



Avaya Solution & Interoperability Test Lab

Application Notes for Sytel Softdial Contact Center® (SCC) with Avaya Aura® Application Enablement Services – Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Sytel Softdial Contact Center® (SCC) v11.1 with Avaya Aura® Application Enablement Services R10.1 and Avaya Aura® Communication Manager R10.1. Sytel SCC integrates with Avaya Aura® Application Enablement Services using the connection to Avaya Aura® Application Enablement Services Telephony Server Application Programming Interface (TSAPI) and the System Management Service (SMS) Web Service to initiate outbound calls and move skills to and from Call Center Elite agents.

Readers should pay attention to **Section 2**, in particular, the scope of testing as outlined in **Section 2.1**, as well as any 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 to integrate Sytel Softdial Contact Center® (SCC) v11.1 with Avaya Aura® Application Enablement Services (AES) R10.1 and Avaya Aura® Communication Manager R10.1, using the connection to Avaya Aura® Application Enablement Services Telephony Server Application Programming Interface (TSAPI) and the System Management Service (SMS) Web Service to initiate outbound calls and move skills to and from Call Center Elite agents.

The System Management Service (SMS) Web Service is hosted on the Application Enablement Services server and exposes management features of Avaya Aura® Communication Manager to client SOAP applications. The web service enables client applications to display, list, add, change and remove specific managed objects on Communication Manager. This service provides programmatic access to a subset of the administration objects available via Communication Manager's System Access Terminal (SAT) screens.

When an agent logs in, SCC checks if this agent has the *outbound* skill. If it does, it removes all other skills and adds the agent to the outbound dialer pool of agents. Sytel SCC uses:

- TSAPI to request makePredictiveCall() and transfer the call to the selected agent
- SMS interface to manage skills for the selected agent

SCC monitors all VDNs associated with the predefined *outbound* skill (and inbound Hunt Group) and mirrors their states. The SCC dialer algorithm selects the best agent to take the outbound call. Once the outbound call is placed and offered to the VDN, the VDN performs an Adjunct Route step in the vector, and SCC returns the selected agent for the call. The VDN then routes the call to the selected agent.

If an inbound call is connected to a VDN, this call will be connected to the outbound agent following the VDN rules. The outbound agent does not receive outbound calls when connected to an inbound call. As soon as the inbound call disconnects, the outbound agent becomes eligible to receive outbound calls.

Both Avaya Agent for Desktop and a J189 phone were used for the solution to manage the voice extension. Sytel's Agent Desktop web application was used to:

- Pop up the customer data to the agent
- Provide an agent screen script to support the agent on the call
- Control login, logout, call disposition and agent breaks

All PBX functions will remain available in Avaya Agent for Desktop or J189.

2. General Test Approach and Test Results

The general test approach was to ensure the connection to Application Enablement Services was successful and to manually run through a number of scenarios to prove this to be the case. The connections to Application Enablement Services were tested by:

- Starting the Sytel SCC campaign
- Observing the outbound calls being made successfully
- Placing incoming calls to inbound VDN's
- Allowing the Sytel's Agent Desktop to answer and process the calls

Serviceability testing was carried out to observe the response of Sytel's Agent Desktop when various LAN failures were simulated.

For compliance testing, Avaya Agent for Desktop was set up to register its extension automatically, and both the J100 Series phone and Avaya Agent for Desktop were configured to answer the calls automatically (as required for this integration). The outbound agents logged in/out using Sytel's Agent Desktop. Sytel synchronized the login with Avaya's AES using the TSAPI connection. Avaya agents logged into both Avaya Agent for Desktop, and the J189 SIP deskphone were used in an Avaya Call Center Elite environment. The Sytel's Agent Desktop utilized these agents and the Avaya Agent for Desktop when making outbound calls to a simulated PSTN.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

Avaya recommends that our customers implement Avaya solutions using appropriate security and encryption capabilities enabled by our products. The testing referenced in these DevConnect Application Notes included the enablement of supported encryption capabilities in the Avaya products. Readers should consult the appropriate Avaya product documentation for further information regarding security and encryption capabilities supported by those Avaya products.

Support for these security and encryption capabilities in any non-Avaya solution component is the responsibility of each individual vendor. Readers should consult the appropriate vendor-supplied product documentation for more information regarding those products.

For the testing associated with these Application Notes, the interface between Avaya systems and Softdial Contact Center did not include the use of any specific encryption features as requested by Sytel.

2.1. Interoperability Compliance Testing

Interoperability compliance testing included feature and serviceability testing. The feature testing focused on the following functionality:

- Agents Login and Logout
- Agent states: Ready, Not Ready, and observing the skills associated
- Make Outbound Campaign calls (Predictive, Progressive, and Preview)
- Receive inbound skillset calls
- Hold/transfer/conference phone calls (using the Avaya endpoints only)
- Serviceability testing by simulating LAN failures

The serviceability testing focused on verifying the ability of the Softdial Contact Center solution to recover from adverse conditions, such as power failures and network disconnects.

2.2. Test Results

All test cases were executed and verified. All test cases passed successfully, with the following observations noted.

1. Application Enablement Services, Service Pack 2 (10.1.0.2), was applied to rectify an issue previously observed with the SMS connection.
2. Agents must login to outbound campaigns using Sytel's Agent Desktop, and the outbound campaign needs to be active. If agents are already logged in, and the outbound campaign is reset or restarted, the agents need to logout to prevent failing to be nailed up for the outbound campaign and blending operation.
3. All telephony functionality such as hold, retrieve, transfer, conference, and forward is done on the Avaya endpoint only and is not part of Sytel's Agent Desktop.
4. The information on the screen pop is not transferred when a "transfer" or "conference" is made to/with another agent. This is as per design.

2.3. Support

For technical support on the Softdial Contact Center, contact Sytel via phone, email, or the internet.

- Phone: +44 (0) 1296 381200
- Web: www.sytel.com
- Email: support@sytel.com

3. Reference Configuration

Figure 1 shows the network topology during compliance testing. The SCC Dialer server was placed on the Avaya Telephony LAN. SCC Outbound Dialer uses TSAPI to do a makePredictiveCall() followed by the SMS interface to manage agent skills and TSAPI to transfer the call to the actual agent. Once the outbound call is placed and offered to the VDN, the VDN does an Adjunct Route step in the vector, and the application (SCC) returns the selected agent for the call. The VDN then routes the call to the selected agent.

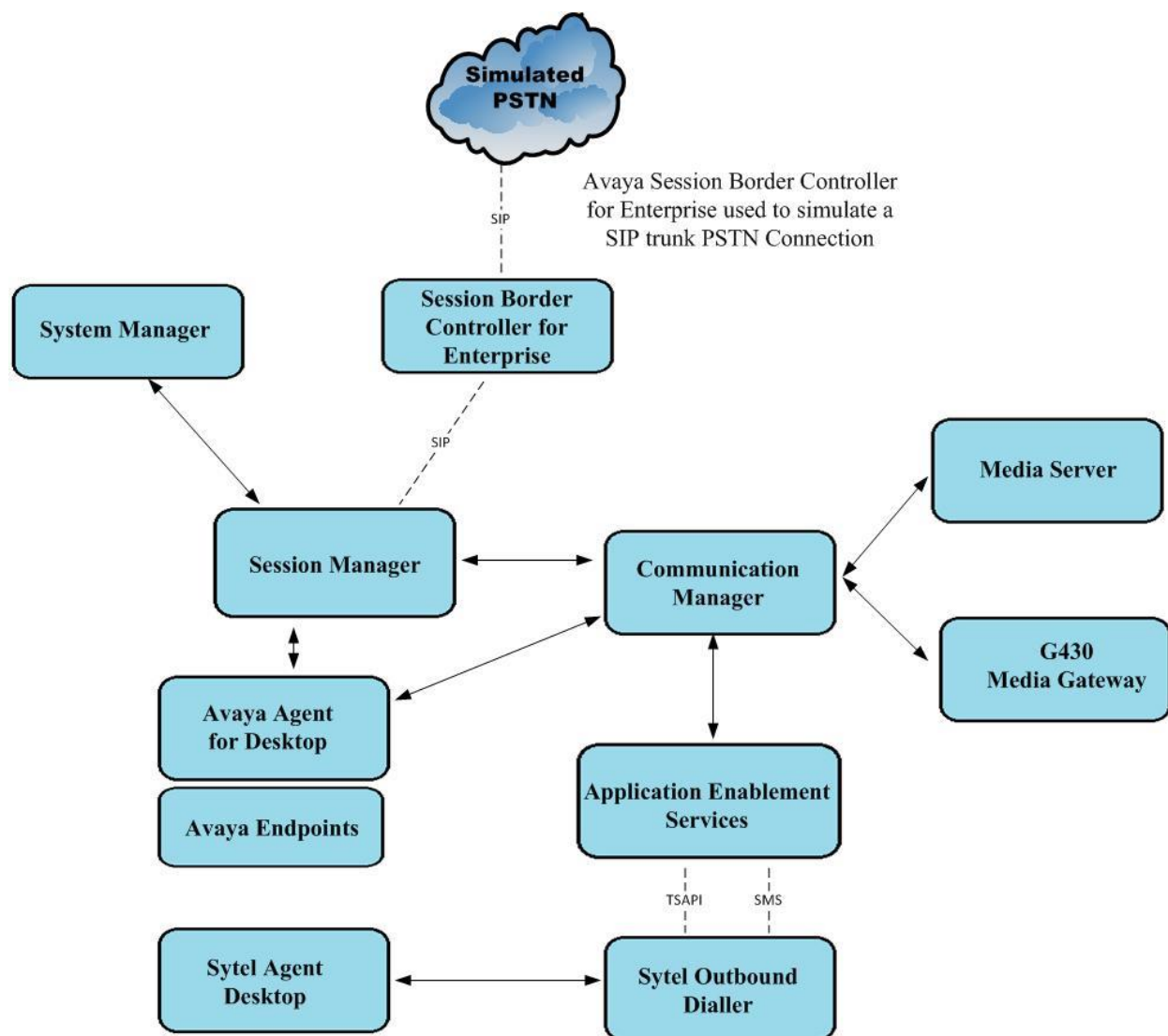


Figure 1: Network solution of Sytel Softdial Contact Center Dialer with Avaya Aura® Application Enablement Services R10.1

4. Equipment and Software Validated

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

Avaya Equipment	Software / Firmware Version
Avaya Aura® Application Enablement Services running on a virtual server	10.1.0.2.0.12-0
Avaya Aura® Communication Manager running on a virtual server	10.1 Update ID 01.0.974.0-27293
Avaya G430 Media Gateway	41.16.0/1
Avaya Aura® System Manager running on a virtual server	10.1.0.0 Build No. – 10.1.0.0.537353 SW Update Revision No: 10.1.0.0.0614254
Avaya Aura® Session Manager running on a virtual server	10.1 Build No. – 10.1.0.0.1010019
Avaya Session Border Controller for Enterprise running on a virtual server	8.1.3.0-31-21052
Avaya Agent for Desktop	2.0.6.23.3005
Avaya J100 Series SIP Deskphone	4.0.7.1.5
Sytel Equipment	Software / Firmware Version
Softdial Contact Center (SCC) – Main Platform	11.1.745
Softdial Avaya Telephony Gateway (SATG) - The integration module	11.1.814.2

5. Configure Avaya Aura® Communication Manager

The configuration and verification operations illustrated in this section were all performed using Communication Manager System Administration Terminal (SAT). The information provided in this section describes the configuration of Communication Manager for this solution. Some screens in this section have been abridged and highlighted for brevity and clarity in the presentation. The general installation of the servers and Avaya G430 Media Gateway is presumed to have been previously completed and is not discussed here. For all other provisioning information, such as initial installation and configuration, please refer to the product documentation in **Section 10**.

5.1. Configuration of the VDN, Vector, and Agent

A new VDN, Vector, and Hunt Group (skill) were created for Outbound calls that are made using the Sytel Outbound Dialer. The following sections show these configurations and the agent setup required for Outbound Dialer to operate successfully with the Avaya platform. For blended-type calls where there is a mixture of outbound calls and inbound calls to the Elite agent, other VDN's Vector and Hunt Groups must be in operation to facilitate inbound calls to skills associated with the same agent.

5.1.1. Hunt Group

A hunt group is set up for outbound calls. Enter the **add hunt-group n** command where **n** in the example below is **85**. On **Page 1** of the **hunt-group** form, assign a **Group Name** and **Group Extension** valid under the provisioned dial plan. Set the following options to **y**, as shown below.

