



Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Aura Alliance Client for Notes/Sametime Deskphone Mode with Avaya Engagement Call Control Snap-in installed on Avaya Breeze™ – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Aura Alliance Client for Notes/Sametime application to interoperate with Avaya Engagement Call Control Snap-in installed on Avaya Breeze.

In the compliance testing, Aura Alliance Client for Notes/Sametime application used HTTPS protocol to connect to Avaya Engagement Call Control service to get events and monitor a deskphone on Avaya Aura® Communication Manager.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as 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 Aura Alliance Client for Notes/Sametime application to interoperate with Avaya Engagement Call Control (ECC) Snap-in installed on Avaya Breeze. Engagement Call Control uses Application Enablement Services Device, Media and Call Control (DMCC) APIs and exposes a subset of the call control features as Representational State Transfer (REST) API and also publishes call events over HTTP.

In the compliance testing, Aura Alliance Client for Notes/Sametime is windows-based application that received call events from Engagement Call Control service to monitor and control a deskphone on Avaya Aura® Communication Manager.

2. General Test Approach and Test Results

The feature test cases were performed manually.

The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet connection to the workstation which Aura Alliance Client application installed on it and restarting the Engagement Call Control service.

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 Aura Alliance Client for Notes/Sametime utilized enabled capabilities of Transport Layer Security (TLS) and HTTPS as requested by Aura Alliance

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing. The feature testing focused on verifying the following on Aura Alliance Client for Notes/Sametime: Monitor and receive call events such as answer incoming call, place outgoing call, put call on hold...etc.

The serviceability testing focused on verifying the ability of Aura Alliance Client for Notes/Sametime to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet connection from the workstation and restarting the AES server.

2.2. Test Results

All test cases were executed and passed successfully.

2.3. Support

Support from Avaya is available by visiting the website <http://support.avaya.com> and a list of product documentation can be found in **Section 9** of these Application Notes. Technical support for the Aura Alliance Client product can be obtained as follows:

Aura Alliance Limited

Tel: +44 (0)20 3127 7761

<http://www.auraalliance.com/global-support/>

3. Reference Configuration

Figure 1 illustrates a sample configuration consisting of Avaya Aura® System Manager, Avaya Aura® Session Manager, Avaya Aura® Communication Manager, and Avaya Aura® Media Server running on Virtualized Environment. The Avaya G450 Media Gateway registers to Communication Manager and has PRI/T1 trunk to simulated PSTN. The Aura Alliance Client for Notes/Sametime was running on a Windows 10. Avaya Engagement Call Control snap-in installed on top of Avaya Breeze which has a TSAPI connection to Avaya Aura® Application Enablement Services server.

