



Avaya Solution & Interoperability Test Lab

Application Notes for Avaya Proactive Contact R5.1.1 with Inisoft synTelate 5.1 using Avaya PG230 Digital Switch and Agent Blending – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Inisoft synTelate 5.1 to interoperate with Avaya Proactive Contact R5.1.1 using Avaya PG230 Digital Switch and Agent Blending. In the compliance testing, Inisoft synTelate used the Agent API from Avaya Proactive Contact and the Telephony Services Application Programmer Interface from Avaya Aura® Application Enablement Services to provide a custom agent desktop for Avaya Proactive Contact agents to handle outbound calls initiated by Avaya Proactive Contact and inbound calls received by Avaya Aura® Communication Manager.

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

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

1. Introduction

These Application Notes describe the configuration steps required for Inisoft synTelate to interoperate with Avaya Proactive Contact using Avaya PG230 Digital Switch and agent blending. In the compliance testing, Inisoft synTelate used the Agent API from Avaya Proactive Contact and the Telephony Services Application Programmer Interface (TSAPI) from Avaya Aura® Application Enablement Services (AES) to provide a custom agent desktop for Avaya Proactive Contact agents, to handle outbound calls initiated by Avaya Proactive Contact and inbound calls received by Avaya Aura® Communication Manager.

Inisoft synTelate is a call center scripting application for creating inbound and outbound campaigns, and consists of the Inisoft synTelate Designer and the Inisoft synTelate Agent. Inisoft synTelate Designer is a graphical tool that is used for the definition of the call flow and agent screens. A subset of the Avaya Proactive Contact Agent API is used by synTelate Designer to obtain jobs, call lists, and data fields to facilitate the agent screen customization.

The Avaya Proactive Contact Agent API is used by synTelate Agent to obtain information such as job type, agent state, customer record fields and values from Avaya Proactive Contact to display on the customized agent desktop, and to request customer record update functions initiated from the agent desktop, such as set callback parameters. The Avaya Proactive Contact Agent API is also used to request call control functions for outbound calls delivered by Avaya Proactive Contact.

In the agent blending environment, the inbound calls are delivered to the agents by Avaya Aura® Communication Manager. The TSAPI interface from Avaya Aura® Application Enablement Services is used by synTelate Agent to request call control functions for the inbound calls.

2. General Test Approach and Test Results

The interoperability compliance testing evaluated the ability of synTelate to carry out call handling functions in a variety of scenarios through its TSAPI and Agent API interface with AES and Proactive Contact respectively. The feature test cases were performed automatically. Outbound calls were automatically placed and delivered to synTelate Web Agent by Proactive Contact. Different types of jobs were exercised, along with different actions initiated from synTelate Web Agent, to verify proper generation and handling of supported messages from Proactive Contact. The Proactive Contact Editor was used to start/stop jobs. The verification included checking the display of fields, options, and values on synTelate Web Agent, and the exchanged API events in the agent1_API.trans logfiles.

Interoperability Compliance Testing

The feature testing focused on verifying proper display of the customized synTelate Agent with appropriate options, fields, and values for the following scenarios:

- Outbound, inbound and managed jobs
- Proactive Agent Blending
- Log in, join job, go on/off break, leave job, and logoff
- Hold, retrieve, NVDT call transfer, conference, place manual call, agent drop, customer drop, release line/hang-up, and finish work
- Set callback and update customer fields

2.1. Test Results

All test cases that were executed have successfully passed.

2.2. Support

Technical support on synTelate can be obtained through the following:

- Phone: +1 (603) 383-4999 or +44 (0) 141-552-8800
- Email: support@inisoft.co.uk

3. Reference Configuration

The configuration used for the compliance testing is shown in **Figure 1**. In the compliance testing, synTelate used the Agent API to monitor and control outbound calls for the agents, and used TSAPI to monitor and control the inbound calls to the agents.

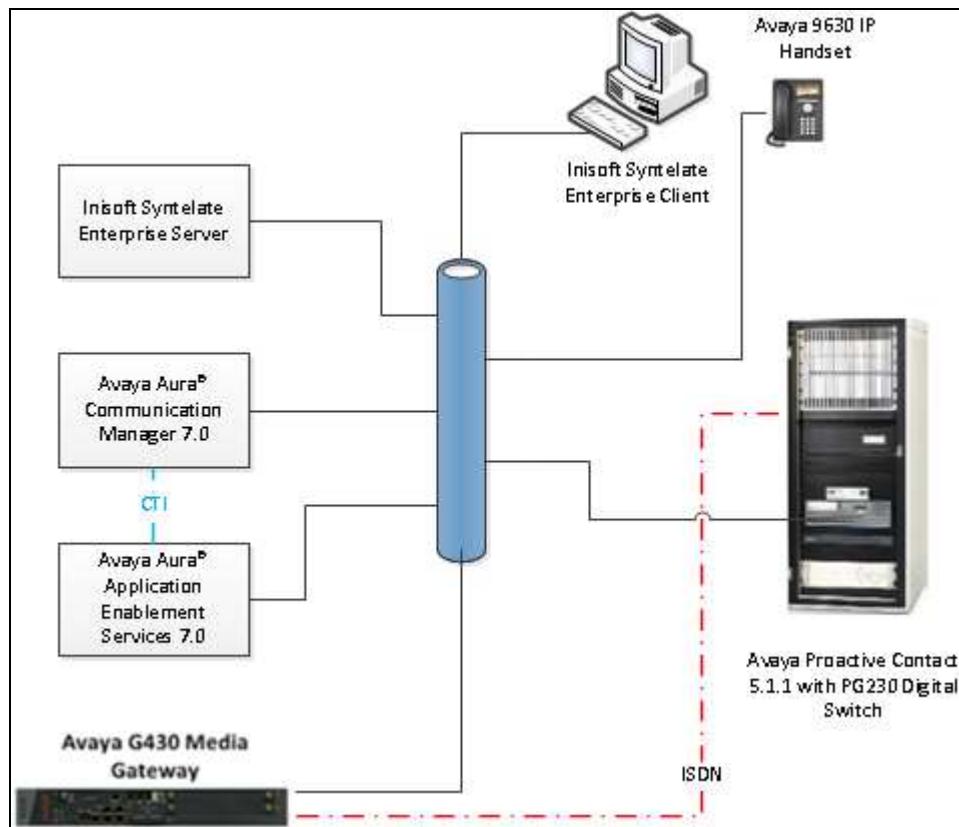


Figure 1: Inisoft synTelate with Avaya Proactive Contact using Avaya PG230 Digital Switch and Proactive Agent Blending

4. Equipment and Software Validated

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

Equipment	Software
VMware virtual machine	Avaya Aura® Communication Manager 7.0.1 R17x.00.0.441.0-22477
G430 Media Gateway	FW 37.20.0
Avaya S8730 Server	Avaya Proactive Contact 5.1.1 with Patch 392
VMware virtual machine	Avaya Aura® Application Enablement Services 7.0.0.0.0.13-0
Inisoft synTelate Enterprise	5.1.0

5. Configure Avaya Aura® Communication Manager

This section provides the procedures for configuring Communication Manager to support the PG230 integration and CTI for Agent Blending. The procedures include the following areas.

- Configure AEServices
- Configure Inbound ACD
- Configure Avaya Proactive Contact Acquire feature
- Configure ACD agent for Proactive Agent Blend
- Configure Feature Access Codes for Call Centre features
- Configure Trunks to Avaya PG230 Digital Switch

5.1. Configure AEServices

Use **change node-names ip** to enter the node-name and IP address for the Application Enablement Server. Take a note of the **CLAN** node **Name** and **IP Address**.

change node-names ip		Page 1 of 2
IP NODE NAMES		
Name	IP Address	
CLAN	10.10.40.31	
CM521	10.10.16.23	
Gateway	10.10.16.1	
IPbuffer	10.10.16.184	
Intuition	10.10.16.51	
MedPro	10.10.16.32	
Presence	10.10.16.83	
RDTT	10.10.16.185	
SESMNGR	10.10.16.44	
SM1	10.10.16.43	
SM61	10.10.16.201	
default	0.0.0.0	
devconaes61	10.10.16.30	

In order for Communication Manager to establish a connection to Application Enablement Services, administer the CTI Link as shown below. Specify an available **Extension** number, set the **Type** as **ADJ-IP**, which denotes that this is a link to an IP connected adjunct, and name the link for easy identification, in this instance, the node-name defined in previous step is used.

add cti-link 1		Page 1 of 3
CTI LINK		
CTI Link: 1		
Extension: 1111		
Type: ADJ-IP		
Name: devconaes61		COR: 1

Using the command **change ip-services**, configure IP-Services for the AESVCS service as follows:

change ip-services					Page	1 of 4
IP SERVICES						
Service Type	Enabled	Local Node	Local Port	Remote Node	Remote Port	
CDR1		CLAN	0	IPbuffer	9000	
CDR2		CLAN	0	RDTT	9001	
AESVCS	y	CLAN	8765			

On **Page 4**, set the **AE Services Server** node name and **Password** the AES Server will use to authenticate with Communication Manager.

change ip-services					Page	4	of	4
AE Services Administration								
Server ID	AE Services Server	Password	Enabled	Status				
1:	devconaes61	Avayapassword1	y	in use				

5.2. Configure Inbound ACD

For the purposes of agent blending, an inbound Vector and VDN must be configured. This is used for delivering inbound calls to ACD agents independent of Proactive Contact. When a call to this VDN is made and queued to skill 2 configured in its vector, Blended Agents (agents which are assigned both skill 2 and skill 1, as described in **Section 5.3**) will automatically be detached from the outbound job, and handle the inbound call. Once the call is complete and there are no more calls queued for the inbound skill, Proactive Contact will acquire the agent for outbound call handling again. Using the command **add vdn x** where **x** is a valid extension, in this case 8274002, administer the VDN as shown below and assign to it a **Name** for identification purposes, and an unassigned **Vector Number**.

add vdn 8274002	Page 1 of 3
VECTOR DIRECTORY NUMBER	
Extension: 8274002	
Name*: Inbound	
Destination: Vector Number	2
Attendant Vectoring? n	
Meet-me Conferencing? n	
Allow VDN Override? n	
COR: 1	
TN*: 1	
Measured: none	
VDN of Origin Annc. Extension*:	
1st Skill*:	
2nd Skill*:	
3rd Skill*:	

VDN 8274002 has a destination of **Vector Number 2**. Configure vector 2 to **queue-to** and unassigned skill **2**.

change vector 2				Page 1 of 6	
CALL VECTOR					
Number: 2		Name: Inbound			
Multimedia? n	Attendant Vectoring? n		Meet-me Conf? n		Lock? n
Basic? y	EAS? y	G3V4 Enhanced? y	ANI/II-Digits? y	ASAI Routing? y	
Prompting? y	LAI? y	G3V4 Adv Route? y	CINFO? y	BSR? y	Holidays? y
Variables? y	3.0 Enhanced? y				
01 queue-to	skill 2		pri h		
02 wait-time	60 secs hearing ringback				

Calls routed to VDN 8274002 will route to skill 2 administered as a hunt group. Configure the hunt group with an appropriate **Group Extension** as per the dial plan, in this case, **3092**, and a **Group Name** for identification. Set **ACD, Queue and Vector** to **y (yes)**, these parameters define that the group is an ACD group, controlled by a vector with queuing enabled.

add hunt-group 2		Page 1 of 4	
HUNT GROUP			
Group Number: 2	ACD? y		
Group Name: Inbound	Queue? y		
Group Extension: 3092	Vector? y		
Group Type: ucd-mia			
TN: 1			
COR: 1	MM Early Answer? n		
Security Code:	Local Agent Preference? n		
ISDN/SIP Caller Display:			
Queue Limit: unlimited			
Calls Warning Threshold:	Port:		
Time Warning Threshold:	Port:		

On **Page 2**, set **Skill** to **y (yes)**. This tells the ACD that the calls routed to this group will be handled by agents assigned to this skill.

add hunt-group 2		Page 2 of 4	
HUNT GROUP			
Skill? y	Expected Call Handling Time (sec): 180		
AAS? n			
Measured: none			
Supervisor Extension:			
Controlling Adjunct: none			
Timed ACW Interval (sec):			
Multiple Call Handling: none			

5.3. Configure Avaya Proactive Contact Acquire feature

In order for Proactive Agent Blending to function, Communication Manager must be configured with a VDN monitored by Proactive Contact. When the agents who belong to the skill to which the Acquire VDN routes are not taking any inbound ACD calls, they are automatically acquired by Proactive Contact to service calls delivered by the outbound job administered in Proactive Contact Editor.

add vdn 8274000	Page 1 of 3
VECTOR DIRECTORY NUMBER	
Extension: 8274000	
Name*: Dialer Acquire-Out	
Destination: Vector Number 1	
Attendant Vectoring? n	
Meet-me Conferencing? n	
Allow VDN Override? n	
COR: 1	
TN*: 1	
Measured: none	
VDN of Origin Annc. Extension*:	
1st Skill*:	
2nd Skill*:	
3rd Skill*:	

VDN 8274000 has a destination of Vector Number 1.

change vector 1	Page 1 of 6
CALL VECTOR	
Number: 1 Name: DialerAcquireOut	
Multimedia? n	Attendant Vectoring? n Meet-me Conf? n Lock? n
Basic? y	EAS? y G3V4 Enhanced? y ANI/II-Digits? y ASAI Routing? y
Prompting? y	LAI? y G3V4 Adv Route? y CINFO? y BSR? y Holidays? y
Variables? y	3.0 Enhanced? y
01 queue-to	skill 1 pri m
02 wait-time	60 secs hearing ringback