- **Group Type** to **ucd-mia**
- **ACD** to **y**
- **Queue** to **y**
- **Vector** to **y**

add hunt-group 85		Page 1 of 4
HUNT GROUP		
Group Number: 85	ACD? y	
Group Name: SytelOutbound	Queue? y	
Group Extension: 1885	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 the **Skill** field to **y**, as shown below.

add hunt-group 85		Page 2 of 4
HUNT GROUP		
Skill? y	Expected Call Handling Time (sec): 180	
AAS? n		
Measured: none		
Supervisor Extension:		
Controlling Adjunct: none		
Multiple Call Handling: none		
Timed ACW Interval (sec):	After Xfer or Held Call Drops? n	

Repeat the above steps to create hunt groups for other inbound services, should they be required. For compliance testing, two hunt groups, 81 and 82, were already in existence for inbound skills Sales and Support.

5.1.2. Vectors

Enter the **change vector n** command, where **n** is the vector number. For this test, simple routing was used to get the call to the agent. The call is sent to the adjunct routing link, so Sytel SCC handles the call.

change vector 2		Page 1 of 6
CALL VECTOR		
Number: 2	Name: Sytel Adjunct Routing	
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 wait-time	1 secs hearing silence	
02 adjunct	routing link 1	
03 wait-time	60 secs hearing silence	
04		
05		
06		

5.1.3. Vector Directory Numbers (VDN)

Enter the **add vdn n** command, where **n** is an available extension number. On **Page 1**, assign a **Name** for the VDN and set the **Vector Number** to that created in **Section 5.1.2**. The **1st Skill** should be set to that hunt group configured in **Section 5.1.1**.

add vdn 3905	Page 1 of 3
VECTOR DIRECTORY NUMBER	
Extension: 3905	
Name*: Outbound	
Destination: Vector Number	2
Attendant Vectoring? n	
Meet-me Conferencing? n	
Allow VDN Override? n	
COR: 1	
TN*: 1	
Measured: none	Report Adjunct Calls as ACD*? n
VDN of Origin Annc. Extension*:	
1st Skill*: 85	
2nd Skill*:	
3rd Skill*:	
* Follows VDN Override Rules	

5.1.4. Administer Agent Logins

Enter the **add agent-loginID n** command, where **n** is an available extension number. Enter a descriptive name for the agent in the **Name** field. The **Auto Answer** field is set to **station**. Configure a password as required.

add agent-loginID 3401	Page 1 of 2
AGENT LOGINID	
Login ID: 3401	AAS? n
Name: Agent1	AUDIX? n
TN: 1	Check skill TNs to match agent TN? n
COR: 1	
Coverage Path:	LWC Reception: spe
Security Code:	LWC Log External Calls? n
Attribute:	AUDIX Name for Messaging:
LoginID for ISDN/SIP Display? n	
Password:	
Password (enter again):	
Auto Answer: station	
AUX Agent Remains in LOA Queue: system	MIA Across Skills: system
AUX Agent Considered Idle (MIA): system	ACW Agent Considered Idle: system
Work Mode on Login: 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**, assign the skills to the agent by entering the relevant hunt group numbers created in **Section 5.1.1** for **SN** and entering a skill level of **1** for **SL**. In this case, an agent able to handle both inbound and outbound calls is created.

change agent-loginID 3401						Page 2 of 2	
				AGENT LOGINID			
Direct Agent Skill:				Service Objective? n			
Call Handling Preference: skill-level				Local Call Preference? n			
	SN	RL	SL		SN	RL	SL
1:	81		1	16:			
2:	85		1	17:			
3:				18:			
4:				19:			
5:				20:			
6:							
7:							

Repeat this task accordingly for any additional inbound agents required.

5.2. Configuration of the connection to the Avaya Aura® Application Enablement Services

The configuration operations described in this section can be summarized as follows:

- Note procr IP Address
- Configure Transport Link
- Configure CTI Link for TSAPI Service

5.2.1. Note procr IP Address for Avaya Aura® Application Enablement Services Connectivity

Display the procr IP address by using the command **display node-names ip** and noting the IP address for the **procr** and Application Enablement Services.

display node-names ip		Page 1 of 2	
		IP NODE NAMES	
Name	IP Address		
SM100	10.10.40.12		
aespri101x	10.10.40.16		
aessec101x	10.10.40.46		
g450	10.10.40.15		
procr	10.10.40.13		

5.2.2. Configure Transport Link for Avaya Aura® Application Enablement Services Connectivity

To administer the transport link to Application Enablement Services, use the **change ip-services** command. On **Page 1**, add an entry with the following values:

- **Service Type:** should be set to **AESVCS**
- **Enabled:** set to **y**
- **Local Node:** set to the node name assigned for the **procr** in **Section 5.2.1**
- **Local Port:** Retain the default value of **8765**

change ip-services				Page 1 of 3	
IP SERVICES					
Service Type	Enabled	Local Node	Local Port	Remote Node	Remote Port
AESVCS	y	procr	8765		

Go to **Page 4** of the **ip-services** form and enter the following values:

- **AE Services Server:** Name obtained from the AES server, in this case **aespri101x**
- **Password:** Enter a password to be administered on the AES server
- **Enabled:** Set to **y**

Note: The password entered for **Password** field must match the password on the AES server in **Section 6.2**. The **AE Services Server** should match the administered name for the AES server; this is created as part of the AES installation and can be obtained from the AES server by typing **uname -n** at the Linux command prompt.

change ip-services				Page 4 of 4
AE Services Administration				
Server ID	AE Services Server	Password	Enabled	Status
1:	aespri101x	*****	y	in use
2:	aessec101x	*****	y	in use
3:				

5.2.3. Configure CTI Link for TSAPI Service

Add a CTI link using the **add cti-link n** command. Enter an available extension number in the **Extension** field. Enter **ADJ-IP** in the **Type** field, and a descriptive name in the **Name** field.

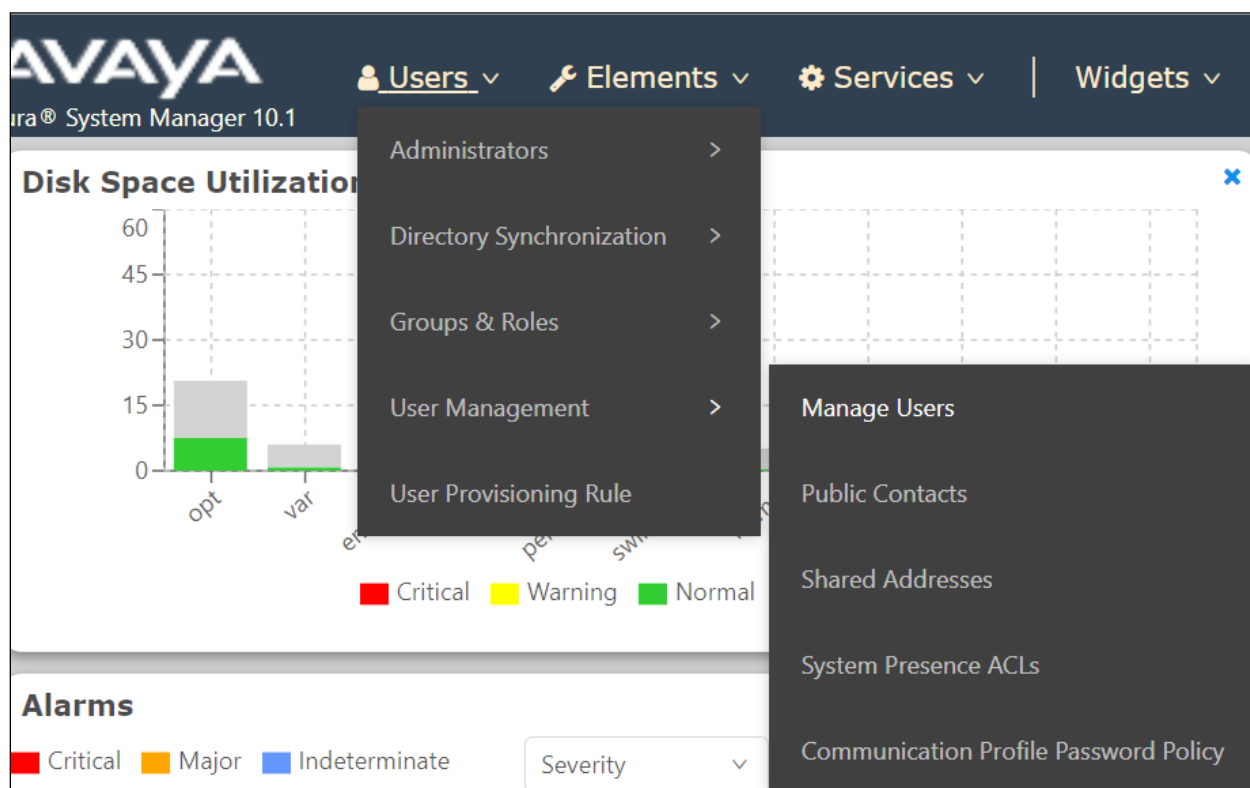
add cti-link 1		Page 1 of 3	
CTI LINK			
CTI Link: 1			
Extension: 3990			
Type: ADJ-IP			
		COR: 1	
Name: aespri101x			

5.3. Configure SIP Agent Stations

Each Avaya SIP endpoint will need to have Auto Answer configured correctly. Changes to SIP phones on Communication Manager must be carried out by System Manager. Access the System Manager using a Web Browser by entering **http://<FQDN>/network-login**, where <FQDN> is the fully qualified domain name of System Manager, or the IP address of System Manager can be used as an alternative to the FQDN. Log in using the appropriate credentials.

Note: The following shows changes to a SIP extension and assumes that the SIP extension has been programmed correctly and is fully functioning.

From the home page, click on **Users** → **User Management** → **Manage Users**, as shown below.



Click on **Manager Users** in the left window. Select the station to be edited and click on **Edit**.

Home | User Management x

User Management

- Manage Users
- Public Contacts
- Shared Addresses
- System Presence ACLs
- Communication Profile ...

Home / Users / Manage Users

Search

View	Edit	New	Duplicate	Delete	More Actions	Options
First Name	Surname	Display Name	Login Name	SIP Handle		
<input checked="" type="checkbox"/>	Agent One	Workspaces	Agent One Workspaces	3101@greanexp.sil6.ava ya.com	3101	
<input type="checkbox"/>	Ascom	DECT_3181	DECT_3181, Ascom	3181@greanexp.sil6.ava ya.com	3181	
<input type="checkbox"/>	Ascom	DECT_3182	DECT_3182, Ascom	3182@greanexp.sil6.ava ya.com	3182	
<input type="checkbox"/>	admin	admin	Default Administrator	admin		
<input type="checkbox"/>	J179	H323	H323, J179	3001@greanexp.sil6.ava ya.com		
<input type="checkbox"/>	Vantage01	K175	K175, Vantage01	3115@greanexp.sil6.ava ya.com	3115	
<input type="checkbox"/>	Paul	Greaney	Paul Greaney	paul@greanexp.sil6.ava ya.com		
<input type="checkbox"/>	AAfD	SIP	SIP, AAfD	3111@greanexp.sil6.ava ya.com	3111	

Click on the **CM Endpoint Profile** tab in the left window. Click on **Endpoint Editor** to make changes to the SIP station.

Home / Users / Manage Users

User Profile | Edit | 3101@greanep.sil6.avaya.com

Commit & Continue Commit Cancel

Identity Communication Profile Membership Contacts

Communication Profile Password

PROFILE SET : Primary

Communication Address

PROFILES

Session Manager Profile

Avaya Breeze® Profile

CM Endpoint Profile

* System : cm101x

* Profile Type : Endpoint

Use Existing Endpoints :

* Extension : 3101

Template : Start typing...

* Set Type : 9641SIPCC

Security Code : Enter Security Code

Port : S000003

Voice Mail Number : 6667

Preferred Handle : Select

Calculate Route Pattern :

Sip Trunk : aar

In the **General Options** tab, ensure that **Type of 3PCC Enabled** is set to **Avaya**.

