



Avaya Solution & Interoperability Test Lab

Application Notes for TASKE Contact with Avaya Aura™ Communication Manager 5.2.1 using Avaya Aura™ Application Enablement Services – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for TASKE Contact to interoperate with Avaya Aura™ Communication Manager 5.2.1 using Avaya Aura™ Application Enablement Services.

In the compliance testing, TASKE Contact used the Telephony Services Application Programming Interface from Avaya Aura™ Application Enablement Services to monitor contact center devices on Avaya Aura™ Communication Manager, and used the event reports from the monitored devices to produce real-time and historical reports.

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 TASKE Contact to interoperate with Avaya Aura™ Communication Manager 5.2.1 using Avaya Aura™ Application Enablement Services.

In the compliance testing, TASKE Contact used the Telephony Services Application Programming Interface (TSAPI) from Avaya Aura™ Application Enablement Services to monitor contact center devices on Avaya Aura™ Communication Manager, and used the event reports from the monitored devices to produce real-time and historical reports.

1.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following on TASKE Contact:

- Handling of TSAPI messages in the areas of event notification and value queries.
- Proper display of monitored device status in the real-time reports.

The serviceability testing focused on verifying the ability of TASKE Contact to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet cable to the TASKE Contact server.

1.2. Support

Technical support on TASKE Contact can be obtained through the following:

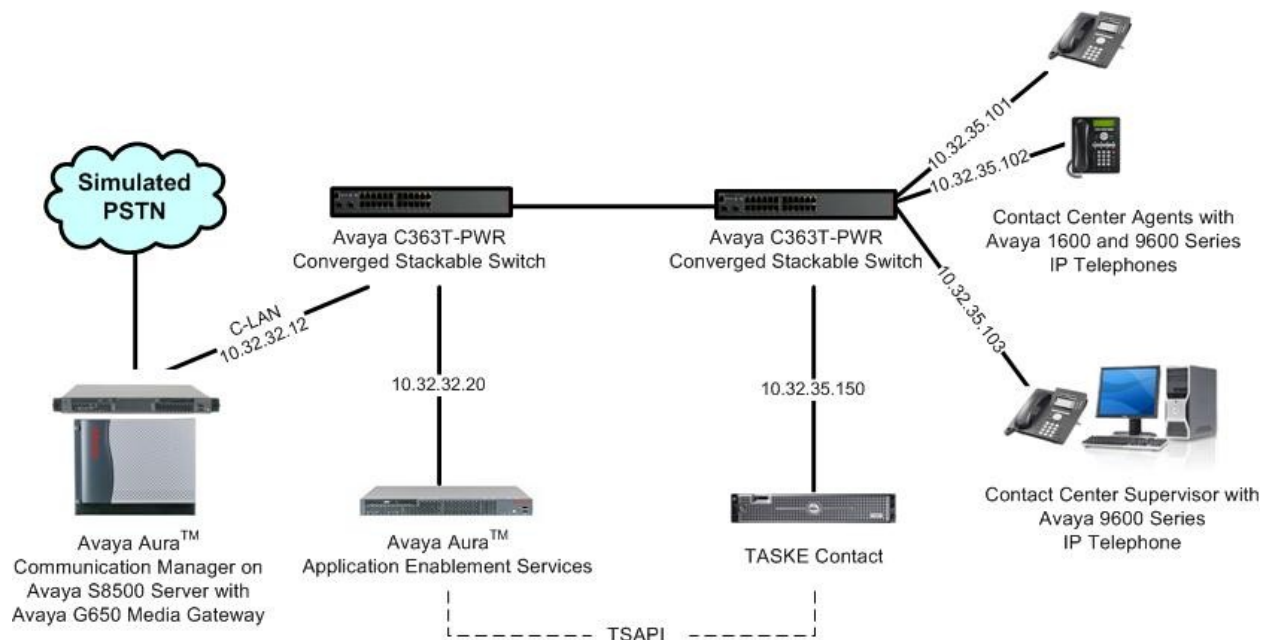
- **Phone:** (877) 778-2753
- **Web:** http://www.taske.com/forms/form_asksupport.html

2. Reference Configuration

The detailed administration of basic connectivity between Avaya Aura™ Communication Manager and Avaya Aura™ Application Enablement Services, and of contact center devices are not the focus of these Application Notes and will not be described.

