

Avaya Solution & Interoperability Test Lab

Application Notes for Configuring NMS Adaptive Predictive Dialler with Avaya IP Office R8.0 using Avaya IP Office TAPI Service Provider – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for the NMS Adaptive Predictive Dialler module to interoperate with Avaya IP Office. NMS Adaptive Predictive Dialler is one module of the NMS Adaptive Suite which allows a user to create outbound Predictive Dialling campaigns using IP Office Deskphones to connect users to the outbound calls.

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 Solutions and Interoperability Test Lab.

1. Introduction

These Application Notes describe the compliance tested configuration used to validate the NMS Adaptive Predictive Dialler module of the Adaptive Suite with Avaya IP Office R8.0 using Avaya IP Office TAPI3 Service Provider. The Adaptive Suite interoperates with Avaya IP Office using Third Party Telephony Application Programming Interface (TAPI).

NMS Adaptive is a Computer Telephony Integration platform that provides call control, media blending, progressive and predictive dialling and monitoring functionality to end users. Adaptive Desktop allows operators to control making and receiving calls via an Avaya handset registered to the Avaya IP Office. The Adaptive Predictive Dialler module of the Adaptive Suite leverages the power of making multiple calls per user. The dialler predicts when the next user will become free and starts to make multiple calls based on its prediction. By the time a user is free, one of the calls is likely to have been answered and the user can take that call. Overdialling leverages the power of making multiple calls per user. Unlike fully predictive dialling, however, the dialler does not try to predict when users will be free: instead, it waits until a user is actually free before it starts to make calls for them. This guarantees that when one of the calls is answered, a user will be available to take that call.

The Adaptive Predictive Dialler can have multiple campaigns operating in different modes. This means that the best dialling method can be chosen based on the exact requirements of the current outbound campaign. When Adaptive Predictive Dialler is started in Overdial or Predictive modes, the software monitors the users. As each user becomes available (or is predicted to be available), the Adaptive Predictive Dialler starts making multiple calls. As soon as a call is answered, the call is automatically transferred to an available user. The user's extension automatically answers the transferred call and the user's computer displays a campaign call dialog, showing the user details of the call, such as the name of the person who was called. Any configured screen pop is also run, presenting the corresponding record in the customer database.

2. General Test Approach and Test Results

The interoperability compliance testing included feature and serviceability testing. The feature testing focused on verifying NMS Adaptive handling of CTI messages in the areas of call control, event notification and routing. Predictive Dialling in an outbound campaign was the main focus of the compliance testing. Using CTI users who are not on a call are utilised in the outbound campaign by transferring the outbound call to a user's deskphone.

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. Compliance testing

The compliance testing focused primarily on the following types of calls:

- Predictive Dialler Single Number tests
- Predictive Dialler Multi Number tests

The serviceability testing focused on verifying the ability of NMS Adaptive to recover from adverse conditions, disconnecting the Ethernet cable for the CTI link and the reboot of Adaptive server under test.

2.2. Test Results

The following observations were noted during testing:

- Adaptive Desktop does not login a user as a part of the CTI functionality. Call Control is taken for a user already logged in to an extension.

2.3. Support

For technical support on NMS Adaptive products please contact the NMS Adaptive support team at:

Web address	:	http://www.nms-adaptive.com/support-options.html
Telephone	:	+44 845 612 4000
Email	:	support@nms-adaptive.com

3. Reference Configuration

Figure 1 shows the network topology for compliance testing. NMS Adaptive Predictive Dialler which resides on a Windows 2003 Server with IP Office TAPI3 Service Provider to provide a CTI connection to Avaya IP Office. Avaya 2400 Series digital deskphones are associated with Adaptive Desktop operators/users giving each Adaptive Desktop user telephony functionality from the IP Office. Avaya H.323 IP deskphones can also be used to provide telephony functionality.

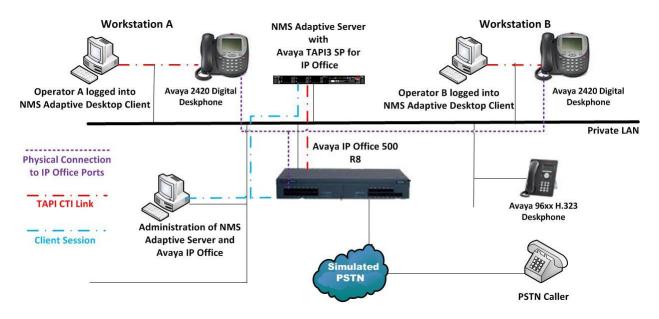


Figure 1: Connection of NMS Adaptive Predictive Dialler with Avaya IP Office R8.0

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya IP Office 500	Avaya IP Office R8.0.16
Avaya 96xx H.323 Deskphone	Avaya H323 IP Office Firmware Ha96xxua3_Hbas.bin
Avaya 2420 Digital Extension	N/A
Avaya TAPI3 Telephony Service Provider Client for IP Office Installed on Adaptive Server.	Avaya TSPI3w.tsp 1.0.0.17
Platform Independent Server with Windows 2003 Server O/S and NMS Adaptive Server.	NMS Adaptive Predictive Dialler Release 9.4
Client Workstation with Windows XP and NMS Adaptive Desktop	NMS Adaptive Desktop Release 9.4

5. Configuration of Avaya IP Office

IP Office is administered using IP Office Manager installed on a client PC. It is assumed that a fully working IP Office is in place with extensions and users preconfigured. This section shows what changes to the IP Office configuration is required for NMS Adaptive Predictive Dialler to interoperate correctly with IP Office.