System : cm101x

Extension : 3101

Template : Select

Set Type : 9641SIPCC

Port : S000003

Security Code :

Name : Agent One Workspaces

General Options (G) Feature Options (F) Site Data (S) Abbreviated Call Dialing (A) Enhanced Call Fwd (E)

Button Assignment (B) Profile Settings (P) Group Membership (M)

* Class of Restriction (COR) : 1

* Emergency Location Ext : 3101

* Tenant Number : 1

* SIP Trunk : aar

Coverage Path 1 :

Lock Message :

Multibyte Language : Not Applicable

* Class Of Service (COS) : 1

* Message Lamp Ext. : 3101

Type of 3PCC Enabled : Avaya

Coverage Path 2 :

Localized Display Name : Agent One Workspaces

Enable Reachability for Station Domain Control : system

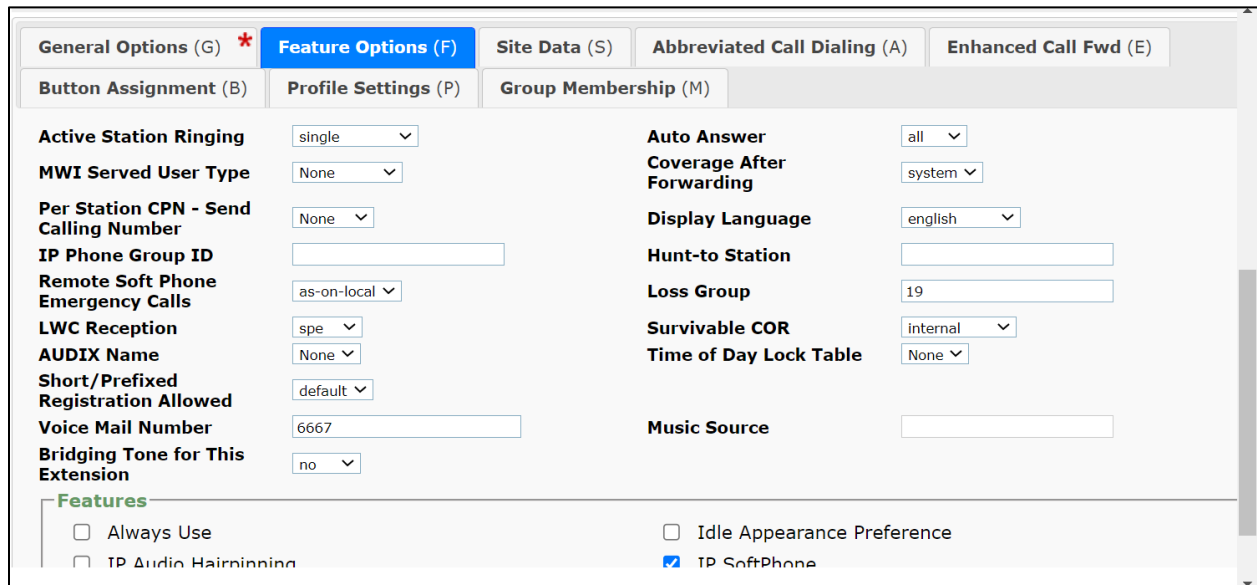
SIP URI :

Primary Session Manager

IPv4 : 10.10.40.12

IPv6 :

On the **Feature Options** tab, **Auto Answer** was set to **all**, this setting is required to allow the correct operation with SCC Dialer.



General Options (G) * **Feature Options (F)** Site Data (S) Abbreviated Call Dialing (A) Enhanced Call Fwd (E)

Button Assignment (B) Profile Settings (P) Group Membership (M)

Active Station Ringing: single

MWI Served User Type: None

Per Station CPN - Send Calling Number: None

IP Phone Group ID:

Remote Soft Phone Emergency Calls: as-on-local

LWC Reception: spe

AUDIX Name: None

Short/Prefixed Registration Allowed: default

Voice Mail Number: 6667

Bridging Tone for This Extension: no

Auto Answer: all

Coverage After Forwarding: system

Display Language: english

Hunt-to Station:

Loss Group: 19

Survivable COR: internal

Time of Day Lock Table: None

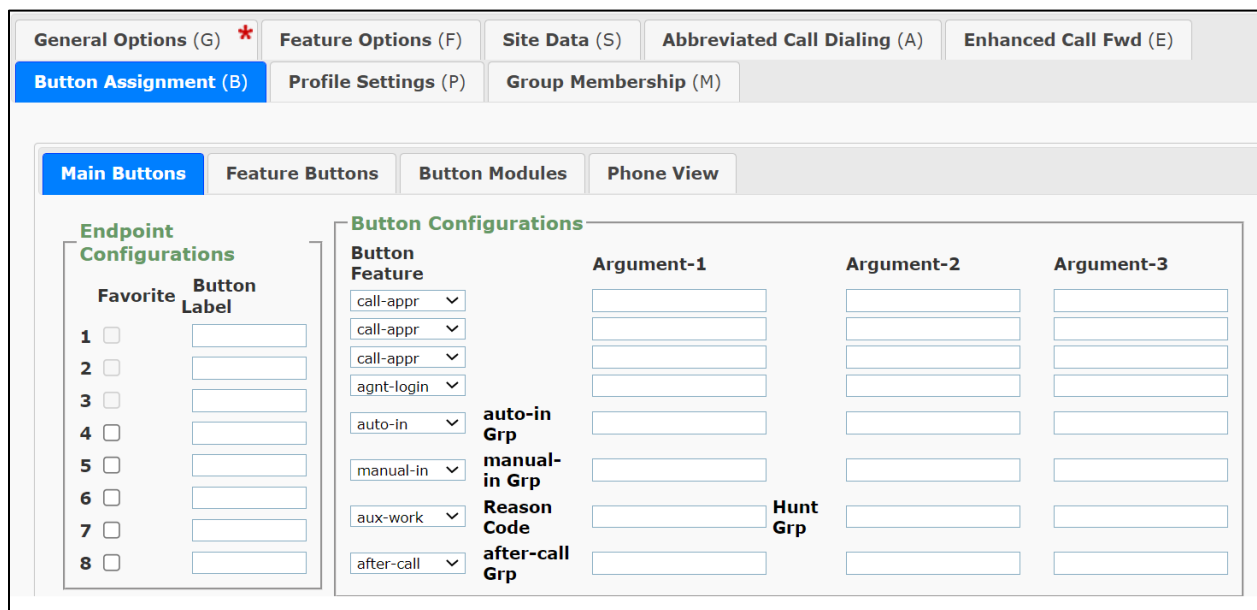
Music Source:

Features

☐ Always Use ☐ Idle Appearance Preference

☐ IP Audio Hairpinning ☒ IP SoftPhone

The buttons were set as shown below but these are not critical to the overall operation of the SCC Dialer. Click on **Done** at the bottom of the screen (not shown).



General Options (G) * **Feature Options (F)** Site Data (S) Abbreviated Call Dialing (A) Enhanced Call Fwd (E)

Button Assignment (B) Profile Settings (P) Group Membership (M)

Main Buttons Feature Buttons Button Modules Phone View

Endpoint Configurations

Favorite	Button Label
1 <input type="checkbox"/>	
2 <input type="checkbox"/>	
3 <input type="checkbox"/>	
4 <input type="checkbox"/>	
5 <input type="checkbox"/>	
6 <input type="checkbox"/>	
7 <input type="checkbox"/>	
8 <input type="checkbox"/>	

Button Configurations

Button Feature	Argument-1	Argument-2	Argument-3
call-appr			
call-appr			
call-appr			
agnt-login			
auto-in			
manual-in			
aux-work			
after-call			

auto-in Grp

manual-in Grp

Reason Code

after-call Grp

Hunt Grp

Click on **Commit** to save the changes.

User Profile | Edit | 3101@greaney.sil6.avaya.com

Commit & Continue Commit Cancel

Identity Communication Profile Membership Contacts

Communication Profile Password

PROFILE SET : Primary

Communication Address

PROFILES

Session Manager Profile ☒

Avaya Breeze® Profile ☐

CM Endpoint Profile ☒

* System : cm101x

* Profile Type : Endpoint

Use Existing Endpoints : ☐

* Extension : 3101

Template : Start typing...

* Set Type : 9641SIPCC

Security Code : Enter Security Code

Port : S000003

Voice Mail Number : 6667

Preferred Handle : Select

Calculate Route Pattern : ☐

Sip Trunk : aar

5.4. Adding a user on Avaya Aura® Communication Manager for Sytel

A user on Communication Manager must be added to allow the SCC Dialer to make changes to the agents on Communication Manager. These changes are facilitated using a connection to the SMS on AES. This connection then uses this user that will be created to carry out the necessary changes on Communication Manager.

Open the web browser to Communication Manager and log in using the appropriate credentials.

10.10.40.13/cgi-bin/common/login/webLogin

AVAYA

Avaya Aura® Communication Manager (CM)
System Management Interface (SMI)

Help Log Off

This Server: cm101x

Logon

Logon ID: paul

Password:

Logon



Once logged in, navigate to **Server (Maintenance)** as shown below.

The screenshot shows the Avaya Aura Communication Manager (CM) System Management Interface (SMI). The top navigation bar includes 'Help', 'Log Off', and a dropdown menu with 'Administration', 'Licensing', and 'Server (Maintenance)'. The 'Server (Maintenance)' option is selected. The page title is 'Avaya Aura® Communication Manager (CM) System Management Interface (SMI)' and it indicates 'This Server: cm101x'. The main content area is titled 'System Management Interface' and includes a copyright notice for 2001-2022 Avaya Inc. and a link to the Avaya support website for third-party components.


Navigate to **Security → Administrator Accounts** in the left window, select **Add Login**, and choose the **SAT Access Only**, as this is all that is required to allow the Sytel user to make the necessary changes to the agents using the SMS connection. Click on **Submit**.

The screenshot shows the 'Security' page in the Avaya Aura Communication Manager (CM) System Management Interface (SMI). The left navigation pane is expanded to 'Security' and 'Administrator Accounts'. The 'Add Login' option is selected. The 'SAT Access Only' radio button is selected. The 'Change Login', 'Remove Login', and 'Lock/Unlock Login' options are also visible, each with a 'Select Login' dropdown menu. The 'Add Group' and 'Remove Group' options are also visible, each with a 'Select Group' dropdown menu. The 'Submit' and 'Help' buttons are at the bottom.

Enter a suitable **Login name** and the rest can be left as default.

Help Log Off Administration	
Administration / Server (Maintenance)	
<ul style="list-style-type: none"> Display Configuration Time Zone Configuration NTP Configuration Server Upgrades Manage Updates IPSI Firmware Upgrades IPSI Version Download IPSI Firmware Download Status Activate IPSI Upgrade Activation Status Data Backup/Restore Backup Now Backup History Schedule Backup Backup Logs View/Restore Data Restore History Security Administrator Accounts Login Account Policy Change Password Login Reports Server Access Server Log Files Firewall Trusted Certificates 	<h3>Administrator Accounts -- Add Login: SAT Access Only</h3> <p>This page allows you to create a login that is intended to have access only to the Communication Manager System</p> <p>Login name: <input type="text" value="sytel"/></p> <p>Primary group: <input checked="" type="radio"/> susers <input type="radio"/> users</p> <p>Additional groups (profile): <input type="text" value="prof20"/></p> <p>Linux shell: <input type="text" value="/opt/ecs/bin/autosat"/></p> <p>Home directory: <input type="text" value="/var/home/sytel"/></p> <p>Lock this account: <input type="checkbox"/></p> <p>SAT Limit: <input type="text" value="none"/></p> <div>  You must assign a profile that has no web access if you want a login with SAT access only. </div> <div>  This shell setting does NOT disable the "go shell" SAT command for this user. </div>

Enter a new **password**, and again the rest can be left as default. Click on **Submit** to finish.

