



Avaya Solution & Interoperability Test Lab

Application Notes for IniSoft synTelate with Avaya Proactive Contact using PG230 Digital Switch - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for IniSoft synTelate 4.0 to successfully interoperate with Avaya Proactive Contact 4.0 using Avaya PG230 Digital Switch. Inisoft synTelate is a call center scripting application for creating inbound and outbound campaigns and consists of the synTelate Designer and the synTelate Agent. IniSoft synTelate Agent was compliance tested against Avaya Proactive Contact 4.0 using Avaya PG230 Switch.

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

1. Introduction

These Application Notes describe a compliance-tested configuration comprised of Avaya Proactive Dialer 4.0 using Avaya PG230 Switch (HardDialer), and Inisoft synTelate 4.0 (synTelate).

synTelate is a call center scripting application for creating inbound and outbound campaigns, and consists of following components:

- synTelate Designer
It is a graphical tool that is used for the definition of the call flow and agent screens.
- synTelate database
It consists of client records that are used during inbound and outbound campaigns which are imported from Avaya HardDialer.
- synTelate Agent
It uses Avaya Proactive Dialer Agent API (Agent API) to communicate with Avaya HardDialer. This allows synTelate Agent to perform operations such as logging in and out, joining a job, changing the state, handling calls and setting completion codes. synTelate Agent uses a TSAPI (Telephony Services API) link to Avaya AE Services to receive inbound call events and to control the call (answer, hold, retrieve, hangup, etc.).

1.1. Interoperability Compliance Testing

The compliance testing examined the synTelate Agent application interoperability with Avaya HardDialer to handle Outbound, Managed, Intelligent Call Blending (ICB) and Predictive Agent Blending (PAB) campaigns. The majority of the testing focused on the ability of the synTelate Agent to handle both inbound and outbound calls. The general test approach was to test the features on the synTelate Agent that are supported with Avaya HardDialer.

Outbound campaign focuses only on outbound calls initiated by the dialer. Managed campaign is a special type of Outbound campaign where the agent releases the call to be dialed after reviewing the customer information.

ICB campaign can handle both outbound and inbound calls but it focuses on outbound calls. Inbound calls for ICB are delivered to the agent using Avaya HardDialer.

PAB campaign can handle both outbound and inbound calls but it focuses on outbound calls and releases agents when an inbound call enters the monitored hunt group queue on Avaya Communication Manager. Predictive Agent Blending is achieved with a Computer Telephony Interface (CTI) link configured between Avaya HardDialer and Avaya AE Services.

- The following features on the synTelate agent were tested:
 - Login / Logout
 - Ready / Not Ready

- Join Job / Leave Job
 - Finish Call
 - Release Call
 - Call Back
 - Agent Owned Recall
 - Job Linking
 - Job Transfer
 - Job End
 - Hangup Line
 - Finish Item
 - Supervised/Unsupervised Transfer (Voice Only)
 - Native Voice and Data Transfer (NVDT)
 - Hold/Unhold
 - Manual Call
- The following campaign types were tested:
 - Outbound
 - Managed
 - Intelligent Call Blending
 - Predictive Agent Blending
 - Inbound calls to the synTelate agent were tested using the PAB feature of Avaya HardDialer.

1.2. Support

Technical support for the synTelate application is available as follows:

- Telephone Help Desk - +44 (0)141 552 8800 or 0800 052 1015
- Support on the Web - <http://inisoft.co.uk/support.html>.

2. Reference Configuration

Figure 1 shows the setup used for the compliance test.

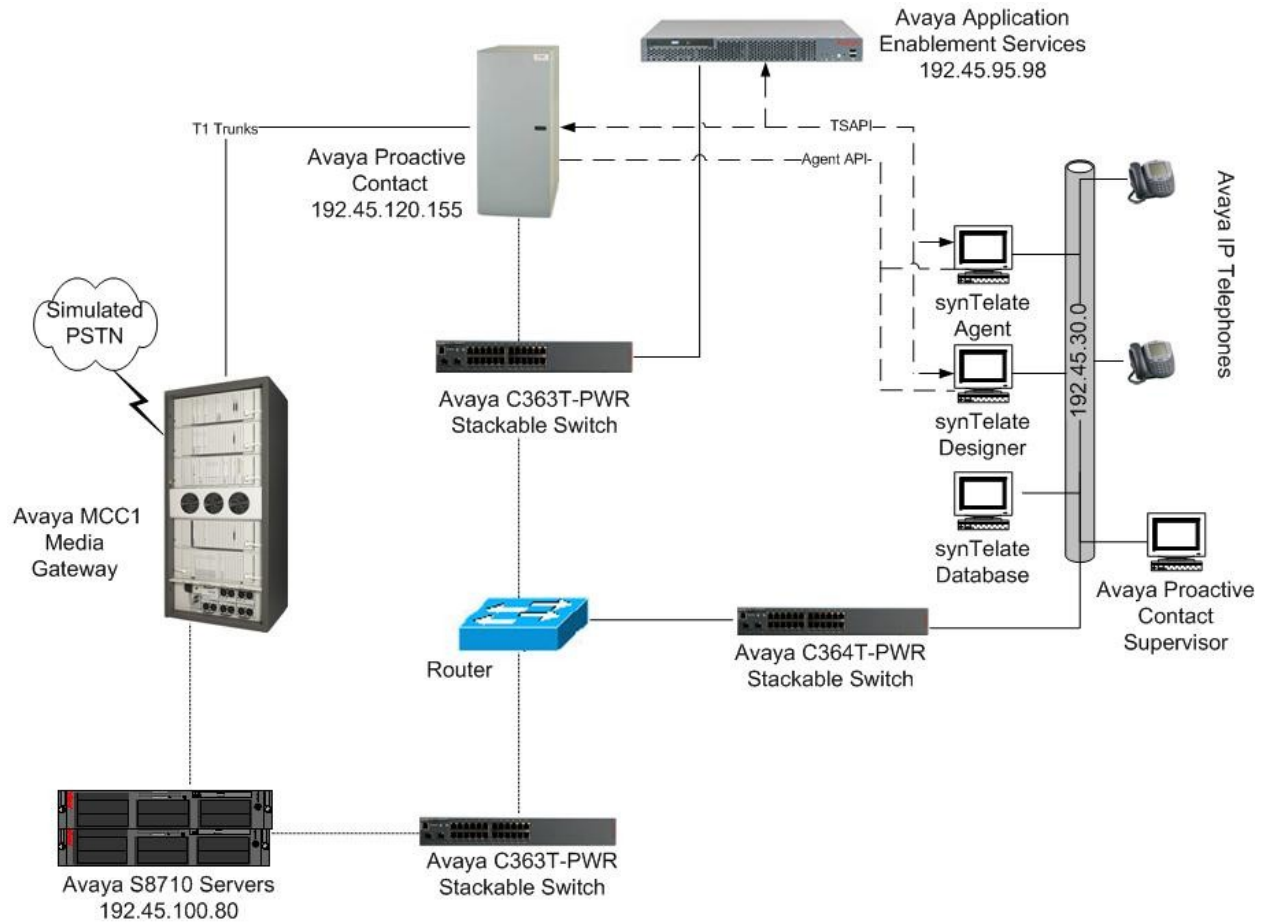


Figure 1 Avaya Proactive Contact using Avaya PG230 Switch and synTelate Configuration

3. Equipment and Software Validated

The following equipment and software were used for the sample configuration.

Equipment/Software	Software Version
Avaya Proactive Contact Server on HP Proliant DL385G2 using PG230 Switch	Avaya Proactive Contact 4.0.1 Build 105
Avaya Proactive Contact Agent API	4.0 (Moagent32.dll)
Avaya Proactive Contact TSAPI Client SDK	3.1.1
Avaya Application Enablement Services Server	4.2
Avaya MCC1 Media Gateway with Avaya S8700 Servers	Avaya Communication Manager 5.0.1 (R015x.01.1.415.1)
Avaya C364T-PWR Converged Stackable Switch	4.5.14
Avaya C363T-PWR Converged Stackable Switch	4.5.14
Avaya 4621SW IP Telephones	2.8.3
synTelate on Windows XP Pro, SP2	
synTelate Designer	4.0.1
synTelate Agent	4.0.1
synTelate Database Server	Microsoft SQL 2003

4. Configure Avaya Proactive Contact

These Application Notes assume that the interface with Avaya HardDialer, Avaya S8700 Server and Avaya Communication Manager has been configured and is operational [2]. The following campaign types are already configured on Avaya HardDialer:

- Outbound Calling
- Predictive Agent Blending
- Managed Calls
- Intelligent Call Blending

In a Predictive Agent Blending system (PAB), agents log in to Avaya Communication Manager and to Avaya HardDialer. Avaya HardDialer via the CTI link monitors the activity on Avaya Communication Manager contact center devices such as the inbound VDN and hunt groups, and uses this information to determine when to acquire agents for outbound calling and when to release the agents to handle inbound calls.

The following features should be configured on Avaya HardDialer [2, 3]:

- Completion Codes
- Agent Owned Recall
- Recall/Callback
- Autowrap
- Job Linking
- Shadow Jobs
- Native Voice and Data Transfer

4.1. Calling List Fields Configuration Files

The calling list contains the customer records. The calling list fields are configured in the list configuration files (i.e., list5.fdict), located in the **/opt/avaya/pds/lists/list5.app** folder on Avaya HardDialer. The following highlighted fields were mapped to the synTelate fields in **Section 7, Step 8**.

```
RECLEN:1035:
ACCTNUM:16:C:ACCOUNT NUMBER:
BALANCE:10:$:BALANCE:
TOTALDUE:10:$:TOTAL DUE:
NAME1:25:C:NAME LINE1:
NAME2:25:C:NAME LINE2:
CITY:25:C:City:
STATE:2:C:State:
ZIPCODE:5:N:ZIPCODE:
PHONE1:12:C:HOME PHONE:
PHONE2:12:C:BUSINESS PHONE:
COMMENT1:60:C:COMMENT LINE 1:
ORIGINALJOBNAME:20:C:Original Job Name
AGENT:8:C:AGENT ID:
DTE:10:D:SYSTEM DATE:
```

4.2. Verify the moagent32.ini file

The synTelate agent checks the moagent32.ini file located in C:WINDOWS directory to obtain the Avaya HardDialer IP address and port number as shown below:

[Server_list]

PG230 = 192.45.120.155:22700

CTI = 192.45.120.154:22700

5. Configure Avaya Communication Manager

The basic configuration of Avaya Communication Manager is beyond the scope of these Application Notes. This section provides the procedures for verifying and configuring Avaya Communication Manager. The following will be configured:

- Configure Avaya Communication Manager for Intelligent Call Blending on Avaya HardDialer
- Configure Avaya Communication Manager for Predictive Agent Blending on Avaya HardDialer

Configuration in the following sections is only for the fields where a value needs to be entered or modified. Default values are used for all other fields. These steps are performed from the Avaya Communication Manager System Access Terminal (SAT) interface. After the completion of the configuration, perform the **save translation** command to make the changes permanent. Refer to [1] for additional details.