Note: A user must be logged into the extension before the Adaptive Desktop can assume control of the extension.

5.1. Configuration of Avaya IP Office Users

Each user needs to be configured to allow the do not disturb feature. Click on **User Rights** in the left window select the user right associated with the users. In the example below this is called **Agent**. Under the **User** tab ensure **Enable do not disturb** is ticked as shown. Enter a suitable name for the User rights as this will be referenced in the User configuration to follow. Click **OK** once the information is entered correctly (not shown).

Avaya IP Office R8 Manager 00E00702D	89A [8.0(16)] [Administrator(Administrator)]	
File Edit View Tools Help 00E00702D89A User Rights	🔹 Agent 💽 💽 😪 🔛 💽 🗛	11 4 11
IP Offices	E	Agent
	User ShortCodes Button Programming Phone Manager Name Agent Locale Priority 5 Do not disturb I Enable do not disturb	Telephony User Rights Membership Voicemail Not part of User Rights Not part of User Rights Not part of User Rights
User Rights (8)	Configuration Ite Record Des	Error List

Expand on **User** in the left window and select the user to modify. Under the **User** tab in the right window ensure that **Working hours User Rights** is set to that user rights configured above.

IP Offices	Extn8910: 8910									
😑 🖞 User (51)	User	Voicemail	DND	ShortCodes	Source Numbers	Telephony	Forwarding	Dial In	Voice Recording	Button Programming
Bit Oser (s1) Image: Nouser Image: RemoteManager RemoteManager Image: RemoteManager 204 Extn204 205 Extn205 205 Extn205 206 Extn206 207 Extn207 208 Extn208 8004 Extn8004 89000 Extn89000 890001 Extn89001 89001 Extn89001 89002 Extn89002 89003 Extn89003 89004 Extn89004 89005 Extn89005 89006 Extn89007 89001 Extn89001 89001 Extn89001 89002 Extn89003 89001 Extn89001 89003 Extn89003 89001 Extn89001 89004 Extn89001 89001 Extn89001 89005 Extn89003 89001 Extn89001 89001 Extn89001 89001 Extn89011 89011 Extn89011 89011 Extn89011 89012 Extn89013 89014 Extn89014 89013 Extn89013 89015 Extn89015	System Profile De T User R User R Workin	Phone Riç evice ype	hts me profi ser Righ	None Telewo P Ena P Ena P Ena P Ena Ex None ts Agent	rker User eptionist able Softphone able one-X Portal Se able one-X TeleComr able Remote Worker Directory 2420 ag hours User Rights	rvices muter	Forwarding	Dial In	Voice Recording	Button Programming
		nours os	ar Rights							_
2010 Extrem 10										

5.2. Adding IP Office Users for Predictive Dialling

Adaptive Predictive Dialler uses an IP office extension in order to make an outbound call in the Predictive campaign and then transfers the caller to an Adaptive user. To add a new IP Office user right-click on users in the left window and select new as highlighted below.

00E00702D89A	 User 	500 TAPI:500		- 2 -			V	2 1	
	IP Offices							API:500: 50	00
- a	New	Ctrl+N				<u></u>			10
	New User Rights from user		odes	Source Numbers	Telephony	Forwarding	Dial In	Voice Recording	Button Programmin
	Cut	Ctrl+X							
	Сору	Ctrl+C		<none></none>					~
	Paste	Ctrl+V		1					~
X	Delete	Ctrl+Del	ces						
-1 🗸	Validate		irances	;					
2	Connect To	Ctrl+T	s						
	Apply User Rights to users								
	Copy User Rights values to users								
	003 Extn89003 004 Extn89004	(including dial acce	ss code)						
- 14 - 14 - 14 - 14 - 14 - 14 - 14 - 14	005 Extn89005	Twinning Time Pro	file	<none></none>					*
890	006 Extn89006	Mobile Dial Delay (secs)	2					

This brings up the user window as shown below. Enter a suitable **Name** and **Password** for the new user along with the **Extension** number and **Profile** which should be set to **Basic User**. Click on **OK** once configured correctly.

🖌 Avay	a IP Office R8 Manager 00E0070	2D89A [8.0(16)] [Adminis	trator(Administrator)]
File E	idit View Tools Help 02D89A <mark>-</mark> User	• 8911 Ext8911	
	IP Offices	E C	Ext8911: 8911*
	 8 208 8 007 2010 8006 2011 8008 2011 8001 4011 8000 8900 8004 8901 8005 8902 2 8911 User (50) NoUser RemoteManager 8911 Ext8911 205 Extra05 206 Extra05 206 Extra04 8900 Extn89001 89002 Extn89001 89002 Extn89001 89002 Extn89001 	Voicemail DND Name Password Confirm Password Full Name Extension Locale Priority System Phone Rights Profile	Short-Codes Source Numbers Telephony Forwarding Dial In Voice Recording Button Programming Menu Programming Mobility Phone Manager Op
	89004 Extn89004 89005 Extn89005 90005 Extn89005		ОК

Note: A new user must be added for each simultaneous outbound call required.

6. Installation and Configuration of Avaya IP Office TAPI3 Service Provider

TAPI3 Service Provider is included in the IP Office CTI Link Software Development Kit (SDK) located on the DevConnect website (<u>http://www.avaya.com/gcm/master-usa/en-us/corporate/alliances/devconnect/index.htm</u>) under the product name IP Office. Once downloaded the install is initiated by running **TAPI3Install.exe** as shown below.