In the compliance testing, the contact center devices consisted of one VDN, one skill group, one supervisor, and two agents shown in the table below. TASKE Contact requested monitoring on the VDN, skill group, and agent telephone extensions.

Device Type	Extension
VDN	65600
Skill Group	65666
Supervisor Telephone	65000
Agent IDs	68801, 68802
Agent Telephone	65001, 65002



3. Equipment and Software Validated

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

Equipment	Software
Avaya Aura™ Communication Manager on Avaya S8500 Server	5.2.1 (R015x.02.1.016.4-18433)
Avaya G650 Media Gateway • TN799DP C-LAN Circuit Pack • TN2302AP IP Media Processor	HW01 FW038 HW20 FW121
Avaya Aura™ Application Enablement Services	5.2.2 (r5-2-2-105.0)
Avaya 1608 IP Telephone (H.323)	1.3
Avaya 9630 IP Telephone (H.323)	3.1
TASKE Contact on Windows 2003 Server with Service Pack 2 • Avaya TSAPI Windows Client	8.9.3042.0 4.1.0.323

4. Configure Avaya Aura™ Communication Manager

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

- Verify Communication Manager License
- Administer CTI link

4.1. Verify Communication Manager License

Log in to the System Access Terminal (SAT) 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		Page	3 of	11
OPTIONAL FEATURES				
Abbreviated Dialing Enhanced List?	y	Audible Message Waiting?	n	
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?	n	CAS Main?	n	
Answer Supervision by Call Classifier?	n	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?	y	DCS (Basic)?	y	
ASAI Link Core Capabilities?	y	DCS Call Coverage?	y	
ASAI Link Plus Capabilities?	y	DCS with Rerouting?	y	

4.2. 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:	60100			
Type:	ADJ-IP			
		COR:	1	
Name:	TASKE TSAPI Link			

5. Configure Avaya Aura™ Application Enablement Services

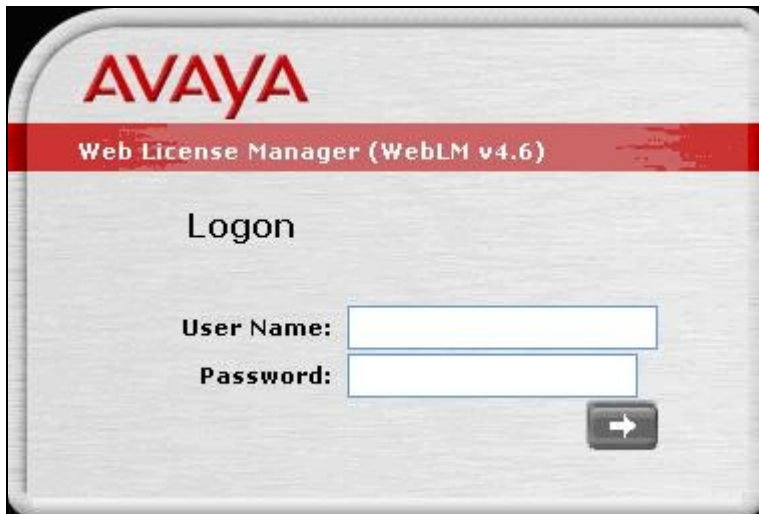
This section provides the procedures for configuring Avaya Aura™ Application Enablement Services. The procedures include the following areas:

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

5.1. Verify TSAPI License

Access the Web License Manager interface by using the URL “https://ip-address/WebLM/index.jsp” in an Internet browser window, where “ip-address” is the IP address of the server hosting the Web License Manager.

The **Web License Manager** screen is displayed. Log in using the appropriate credentials.

The image shows the Avaya Web License Manager (WebLM v4.6) login interface. At the top, the Avaya logo is displayed in red. Below it, a red banner contains the text "Web License Manager (WebLM v4.6)". The main heading is "Logon". There are two input fields: "User Name:" and "Password:". To the right of the "Password:" field is a dark gray button with a white right-pointing arrow.