As shown in vector 1, **skill 1** will be the skill in which the agents required for Proactive Agent Blending will reside. Skill 1 is administered as a hunt group using the command **add hunt-group 1** and specify and identifying **Group Name**, **Group Extension**, and setting **ACD**, **Queue** and **Vector** to **y**.

add hunt-group 1	Page 1 of 4
HUNT GROUP	
Group Number: 1	ACD? y
Group Name: Dialer Acquire-Out	Queue? y
Group Extension: 3091	Vector? y
Group Type: ucd-mia	
TN: 1	
COR: 1	MM Early Answer? n
Security Code:	Local Agent Preference? n
ISDN/SIP Caller Display:	
Queue Limit: unlimited	
Calls Warning Threshold:	Port:
Time Warning Threshold:	Port:

On Page 2, set **Skill** to **y**

add hunt-group 1	Page 2 of 4
HUNT GROUP	
Skill? y	Expected Call Handling Time (sec): 180
AAS? n	
Measured: none	
Supervisor Extension:	
Controlling Adjunct: none	
Timed ACW Interval (sec):	
Multiple Call Handling: none	

5.4. Configure ACD agent for Proactive Agent Blend

In order for the ACD agent to be acquired by Proactive Contact once it has completed taking inbound calls using the Proactive Agent Blending feature, it must be in both the inbound skill (2) and the Acquire skill (1). Using the command **add agent-loginID x** where **x** is a valid extension in the dialplan. Administer the **Name**, **Security Code**, and **Password** fields as shown below.

add agent-loginID 8271001		Page 1 of 3
AGENT LOGINID		
Login ID: 8271001	AAS? n	
Name: Agent1	AUDIX? n	
TN: 1	LWC Reception: spe	
COR: 1	LWC Log External Calls? n	
Coverage Path:	AUDIX Name for Messaging:	
Security Code: 6002	LoginID for ISDN/SIP Display? n	
	Password: 6002	
	Password (enter again): 6002	
	Auto Answer: station	
	MIA Across Skills: system	
	ACW Agent Considered Idle: system	
	Aux Work Reason Code Type: system	
	Logout Reason Code Type: system	
	Maximum time agent in ACW before logout (sec): system	
	Forced Agent Logout Time: :	
WARNING: Agent must log in again before changes take effect		

On **Page 2** configure the agent in both the inbound skill and the acquire skill.

add agent-loginID 8271001		Page 2 of 3
AGENT LOGINID		
Direct Agent Skill:	Service Objective? n	
Call Handling Preference: skill-level	Local Call Preference? n	
SN RL SL	SN RL SL	SN RL SL
1: 1	16:	31:
2: 2	17:	32:
		46:
		47:

5.5. Configure feature access codes for Call Centre features

These will be referenced later in the Proactive Contact Configuration and used by AES to change the state of the agent on Communication Manager during blend operation. Enter the command **change feature-access-codes**, and on **Page 5** configure **Auto-In Access Code**, **Login Access Code** and **Logout Access Code** as per the dialplan.

change feature-access-codes		Page	5 of 10
FEATURE ACCESS CODE (FAC)			
Call Center Features			
AGENT WORK MODES			
After Call Work Access Code: *36			
Assist Access Code: *37			
Auto-In Access Code: *38			
Aux Work Access Code: *39			
Login Access Code: *40			
Logout Access Code: *41			
Manual-in Access Code: *42			

5.6. Configure Trunks to Avaya PG230 Digital Switch

A number of trunks are required for the purpose of communication between PG230 and Communication Manager. One trunk for calls in each of the following categories.

- Agent Headsets (Dialback)
- Outbound
- Inbound
- Transfer

The physical connection is made between PG230 and the MM710 contained within the G430 Media Gateway. Enter the **add ds1 xxxx** command, where **xxxx** is the location of the DS1 circuit pack and configure as follows:

- | | |
|-------------------------------|---|
| • Name | Set to any descriptive string value, in this case, it was CM-PG230 |
| • Bit Rate | Set to 2.048 |
| • Line Coding | Set to hdb3 |
| • Signaling Mode | Set to isdn-pri |
| • Connect | Set to pbx |
| • Interface | Set to peer-master |
| • Peer Protocol | Set to Q-SIG |
| • Interface Companding | Set to alaw |
| • Idle Code | Set to 01010100 |

```
add ds1 001v2                                     Page 1 of 1
                                         DS1 CIRCUIT PACK

      Location: 001v2                               Name: CM-PG230
      Bit Rate: 2.048                             Line Coding: hdb3

      Signaling Mode: isdn-pri
      Connect: pbx                                Interface: peer-master
      TN-C7 Long Timers? n                       Peer Protocol: Q-SIG
      Interworking Message: PROgress              Side: a
      Interface Companding: alaw                  CRC? y
      Idle Code: 01010100                        Channel Numbering: timeslot
                                         DCP/Analog Bearer Capability: 3.1kHz

                                         T303 Timer(sec): 4
                                         Disable Restarts? n

      Slip Detection? y                          Near-end CSU Type: other

      Echo Cancellation? n
```

Configure a Signaling Group for the previously configured DS1 board 001v2. Enter the **add signaling-group n** command, where **n** is an unused signaling group number. Configure as follows:

- **Group Type** Set to **isdn-pri**
- **Primary D-Channel** Enter the DS1 board number followed by 16
- **Trunk Group for Channel Selection** Enter the 1st trunk group number that was configured for DS1 board 001v2 in this case that was trunk group **21**
- **TSC Supplementary Service Protocol** Set to **b**

add signaling-group 10		Page 1 of 1	
SIGNALING GROUP			
Group Number: 10	Group Type: isdn-pri		
	Associated Signaling? y	Max number of NCA TSC: 0	
	Primary D-Channel: 001v216	Max number of CA TSC: 0	
		Trunk Group for NCA TSC:21	
Trunk Group for Channel Selection: 21	X-Mobility/Wireless Type: NONE		
TSC Supplementary Service Protocol: b	Network Call Transfer? n		

Configure a trunk group used for inbound calls. Enter the **add trunk-group n** command, where **n** is an available trunk group number. Configure as follows:

- **Group Type** Set to **isdn**
- **Group Name** Set to any descriptive string value, in this case, it was **QSIG to PG230 - Inbound**
- **TAC** Enter a Trunk Access Code that is valid in the provisioned dial plan
- **Dial Access** Set to **y**
- **Service Type** Set to **tie**

```

add trunk-group 23                                     Page 1 of 21
                                     TRUNK GROUP

Group Number: 23                      Group Type: isdn          CDR Reports: y
  Group Name: QSIG to PG230 - Inbound  COR: 1                TN: 1          TAC: 723
    Direction: two-way                Outgoing Display? n      Carrier Medium:
PRI/BRI
  Dial Access? y                      Busy Threshold: 255  Night Service:
Queue Length: 0
Service Type: tie                     Auth Code? n          TestCall ITC:
rest
                                     Far End Test Line No:
TestCall BCC: 4

```

On **Page 2** of the trunk group configuration, configure as follows:

- **Supplementary Service Protocol** - Set to **b**
- **Disconnect Supervision**
 - **In** - set to **y**
 - **Out** - set to **y**

```

add trunk-group 23                                     Page 2 of 21
  Group Type: isdn

TRUNK PARAMETERS
  Codeset to Send Display: 6          Codeset to Send National IEs: 6
  Max Message Size to Send: 260      Charge Advice: none
  Supplementary Service Protocol: b   Digit Handling (in/out): enbloc/enbloc

  Trunk Hunt: cyclical

                                     Digital Loss Group: 13
Incoming Calling Number - Delete:      Insert:                      Format:
  Bit Rate: 1200                      Synchronization: async      Duplex: full
Disconnect Supervision - In? y Out? y
Answer Supervision Timeout: 0
  Administer Timers? n                CONNECT Reliable When Call Leaves ISDN? n
                                     Delay Call Setup When Accessed Via IGAR? N

```


On **Page 5**, configure **GROUP MEMBER ASSIGNMENTS** as follows.

- **Port** Enter the DS1 board number followed by the trunk member number. The ports configured on Communication Manager must be mapped to the ports configured on the PG230 Digital Switch
- **Sig Grp** Enter the number of the signaling group configured for the DS1 board 001v2 in this case it is Signaling Group **10**

add trunk-group 21					Page 5 of 21	
					TRUNK GROUP	
					Administered Members (min/max): 1/5	
GROUP MEMBER ASSIGNMENTS					Total Administered Members: 5	
	Port	Code	Sfx	Name	Night	Sig Grp
1:	001v217	MM710	C			10
2:	001v218	MM710	C			10
3:	001v219	MM710	C			10
4:	001v220	MM710	C			10
5:	001v221	MM710	C			10

Note: There is different port numbering between PG230 Digital Switch and Communication Manager; therefore ports 18-22 on PG230 Digital Switch correspond to ports 17-21 on Communication Manager.

Repeat the above configuration steps in order to configure remaining trunk groups for Agent Headsets (Dial Back), Outbound and Transfer calls. For each trunk group make sure that the number of ports in GROUP MEMBER ASSIGNMENTS is correctly mapped to the number of ports configured on the PG230. Also, for every trunk group, configure each port with signaling group 10.

Enter **list trunk-group** command, to list all trunk groups that were configured on the Communication Manager. Below is the list of all trunk groups that were configured for the E1 QSIG trunk between Communication Manager and PG230 Digital Switch.

list trunk-group											Page	1
TRUNK GROUPS												
Grp												
No.	TAC	Group	Type	Group Name	No.	Mem	TN	COR	CDR	Meas	Dsp	Que
21	721	isdn		QSIG to PG230 - Headsets	5	1	1	y	none	y		0
22	722	isdn		QSIG to PG230 - Outbound	10	1	1	y	none	n		0
23	723	isdn		QSIG to PG230 - Inbound	5	1	1	y	none	n		0
24	724	isdn		QSIG to PG230 - Transfer	5	1	1	y	none	n		0

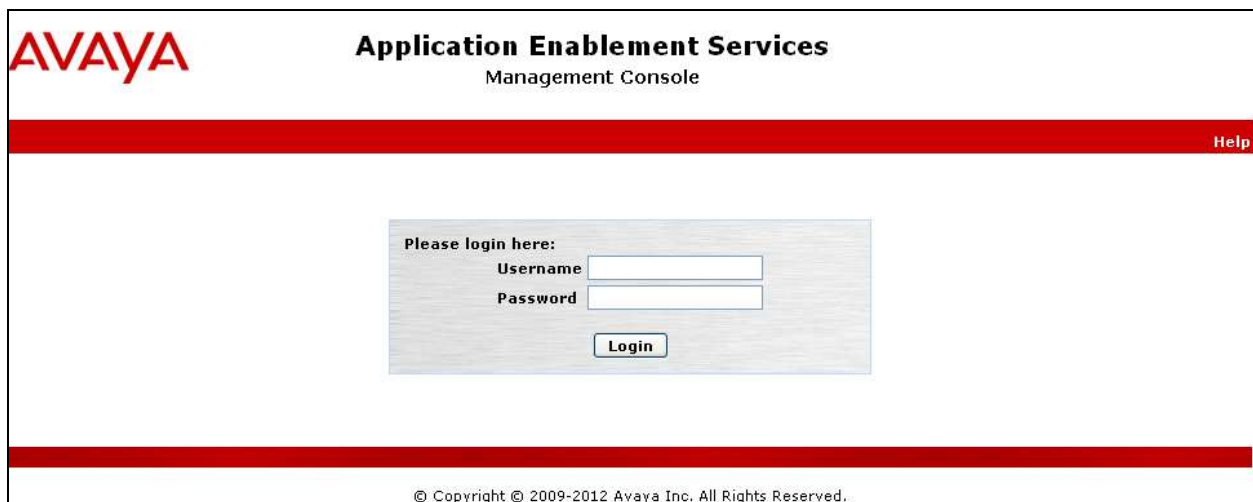
6. Configure Avaya Aura® Application Enablement Services Server

This section provide the procedures for configuring Application Enablement Services. The procedures include the following areas:

- Verify TSAPI License
- Administer the Switch Connection
- Administer TSAPI Link
- Disable Security Database
- Resetart TSAPI Service
- Obtain Tlink name
- Administer Avaya Proactive Contact and synTelate user
- Configure Devices

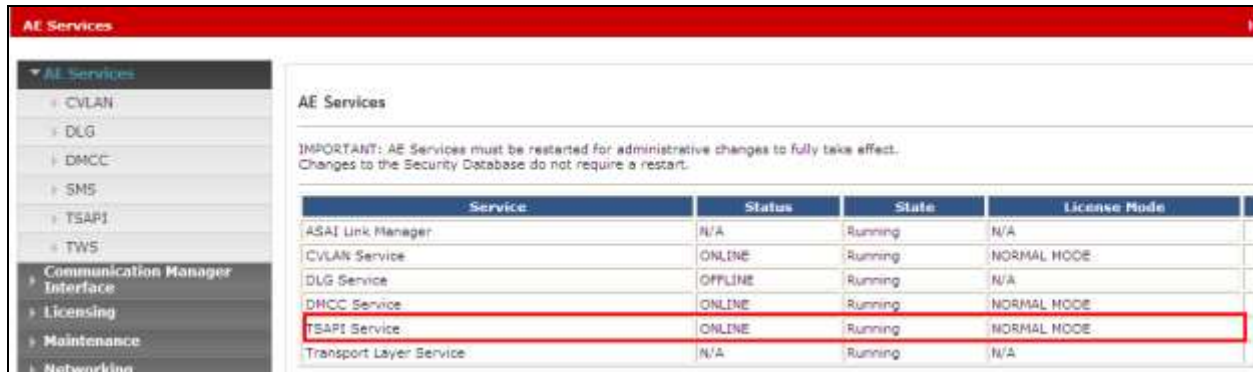
6.1. Verify TSAPI License

To access the maintenance console, enter **https://<ip-addr>** as the URL in an Internet browser, where <ip-addr> is the active IP address of AES. The login screen is displayed, log in with the appropriate credentials and then select the **Login** button.



