



DevConnect Program

Application Notes for Globitel SpeechLog Call Recording 8.0 with Avaya Aura® Communication Manager and Avaya Aura® Application Enablement Services 10.1 using DMCC Multiple Registration – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Globitel SpeechLog Call Recording 8.0 to interoperate with Avaya Aura® Communication Manager 10.1 and Avaya Aura® Application Enablement Services 10.1. Globitel SpeechLog Call Recording is a voice recording solution which can be used to record voice streams for Avaya telephony using Multiple Registration recording method.

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.

1. Introduction

These Application Notes describe the configuration steps required for Globitel SpeechLog Call Recording 8.0 to interoperate with Avaya Aura® Communication Manager 10.1 and Avaya Aura® Application Enablement Services 10.1 using the Multiple Device Registration recording method.

Globitel SpeechLog Call Recording 8.0 is a voice recording system which can be used to record the voice stream of Avaya telephony endpoints. In this compliance test, it uses Avaya Aura® Communication Manager's Multiple Device Registration feature via Avaya Aura® Application Enablement Services (AES) Device, Media, and Call Control (DMCC) interface to capture the audio and call details for call recording. The application uses the Avaya Aura® Application Enablement Services DMCC service to register the extensions that are to be recorded. When the extension receives an event pertaining to the start of a call, the application receives the extensions RTP media stream.

2. General Test Approach and Test Results

The general test approach was to validate correct recording of calls in a variety of call handling scenarios and recovery from network interruption using DMCC Multiple Registration. All test cases were performed manually.

For the manual part of the testing, each call was handled manually on the extension telephone with generation of unique audio content for the recordings. Necessary user actions such as hold and reconnect were performed from the agent telephones to test the different call scenarios.

The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet connection to Globitel SpeechLog Call Recording.

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 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 the Globitel SpeechLog Call Recording did not include use of any specific encryption features as requested by Globitel.

2.1. Interoperability Compliance Testing

The interoperability compliance test included both feature functionality and serviceability testing. The feature functionality testing focused on placing and recording calls in different call scenarios with good quality audio recordings and accurate call records. The tests included:

- **Inbound/Outbound calls** – Test call recording for inbound and outbound calls to the Communication Manager to and from PSTN callers.
- **Hold/Transferred/Conference calls** – Test call recording for calls transferred to and in conference with PSTN callers.
- **Feature calls** - Test call recording for calls that are parked or picked up using Call Park, Call Pickup, Bridged Appearance and Service Observing.
- **Calls to Elite Agents** – Test call recording for calls to Communication Manager agents logged into Avaya Agent for Desktop.
- **Serviceability testing** - The behavior of Globitel SpeechLog Call Recording under different simulated failure conditions.

2.2. Test Results

All test cases were executed and verified successfully.

2.3. Support

Technical support on Globitel SpeechLog Call Recording 8.0 can be obtained through the following: Globitel, Khaldia, Amman, Jordan.

support@globitel.com

Hotline: +962 (7) 97315050

Phone: +962 (6) 5300 130

Fax: +962 (6) 5300 144

P.O. Box 1786 Amman 11821 Jordan

3. Reference Configuration

Globitel SpeechLog Call Recording can be configured on a single server or with components distributed across multiple servers. The compliance test used a single server configuration.