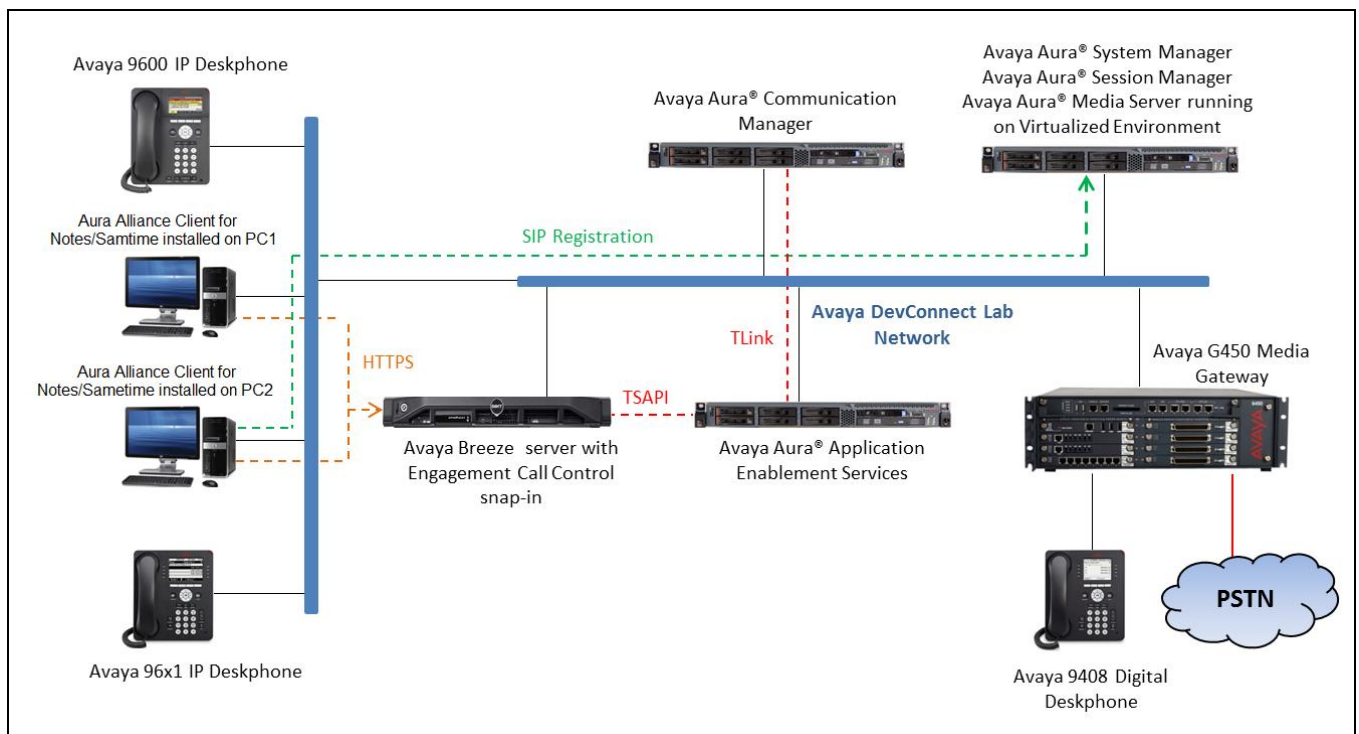


Figure 1: Compliance Testing Configuration

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 running in Virtual Environment	R017x.01.0.532. 7.1.1 FP1
Avaya G450 Media Gateway	38.20.0
Avaya Aura® Media Server running in Virtual Environment	7.8.0.333
Avaya Aura® Application Enablement Services in Virtual Environment	7.1.1.0.0.5-0
Avaya Aura® System Manager running on Virtualized Environment	7.1.1 FP1
Avaya Aura® Session Manager running on Virtualized Environment	7.1.1.0.711008
Avaya Breeze™	3.3.1.1
Avaya Engagement Call Control	3.3.0.0
Avaya 9611G IP Deskphone (SIP)	Avaya one-X® Deskphone Release 7.1.1
Avaya 9641GS IP Deskphone (H.323)	Avaya one-X® Deskphone Release 6.65
Aura Alliance Client running on IBM Notes	10.1.11
IBM Notes	9.0 FP9

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
- Administer AE Services

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 4**. 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		Page	4 of	12
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 1		Page	1 of	3
CTI LINK				
CTI Link:	1			
Extension:	3332			
Type:	ADJ-IP			
		COR: 1		
Name:	AES70			

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 19
                                FEATURE-RELATED SYSTEM PARAMETERS

SYSTEM PRINTER PARAMETERS
  Endpoint:                      Lines Per Page: 60

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: 01
      Copy UCID for Station Conference/Transfer? y
```

Navigate to **Page 13**, and enable **Send UCID to ASAI**. This parameter allows for the universal call ID to be sent to ASAI and it will be used by Engagement Call Control application.

