

## Avaya Solution & Interoperability Test Lab

# Application Notes for Inisoft synTelate Enterprise 4.4.6 with Avaya Aura® Communication Manager 6.3 and Avaya Aura® Application Enablement Services 6.3 – Issue 1.0

### **Abstract**

These Application Notes describe the configuration steps required for Inisoft synTelate Enterprise 4.4.6 to interoperate with Avaya Aura® Communication Manager 6.3 and Avaya Aura® Application Enablement Services 6.3. Inisoft synTelate Enterprise is a scripting tool for creating campaigns for use on the contact center agent desktop.

In the compliance testing, Inisoft synTelate Enterprise used the Telephony Services Application Programmer Interface from Avaya Aura® Application Enablement Services to provide screen pop and call control via customized agent desktop.

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 for Inisoft synTelate Enterprise 4.4.6 to interoperate with Avaya Aura® Communication Manager 6.3 and Avaya Aura® Application Enablement Services 6.3. Inisoft synTelate Enterprise is a scripting tool for creating campaigns for use on the contact center agent desktop.

In the compliance testing, Inisoft synTelate Enterprise used the Telephony Services Application Programmer Interface (TSAPI) from Avaya Aura® Application Enablement Services to monitor agent stations, and to provide screen pop and call control via customized agent desktop.

The Inisoft synTelate Enterprise solution consists of the synTelate Designer, synTelate Enterprise, and a generic Database server. synTelate Designer is a graphical tool used to define the call flow and custom agent desktop screen.

# 2. General Test Approach and Test Results

The feature test cases were performed manually. Upon agent log in, synTelate Enterprise used TSAPI to snapshot device and query agent state, to log the agent into Communication Manager as needed, and to request monitoring.

For the manual part of the testing, incoming ACD calls were placed from the PSTN with available agents, and outbound calls were placed from the agent desktops. All necessary call actions were initiated from the agent desktops whenever possible.

The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet connection to synTelate Enterprise.

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

# 2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following on synTelate Enterprise:

- Use of TSAPI query service to query agent states.
- Use of TSAPI event report service to monitor agent stations.
- Use of TSAPI set value service to set agent states, including login, logout, and work mode changes.
- Use of TSAPI call control service to support call control from the agent desktops.
- Proper handling of call scenarios involving inbound, outbound, internal, external, ACD, non-ACD, screen pop, drop, hold/resume, multiple calls, multiple agents, conference, transfer, long duration, pending aux work, and reason codes.

The serviceability testing focused on verifying the ability of synTelate Enterprise to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet connection to synTelate Enterprise.

#### 2.2. Test Results

All test cases were executed, and the following is an observation on synTelate Enterprise:

• The current version does not support screen pop of customer record at the transfer-to agent for the blind transfer scenario. The workaround is to manually retrieve the customer record or use attended transfer.

# 2.3. Support

Technical support on synTelate Enterprise can be obtained through the following:

• **Phone:** (603) 383-4999 or +44 (0) 141-552-8800

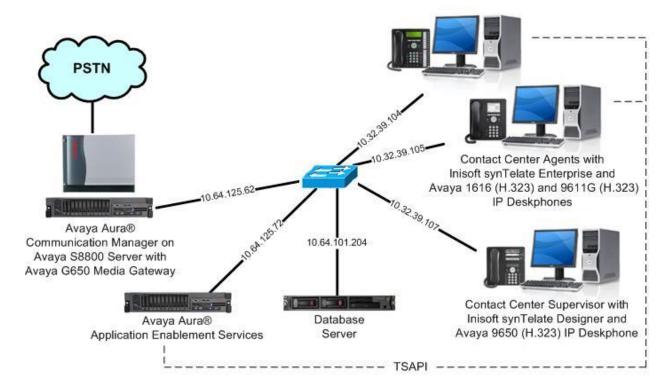
• Email: support@inisoft.co.uk

# 3. Reference Configuration

In the compliance testing, synTelate Designer was running on the supervisor PC, and synTelate Enterprise was running on each agent PC using the custom agent desktop screen developed by synTelate Designer. As shown in **Figure 1**, each synTelate Enterprise had a TSAPI connection to Application Enablement Services.

The detailed administration of basic connectivity between Communication Manager and Application Enablement Services, and of contact center devices are not the focus of these Application Notes and will not be described. The pre-existing contact center devices used in the compliance testing is shown in the table below.