The **Web License Manager** screen below is displayed next. 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 **TSAPI Simultaneous Users**, as shown below.


Web License Manager (WebLM v4.6)
Logoff

Install License
Licensed Products
APPL_ENAB
Application_Enablement
Uninstall License
Change Password
Server Properties
Manage Users
Logout

Application Enablement (CTI) - Release: 5 - SID: 10503000 (Standard License File)

You are here: Licensed products > Application Enablement (CTI)

License installed on: Apr 16, 2010 11:27:38 AM EDT

[View Peak Usage](#)

Feature (Keyword)	Expiration Date	Licensed	Acquired
Unified CC API Desktop Edition (VALUE_AES_AEC_UNIFIED_CC_DESKTOP)	permanent	1000	0
Device Media and Call Control (VALUE_AES_DMCC_DMC)	permanent	100	0
DLG (VALUE_AES_DLG)	permanent	16	0
CVLAN ASAI (VALUE_AES_CVLAN_ASAI)	permanent	16	2
AES ADVANCED SMALL SWITCH (VALUE_AES_AEC_SMALL_ADVANCED)	permanent	3	0
CVLAN Proprietary Links (VALUE_AES_PROPRIETARY_LINKS)	permanent	16	0
AES ADVANCED LARGE SWITCH (VALUE_AES_AEC_LARGE_ADVANCED)	permanent	3	0
TSAPI Simultaneous Users (VALUE_AES_TSAPI_USERS)	permanent	1000	1000
AES ADVANCED MEDIUM SWITCH (VALUE_AES_AEC_MEDIUM_ADVANCED)	permanent	3	1

5.2. 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 login interface for the AVAYA Application Enablement Services Management Console. At the top, the AVAYA logo is on the left, and the text "Application Enablement Services Management Console" is on the right. Below this is a red horizontal bar with the word "Help" in white on the right side. The main content area has a light gray background with the text "Please login here:" followed by two input fields labeled "Username" and "Password". Below these fields is a "Login" button. At the bottom of the page, there is a red horizontal bar and the copyright notice "© 2009 Avaya, Inc. All Rights Reserved."

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



The screenshot shows the "Welcome to OAM" screen of 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: "Welcome: User craft", "Last login: Thu Oct 7 15:23:14 2010 from 10.32.35.10", "HostName/IP: AES-Test/10.32.32.20", "Server Offer Type: TURNKEY", and "SW Version: r5-2-2-105-0". Below the header is a red bar with "Home" on the left and "Home | Help | Logout" on the right. A left sidebar contains a list of menu items: "AE Services", "Communication Manager Interface", "Licensing", "Maintenance", "Networking", "Security", "Status", "User Management", "Utilities", and "Help". The main content area is titled "Welcome to OAM" and contains a paragraph: "The AE Services Operations, Administration, and Management (OAM) Web provides you with tools for managing the AE Server. OAM spans the following administrative domains:". This is followed by a bulleted list of domains and their functions: "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.", "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.", and "Help - Use Help to obtain a few tips for using the OAM Help system". At the bottom, a paragraph states: "Depending on your business requirements, these administrative domains can be served by one administrator for both domains, or a separate administrator for each domain."

5.3. Administer TSAPI Link

To administer a TSAPI link, select **AE Services > TSAPI > TSAPI Links** from the left pane. The **TSAPI Links** screen is displayed, as shown below. Click **Add Link**.

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 "craft" with login details. A red navigation bar contains "AE Services | TSAPI | TSAPI Link" and links for "Home | Help | Logout". The left sidebar shows a tree view with "AE Services" expanded, containing "CVLAN", "DLG", "DMCC", "SMS", "TSAPI" (expanded), and "TSAPI Links" (selected). The main content area is titled "TSAPI Links" and displays a table with one link:

Link	Switch Connection	Switch CTI Link #	ASAI Link Version	Security
1	S8500	1	4	Encrypted

Below the table are buttons for "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 "S8500" is selected. For **Switch CTI Link Number**, select the CTI link number from **Section 4.2**. Retain the default values in the remaining fields.

