. Configure SIP Trunks

In the left window select the IP Office system (**IPOPG\_R9**) and expand that navigate to **Line** and select the SIP line that needs to be configured (**17**). The SIP lines details are displayed in the main window. At the top of the main window select the SIP Line tab; enter the IP address of the DS3000 SIP server for the **ITSP Domain Name**. The other fields can be left as shown below, as this was the setup used for compliance testing.

🚰 Avaya IP Office Manager IPOPG_R9 [9.0.300.941] [Administrator(Administrator)]						
File Edit View Tools Help						
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IPOPG_R9 Line	• 17	<u> </u>				
IP Offices	×=		SIP Line - Line 17			
н 🖁 воотр (7)	SIP Line Transport SIP URI VoIP	T38 Fax SIP Credentials				
Ø Operator (3)     IPOPG_R9	Line Number	17 😂				
।	ITSP Domain Name	10.253.144.206	In Service			
行1 行2			URI Type	SIP	~	
- 173	Prefix		Check OOS	$\checkmark$		
	National Prefix	0	Call Routing Method	Request URI	~	
	Country Code		Originator number for forwarded and twinning calls			
17	International Prefix	00	Name Priority	Favour Trunk	~	
E Control Unit (4)	Send Caller ID	P Asserted ID 💙	Caller ID from From header			
	Association Method	By Source IP address	Send From In Clear			
Group (3)     Group (3)     Group (3)			User-Agent and Server Headers			
			Service Busy Response	486 - Busy Here	~	
🗉 🚯 Incoming Call Route (5)			Action on CAC Location Limit	Allow Voicemail	~	
	REFER Support					
Time Profile (0)	Incoming	Auto				
Firewall Profile (1)  Firewall Profile (2)  Firewall Profile (2)  Firewall Profile (2)  Firewall Profile (1)	Outgoing	Auto				

Select the **Transport** tab and enter the DS3000 SIP server IP address for the **ITSP Proxy** Address, ensure that **UDP** is selected for the **Layer 4 Protocol** and the port is set to **5060**.

🐮 Avaya IP Office Manager IPOF	PG_R9 [9.0.300.941] [Administrator(Administrator)]					
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IPOPG_R9 Line	<ul> <li>▲ 17</li> </ul>					
IP Offices	E SIP Line - Line 17					
BOOTP (7)	SIP Line Transport SIP URI VOIP T38 Fax SIP Credentials					
⊕ 🥐 Operator (3) ⊜ 🖘 IPOPG_R9	ITSP Proxy Address 10.253.144.206					
	Network Configuration					
- t7 1 - t7 2	Layer 4 Protocol UDP Send Port 5060					
-173	Use Network Topology Info None 🖌 Listen Port 5060					
- 🛩 5	Explicit DNS Server(s) 0 · 0 · 0 · 0 0 · 0 · 0					
<i></i> 6 <i></i> 9	Calls Route via Registrar					
10						
	Separate Registrar					
Extension (26)						
Short Code (72)						
Service (0)						
AS (1)     AS (1)     AS (1)     A (2)     Incoming Call Route (5)						

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🌃 Avaya IP Office Manager IPO	PG_R9 [9.0.300.941] [#	Administrator(Administrator)]	
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IPOPG_R9	• 17	<b></b>	
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BOOTP (7)	SIP Line Transport SIP URI	VoIP T38 Fax SIP Credentials	
⊕ 🐖 Operator (3) ⊟ 🖘 IPOPG_R9	Channel Groups	Via Local URI Contact Display Name	Add
⊞≪च System (1) ⊟*ि7 Line (10)	1 17 17	< * * * *	Remove
- 171			Edit
6			
17 18			

Below is the setup used for compliance testing. Click on **OK** once this is set correctly.

🖬 Avaya IP Office Manager IPOPG_R9 [9.0.300.941] [Administrator(Administrator)]						
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IPOPG_R9 • Line	• 17 •					
IP Offices	SIP Line - Line 17					
H & BOOTP (7)	SIP Line Transport SIP URI VOIP T38 Fax SIP Credentials					
⊕	Channel         Groups         Via         Local URI         Contact         Display Name         Add           1         17         17         < *					
🖃 🕂 Line (10)	Remove					
-f1 -f12	Edit					
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17	Local URI Cancel					
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	Display Name *					
Group (3)     Group (3)     Group (3)     Group (72)	PAI					
<ul> <li>Service (0)</li> <li>RAS (1)</li> </ul>	Registration 0: <none></none>					
Incoming Call Route (5)	Incoming Group 17					
	Outgoing Group 17					
<ul> <li>① Time Profile (0)</li> <li></li></ul>	Max Calls per Channel 10					
IP Route (2)						
Account Code (1)						

Click on the **VoIP** tab and select the appropriate **Codec** to be used and the suitable **DTMF Support**, below is what was used for compliance testing. Click on **OK** once complete, (not shown).