5.1. Configure Avaya Communication Manager for Intelligent Call Blending

Intelligent Call Blending uses T1 ports configured as DS1FD stations for inbound calls. The AAS option is used to allow the inbound ports to automatically log into the hunt group via the Agent LoginIDs. Implementation of the required DS1FD stations on Avaya Communication Manager can be achieved using the following series of steps.

Step	Description
1.	<p>Enter the add ds1 xxxxx command, where xxxxx is the location of the DS1 circuit pack. Configure the following.</p> <ul style="list-style-type: none">• Name – Set to any descriptive string value.• Bit Rate – Set to 1.544.• Line Coding – set to ami-zcs.• Framing Mode – set to d4.• Signaling Mode – set to robbed-bit. <div><pre>add ds1 1a14 DS1 CIRCUIT PACK Location: 01A14 Name: PDS 1-21-1 Bit Rate: 1.544 Line Coding: ami-zcs Line Compensation: 1 Framing Mode: d4 Signaling Mode: robbed-bit Interface Companding: mulaw Idle Code: 11111111 Slip Detection? n Near-end CSU Type: other</pre></div>

Step	Description
2.	<p>Enter add station <i>n</i> command, where <i>n</i> is a valid extension as per the dial plan configure as follows:</p> <ul style="list-style-type: none"> • Type – Set to DS1FD. • Port – Enter DS1 port number. Ports 17 through 20 are used for inbound calls. • Name – Set to any descriptive string value. • Repeat this step to configure additional DS1 ports for inbound calls. <div data-bbox="389 493 1386 829"> <pre> add station 30501 Page 1 of 3 STATION Extension: 30501 Lock Messages? n BCC: 0 Type: DS1FD Security Code: TN: 1 Port: 01A1417 Coverage Path 1: COR: 1 Name: PDS Sta 30501 s1-21-1-17 Coverage Path 2: COS: 1 Hunt-to Station: Tests? y STATION OPTIONS Loss Group: 4 Off Premises Station? y R Balance Network? n </pre> </div>

Step	Description
3.	<p data-bbox="293 233 1468 300">Enter add hunt-group <i>n</i> command, where <i>n</i> is an unused hunt group number and configure as follows:</p> <ul data-bbox="342 306 1312 499" style="list-style-type: none"> • Group Name – Set to any descriptive string value. • Group Extension – Set to a valid extension provisioned in the dial plan. • ACD – Set to y. • Queue – Set to y. • Vector – Set to y. <div data-bbox="293 533 1468 995"> <pre data-bbox="293 533 1468 995"> add hunt-group 621 HUNT GROUP Group Number: 621 Group Name: Dialer ICB Group Extension: 30500 Group Type: ucd-mia TN: 1 COR: 1 Security Code: ISDN/SIP Caller Display: Queue Limit: unlimited Calls Warning Threshold: Time Warning Threshold: ACD? y Queue? y Vector? y MM Early Answer? n Local Agent Preference? n Port: Port: </pre> </div> <p data-bbox="293 1035 1451 1066">On Page 2 of the HUNT GROUP form, set the Skill and AAS fields to y as shown below.</p> <div data-bbox="293 1066 1468 1268"> <pre data-bbox="293 1066 1468 1268"> add hunt-group 621 HUNT GROUP Skill? y AAS? y Measured: none Supervisor Extension: Controlling Adjunct: none </pre> </div>

Step	Description
4.	<p>Enter add agent-loginID <i>n</i> command, where <i>n</i> is valid and configure as follows:</p> <ul style="list-style-type: none"> • Name – Set to any descriptive string value. • AAS – Set to y. • Port Extension – Set to Port Extension field value configured in Step 2. • Repeat this step for other agent login ids to be configured. <div> <pre> add agent-loginID 20521 AGENT LOGINID Page 1 of 2 Login ID: 20521 Name: Dialer ICB TN: 1 COR: 1 Coverage Path: Security Code: AAS? y AUDIX? n LWC Reception: spe LWC Log External Calls? n AUDIX Name for Messaging: LoginID for ISDN Display? n Port Extension: 30501 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 WARNING: Agent must log in again before changes take effect </pre> </div> <p>Navigate to Page 2 on the AGENT LOGINID form. Set the SN (Skill Number) field to 621, this is the hunt group number administered in Step 3. Set the SL (Skill Level) field to 1.</p> <div> <pre> change agent-loginID 20521 AGENT LOGINID Page 2 of 2 Direct Agent Skill: Call Handling Preference: skill-level Local Call Preference? n SN SL SN SL SN SL SN SL 1: 621 1 16: 31: 46: 2: 17: 32: 47: 3: 18: 33: 48: 4: 19: 34: 49: </pre> </div>

Step	Description
5.	<p>Enter the change vector n command, where n is an unused vector number. This vector will be used to send inbound calls to Avaya HardDialer. The vector should queue to the skill configured in Step 3.</p> <pre> change vector 621 Page 1 of 3 CALL VECTOR Number: 621 Name: PDS ICB Multimedia? 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? n Holidays? n Variables? n 3.0 Enhanced? y 01 queue-to skill 621 pri m 02 03 </pre>
6.	<p>This VDN will be used to send inbound calls to Avaya HardDialer. Enter add vdn n command, where n is an unused extension and configure as follows:</p> <ul style="list-style-type: none"> • Name – Set to any descriptive string value. • Vector Number – Set to vector configured in the previous step. <pre> add vdn 20600 Page 1 of 3 VECTOR DIRECTORY NUMBER Extension: 20600 Name*: Dialer ICB Vector Number: 621 Meet-me Conferencing? n Allow VDN Override? n COR: 1 TN*: 1 Measured: internal Acceptable Service Level (sec): 20 VDN of Origin Annc. Extension*: 1st Skill*: 2nd Skill*: 3rd Skill*: </pre>

5.2. Configure Avaya Communication Manager for Predictive Agent Blending

Avaya HardDialer via the CTI link monitors the activity on Avaya Communication Manager contact center devices such as the inbound VDN and hunt groups, and uses this information to determine when to acquire agents for outbound calling and when to release the agents to handle inbound calls.

Step	Description
1.	<p>Use the display system-parameters customer-options command. On Page 3, verify that the Computer Telephony Adjunct Links, ASAI Link Core Capabilities and ASAI Link Plus Capabilities fields are set to y.</p> <pre> display system-parameters customer-options Page 3 of 11 OPTIONAL FEATURES Abbreviated Dialing Enhanced List? n Audible Message Waiting? n Access Security Gateway (ASG)? n Authorization Codes? n Analog Trunk Incoming Call ID? n Backup Cluster Automatic Takeover? n A/D Grp/Sys List Dialing Start at 01? n CAS Branch? n Answer Supervision by Call Classifier? y CAS Main? n ARS? y Change COR by FAC? n ARS/AAR Partitioning? y Computer Telephony Adjunct Links? y ARS/AAR Dialing without FAC? y Cvg Of Calls Redirected Off-net? n ASAI Link Core Capabilities? y DCS (Basic)? n ASAI Link Plus Capabilities? y DCS Call Coverage? n Async. Transfer Mode (ATM) PNC? n DCS with Rerouting? n Async. Transfer Mode (ATM) Trunking? n ATM WAN Spare Processor? n Digital Loss Plan Modification? n ATMS? n DS1 MSP? n Attendant Vectoring? n DS1 Echo Cancellation? n </pre>
2.	<p>On Page 6, verify that the ACD and Vectoring (Basic) fields are set to y.</p> <pre> display system-parameters customer-options Page 6 of 11 CALL CENTER OPTIONAL FEATURES Call Center Release: 4.0 ACD? y BCMS (Basic)? n Reason Codes? n BCMS/VuStats Service Level? n Service Level Maximizer? n BSR Local Treatment for IP & ISDN? n Service Observing (Basic)? y Business Advocate? n Service Observing (Remote/By FAC)? y Call Work Codes? n Service Observing (VDNs)? y DTMF Feedback Signals For VRU? n Timed ACW? n Dynamic Advocate? n Vectoring (Basic)? y Expert Agent Selection (EAS)? y Vectoring (Prompting)? y EAS-PHD? n Vectoring (G3V4 Enhanced)? n Forced ACD Calls? n Vectoring (4.0 Enhanced)? n Least Occupied Agent? n Vectoring (ANI/II-Digits Routing)? n Lookahead Interflow (LAI)? n Vectoring (G3V4 Advanced Routing)? n Multiple Call Handling (On Request)? n Vectoring (CINFO)? n Multiple Call Handling (Forced)? n Vectoring (Best Service Routing)? n PASTE (Display PBX Data on Phone)? n Vectoring (Holidays)? n Vectoring (Variables)? n </pre>