Computer	Eile Edit View Favorites Io	ols <u>H</u> elp 1 🜔 Folders 🛛	a da 🗙 🖌 🖽		
2	Address 🛅 C:\Documents and Setti	ngs\Administrator\[Desktop\SDK 2.0 DEVCC	NNECT SITE	
5	Name 🔺	Size	Туре	Date Modified	Attribute:
utty.exe	html		File Folder	07/11/2011 13:47	
	Samples		File Folder	07/11/2011 13:47	
	🔁 🤒 Autorun.inf	1 KB	Setup Information	03/10/2001 11:41	A
	🔊 go	1 KB	Shortcut to Program	03/10/2001 17:31	А
	💽 go.bat	1 KB	Windows Batch File	12/12/2001 16:38	А
Network Places	index.htm	4 KB	HTML Document	12/06/2006 10:26	A
ridcos	🔋 🗐 readme.txt	1 KB	Text Document	22/10/2003 12:59	А
6	🗐 readme-DevConnect.txt	1 KB	Text Document	12/07/2006 13:38	А
C)	TAPI3Install.exe	3,637 KB	Application	22/10/2003 16:19	A

To configure the TAPI Service Provider, navigate to **Control Panel** and right click on **Phone and Modem Options** and properties as highlighted below.



Click on the **Advanced** tab and highlight **Avaya IP Office TAPI3 Service Provider** and click **Configure**.

ialing Rules Modems	Advanced		
An.	g telephony providers 3 Service Provider hony Service Provide ISP nference TAPI Servic rvice Provider	at .	his computer:

Enter the IP Office IP address into the **Switch IP Address** box. Select **Third Party** and enter the IP Office Administrators password into the **Switch Password** box. Ensure **WAV Users** and **ACD Queues** are ticked as shown below.

aya TAPI3 config	uration	
Switch IP Address	192.168.30.31	Cancel
C Single User		
User Name		
User Password		
Third Party		
Switch Password		
	F Ex Directory Users	
	VAV Users	

7. Configuration of NMS Adaptive Predictive Dialler

This section outlines the steps necessary to configure the NMS Adaptive Predictive Dialler to enable the Adaptive Desktop users use the Avaya IP Office deskphones in a predictive dialling outbound campaign. All configuration changes on the Adaptive Server are done through Adaptive Management Console installed on the Adaptive Server.

Note: Installation of the Adaptive CTI software is outside the scope of this document, for additional information regarding the installation please see **Section 10** of these Application Notes.

7.1. Configuration of NMS Adaptive CTI Gateway

The steps below describe the configuration for Adaptive CTI Gateway. This configuration enables the Adaptive Predictive Dialler communicate with IP Office via TAPI. Open the program **Adaptive Management Console** as shown below.

Manage Your	Server Server	er
Command Pro	1 Windows Catalog	•
/ Windows Expl	🌯 Windows Update	+
Adaptive Deskti	Accessories Administrative Tools	• •
Notepad	 Dell Accessories Startup 	•
Adaptive Manaç Console	 Symantec Client Security WinPcap 	*
Adaptive Predic	🛅 WinZip 🛅 Wireshark	Adaptive Desktop
WordPad	 Wisdom-soft ScreenHunter 5 F Internet Explorer 	ree Adaptive Management Console
Paint	 Outlook Express Remote Assistance 	Adaptive Predictive Dialler Oninstall Adaptive Call Recorder
All Programs	Adaptive Microsoft SQL Server 2005	Uninstall Adaptive Server

Enter the appropriate credentials into the Adaptive Management Console login screen as shown.

Adaptive Management Console	SHARING 💌 💶 🗙
Eile Yiew Config Server Activity Real-Time Historical Display Window Help	
Adaptive Management Console 💽 SHARING 💌 🔀	
Please enter your user name and password.	
User name: Administrator	
Password:	
OK Cancel Help	

Once logged in configure the CTI Gateway Service by clicking on **Config** in the toolbar at the top of the screen and under **System** select **CTI Gateway Service** as shown below.

Maaptive 🚮	Management Console		SHARING 👻 💶 🗖 🗙
Eile View	Config Server Activity B Users and Teams Message Rules Dialling Campaigns Macros and Screen Pops	eal-Time Historical Display Window Help	
	System	Queues Server Service <u>CTI Gateway Service</u> Messaging Processor Service SQL Exporting Service <u>Web Gateway Service</u> Message Database <u>A</u> dministrator Adaptive <u>Helper Service</u>	

The Adaptive CTI Gateway Configuration window opens. Select Client Server Comms tab and select TAPI 3rd Party for the Telephone system as highlighted below. Click Settings to configure the TAPI Settings.

Adaptive Management Console	SHARING -
Eile Yiew Config Server Activity Real-Time Historical Display Window Help	
Adaptive CTI Gateway Configuration	ব
Blending Banned Numbers Busy Lamp Field Restrictions Extensions Client Server Comms CLI Matching and Contacts List Do-Not-Disturb	
Communication with Adaptive Desktop	
Use IP address: Use host name: NMS_TEST_Server auto-detect	
Port number: 54321	
Use default telephone extension numbers for users	
Communication with the telephone system	
Telephone system: TAPI 3rd Party Settings	
Adaptive Switch Simulator Go Connect Inter Tel Axxess	
TAPI 3rd Party	
OK Cancel Apply Help	

The **TAPI** (**Third Party**) **Settings** window opens. Click the **Avaya IP Office** button under the **Line device identification** tab and click **OK** to submit. All other entries are default.