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IPOPG_R9	• 17		
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🗃 🤱 ВООТР (7)	SIP Line Transport SIP U	N VoIP T38 Fax SIP Credentials	
	Codec Selection	System Default Unused G.7211 ULAW 64K G.729(a) 8K CS-ACELP G.723.1 6K3 MP-MLQ C<	VoIP Silence Suppression  Allow Direct Media Path  Re-invite Supported Codec Lockdown PRACK/100rel Supported Force direct media with phones G.711 Fax ECAN
Group (3)     Short Code (72)     Service (0)     A    SA    SA	Fax Transport Support Location Call Initiation Timeout (s) DTMF Support	None Cloud 4	

### 5.3. Configure Short Codes

Short Codes are used to route calls to various lines configured on the IP Office. From the left window, right-click on **Short Codes** and select **New**.

🖬 Avaya IP Office Manager IPO	PG_R9 [9.0.300.941] [Administ	trator(Administrator)]
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■ <b>8</b> BOOTP (7) ■ Ø Operator (3)	Short Code	
■ Sperator (5)	Code	
System (1)	Feature	v
● 行了 Line (10)	Telephone Number	
	Line Group ID	·
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Paste     WanPor	Ctrl+V	
Delete	Ctrl+Del	
🖓 Time Pro 🧹 Validate		
🗉 🝈 Firewall ᡓ Connect To	. Ctrl+T	
IP Route, IP Route, I denote the second code (1)		*
Licence (31)		
Tunnel (0)		
🔄 🏰 User Rights (8)		
Auto Attendant (0)		
ARS (1) Location (0)		

A short code is created in order to directly route to the DS3000 hunt group, enter the number of the DS3000 operators queue, **50000** and ensure that the **Line Group ID** configured in **Section 5.2** is chosen.

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<ul> <li></li></ul>	Code	50000				
Grand System (1)	Feature	Dial	~			
由一行了 Line (10) 由一≪つ Control Unit (4)	Telephone Number	50000				
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	Locale		~			
Short Code (72)     Service (0)	Force Account Code					
😠 🝶 RAS (1)			-			
⊕ Incoming Call Route (5)     ⊕     WanPort (0)						
- A Directory (0)						

Alternatively an existing **Short Code** can be edited in order to route all calls beginning with 9 to the DS3000 in the example shown below. Ensure that the **Line Group ID** configured in **Section 5.2** is chosen. Click on **OK** once this completed.

Manager IB Office Manager IB0		] [A dministrator/A dministrator/]				
🚰 Avaya IP Office Manager IPOPG_R9 [9.0.300.941] [Administrator(Administrator)]						
File Edit View Tools Help						
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IPOPG_R9 Short Code						
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<b>9X</b> *52	Telephone Number	N				
9× *53*N# 9× *55	Line Group ID	17				
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Incoming Call Route (5)						
- 🧐 WanPort (0)						
Directory (0)						
Time Profile (0)				_		
IP Route (2)			OK Cance	el		
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### 5.4. Save Configuration

Once all the configuration is setup as required, click on the **Save** icon at the top right of the screen.

🌃 Avaya IP Office Manager IPO	PG_R9 [9.0.300.941] [Administrator(Administrator)]				
File Edit View Tools Help					
	<mark>√ ≝ ≄ </mark> ®				
IPOPG_R9 Line	• 17				
IP Offices	E SIP Line - Line 17				
	SIP Line Transport SIP URI VoIP T38 Fax SIP Credentials				
<ul> <li></li></ul>					

The **Save Configuration** window is opened and the **Configuration Reboot Mode** will either be **Immediate**, which will reboot the IP Office, or **Merge**, as is shown below that will not require a reboot of the IP Office. Click on **OK**.