Help Log Off Administration	
Administration / Server (Maintenance)	
<ul style="list-style-type: none"> Display Configuration Time Zone Configuration NTP Configuration Server Upgrades Manage Updates IPSI Firmware Upgrades IPSI Version Download IPSI Firmware Download Status Activate IPSI Upgrade Activation Status Data Backup/Restore Backup Now Backup History Schedule Backup Backup Logs View/Restore Data Restore History Security Administrator Accounts Login Account Policy Change Password Login Reports Server Access Server Log Files Firewall Trusted Certificates 	<p>only.</p> <p>Linux shell: <input type="text" value="/opt/ecs/bin/autosat"/></p> <p>Home directory: <input type="text" value="/var/home/sytel"/></p> <p>Lock this account: <input type="checkbox"/></p> <p>SAT Limit: <input type="text" value="none"/></p> <p>Date after which account is disabled-blank to ignore (YYYY-MM-DD): <input type="text"/></p> <p>Enter password: <input type="password" value="....."/></p> <p>Re-enter password: <input type="password" value="....."/></p> <p>Force password change on next login: <input type="radio"/> Yes <input checked="" type="radio"/> No</p> <div> <input type="button" value="Submit"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/> </div> <div>  This shell setting does NOT disable the "go shell" SAT command for this user. </div>

6. Configure Avaya Aura® Application Enablement Services

This section provides the procedures for configuring Application Enablement Services. The procedures fall into the following areas:

- Verify Licensing
- Switch Connection
- Administer TSAPI Link
- Identify Tlinks
- Enable TSAPI Ports
- Create CTI User
- Configure Security
- Configure System Management Service (SMS)
- Restart AE Server

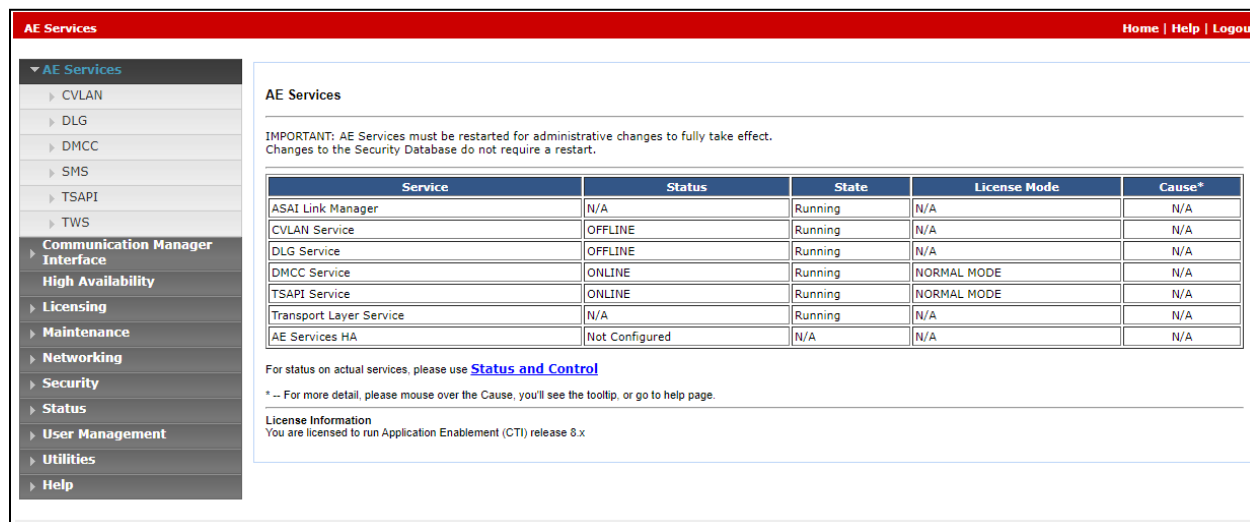
6.1. Verify Licensing

To access the AES Management Console, enter **https://<ip-addr>** as the URL in an Internet browser, where <ip-addr> is the IP address of AES. Log in with the appropriate credentials at the login screen and then select the **Login** button.



The screenshot shows the Avaya Application Enablement Services Management Console login page. 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 thick red horizontal bar spans the width of the page below the header. 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: "Username" and "Password". Below these fields are two buttons: "Login" and "Reset". Another thick red horizontal bar is located below the login form. At the bottom of the page, centered, is the copyright notice: "Copyright © 2009-2016 Avaya Inc. All Rights Reserved."

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 appropriate license.



AE Services Home | Help | Logout

▼ AE Services

- ▶ CVLAN
- ▶ DLG
- ▶ DMCC
- ▶ SMS
- ▶ TSAPI
- ▶ TWS
- ▶ Communication Manager Interface
- ▶ High Availability
- ▶ Licensing
- ▶ Maintenance
- ▶ Networking
- ▶ Security
- ▶ Status
- ▶ User Management
- ▶ Utilities
- ▶ Help

AE Services

IMPORTANT: AE Services must be restarted for administrative changes to fully take effect. Changes to the Security Database do not require a restart.

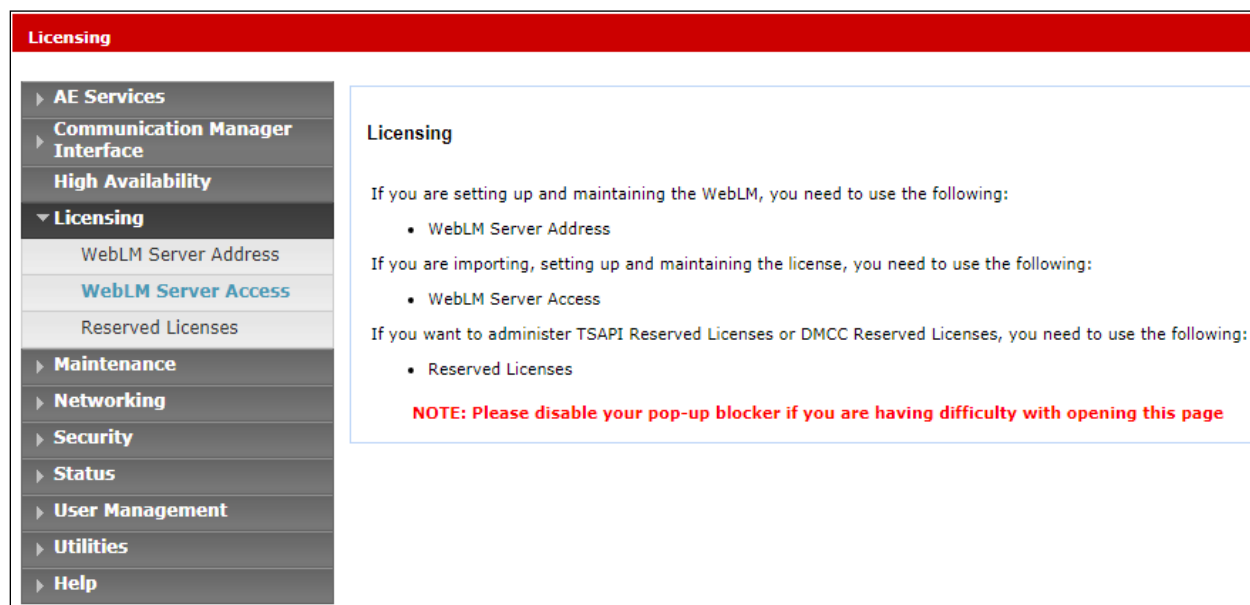
Service	Status	State	License Mode	Cause*
ASAI Link Manager	N/A	Running	N/A	N/A
CVLAN Service	OFFLINE	Running	N/A	N/A
DLG Service	OFFLINE	Running	N/A	N/A
DMCC Service	ONLINE	Running	NORMAL MODE	N/A
TSAPI Service	ONLINE	Running	NORMAL MODE	N/A
Transport Layer Service	N/A	Running	N/A	N/A
AE Services HA	Not Configured	N/A	N/A	N/A

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

* -- For more detail, please mouse over the Cause, you'll see the tooltip, or go to help page.

License Information
You are licensed to run Application Enablement (CTI) release 8.x

The TSAPI license is a user licenses issued by the Web License Manager to which the Application Enablement Services server is pointed to. From the left window open **Licensing** and click on **WebLM Server Access** as shown below.



Licensing

▶ AE Services

▶ Communication Manager Interface

▶ High Availability

▼ **Licensing**

- WebLM Server Address
- WebLM Server Access**
- Reserved Licenses

▶ Maintenance

▶ Networking

▶ Security

▶ Status

▶ User Management

▶ Utilities

▶ Help

Licensing

If you are setting up and maintaining the WebLM, you need to use the following:

- WebLM Server Address

If you are importing, setting up and maintaining the license, you need to use the following:

- WebLM Server Access

If you want to administer TSAPI Reserved Licenses or DMCC Reserved Licenses, you need to use the following:

- Reserved Licenses

NOTE: Please disable your pop-up blocker if you are having difficulty with opening this page

The following screen shows the available licenses for **TSAPI** users.

[illegible]

6.2. Switch Connection to Avaya Aura® Communication Manager

Typically, the connection between the AES and Communication Manager is set up as part of the initial installation and would not usually be outlined in these Application Notes. The following screenshots show the setup that was used for compliance testing. From the AES Management Console, navigate to **Communication Manager Interface** → **Switch Connections**, the connection to Communication Manager should be present as shown below but if one is not present one can be added by clicking on **Add Connection**.

The screenshot shows the Avaya Application Enablement Services Management Console. The top header includes the Avaya logo, the title "Application Enablement Services Management Console", and a welcome message with user details. The left sidebar contains a navigation menu with options like "AE Services", "Communication Manager Interface", "Switch Connections", "Dial Plan", "High Availability", "Licensing", "Maintenance", and "Networking". The main content area is titled "Switch Connections" and features a table with the following data:

Connection Name	Processor Ethernet	Msg Period	Number of Active Connections
cm101x	Yes	30	1

Below the table are buttons for "Edit Connection", "Edit PE/CLAN IPs", "Edit Signaling Details", "Delete Connection", and "Survivability Hierarchy".

In the resulting screen, enter the **Switch Password**; the Switch Password must be the same as that entered into Communication Manager AE Services Administration screen via the **change ip-services** command, described in **Section 5.2.2. Secure H323 Connection** was left unticked, as shown below. Click **Apply** to save changes.

The screenshot shows the "Connection Details - cm101x" screen. The left sidebar is the same as the previous screenshot. The main content area contains the following fields and options:

- Switch Password: [Redacted]
- Confirm Switch Password: [Redacted]
- Msg Period: 30 Minutes (1 - 72)
- Provide AE Services certificate to switch: ☒
- Secure H323 Connection: ☐
- Processor Ethernet: ☒
- Enable TLS Certificate Validation: ☐

At the bottom are "Apply" and "Cancel" buttons.

From the **Switch Connections** screen, select the radio button for the recently added switch connection and select the **Edit PE/CLAN IPs** button (not shown), see screen at the bottom of the previous page. In the resulting screen, enter the IP address of the procr as shown in **Section 5.2.1** that will be used for the AES connection and select the **Add/Edit Name or IP** button.

Communication Manager Interface | Switch Connections

Home | Help | Logout

AE Services
Communication Manager Interface
Switch Connections
Dial Plan
High Availability
Licensing
Maintenance

Edit Processor Ethernet IP - cm101x

10.10.40.13 Add/Edit Name or IP

Name or IP Address	Status
10.10.40.13	In Use

Back

Clicking on **Edit Signaling Details** below brings up the H.323 Gatekeeper page.

AVAYA Application Enablement Services Management Console

Welcome: User cust
Last login: Fri Sep 9 17:54:25 2022 from 192.168.40.240
Number of prior failed login attempts: 0
HostName/IP: aespr101x/10.10.40.16
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.0.1.0.7-0
Server Date and Time: Tue Sep 20 15:52:43 IST 2022
HA Status: Not Configured

Communication Manager Interface | Switch Connections

Home | Help | Logout

AE Services
Communication Manager Interface
Switch Connections
Dial Plan
High Availability
Licensing
Maintenance
Networking

Switch Connections

Add Connection

Connection Name	Processor Ethernet	Msg Period	Number of Active Connections
<input checked="" type="radio"/> cm101x	Yes	30	1

Edit Connection Edit PE/CLAN IPs Edit Signaling Details Delete Connection Survivability Hierarchy

The IP address of Communication Manager is set for the **H.323 Gatekeeper**, as shown below.

Communication Manager Interface | Switch Connections

AE Services
Communication Manager Interface
Switch Connections
Dial Plan
High Availability
Licensing
Maintenance
Networking

Switch Connections

Edit H.323 Gatekeeper - cm101x

Add Name or IP

Name or IP Address

☒ 10.10.40.13

Delete IP

6.3. Administer TSAPI link

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

The screenshot shows the 'AE Services | TSAPI | TSAPI Links' management console. On the left, a sidebar lists 'AE Services' with sub-items: CVLAN, DLG, DMCC, SMS, TSAPI (expanded), TSAPI Links (selected), and TSAPI Properties. The main area is titled 'TSAPI Links' and contains a table with two columns: 'Link' and 'Switch Connection'. Below the table are three buttons: 'Add Link', 'Edit Link', and 'Delete Link'.


On the **Add TSAPI Links** screen (or the **Edit TSAPI Links** screen to edit a previously configured TSAPI Link as shown below), enter the following values:

- **Link:** Use the drop-down list to select an unused link number.
- **Switch Connection:** Choose the switch connection **cm101x**, which has already been configured in **Section 6.2** from the drop-down list.
- **Switch CTI Link Number:** Corresponding CTI link number configured in **Section 5.2.3** Error! Reference source not found. which is **1**.
- **ASAI Link Version:** **12** was used for compliance testing but the latest version available can be chosen).
- **Security:** This can be left at the default value of **both**.

Once completed, select **Apply Changes**.

The screenshot shows the 'AE Services | TSAPI | TSAPI Links' management console. On the left, a sidebar lists 'AE Services' with sub-items: CVLAN, DLG, DMCC, SMS, TSAPI (expanded), TSAPI Links (selected), TSAPI Properties, TWS, and Communication Manager Interface. The main area is titled 'Edit TSAPI Links' and contains a form with the following fields: 'Link' (value: 1), 'Switch Connection' (value: cm101x), 'Switch CTI Link Number' (value: 1), 'ASAI Link Version' (value: 12), and 'Security' (value: Both). Below the form are three buttons: 'Apply Changes', 'Cancel Changes', and 'Advanced Settings'.