3.	<p>Add a CTI link using the add cti-link <i>n</i> command; where <i>n</i> is an available CTI link number and configure as follows:</p> <ul style="list-style-type: none"> • Extension – Set to an available extension as per the dial plan. • Type – Set to ADJ-IP • Name – Set to any descriptive string value. <div data-bbox="300 415 1477 615" style="border: 1px solid black; padding: 5px;"> <pre> add cti-link 15 CTI LINK CTI Link: 15 Extension: 24998 Type: ADJ-IP Name: AES DEVCON2715 COR: 1 Page 1 of 2 </pre> </div>
4.	<p>Enter add hunt-group <i>n</i> command, where <i>n</i> is an unused hunt group number and configure as follows:</p> <ul style="list-style-type: none"> • Group Name – Set to any descriptive string value. • Group Extension – Set to a valid extension provisioned in the dial plan. • ACD – Set to y. • Queue – Set to y. • Vector – Set to y. <div data-bbox="300 947 1477 1285" style="border: 1px solid black; padding: 5px;"> <pre> add hunt-group 402 HUNT GROUP Group Number: 402 Group Name: Dialer Inbound Group Extension: 50402 Group Type: ucd-mia TN: 1 COR: 1 Security Code: ISDN/SIP Caller Display: ACD? y Queue? y Vector? y MM Early Answer? n Local Agent Preference? n Page 1 of 3 </pre> <p>On Page 2 of the HUNT GROUP form, set the Skill field to y as shown below.</p> <div data-bbox="300 1360 1477 1558" style="border: 1px solid black; padding: 5px;"> <pre> add hunt-group 402 HUNT GROUP Skill? y AAS? n Measured: none Supervisor Extension: Controlling Adjunct: none Page 2 of 3 </pre> </div> </div>

5. Enter **change vector *n*** command, where *n* is associated to hunt group **402**. Enter the commands to queue to skill **402** as shown below.

```
change vector 402                                     Page 1 of 3
                                     CALL VECTOR
      Number: 402                                     Name: Dialer Inbound
      Attendant Vectoring? n      Meet-me Conf? n      Lock? n
      Basic? y      EAS? y      G3V4 Enhanced? n      ANI/II-Digits? n      ASAI Routing? y
      Prompting? y      LAI? n      G3V4 Adv Route? n      CINFO? n      BSR? n      Holidays? n
      Variables? n      4.0 Enhanced? n
01 queue-to      skill 402      pri h
02 wait-time      60      secs hearing ringback
03
04
```

6. Enter **add vdn *n*** command, where *n* is an unused VDN and configure as follows:
- **Name** – Set to any descriptive string value.
 - **Vector Number** – Set to the vector configured in the previous step.

```
add vdn 54402                                     Page 1 of 2
                                     VECTOR DIRECTORY NUMBER
                                     Extension: 54402
                                     Name: Dialer Inbound
                                     Vector Number: 402
      Attendant Vectoring? N
      Meet-me Conferencing? N
      Allow VDN Override? N
      COR: 1
      TN: 1
      Measured: none
      1st Skill:
      2nd Skill:
      3rd Skill:
```

7. Enter the **add agent-loginID *n*** command, where ***n*** is valid extension as per the dial plan and configure as follows:

- **Name** – Set to any descriptive string value.
- **Auto Answer** - Set to **all**.
- Repeat this step to configure additional agent login IDs.

```
add agent-loginID 25020                                     Page 1 of 2
                                AGENT LOGINID
Login ID: 25020                                           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:
                                           LoginID for ISDN Display? n
                                           Password:
                                           Password (enter again):
                                           Auto Answer: all
                                           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
```

On **Page 2** of the **AGENT LOGINID** form, specify the list of skills in the **SN** (Skill Number) field and level in the **SL** (Skill Level) field assigned to this agent login as shown below.

```
change agent-loginID 25020                                     Page 2 of 2
                                AGENT LOGINID
Direct Agent Skill:
Call Handling Preference: skill-level
SN      SL      SN      SL      SN      SL      SN      SL
1: 402    2      16:      31:      46:
2:      17:      32:      47:
3:      18:      33:      48:
4:      19:      34:      49:
```


8. Enter the **change station n** where n is already configured agent phone/headset extension used by the HardDialer. On **Page 3**, configure the following button assignments:
- **aux-work** – agent is logged on to the phone for outbound calls.
 - **auto-in** – agent goes to auto-in to accept inbound calls.
 - **after-call** –when the agent is in wrap up state after the call has ended.
 - **release** – to drop the call.
 - Repeat this step to configure additional agent phone/headset extensions.

```
change station 22720                                     Page 3 of 4

                                STATION

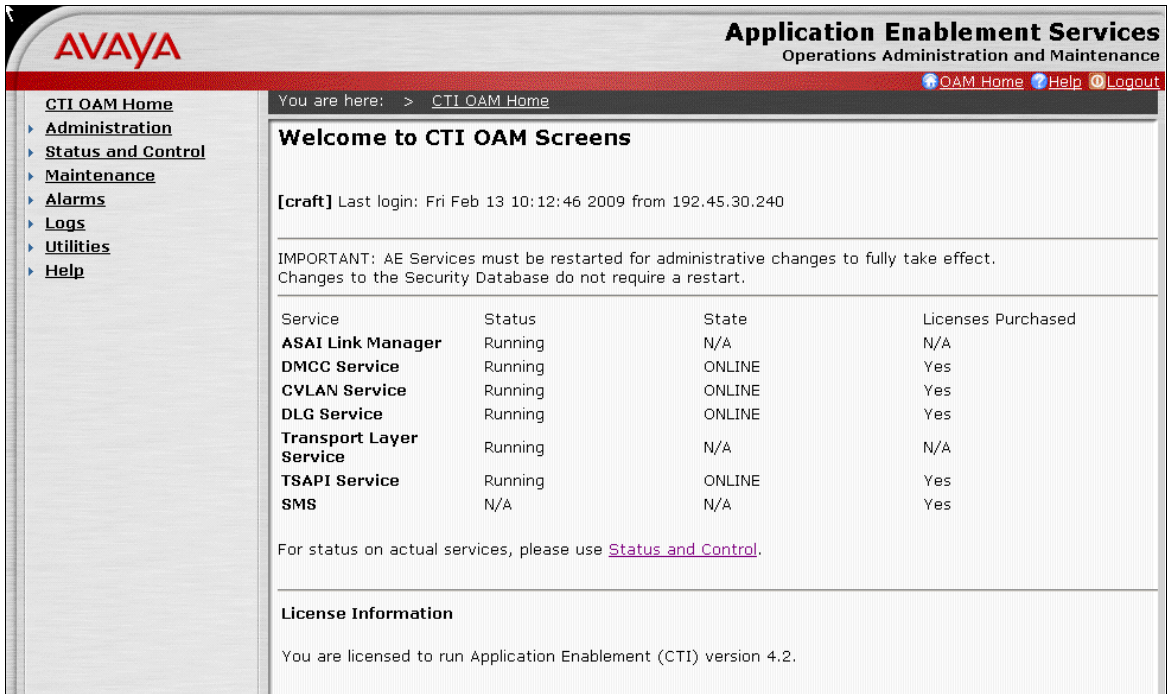
SITE DATA
  Room:                               Headset? n
  Jack:                              Speaker? n
  Cable:                             Mounting: d
  Floor:                             Cord Length: 0
  Building:                           Set Color:

ABBREVIATED DIALING
  List1:                               List2:                               List3:

BUTTON ASSIGNMENTS
  1: call-appr                        5: aux-work      RC:      Grp:
  2: call-appr                        6: auto-in       Grp:
  3: call-appr                        7: after-call   Grp:
  4: call-fwd   Ext:                  8: release
```

6. Configure Avaya Application Enablement Services

This section provides the procedures for configuring Avaya Application Enablement Services. Basic configuration related to the switch connection between Avaya Communication Manager and Avaya Application Enablement Services is assumed. Configuration in the following steps is only for the fields where a value needs to be entered or modified. Default values are used for all other fields.

Step	Description
1.	Launch a web browser, enter <a href="https://<IP address of AE Services>:8443/MVAP">https://<IP address of AE Services>:8443/MVAP in the URL, and log in with the appropriate credentials for accessing the Avaya AE Services CTI OAM pages.
2.	From the CTI OAM Home menu, select CTI OAM Admin and verify that the TSAPI Service is licensed as shown below under the heading License Information. <div></div>

3. From the CTI OAM Home menu, select **Administration** → **CTI Link Admin** → **TSAPI Links** and click on **Add Link** (not shown). At the **Add/ Edit TSAPI Links** screen configure as follows:

- **Link:** Choose a link number between 1 and 16 that is available.
- **Switch Connection:** Select the appropriate previously configured switch connection to be used, from the drop down list.
- **Switch CTI Link Number:** Corresponding CTI link number configured in **Section 5.2, Step 3**.
- Click **Apply Changes**.

The screenshot shows the 'Add / Edit TSAPI Links' configuration page. The left sidebar contains a tree view with 'Administration' expanded, showing 'CTI Link Admin' and 'TSAPI Links'. The main content area has a breadcrumb trail: 'You are here: > Administration > CTI Link Admin > TSAPI Links'. Below the title 'Add / Edit TSAPI Links', there are four configuration fields: 'Link:' with a dropdown set to '15', 'Switch Connection:' with a dropdown set to 'devcon2715', 'Switch CTI Link Number:' with a dropdown set to '15', and 'ASAI Link Version' with a dropdown set to '4'. A 'Security' dropdown is set to 'Unencrypted'. At the bottom are 'Apply Changes' and 'Cancel Changes' buttons.

4. Navigate to the **Tlinks** screen by selecting **Administration** → **Security Database** → **Tlinks**. Avaya AE Services server automatically creates the Tlink Name **Avaya#DEVCON2715#CSTA#DEVCONAES01** as shown in the screen below.