The image shows the login screen for the Avaya Application Enablement Services Management Console. At the top left is the Avaya logo. To its right, the text "Application Enablement Services" is displayed in a large, bold font, with "Management Console" in a smaller font below it. A red horizontal bar spans the width of the page, with the word "Help" in white text on the right side. In the center of the page is a light gray rectangular box containing the login form. The form has the text "Please login here:" followed by two input fields labeled "Username" and "Password". Below these fields is a "Login" button. At the bottom of the page, a red horizontal bar is present, and below it, the copyright notice "© Copyright © 2009-2012 Avaya Inc. All Rights Reserved." is displayed.

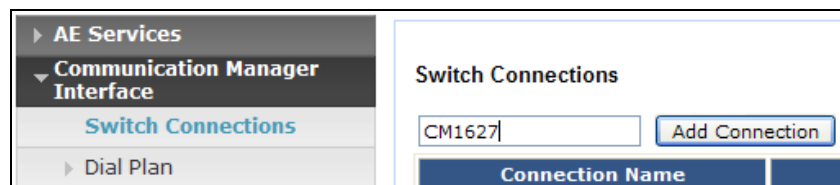
The Application Enablement Services Management Console appears displaying the **Welcome to OAM** screen (not shown). Select **AE Services** and verify that the TSAPI Service is licensed by ensuring that **TSAPI Service** is in the list of services and that the **License Mode** is showing **NORMAL MODE**. If not, contact an Avaya support representative to acquire the proper license for your solution.



Service	Status	State	License Mode
ASAI Link Manager	N/A	Running	N/A
CVLAN Service	ONLINE	Running	NORMAL MODE
DLG Service	OFFLINE	Running	N/A
DMCC Service	ONLINE	Running	NORMAL MODE
TSAPI Service	ONLINE	Running	NORMAL MODE
Transport Layer Service	N/A	Running	N/A

6.2. Create Switch Connection

From the AES Management Console, navigate to **Communication Manager Interface** → **Switch Connections** to set up a switch connection. Enter in a name for the Switch Connection to be added and click the **Add Connection** button.



Connection Name
CM1627

In the resulting screen enter the **Switch Password**, the Switch Password must be the same as configured **Section 5.1**. Default values may be accepted for the remaining fields. Click **Apply** to save changes.

Connection Details - CM1627

Switch Password

Confirm Switch Password

Msg Period Minutes (1 - 72)

Provide AE Services certificate to switch ☒

Secure H323 Connection ☐

Processor Ethernet ☒

From the **Switch Connections** screen, select the radio button for the recently added switch connection and select the **Edit CLAN IPs** button (not shown). In the resulting screen, enter the IP address of the procr as shown in **Section 5.10** that will be used for the AES connection and select the **Add Name or IP** button.

6.3. Administer TSAPI link

From the Application Enablement Services Management Console, navigate to **AE Services → TSAPI → TSAPI Links**. Select **Add Link** button as shown in the screen below.

TSAPI Links

Link	Switch Connection

On the **Add TSAPI Links** screen, enter the following values:

- **Link:** Use the drop-down list to select an unused link number.
- **Switch Connection:** Choose the switch connection **CM63VMPG**, configured in **Section 6.2** from the drop-down list.
- **Switch CTI Link Number:** Corresponding CTI link number configured in **Section 5.1**
- **ASAI Link Version:** This can be left at the default value
- **Security:** This can be left at the default value. The value **Both** was used in this test.

Once completed, select **Apply Changes**.

AE Services

- ▶ CVLAN
- ▶ DLG
- ▶ DMCC
- ▶ SMS
- ▼ **TSAPI**
 - **TSAPI Links**
 - TSAPI Properties
- ▶ TWS

Add TSAPI Links

Link: 2

Switch Connection: CM1627

Switch CTI Link Number: 2

ASAI Link Version: 7

Security: Both

Apply Changes **Cancel Changes**

Another screen appears for confirmation of the changes. Choose **Apply**.

Apply Changes to Link

Warning! Are you sure you want to apply the changes?
These changes can only take effect when the TSAPI server restarts.
Please use the Maintenance -> Service Controller page to restart the TSAPI server.

Apply **Cancel**

The TSAPI Service must be restarted to effect the changes made in this section. From the Management Console menu, navigate to **Maintenance** → **Service Controller**. On the Service Controller screen, tick the **TSAPI Service** and select **Restart Service**.

Service Controller

Service	Controller Status
<input type="checkbox"/> ASAI Link Manager	Running
<input type="checkbox"/> DMCC Service	Running
<input type="checkbox"/> CVLAN Service	Running
<input type="checkbox"/> DLG Service	Running
<input type="checkbox"/> Transport Layer Service	Running
<input checked="" type="checkbox"/> TSAPI Service	Running

For status on actual services, please use [Status and Control](#)

6.4. Identify Tlinks

Navigate to **Security** → **Security Database** → **Tlinks**. Verify the value of the **Tlink Name**. This will be needed to configure Presence Suite in **Section 7.1**.

The screenshot displays the Avaya Management System (AMS) interface. On the left is a navigation tree with the following items: AE Services, Communication Manager Interface, High Availability, Licensing, Maintenance, Networking, Security (expanded), Account Management, Audit, Certificate Management, Enterprise Directory, Host AA, PAM, Security Database (expanded), Control, CTI Users, Devices, Device Groups, and Tlinks (highlighted in blue). The main content area on the right is titled 'Tlinks'. It contains a 'Tlink Name' section with two radio button options: 'AVAYA#CM1627#CSTA#AES71678' (which is selected) and 'AVAYA#CM1627#CSTA-S#AES71678'. Below these options is a 'Delete Tlink' button.

6.5. Create Avaya CTI User

A User ID and password needs to be configured for the Inisoft server to communicate as a TSAPI client with the Application Enablement Services server. Navigate to the **User Management** → **User Admin** screen then choose the **Add User** option (not shown). In the **Add User** screen shown below, enter the following values:

- **User Id** - This will be used by the Inisoft Server in **Section 7.1**.
- **Common Name** and **Surname** - Descriptive names need to be entered.
- **User Password** and **Confirm Password** - **CT User** - Select **Yes** from the drop-down menu.

Complete the process by choosing **Apply** at the bottom of the screen (not shown).

User Management | User Admin | List All Users

Edit User

* User Id: syntelate

* Common Name: syntelate

* Surname: syntelate

User Password:

Confirm Password:

Admin Note:

Avaya Role: None

Business Category:

Car License:

CM Home:

Css Home:

CT User: Yes

Department Number:

Display Name:

Employee Number:

Employee Type:

The next screen will show a message indicating that the user was created successfully (not shown).

6.6. Enable Unrestricted Access for CTI User

Navigate to the **CTI Users** screen by selecting **Security** → **Security Database** → **CTI Users** → **List All Users** (not shown). Select the user that was created in **Section 6.5** and select the **Edit** option (not shown). The **Edit CTI User** screen appears. Check the **Unrestricted Access** box and click **Apply Changes** at the bottom of the screen.

Security | Security Database | CTI Users | List All Users

Edit CTI User

User Profile:

User ID: syntelate
Common Name: syntelate
Worktop Name: NONE
Unrestricted Access ☒

Call and Device Control: Call Origination/Termination and Device Status: None

Call and Device Monitoring: Device Monitoring: None
Calls On A Device Monitoring: None
Call Monitoring: ☐

Routing Control: Allow Routing on Listed Devices: None

Apply Changes **Cancel Changes**

A screen (not shown) appears to confirm applied changes to CTI User, choose **Apply**. This CTI user should now be enabled.

6.7. Configure Devices

In order for Proactive Contact to perform Proactive Agent Blending, AE Services needs to be configured with the devices which are to be monitored. Click on **Security** → **Security Database** → **Devices** (not shown) next **Add Device** (not shown), enter the VDN extension number you created for the VDN administered in **Section 5.3** in this instance, VDN 8274000. Click on **Add Device** (not shown), the following screen will be displayed. Complete the fields as shown and click **Apply Changes** and click **Confirm** at the subsequent confirmation screen.

The screenshot shows a web interface with a red header bar containing the text "Security | Security Database | Devices". On the left is a vertical navigation menu with the following items: "AE Services", "Communication Manager Interface", "High Availability", "Licensing", "Maintenance", "Networking", "Security" (which is expanded and highlighted), and "Account Management". The main content area is titled "Edit Device" and contains the following fields: "Device ID" with the value "8274000", "Location" with the value "CM27", "Device Type" with a dropdown menu showing "VDN", and "Tlink Group" with a dropdown menu showing "Any". At the bottom of the form are two buttons: "Apply Changes" and "Cancel Changes".

Perform the same for the Inbound VDN, in this case, VDN 8274001, as shown.

This screenshot is identical in layout to the previous one, showing the "Edit Device" configuration screen. The red header bar also reads "Security | Security Database | Devices". The left navigation menu is the same, with "Security" expanded. The main content area, titled "Edit Device", shows the "Device ID" field with the value "8274001". The "Location" field is "CM27", "Device Type" is "VDN", and "Tlink Group" is "Any". The "Apply Changes" and "Cancel Changes" buttons are at the bottom.

7. Configure Avaya Proactive Contact

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

- Verify Avaya Proactive Contact Licensing
- Configure CTI
- Configure Avaya Proactive Contact with CTI for Agent Blending
- Configure master.cfg
- Configure number format
- Configure the calling list
- Configure Avaya Proactive Contact Administration Software

7.1. Verify Avaya Proactive Contact Licensing

Access the Web License Manager of the Avaya Proactive Contact, in this instance using the URL <https://10.10.16.91:52233/WebLM/>. The Web License Manager Screen is displayed; login using the appropriate credentials.



The **Web License Manager** screen below is displayed. Select **Licensed products** → **Avaya_Proactive_Contact** in the left pane, to display the **Licensed Features** screen in the right pane. Verify that there are sufficient licenses for each of the fields displayed:

AVAYA Web License Manager (WebLM v4.7) [Logout](#)

Install License **Avaya_Proactive_Contact - Release: 5 - SID: 11018150 (Standard License File)**

Licensed Products
Avaya_Proactive_Contact
 Uninstall License
 Change Password
 Server Properties
 Manage Users
 Logout

You are here: Licensed products > Avaya_Proactive_Contact

License installed on: 20-May-2011 13:25:58 o'clock EDT

[View Peak Usage](#)

Licensed Features

Feature (Keyword)	Expiration Date	Licensed	Acquired
Number of PBX Agents using Avaya CT with predictive (VALUE_APC_PREDICTIVECTAGENTS)	permanent	100	0
Number of telephone lines (VALUE_APC_PHONELINES)	permanent	100	0
Number of Agents with Predictive Dialing (VALUE_APC_PREDICTIVE_AGENTS)	permanent	100	0
Number of PBX Agents using Avaya CT (VALUE_APC_TOTALCTAGENTS)	permanent	100	0
Number of Supervisor Workstations (VALUE_APC_SUPERVISORS)	permanent	10	0
Number of Agents (VALUE_APC_TOTAL_AGENTS)	permanent	100	0

Acquired Licenses

7.2. Configure CTI

In order to establish the TSAPI link between Proactive Contact and Application Enablement Services Server, the relevant files were edited. From the Proactive Contact Telnet Session create a `cti_passwd.cfg` file by doing the following:

- type `cti_passwd -s` (s denotes the CTI Option).

When prompted for the password enter the password assigned to the CTI user configured earlier on the Application Enablement Services Server in **Section 6.5**, and hit return, re-enter as requested.