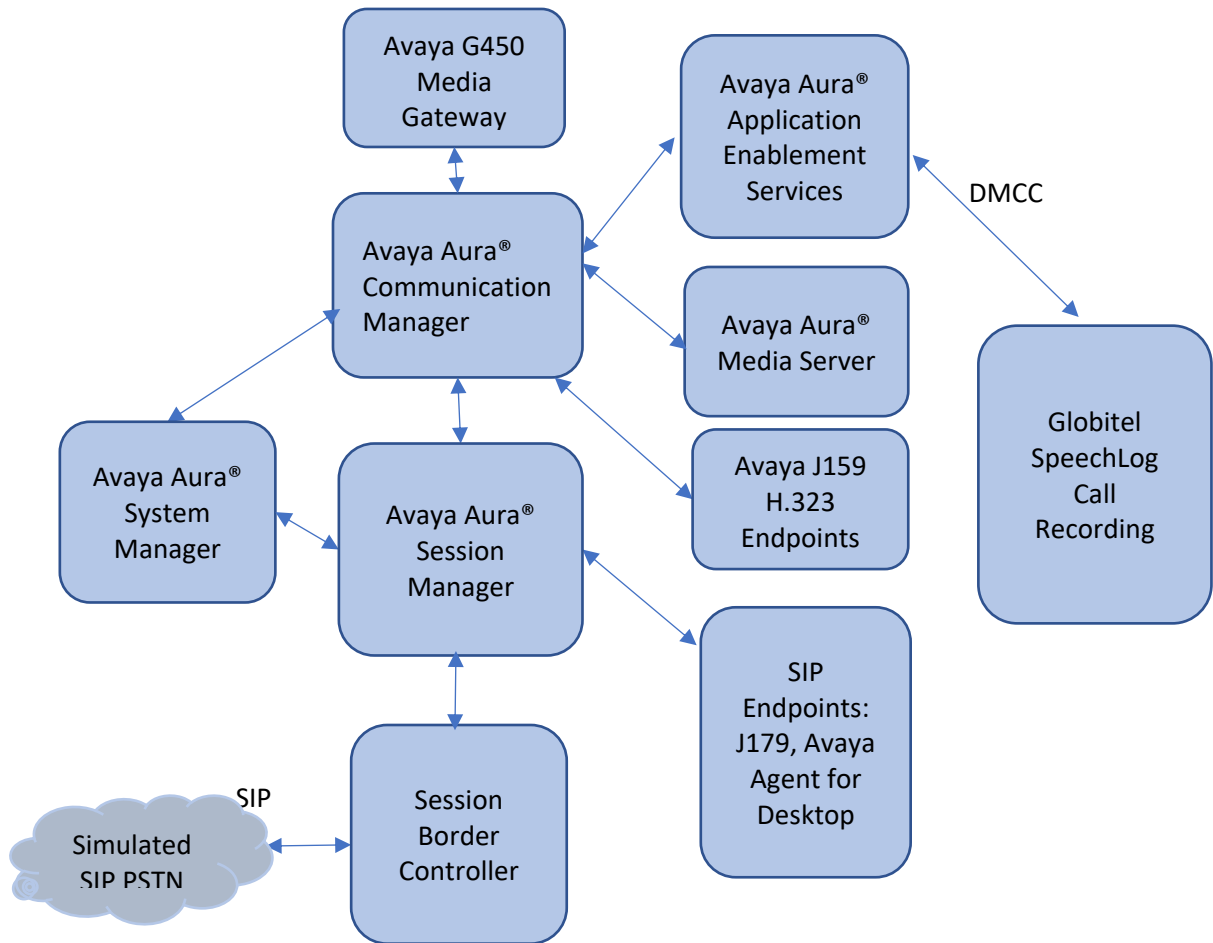


Figure 1: Compliance Testing Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® System Manager in Virtual Environment	10.1.2.1012015476
Avaya Aura® Session Manager in Virtual Environment	10.1.2.0.1012016
Avaya Aura® Communication Manager in Virtual Environment	10.1.2 - 01.0.974.0 27783
Avaya G450 Media Gateway	42.18.1
Avaya Aura® Media Server in Virtual Environment	10.1.0 SP 2
Avaya Aura® Application Enablement Services in Virtual Environment	10.1.2.0.0.12-0
Avaya Session Border Controller in Virtual Environment	10.1.0.0-32-21432
Avaya Agent for Desktop for Windows	2.0.6.26.3001
Avaya J179 IP Phone (SIP)	4.1.1
Avaya J159 IP Deskphone (H.323)	6.8.5
Globitel SpeechLog Call Recording	8.0

5. Configure Avaya Aura® Communication Manager

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

- Administer CTI link.
- Configure H.323 Stations for Multi-Registration.
- Configure SIP Stations for Multiple Registration.

5.1. 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 1	Page 1 of 3
CTI Link: 1	CTI LINK
Extension: 79999	
Type: ADJ-IP	
Name: aes140	COR: 1
Unicode Name? n	

5.2. Configure H.323 Stations for Multi-Registration

All endpoints that are to be monitored by Globitel will need to have IP Softphone set to **y**. IP Softphone must be enabled in order for Multiple Registration to work. Type **change station x** where **x** is the extension number of the station to be monitored. Also, note this extension number for configuration required during the Globitel setup in **Section 7**. Note the **Security Code** and ensure that **IP Softphone** is set to **y**.

change station 70010	Page 1 of 5
STATION	
Extension: 70010	Lock Messages? n
Type: 9641	Security Code: 111222
Port: S000004	Coverage Path 1:
Name: H323 Ext1	Coverage Path 2:
	Hunt-to Station:
	BCC: 0
	TN: 1
	COR: 1
	COS: 1
	Tests: y
STATION OPTIONS	
	Time of Day Lock Table:
Loss Group: 19	Personalized Ringing Pattern: 1
	Message Lamp Ext: 70010
Speakerphone: 2-way	Mute Button Enabled? y
Display Language: english	Button Modules: 0
Survivable GK Node Name:	
Survivable COR: internal	Media Complex Ext:
Survivable Trunk Dest? y	IP SoftPhone? y
	IP Video Softphone? n
	Short/Prefixed Registration Allowed: default
	Customizable Labels? Y

For compliance testing, two H323 extensions were administered: **70010** and **70011**.

5.3. Configure SIP Stations for Multiple Registration

The configuration for SIP Stations should be using System Manager and this section only shows what needs to be changed.

Each Avaya SIP endpoint or station that needs to be monitored for call recording will need to have **Type of 3PCC Enabled** is set to **Avaya** and **IP Softphone** set to **Yes**.

display station 70000		Page 1 of 6
STATION		
Extension: 70000	Lock Messages? n	BCC: 0
Type: J179	Security Code: 111222	TN: 1
Port: S000010	Coverage Path 1:	COR: 1
Name: SIP Ext1	Coverage Path 2:	COS: 1
	Hunt-to Station:	Tests: y
STATION OPTIONS		
Time of Day Lock Table:		
Loss Group: 19	Personalized Ringing Pattern: 1	
	Message Lamp Ext: 70000	
Speakerphone: 2-way	Mute Button Enabled? y	
Display Language: english	Button Modules: 0	
Survivable GK Node Name:		
Survivable COR: internal	Media Complex Ext:	
Survivable Trunk Dest? y	IP SoftPhone? y	
	IP Video Softphone? n	
	Short/Prefixed Registration Allowed: default	
	Customizable Labels? Y	

Go to **Page 6**.

display station 70000	STATION	Page 6 of 6
SIP FEATURE OPTIONS		
Type of 3PCC Enabled: Avaya SIP Trunk: aar		
Enable Reachability for Station Domain Control: s		
SIP URI: 70000@aura.com		
Primary Session Manager		
IPv4 Address: 10.128.224.18	IPv6 Address:	
IPv4 Node Name: smsip18	IPv6 Node Name:	
Secondary Session Manager		
IPv4 Address:	IPv6 Address:	
IPv4 Node Name:	IPv6 Node Name:	
Third Session Manager		
IPv4 Address:	IPv6 Address:	
IPv4 Node Name:	IPv6 Node Name:	
Fourth Session Manager		
IPv4 Address:	IPv6 Address:	
IPv4 Node Name:	IPv6 Node Name:	

For compliance testing, two SIP extensions were administered: **70000** and **70001**.