```
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 UI 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
      Prefer H.323 Over SIP For Dual-Reg Station 3PCC Make Call? n
```


5.4. Administer AE Services

To administer the transport link to AES, use the command “change ip-services”. On Page 1, add an entry with the following values. **Service Type** should be selected as **AESVCS**, enter “y” in **Enabled**, “procr” in the **Local Node** and “8765” in the **Local Port**.

change ip-services					Page	1 of 4
IP SERVICES						
Service Type	Enabled	Local Node	Local Port	Remote Node	Remote Port	
AESVCS	y	procr	8765			

Go to **Page 4**. The password entered for **Password** field must match the password on the AES server in the Switch Connection in **Section 6.3**. The **AE Services Server** should match with the host name of the AES server. To obtain the host name of AES server, use the command “**uname -n**” in the Linux command prompt.

change ip-services					Page	4 of 4
AE Services Administration						
Server ID	AE Services Server	Password	Enabled	Status		
1:	aes70	*	y	in use		

6. Configure Avaya Aura® Application Enablement Services

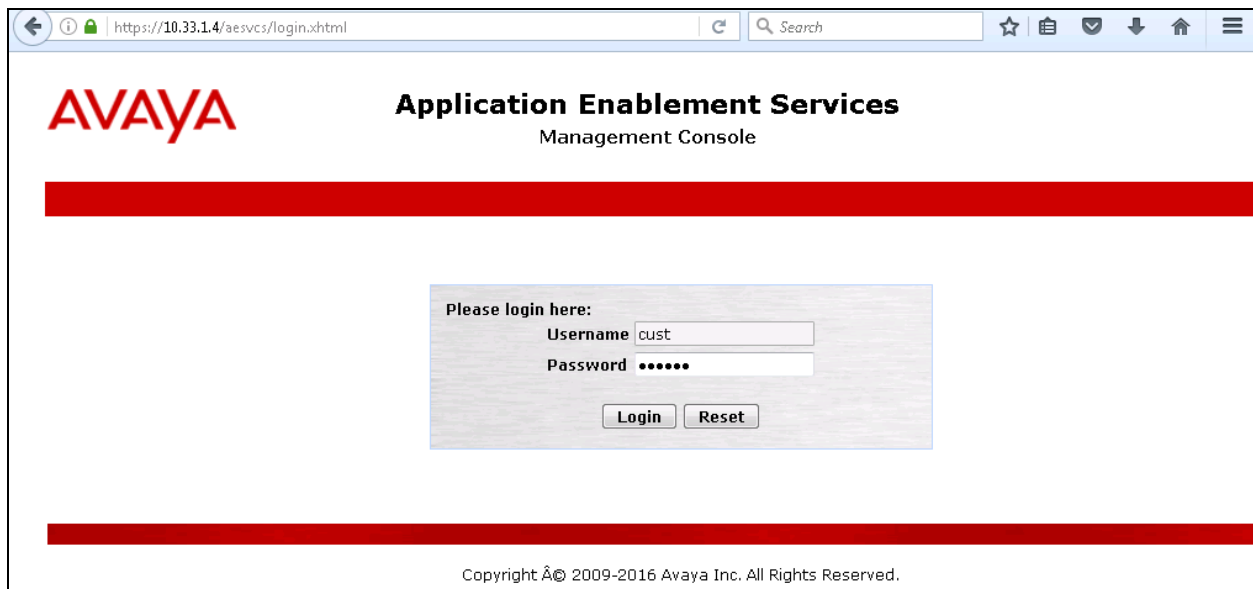
This section provides the procedures for configuring Application Enablement Services. The procedures include the following areas:

- Launch OAM interface
- Verify license
- Administer Switch Connection
- Administer TSAPI link
- Administer CTI user
- Administer Security Database
- Administer ports
- 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 a web browser window with the URL `https://10.33.1.4/aesvcs/login.xhtml`. The page features the Avaya logo and the title "Application Enablement Services Management Console". A red horizontal bar is positioned above the login form. The login form itself is titled "Please login here:" and contains fields for "Username" (with the value "cust") and "Password" (masked with dots). Below the password field are "Login" and "Reset" buttons. Another red horizontal bar is located below the login form. At the bottom of the page, the copyright notice "Copyright © 2009-2016 Avaya Inc. All Rights Reserved." is displayed.

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

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 for user "cust" with login details. A red navigation bar contains "Home", "Help", and "Logout". On the left, a sidebar lists various services: AE Services, Communication Manager Interface, High Availability, Licensing, Maintenance, Networking, Security, Status, User Management, Utilities, and Help. The main content area displays a "Welcome to OAM" message, explaining that the OAM Web provides tools for managing the AE Server and listing administrative domains: AE Services, Communication Manager Interface, High Availability, Licensing, Maintenance, Networking, Security, Status, User Management, Utilities, and Help. It also notes that these domains can be served by one administrator or separate administrators.

AVAYA Application Enablement Services Management Console

Welcome: User cust
Last login: Thu Nov 24 09:28:54 2016 from 135.10.98.86