Navigate to the `/opt/avaya/pds/config/swif_ct.cfg` file and change the parameters as shown follows.

```
SERVER:AVAYA#CM#CSTA-S#DEVCONAES61
LOGIN:syntelate
REASONCODE:1
PHANTOMNUMBERS:1850-1854
WORKMODE:AUTO_IN
AGENTANSWER:NO
PRIORITYCALL:NO
```

Notes: The Tlink and the Proactive Contact CTI username as configured in **Section 6**

Navigate to the `/opt/avaya/pds/config/` directory. Copy and rename the `tslibrc` file, by typing **cp tslibrc .tslibrc**. Edit `.tslibrc` with the IP Address of the Application Enablement Services Server, as shown.

```
[Telephony Servers]
; This is a list of the servers offering Telephony Services via TCP/IP.
; Either domain name or IP address may be used; default port number is 450
; The form is: host_name=port_number    For example:
;
; tserver.mydomain.com=450
10.10.16.30
;

; This file should be copied to CONFIG directory as .tslibrc.
; See master.cfg for the directory name.

; This entry overrides the [Telephony Servers] section, if any.
```

For Agent Blending, copy the .tslibrc file to the **/opt/avaya/pab/config/** directory by entering the command **cp /opt/avaya/pab/config/.tslibrc /opt/avaya/pab/config/.tslibrc**. Navigate to **/opt/avaya/pds/config** – edit **opmon.cfg** as shown below:

```
CFGTIME:15
DIALBACK:1-15:15:1::
DIALBACKNUM:ALL
```

Edit **dgswitch.cfg** as shown below. The format used is based on the location of the ports in the PG230 Digital Switch; therefore Proactive Contact is configured with the same number of Inbound Ports as the number of inbound lines on the PG230 Digital Switch. The inbound ports configured on Proactive Contact correspond to the ports of the inbound trunk group configured on Communication Manager in **Section 5.6**; the same is true for Headset, Outbound and Transfer trunk ports.

```
# Headset Ports
H:1:361:1::#H:15:1:1-1-21-4-2
H:2:362:1::#H:15:1:1-1-21-4-3
H:3:363:1::#H:15:1:1-1-21-4-4
H:4:364:1::#H:15:1:1-1-21-4-5
H:5:365:1::#H:15:1:1-1-21-4-6

# Normal Outbound Trunks
N:1:366:1::#O:10:1:1-1-21-4-7
N:2:367:1::#O:10:1:1-1-21-4-8
N:3:368:1::#O:10:1:1-1-21-4-9
N:4:369:1::#O:10:1:1-1-21-4-10
N:5:370:1::#O:10:1:1-1-21-4-11
N:6:371:1::#O:10:1:1-1-21-4-12
N:7:372:1::#O:10:1:1-1-21-4-13
N:8:373:1::#O:10:1:1-1-21-4-14
N:9:374:1::#O:10:1:1-1-21-4-15
N:10:375:1::#O:10:1:1-1-21-4-16

# Normal Inbound Trunks

N:11:377:1::#I:11:1:1-1-21-4-18
N:12:378:1::#I:11:1:1-1-21-4-19
N:13:379:1::#I:11:1:1-1-21-4-20
N:14:380:1::#I:11:1:1-1-21-4-21
N:15:381:1::#I:11:1:1-1-21-4-22

# Transfer-thru Trunks
T:1:12:1::#T:12:1:1-1-21-4-1
```

Edit only the last 4 lines of **voicemsg.cfg**, this file refers to the announcements recorded on the PG230.

```
250:greeting:1027:Female:Folder4:Voice:Message27
251:inbound:1028:Female:Folder4:Voice:Message28
252:outbound:1029:Female:Folder4:Voice:Message29
253:notLoggedIn:1030:Female:Folder4:Voice:Message30
```

Navigate to the **/opt/avaya/pds/scripts** directory and copy the telephny_sp.spt file to the telephny.spt file using the command **cp telephny_hd.spt telephny.spt**. This file defines Hard Dialer specific parameters.

Navigate to the **/opt/avaya/pds/shell/** directory and edit the **pdscontrol** file. This script starts the agent binary during pds_stop/start. Normally it is set to **agent -d** which starts the agent binary as a daemon. Make the following change to this line in the script for the purposes of Proactive Agent Blending.

agent -m -d

7.3. Configure Avaya Proactive Contact with CTI for Agent Blending

From the Proactive Contact Telnet Session create a `cti_passwd.cfg` file by entering the following Type **cti_passwd -b** (b denotes the blend). When prompted for the password enter the password assigned to the CTI user configured earlier in **Section 6.5**.

Navigate to the `/opt/avaya/pab/config/` directory. Copy and rename the `ctirc.cvct` file, by typing **cp ctirc.cvct ctirc1**. Edit `ctirc1` as shown below.

```
#####
# LAST REVISION $Date: 2002/02/20 16:24:55 $
#####
# The only configurable line is the 14th line after the comments (third from
# the bottom). There are five fields in this line:
# Field 1: TLINK
# Field 2: Login name for CVCT (run "cti_passwd -b" to setup the encrypted
password)
# Field 3: Application Name (PDS)
# Field 4: TS2 - This is the library version that we used. Do no change.
0                                # CVCT CEP (switch type)
0x11                             # CEP CHGSVR
0x2015A                          # Supported Events
0                                # Stats and Counts (No MIS for Aspect)
0                                # Appear and Vanish (No LM for Aspect)
0                                # Agent Available, Login, Logout
0                                # per-outstanding-move (N/A for Aspect)
0                                # seconds added to LM (N/A for Aspect)
0                                # seconds added to LC (N/A for Aspect)
Port SupId SupPass
NotUsed
AVAYA#CM#CSTA-S#DEVCONAES61:pc5hd:PDS:TS2
chgsvr
cep_pway
```

Copy and rename the CBA_procs.example file, type **cp CBA_procs.example CBA_procs** and edit **CBA_procs** as shown below:

```
#####
#                                     |Max Wait|Max Wait|Max Wait|Max Wait|Kill
#                                     | Before | Before | Before | Before |Cfg-
# Process|Startup|Shutdown|Shutdown|  Abort  | SIGTERM| SIGKILL|Only
#   Type | Order | Order  | Message| Message| Signal | Signal |Mode
#-----
# NOTE - Startup Order and Shutdown Order MUST start at the value one(1) and
#        increment WITHOUT any sequence gaps
PROCESS_CONTROL
SOE| 1 | 5 | -1 | -1 | -1 | 25 | 0
USR| 2 | 4 | -1 | -1 | 21 | 24 | 0
CTI| 3 | 3 | 11 | 15 | 24 | 35 | 1
ACD| 4 | 2 | 0  | 5  | 10 | 11 | 1
MSC| 5 | 1 | -1 | -1 | -1 | 25 | 0

#####
# Process | Host | Path | Binary | Parameters
#   Type  | Name |      | Name   |
#-----
PROCESS_INSTANCE
USR|devconhd|/opt/avaya/pab/bin/|cbauser|1
CTI|devconhd|/opt/avaya/pab/bin/|cti|1
ACD|devconhd|/opt/avaya/pab/bin/|acdmon|1 nocancel min_asa 2sec gen_rel
MSC|devconhd|/opt/avaya/pab/scripts/|acdsnap_mon|
```

Copy and rename the CBA_cfg.example file, type **cp CBA_cfg.example CBA_cfg** and press Enter. This establishes the Application, PBX and Gateway IDs used by Agent Blending.

Proactive Contact needs to be configured with the inbound VDN to be monitored and the acquire VDN for acquiring agents in order to handle calls from the outbound job. The Proactive Contact name for a VDN is Domain. Configured in **/opt/avaya/pab/config/dom_group.data** – this defines an outbound only Domain Group called NORTH_USA, an IB (inbound) Domain called 8274002, with specific reference to VDN 8274002, and a TEAM (acquire) Domain called 8274000 with specific reference to VDN 8274000. Both of these Domain have a Domain Group ID of NORTH_USA.

```
*VERSION | 1
##### Defined Domains Groups #####
# Domain Group Record Layout - To Create a new domain group copy the template
#   below and replace all field holders with appropriate values.
#   NOTE - All fields that retain their place holder values (TR, TT, etc)
#           will be assumed to be empty.
#   NOTE - Line breaks may happen between any fields but not within a field
#   NOTE - Do not change lower case field holders
#
#   WARNING - Remove the "#" comment field indicator to activate the template
#
# TEMPLATE
# -----
--
# *DG | DG_NM | dg_id | RTI | CM | MAAS | SC | DSL | MSL |
#   AUT | MAO | TR | TT | ACWT | MQR | afi | rti |
# -----
--
#
# Description of fields within a Domain Group
# -----
# *      - Start Of New Record { MUST be in first column of record}
# DG      - Domain Group Record Key   { Always DG}
# DG_NM   - Domain Group Name {Descriptive name use by UI to specify a domain}
# dg_id   - Domain Group ID { FILLED IN BY SYSTEM}
# RTI     - Time Interval (hours)
# CM      - Control Method {ASA-Avg.Spd Answered,SL-Sevice Lvl,OB_ONLY-
Outbound}
# MAAS    - [Target] Average Speed to Answer (seconds)
# SC      - Service Criterion (seconds)
# DSL     - Desired Service Level (%)
# MSL     - Abatement Service Level (%)
# AUT     - Traffic Intensity Threshold (%)
# MAO     - Minimum # of Agents on Outbound (# agents)
# TR      - Initial Traffic Rate (calls/second)
# TT      - Minimum Talk Time (seconds)
# ACWT    - Minimum After Call Work Time (seconds)
# MQR     - Minimum Queued for Release (OB_ONLY groups)
# afi     - Acquisitions From Inbound { FILLED IN BY SYSTEM }
# rti     - Releases To Inbound      { FILLED IN BY SYSTEM }
#
#
# *DG | NORTH_USA | 1 | RTI | OB_ONLY | MAAS | SC |
#     DSL | MSL | AUT | MAO | TR | TT |
#     ACWT | 0 | afi | rti |
```

```

##### Defined Domains #####
# Domain Record Layout - To Create a new domain copy the template below
#   and replace all field holders with appropriate values.
#   NOTE - All notes/warnings from domain group field still apply.
#
# TEMPLATE
# -----
# *DM | DM_ADRS | DM_EXT | DG_NM | dg_id | AP_ID | PBX_ID | GW_ID | DM_TYP |
# -----
#
# Description of fields within a Domain
# -----
# *          - Start Of New Record {MUST be in first column of record}
# DM         - Domain Record Keyword   {Always DM}
#
# DM_ADRS- Domain Address
# DM_EXT - Domain Phone Number
# DG_NM  - Domain Group Name {Descriptive name use by UI to specify a D.G.}
#                Use TRANS if defining a floating transient domain.
# dg_id  - Domain Group ID {FILLED IN BY SYSTEM}
# AP_ID  - PDS ID
# PBX_ID - PBX ID
# GW_ID  - Gateway ID
# DM_TYP - Domain Type -- one of:
#                IB          - Inbound,
#                TRANS       - Transient Acquire,
#                TEAM        - Team Acquire,
#                OV_FLOW    - Overflow
#
#
# *DM | 8274000 | 8274000 | NORTH_USA | 1 | 1 | 1 |
#      1 | TEAM |
#
# *DM | 8274002 | 8274002 | NORTH_USA | 1 | 1 | 1 |
#      1 | IB |

```

Edit **ACD.cfg** – This file contains the Communication Manager feature access codes for ACD login and logout s noted in Section 5.5 and also specifies the **TESTMODE**, configured as shown below:

```
TESTMODE:OFF
DELAYTIME:5
LOGIN:*40
LOGOUT:*41
```

Edit **acd_ext.cfg** – This file contains the Communication Manager extension number which Proactive Contact Agents and ACD Agents will be logging in, as show below, extension **8271001** is the extension onto which agents are logged into in this case:

```
1:8271001
```

Agent Blending is a feature add-on for Proactive Contact. Ensure that PDS is stopped and as root, enter the command **menu install** which will run a script. When prompted Select option **2**. For **Value added products**, and then **2** again for **Install Predictive Agent Blend** and follow the instructions prompted on screen as shown below:

```
Have you stopped PDS processes: y
Following AES servers are configured:
10.10.16.30 Do you want to add another AES server: n
CTI password seems to be already set in /opt/avaya/pab/config/cti_passwd.cfg
Do you wish to change the CTI password? n
AES_LINK set to AVAYA#CM#CSTA-S#DEVCONAES61
Do you want to change it now?: n
AES_USER set to pc5hd
Do you want to change it now?: n
Do you wish to configure Domains now?: n
Do you wish to change number of users that can be acquired for outbound
calling now?: n
Now we'll install ACD extensions
Enter q to quit
When prompted, press any key to continue.
Enter 0 to exit, and 0 again
```

7.4. Configure master.cfg

Amendments to the **master.cfg** file, located in **/opt/avaya/pds/etc** were made as follows.

```
CALL_BLENDING: YES
DBKGROUP: 15,1,1
DBSERVERIP: 10.10.16.91
IICB_HOST: devconhd
INBNDSYS: YES
LINEASSIGN: REG,O=1-10;INB,I=11-15
NAMESERVICEHOST: devconhd
OPERATORS: 5
OPLIMIT: I=5,O=5,B=5,P=5,M=5
PORTS: 15
PRIMARY: YES
SWITCHNAME: switch1
SWITCHTESTMODE: NO
SWITCHTYPE: DIGITAL
VISUAL_CPA: YES
WEBLMURL: http://10.10.16.91,8080/WebLM/LicenseServer:
```

Note: INBNDSYS was set to **YES** for the purposes of Inisoft testing.

7.5. Configure Number Format

The **phonefmt.cfg** file located in **/opt/avaya/pds/config** contains details of how Proactive Contact needs to manipulate numbers in the calling list in order to successfully place calls. The last line in the file is configured as follows:

```
STD TO DIALFMT: *:ALLTYPES:10:8230003::
```

In this instance, of the digits dialed, **10** are deleted and the digits **8230003** are inserted.

7.6. Configure Calling List

Proactive Contact is delivered with default calling lists. The author assumes an inbound and outbound calling list is created using Proactive Contact Editor. The administration of calling lists is outside of the scope of this document.

7.7. Configure Avaya Proactive Contact Administration Software

In order for the Proactive Contact Editor application to communicate with the Proactive Contact Server, the PC on which it resides must be configured.

7.7.1. Configure Windows Host File

Edit `%WINDIR%\system32\drivers\etc\hosts` to include the hostname and IP address of the Proactive Contact Server, as follows:

10.10.16.91 devconhd

7.7.2. Check Avaya Proactive Contact Services

Ensure all necessary services are running on the Proactive Contact Server. The following commands start, check and stop the three services. The services must be stopped and started in the order shown. All services must be started before proceeding.

```
start_db
start_mts
start_pds
check_db
check_mts
check_pds
stop_pds
stop_mts
stop_db
```

7.7.3. Configure Avaya Proactive Contact Administration Software

Double click on the Health Manager icon on the desktop. The screen below will be presented; complete it as shown with the Proactive Contact IP address and hostname.