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
- Administer Globitel user
- Enable CTI User
- Display Port Information
- Restart services

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 screenshot shows the Avaya Application Enablement Services Management Console login interface. At the top left is the Avaya logo in red. To its right, the text "Application Enablement Services" is displayed in bold black, with "Management Console" in a smaller font below it. A thick red horizontal bar spans the width of the page. In the center, there is a light gray rectangular box with a blue border. Inside this box, the text "Please login here:" is at the top. Below it, the label "Username" is followed by a white text input field. At the bottom of the box is a "Continue" button. Another thick red horizontal bar is located at the bottom of the page, just above the footer. The footer text, "Copyright © 2009-2023 Avaya Inc. All Rights Reserved.", is centered at the very bottom.

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

**Application Enablement
Services**
Management Console

Welcome: User cust
Last login: Fri Apr 7 11:07:27 I.T. 2023 from
172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri Apr 07 11:08:30 ICT 2023
HA Status: Not Configured

Home

Home | Help | Logout

▶ AE Services
▶ Communication Manager
Interface
High Availability
▶ Licensing
▶ Maintenance
▶ Networking
▶ Security
▶ Status
▶ User Management
▶ Utilities
▶ Help

Welcome to OAM

The AE Services Operations, Administration, and Management (OAM) Web provides you with tools for managing the AE Server. OAM spans the following administrative domains:

- AE Services - Use AE Services to manage all AE Services that you are licensed to use on the AE Server.
- Communication Manager Interface - Use Communication Manager Interface to manage switch connection and dialplan.
- High Availability - Use High Availability to manage AE Services HA.
- Licensing - Use Licensing to manage the license server.
- Maintenance - Use Maintenance to manage the routine maintenance tasks.
- Networking - Use Networking to manage the network interfaces and ports.
- Security - Use Security to manage Linux user accounts, certificate, host authentication and authorization, configure Linux-PAM (Pluggable Authentication Modules for Linux) and so on.
- Status - Use Status to obtain server status informations.
- User Management - Use User Management to manage AE Services users and AE Services user-related resources.
- Utilities - Use Utilities to carry out basic connectivity tests.
- Help - Use Help to obtain a few tips for using the OAM Help system

Depending on your business requirements, these administrative domains can be served by one administrator for all domains, or a separate administrator for each domain.

6.2. Verify License

Select **Licensing** → **WebLM Server Access** in the left pane, to display the applicable WebLM server log in screen (not shown). Log in using the appropriate credentials and navigate to display installed licenses (not shown).

AVAYA **Application Enablement Services**

Management Console

Welcome: User cust
Last login: Fri Apr 7 11:07:27 I.T. 2023 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri Apr 07 11:09:10 ICT 2023
HA Status: Not Configured

Licensing

Home | Help | Logout

▶ 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

Select **Licensed products** → **APPL_ENAB** → **Application_Enablement** in the left pane, to display the **Licensed Features** screen in the right pane.

Verify that there are sufficient licenses for **Device Media and Call Control** and **TSAPI Simultaneous Users**, as shown below.