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(iii — iiii)		· ]		
IP Offices	H H		SIP Line - Line 17	
🗉 🔏 BOOTP (7)	SIP Line Transport SIP UR	I VoIP T38 Fax SIP Creden	itials	
Operator (3)     Operator (3)			VoIP Sil	ence Suppression
System (1)				
□	Color Colorian	System Default	Save Configuration	Media Path
-171	Codec Selection	L .	IP Office Settings	upported
-172		-Unused	IPOPG_R9	down
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18			○ Timed	
🗈 🖘 Control Unit (4)			- Reboot Time	
Extension (26)				
<ul> <li>User (25)</li> <li>Group (3)</li> </ul>			16:03	
Short Code (72)	Fax Transport Support	None		
Service (0)	Location	Cloud	Call Barring	
🕀 💑 RAS (1)	Call Initiation Timeout (s)	4	Incoming Calls	
Incoming Call Route (5) WanPort (0)			Outgoing Calls	
Directory (0)	DTMF Support	RFC2833		
			L	
🗄 🕕 Firewall Profile (1)			OK Cancel Help	
IP Route (2)     Account Code (1)				

Enter the **Administrator** credentials and click on **OK** to complete the **Save Configuration** procedure.

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5			G.723.1 6K3 MP-MLQ	Merge		
			Service Us	er Login	nes	
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- 🍾 17			IP Office :	IPOPG_R9 - IP 500 V2		
Extension (26)			Service Us	er Name Administrator		
🕀 🥼 User (25)			Service Us	er Password		
🗉 🎆 Group (3)		Fax Transport Support	None			
Short Code (72)     Service (0)		Location	Cloud	OK Cancel Help		
E A RAS (1)				Incoming Calls		
🗄 🚯 Incoming Call Ro	ute (5)	Call Initiation Timeout (s)	4			
- 🤴 WanPort (0)		DTMF Support	RFC2833	Outgoing Calls		
- M Directory (0) 						
Ime Profile (0)     E      E      E      Firewall Profile (1)	۱					
IP Route (2)	.,			OK Cancel Help		
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📩 🦺 - Usan Diakka (O)						

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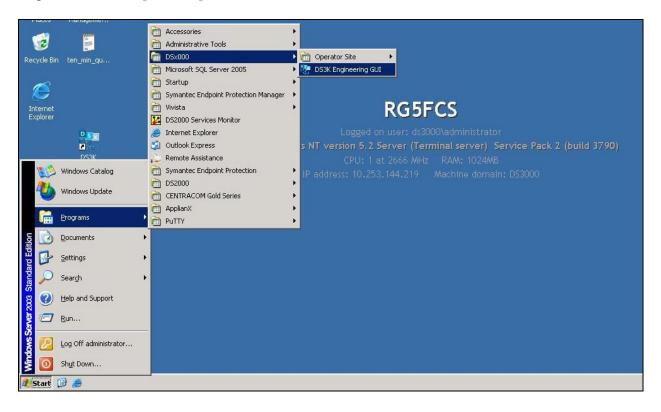
# 6. Configure Capita Secure Information Solutions DS3000

The following sections describe the steps required to configure the DS3000 application in order to connect successfully with IP Office using SIP trunks.

#### 6.1. Configure DS3000 connection to Avaya IP Office

The configuration for the connection to IP Office is performed on the DS3000 FCS machine.

Log into **DS3K Engineering GUI** as shown below on the DS3000 FCS Server.



Once logged in the following screen appears. Select **Telephone Gateways** in the right column, highlighted below.

Home Gateways	<u> </u>
System Monitor Media Endpoints Audio Mixes	CATEGORIES     A-Z <ul> <li>Engineering</li> <li>Diagnostics Audio Mixes Madia Endpoints System Monitor:</li> <li>Configuration Audio Settings Backup/Restore Macdio Media Gateways Recorder Settings SNMP Settings SNMP Settings SNMP Settings SNMP Settings Thephone Interraces Tome Wav File Manager</li> </ul> <li>Enter search criteria</li>

The **Gateways** tab is opened. Select the + icon at the bottom left of the screen.

/	Home Gateways					_ ×
	Id A Osvignalling RydPRSS RydPRSS AvayaSM	IP Address           10.200.93.3           0.233.144.206           10.233.144.206           10.233.146.206           192.166.50.16				
	+		Refresh	Delete	Discard Changes	Save

Fill in the **Gateway Id** and **IP Address** information. This will be the IP address of the IP Office. Click on **Save** once this is done.