Another screen appears for confirmation of the changes made. 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.**

When the TSAPI Link is completed, it should resemble the screen below.

TSAPI Links				
Link	Switch Connection	Switch CTI Link #	ASAI Link Version	Security
<input checked="" type="radio"/> 1	cm101x	1	12	Both
<input type="button" value="Add Link"/> <input type="button" value="Edit Link"/> <input type="button" value="Delete Link"/>				

6.4. Identify Tlinks

Navigate to **Security** → **Security Database** → **Tlinks**. Verify the value of the **Tlink Name**. This will be needed to configure/verify the TSAPI Client in **Section 7.1**.

Security | Security Database | Tlinks

▶ AE Services

▶ Communication Manager Interface

High Availability

▶ Licensing

▶ Maintenance

▶ Networking

▼ Security

▶ Account Management

▶ Audit

▶ Certificate Management

Enterprise Directory

▶ Host AA

▶ PAM

▼ Security Database

▪ Control

⊕ CTI Users

▪ Devices

▪ Device Groups

▪ **Tlinks**

▪ Tlink Groups

▪ Worktops

Tlinks

Tlink Name

☒ AVAYA#CM101X#CSTA#AESPRI101X

☐ AVAYA#CM101X#CSTA-S#AESPRI101X

Delete Tlink

6.5. Enable TSAPI Ports

To ensure that TSAPI ports are enabled, navigate to **Networking → Ports**. Ensure that the TSAPI ports are set to **Enabled** as shown below, also note the port number, the default port is 450 and this will be used in the configuration of the TSAPI client in **Section 7.1**.

▶ AE Services			
▶ Communication Manager Interface			
High Availability			
▶ Licensing			
▶ Maintenance			
▼ Networking			
AE Service IP (Local IP)			
Network Configure			
Ports			
TCP/TLS Settings			
▶ Security			
▶ Status			
▶ User Management			
▶ Utilities			
▶ Help			

Ports

			Enabled	Disabled
CVLAN Ports				
Unencrypted TCP Port	9999		<input checked="" type="radio"/>	<input type="radio"/>
Encrypted TCP Port	<input type="text" value="9998"/>		<input checked="" type="radio"/>	<input type="radio"/>

DLG Port	TCP Port	5678		
----------	----------	------	--	--

			Enabled	Disabled
TSAPI Ports				
TSAPI Service Port	450		<input checked="" type="radio"/>	<input type="radio"/>
Local TLINK Ports				
TCP Port Min	1024			
TCP Port Max	1039			
Unencrypted TLINK Ports				
TCP Port Min	<input type="text" value="1050"/>			
TCP Port Max	<input type="text" value="1065"/>			
Encrypted TLINK Ports				
TCP Port Min	<input type="text" value="1066"/>			
TCP Port Max	<input type="text" value="1081"/>			

			Enabled	Disabled
DMCC Server Ports				
Unencrypted Port	<input type="text" value="4721"/>		<input checked="" type="radio"/>	<input type="radio"/>
Encrypted Port	<input type="text" value="4722"/>		<input checked="" type="radio"/>	<input type="radio"/>
TR/87 Port	<input type="text" value="4723"/>		<input checked="" type="radio"/>	<input type="radio"/>

6.6. Create CTI User

A User ID and password needs to be configured for the Outbound Dialer to communicate with the Application Enablement Services server. Navigate to the **User Management** → **User Admin** screen then choose the **Add User** option.

User Management | User Admin

User Admin

User Admin provides you with the following options for managing AE Services users:

- Add User
- Change User Password
- List All Users
- Modify Default User
- Search Users

In the **Add User** screen shown below, enter the following values:

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

Click on **Apply Changes** at the bottom of the screen (not shown).

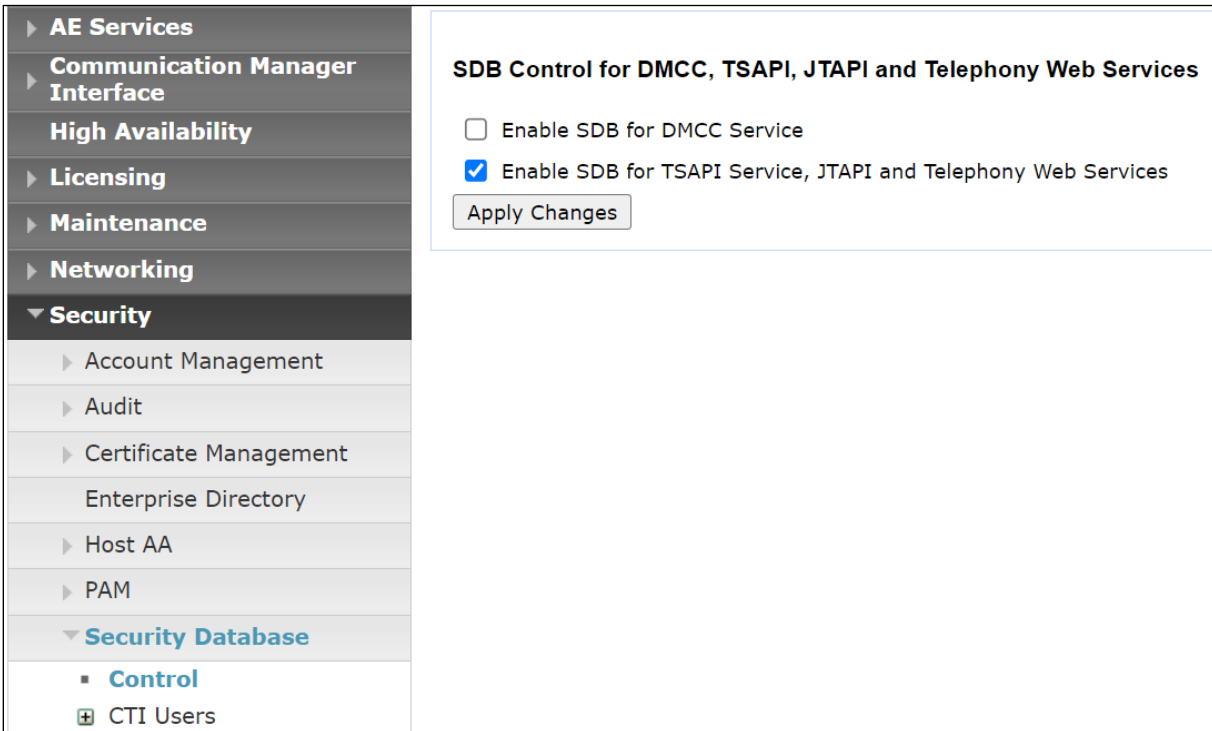
High Availability	* User Id	sytel
▶ Licensing	* Common Name	Sytel
▶ Maintenance	* Surname	TSAPI-Integration
▶ Networking	User Password
▶ Security	Confirm Password
▶ Status	Admin Note	
▼ User Management	Avaya Role	userservice.useradmin ▼
▶ Service Admin	Business Category	
▼ User Admin	Car License	
▪ Add User	CM Home	
▪ Change User Password	Css Home	
▪ List All Users	CT User	Yes ▼
▪ Modify Default Users	Department Number	
▪ Search Users	Display Name	

6.7. Configure Security

The CTI user and the database security are set.

6.7.1. Configure Database Control

Open **Control** and ensure that the **SDB Control** is set as shown below.



The screenshot shows a web-based configuration interface. On the left is a navigation menu 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 (selected), and CTI Users. The main content area is titled 'SDB Control for DMCC, TSAPI, JTAPI and Telephony Web Services'. It contains two checkboxes: 'Enable SDB for DMCC Service' (unchecked) and 'Enable SDB for TSAPI Service, JTAPI and Telephony Web Services' (checked). Below the checkboxes is an 'Apply Changes' button.

Note: The AES Security Database (SDB) provides the ability to control a user's access privileges. The SDB stores information about Computer Telephony (CT) users and the devices they control. The DMCC service, the TSAPI service, and Telephony Web Services use this information for permission checking. Please look to **Section 10** for more information on this.

6.7.2. Associate Devices with CTI User

Navigate to **Security** → **Security Database** → **CTI Users** → **List All Users**. Select the CTI user added in **Section 6.6** and click on **Edit Users**.

User ID	Common Name	Worktop Name	Device ID
<input type="radio"/> nice1	nice1	NONE	NONE
<input type="radio"/> paul1	paul1	NONE	NONE
<input type="radio"/> paul2	paul2	NONE	NONE
<input checked="" type="radio"/> sytel	Sytel	NONE	NONE

Edit List All

In the main window ensure that **Unrestricted Access** is ticked. Once this is done click on **Apply Changes**.

Edit CTI User

User Profile:

User ID: sytel
Common Name: Sytel
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

6.8. Configure System Management Service (SMS)

Navigate to **AE Services** → **SMS** → **SMS Properties**. The only change that should be necessary is the value set in the **Default CM Host Address**, this should be set to the IP address of Communication Manager. Everything else should be as default, or as shown below. Click on **Apply Changes** to ensure that all is saved correctly.

AE Services | SMS | SMS Properties

▼ **AE Services**

▶ CVLAN

▶ DLG

▶ DMCC

▼ **SMS**

▪ **SMS Properties**

▶ TSAPI

▶ TWS

▶ **Communication Manager Interface**

High Availability

▶ **Licensing**

▶ **Maintenance**

▶ **Networking**

SMS Properties

Default CM Host Address

Default CM Admin Port

CM Connection Protocol

SMS Logging

SMS Log Destination

CM Proxy Trace Logging

Max Sessions per CM

Proxy Shutdown Timer seconds

SAT Login Keepalive seconds

CM Terminal Type

Proxy Log Destination

6.9. Restart AE Server

Once everything is configured correctly, it is best practice to restart AE Server (if possible), this will ensure that the new connections are brought up correctly. Click on the **Restart AE Server** button at the bottom of the screen.

Maintenance | Service Controller

▶ AE Services

▶ Communication Manager Interface

High Availability

▶ Licensing

▼ Maintenance

Date Time/NTP Server

▶ Security Database

Service Controller

▶ Server Data

▶ Networking

▶ Security

▶ Status

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 type="checkbox"/> TSAPI Service	Running

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

Start

Stop

Restart Service

Restart AE Server

Restart Linux

Restart Web Server

A message confirming the restart will appear, click on **Restart** to proceed.

Maintenance | Service Controller

▶ AE Services

▶ Communication Manager Interface

High Availability

▶ Licensing

▼ Maintenance

Date Time/NTP Server

▶ Security Database

Service Controller

▶ Server Data

Restart AE Server

Warning! Are you sure you want to restart?
Restarting will cause all existing connections to be dropped and associations lost.

Restart

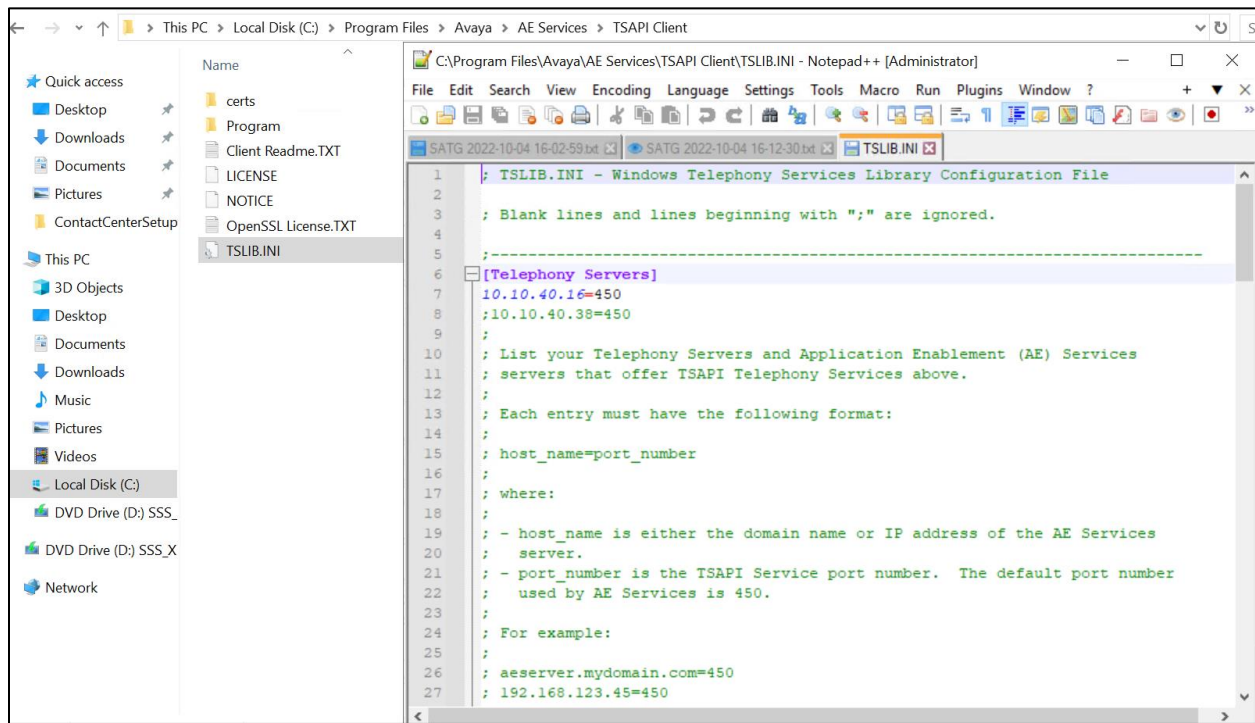
Cancel

7. Configure Sytel Softdial Contact Center

The configuration of the SCC server consists of amending a TSAPI client.ini file to ensure the correct IP address is given, and to configure the outbound campaign on the SCC Campaign Manager module. Please consult Sytel's Support using the contact information from **Section 2.3** above to explore all outbound campaign management options or any other SCC options.