Ble	e device identification	OND settings	Trace information (diag	gnostics) (pns
CI _I	Click one of the following I	buttons to appl	y preset values:	ф
or [AASTRA		Panasonic KX-	TD
-	Alcatel		Panasonic KX-	TDA
. [Avaya IP Office		Samsung OFFICE	SERV
ort	LG IPECS		Siemens Hi-Path	170
	LG LDK / ipLDK		Siemens ECSTA	150
ion 🔽	Prefix extension number	s with this strin	g: IP Office Phone:	
ele (•	No suffix (ignore charac	ters after the e	(tension number)	
ele 🔽	No suffix (ignore charac	ters after the e	(tension number)	
ele (•	No suffix (ignore charac	ters after the e	(tension number)	

Click on **Dialling properties** on the **Adaptive CTI Gateway Configuration** window as shown below.

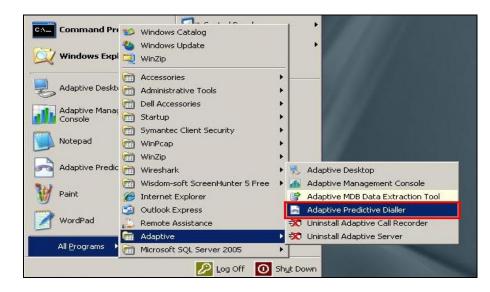
Use host name NMS_TEST_Server auto-detect auto-detect st number: 54321 Use default telephone extension numbers for users simmunication with the telephone system	Blending B Client Server Com	anned Numbers ms CLIMa	Busy Lamp F atching and Cont	"ield Restrictions acts List	Extension Do-Not-Disturb
Int number: 54321 Use default telephone extension numbers for users Immunication with the telephone system Idephone system: TAPI 3rd Party Settings	Communication with C Use IP address:	Adaptive Desktop			
Use default telephone extension numbers for users	• Use host name:	NMS_TEST_Serv	er	auto-detect	
mmunication with the telephone system	Port number:	54321			
,	Communication with	the telephone system	n		
	Communication with Telephone system:	TAPI 3rd Party		Settings]
		TAPI 3rd Party		Settings]

Prefix numbers for outside lines and appended numbers are added for the system on this screen. The information added here is non-specific as it is unique for each site. Once the relevant information is added, click **OK** and **OK** on the **Adaptive CTI Gateway Configuration** window, as shown.

Blending	Banned Numbers Busy Lamp Field Restrictions Extension
	rver Comms CLI Matching and Contacts List Do-Not-Disturb
	Dialling Properties
Communi	Append digits or characters to all outbound dialled numbers
C Use II	✓ When the dialled number is longer than this many digits: 4
Use F	append these characters (and then dial):
Port numt	
ronthame	- Special measures when dialling external numbers
🗖 Use c	Identify a dialled number as external (i.e. not a local extension) if it
	C starts with these digits:
Communi	in which case:
Telephon	before dialling, always prefix with these digits: 9
	C always use this account code:
	OK Cancel
-	

7.2. Configuration of NMS Adaptive Predictive Dialler

This section shows the configuration steps necessary to select the IP Office extensions used for predictive dialling. Adaptive Predictive Dialler dials selected telephone numbers and the client then gets automatically transferred to the Adaptive Desktop user. Open the program **Adaptive Predictive Dialler** as shown below.

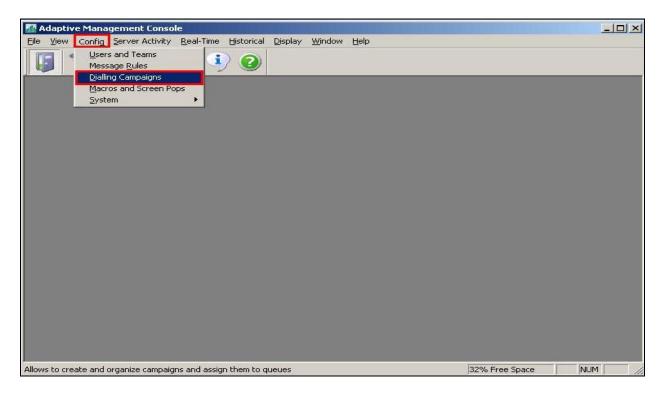


Click on the **Assign Extensions** icon at the top of the screen highlighted below. This opens the **Assign Extensions** window. Click on the new extensions icon at the top of that window highlighted and enter the IP Office **Extension Numbers** that will be used for dialling out by the **Adaptive Predictive Dialler**. Click **OK** on each window to save the configuration.

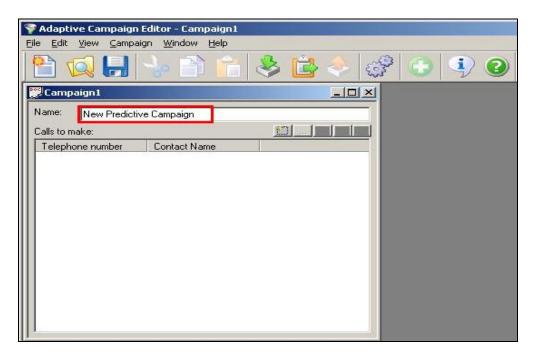
Adaptive Predictive Dialler			SHARING		
Users assigned to the predictive dialler			Extensions assigned to the predictive dialler		
User Extension Op A	Status	DND Number	Exten Status Number 8911		
	Ex	ign Extensions lensions: 911			
Predictive dialler retrieval queues Queue Call Queue	Predictive calls	(Enter Extension Numbers OK Cancel Enter one or more extension numbers, separated by co	SHARING X	
Ready			Unanswered: Engaged: Unobtainable: Calls per free user: Expected call duration: Running time:		

7.3. Configure Adaptive Predictive Dialling Campaign

Open the Adaptive Management Console as described in **Section 7.1**. Select **Config** in the tool bar and click on **Dialling Campaigns** as shown below.