I Engineers Tool					
Home Gateways	×				
		_			
Id Asterisk99 Avaya Mediant2000 Mediant1000B AvayaGalwaySM AvayaGalwayIPO	IP Address 10.253.100.99 10.12.17.14 10.253.146.125 10.253.146.126 10.10.40.24 <b>10.10.40.24</b>				
				AvayaGalwayIPO	
			IP Address	10 . 10 . 40 . 50	
+		Refresh	Delete	Discard Changes	Save

Click on the **Home** tab and select **Telephone Interfaces** in the right column as highlighted below.

Home Gateways	
System Monitor Media Endpoints Audio M	CATEGORIES A-Z  E Engineering Diagnostics Audio Mixes Media Endpoints System Monitor Configuration Audio Settings Backup/Restore MCS Configuration Settings Operator Settings Recorder Settings SNMP Faults SNMP Faults SNMP Faults SNMP Faults SNMP Exitings Telephone Interfaces Tone Settings Tone Settings Tone Settings Tone WAV File Manager

The **Telephone Interfaces** tab is opened. Select the + icon at the bottom left of the screen to add a new Telephone interface.

Home	Gateways	;	Tele	ephone I	nterfaces	k/				-
Telephone Inter	face types: IZ Normal IZ	Inter Site						)		
Id	Gateway 🔺	Interface Number	Туре	Group	Start Line	No of Lines	Card Number	T		
AvayaSM OSVSIP RG4 RG6	AvayaSM OSVSignalling Rig4DRSS Rig6DRSS	2 1 3 4	SIP SIP SIP SIP		31 1 61 71	30 30 10 10	N/A N/A N/A N/A	-		
+						Refresh		Delete	Discard Changes	Save

All the information in the right column must be filled in. The screen below shows the information that was used during compliance testing. Click on **Save** at the bottom right of the screen once all the information has been entered correctly. Note, set the **Operator ringing tone generation** to **Generate only when there is no early media**.

gineers Tool												_ 5
Home	Ga	ateways		×	Tele	ephone I	nterfaces	×				
Id Asterisk99 Auayal abSM AvayaGalwayIPO AvayaGalwaySM 1	face types: Vor Gateway Asterisk99 AvayaGalwayIPO AvayaGalwayIPO AvayaGalwaySM Mediant1000B	Interfac e Number 2 3 6 4 5	Type SIP SIP SIP DPNSS	Group			Telephone Interface Gateway Interface Number Type Group Start Line Number	AvayaGalwayIP AvayaGalwayIPO 6 SIP 151		×		
									Number of Lines Operator ringing tone generation Monitor Interface Inter Site	30 Generate only when th	ere is no early media	
+						Refre	esh		Delete D	iscard Changes	Save	

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### 6.2. Configure the DS3000 extension numbers

Open the **DS3000 Client** on the DS3000 Client machine. Enter the correct credentials on the **LOGON PAD**.

Recycle Bin	🧕 DS3000 Use	er Console										
0		17 13:27 A.001	89 4	) Enter	PIN To L	og On				2	Quit	
arcs												
DS3000 Client												
						LC	GON PA	D				
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DS3000 User Console	T					
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		Use	r Type Selec	tion		
	CUT01				MUT01	
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	Next Page	Prev Page		Resume		
•						

Click on **Resume** at the bottom of the screen as highlight.

Select **Done** at the bottom of the screen as highlighted.

DS3000 User Console Jan 17 13:30 AA.001	Select Fun	ctional Areas				Quit
	Selected		Functional	Area Select		
	FA001	FA001	FA002	FA003	FA004	
	FA002 FA003 FA004	FA005	FA006	PERF		
	FA005 FA006					
	PERF					
	Done	Next Page				
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DS3000 User Console     Jan 17 13:30     AA.001	Failed to Load Resource Groups	Quit
	Main Term Scrn Ovrd	
	Send Mssg	
	Update Dbase Fault Log	
	Calib Scrn Scrn	

Click on the **UpdateDbase** button highlighted.

Click on the **Call Routes** icon highlighted in the left window. The highlighted row in the right window shows that when 3xxx is dialled that Interface 2 is used. Note: The interface numbers are as defined by the configuration entered in **Section 6.1**.

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	GSM Pagers	15		0	2	444444	0		255	255	255	255
	HandOff Groups	16		61	2	51	0		255	255	255	255

Select **DPNSS Extensions** in the left column highlighted. Note the entry highlighted is for the DS3000 Extension **50000**. Ensure **Accept Type** is set to **Telephone**.