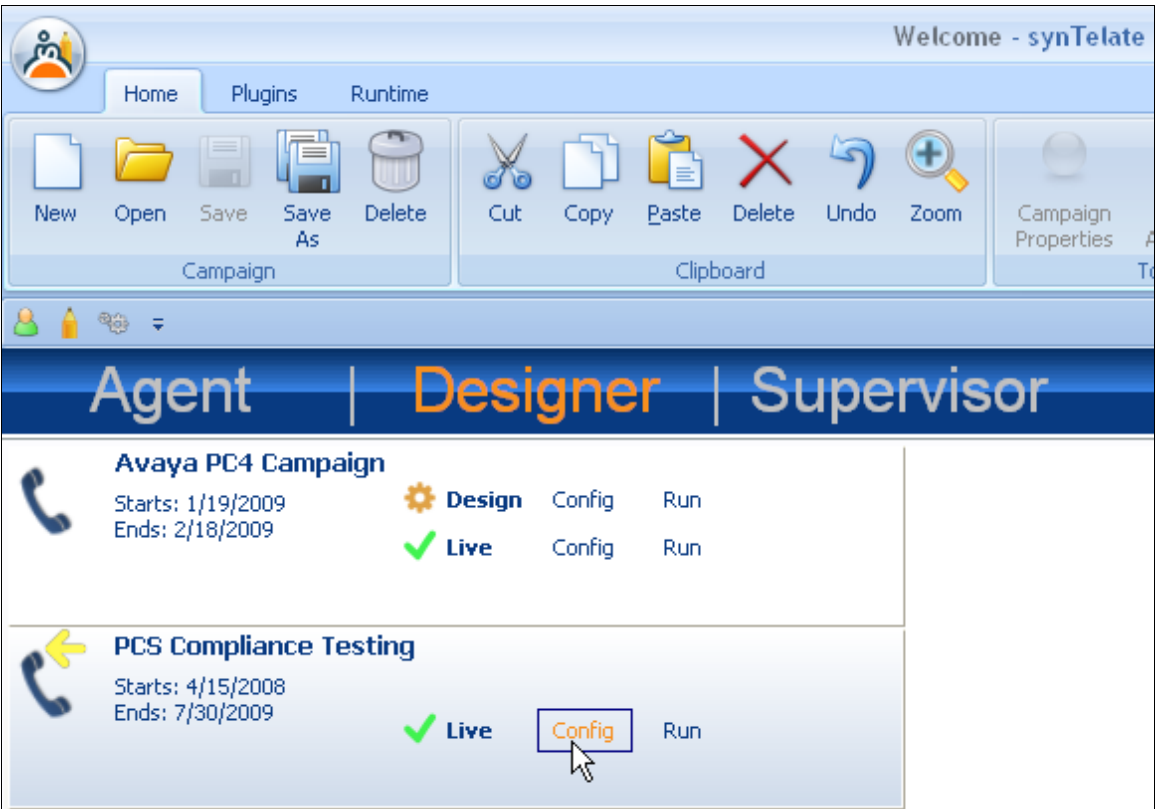
The screenshot shows the 'Tlinks' screen. The left sidebar has 'Administration' expanded, with 'Security Database' and 'Tlinks' selected. The main content area has a breadcrumb trail: 'You are here: > Administration > Security Database > Tlinks'. Below the title 'Tlinks', there is a table with a single column 'Tlink Name'. It lists 15 entries, each with a radio button. The 8th entry, 'AVAYA#DEVCON2715#CSTA#DEVCONAES01', is selected with a radio button.

5. A user ID and password must be configured for the synTelate Agent application and for Avaya HardDialer (not shown) to communicate as a TSAPI Client with the AE Services. Navigate to **OAM Home → User Management → Add User** and configure as follows:
- **User Id:** Enter a login name to be used by synTelate agent.
 - **Common Name:** Enter any descriptive string.
 - **Surname:** Enter any descriptive string.
 - **User Password:** Enter a password to be used by synTelate agent.
 - **Confirm Password:** Re-enter the password.
 - **CT User:** Select **Yes** from the drop down list.

The screenshot shows a web browser window with the title 'User Management Home'. The breadcrumb navigation at the top reads 'You are here: > User Management > Add User'. On the left is a sidebar menu with the following items: 'User Management' (expanded), 'List All Users', 'Add User', 'Search Users', 'Modify Default User', 'Change User Password', 'Service Management', and 'Help'. The main content area is titled 'Add User' and contains a message: 'Fields marked with * can not be empty.' Below this are several input fields: '* User Id' (text box with 'syntelate'), '* Common Name' (text box with 'syntelate'), '* Surname' (text box with 'syntelate'), '* User Password' (password box with '*****'), '* Confirm Password' (password box with '*****'), 'Admin Note' (text box), 'Avaya Role' (dropdown menu with 'None' selected), 'Business Category' (text box), 'Car License' (text box), 'CM Home' (text box), 'Css Home' (text box), and 'CT User' (dropdown menu with 'Yes' selected).

7. Configure synTelate

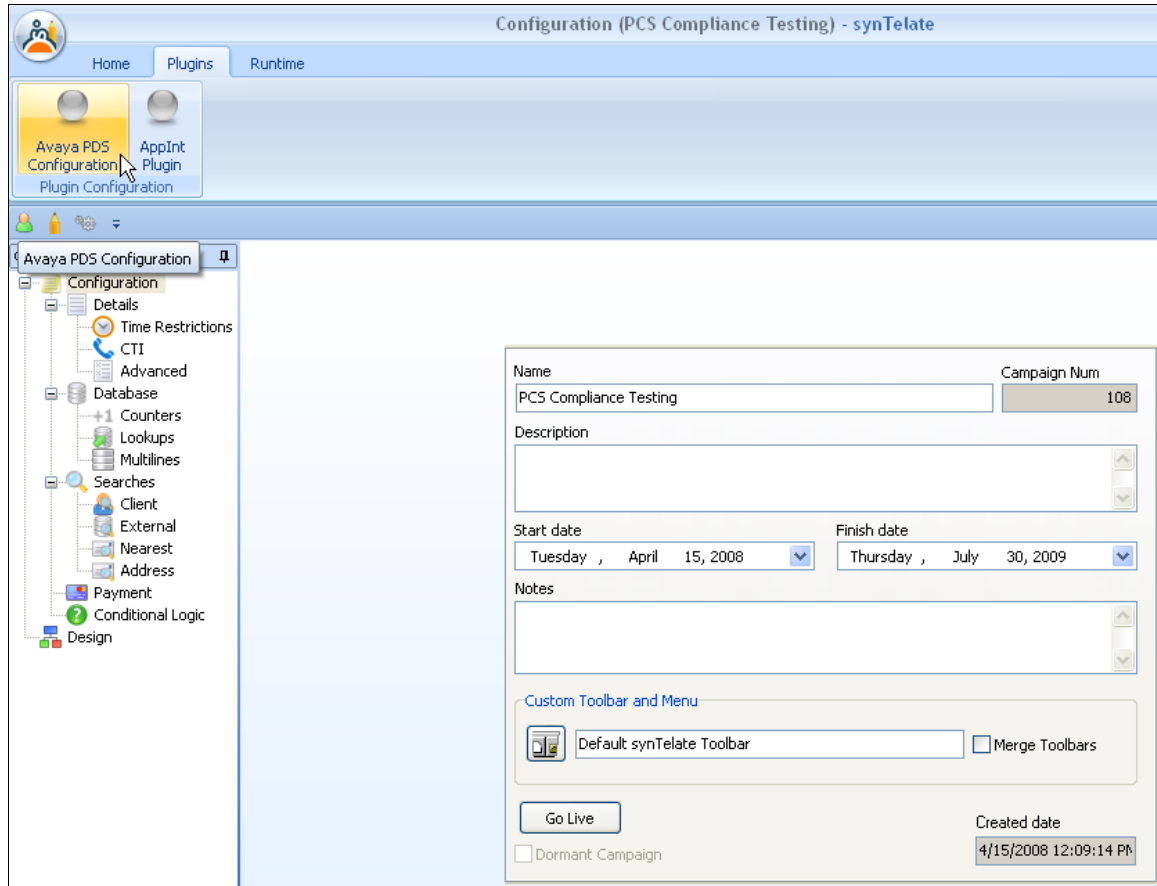
This section describes the steps for configuring synTelate. Configuration in the following sections is only for the fields where a value needs to be entered or modified. Default values are used for all other fields.

Step	Description
1.	<p>From the synTelate Designer workstation, navigate to Start Menu → Programs → synTelate → synTelate Designer and select the Designer tab and click Config for PCS Compliance Testing.</p> <p>Note: PCS Compliance Testing campaign was pre-configured for compliance testing. Refer to [6] for synTelate documentation to configure campaigns.</p> 

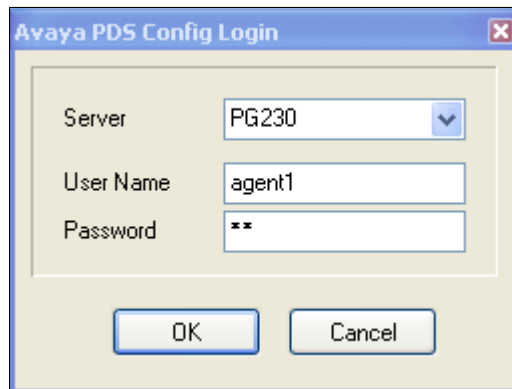
2. At the **Configuration** screen for PCS Compliance Testing campaign, select the **Plugins** tab and click **Edit Design** in the right pane.

The screenshot shows the 'Configuration (PCS Compliance Testing) - synTelate' application window. The interface includes a top navigation bar with 'Home', 'Plugins', and 'Runtime' tabs. Below this is a 'Plugin Configuration' section with 'Avaya PDS Configuration' and 'AppInt Plugin Configuration' buttons. On the left is a 'Campaign Explorer' tree with a hierarchy: Configuration (expanded) -> Details -> Time Restrictions -> CTI -> Advanced -> Database -> Counters -> Lookups -> Multilines -> Searches -> Client -> External -> Nearest -> Address -> Payment -> Conditional Logic -> Design. The main right pane displays the configuration details for the 'PCS Compliance Testing' campaign (Campaign Num: 69). Fields include 'Name' (PCS Compliance Testing), 'Description' (empty), 'Start date' (Tuesday, April 15, 2008), 'Finish date' (Thursday, July 30, 2009), and 'Notes' (empty). A 'Custom Toolbar and Menu' section shows 'Default synTelate Toolbar' and a 'Merge Toolbars' checkbox. At the bottom, there is an 'Edit Design' button (highlighted with a red box and a mouse cursor), a 'Dormant Campaign' checkbox, and a 'Created date' field showing '4/15/2008 12:09:14 PM'.