Number of prior failed login attempts: 0
HostName/IP: aes70/10.33.1.4
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 7.0.1.0.3.15-0
Server Date and Time: Fri Nov 25 10:45:34 EST 2016
HA Status: Not Configured

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.

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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).

The screenshot shows the Avaya Application Enablement Services Management Console with the "Licensing" section selected in the sidebar. The main content area displays instructions for setting up and maintaining the WebLM, including the WebLM Server Address, WebLM Server Access, and Reserved Licenses. A note at the bottom states: "NOTE: Please disable your pop-up blocker if you are having difficulty with opening this page".

AVAYA Application Enablement Services Management Console

Welcome: User cust
Last login: Fri Nov 25 10:45:17 2016 from 135.10.98.86
Number of prior failed login attempts: 0
HostName/IP: aes70/10.33.1.4
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 7.0.1.0.3.15-0
Server Date and Time: Fri Nov 25 10:52:17 EST 2016
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

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

KP; Reviewed:
SPOC 12/6/2017

6.3. Administer Switch Connection

Select **Communication Manager Interface** → **Switch Connections** from the left pane of the **Management Console**, enter a name in **Switch Connection** box and click **Add** button (not shown). Enter the password as configured in **Section 5.4** in the **Switch Password** and **Confirm Switch Password** fields and check on **Processor Ethernet** field if the Processor Ethernet is used in Communication Manager. Click **Apply** button to save the configuration.

The screenshot shows the Avaya Application Enablement Services Management Console. The left navigation pane is expanded to 'Communication Manager Interface' > 'Switch Connections'. The main content area is titled 'Connection Details - interopCM'. It contains the following fields:

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

At the bottom of the form are 'Apply' and 'Cancel' buttons. The top right of the console displays user information: 'Welcome: User cust', 'Last login: Fri Nov 25 10:50:11 2016 from 135.10.98.86', 'Number of prior failed login attempts: 0', 'HostName/IP: aes70/10.33.1.4', 'Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE', 'SW Version: 7.0.1.0.3.15-0', 'Server Date and Time: Fri Nov 25 11:12:37 EST 2016', and 'HA Status: Not Configured'.

Select the **interopCM** switch connection that has been added above, and select **Edit PE/CLAN IPs** to add the IP address for the switch connection.

The screenshot shows the Avaya Application Enablement Services Management Console. The left navigation pane is expanded to 'Communication Manager Interface' > 'Switch Connections'. The main content area is titled 'Switch Connections'. It features a table with the following columns: 'Connection Name', 'Processor Ethernet', 'Msg Period', and 'Number of Active Connections'.

Connection Name	Processor Ethernet	Msg Period	Number of Active Connections