Enter a suitable name for the new campaign.



i) (

Select **Campaign** from the top toolbar and **Settings** as shown below.

Select the **Predictive Dialler** tab. Ensure that **Make this a predictive dialler campaign** is ticked. Select **Predictive – talk time (seconds)** for **Dialling mode** and **Make rescheduled calls predictive** for **Rescheduling**. Click **Apply** once all necessary selections are completed.

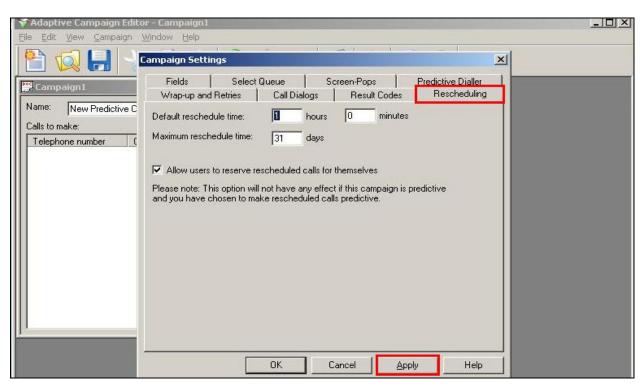
😽 Adaptive Campaign Edito	or - Campaign1	-O×
Eile Edit Yiew Campaign		
1 🔁 😡 🛃 🚽	Campaign Settings	
Campaign1	Wrap-up and Retries Call Dialogs Result Codes Rescheduling Fields Select Queue Screen-Pops Predictive Dialler	
Name: New	Make this a predictive dialler campaign	
Calls to make: Telephone number (Calls per free user: 3 Dialling mode Overdial • Predictive - talk time (seconds): 30 Rescheduling Make rescheduled calls progressive • Make rescheduled calls progressive Make rescheduled calls progressive • Reschedule abandoned calls (predictive) Retry answered abandoned calls after: 72 Hours	
	OK Cancel <u>Apply</u> Help	

Select the queue to which the Predictive Campaign belongs to under the **Select Queue** tab, click **Apply** once selected.

Adaptive Campaign Edit	ur - Campaign1 Window Help	
	Campaign Settings Wrap-up and Betries Call Dialogs Result Codes Rescher Fields Select Queue Screen-Pops Predictive Di	
Calls to make: Telephone number (Queue: Default	
	Please select the queue for this campaign. The campaign will NOT be added to the queue until you select Assign Campaign	
	OK Cancel Apply I	Help

The Predictive Dialler fields such as **Contact Name** or **Telephone Number** can be altered or added to by selecting the icon highlighted below in the **Fields** tab. These fields will be evident in **Section 7.4** when adding calls to a campaign.

Adaptive Campaign Edito	<u>M</u> indow <u>H</u> elp				<u>-</u> D×
1 🔁 😡 🔚 🚽	ampaign Settings	- 1		I	×
Campaign1	Wrap-up and Retries Fields Select	Call Dialogs Queue S	Result Codes	Rescheduling Predictive Dialler	
Name: New Predictive C	Fields:				
	Field Name	Field T	уре		
Telephone number (Telephone Number Contact Name	Telepi Stand	none number ard		
		ок С	Cancel Ap	ply Help	



The default rescheduling time can be altered under the **Rescheduling** tab.

Once a call is completed a result code must be entered to report on how the call was finished, for example if the agent made a sale or if the customer was not interested or perhaps would require a call back in the future. Click on **Result Codes** tab and select the icon highlighted to **Add result code**. Enter a suitable **Meaning** and choose an **Action** from the drop-down menu. Click **OK** once completed.

Adaptive Campaign Edito			×
	Tampaign Settings Fields Select Queue Wrap-up and Retries Call Dialo Users may use the following result codes:		and the second
Calls to make:	Code (number) Meaning (text) Add result code Code (number): 1	Action	Wrap X
Telephone number (Meaning (text): The sale is mad Action: Contact comple		
	OK	Cancel Apply	Help

7.4. Adding callers to a campaign

Click on the icon highlighted below to add some users/numbers to the predictive campaign.

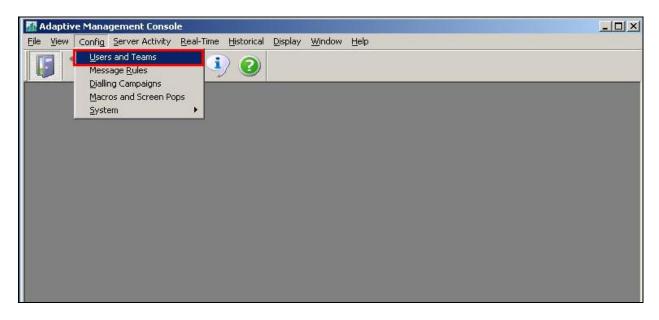
🖓 Adaptive Campaign Editor - Campaign 1	
<u>File Edit Yiew Campaign Window Help</u>	
1	
Campaign1	
Name: New Predictive Campaign Calls to make: Telephone number Contact Name	

Note the fields present in the Add Call window. These fields correspond to those added in the **Section 7.3** above. Click on OK once completed. Any number of calls can be added to the campaign.