7.1. Configure the Avaya TSAPI Client running on SCC Server

Navigate to **Program Files → Avaya → AE Services → TSAPI Client**, as shown below. The **TSLIB.ini** file needs to be edited to add the IP address and port of the AES server, that being **10.10.40.16** and port **450**, as shown below.



7.2. Configure Sytel Avaya Telephony gateway on SCC Server

Sytel's integration service (SATG) configuration parameters are stored in the Windows Registry. Open Windows Registry Editor to the registry path

HKEY_LOCAL_MACHINE\SOFTWARE\Sytel\SoftdialAvayaTelephonyGateway\landlord

The configuration parameters were set as shown for compliance testing. The following parameters should be configured:

AvayaWebServiceURI: SMS address

AvayaWebServiceUser: SMS user

AvayaWebServicePassword: SMS Password

AvayaServerID: TSAPI Server Instance

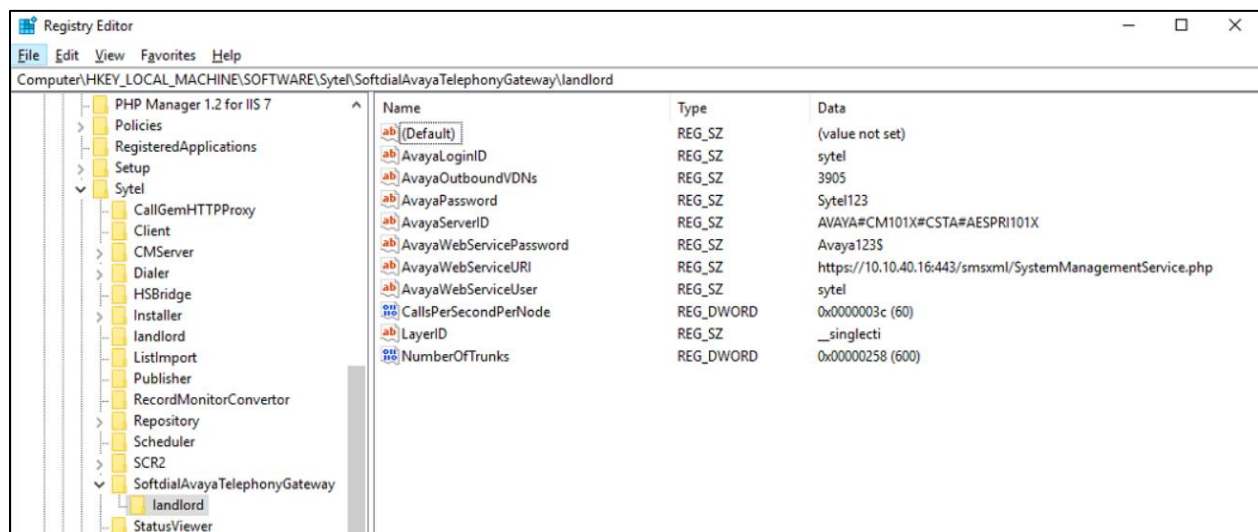
AvayaLoginID: TSAPI User

AvayaPassword: TSAPI Password

AvayaOutboundVDNs: Outbound VDN

NumberOfTrunks: Maximum number of simultaneous outbound calls. Use the ratio of 2:5 trunks per agent when using Predictive campaigns—default 600.

CallsPerSecondPerNode: Maximum number of calls per second for all outbound campaigns. Default 60.

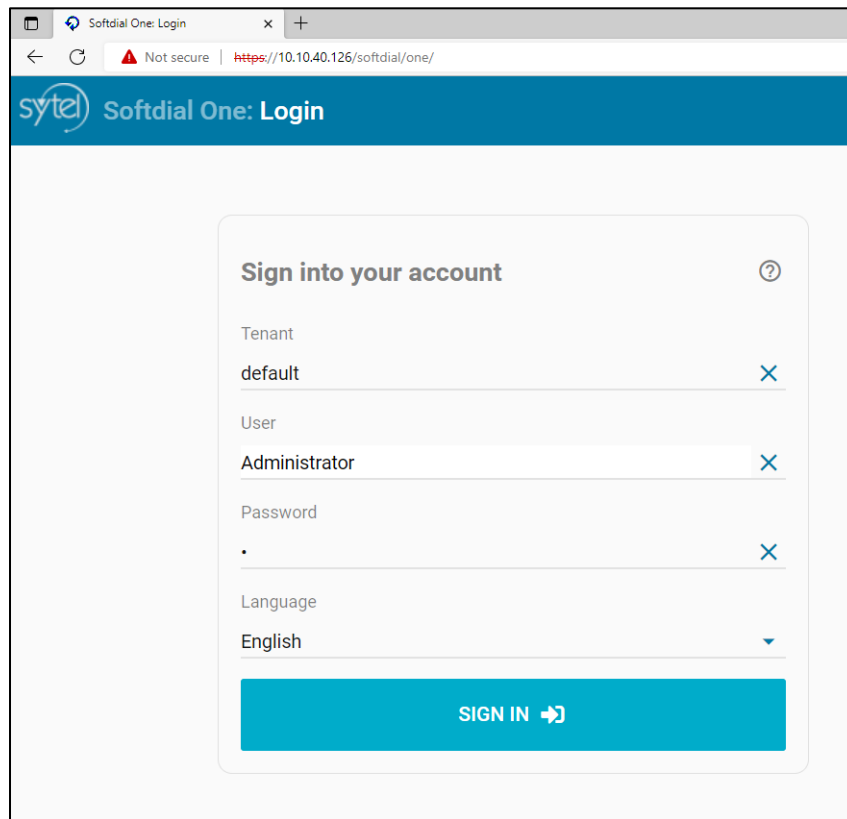


Note: The parameters not listed above are for internal use and should not be changed.

Note: Restart the service Softdial Avaya Telephony Gateway after changing any of the parameters.

7.3. Configure the Outbound Campaign

Open a web browser to the IP address of the Softdial Contact Center server. Enter the appropriate credentials and click on **Sign In**.



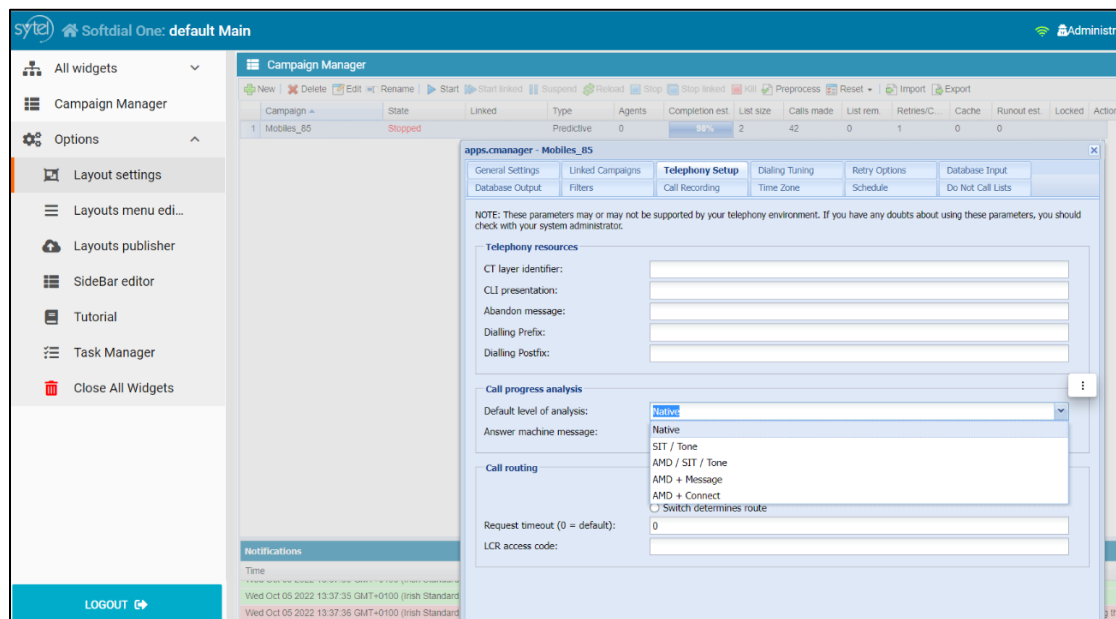
The screenshot shows a web browser window with the title "Softdial One: Login". The address bar shows "https://10.10.40.126/softdial/one/" with a "Not secure" warning. The page has a blue header with the Sytel logo and "Softdial One: Login". The main content area is white and contains a "Sign into your account" form. The form has the following fields: "Tenant" with the value "default", "User" with the value "Administrator", "Password" with masked characters, and "Language" with the value "English". Each input field has a blue 'X' icon to its right. At the bottom of the form is a large blue button labeled "SIGN IN" with a right-pointing arrow.

For a complete set of instructions on creating an outbound campaign and loading data for outbound dialing, please contact Sytel's support, as per **Section 2.3**.

Please note that the campaign name format is key to relating an outbound campaign in SCC with an outbound skill in Avaya.

Following the screenshot example, the campaign "*Mobiles_85*" will use skill 85 as its outbound skill in AES. This is a required configuration for SCC Dialer integration.

Open **Campaign Manager** by clicking on it in the left window, and the existing outbound campaign should be displayed. Double-click on the campaign, and a new window will open, as shown below. Click on the **Telephony Setup** tab. Note that the **Default level of analysis** was set to **Native**, as shown. This will ensure that Answering Machine Detection was not set to that on Communication Manager.



Communication Manager performs the Answer Machine actions in this integration scenario. It can be optionally enabled by changing the Default level of analysis in an SCC campaign to enable/disable it as follows:

- **Native:** AMD is disabled. This is the TSAPI option AT_NO_TREATMENT
- **SIT / Tone:** AMD is managed by what is the default option in Avaya Communications Manager. This is TSAPI option AT_NONE
- **AMD + Connect:** AMD is enabled for the campaign. This is TSAPI option AT_CONNECT
- **All other options:** AMD is enabled. If detected as AMD, the call is dropped. This is TSAPI option AT_DROP

Note: Avaya's AMD configuration and tuning are not in the scope of this document.

Click on the **Dialing Tuning** tab. These options were set as shown for compliance testing.

The screenshot displays the 'Campaign Manager' application window. At the top, a toolbar contains various action buttons like New, Delete, Edit, Start, and Stop. Below this is a table listing campaigns. The first campaign, 'Mobiles_85', is highlighted, and its configuration window is open. The 'Dialing Tuning' tab is selected within this window. The configuration is divided into two main sections: 'Overdial parameters' and 'Outbound skills-based routing'. The 'Overdial parameters' section includes input fields for 'Target abandon rate (1-20%)' (set to 3), 'Initial estimated average talk time (1-20min)' (set to 2), 'Abandon delay (0-6s)' (set to 1), 'Ring timeout (15-59s)*' (set to 16), 'Max wrap time (0-3600s)' (set to 0), 'Wrap outcome' (a dropdown menu), and 'Wrap data' (a text field). A note below these fields states: '* If this value exceeds CallGem's MaxRNATime value, CallGem's MaxRNATime value will be used. Refer to the Contact Center Guide for further details.' The 'Outbound skills-based routing' section has three radio button options: 'No skills-based routing' (which is selected), 'Queue address for this list:', and 'Queue address from this column:'. Below these is a text field for 'LFO abandon outcome (0 = No LFO Abandon):' set to 0. On the left side of the application, a 'Notifications' panel shows a log of events, including a message about loading DSN table input columns.