WebLM Home	Application Enablement (CTI) - Release: 10 - SID: 10503000 Stanc																																						
Install license	You are here: Licensed Products > Application_Enablement > View License Capacity																																						
Licensed products	License installed on: December 26, 2022 4:16:11 PM +07:00																																						
APPL_ENAB	<div> License File Host IDs: V6-57-E4-FE-7D-54-01 </div>																																						
▼ Application_Enablement	<div> Licensed Features </div>																																						
View license capacity	<div> 14 Items Show All ▼ </div>																																						
View peak usage	<table border="1"> <thead> <tr> <th>Feature (License Keyword)</th> <th>Expiration date</th> <th>Licensed capacity</th> </tr> </thead> <tbody> <tr> <td>Device Media and Call Control VALUE_AES_DMCC_DMC</td> <td>permanent</td> <td>1000</td> </tr> <tr> <td>AES ADVANCED LARGE SWITCH VALUE_AES_AEC_LARGE_ADVANCED</td> <td>permanent</td> <td>1000</td> </tr> <tr> <td>AES HA LARGE VALUE_AES_HA_LARGE</td> <td>permanent</td> <td>1000</td> </tr> <tr> <td>AES ADVANCED AGENT VALUE_AES_ADVANCED_AGENT</td> <td>permanent</td> <td>1000</td> </tr> <tr> <td>AES ADVANCED MEDIUM SWITCH VALUE_AES_AEC_MEDIUM_ADVANCED</td> <td>permanent</td> <td>1000</td> </tr> <tr> <td>Unified CC API Desktop Edition VALUE_AES_AEC_UNIFIED_CC_DESKTOP</td> <td>permanent</td> <td>1000</td> </tr> <tr> <td>CVLAN ASAI VALUE_AES_CVLAN_ASAI</td> <td>permanent</td> <td>1000</td> </tr> <tr> <td>AES HA MEDIUM VALUE_AES_HA_MEDIUM</td> <td>permanent</td> <td>1000</td> </tr> <tr> <td>AES ADVANCED SMALL SWITCH VALUE_AES_AEC_SMALL_ADVANCED</td> <td>permanent</td> <td>1000</td> </tr> <tr> <td>DLG VALUE_AES_DLG</td> <td>permanent</td> <td>1000</td> </tr> <tr> <td>TSAPI Simultaneous Users VALUE_AES_TSAPI_USERS</td> <td>permanent</td> <td>1000</td> </tr> </tbody> </table>			Feature (License Keyword)	Expiration date	Licensed capacity	Device Media and Call Control VALUE_AES_DMCC_DMC	permanent	1000	AES ADVANCED LARGE SWITCH VALUE_AES_AEC_LARGE_ADVANCED	permanent	1000	AES HA LARGE VALUE_AES_HA_LARGE	permanent	1000	AES ADVANCED AGENT VALUE_AES_ADVANCED_AGENT	permanent	1000	AES ADVANCED MEDIUM SWITCH VALUE_AES_AEC_MEDIUM_ADVANCED	permanent	1000	Unified CC API Desktop Edition VALUE_AES_AEC_UNIFIED_CC_DESKTOP	permanent	1000	CVLAN ASAI VALUE_AES_CVLAN_ASAI	permanent	1000	AES HA MEDIUM VALUE_AES_HA_MEDIUM	permanent	1000	AES ADVANCED SMALL SWITCH VALUE_AES_AEC_SMALL_ADVANCED	permanent	1000	DLG VALUE_AES_DLG	permanent	1000	TSAPI Simultaneous Users VALUE_AES_TSAPI_USERS	permanent	1000
Feature (License Keyword)	Expiration date	Licensed capacity																																					
Device Media and Call Control VALUE_AES_DMCC_DMC	permanent	1000																																					
AES ADVANCED LARGE SWITCH VALUE_AES_AEC_LARGE_ADVANCED	permanent	1000																																					
AES HA LARGE VALUE_AES_HA_LARGE	permanent	1000																																					
AES ADVANCED AGENT VALUE_AES_ADVANCED_AGENT	permanent	1000																																					
AES ADVANCED MEDIUM SWITCH VALUE_AES_AEC_MEDIUM_ADVANCED	permanent	1000																																					
Unified CC API Desktop Edition VALUE_AES_AEC_UNIFIED_CC_DESKTOP	permanent	1000																																					
CVLAN ASAI VALUE_AES_CVLAN_ASAI	permanent	1000																																					
AES HA MEDIUM VALUE_AES_HA_MEDIUM	permanent	1000																																					
AES ADVANCED SMALL SWITCH VALUE_AES_AEC_SMALL_ADVANCED	permanent	1000																																					
DLG VALUE_AES_DLG	permanent	1000																																					
TSAPI Simultaneous Users VALUE_AES_TSAPI_USERS	permanent	1000																																					
ASBCE																																							
▶ Session_Border_Controller_E_AE																																							
COMMUNICATION_MANAGER																																							
▶ Call_Center																																							
▶ Communication_Manager																																							
DEVICE_SERVICES																																							
▶ Device_Services																																							
MSR																																							
▶ Media_Server																																							
SYSTEM_MANAGER																																							
▶ System_Manager																																							
SessionManager																																							
▶ SessionManager																																							
VDIA																																							
▶ VDIA																																							
Uninstall license																																							
Server properties																																							
Shortcuts																																							
Help for Licensed products																																							

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 screenshot shows the 'TSAPI Links' screen in the Management Console. The top navigation bar includes 'AE Services | TSAPI | TSAPI Links' and 'Home | Help | Logout'. The left sidebar shows a tree view with 'AE Services' expanded, containing 'CVLAN', 'DLG', 'DMCC', 'SMS', 'TSAPI' (expanded), 'TWS', and 'Communication Manager Interface'. Under 'TSAPI', 'TSAPI Links' is selected. The main content area is titled 'TSAPI Links' and contains a table with columns: 'Link', 'Switch Connection', 'Switch CTI Link #', 'ASAI Link Version', and 'Security'. Below the table are three buttons: 'Add Link', 'Edit Link', and 'Delete 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 **CM121** is selected. For **Switch CTI Link Number**, select the CTI link number from **Section 5.1**. Retain the default values in the remaining fields.

The screenshot shows the 'Edit TSAPI Links' screen in the Management Console. The top navigation bar includes 'AE Services | TSAPI | TSAPI Links' and 'Home | Help | Logout'. The left sidebar shows a tree view with 'AE Services' expanded, containing 'CVLAN', 'DLG', 'DMCC', 'SMS', 'TSAPI' (expanded), 'TWS', and 'Communication Manager Interface'. Under 'TSAPI', 'TSAPI Links' is selected. The main content area is titled 'Edit TSAPI Links' and contains a form with the following fields: 'Link' (text input with value '1'), 'Switch Connection' (dropdown menu with value 'CM121'), 'Switch CTI Link Number' (dropdown menu with value '1'), 'ASAI Link Version' (dropdown menu with value '12'), and 'Security' (dropdown menu with value 'Both'). Below the form are three buttons: 'Apply Changes', 'Cancel Changes', and 'Advanced Settings'. The top right corner of the page displays system information: 'Welcome: User cust', 'Last login: Fri Apr 7 11:08:29 I.T. 2023 from 172.16.8.167', 'Number of prior failed login attempts: 0', 'HostName/IP: aes140.aura.com/10.30.5.140', 'Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE', 'SW Version: 10.1.2.0.0.12-0', 'Server Date and Time: Fri Apr 07 11:12:21 ICT 2023', and 'HA Status: Not Configured'.

6.4. Administer Globitel User

Select **User Management** → **User Admin** → **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.

AVAYA **Application Enablement Services**
Management Console

Welcome: User cust
Last login: Mon Apr 24 17:17:29 I.T. 2023 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes140.aura.com/10.30.5.140
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.2.0.0.12-0
Server Date and Time: Fri Apr 28 16:11:27 ICT 2023
HA Status: Not Configured

User Management | User Admin | Add UserHome | Help | Logout

▶ AE Services

▶ Communication Manager Interface

High Availability

▶ Licensing

▶ Maintenance

▶ Networking

▶ Security

▶ Status

▼ User Management

▶ Service Admin

▼ User Admin

▪ Add User

▪ Change User Password

▪ List All Users

▪ Modify Default Users

▪ Search Users

▶ Utilities

▶ Help

Add User

Fields marked with * can not be empty.