Device Type	Extension
VDN	60001, 60002
Skill Group	65081, 65082
Supervisor	65000
Agent Station	65001, 65002
Agent ID	65881, 65882
Agent Password	65881, 65882



**Figure 1: Compliance Testing Configuration** 

# 4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager on Avaya S8800 Server with Avaya G650 Media Gateway	6.3.6 (R016x.03.0.124.0-21591)
Avaya Aura® Application Enablement Services	6.3.3 SP1 (6.3.3.1.10-0)
Avaya 1616 IP Deskphone (H.323)	1.350B
Avaya 9611G IP Deskphone (H.323)	6.4.0.14
Avaya 9650 IP Deskphone (H.323)	3.230A
Inisoft synTelate Enterprise on Microsoft Windows 7 Professional  • Avaya TSAPI Windows Client (csta32.dll)	4.4.6.4 SP 1 6.3.0.334
Inisoft synTelate Designer on Microsoft Windows 7 Professional  • Supervisor  • Avaya TSAPI Windows Client (csta32.dll)	4.4.6.4 SP1 4.2.4.0 6.3.0.334
Database Server on Microsoft Server 2008  • Microsoft SQL Server 2008 R2	R2 Datacenter 10.50.1600.1

# 5. Configure Avaya Aura® Communication Manager

This section provides the procedures for configuring Communication Manager. The procedures include the following areas:

- Verify license
- Administer CTI link
- Administer system parameters features
- Obtain reason codes

## 5.1. Verify License

Log in to the System Access Terminal to verify that the Communication Manager license has proper permissions for features illustrated in these Application Notes. Use the "display system-parameters customer-options" command to verify that the **Computer Telephony Adjunct Links** customer option is set to "y" on **Page 3**. If this option is not set to "y", then contact the Avaya sales team or business partner for a proper license file.

```
display system-parameters customer-options
                                                                     3 of 11
                                                               Page
                               OPTIONAL FEATURES
   Abbreviated Dialing Enhanced List? y
                                                 Audible Message Waiting? y
       Access Security Gateway (ASG)? n
                                                  Authorization Codes? y
       Analog Trunk Incoming Call ID? y
                                                              CAS Branch? n
A/D Grp/Sys List Dialing Start at 01? y
                                                               CAS Main? n
Answer Supervision by Call Classifier? y
                                                       Change COR by FAC? n
                                ARS? y Computer Telephony Adjunct Links? y
                ARS/AAR Partitioning? y Cvg Of Calls Redirected Off-net? y
         ARS/AAR Dialing without FAC? n
                                                             DCS (Basic)? y
         ASAI Link Core Capabilities? n
                                                       DCS Call Coverage? y
         ASAI Link Plus Capabilities? n
                                                      DCS with Rerouting? y
```

#### 5.2. Administer CTI Link

Add a CTI link using the "add cti-link n" command, where "n" is an available CTI link number. Enter an available extension number in the **Extension** field. Note that the CTI link number and extension number may vary. Enter "ADJ-IP" in the **Type** field, and a descriptive name in the **Name** field. Default values may be used in the remaining fields.

```
add cti-link 2

CTI LINK

CTI Link: 2

Extension: 60100

Type: ADJ-IP

COR: 1

Name: AES CTI Link
```

## 5.3. Administer System Parameters Features

Use the "change system-parameters features" command to enable **Create Universal Call ID** (**UCID**), which is located on **Page 5**. For **UCID Network Node ID**, enter an available node ID.

```
change system-parameters features
                                                              Page
                                                                     5 of 20
                       FEATURE-RELATED SYSTEM PARAMETERS
SYSTEM PRINTER PARAMETERS
                        Lines Per Page: 60
 Endpoint:
SYSTEM-WIDE PARAMETERS
                                    Switch Name:
           Emergency Extension Forwarding (min): 10
         Enable Inter-Gateway Alternate Routing? n
Enable Dial Plan Transparency in Survivable Mode? n
                             COR to Use for DPT: station
               EC500 Routing in Survivable Mode: dpt-then-ec500
MALICIOUS CALL TRACE PARAMETERS
              Apply MCT Warning Tone? n MCT Voice Recorder Trunk Group:
     Delay Sending RELease (seconds): 0
SEND ALL CALLS OPTIONS
    Send All Calls Applies to: station Auto Inspect on Send All Calls? n
             Preserve previous AUX Work button states after deactivation? n
UNIVERSAL CALL ID
    Create Universal Call ID (UCID)? y
                                          UCID Network Node ID: 27
```