Campaign	State	Linked	Type	Agents	Completion est.	List size	Calls made	List rem.	Retries/C...	Cache	Runout est.	Locked	Actions
1 Mobiles_85	Stopped		Predictive	0	98%	2	42	0	1	0	0		

apps.cmanager - Mobiles_85

General Settings | Linked Campaigns | Telephony Setup | **Dialing Tuning** | Retry Options | Database Input | Database Output | Filters | Call Recording | Time Zone | Schedule | Do Not Call Lists

NOTE: There is no need to change these parameters to alter dialing performance. Softdial will automatically adjust the dialing rate. These parameters are set to reasonable defaults that should only be changed upon advice from your supplier or in order to comply with local dialing legislation.

Overdial parameters

Target abandon rate (1-20%): 3

Initial estimated average talk time (1-20min): 2

Abandon delay (0-6s): 1

Ring timeout (15-59s)*: 16

Max wrap time (0-3600s): 0

Wrap outcome: [dropdown]

Wrap data: [text field]

* If this value exceeds CallGem's MaxRNATime value, CallGem's MaxRNATime value will be used. Refer to the Contact Center Guide for further details.

Outbound skills-based routing

☒ No skills-based routing

☐ Queue address for this list: [text field]

☐ Queue address from this column: [text field]

LFO abandon outcome (0 = No LFO Abandon): 0

Notifications

Time

Wed Oct 05 2022 13:37:35 GMT+0100 (Irish Standard)

Wed Oct 05 2022 13:37:36 GMT+0100 (Irish Standard)

Loaded DSN table input columns

Under the **General Settings** tab, the **Campaign type** can be chosen. For compliance testing, **Predictive**, **Progressive**, and **Preview** campaigns were run.

apps.cmanager - Mobiles_85

General Settings | Linked Campaigns | Telephony Setup | Dialing Tuning | Retry Options | Database Input | Database Output | Filters | Call Recording | Time Zone | Schedule | Do Not Call Lists

This page contains the basic campaign settings. Choose a type of outbound or inbound campaign. The operational parameters will usually be defaulted to settings appropriate for your site. You will not normally need to change these settings.

Name

Campaign name: ☐ Template

Campaign type

☒ Predictive

☐ Progressive

☐ Preview

☐ Manual Outbound

☐ Inbound

☐ Inbound On-Hook

Operational parameters

☒ Enable Callbacks

Preview options

Timeout (s):

Breather (s):

☐ On-Hook Preview

End of list behaviour

☒ Wait for retries to become due

☐ Stop campaign

☐ Accelerate retries then stop campaign

☐ Accelerate retries, chain agents, stop campaign

☐ Accelerate retries, chain agents, leave open

☐ Chain agents then stop campaign

☐ Chain agents then leave open

▼

OK Cancel Revert

8. Verification Steps

The connection to Application Enablement Services can be verified on the Application Enablement Services side, on the SCC Dialer side, and by using the desktop to make an outbound call.

8.1. Verify connection from Avaya platform

There are a number of checks that can be performed to ensure that a connection is present from the Avaya products.

- Verify CTI Service State on Communication Manager
- Verify TSAPI link and user on Application Enablement Services
- Verify SMS on Application Enablement Services

8.1.1. Verify Avaya Aura® Communication Manager CTI Service State

Check the connection between Communication Manager and AES. Check the AESVCS link status by using the command **status aesvcs cti-link**. Verify the **Service State** of the CTI link is **established**.

status aesvcs cti-link						
AE SERVICES CTI LINK STATUS						
CTI Link	Version	Mnt Busy	AE Services Server	Service State	Msgs Sent	Msgs Rcvd
1	12	no	aespri101x	established	865	865

8.1.2. Verify TSAPI Link

On the AES Management Console, verify the status of the TSAPI link by selecting **Status** → **Status and Control** → **TSAPI Service Summary** to display the **TSAPI Link Details** screen. Verify the TSAPI link by checking that the **Status** is **Talking** and the **State** is **Online**.

Status | Status and Control | TSAPI Service Summary

Home | Help | Logout

AE Services

Communication Manager Interface

High Availability

Licensing

Maintenance

Networking

Security

Status

Alarm Viewer

Logs

Log Manager

Status and Control

CVLAN Service Summary

DLG Services Summary

DMCC Service Summary

Switch Conn Summary

TSAPI Service Summary

TSAPI Link Details

☐ Enable page refresh every 60 seconds

	Link	Switch Name	Switch CTI Link ID	Status	Since	State	Switch Version	Associations	Msgs to Switch	Msgs from Switch	Msgs Period
<input checked="" type="radio"/>	1	cm101x	1	Talking	Tue Oct 4 16:49:59 2022	Online	20	6	15	15	30

For service-wide information, choose one of the following:

Clicking on **User Status** from the screen on the previous page should display something similar to that shown below, where the **sytel** user and corresponding **Tlink Name** are shown.

CTI User Status
☐ Enable page refresh every seconds
CTI Users
Open Streams 3
Closed Streams 0
Open Streams

Name	Time Opened	Time Closed	Tlink Name
sytel	Tue 04 Oct 2022 04:50:11 PM IST		AVAYA#CM101X#CSTA#AESPRI101X
DMCCLCSUserDoNotModify	Tue 04 Oct 2022 04:51:15 PM IST		AVAYA#CM101X#CSTA#AESPRI101X
DMCCLCSUserDoNotModify	Tue 04 Oct 2022 04:51:15 PM IST		AVAYA#CM101X#CSTA#AESPRI101X

8.1.3. Verify SMS link

Open a web page to <https://<AESIP>/sms/sms-test.php>, as shown below. Enter the Communication Manager login details and a **Request**, such as List Agent, is entered as shown below, this should return a **Response** as shown.

SMS Interactive Test
+

Not secure | https://10.10.40.16/sms/sms_test.php

AVAYA

String Based - Web Service Request Form

SMS Resources
Model Documentation
Model Doc (No-Frames)
SMS WSDL

Connection Information
CM Login ID login@[IPv6]:port|hostname:port>
Password
SOAP Request Timeout (Seconds)

Request Parameters
Model ...
Operation
Objectname
Qualifier
Fields

Session Recording
☐ Record SMS Request
☐ Record Result Data

Last Request Response
Session ID [Duplicate Session](#)
Response

```

{
  var $result_code = 0
  var $result_data = 'Login_ID[0]=3401|Login_ID[1]=3402|Name[0]=Agent One
Workspaces|Name[1]=Agent Two
Workspaces|Extension[0]=unstaffed|Extension[1]=unstaffed|Direct_Agent_Skill[0]=1
Direct_Agent_Skill[1]=AAS[0]=n|AAS[1]=n|AUDIX[0]=n|AUDIX[1]=n|COR[0]=1|COR[1]=1
|Call_Handling_Preference[0]=skill-level|Call_Handling_Preference[1]=skill-
level|Service_Objective[0]=n|Service_Objective[1]=n|SN[0]=|SN[1]=|SL[0]=|SL[1]='

```

8.2. Verify Connection from Sytel SCC

Log into the Softdial Contact Center by opening a web session to the IP address of the dialer as shown below. Enter the appropriate credentials and click on **Sign In**.

Softdial One: Login

Sign into your account

Tenant
default

User
Administrator

Password
•

Language
English

SIGN IN

Navigate to **Campaign Manager** in the left window and start the campaign by highlighting the configured outbound campaign in the main window and clicking on **Start** above it. The outbound Campaign should be running before any agent login.

Softdial One: default Main

Administrator

Campaign Manager

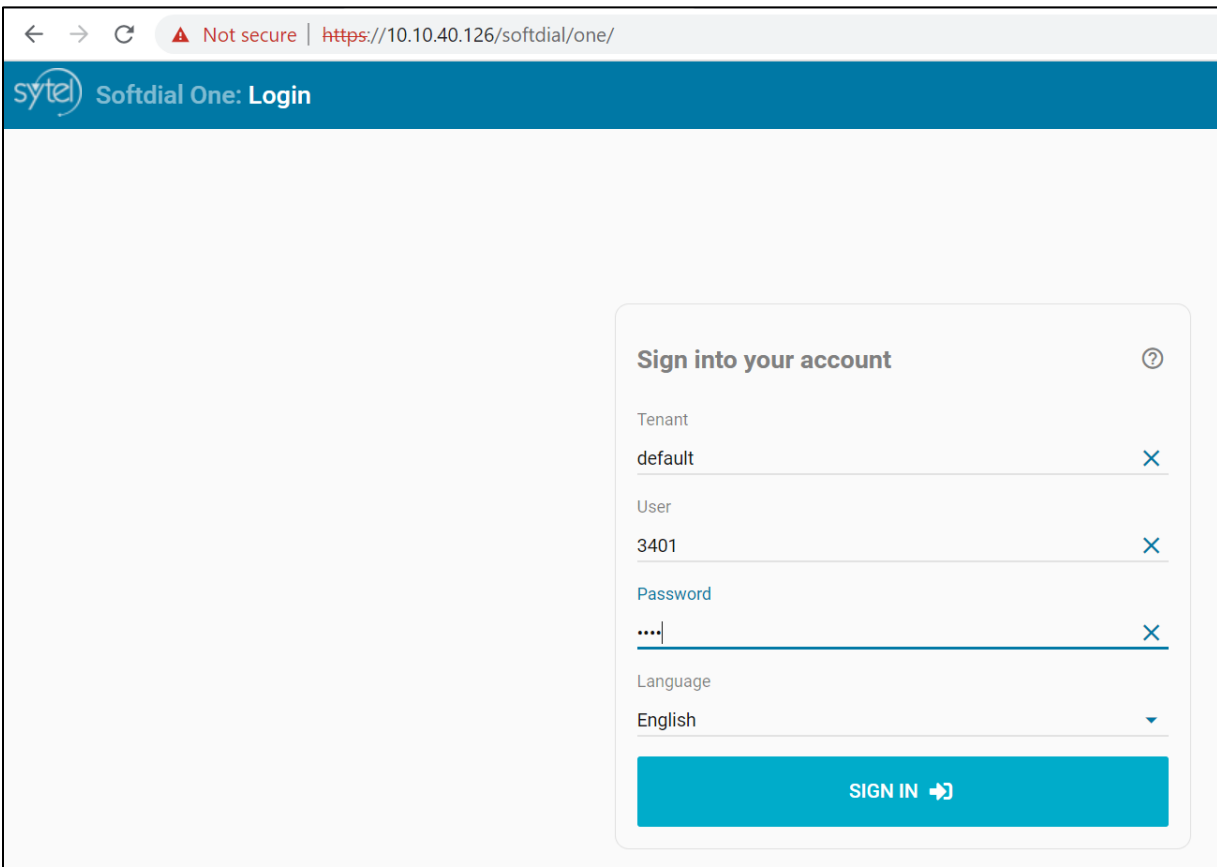
Campaign	State	Linked	Type	Agents	Completion est.	List size	Calls made	List rem.	Retries/C...	Cache
1 Mobiles_85	Stopped		Predictive	0	100%	2	40	0	0	0

Notifications

Time	Level	Message
Tue Oct 04 2022 20:59:37 GMT+0100 (Irish Standard Time)	Notification	Campaign Mobiles_85: The database worker thread exiting
Tue Oct 04 2022 20:59:37 GMT+0100 (Irish Standard Time)	Notification	Campaign Mobiles_85: Database worker thread closed

LOGOUT

From a client PC, open a web browser to the SCC as shown, and enter the desired Agent ID (**User**) and **Password**. Ensure that **Tenant** is set to **default**, as shown below.