3. Click **Avaya PDS Configuration**.




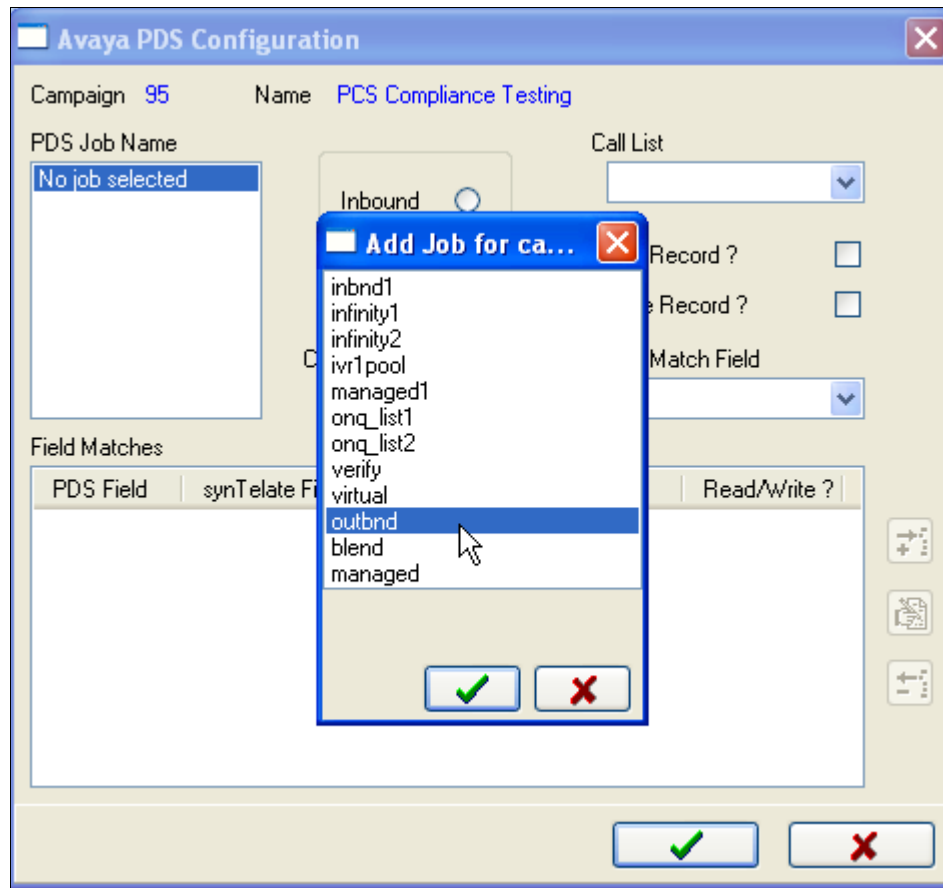
4. In **Avaya PDS Config Login** dialog box, enter the following:
- **Server** – Select the Avaya HardDialer name from the drop down list.
 - **User Name** – Enter the agent name configured on Avaya HardDialer
 - **Password** – Enter the password for the agent name configured on Avaya HardDialer.
 - Click **OK**.




5. At the **Avaya PDS Configuration** screen, right click in the **PDS Job Name** list box and select **Add Job**.

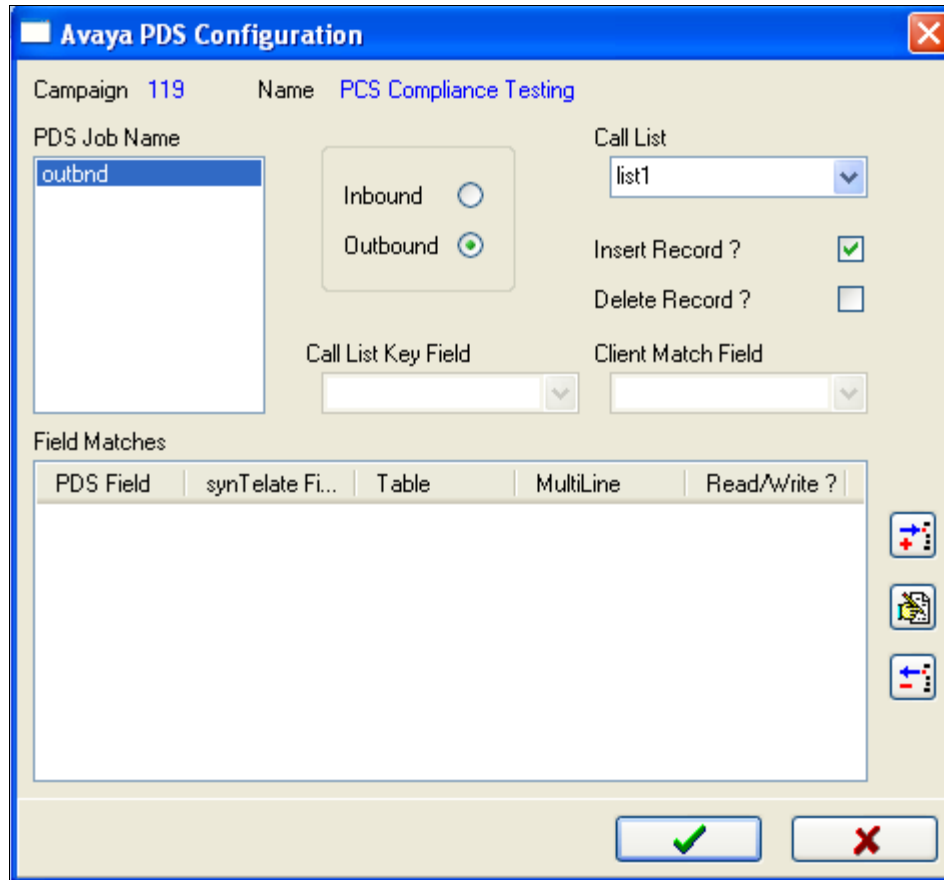
The screenshot shows the 'Avaya PDS Configuration' window. At the top, it displays 'Campaign 119' and 'Name PCS Compliance Testing'. Below this, the 'PDS Job Name' list box contains the text 'No job selected'. A right-click context menu is open over this list box, showing two options: 'Add Job' and 'Delete Job'. To the right of the list box, there are radio buttons for 'Inbound' and 'Outbound', with 'Outbound' being selected. Below these are dropdown menus for 'Call List', 'Call List Key Field', and 'Client Match Field'. Further right are checkboxes for 'Insert Record ?' and 'Delete Record ?'. At the bottom of the window, there is a 'Field Matches' section with a table that has columns: 'PDS Field', 'synTelate Fi...', 'Table', 'MultiLine', and 'Read/Write ?'. The table is currently empty. At the bottom right of the window, there are two buttons: a green checkmark button and a red 'X' button.

6. All the jobs retrieved from Avaya HardDialer are listed in the **Add Job for campaign** dialog box that appears. Select a relevant job for the outbound campaign and click on the  button.






7. At the **Avaya PDS Configuration** screen, configure as follows:


- Select the **Outbound** radio button.
- **Call list** - Select **list1** from a drop down list.
- Check the **Insert Record** box.
- Click the  button to choose Avaya HardDialer fields that will be mapped to the synTelate database field names.

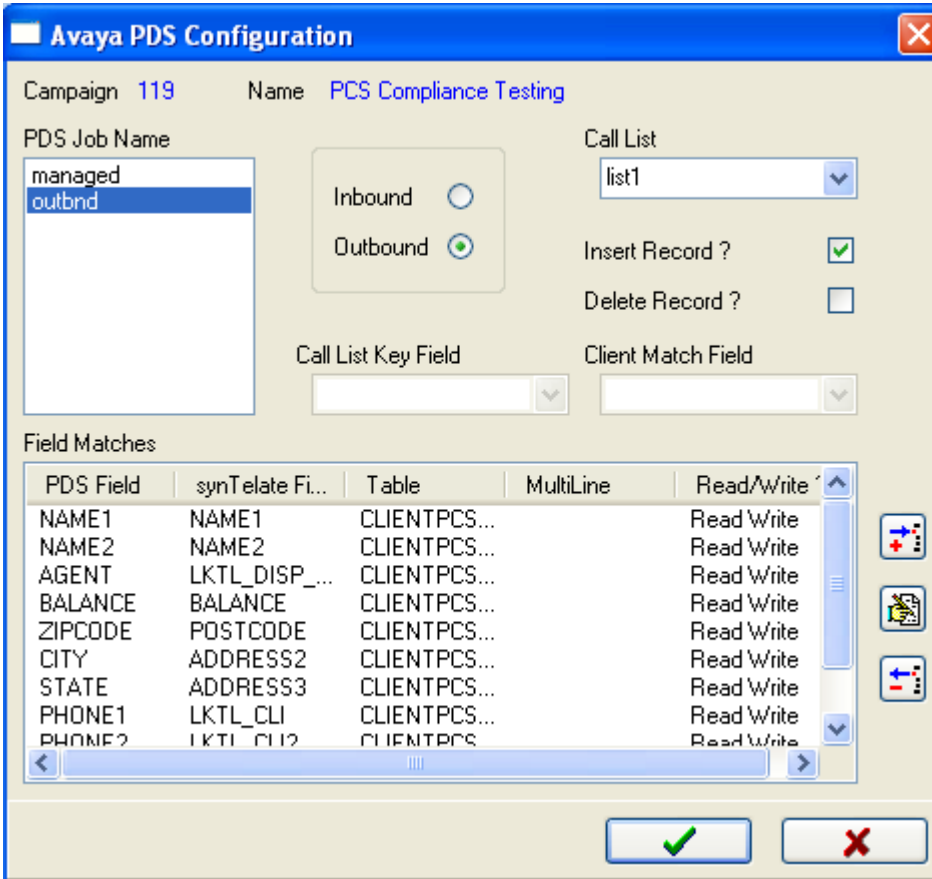


The image shows the 'Avaya PDS Configuration' dialog box. At the top, it displays 'Campaign 119' and 'Name PCS Compliance Testing'. Below this, there are several configuration options: 'PDS Job Name' with a list box containing 'outbnd'; 'Inbound' and 'Outbound' radio buttons, with 'Outbound' selected; 'Call List' with a dropdown menu showing 'list1'; 'Insert Record ?' with a checked checkbox; 'Delete Record ?' with an unchecked checkbox; 'Call List Key Field' and 'Client Match Field' with empty dropdown menus. At the bottom, there is a 'Field Matches' section with a table that has columns for 'PDS Field', 'synTelate Fi...', 'Table', 'MultiLine', and 'Read/Write ?'. To the right of the table are three icons: a plus sign, a magnifying glass, and a minus sign. At the very bottom of the dialog are two buttons: a green checkmark and a red X.