Navigate to **Page 13**, and enable **Send UCID to ASAI**. This parameter allows for the universal call ID to be sent to synTelate Enterprise.

```
change system-parameters features
                                                               Page 13 of 20
                        FEATURE-RELATED SYSTEM PARAMETERS
CALL CENTER MISCELLANEOUS
          Callr-info Display Timer (sec): 10
                        Clear Callr-info: next-call
       Allow Ringer-off with Auto-Answer? n
   Reporting for PC Non-Predictive Calls? n
           Agent/Caller Disconnect Tones? n
         Interruptible Aux Notification Timer (sec): 3
            Zip Tone Burst for Callmaster Endpoints: double
 ASAI
           Copy ASAI UUI During Conference/Transfer? y
       Call Classification After Answer Supervision? y
                                   Send UCID to ASAI? y
         For ASAI Send DTMF Tone to Call Originator? y
 Send Connect Event to ASAI For Announcement Answer? n
```

#### 5.4. Obtain Reason Codes

For contact centers that use reason codes, enter the "change reason-code-names" command to display the configured reason codes. Make a note of the reason codes, which will be used to configure synTelate Enterprise.

```
Page 1 of 1
change reason-code-names
                                REASON CODE NAMES
                           Aux Work/
                                                Logout
                        Interruptible?
       Reason Code 1: Comfort Break
       Reason Code 2: Lunch Break
       Reason Code 3: Training Session/n
       Reason Code 4: End of Shift /n
       Reason Code 5:
                                      /n
       Reason Code 6:
Reason Code 7:
Reason Code 8:
                                       /n
                                       /n
                                       /n
       Reason Code 9:
                                       /n
 Default Reason Code:
```

# 6. Configure Avaya Aura® Application Enablement Services

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

- Launch OAM interface
- Verify license
- Administer TSAPI link
- Disable security database
- Restart service
- Obtain Tlink name
- Administer synTelate user

#### 6.1. Launch OAM Interface

Access the OAM web-based interface by using the URL "https://ip-address" in an Internet browser window, where "ip-address" is the IP address of the Application Enablement Services server.

The **Please login here** screen is displayed. Log in using the appropriate credentials.

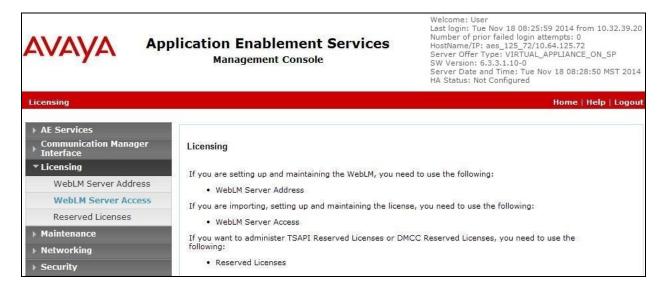


The **Welcome to OAM** screen is displayed next.



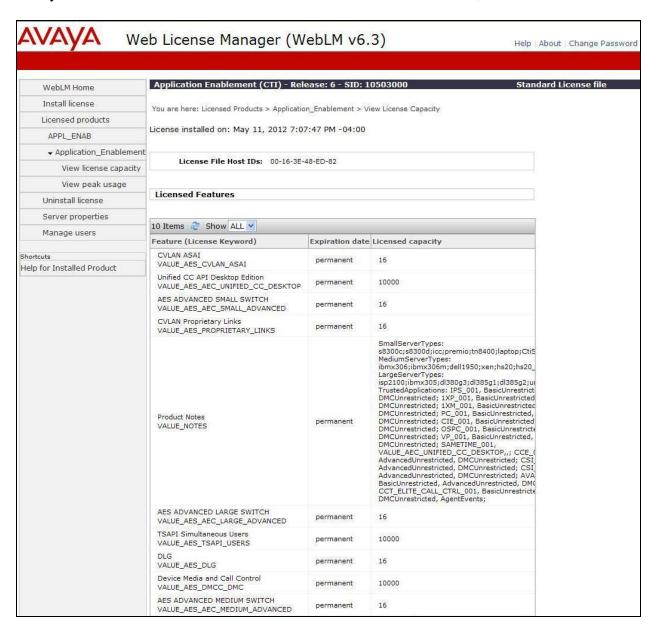
## 6.2. Verify License

Select Licensing  $\rightarrow$  WebLM Server Access in the left pane, to display the Web License Manager pop-up screen (not shown), and log in using the appropriate credentials.