The screenshot shows a Windows-style dialog box titled "Configurator". Inside, there is a text box with the instruction: "You can specify the Primary Dialer, Email Server and the Database Server details. Please re-run the Health Monitor after setting the details." Below this, there are three sections for configuration:

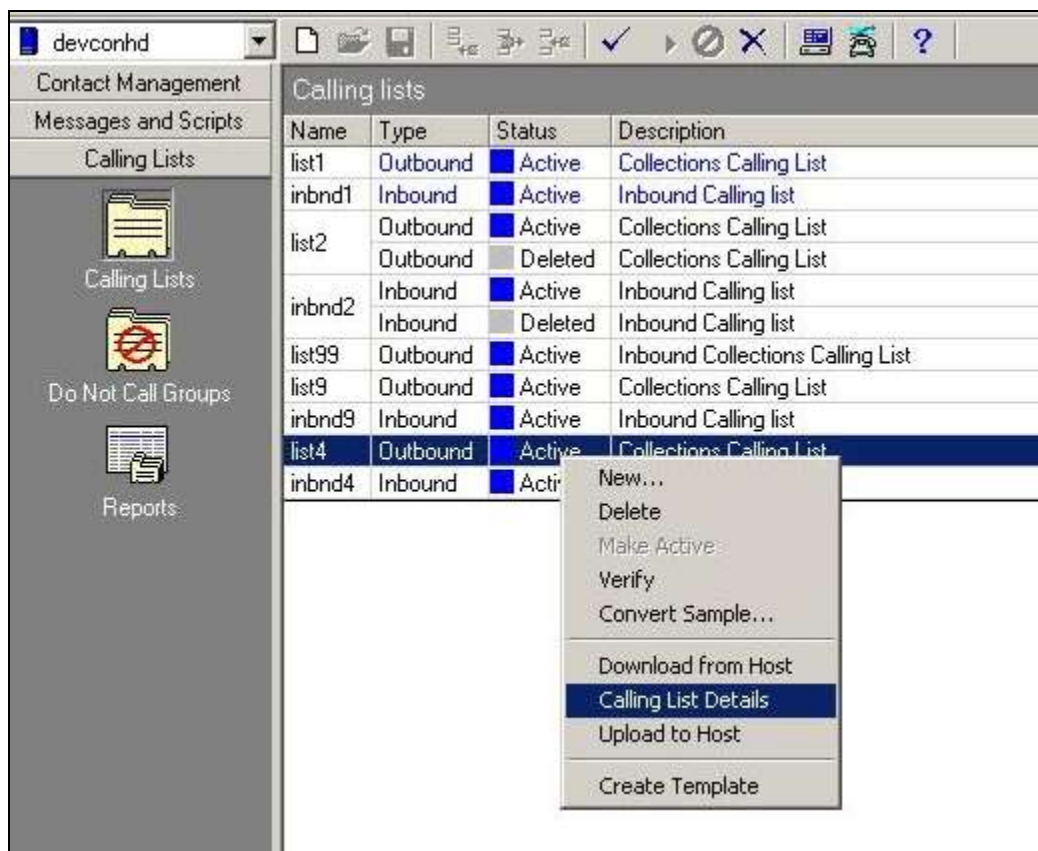
- Primary Proactive Contact Details:** Contains a "Name:" field with the value "devconhd" and an "IP Address:" field with the value "10 . 10 . 16 . 91".
- Use primary server for email and database:** A checkbox that is checked.
- Email Server Details:** Contains a "Name:" field with the value "devconhd" and an "IP Address:" field with the value "10 . 10 . 16 . 91".
- Database Server Details:** Contains a "Name:" field with the value "devconhd" and an "IP Address:" field with the value "10 . 10 . 16 . 91".

At the bottom of the dialog are "OK" and "Cancel" buttons.

It is now possible to log in to the Health Manager with the **sysadm** login credentials. Close Health Manager and double click on the Editor icon on the desktop. Log in with the **sysadm** login credentials.

7.7.4. Configure Native Voice and Data Transfer Parameters (NVDT)

NVDT is the feature used when transferring caller details from the outbound job to the inbound job. In this instance, an agent logged into the inbound job will receive the account number as well as the voice path. These parameters are configured in the calling list, as shown below. In the left hand pane click **Calling Lists** → **Calling Lists** right click on **list4** and select **Calling List Details**.



Click to place a tick in the field to enable NVDT (Native Voice and Data Transfer).

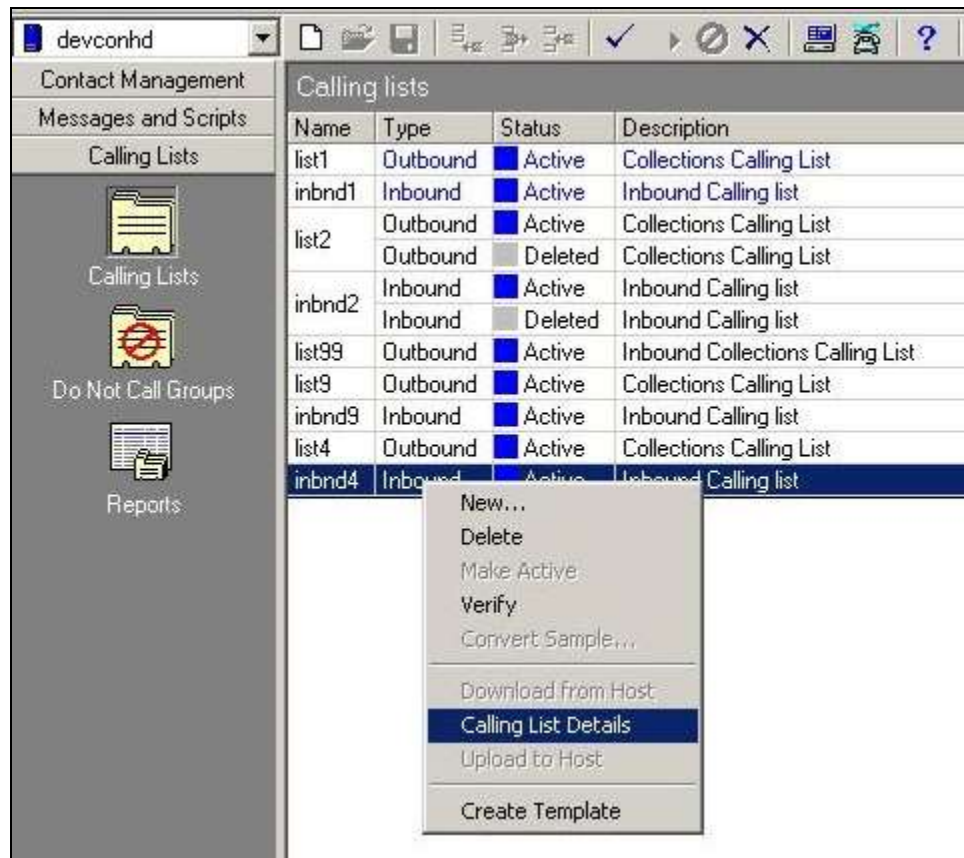
Name	Type	Status	Description
list1	Outbound	Active	Collections Calling List
inbnd1	Inbound	Active	Inbound Calling list
list2	Outbound	Active	Collections Calling List
list2	Outbound	Deleted	Collections Calling List
inbnd2	Inbound	Active	Inbound Calling list
inbnd2	Inbound	Deleted	Inbound Calling list
list99	Outbound	Active	Inbound Collections Calling List
list9	Outbound	Active	Collections Calling List
inbnd9	Inbound	Active	Inbound Calling list
list4	Outbound	Active	Collections Calling List
inbnd4	Inbound	Active	Inbound Calling list

Name	Details
General	
Number of phone fields	2
List is part of Do Not Call group	<input type="checkbox"/>
Post Update	<input checked="" type="checkbox"/>
Number of phones to update	2
Number of call attempts to keep	5
Maintain history of attempts	Keep initial
Update record codes	2,3,11,13
Infinite Job	<input type="checkbox"/>
Key for removing duplicate records	
Key for indexing records	
Key for indexing Do Not Call processing	
LATELIST	<input type="checkbox"/>
Match compcodes	
Sort newly downloaded records	<input type="checkbox"/>
Key for sorting	
Campaign Update	<input type="checkbox"/>
Update Mode	
Native Voice and Data Transfer	<input checked="" type="checkbox"/>
Sales Verification	<input checked="" type="checkbox"/>

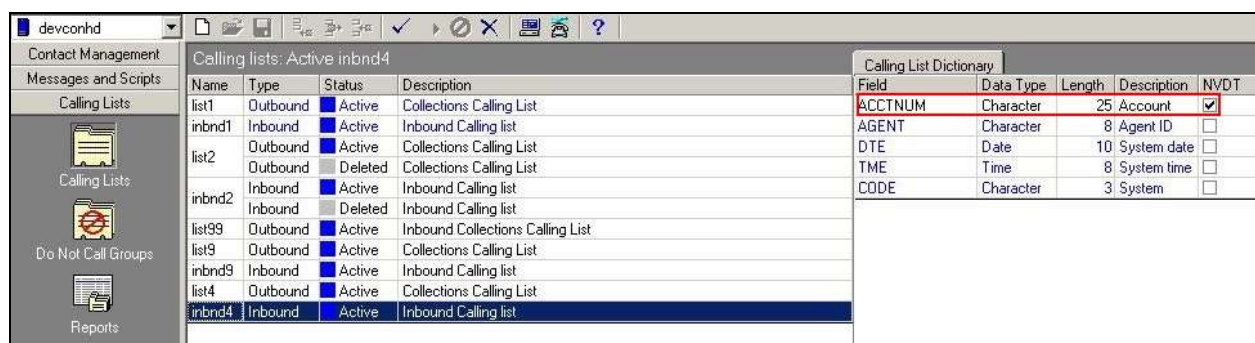
Click on the **Calling List Dictionary** tab, and click to place a tick in the **NVDT** column next to **ACCTNUM**, ensure the **LENGTH** field is set to **25** and save (not shown) when completed.

Field	Data Type	Length	Description	NVDT	RSM	Label
ACCTNUM	Character	25	ACC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BALANCE	Currency	20	BALANCE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOTALDUE	Currency	18	TOTAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME1	Character	25	NAME	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME2	Character	25	NAME	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CITY	Character	25	City	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
STATE	Character	2	State	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ZIPCODE	Numeric	5	ZIPCODE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PHONE1	Character	12	HOME	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PHONE2	Character	12	BUSINESS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMENT1	Character	60	COMMENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AGENT	Character	8	AGENT ID	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The same needs to be performed for the **inbnd4** list. Right click on **inbnd4** and select **Calling List Details**.

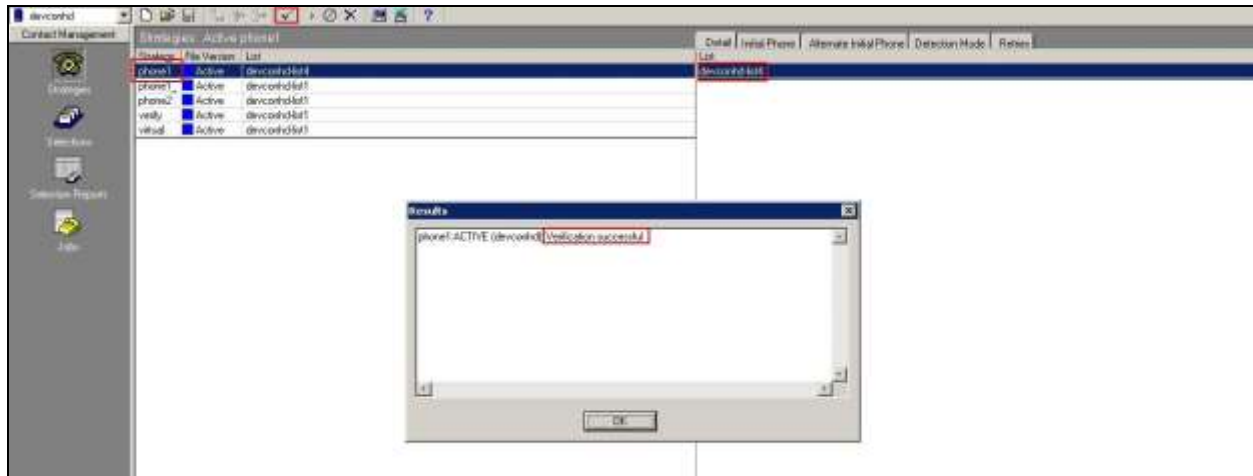


Click to place a tick in the column next to **ACCTNUM**, and ensure the **LENGTH** field is set to **25**. Save when completed (not shown).