💖 Adaptive Campaign Editor - Ca	ampaign1			_D×
Eile Edit View Campaign Windo	w <u>H</u> elp			
🖹 🐼 🔚 😽 🗎		🖹 🔶 🚰	3 9 0	
📴 Campaign1	Add Call			×
Name: New	Telephone number:	0871234567		-
Calls to make:	Contact name:	Paul		-
Telephone number Contact	┌─ Custom fields───			
Contact	Custom neius			
[]].			1	
		OK Cano	el	

7.5. Adding Adaptive Users

Open the Adaptive Management Console as described in Section 7.1. Under Config select Users and Teams highlighted below.



Select the Users tab and click on the Add button highlighted below.

Adaptive Management Cons	Configuration Editor	<u>? ×</u>	<u> </u>
Ele Yiew Config Server Activit	Users Teams The following users can log in: Add Name Team	Edit Remove	
	Log out selected users		
	OK Cancel App	oly Help	a a a a a a a a a a a a a a a a a a a

PG; Reviewed SPOC 8/3/2012

The Add User window is opened, under the Name and Details tab enter a suitable Name and Password and click Apply.

Adaptive Management Cons	Add User	? X _ D X
File View Config Server Activity	Name and Details Queues Macros Permissions Email Permi Name: Op A Password:	ssions
		Help

Select the **Queues** tab and click on the icon highlighted below. The **Select Retrieval or Forwarding Queues** window is opened. Select the required queue that will be associated with the new user and click **OK**.

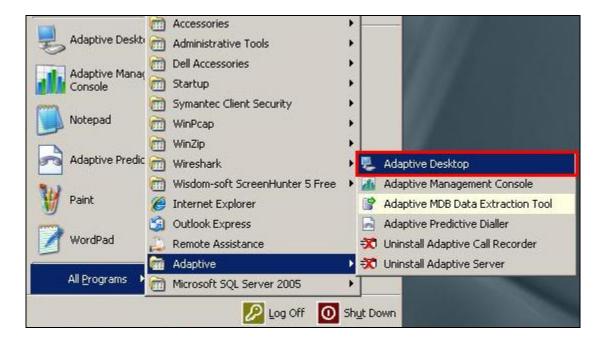
Adaptive Management Cons File View Config Server Activity	Add User	<u>.</u>
	Name and Details Queues Macros Permissions Email Permission	
	Select Retrieval or Forwarding Queues Select one or more queues from the list below, then click OK: Default Undeliverable	
	OK Cancel	
	User-specific blending time: -1 seconds	Help

Click on the **Permissions** tab and select the **Module Permissions** required for the user, the example below shows all possible modules selected for the user. Click on OK once selected.

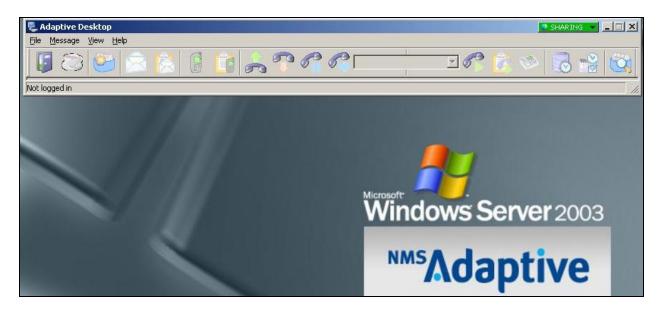
Adaptive Management Cons	Add User	<u></u>
Ele View Config Server Activit:	Name and Details Queues Macros Permissions Email Module Permissions CTI SMS EMail Progressive Dialling	
	 ✓ Predictive Dialling ✓ WebChat ✓ Use Management Console 	
Factbolin avera Et	Restrict Access to Historical Call Recor Additional Permissions OK Cancel Apply	ding Report

7.6. Configure Adaptive Desktop

Open Adaptive Desktop as shown below.



This opens the Adaptive Desktop window as shown.



Click on the Login Icon highlighted. This opens the Adaptive Desktop – User Login window, Enter the required User name and Password and click OK.

	Adaptive Des	ktop - User Login SHARING 💌 🔀	
	Please enter yo	our user name and password.	and the second se
	User name: Password:	Ор А	
Adaptive Desktop Ele Message View Help Image: Second Seco	in usin	Progressive Dialling Predictive Dialling WebChat gin options the Adaptive Desktop starts on this computer, automatically log	

Once **OK** is clicked above the **Set Telephone Extension** window opens. Enter the IP Office extension that is to be associated with the Adaptive Desktop operator and click **OK**.

	Set Telephone	Extension		SHARING V	×		
	Enter your teleph xxxx	one extension number ir		on this computer			
Adaptive Desktop Ele Message View Help		17A (2) @0	BA) <u> </u>		1	×1
Not logged in			0 0		<u> </u>		

Once logged in information on **messages**, **calls**, and **Call Queue** is displayed as highlighted below.

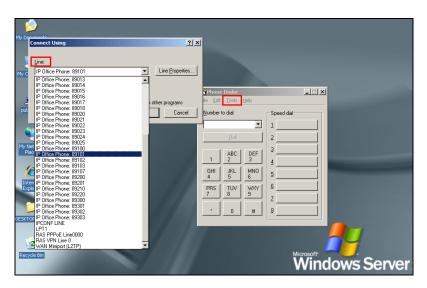
Adaptive Desktop - Op A - <automatic> e Message View Help</automatic>		
3 8 8 8	00000	
al 0 messages, 0 calls Call Queue -> 0, 0		

8. Verification Steps

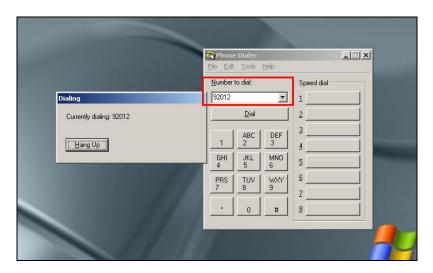
This section illustrates the steps necessary to verify that the NMS Adaptive Predictive Dialler is connected to the IP Office correctly.