* User Idglobitel

* Common Nameglobitel

* Surnameglobitel

* User Password*****

* Confirm Password*****

Admin Note

Avaya RoleNone

Business Category

Car License

CM Home

Css Home

CT UserYes

Department Number

Display Name

Employee Number

Employee Type

6.5. Enable CTI User

Navigate to the CTI Users screen by selecting **Security** → **Security Database** → **CTI Users** → **List All Users**. In the CTI Users window, select the user that was set up in **Section 6.4** and select the **Edit** option.

User ID	Common Name	Worktop Name	Device ID
<input checked="" type="radio"/> globitel	globitel	NONE	NONE
<input type="radio"/> uniphore	uniphore	NONE	NONE

[Edit](#) [List All](#)

The **Edit CTI User** screen appears. Tick the **Unrestricted Access** box and **Apply Changes** at the bottom of the screen.

Edit CTI User

User Profile: User ID: globitel
Common Name: globitel
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](#)

6.6. Display Port Information

Select **Networking** → **Ports**, in the DMCC Server Ports section ensure that Unencrypted Port is Enabled and set to 4721. Click **Apply Changes** (not shown) when done.

Networking | Ports

Home | Help | Logout

▶ 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

CVLAN Ports

Unencrypted TCP Port9999

Enabled Disabled

Encrypted TCP Port9998

Enabled Disabled

DLG Port

TCP Port5678

TSAPI Ports

TSAPI Service Port450

Enabled Disabled

Local TLINK Ports

TCP Port Min1024

TCP Port Max1039

Unencrypted TLINK Ports

TCP Port Min1050

TCP Port Max1065

Encrypted TLINK Ports

TCP Port Min1066

TCP Port Max1081

DMCC Server Ports

Unencrypted Port4721

Enabled Disabled

Encrypted Port4722

Enabled Disabled

TR/87 Port4723

Enabled Disabled

6.7. Restart Services

Select **Maintenance** → **Service Controller** from the left pane, to display the **Service Controller** screen in the right pane. Check **TSAPI Service** and **DMCC Service** then click **Restart Service**.

AVAYA

Application Enablement Services
Management Console

Welcome: User cust
Last login: Tue Aug 23 16:06:09 2022 from 172.16.8.167
Number of prior failed login attempts: 0
HostName/IP: aes155.aura.com/10.128.226.155
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 10.1.0.1.0.7-0
Server Date and Time: Tue Sep 20 15:27:30 ICT 2022
HA Status: Not Configured

Maintenance | Service ControllerHome | Help | Logout

▶ AE Services

▶ Communication Manager Interface

▶ High Availability

▶ Licensing

▼ Maintenance

▶ Date Time/NTP Server

▶ Security Database

▶ Service Controller

▶ Server Data

▶ Networking

▶ Security

▶ Status

▶ User Management

▶ Utilities

▶ Help

Service Controller

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

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

StartStopRestart ServiceRestart AE ServerRestart LinuxRestart Web Server

7. Configure Globitel SpeechLog Call Recording

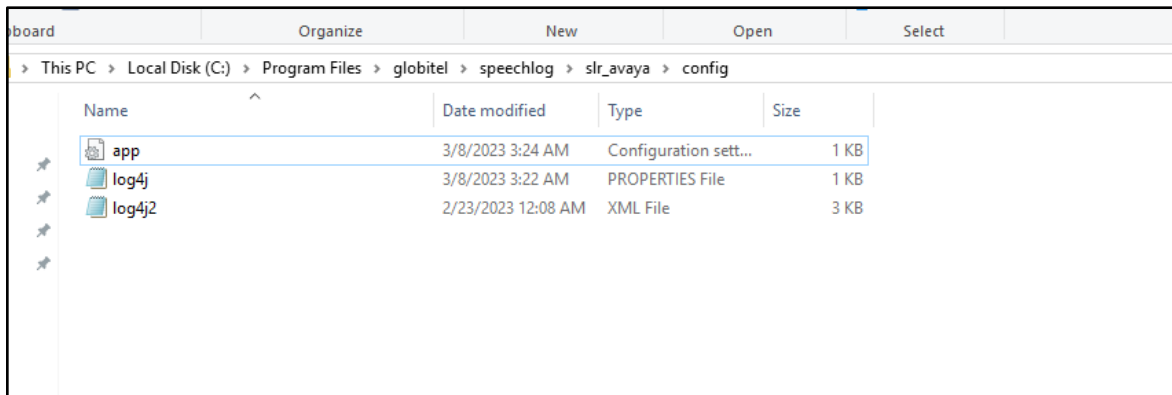
This section provides the procedures for configuring Globitel SpeechLog Call Recording. The procedures include following areas:

- Administer CTI server.
- Administer Virtual Ports.

The configuration of Globitel SpeechLog Call Recording is performed by Globitel engineers. The procedural steps are presented in these Application Notes are for informational purposes.

7.1. Administer CTI Server

Navigate to the **C:\Program Files\globitel\speechlog\slr_avaya\config** directory, and open the configuration file from the **SampleConfigFiles** directory to the current directory shown below.