<input type="radio"/> CLAN1	No	30	1
<input checked="" type="radio"/> interopCM	Yes	30	1
<input type="radio"/> server1	Yes	30	0

Below the table are several buttons: 'Edit Connection', 'Edit PE/CLAN IPs' (highlighted with a red box), 'Edit H.323 Gatekeeper', 'Delete Connection', and 'Survivability Hierarchy'. The 'Add Connection' button is located above the table. The top right of the console displays user information: 'Welcome: User cust', 'Last login: Fri Nov 25 10:50:11 2016 from 135.10.98.86', 'Number of prior failed login attempts: 0', 'HostName/IP: aes70/10.33.1.4', 'Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE', 'SW Version: 7.0.1.0.3.15-0', 'Server Date and Time: Fri Nov 25 11:19:55 EST 2016', and 'HA Status: Not Configured'.

Enter the IP address of the Processor Ethernet of Communication Manager in the box and click the **Add/Edit Name of IP** button to add the IP.

Communication Manager Interface | Switch Connections Home | Help | Logout

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

Edit Processor Ethernet IP - interopCM

10.33.1.6

Name or IP Address	Status
10.33.1.6	In Use

Select **Edit H.323 Gatekeeper** button from the Switch Connection page to add an IP address of gate keeper, the Gatekeeper IP address in this case is also the Processor Ethernet.

Communication Manager Interface | Switch Connections Home | Help | Logout

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

Edit H.323 Gatekeeper - interopCM

10.33.1.6

Name or IP Address

☒ 10.33.1.6

6.4. 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**.

AVAYA Application Enablement Services Management Console

Welcome: User
Last login: Tue Nov 17 15:23:19 2015 from 192.168.200.20
Number of prior failed login attempts: 0
HostName/IP: aes7/10.64.101.239
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 7.0.0.0.1.13
Server Date and Time: Tue Nov 17 16:13:36 EST 2015
HA Status: Not Configured

AE Services | TSAPI | TSAPI Links Home | Help | Logout

AE Services
CVLAN
DLG
DMCC
SMS
TSAPI
TSAPI Links
TSAPI Properties

TSAPI Links

Link	Switch Connection	Switch CTI Link #	ASAI Link Version	Security
------	-------------------	-------------------	-------------------	----------

The **Add TSAPI Links** screen is displayed in the right side. 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 “**interopCM**”, which was added in Section 6.3 above, was selected. For **Switch CTI Link Number**, select the CTI link number from **Section 5.2**. Select **Both** in the **Security** dropdown menu to support both unencrypted and encrypted TSAPI links. Retain the default values in the remaining fields.

The screenshot shows the 'Add TSAPI Links' configuration page. The left sidebar has a menu with 'TSAPI Links' selected. The main content area has the following fields:

- Link: 2
- Switch Connection: interopCM
- Switch CTI Link Number: 1
- ASAI Link Version: 7
- Security: Both

At the bottom of the form are two buttons: 'Apply Changes' and 'Cancel Changes'.

6.5. Administer CTI 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.