The Web License Manager screen below is displayed. Select Licensed products → APPL\_ENAB → Application\_Enablement in the left pane, to display the Application Enablement (CTI) screen in the right pane.

Verify that there are sufficient licenses for **TSAPI Simultaneous Users**, as shown below.



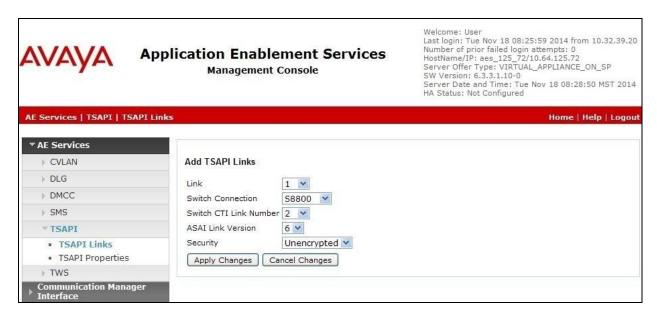
#### 6.3. Administer TSAPI Link

Select **AE Services** → **TSAPI** → **TSAPI Links** from the left pane of the **Management Console**, to administer a TSAPI link. The **TSAPI Links** screen is displayed, as shown below. Click **Add Link**.



The **Add TSAPI Links** screen is displayed next.

The **Link** field is only local to the Application Enablement Services server, and may be set to any available number. For **Switch Connection**, select the relevant switch connection from the drop-down list. In this case, the existing switch connection "S8800" is selected. For **Switch CTI Link Number**, select the CTI link number from **Section 5.2**. Retain the default values in the remaining fields.



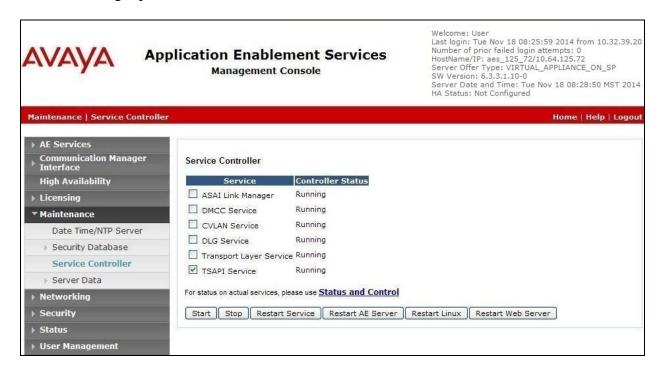
# 6.4. Disable Security Database

Select Security  $\rightarrow$  Security Database  $\rightarrow$  Control from the left pane, to display the SDB Control for DMCC, TSAPI, JTAPI and Telephony Web Services screen in the right pane. Uncheck both fields below.



#### 6.5. Restart Service

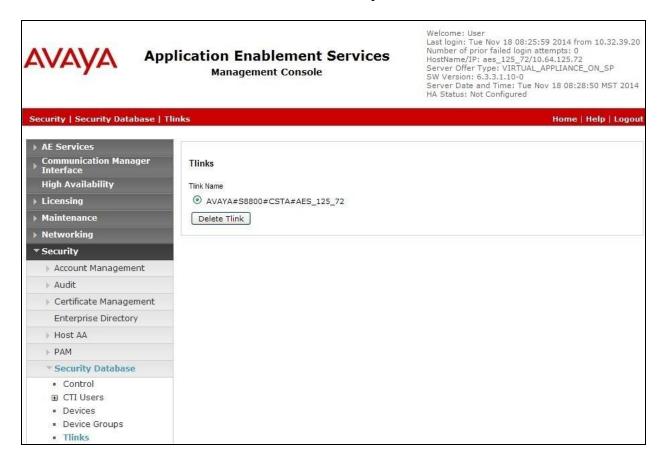
Select Maintenance  $\rightarrow$  Service Controller from the left pane, to display the Service Controller screen in the right pane. Check TSAPI Service, and click Restart Service.