PDS Field	synTelate Fi...	Table	MultiLine	Read/Write ?
-----------	-----------------	-------	-----------	--------------

8.	<p>In the Add Field Match... dialog box, configure as follows:</p> <ul style="list-style-type: none"> • PDS Field - Select Avaya HardDialer field from the PDS Field drop down list. • synTelate Field - Click the  button and select the corresponding synTelate field name. • Read/Write Options – Check the appropriate radio button. • Click the  button. 
9.	<p>Repeat Steps 8 for additional fields to be mapped. Additional fields to be mapped are highlighted in Section 4.1.</p>

10. The **Avaya PDS Configuration** screen shows the complete list of synTelate fields mapped to the relevant Avaya HardDialer fields. Click the  button.

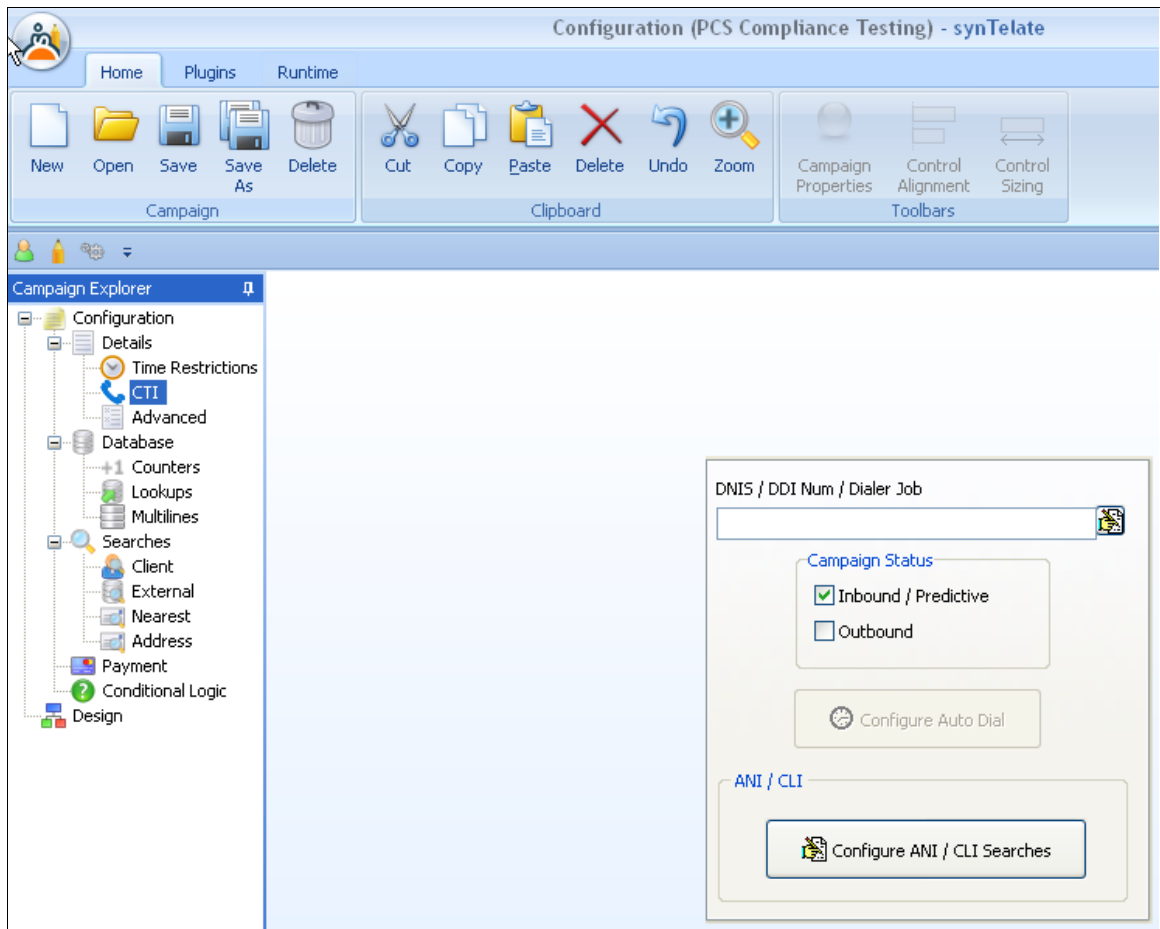



The screenshot shows the 'Avaya PDS Configuration' dialog box. At the top, it displays 'Campaign 119' and 'Name PCS Compliance Testing'. Below this, there are two sections: 'PDS Job Name' and 'Call List'. The 'PDS Job Name' section has a list box with 'managed' and 'outbnd' (selected). The 'Call List' section has a dropdown menu with 'list1' selected. There are two radio buttons for 'Inbound' (unselected) and 'Outbound' (selected). Below these are two checkboxes: 'Insert Record ?' (checked) and 'Delete Record ?' (unchecked). Further down are two dropdown menus for 'Call List Key Field' and 'Client Match Field'. The bottom section is titled 'Field Matches' and contains a table with 5 columns: 'PDS Field', 'synTelate Fi...', 'Table', 'MultiLine', and 'Read/Write'. The table lists 8 rows of field mappings. To the right of the table are three icons: a plus sign, a minus sign, and a refresh icon. At the bottom right of the dialog are two buttons: a green checkmark button and a red X button.


PDS Field	synTelate Fi...	Table	MultiLine	Read/Write
NAME1	NAME1	CLIENTPCS...		Read Write
NAME2	NAME2	CLIENTPCS...		Read Write
AGENT	LKTL_DISP_...	CLIENTPCS...		Read Write
BALANCE	BALANCE	CLIENTPCS...		Read Write
ZIPCODE	POSTCODE	CLIENTPCS...		Read Write
CITY	ADDRESS2	CLIENTPCS...		Read Write
STATE	ADDRESS3	CLIENTPCS...		Read Write
PHONE1	LKTL_CLI	CLIENTPCS...		Read Write
PHONE2	LKTL_CLI2	CLIENTPCS...		Read Write

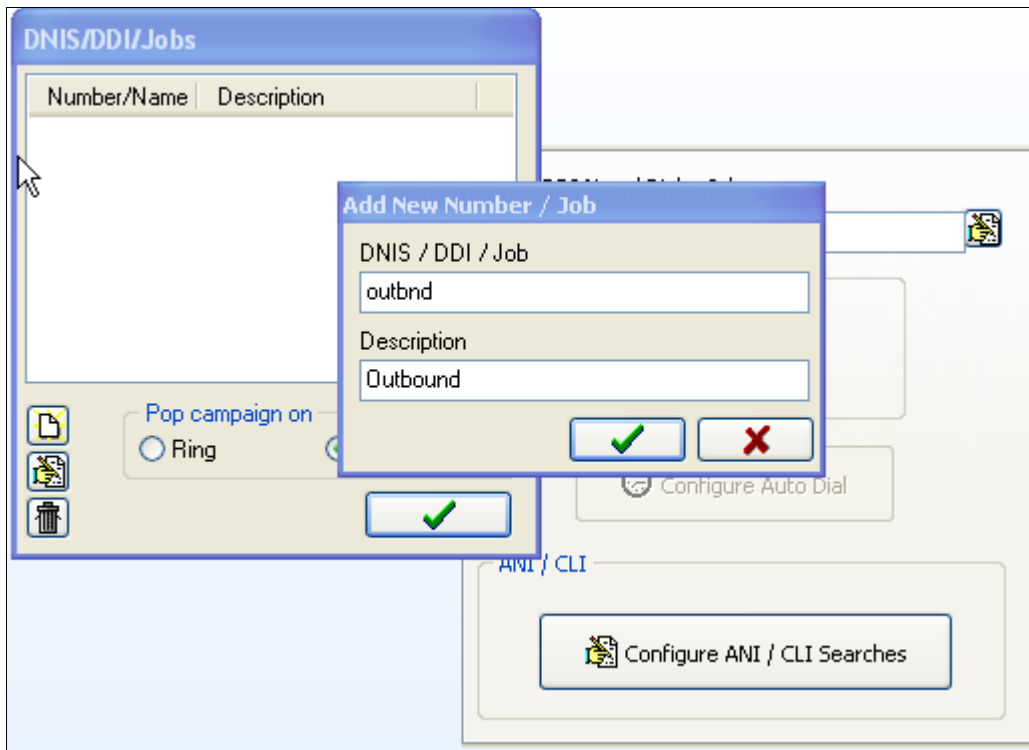
11. Repeat **Steps 5-9** to create additional jobs and their field mappings.

12. At the **Configuration** screen, click on **CTI** in the menu tree on the left and then click on  next to the **DNIS/DDI Num/Dialer Job** field.

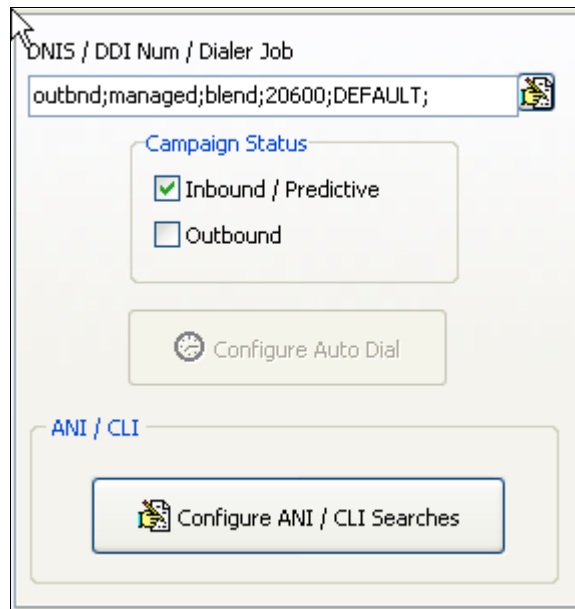


13. Click on  at the **DNIS/DDI/Jobs** screen and at the **Add New Number/Job** screen configure as follows:

- **DNIS/DDI/Job** – Set to one of the jobs configured in **Step 6** or **DEFAULT**.
- **Description** – Set to any descriptive text string.
- Click  button.