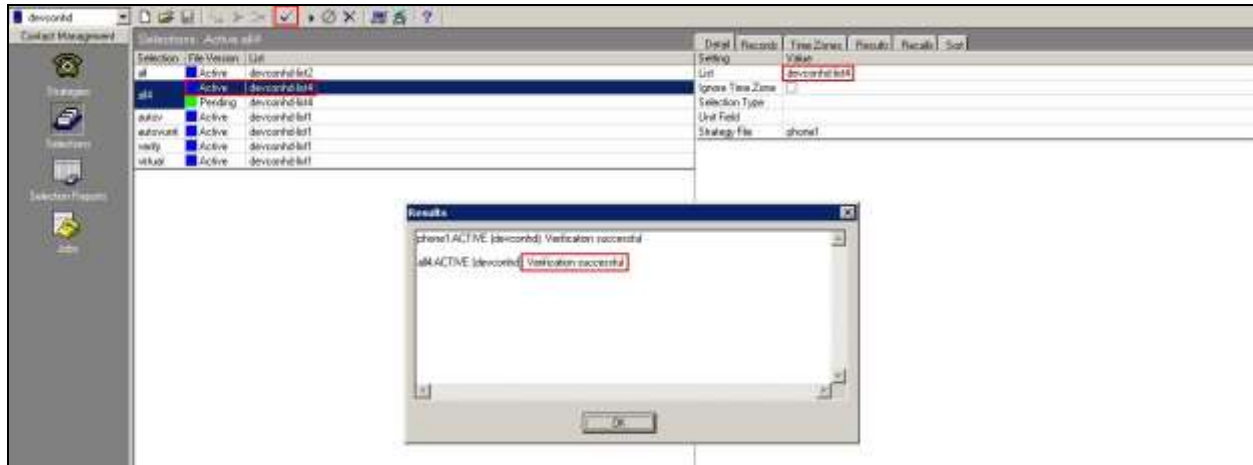
7.7.5. Configure Strategy


Assuming that strategy **phone1** and calling list **list4** (as specified in the previous section), are being used, configure editor as shown below and click verify. Ensure verification is successful.

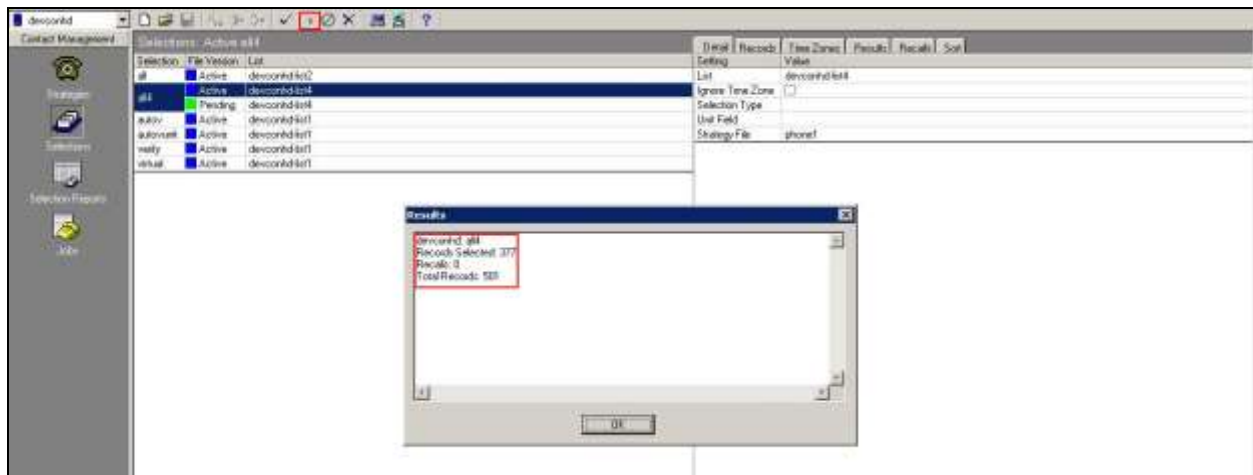


7.7.6. Configure Selections

Click **Selections**, select **all4**, and clicking **list4**, click verify  and ensure verification is successful.



Click **Run** , and ensure that the **Results** pop-up screen shows some records in the **Records Selected** field.



7.7.7. Configure Outbound Job

Click **Jobs**, select **outbnd2** and configure as shown below:

Note: Name of inbound job to transfer calls to field is set to **inbnd1**

The screenshot displays the Avaya Contact Management interface. On the left, a sidebar contains navigation icons for Strategies, Selection, Selection Reports, and Jobs. The main window is titled 'Jobs: Active outbnd2'. It features a table with columns: Job, Job type, File/Screen, Outbound list, Inbound list, and Status. The 'outbnd2' job is selected and highlighted in blue. To the right of the table is the 'Job Detail' pane, which shows various configuration settings for the selected job. The settings are organized into sections: Basic, Call Pacing, Files, Interactive Voice Response, Job Type, and Labels. The 'Files' section is expanded, showing fields for Outbound calling list, Record selection file name, Outbound screen(s), Agent keys definition file name, Do Not Call group name, Name of new job to link to, and Name of inbound job to transfer calls to. The 'Name of inbound job to transfer calls to' field is highlighted with a red box and contains the value 'inbnd1'. Other fields in the 'Files' section are also highlighted with red boxes: 'Outbound calling list' (devconhd-list4), 'Record selection file name' (all), and 'Outbound screen(s)' (list1). The 'Interactive Voice Response' section has a checkbox for 'Allow IVR agents on job' which is unchecked. The 'Job Type' section has checkboxes for 'Transaction verification job', 'Run job without agents', and 'Run job with OFCOM', all of which are unchecked. The 'Labels' section has a text field for 'Script label to use for making call' with the value 'avail_1' and a text field for 'Main data processing label' with the value 'generic'.

Job	Job type	File/Screen	Outbound list	Inbound list	Status
blend	Blend	Active	devconhd-list1	devconhd-inbnd1	Skipped
inbnd1	Inbound	Active		devconhd-inbnd4	Skipped
inbnd2	Inbound	Active		devconhd-inbnd2	Skipped
managed	Managed	Active	devconhd-list1		Skipped
outbnd	Outbound	Active	devconhd-list1		Skipped
outbnd2	Outbound	Active	devconhd-list4		Skipped
wait	Outbound	Active	devconhd-list1		Skipped
virtual	Virtual	Active	devconhd-list1		Skipped

Job Detail

Setting

Basic

Job description: generic

Tagged trunk-to-trunk transfer data: 0

Percentage complete of job to trigger call of link job: 0

Line type(s) for use on job: REG

Earliest start time: 08:00

Latest stop time: 23:00

Calling party number (ANI):

Calling party number (ANI) by record:

Require unit ID for agent login:

Transaction completion code(s): 93

Call Pacing

Call Pacing Method: Expert Calling Ratio

Expert calling ratio: W9

Initial hit rate: 50

Minimum hit rate: 20

Call Phone Campaign Call Progress (valid values: 1-4, 0 for regular campaigns): 0

Files

Outbound calling list: devconhd-list4

Record selection file name: all

Outbound screen(s): list1

Agent keys definition file name: ag_cms1

Do Not Call group name: DNC

Name of new job to link to:

Name of inbound job to transfer calls to: inbnd1

Interactive Voice Response

Allow IVR agents on job: ☐

IVR identifier:

Initial script to run on the IVR:

Script to run on the IVR:

Job Type

Transaction verification job: ☐

Run job without agents: ☐

Run job with OFCOM: ☐

Start OFCOM timer when: Customer begins to speak

Labels

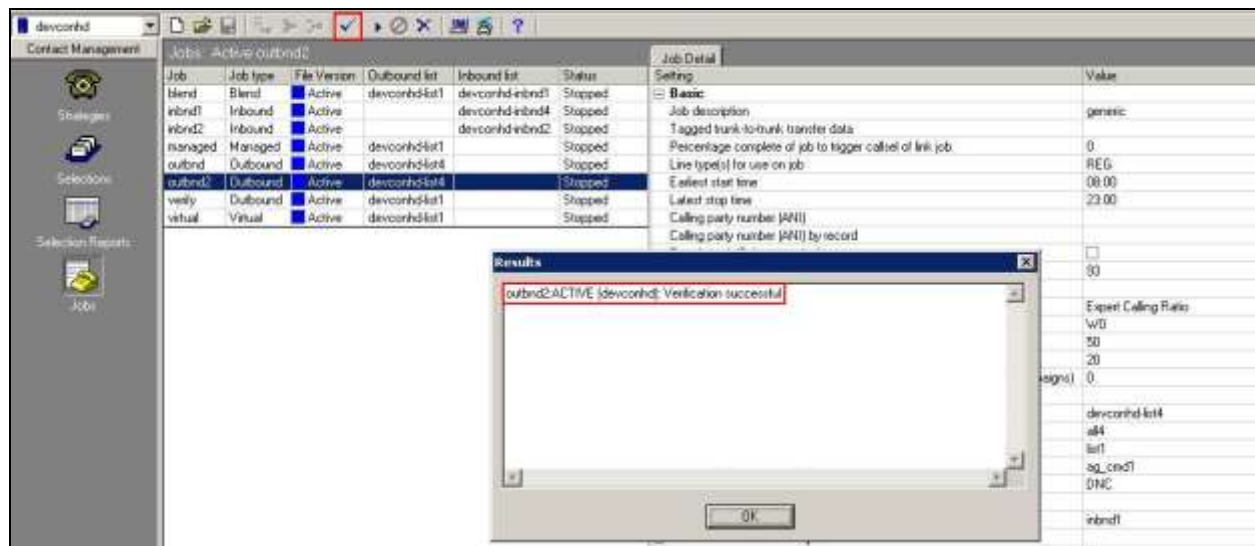
Script label to use for making call: avail_1

Main data processing label: generic

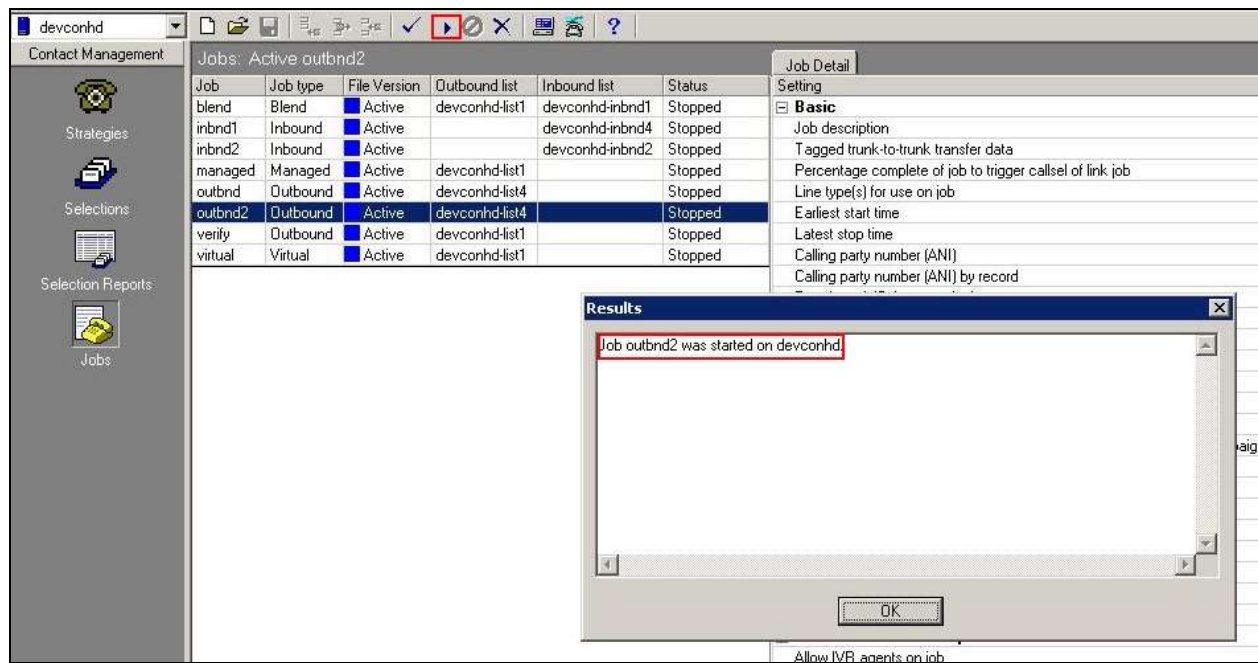
Continued from previous screenshot.

Labels	
Script label to use for making call	wait1_f
Main data processing label	generic
Script label to use OFCOM	
Managed Dialing	
Managed (preview) dialing	<input type="checkbox"/>
Allow agents to cancel call in preview mode	<input type="checkbox"/>
Time limit (seconds) for preview	10
Display empty record at preview	<input type="checkbox"/>
Allow dialing from deleted record	<input type="checkbox"/>
Method for record search at preview (LIS, HASH, NONE)	NONE
Key field for LIS record search	
Outbound Processing	
Shutdown job when no more calls remain	<input type="checkbox"/>
Make alternate phone lowest priority in selecting next record	<input type="checkbox"/>
Order calling of records by time zone	<input type="checkbox"/>
VDN needed by the CTI Dialer only	
Post Processing	
Automatically start Update mode on customer hang-up	<input type="checkbox"/>
Quota Settings	
Quota setting (completion code,quota)	
Quota settings file name	
Save quota setting when the job ends	<input type="checkbox"/>
Recall	
Recall reschedule interval (minutes)	10
Recall notification time (minutes)	2
Number of recall attempts	2
Auto assign recall from Infinite job to agents on another job	<input type="checkbox"/>
Name of the job to get agent for recall	
Service Level	
Desired service level (percentage)	
Time to connect tolerance (seconds)	
Ofcom Timer	2
Wait Queues	
Total wait delay (seconds)	90
Number of message to play while on hold awaiting transfer	

Click verify  and ensure verification completes successfully.