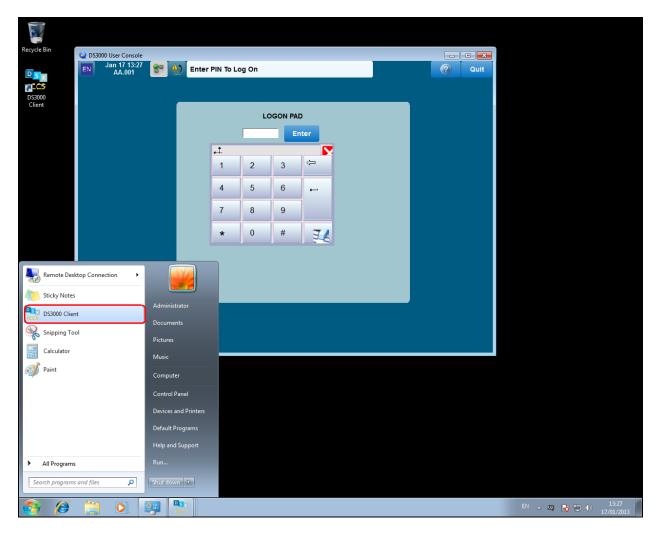
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L TELEPHONY	10	<u> </u>	EXT 49909		Telephone	Ū	1: PAGE 1 (3 💌	0	GRP-2	SUBGRP-01	·	1:1
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GSM Pagers	15		50001		Telephone	-	1: PAGE 1 (3 💌	0	GRP-1	SUBGRP-01	•	1: 1
HandOff Groups	16		50002		Telephone	•	1: PAGE 1 (3 💌	0	GRP-1	SUBGRP-01	•	1: T

# 7. Verification Steps

The following step can be taken to ensure that the connection between Capita's DS3000 solution and the Avaya solution is configured correctly. Make a call to and from the DS3000 and verify that the caller can be heard.

### 7.1. Verify that calls can be made to the DS3000

Open the **DS3000 Client** on the DS3000 Client machine. Enter the correct credentials on the **LOGON PAD**.



Select User	Туре				Quit
	Use	r Type Selec	tion		
CUT01				MUT01	
Next Page	Prev Page	— PAGE 1	Resume		

Click on **Resume** at the bottom of the screen as highlight.

Select **Done** at the bottom of the screen as highlighted.

DS3000 User Console Jan 17 13:30 AA.001	Select Fun	ctional Areas				Quit
	Selected		Functional	Area Select		
	FA001	FA001	FA002	FA003	FA004	
	FA002 FA003 FA004	FA005	FA006	PERF		
	FA005 FA006					
	PERF					
	Done	Next Page				

Q DS3000 User Console		
Jan 17 16:59         Image: AA.001	Preselections Menu	Quit
	Main Term Scrn Ovrd	
	Send Mssg	
	Update Dbase Log	
	Calib Scrn Scrn	

Click on the **Main Scrn** button highlighted below.

Once a call is presented to the DS3000 the following screen should appear. Click on the **Take Call** button on the bottom right of the screen to take the call.



# 8. Conclusion

These Application Notes describe the configuration steps required for DS3000 from Capita Secure Information Solutions to successfully interoperate with Avaya IP Office R9.0. Please refer to **Section 2.2** for test results and observations.

# 9. Additional References

This section references documentation relevant to these Application Notes. The Avaya product documentation is available at <u>http://support.avaya.com</u>, where the following documents can be obtained.

- [1] *IP Office 9.0 IP500/IP500 V2 Installation*, Document Number 15-601042, Issue 27m, July 2, 2013.
- [2] *IP Office Release 9.0 Manager 9.0*, Document Number 15-601011, Issue 29u, April 5, 2013.
- [3] *IP Office System Status Application*, Document Number 15-601758, Issue 07a, November 26, 2012.
- [4] IP Office System Monitor, Document Number 15-601019, Issue 03c, March 1, 2013
- [5] Application Notes for Configuring Capita Secure Information Solutions DS3000 with Avaya Aura® Session Manager R6.3 and Avaya Aura® Communication Manager R6.3 using SIP Trunks

Product documentation for DS3000 can be requested from Capita or may be downloaded from <u>http://www.capitasecureinformationsolutions.co.uk</u>

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