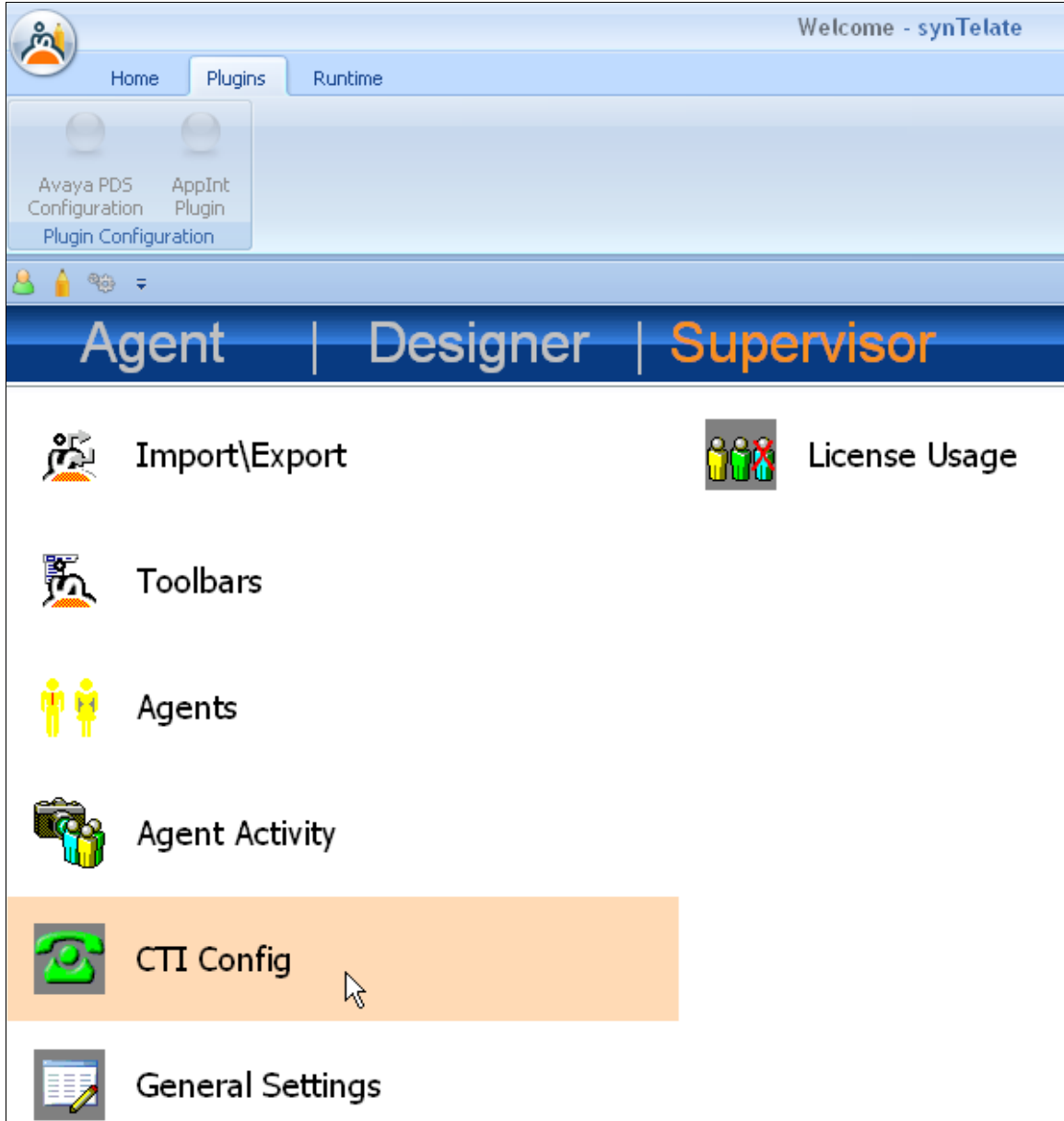


14. The screen below shows the CTI configurations done for this compliance testing.

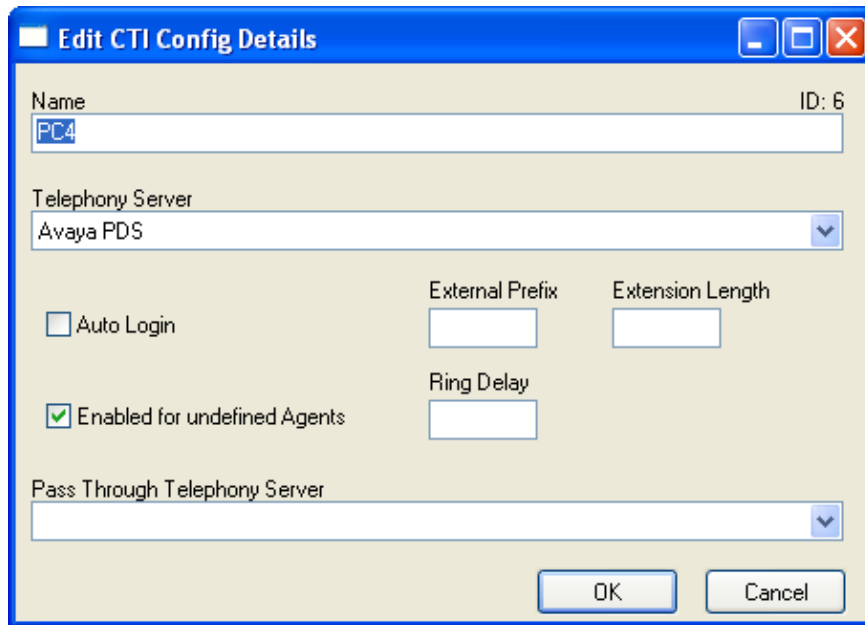


15. At the **synTelate** screen, configure as follows:

- Click the **Supervisor** tab.
- Select **CTI Config**.
- Click **Add** at the **CTI Configuration Setup** screen [not shown].



16. At the **Edit CTI Config Details** screen, configure as follows:
- **Name** – Enter any descriptive and unique name which will be listed when the synTelate agent is run.
 - **Telephony Server** - Select **Avaya PDS** from the drop down list.
 - **Auto Login** - Uncheck the box.
 - Click **OK**.



Edit CTI Config Details

Name ID: 6
PC4

Telephony Server
Avaya PDS

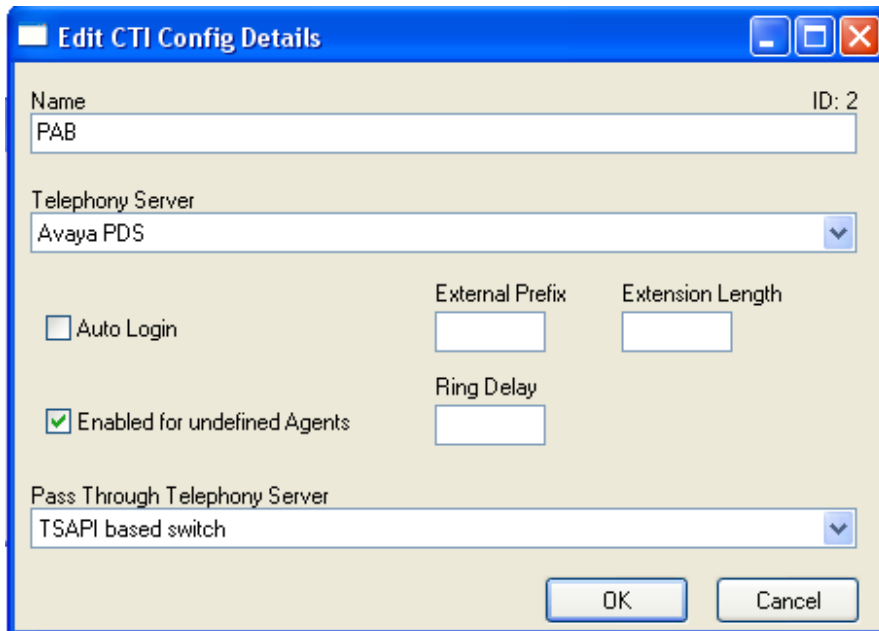
☐ Auto Login External Prefix Extension Length

☒ Enabled for undefined Agents Ring Delay

Pass Through Telephony Server

OK Cancel

17. Repeat the previous step for Predictive agent blending. Additionally, set the **Pass Through Telephony Server** field to **TSAPI based switch** from the drop down list and click **OK**.



Edit CTI Config Details

Name ID: 2
PAB

Telephony Server
Avaya PDS

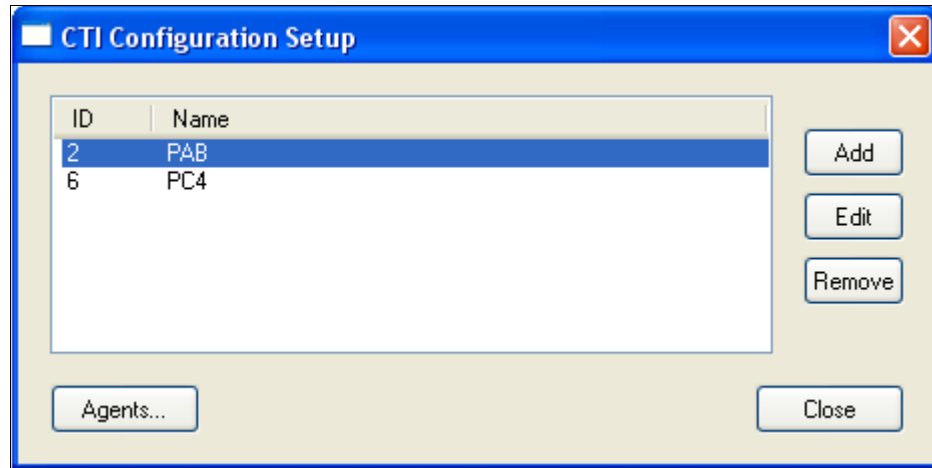
☐ Auto Login External Prefix Extension Length

☒ Enabled for undefined Agents Ring Delay

Pass Through Telephony Server
TSAPI based switch

OK Cancel

18. At the **CTI Configuration** dialog box click **Close** once all the configurations are done.



19. Click the **Go Live** button on the screen displayed in **Step 3**.

8. General Test Approach and Test Results

All feature tests passed. Following observations were made during compliance testing:

- Buttons on the synTelate Agent are not disabled even if they are not available.
- Conference feature is not available.
- Native Voice and Data transfer feature was not tested.

9. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya Communication Manager, Avaya Application Enablement Services, and synTelate Agent PC.

9.1. Verify Avaya Communication Manager and Avaya Enablement Services

The following steps can ensure that the communication between Avaya Communication Manager and Avaya Application Enablement Services server is working.

Step	Description																																																																								
1.	<div>Verify that the service state of the TSAPI link is established.</div> <div><pre>status aesvcs cti-link</pre><table><thead><tr><th colspan="7">AE SERVICES CTI LINK STATUS</th></tr><tr><th>CTI Link</th><th>Version</th><th>Mnt Busy</th><th>AE Services Server</th><th>Service State</th><th>Msgs Sent</th><th>Msgs Rcvd</th></tr></thead><tbody><tr><td>4</td><td></td><td>no</td><td></td><td>down</td><td>0</td><td>0</td></tr><tr><td>15</td><td>4</td><td>no</td><td>devconaes01</td><td>established</td><td>15</td><td>15</td></tr></tbody></table></div>	AE SERVICES CTI LINK STATUS							CTI Link	Version	Mnt Busy	AE Services Server	Service State	Msgs Sent	Msgs Rcvd	4		no		down	0	0	15	4	no	devconaes01	established	15	15																																												
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4		no		down	0	0																																																																			
15	4	no	devconaes01	established	15	15																																																																			
2.	<div>On Avaya HardDialer enter the “netstat -a” command to verify the connection with Avaya HardDialer. The results of the “netstat -a” should show an ESTABLISHED synTelate agent connection.</div> <div><table><tbody><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:NameService_ssl</td><td>lzpds4:32828</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:logger_ssl</td><td>lzpds4:32829</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:agent</td><td>192.45.30.30:1070</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:NameService_ssl</td><td>lzpds4:32823</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:32898</td><td>lzpds4:serviceAct_ssl</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:2484</td><td>lzpds4:32886</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:32882</td><td>lzpds4:dccs_ssl</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:serviceAct_ssl</td><td>lzpds4:32898</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:dialerSA_ssl</td><td>lzpds4:32899</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:32875</td><td>lzpds4:dialerSM_ssl</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:32899</td><td>lzpds4:dialerSA_ssl</td><td>ESTABLISHED</td></tr><tr><td>tcp</td><td>0</td><td>0</td><td>lzpds4:32857</td><td>DEVCONAES01:1055</td><td>ESTABLISHED</td></tr></tbody></table></div>	tcp	0	0	lzpds4:NameService_ssl	lzpds4:32828	ESTABLISHED	tcp	0	0	lzpds4:logger_ssl	lzpds4:32829	ESTABLISHED	tcp	0	0	lzpds4:agent	192.45.30.30:1070	ESTABLISHED	tcp	0	0	lzpds4:NameService_ssl	lzpds4:32823	ESTABLISHED	tcp	0	0	lzpds4:32898	lzpds4:serviceAct_ssl	ESTABLISHED	tcp	0	0	lzpds4:2484	lzpds4:32886	ESTABLISHED	tcp	0	0	lzpds4:32882	lzpds4:dccs_ssl	ESTABLISHED	tcp	0	0	lzpds4:serviceAct_ssl	lzpds4:32898	ESTABLISHED	tcp	0	0	lzpds4:dialerSA_ssl	lzpds4:32899	ESTABLISHED	tcp	0	0	lzpds4:32875	lzpds4:dialerSM_ssl	ESTABLISHED	tcp	0	0	lzpds4:32899	lzpds4:dialerSA_ssl	ESTABLISHED	tcp	0	0	lzpds4:32857	DEVCONAES01:1055	ESTABLISHED
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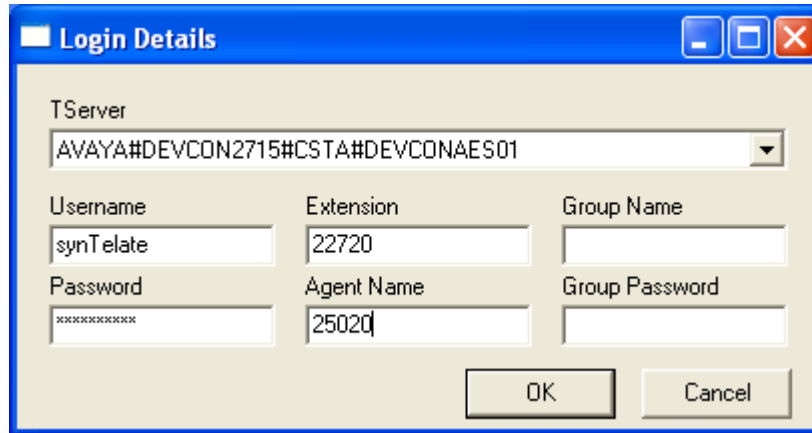
Step	Description
3.	On Avaya AE Services server, verify that the TSAPI link is in Talking State.

Switch Conn	Conn State	Since	Online/Offline	Active CLANs/Admin'd CLANs	# of TCI Conns	Msgs To Switch	Msgs From Switch	Msg Period
devcon11	Invalid Password	2009-01-28 13:05:04.0	Online	0 / 1	2	39	39	30
devcon13	Talking	2009-01-14 14:11:28.0	Online	1 / 1	4	226	241	30
devcon14	TCP Down	2009-01-14 14:11:53.0	Online	0 / 1	3	0	0	30
devcon26	Talking	2009-01-23 07:24:48.0	Online	2 / 2	2	377	385	30
devcon2715	Talking	2009-01-14 14:11:27.0	Online	2 / 2	2	386	386	30
devcon32	Invalid Password	2009-01-28 13:05:03.0	Online	0 / 1	4	39	39	30
devcon33	TCP Down	2009-01-14 14:11:50.0	Online	0 / 2	3	39	39	30
procurementlab	TCP Down	2009-01-14 14:11:53.0	Online	0 / 1	3	0	0	30

9.2. Verify synTelate Agent

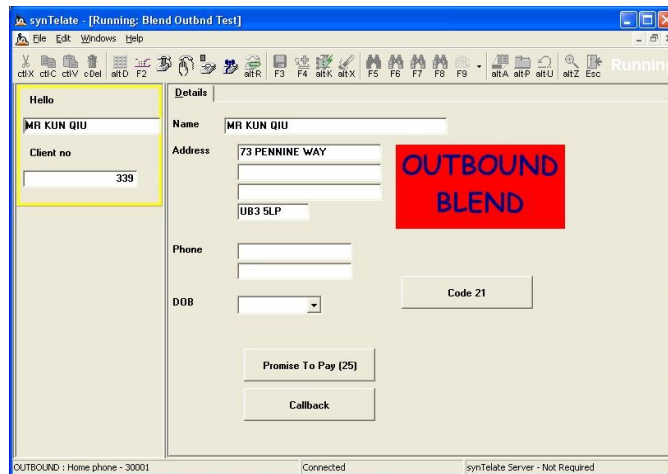
Step	Description
1.	On the synTelate Agent workstation, navigate to Start Menu → Programs → synTelate → synTelate Agent to verify that the CTI configurations done in Section 7, Steps 16-17 are presented.

2. If **PAB** (Predictive Agent Blending) is chosen from the list in previous step, then this additional dialog box should pop-up providing a list of TSAPI links in the **TServer** field. Verify the TSAPI link configured in **Section 6, Steps 3-4** is available. The **Username** and **Password** fields should match the configuration done in **Section 6, Step 5**. This verifies that the synTelate agent has connectivity to Avaya AE Services.



The 'Login Details' dialog box is shown. It has a title bar with a blue background and standard window controls. The main area is light beige. At the top, there's a 'TServer' dropdown menu with the text 'AVAYA#DEVCON2715#CSTA#DEVCONAES01'. Below this are three rows of input fields: 'Username' (containing 'synTelate'), 'Extension' (containing '22720'), and 'Group Name' (empty). The second row contains 'Password' (containing 'xxxxxxxx'), 'Agent Name' (containing '25020'), and 'Group Password' (empty). At the bottom right are 'OK' and 'Cancel' buttons.

3. The following screen displays an example of an outbound campaign customer record screen pop.



The screenshot shows the 'synTelate' application window with the title '[Running: Blend Outbound Test]'. The window has a menu bar (File, Edit, Windows, Help) and a toolbar with various icons. The main area is divided into two panes. The left pane has a 'Hello' section with 'MR KUN QIU' and a 'Client no' field with '339'. The right pane has a 'Details' section with fields for 'Name' (MR KUN QIU), 'Address' (73 PENNINE WAY, UB3 SLP), 'Phone', and 'DOB'. There are also buttons for 'Code 21', 'Promise To Pay (25)', and 'Callback'. A red box with the text 'OUTBOUND BLEND' is overlaid on the right pane. At the bottom, there's a status bar with 'OUTBOUND : Home phone - 30001', 'Connected', and 'synTelate Server - Not Required'.

10. Conclusion

These Application Notes describe the required configuration steps for the synTelate Agent 4.0 application to successfully interoperate with Avaya Proactive Contact 4.0 using PG230 Digital Switch. All test cases were completed successfully and the configuration described in these Application Notes has been successfully compliance tested.

11. Additional References

This section references Avaya and Initiative Software product documentation that are relevant to these Application Notes.

Avaya product documentation can be found at <http://support.avaya.com>.

- [1] *Administrator Guide for Avaya Communication Manager*, Document ID 03-300509, Issue 4.0, February 2007
- [2] *Implementing Proactive Contact 4.0*, May, 2008
- [3] *Administering Avaya Proactive Contact (Linux-based Interface)*, January 2008
- [4] *Avaya Application Enablement Services 4.2 Administration and Maintenance Guide*, Document ID 02-300357, Issue 4, September 2008
- [5] *Sample Avaya Proactive Contact 3.0 with CTI Installation and Configuration*, Issue 1.0, Avaya Solution and Interoperability Test Lab

Company and product information available from Initiative Software at www.syntelate.com or www.inisoft.co.uk

- [6] *Installation and Administration guide for synTelate 4.0*

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