The screenshot shows the 'Add User' configuration page. The left sidebar has a menu with 'User Admin' selected and 'Add User' highlighted. The main content area has the following fields:

- User Id: ctuser
- Common Name: CTI User
- Surname: CTI User
- User Password: (masked with dots)
- Confirm Password: (masked with dots)
- Admin Note: (empty text box)
- Avaya Role: None
- Business Category: (empty text box)
- Car License: (empty text box)
- CM Home: (empty text box)
- Csx Home: (empty text box)
- CT User: Yes

At the top of the main area, there is a note: 'Fields marked with * can not be empty.'

6.6. Configure Security Database

Select **Security** → **Security Database** → **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.


The screenshot shows the 'Security | Security Database | Control' page. The left navigation pane lists various services, with 'Security' expanded and 'Security Database' selected. 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' and 'Enable SDB for TSAPI Service, JTAPI and Telephony Web Services', both of which are unchecked. An 'Apply Changes' button is located below the checkboxes.

Select **Security** → **Security Database** → **CTI Users** → **List All Users** and select the CTI user which was created in **Section 6.5** and select **Edit** button (not shown). In the **Edit CTI User**, select the check box **Unrestricted Access** and click **Apply Changes** to save the configuration.

The screenshot shows the 'Security | Security Database | CTI Users | List All Users' page. The left navigation pane shows 'Security Database' expanded, with 'CTI Users' and 'List All Users' selected. The main content area is titled 'Edit CTI User'. It displays the user profile for 'ctiuser' (CTI User). The 'Unrestricted Access' checkbox is checked and highlighted with a red box. Below the profile, there are sections for 'Call and Device Control', 'Call and Device Monitoring', and 'Routing Control', each with a dropdown menu set to 'None'. At the bottom, there are 'Apply Changes' and 'Cancel Changes' buttons.

6.7. Administer Ports

Select **Networking** → **Ports** from the left pane, to display the **Ports** screen in the right pane. In **TSAPI Ports** section, select the radio button for **TSAPI Service Port 450** and in the **DMCC Server Ports** section, select the radio button for **Unencrypted Port 4721** under the **Enabled** column, as shown below. Retain the default values in the remaining fields.



Application Enablement Services
 Management Console

Welcome: User cust
 Last login: Fri Nov 25 10:50:11 2016 from 135.10.98.86
 Number of prior failed login attempts: 0
 HostName/IP: aes70/10.33.1.4
 Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
 SW Version: 7.0.1.0.3.15-0
 Server Date and Time: Fri Nov 25 11:58:36 EST 2016
 HA Status: Not Configured

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			Enabled	Disabled
Unencrypted TCP Port	9999		<input checked="" type="radio"/>	<input type="radio"/>
Encrypted TCP Port	9998		<input type="radio"/>	<input checked="" type="radio"/>
<hr/>				
DLG Port	TCP Port	5678		
<hr/>				
TSAPI Ports			Enabled	Disabled
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	1050			
TCP Port Max	1065			