The screenshot shows the "Add TSAPI Links" screen in the AVAYA Application Enablement Services Management Console. The layout is similar to the previous screen, but the main content area is titled "Add TSAPI Links" and contains form fields for creating a new link:

- Link: 1
- Switch Connection: S8500
- Switch CTI Link Number: 1
- ASAI Link Version: 4
- Security: Unencrypted

At the bottom of the form are buttons for "Apply Changes" and "Cancel Changes".

5.4. Enable Security Database

Enable the security database for use by TASKE Contact. Select **Security > Security Database > Control** from the left pane, to display the **SDB Control for DMCC and TSAPI** screen in the right pane. Check **Enable SDB TSAPI Service, JTAPI and Telephony Service**.

The screenshot shows the Avaya Application Enablement Services Management Console. The left navigation pane has 'Security' expanded, with 'Security Database' and 'Control' selected. The main content area is titled 'SDB Control for DMCC and TSAPI'. It contains two checkboxes: 'Enable SDB for DMCC Service' (unchecked) and 'Enable SDB TSAPI Service, JTAPI and Telephony Service' (checked). Below the checkboxes is an 'Apply Changes' button. The top right corner displays user information: 'Welcome: User craft', 'Last login: Thu Oct 7 15:23:14 2010 from 10.32.35.10', 'HostName/IP: AES-Test/10.32.32.20', 'Server Offer Type: TURNKEY', and 'SW Version: r5-2-2-105-0'. The top navigation bar shows 'Security | Security Database | Control' and links for 'Home | Help | Logout'.

5.5. Restart TSAPI Service

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

The screenshot shows the Avaya Application Enablement Services Management Console. The left navigation pane has 'Maintenance' expanded, with 'Service Controller' selected. The main content area is titled 'Service Controller'. It contains a table with two columns: 'Service' and 'Controller Status'. The table lists several services, with 'TSAPI Service' checked and 'Running'. Below the table is a note: 'For status on actual services, please use [Status and Control](#)'. At the bottom are buttons for 'Start', 'Stop', 'Restart Service', 'Restart AE Server', 'Restart Linux', and 'Restart Web Server'. The top right corner displays user information: 'Welcome: User craft', 'Last login: Thu Oct 7 15:23:14 2010 from 10.32.35.10', 'HostName/IP: AES-Test/10.32.32.20', 'Server Offer Type: TURNKEY', and 'SW Version: r5-2-2-105-0'. The top navigation bar shows 'Maintenance | Service Controller' and links for 'Home | Help | Logout'.

Service	Controller Status
☐ ASAI Link Manager	Running
☐ DMCC Service	Running
☐ CVLAN Service	Running
☐ DLG Service	Running
☐ Transport Layer Service	Running
☒ TSAPI Service	Running

5.6. Administer Security Database

All devices that are monitored by TASKE Contact need to be configured in the security database. Select **Security > Security Database -> Devices**, and add a device for each VDN, skill group, and agent telephone extensions from **Section 2**.

In the subsequent **Add / Edit Device** screen (not shown), select the appropriate **Device Type**, and select “Any” for **Tlink Group**.

A listing of the configured devices used for the compliance testing is shown below. Note the **Tlink Group** and **Device Type** settings.



**Application Enablement
Services**
Management Console

Welcome: User craft
Last login: Thu Oct 7 15:23:14 2010 from
10.32.35.10
HostName/IP: AES-Test/10.32.32.20
Server Offer Type: TURNKEY
SW Version: r5-2-2-105-0

Security | Security Database | Devices

Home | Help | Logout

▶ AE Services

▶ Communication Manager
Interface

▶ Licensing

▶ Maintenance

▶ Networking

▼ Security

▶ Account Management

▶ Audit

▶ Certificate Management

Enterprise Directory

▶ Host AA

▶ PAM

▼ Security Database

▪ Control

⊕ CTI Users

▪ **Devices**

Devices

Device ID	Tlink Group	Device Type	Location
☒ 65001	Any	PHONE	TASKE Agent 1
☐ 65002	Any	PHONE	TASKE Agent 2
☐ 65600	Any	VDN	TASKE VDN
☐ 65666	Any	ACD	TASKE Skill Group
☐ 66556	Any	PHONE	

5.7. 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 TASKE.