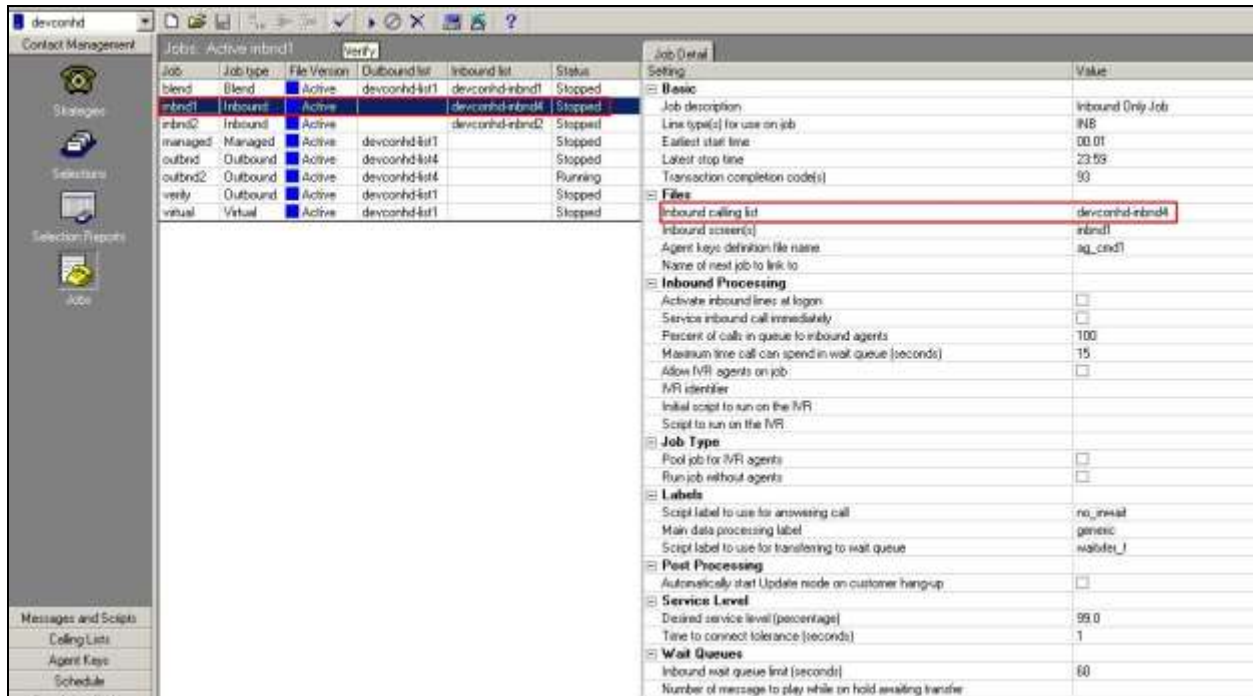
Click run  to start the job.



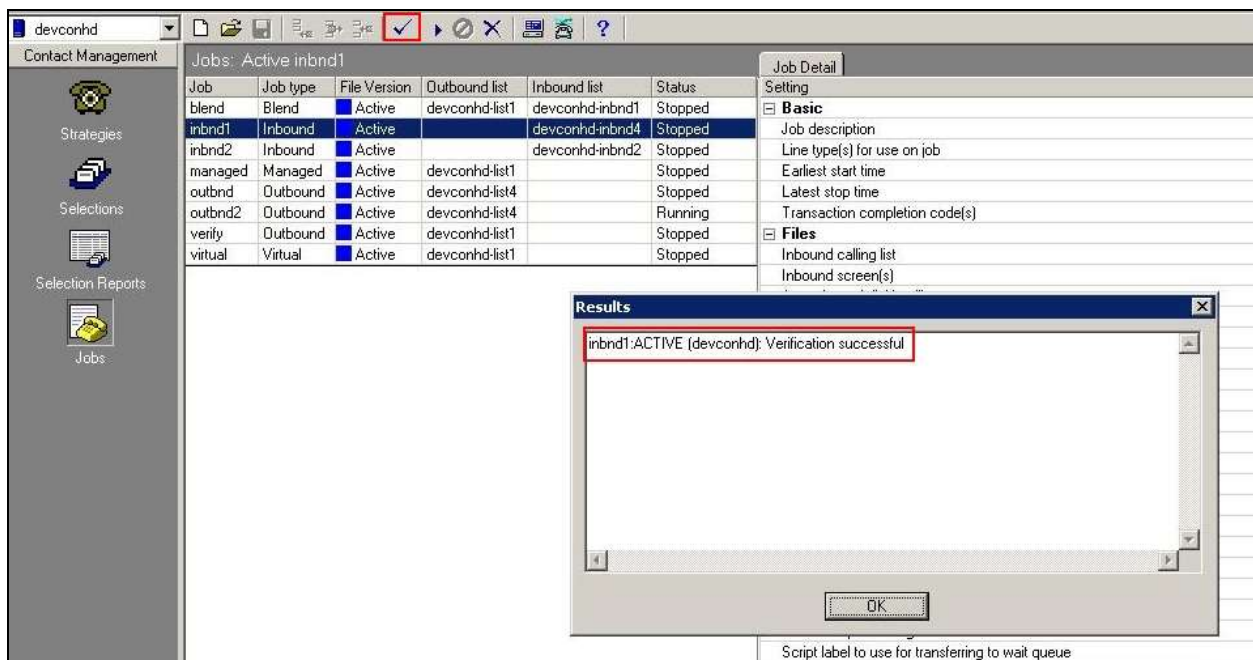
The outbound job is now running, and Proactive Contact will be initiating outbound calls to Proactive Contact Agents, once logged in. In this instance, synTelate Agent is used to log in both the Proactive Contact Agent, and the Communication Manager as an ACD Agent.


7.7.8. Configure Inbound Job

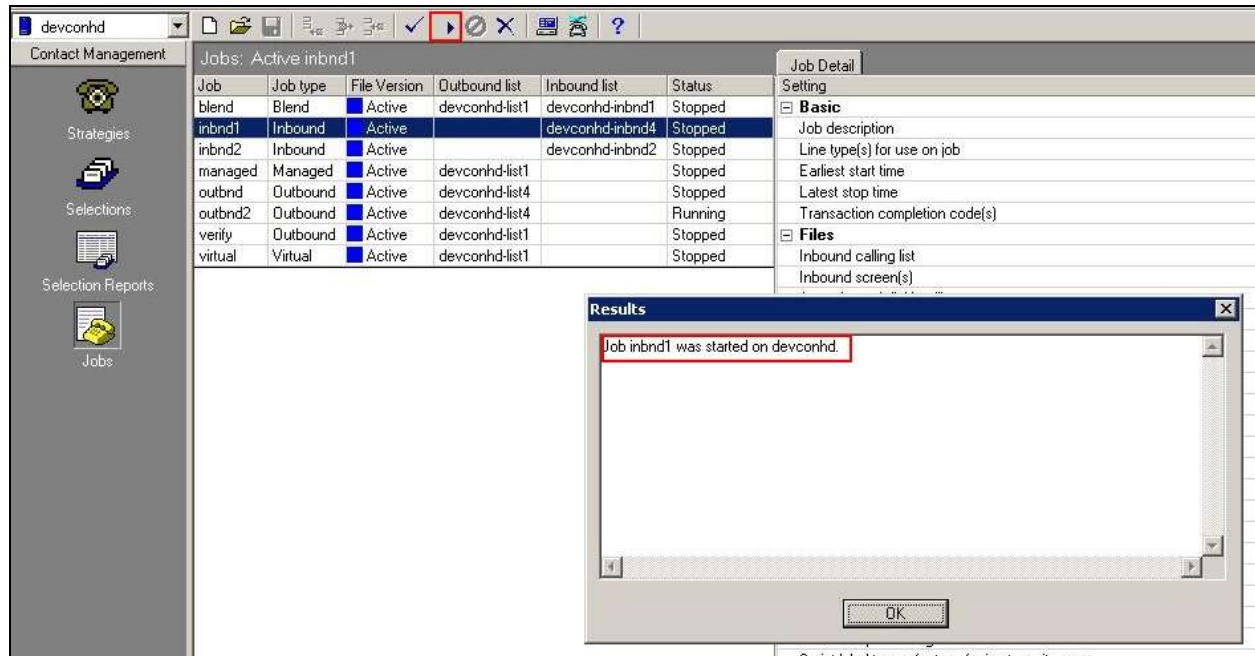
Click **Jobs** in the left pane, select **inbnd4** and set the **inbound calling list** field as configured in **Section 7.7.4**.



Click verify  and ensure verification completes successfully.



Click  to start the job.



If the job fails to run as expected, ensure the job file within the **/opt/avaya/pds/job/** directory has the following parameters set.

TESTMODE::
TESTOPER::

8. Configure Inisoft synTelate Designer

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

- Administer Moagent32.ini
- Launch Designer
- Administer campaigns
- Administer scripts and screens
- Administer CTI

8.1. Administer Moagent32.ini

From the PC running Designer, navigate to the **C:\WINDOWS\system32** directory to locate the **Moagent32.ini** file, amend this file with the Proactive Contact IP address as **servername** and set **UseDIIDbs=0**.

```
[logon]
servername = 10.10.16.91
[ConfigSettings]
UseDIIDbs=0
```

8.2. Launch Designer

From the PC running Designer, select **Start → Programs → synTelate → synTelate Designer** to display the **Welcome - synTelate** screen (not shown). Select the **Designer** tab (not shown). From the top menu, select the **Home** tab. Click **New** and select **Wizard → Dialler Wizard** from the drop-down list to create a new campaign.



8.3. Administer campaigns

On **Step 1 of 6** screen configure as follows:

The screenshot shows a window titled "Campaign Wizard with Avaya Proactive Contact". The subtitle is "Step 1 of 6 - Basic Campaign Details". Below the subtitle, it says "Please enter basic details for the campaign". The form has two columns. The left column contains: "Database *" with a dropdown menu showing "synRun"; "Password *" with a text box containing "*****"; "Start Date" with a dropdown menu showing "12/05/2011"; and "End Date" with a dropdown menu showing "11/05/2012". The right column contains: "Name *" with a text box containing "Compliance_Testing_Campaign"; "Description" with a large empty text box; and "Notes" with a large empty text box. At the bottom right, there are three buttons: a left arrow, a right arrow, and a red circle with a slash.

Click on the arrow pointing **right above**, the **Avaya PCS Login** screen is displayed. Enter the credentials for the Proactive Contact supervisor and click on the green tick.

The screenshot shows a window titled "Avaya PCS Login". It has two text boxes: "Agent Name" with the value "sysadm" and "Password" with the value "*****". Below the text boxes are two buttons: a green checkmark and a red circle with a slash.

On **Step 2 of 6** screen select the proper values for **Call List** and **Job Name**. Retain the default value for **Client Status Table**, and select the proper **Job Type**.

The screenshot shows a Windows-style application window titled "Campaign Wizard with Avaya Proactive Contact". The window has a blue title bar with standard minimize, maximize, and close buttons. The main content area is light blue and contains the following elements:

- Step 2 of 6 - Choose Data Source**: The title of the current screen.
- Please specify the data source for the campaign**: A subtitle instruction.
- Call List ***: A dropdown menu with "list2" selected.
- Job Name ***: A dropdown menu with "outbnd2" selected, accompanied by a three-dot menu icon.
- Client Status Table ***: A dropdown menu with "outbnd2" selected.
- Job Type**: A group box containing two radio buttons: "Inbound" (unselected) and "Outbound" (selected).
- Incoming DDI**: A text input field with a three-dot menu icon to its right.
- Additional Jobs**: A large, empty text area.

At the bottom right of the window, there are three navigation buttons: a left arrow, a right arrow, and a red circle with a diagonal line (cancel).

Configure **Step 3 of 6** screen as below:

Campaign Wizard with Avaya Proactive Contact

Step 3 of 6 - Database Behaviour

Please specify the desired behaviour of the Client Status Table record in the database when a call is popped.

Client Record

☒ Create New ☒ Save To Database
Create a new record in the Client Status Table for each PCS call

☐ Match Existing On Field
Display an existing record in the Client Status Table for each PCS Call

Navigation buttons: Back, Forward, Cancel

The **Step 4 of 6** screen is displayed.

Campaign Wizard with Avaya Proactive Contact

Step 4 of 6 - Dialler Field Mappings

Please specify which fields from the dialler will be mapped to fields in the Client Status Table.

Available Fields		Selected Fields
ACCTNUM	>	
BALANCE		
CITY	>>	
COMMENT1		
FINOPER	<	
FRTHDATE1		
FRTHTIME1	<<	
NAME		
NAME1		
NAME2		
PHONE1		
PHONE2		
STATE		
SVJCODE		
TOTALDUE		
ZIPCODE		

Navigation buttons: < > << >> < > << >>

Click on the double arrow highlighted below to select all fields.

Campaign Wizard with Avaya Proactive Contact

Step 4 of 6 - Dialler Field Mappings
Please specify which fields from the dialler will be mapped to fields in the Client Status Table.

Available Fields		Selected Fields
	>	ACCTNUM
	>>	BALANCE
		CITY
		COMMENT1
		FINOPER
		FRTHDATE1
		FRTHTIME1
		NAME
		NAME1
		NAME2
		PHONE1
		PHONE2
		STATE
		SVJCODE
		TOTALDUE
		ZIPCODE

Navigation buttons: < > << >> <=> <=><=>




The **Step 5 of 6** screen is displayed, amend as required.




Campaign Wizard with Avaya Proactive Contact

Step 5 of 6 - outbnd2 - Fields

Please check the data types and lengths and edit where required. Add any additional fields where necessary.

Field Name	Call List Field	Type	Length	Decimals	Exists	Modified	Delete
ACCTNUM	ACCTNUM	varchar	25	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BALANCE	BALANCE	numeric	20	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CITY	CITY	varchar	25	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COMMENT1	COMMENT1	varchar	60	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
FINOPER	FINOPER	varchar	8	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
FRTHDATE1	FRTHDATE1	datetime	10	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
FRTHTIME1	FRTHTIME1	datetime	10	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NAME	NAME	varchar	20	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NAME1	NAME1	varchar	25	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The **Step 6 of 6** screen is displayed shows the summary of the configuration. Click on the door icon highlighted to complete the Campaign Wizard.