Encrypted TLINK Ports				
TCP Port Min	1066			
TCP Port Max	1081			
<hr/>				
DMCC Server Ports			Enabled	Disabled
Unencrypted Port	4721		<input checked="" type="radio"/>	<input type="radio"/>
Encrypted Port	4722		<input type="radio"/>	<input checked="" type="radio"/>
TR/87 Port	4723		<input checked="" type="radio"/>	<input type="radio"/>

6.8. Restart Services

Select **Maintenance** → **Service Controller** from the left pane, to display the **Service Controller** screen in the right pane. Click **Restart AE Service**.



Application Enablement Services
 Management Console

Welcome: User cust
 Last login: Fri Nov 25 10:50:11 2016 from 135.10.98.86
 Number of prior failed login attempts: 0
 HostName/IP: aes70/10.33.1.4
 Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
 SW Version: 7.0.1.0.3.15-0
 Server Date and Time: Fri Nov 25 11:58:36 EST 2016
 HA Status: Not Configured

Maintenance | Service Controller
Home | Help | Logout

- ▶ AE Services
- ▶ Communication Manager Interface
- ▶ High Availability
- ▶ Licensing
- ▼ Maintenance
- Date Time/NTP Server
- Security Database
- Service Controller
- Server Data
- ▶ Networking
- ▶ Security

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

7. Configure Avaya Breeze and Engagement Call Control Service

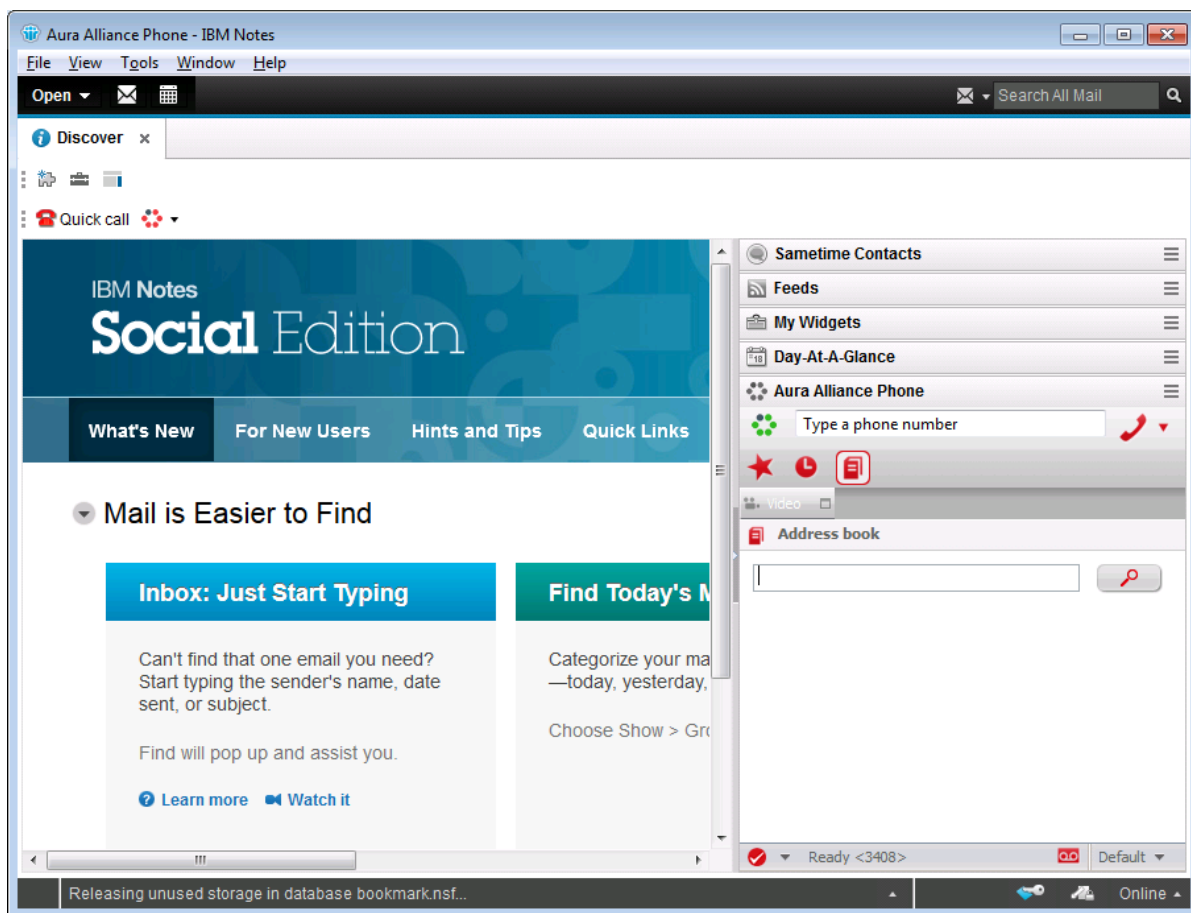
This document assumes Avaya Breeze™ and Engagement Call Control snap-in are already in place and configured. For procedure of how to install and configure Avaya Engagement Call Control snap-in on Avaya Breeze, please refer to **Section 11[2]**.

8. Configure Aura Alliance Client for Notes/Sametime

This section provides steps to configure the Aura Alliance Client application. During compliance test, the installation and configuration of Aura Alliance Client application was performed by an Aura Alliance engineer. This section describes the initial and basic configuration of the Aura Alliance Client application.

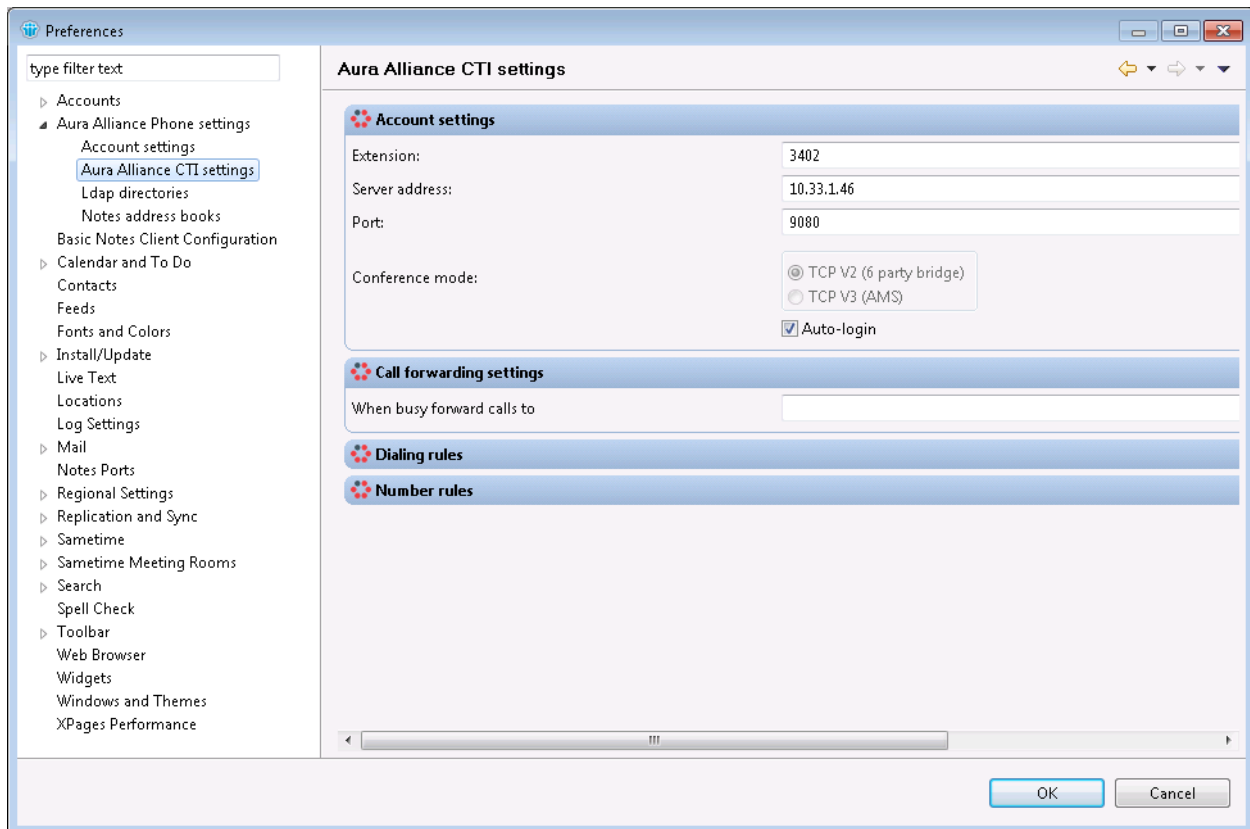
From the PC where IBM Notes application is installed, run the Aura Alliance Phone application from the Start menu. The Aura Alliance Phone – IBM Notes window is displayed as below.

Note: In order for Aura Alliance Client for Notes/Sametime to control a SIP deskphone, ensure that SIP deskphone has **Type of 3PCC Enabled** set to **Avaya** and use TLS protocol to register to Session Manager.



Navigate to menu **File → Preferences → Aura Alliance Phone settings → Aura Alliance CTI settings**. The **Aura Alliance CTI settings** window is displayed in the right side of **Preferences** Window. For Aura Alliance client to control a phone extension, enter the extension number 3402 of a deskphone in the **Extension** field, signalling IP address 10.33.1.46 of Engagement Call Control service in the **Server address** field and the port 9080 in the **Port** field. Keep other settings at default.

Click **OK** button to save the change on completion.



9. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Aura Alliance Client for Notes/Sametime and Avaya Engagement Call Control service on Avaya Breeze.

9.1. 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.