In this case, the associated Tlink name is “AVAYA#S8500#CSTA#AES-TEST”. Note the use of the switch connection “S8500” from **Section 5.3** as part of the Tlink name.

The screenshot displays 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 "craft" with login details. A red navigation bar contains links for "Security | Security Database | Tlinks" and "Home | Help | Logout". The left sidebar lists various system components, with "Security" expanded to show "Security Database" and "Tlinks" selected. The main content area, titled "Tlinks", shows a list of Tlink names with radio button selection. The first option, "AVAYA#S8500#CSTA#AES-TEST", is selected. Below the list are "Edit Tlink" and "Delete Tlink" buttons.

AVAYA Application Enablement Services Management Console

Welcome: User craft
Last login: Thu Oct 7 15:23:14 2010 from 10.32.35.10
HostName/IP: AES-Test/10.32.32.20
Server Offer Type: TURNKEY
SW Version: r5-2-2-105-0

Security | Security Database | Tlinks Home | Help | Logout

Tlinks

Tlink Name

☒ AVAYA#S8500#CSTA#AES-TEST

☐ AVAYA#S8500#CSTA-S#AES-TEST

Edit Tlink Delete Tlink

5.8. Administer TASKE 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 values in the remaining fields.

The screenshot displays 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: 'Welcome: User craft', 'Last login: Thu Oct 7 15:23:14 2010 from 10.32.35.10', 'HostName/IP: AES-Test/10.32.32.20', 'Server Offer Type: TURNKEY', and 'SW Version: r5-2-2-105-0'. A red navigation bar contains 'User Management | User Admin | Add User' and 'Home | Help | Logout'. The left sidebar lists navigation options: AE Services, Communication Manager Interface, Licensing, Maintenance, Networking, Security, Status, User Management (expanded), Service Admin, User Admin (expanded), Add User (selected), Change User Password, List All Users, Modify Default Users, Search Users, Utilities, and Help. The main content area is titled 'Add User' and includes a note: 'Fields marked with * can not be empty.' The form fields are: * User Id (taske), * Common Name (taske), * Surname (taske), * User Password (masked), * Confirm Password (masked), Admin Note (empty), Avaya Role (None), Business Category (empty), Car License (empty), CM Home (empty), Csm Home (empty), CT User (Yes), Department Number (empty), and Display Name (empty).

Add User	
Fields marked with * can not be empty.	
* User Id	taske
* Common Name	taske
* Surname	taske
* User Password	
* Confirm Password	
Admin Note	
Avaya Role	None
Business Category	
Car License	
CM Home	
Csm Home	
CT User	Yes
Department Number	
Display Name	

Select **Security > Security Database > CTI Users > List All Users** from the left pane, and select the newly created TASKE user from the listing (not shown).

The **Edit CTI User** screen is displayed next. Set the permissions as shown below.

The screenshot displays 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 craft' with login details. A red navigation bar contains the breadcrumb 'Security | Security Database | CTI Users | List All Users' and links for 'Home | Help | Logout'.

On the left, a sidebar menu lists various services, with 'Security' expanded to show 'Security Database' and 'CTI Users'. Under 'CTI Users', 'List All Users' is selected.

The main content area is titled 'Edit CTI User' and shows the configuration for user 'taske'. The 'User Profile' section includes fields for 'User ID' (taske), 'Common Name' (taske), 'Worktop Name' (set to 'NONE' via a dropdown), and 'Unrestricted Access' (unchecked). Below this, 'Call Origination and Termination / Device Status' is set to 'Any' via a dropdown.

The 'Call and Device Monitoring' section has three rows: 'Device' (Any), 'Call / Device' (Any), and 'Call' (checked). The 'Routing Control' section shows 'Allow Routing on Listed Devices' set to 'Any'.

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

6. Configure TASKE Contact

This section provides the procedures for configuring TASKE Contact. The procedures include the following areas:

- Administer TASKE Database Update Wizard
- Administer TASKE Collector
- Administer extensions
- Administer agents
- Administer agent groups
- Administer queues
- Administer supervisors
- Restart components

6.1. Administer TASKE Database Update Wizard

At the conclusion of the TASKE Contact installation, the TASKE Database Update Wizard is invoked automatically and displays the **Welcome to the TASKE Database Update Wizard** screen shown below.