#### 6.6. Obtain Tlink Name

Select Security → Security Database → Tlinks from the left pane. The Tlinks screen shows a listing of the Tlink names. A new Tlink name is automatically generated for the TSAPI service. Locate the Tlink name associated with the relevant switch connection, which would use the name of the switch connection as part of the Tlink name. Make a note of the associated Tlink name, to be used later for configuring synTelate Enterprise.

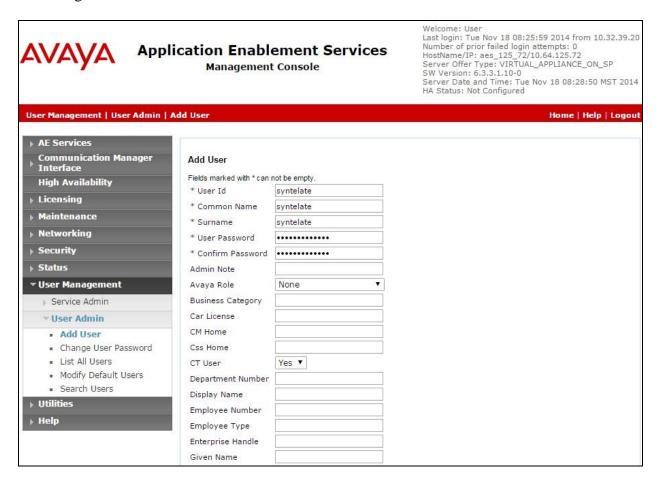
In this case, the associated Tlink name is "AVAYA#S8800#CSTA#AES\_125\_72". Note the use of the switch connection "S8800" from Section 6.3 as part of the Tlink name.



## 6.7. Administer synTelate User

Select User Management  $\rightarrow$  User Admin  $\rightarrow$  Add User from the left pane, to display the Add User screen in the right pane.

Enter desired values for **User Id**, **Common Name**, **Surname**, **User Password**, and **Confirm Password**. For **CT User**, select "Yes" from the drop-down list. Retain the default value in the remaining fields.



# 7. Configure Inisoft synTelate Enterprise

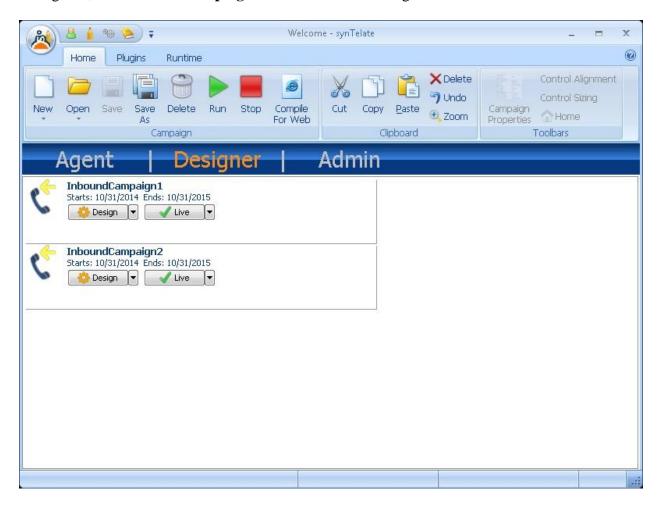
This section provides the procedures for configuring synTelate Enterprise. The procedures include the following areas:

- Administer campaigns
- Administer reason codes
- Administer TSLIB.INI
- Administer CTI

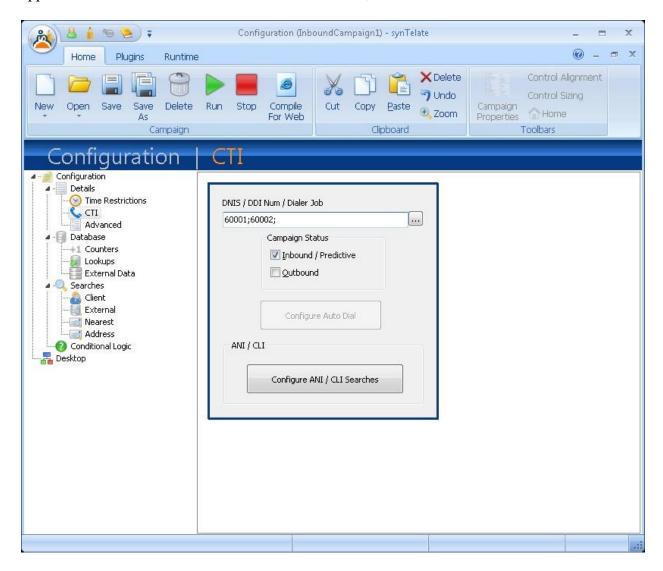
# 7.1. Administer Campaigns

From the PC running synTelate Designer, select Start  $\rightarrow$  All Programs  $\rightarrow$  synTelate Enterprise  $\rightarrow$  synTelate Designer, to display the Welcome – synTelate screen.