```
status aesvcs cti-link
```

AE SERVICES CTI LINK STATUS						
CTI Link	Version	Mnt Busy	AE Services Server	Service State	Msgs Sent	Msgs Rcvd
1	7	no	aes70	established	15	15

9.2. Verify Avaya Aura® Application Enablement Services

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

Verify that the **Session ID** is associated with the CTI user “ctiuser” and the **Far-end Identifier** is associated with the Engagement Call Control service.

Status | Status and Control | DMCC Service SummaryHome

▶ AE Services

▶ Communication Manager Interface

High Availability

▶ Licensing

▶ Maintenance

▶ Networking

▶ Security

▼ Status

Alarm Viewer

▶ Log Manager

▶ Logs

▼ Status and Control

■ CVLAN Service Summary

■ DLG Services Summary

■ DMCC Service Summary

■ Switch Conn Summary

■ TSAPI Service Summary

DMCC Service Summary - Session Summary

Please do not use back button

☐ Enable page refresh every 60 seconds

Session Summary [Device Summary](#)

Generated on Tue Oct 17 14:35:44 EDT 2017

Service Uptime: 11 days, 23 hours 51 minutes

Number of Active Sessions: 1

Number of Sessions Created Since Service Boot: 9

Number of Existing Devices: 11

Number of Devices Created Since Service Boot: 13

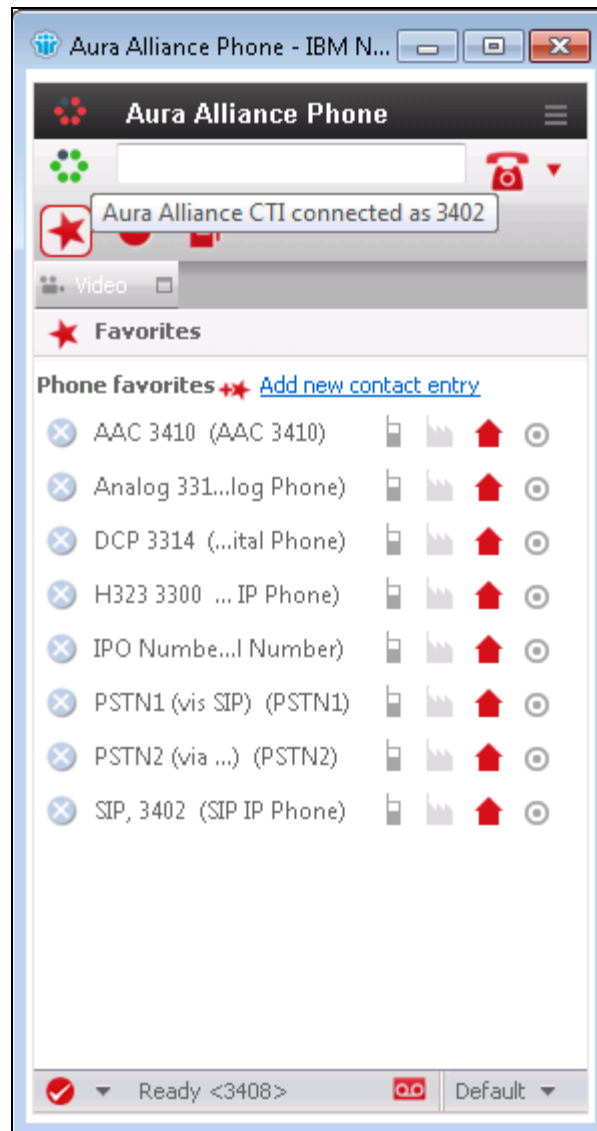
	Session ID	User	Application	Far-end Identifier	Connection Type	# of Active Sessions
<input type="checkbox"/>	0C765BD762B235AD1 76D7DC66E98127B-1	ctiuser	Khepri Call Server Connector	10.33.1.46	XML Encrypted	11

Terminate Sessions Show Terminated Sessions

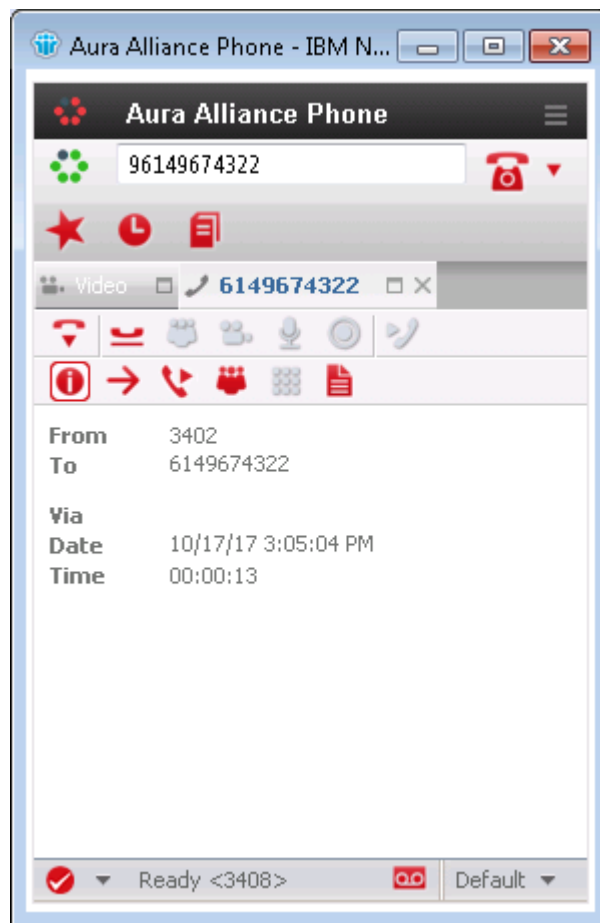
Item 1-1 of 1
1 Go

9.3. Verify Aura Alliance Client Notes/Sametime

Green circle icon next to the calling box indicates that Aura Alliance client successfully connects to Avaya Breeze to control a deskphone. Move the mouse over the green circle icon to get information of the deskphone extension that is being controlled by Aura Alliance client.



Place an outbound call and verify call states on the deskphone and the call tab window of Aura Alliance client application. It should be synchronized. The screen below shows the call from the extension 3402 of deskphone to external number 6149674322.



10. Conclusion

These Application Notes describe the configuration steps required for Aura Alliance Client Notes/Sametime to successfully interoperate with Avaya Breeze™ via Engagement Call Control service. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

11. 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 7.1, Document 03-300509, Issue 10, August 2017.
- [2] Avaya Engagement Call Control Snap-in Reference.
- [3] Administering Avaya Breeze™, Release 3.3, Issue1, June 2017
- [4] Avaya Aura® Application Enablement Services Administration and Maintenance Guide, Release 7.1, Document 02-300357, August 2017.

Documentation related to Aura Alliance may directly be obtained from Aura Alliance.

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