Open the **app** file with the Notepad application, and configure as below:

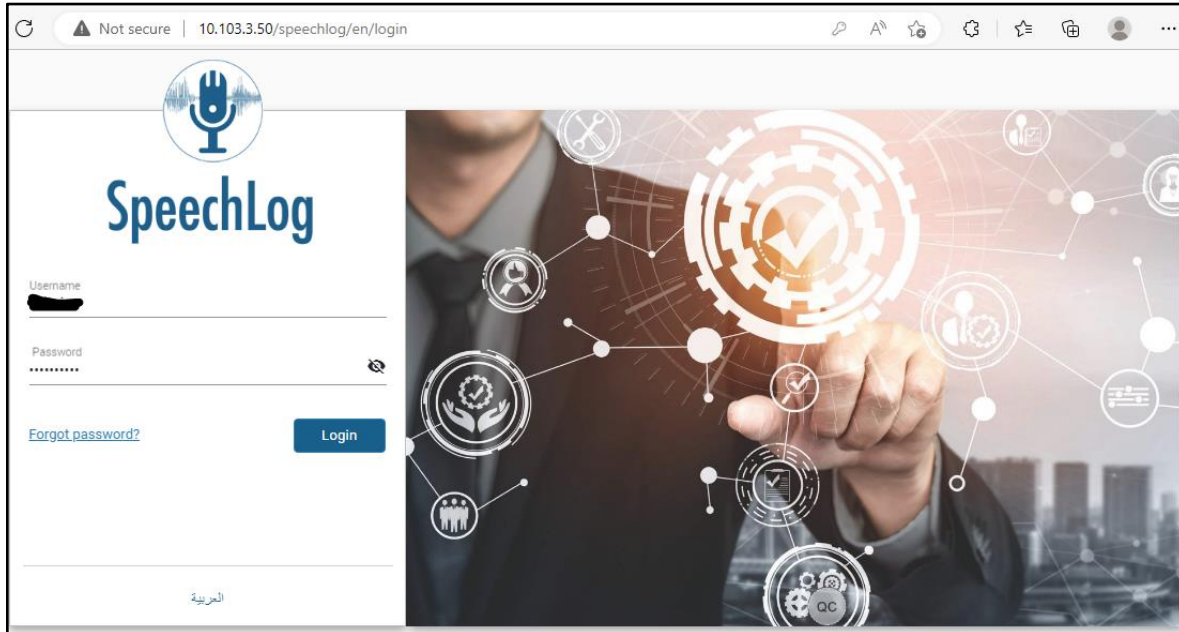
```
[app]
id = 1
type = tapi_mr
name = Globitel Speechlog Dmcc Service
host = IP address of Globitel Speechlog Call Recording server
storage_path = C:/globitel/calls/
```

```
[slc]
host = IP address of Globitel Speechlog Call Recording server
port = 55501
```

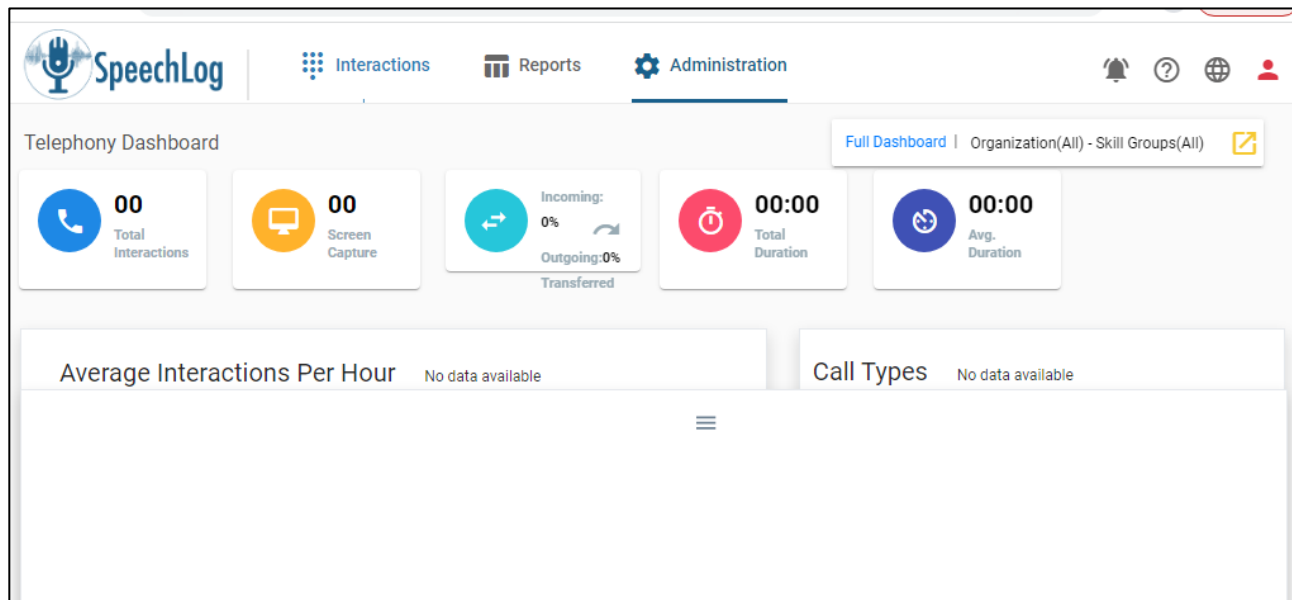
```
[cti]
host = Avaya AES IP Address
username = globitel
password = password for globitel user create in Section 6.4
cmapi_port = 4721 as per Section 6.6
tsapi_port = 450 as per Section 6.6
tsapi_link = "AVAYA#CM121#CSTA#AES140"
```