8.1. Verify that Avaya IP Office TAPI Service Provider is running correctly

Open **Phone Dialer** (Windows program installed on all Windows platforms) on the Evolution Server where TAPI is installed. Click on the Tools menu and select **Connect Using**. Another box opens as shown below. Open the **Line** dropdown box and all the IP Office users should here as an available line to use.



Choose any line and in the box **Number to dial** enter a valid IP Office extension number as shown below and click **Dial**. The **Phone Dialer** should successfully call the chosen extension number.



Solution & Interoperability Test Lab Application Notes ©2012 Avaya Inc. All Rights Reserved. 26 of 32 AdpPRE_IPOR8

8.2. Verify that NMS Adaptive Server has CTI functionality

Open Adaptive Management Console as shown in **Section 7.1**. Click on **Server Activity** in the top menu and **Telephone Events** as shown below.

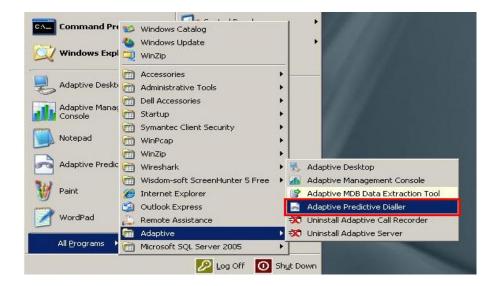
A 🔝	daptiv	e Mana	gement Consol	e					
Eile	⊻iew	Config	Server Activity	<u>R</u> eal-Ti	me	Historical	Display	Window	Help
		7	Message Pro	ents		2			
	14		D <u>a</u> ta Controll <u>W</u> eb Gatewa CR Archive	У	F				
					22.5				

Telephone Events and status are displayed in the CTI Gateway window as shown below.

View Config Server Activity Rea CTI Gateway		SHARING - ? - IX	
elephone Events and status		Save output to file	_
2011/11/17 16:08:19	8	rsion = 20000	
ineNegotiateAPIVersion for device 1 ret 2011/11/17 16:08:19 Connected users and extensions	urned 8000000c (-2147483636), dwAPIVe	rsion = 20000 ▼	
2011/Ĩ1/17 16:08:19 ◀┃	urned 8000000c (-2147483636), dwAPIVe	rsion = 20000	
2011/T1/17 16:08:19 I connected users and extensions	1		

8.3. Verify Predictive Dialler is operating correctly

Open the program Adaptive Predictive Dialler as shown below.



Once opened the Adaptive Predictive Dialler window shows information on the Avaya **Extensions assigned to the predictive dialler**.

🗖 Adaptive Predictive Dialler	
File View Settings Help	
1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Users assigned to the predictive dialler	Extensions assigned to the predictive dialer
User Extension Status DND Number	Extension Status Number
LukeMarchant 1011 Available off ImmenOtas 1016 Available off HareNKhallen 1015 1 ST BREAK DN PhyrCollet uner logged out off ThesCarenas uner logged out off SawiederKaun 1017 Available off DavidSuntis 1014 inging off 07845732336 BerrHotock 1010 Iabing off 01438211831 JasonCoine 1009 Available off	1040 inging 01226240519 1041 inging 01972619785 1042 inging 01972619785 1043 avalable 01914421567 1044 avalable 01914421567 1045 avalable 01914421567 1046 avalable 01914421567 1047 avalable 01914421567 1048 avalable 01914421567 1049 avalable 01914421567 1049 avalable 01914421567 1046 avalable 01914421567 1047 avalable 01914421567 1048 avalable 01914421567 1059 avalable 01914421567 1050 avalable 01914421567 1051 avalable 01914421567 1052 avalable 01914421567 1053 avalable 01914421567 1055 avalable 01914421567 1055 avalable 01915 1055 <
Predictive dialler retrieval queues	Call statistics for today:
Queue Predictive calls Progressive calls	Dialed: 447
4 40 0 OVER 50S 2 5152 0 L0L 1 201 0 L0L 3 0 0 QUANTUM 2048 0 OVER 50S 0 0	Connected: 141 31.5% Abandoned answered: 1 0.7% Unonswered: 295 66.0% Engaged: 5 1.1% Unoblainable: 5 1.1% Calls per free user: 6 Calls: Expected call duration: "overdialing" Urees: Running time: 00.19.26

Reports on predictive calls made are available on the Adaptive Management Console. Open Adaptive Management Console as shown in **Section 7.1**. Click on **Historical** in the top menu and **Campaigns** \rightarrow **Single Campaign Report** as shown below.

🌆 Adaptive Management Console		LogMeIn - Remote Se	ssion 🗶	
Eile View Config Server Activity Real-Time	Historical Display	Window Help		
🚺 🍞 🐺 🎬 💩 🍕	Users	•		
	Extensions		.	
	⊆ampaigns	Single Campaign Report	8	
	Predictive Dialler			
	Queues	 Call Duration By <u>Result</u> 		
	Server	 Multi Campaign Report 		

Select the predictive campaign required from the Select Campaign window.