Select **New**  $\rightarrow$  **Wizard** from the top menu, and follow [3] to create a desired campaign for handling of inbound ACD calls. In the compliance testing, two inbound campaigns were preconfigured, and **InboundCampaign1** was used in the testing.

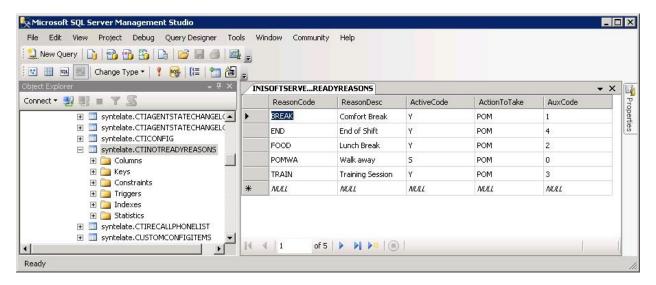


As part of configuring the **DNIS / DDI Num/ Dialer Job** for the inbound campaign, the applicable VDN extensions from **Section 3** were used, as shown below.



#### 7.2. Administer Reason Codes

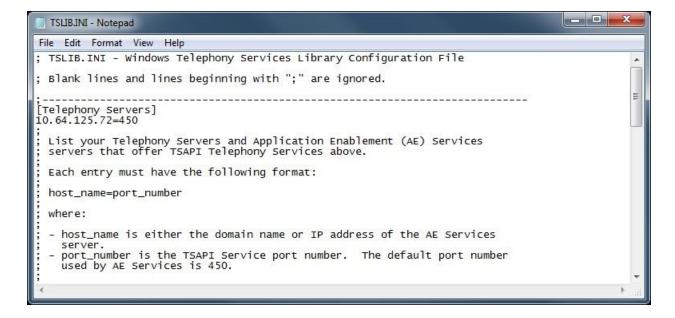
From the Database server, follow [3] to create an entry for each reason code from **Section 5.4**. Note that the "POMWA" reason code shown below was created by the system.



#### 7.3. Administer TSLIB.INI

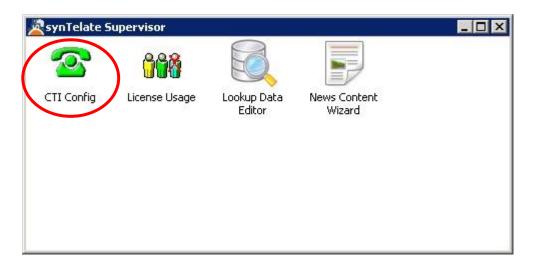
From the PC running synTelate Designer, select Start → All Programs → Avaya AE Services → TSAPI Client → Edit TSLIB.INI. The TSLIB.INI screen below is displayed.

Under **Telephony Servers**, enter an entry as shown below, using the IP address of Application Enablement Services, in this case "10.64.125.72".

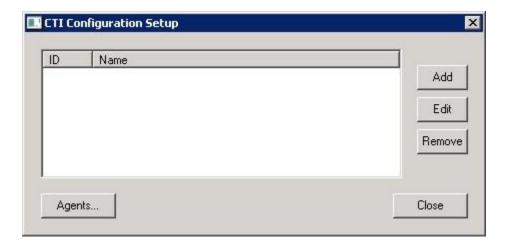


#### 7.4. Administer CTI

From the PC running synTelate Designer, select **Start**  $\rightarrow$  **All Programs**  $\rightarrow$  **synTelate Enterprise**  $\rightarrow$  **synTelate Supervisor** to display the **synTelate Supervisor** screen below. Select **CTI Config**.



The CTI Configuration Setup screen is displayed next. Click Add.



The **Edit CTI Link Details** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

• Name: A desired name.