7.2. Administer Register Devices

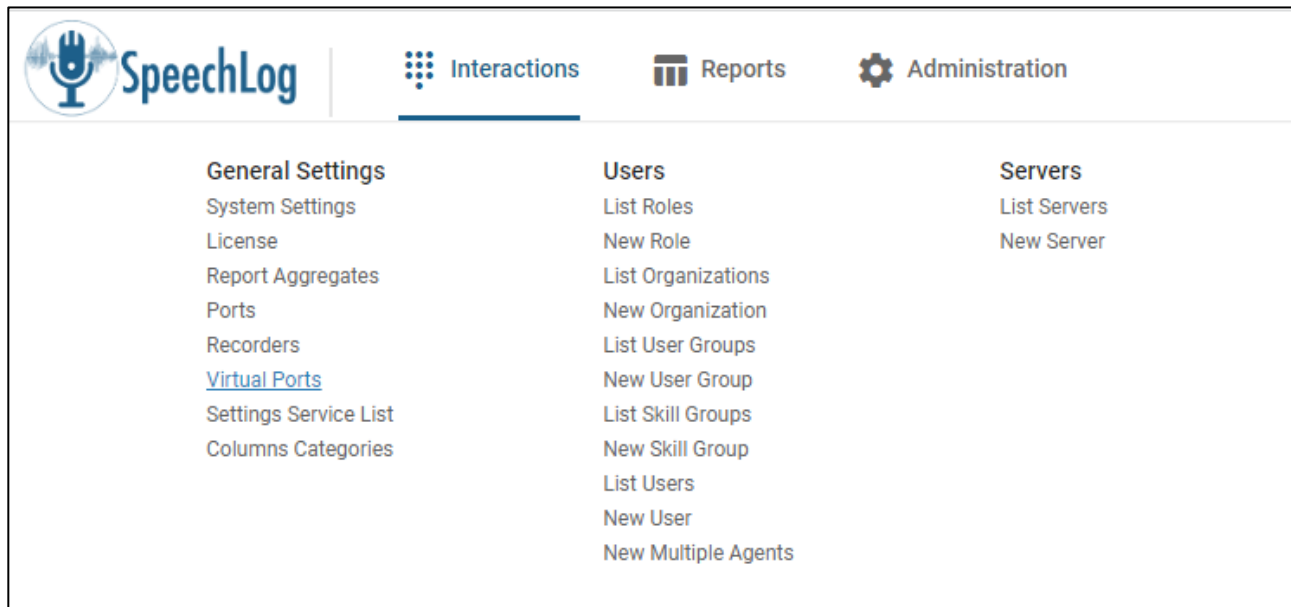
Access the Globitel SpeechLog Call Recording web-based interface by using the URL “http://ip-address” in an Internet browser window, where **ip-address** is the IP address of the Globitel SpeechLog Call Recording server. Log in using the appropriate credentials.



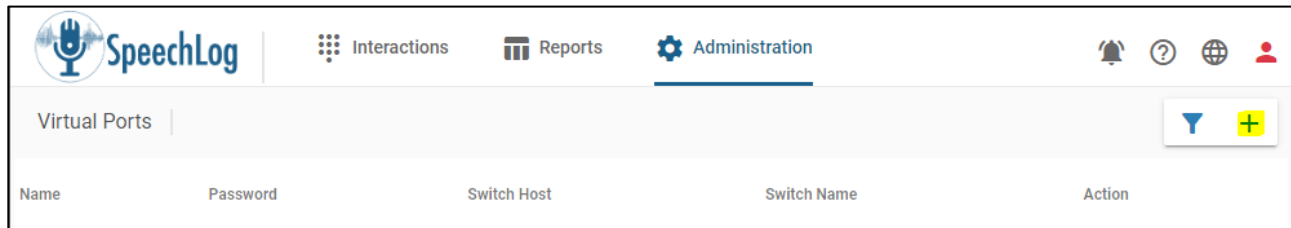
The screen below is displayed. Click on the **Administration** icon.



Select **Virtual Ports**.



The **Virtual Ports** screen is displayed. Select + to add new **Virtual Ports**.



Input stations information that created in **Section 5.2 and 5.3**. Click **Save**.

A screenshot of the 'Add Port' form in the SpeechLog application. The form has a title 'Add Port' at the top. Below the title are four input fields: 'Name' with the value '70010', 'Password' with the value '071188', 'Switch Host' with the value '10.30.5.121', and 'Switch Name' with the value 'CM121'. At the bottom right of the form are three buttons: 'Cancel' (red), 'Clear' (yellow), and 'Save' (blue).

For compliance testing these **Virtual Ports** created in Speechlog, which correspond to the two H.323 stations and the two SIP stations that were used and recorded.

Virtual Ports 				
<div><div></div><div></div></div>				
Name	Password	Switch Host	Switch Name	Action
70010	071188	10.30.5.121	CM121	<div><div></div><div></div></div>
70011	071188	10.30.5.121	CM121	<div><div></div><div></div></div>
70000	071188	10.30.5.121	CM121	<div><div></div><div></div></div>
70001	071188	10.30.5.121	CM121	<div><div></div><div></div></div>

8. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Communication Manager, Application Enablement Services, and Globitel SpeechLog Call Recording.