🚮 Adaptive Management Console	LogMeln -	Remote Session	×		_ 6
Elle View Config Server Activity Real-Time Historical Di	splay <u>Window</u> Help		100		
S 🖗 🎬 🖏 🔹 🕑					
			_	_	
	Select Campaign			×	
	Select one campaign from	the following list:	D	elete	
	Name	Date	Results		
	MR 18052011	5/18/2011 12:11:16	1		
	MR 1805	5/18/2011 2:04:18 PM	0		
	MR 1805	5/18/2011 2:07:05 PM	1		
	MR LOFTSPACE	5/18/2011 4:19:50 PM 5/18/2011 6:37:09 PM	924 240		
	NGPS SOLAR BH	5/19/2011 1:05:03 PM			
	NGPS SOLAR BH	5/19/2011 1:05:52 PM	231		
	MR 200511	5/20/2011 1:08:10 PM			
	PREVIOUS 20	5/20/2011 4:30:43 PM	852		
	TA	5/23/2011 11:46:03	67		
	TA 2 TA 2	5/23/2011 3:11:51 PM 5/23/2011 3:14:11 PM	0 67		
	MR 230511	5/23/2011 3:40:23 PM	424		
	MR 2011	5/23/2011 3:56:20 PM	212		
	MB TA	5/23/2011 5:32:29 PM	178		
	MR 240511	5/24/2011 12:53:08	277		
	TA 24	5/24/2011 4:20:01 PM	168	-	
		OK Cancel		1.000	
		UK Lancel			

An example of a report showing the predictive calls made and the results of these calls is shown in the report below.

🚺 Adaptive Man	agement Cons	ole - [Outbound dia	iller campaign	NGPS SOLAR BH]	mote Session	×				- 8
Eile ⊻iew Co	onfig Server Act	ivity <u>R</u> eal-Time <u>H</u> is	storical <u>D</u> isplay	Window Help						_ 8
🚺 🍞 🌄 👛 🖎 🎐 🕑										
Date and time	Number	Name	Engaged	Unanswered	Rescheduled	Result	Code	User	Prep time	Dial time
2011/05/19 13:	01202515619	Paul Wheatley	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
2011/05/19 13:	07989355978	Waters	0	1	0	Not Interested	2	CarolWalsh	0 s	0 s
2011/05/19 13:		Rowe	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
2011/05/19 13:		BARTLETT	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 13:		Murphy	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 13:		Turner	0	1	0	Not Interested	2	CarolWalsh	0 s	0 s
2011/05/19 13:		Garside	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
2011/05/19 13:	07974240401	Phillips	0	0	0	Not Interested	2	CarolWalsh	0 s	Os -
2011/05/19 13:	07974116342	William Hill	0	1	0	Fact Find	1	CarolWalsh	0 s	0 s
2011/05/19 13:		Gunovsky	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
2011/05/19 13:		Elizabeth Horn	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
2011/05/19 13:		MCDONALD	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 13:	07966449770	Goodman	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 13:	07963455012	Kennedy	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 14:	01425617653	MASON	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 14:	01202573869	Patricia Lurens	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 14:	01202814594	Sherwood	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 14:	01202431706	Mansell	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 14:	01202483781	Hopkins	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 14:	01202798480	Morland	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 14:	07940401704	Moulton	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 14:		MCMASTERRA	0	Ō	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 15:		Briers	0	Ō	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 15:		Hopking	0	0	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 15:		CONWAY	0	1	0	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 15:		Bird	õ	ō	ŏ	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 15:		Neil	0	õ	ů.	Not Interested	2	CarolWalsh	0 s	05
011/05/19 15:		Thomas	õ	õ	ŏ	Not Interested	2	CarolWalsh	0 s	0 s
011/05/19 15:		Wrobel	0	Ő	ŏ	Fact Find	1	CarolWalsh	0s	0s
011/05/19 16:		Parker	0	ñ	õ	Not Interested	2	CarolWalsh	0 s	0 s
011/05/20 10:		Prasad	0	1	õ	Not Interested	2	CarolWalsh	0 s	0 s
011/05/20 10:		Isidro	0	1	0	Not Interested	2	CarolWalsh	05	0 s
011/05/20 10:		Barents	0	2	0	Not Interested	2	CarolWalsh	05	0 s
011/05/20 10:		Prosser	0	2	0	Not Interested	2	CarolWalsh	05	05
011/05/20 10:		Bell	0	2	0	Not Interested	2	CarolWalsh	U S O S	U S O S
			0	1	0		2	CarolWalsh		
011/05/20 10:		DAVEY		1		Not Interested	2	CarolWalsh CarolWalsh	0 s	0 s
011/05/20 10:		FOGDEN	0	2	0	Not Interested			0 s	0 s
011/05/20 10:		MOTT	0	1	0	Fact Find	1	CarolWalsh	0 s	0 s
011/05/20 11:	07972689730	Fulmar	0	3	0	Not Interested	2	CarolWalsh	0 s	0 s

9. Conclusion

As illustrated in these Application Notes the procedures for configuring NMS Adaptive Predictive Dialler to interoperate with Avaya IP Office R8.0. Using the configuration described in these Application Notes an outbound Predictive Dialling Campaign was tested. During compliance testing, all test cases were completed successfully any observations are outlined in **Section 2.2**.

10. Additional References

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

- [1] TAPI Link installation Doc #15-601034 Issue 11d
- [2] TAPI Link Doc # 15-601035 Issue 11f
- [3] IP Office R8 Doc library

The following NMS Adaptive product documentation can be found at http://nms-adaptive.com/downloads/

[1] Adaptive Software Suite – User Guide

©2012 Avaya Inc. All Rights Reserved.

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and TM are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at <u>devconnect@avaya.com</u>.