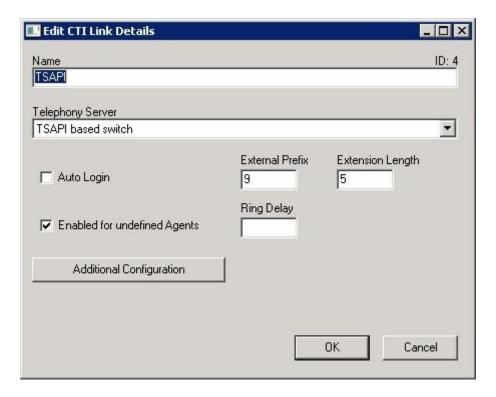
• **Telephony Server:** "TSAPI based switch"

• External Prefix: Applicable prefix for external calls, in this case "9".

• Extension Length: Length of internal extensions, in this case "5".

• Enabled for undefined Agents: Checked in the compliance testing.

#### Click Additional Configuration.

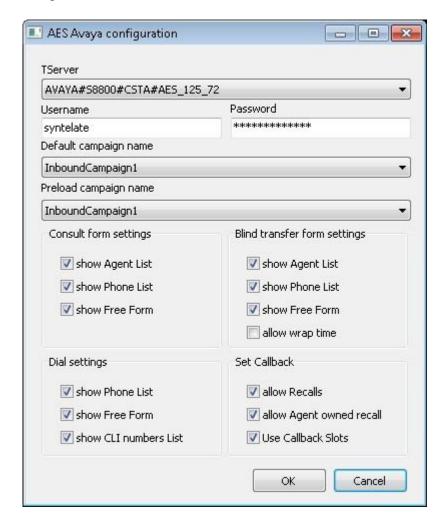


The **AES Avaya configuration** screen is displayed next. Enter the following values for the specified fields.

• **TServer:** Select the Tlink name from **Section 6.6**.

Username: The synTelate user credentials from Section 6.7.
 Password: The synTelate user credentials from Section 6.7.
 Default campaign name: Select the applicable campaign from Section 7.1.
 Preload campaign name: Select the applicable campaign from Section 7.1.

Configure the remaining parameters as desired. The screenshot below shows the settings used in the compliance testing, which were all default values.



# 8. Verification Steps

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

## 8.1. Verify Avaya Aura® Communication Manager

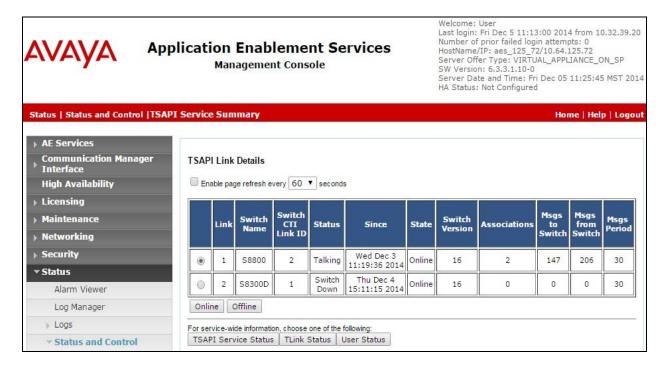
On Communication Manager, verify the status of the administered CTI link by using the "status aesvcs cti-link" command. Verify that the **Service State** is "established" for the CTI link number administered in **Section 5.2**, as shown below.

2	6	no	aes_125_72	established	213	153	
CTI Link	Version	Mnt Busy	AE Services Server	Service State	Msgs Sent	Msgs Rcvd	
AE SERVICES CTI LINK STATUS							
status aesvcs cti-link							

## 8.2. Verify Avaya Aura® Application Enablement Services

On Application Enablement Services, verify the status of the TSAPI link by selecting **Status > Status and Control > TSAPI Service Summary** from the left pane (not shown). The **TSAPI Link Details** screen is displayed.

Verify the **Status** is "Talking" for the TSAPI link administered in **Section 6.3**, and that the **Associations** column reflects the number of agents from **Section 3** that are currently logged into synTelate Enterprise and therefore monitored, in this case "2".