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 5.1**, as shown below.

```
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	aes140	established	1523	1523

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. 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 total number of monitored extensions from **Section 5.2** and **Section 5.3**.

Status | Status and Control | TSAPI Service SummaryHome | 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	CM121	1	Talking	Fri Apr 7 15:25:51 2023	Online	20	2	1523	1523	30

OnlineOffline

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

TSAPI Service StatusTLink StatusUser Status

Verify the status of the DMCC link by selecting **Status → Status and Control → DMCC Service Summary** from the left pane. The **DMCC Service Summary → Session Summary** screen is displayed.

Verify the **User** column shows an active session with the Globitel user name from **Section 6.4**, and that the **# of Associated Devices** column reflects the total number of monitored extensions from **Section 5.2** and **Section 5.3**.

Status | Status and Control | DMCC 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

DMCC Service Summary - Session Summary

Please do not use back button

☐ Enable page refresh every 60 seconds

Session Summary [Device Summary](#)
Generated on Mon Jun 26 16:57:19 ICT 2023

Service Uptime: 26 days, 6 hours 48 minutes

Number of Active Sessions: 1

Number of Sessions Created Since Service Boot: 4

Number of Existing Devices: 4

Number of Devices Created Since Service Boot: 4

	Session ID	User	Application	Far-end Identifier	Connection Type	# of Associated Devices
<input type="checkbox"/>	C382E127CA5E77E0D F4496962DCC7BAB-5	globitel	cmapiApplication	10.103.3.50	XML Unencrypted	4

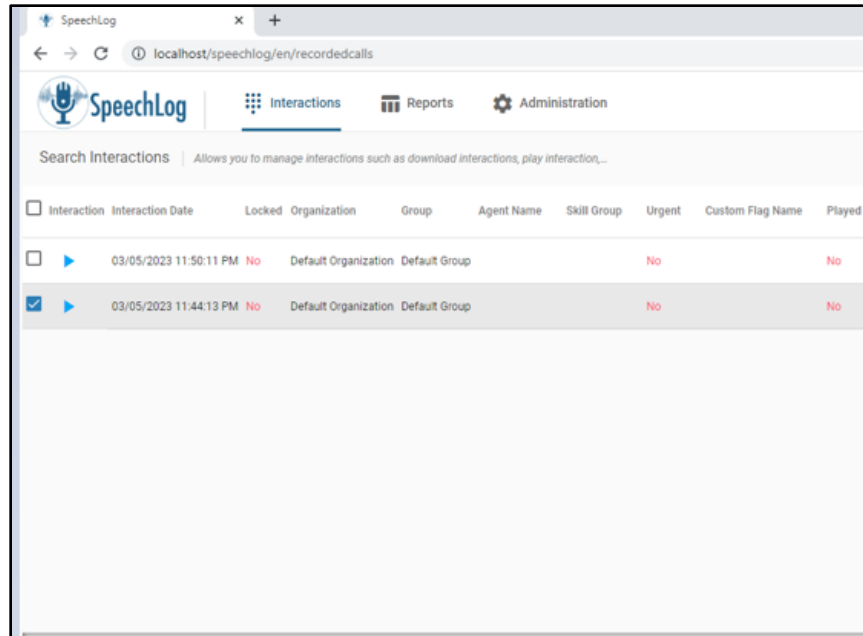
[Terminate Sessions](#)
[Show Terminated Sessions](#)

Item 1-1 of 1

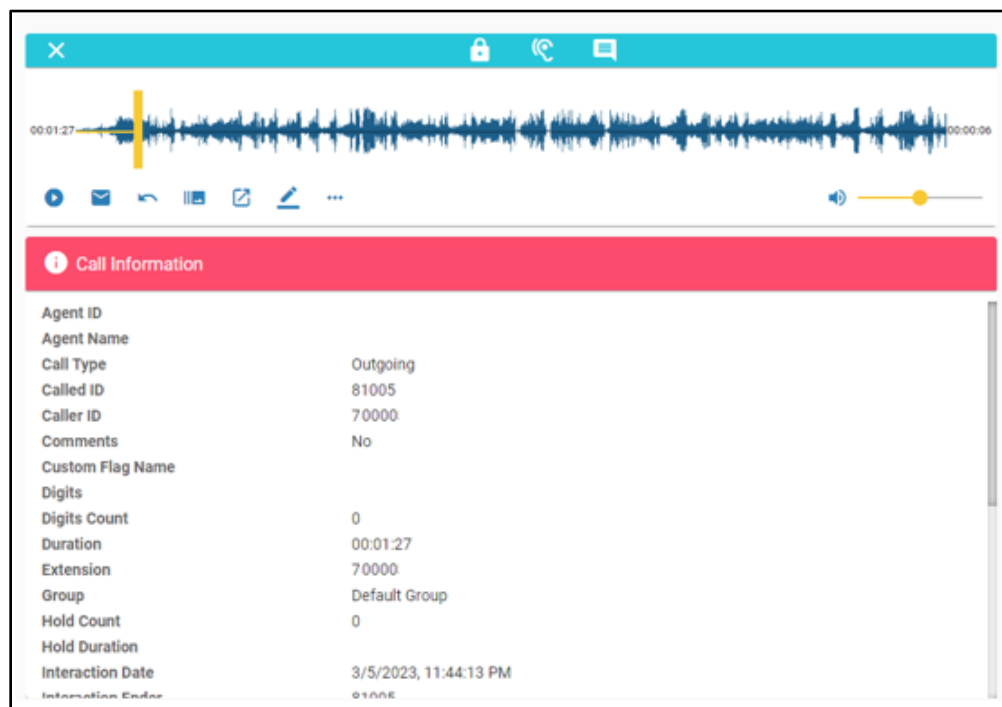
1 Go

8.3. Verify Globitel SpeechLog Call Recording

Follow the procedures in **Section 7.2** to log in to the Globitel SpeechLog Call Recording 8.0 web-based interface. Select **Interaction**, it will show a listing of all recording entries.



Double click on the entry to listen to the playback. Verify that call recording is played back.



9. Conclusion

These Application Notes describe the configuration steps required for Globitel SpeechLog Call Recording 8.0 to successfully interoperate with Avaya Aura® Communication Manager and Avaya Aura® Application Enablement Services 10.1 using Multiple Registration. All feature and serviceability test cases were completed successfully.

10. Additional References

This section references the Avaya and Globitel SpeechLog Call Recording product documentation that are relevant to these Application Notes.

Product documentation for Avaya products may be found at <http://support.avaya.com>.

1. *Administering Avaya Aura® Communication Manager*, Release 10.1.x, Issue 1, Dec 2021
2. *Administering Avaya Aura® Session Manager*, Release 10.1.x, Issue 3, April 2022
3. *Administering Avaya Aura® System Manager*, Release 10.1.x, Issue 6, June 2022
4. *Administering Avaya Aura® Application Enablement Services*, Release 10.1.x, Issue 4, April 2022

Product Documentation for Globitel products may be found at <https://www.globitel.com/>

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