← → ↻ Not secure | https://10.10.40.126/softdial/one/

sytel Softdial One: Login

Sign into your account ⓘ

Tenant
default ⓘ

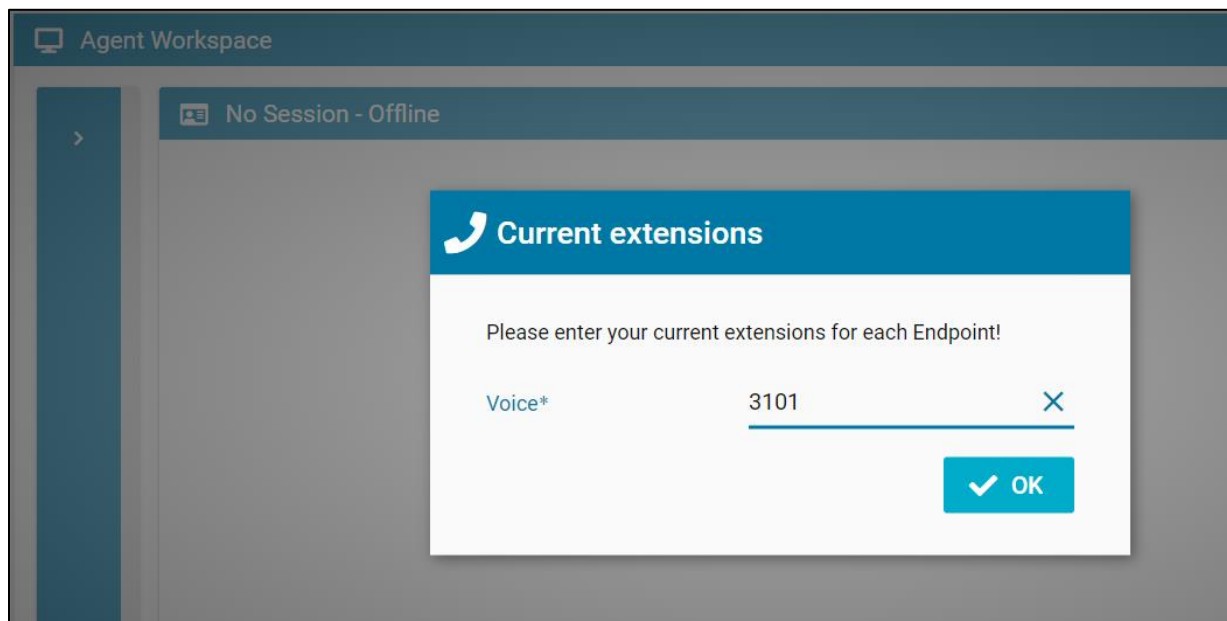
User
3401 ⓘ

Password
... ⓘ

Language
English ▾

SIGN IN ➔

Enter the Avaya extension to be used and click on **OK**.



Agent Workspace

No Session - Offline

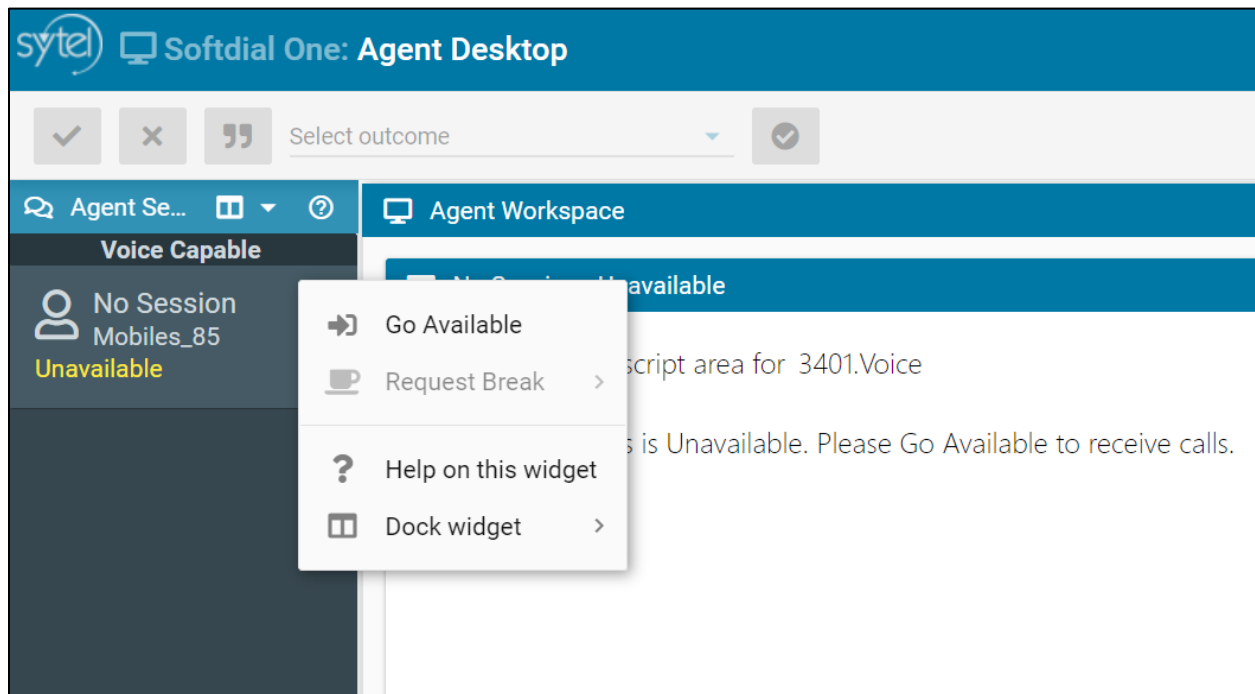
Current extensions

Please enter your current extensions for each Endpoint!

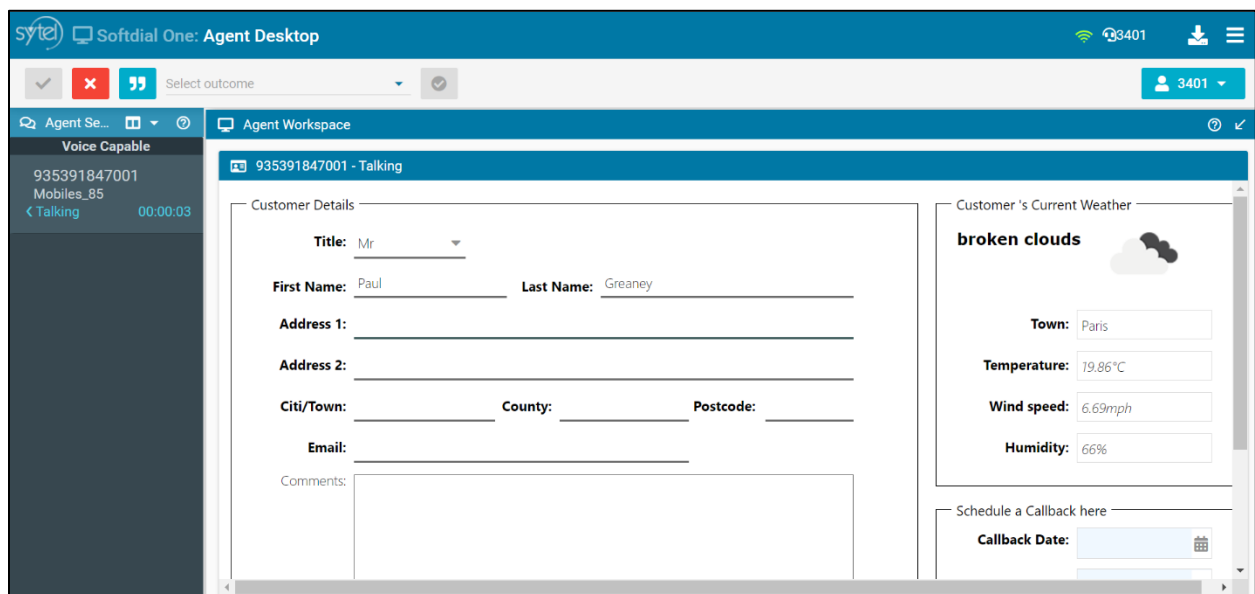
Voice* 3101 X

✓ OK

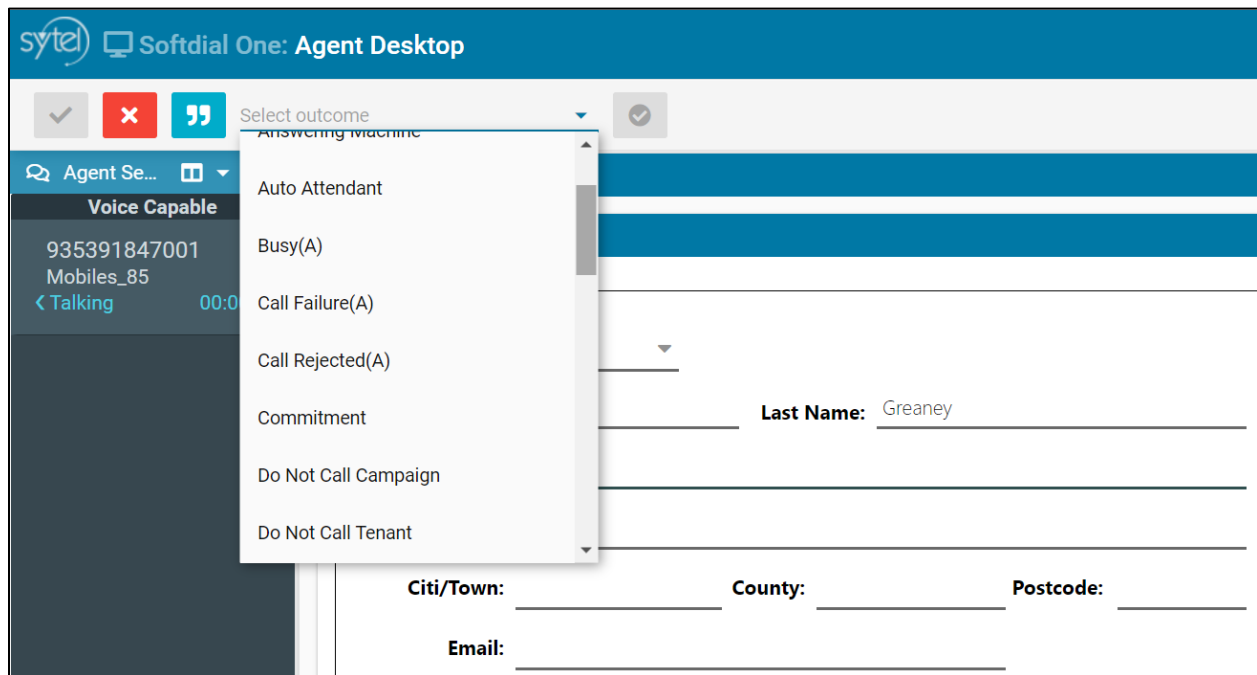
Once logged in, the agent can **Go Available** by right-clicking on the left window area, as shown.



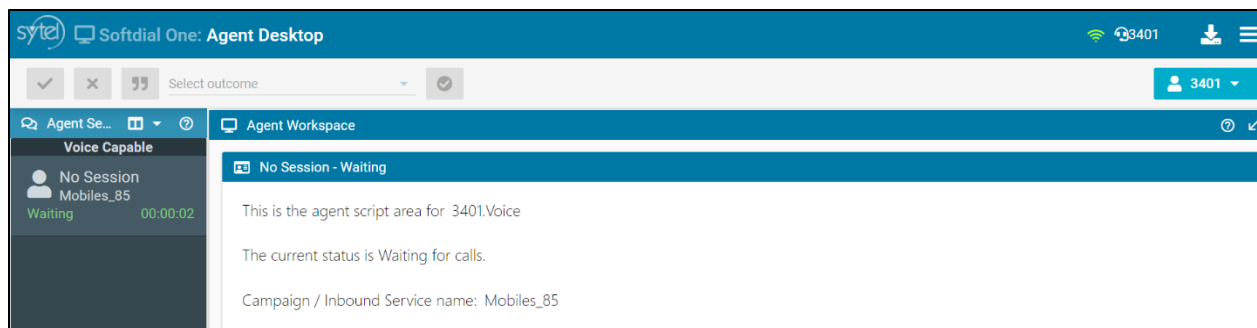
Once the call is answered (and this is done automatically), a screen pop like the one below should be populated on the agent's screen.



Once the agent is finished with the caller, the agent can choose the outcome as shown below.



Once the call is complete, the agent is waiting for the next outbound or inbound call to arrive.



9. Conclusion

These Application Notes describe the configuration steps required to integrate Sytel Softdial Contact Center v11.1 with Avaya Aura® Application Enablement Services R10.1 and Avaya Aura® Communication Manager R10.1. All feature and serviceability test cases were completed successfully, with all observations listed in **Section 2.2**.

10. Additional References

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

Documentation for Avaya products may be obtained via <http://support.avaya.com>.

- [1] *Administering Avaya Aura® Communication Manager*, Release 10.1, Issue 1, December 2021.
- [2] *Administering Avaya Aura® Application Enablement Services*, Release 10.1.x, Issue 4, April 2022.

Documentation related to Softdial Contact Center may be obtained directly from Sytel or via Sytel Help Web Portal (<https://help.sytel.com/>)

- [3] *Softdial Contact Center Documentation*, Release 11.1.745+, Issue 15, August, 2022.

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