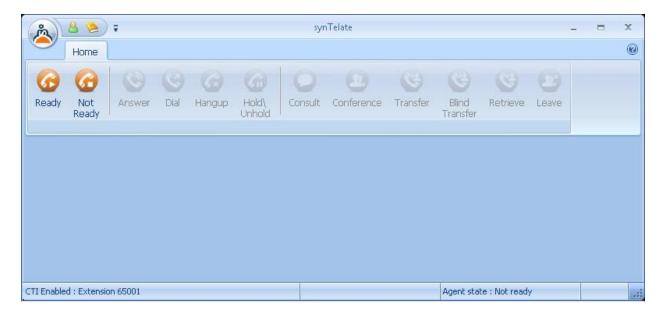


# 8.3. Verify Inisoft synTelate Enterprise

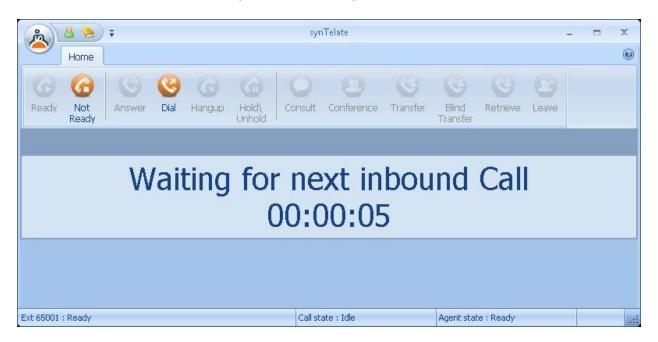
From the agent PC, select Start  $\rightarrow$  All Programs  $\rightarrow$  synTelate Enterprise  $\rightarrow$  synAgent to display the Login Details screen. Enter the relevant agent station extension, agent ID and agent password from Section 3.



The screen below is displayed next. Select **Ready** for the agent to become available.



Verify the screen is updated, showing the agent waiting for an inbound call. Also verify that the bottom of the screen reflects **Ready**, **Idle**, and **Ready**, as shown below.



Make an incoming ACD call. Verify that the call is ringing at the available agent, and that the bottom screen of the agent reflects **Call state** of **Ringing**. Also verify that the top pane of the agent is updated to reflect the **Answer** and **Hangup** icons, as shown below.

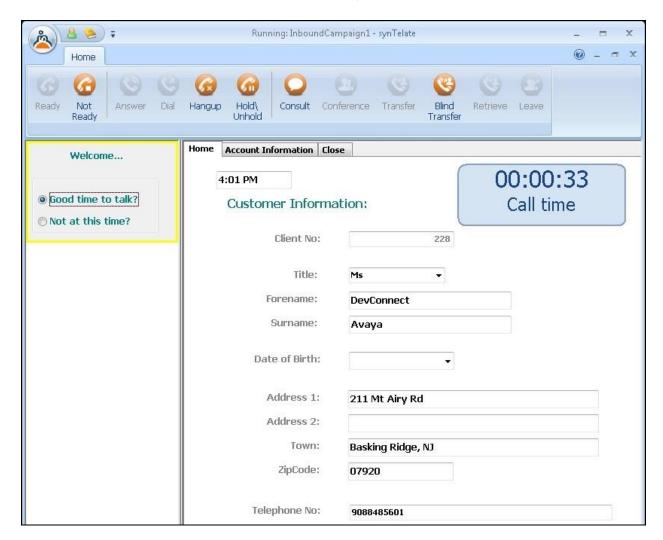
#### Click **Answer**.



Verify that the agent is connected to the PSTN caller with two-way talk paths, and that **Matching Records** pop-up box is displayed with matching records associated with the PSTN caller number, as shown below. Select the pertinent matching entry in the pop-up box.



Verify that the agent screen is updated with the **Customer Information** screen along with proper PSTN caller information obtained from the database, as shown below.



# 9. Conclusion

These Application Notes describe the configuration steps required for Inisoft synTelate Enterprise 4.4.6 to successfully interoperate with Avaya Aura® Communication Manager 6.3 and Avaya Aura® Application Enablement Services 6.3. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

# 10. Additional References

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

- **1.** Administering Avaya Aura® Communication Manager, Document 03-300509, Issue 10, Release 6.3, June 2014, available at http://support.avaya.com.
- **2.** Avaya Aura® Application Enablement Services Administration and Maintenance Guide, Release 6.3, 02-300357, June 2014, available at <a href="http://support.avaya.com">http://support.avaya.com</a>.
- 3. Helpfile for synTelate version 4.4, available from the synTelate Enterprise installation CD.

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