Campaign Wizard with Avaya Proactive Contact

Step 6 of 6 - Summary
Please ensure all details are correct. To alter details, navigate to the respective page.

Campaign Details | Data Source | Database Behaviour | Additional Jobs

Database: synRun

Name: Compliance_Testing_Campaign CPGNo: 88

Description:

Notes:

Start Date: 12/05/2011 End Date: 11/05/2012

☐ Open Campaign Desktop

syntelate®
The Call Center Desktop

Navigation icons: Back, **Door Icon**, Cancel

8.4. Administer scripts and screens

For the purposes of this compliance test, it is assumed that scripts and screens have already been created according to requirements. A sample screen is shown below.

The screenshot displays a software application window titled "Running - synTelate". The interface includes a top toolbar with icons for Cut, Copy, Paste, Delete, Undo, Zoom, and various call control functions like Dialer Utility, Dial / Answer / Complete Preview, Hangup, Hold / Retrieve, Ready, Redirect, Call, and Save. Below the toolbar, there is a sidebar on the left with a "Good Afternoon" greeting and two input fields containing "JOHN DOE". The main area is titled "Compliance Outbound 2 Test" and contains a form with the following fields:

- AcctNum: 5300292120986830
- Name: JOHN DOE (with a second input field also containing JOHN DOE)
- Address: (empty)
- Phone 1: 2032323423
- Phone 2: 0000000000
- Comments: (empty text area)

At the bottom of the form are two buttons: "Complete Call (21)" and "Set Recall". The status bar at the very bottom shows "OUTBOUND : Home phone - 2032323423", "Ready", and "synTelate Server - Not Required".

8.5. Administer CTI

Select the **Supervisor** tab in synTelate Designer and click on **CTI Config**.



Click **Add**.



On **Edit CTI Config Details** screen shown below enter any descriptive string in the **Name** field and ensure the **Pass Through Telephony Server** is set to **TSAPI based switch**. Click **OK**.

Edit CTI Config Details

Name ID: 2
Avaya PC5 with PAB

Telephony Server
Avaya PDS

☐ Auto Login

External Prefix

Extension Length
3

☒ Enabled for undefined Agents

Ring Delay

Pass Through Telephony Server
TSAPI based switch

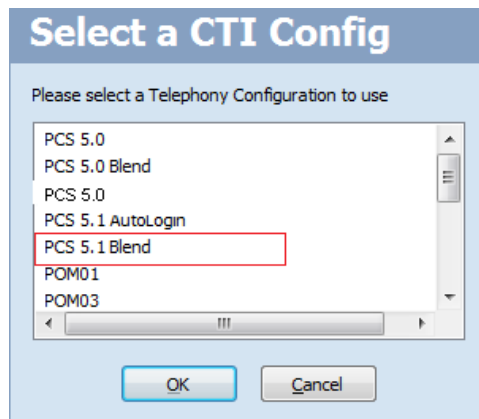
OK Cancel

9. Verification Steps

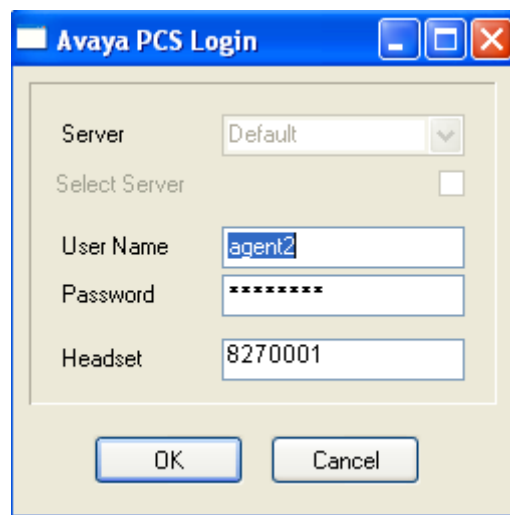
This section provides the tests that can be performed to verify proper configuration of synTelateagent to interoperate with Proactive Contact. Prior to verification, start an outbound job on Proactive Contact.

9.1. Verify synTelate

From the PC running synTelate Agent, select **Start → Programs → synTelate → synTelate Agent**. In the **Select a CTI Config** screen shown below select the CTI configured in **Section 8.5**



The **Avaya PCS Login** screen is displayed. Enter a valid agent login and password for Proactive Contact, and the agent station/headset number detailed above.

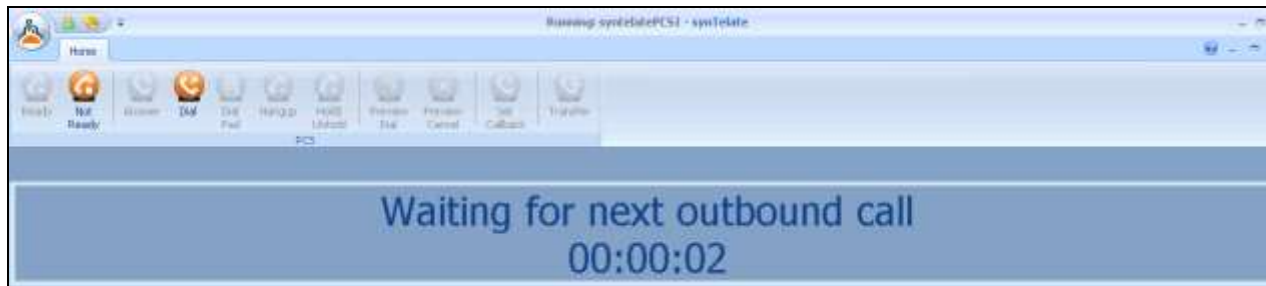


The synTelate splash screen is shown:

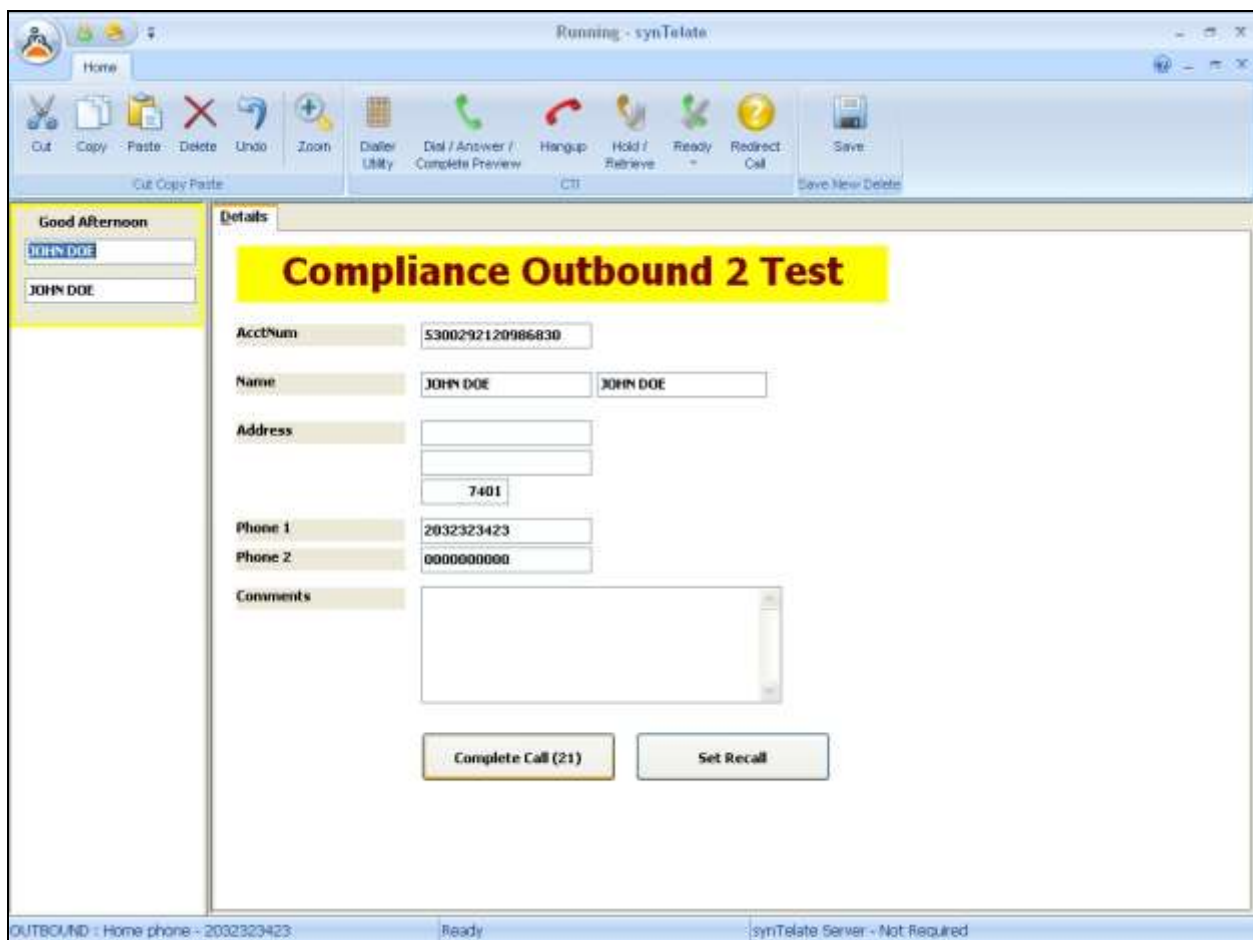


synTelate opens with welcome screen showing list of available jobs. Verify the active outbound job is displayed. Click **outbnd2** (not shown).

The **Dialler Status** box is displayed. Verify the values for **Status** and **Job**, as shown below.



The **Running - synTelate** screen is displayed. When an outbound call is delivered to the agent, verify that the appropriate data screen is displayed and populated with values retrieved from the customer record, as shown below:



9.2. Verify Avaya Aura® Communication Manager

The following steps can ensure that signaling group and trunk groups configured between Communication Manager and PG230 Digital Switch are in-service. From the Communication Manager SAT enter the command **status signaling-group 10** to verify that the signaling group for the 0001v2 DS1 board is **in-service**.

```
status signaling-group 10
                        STATUS SIGNALING GROUP

      Group ID: 10                      Active NCA-TSC Count: 0
      Group Type: isdn-pri              Active CA-TSC Count: 0
      Signaling Type: facility associated signaling
      Group State: in-service

                        Primary D-Channel

      Port: 01A0916      Level 3 State: in-service

                        Secondary D-Channel

      Port:              Level 3 State: no-link
```

Enter the command **status trunk 21** to verify that the headset trunk group 21 is **in-service**.

```
status trunk 10
                        TRUNK GROUP STATUS
```

Member	Port	Service State	Mtce Connected Ports Busy
0021/001	001v201	in-service/idle	no
0021/002	001v202	in-service/idle	no
0021/003	001v203	in-service/idle	no
0021/004	001v204	in-service/idle	no
0021/005	001v205	in-service/idle	no

Repeat the above test for other trunk groups configured on E1 trunk line between Communication Manager and PG230 Digital Switch.

9.3. Verify Avaya Proactive Contact

From Proactive Contact shell, type the command **jobmon** to verify agent is logged into the job outbnd2 and handling a call:

```
[STANDARD]                               Job Activity                               [ALLID]
                               Summary Statistics
                               Job: [outbnd2][60]
                               Start time: 10.43.09   Current time: 10.56.11
Agent Activity                               Line Usage
-----
-
      All Outb   ACD   PTP   Outbound Lines   Cur   Avg   Peak
Logged in:    1    1     0     0   Demand       :    1    1    1
Assigned :    1    1           Available       :    9
On Phone  :    1    1           Total Lines    :   10

Calling Activities
-----
-
Outbound Phone Calls
Records Selected:      372
Phone Calls made:      34
Cur/Run Hit Rate:     20/5  %
Agent Connects   :      1
Queue           :      0
Recalls         :      0
Phone Calls Left:     338

[ Job outbnd2 ready for calling ]
```

9.4. Verify Avaya Aura® Application Enablement Services

On Application Enablement Services, verify the status of the TSAPI link by selecting **Status** → **Status and Control** → **TSAPI Service Summary** from the left pane. The **TSAPI Link Details** screen is displayed. Verify the **Status** is **Talking** for the TSAPI link administered in **Section 6** as shown below.

The screenshot shows the Avaya Application Enablement Services Management Console. The left navigation pane includes sections like 'All Services', 'Communication Manager Interface', 'Licensing', 'Maintenance', 'Networking', 'Security', and 'Status'. The 'Status' section is expanded, showing 'Alarm Viewer', 'Logs', and 'Status and Control'. Under 'Status and Control', 'TSAPI Service Summary' is selected. The main content area displays 'TSAPI Link Details' with a table of links. The first link has a status of 'Talking'.

Link	Switch Name	Switch CTI Link ID	Status	Since	State	Switch Version	Associations	Msgs to Switch	Msgs from Switch	Msgs Period
1	CM	1	Talking	Thu Jun 2 10:17:49 2011	Online	16	9	15	15	30

10. Conclusion

These Application Notes describe the configuration steps required for Inisoft synTelate to successfully interoperate with Avaya Proactive Contact with Avaya PG230 Digital Switch using agent blending. All feature test cases were completed successfully.

11. Additional References

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

1. *Administering Avaya Proactive Contact*, Release 5.1.1 April 2015, available at <http://support.avaya.com>.
2. synTelate v5.1 Training Manual 2015 Issue 01.doc – available directly from synTelate support.

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