Navigate forward to the **Import Communication Manager Information** screen. If Avaya Site Administration is used to obtain the configured contact center devices from Communication Manager, then the path to where the data files reside can be entered in **Folder**.

In the compliance testing, the manual method was used to configure the contact center devices on TASKE, therefore all default values were retained on the TASKE Database Update Wizard.



The screenshot shows a Windows-style dialog box titled "TASKE Database Update Wizard". On the left is a red vertical bar with the "TASKE TECHNOLOGY" logo. The main area is titled "Import Communication Manager Information." and contains the instruction: "Select the folder which contains the data files exported from the Avaya Site Administration utility." Below this is a text field labeled "Folder:" followed by a "Browse" button. Further down is an "Import" button with the instruction "Click Import to collect updated information." at the bottom are three buttons: "< Back", "Next >", and "Cancel".

6.2. Administer TASKE Collector

After completing the TASKE Database Update Wizard, the **TASKE Collector** screen is displayed. For **Tlink name**, select the Tlink name from **Section 5.7**.

Select the radio button for **Specific Windows user**. For **User name** and **Password**, enter the TASKE user credentials from **Section 5.8**. Check **Remember password** if desired.

The screenshot shows the 'TASKE Collector - Telephony Services Connection' dialog box. It contains the following elements:

- Title Bar:** TASKE Collector - Telephony Services Connection
- Text:** The TASKE Collector connects to the CentreVu® Tserver to monitor telephone system activity. The connection is made through a Tlink, which represents a specific service.
- Tlink name:** A dropdown menu showing 'AVAYA#S8500#CSTA#AES-TEST'.
- Text:** The Tserver can be configured to use a Security Database to control access. Connection requires a Windows user name when this feature is enabled. The user must exist in the Security Database and must have permission to monitor all devices.
- Connect to the Tserver as:**
 - ☐ Logged in Windows user
 - ☒ Specific Windows user:
 - User name:** TASKE
 - Password:** [masked with 'x']
 - ☒ Remember password
- OK** button

The **TASKE Console** screen is displayed next. Select **Tools > Administrator** from the top menu.

The screenshot shows the 'TASKE Console' application window with a menu bar (File, Action, View, Tools, Help) and a toolbar. Below is a table listing system components and their status.

Component	Status	Startup	Category
TASKE Collector	Started	Automatic	TASKE Contact
TASKE Information Server	No data	Automatic	TASKE Contact
TASKE Upgrade Server	Started	Automatic	TASKE Contact
TASKE Add-On Server	Started	Automatic	TASKE Add-On
TASKE Integration Server	Started	Manual	TASKE Add-On
TASKE Web Server	Started	Automatic	TASKE Web
World Wide Web Publishing	Started	Automatic	Microsoft IIS

6.3. Administer Extensions

The **TASKE Administrator** screen is displayed. Select **Extensions** from the left pane, followed by **New** in the right pane to create an extension record.

In the lower right pane, enter the first agent telephone extension from **Section 2** in the **ID** field. Enter a desired **Name**. For **Extension Type**, select “Normal” for agent telephone extensions and “VDN” for VDN extensions.

The screenshot shows the TASKE Administrator application window. The left sidebar contains a tree view with the following items: Trunks, Trunk Groups, Extensions (selected), Extension Groups, Agents, Agent Groups, Queues, Queue Groups, Spectrums, Report Options, DNIS, DNIS Groups, Range, and Users. The main area is divided into two panes. The top pane, titled 'List Of Extensions (Total = 0)', contains a table with columns: ID, Name, Nick Name, and Ext. The bottom pane, titled 'Extension Record Details:', contains a 'New' button, 'Duplicate', 'Update', and 'Delete' buttons. Below these are input fields for ID (65001), Name (TASKE Agent 1), and Nick Name. There is a section 'Is a Member Of:' with a table with columns ID, Name, and Nick Name. To the right of this is an 'Extension Type' dropdown menu set to 'Normal'. A 'Go To' button is at the bottom left of the details pane.

Repeat this procedure for all agent telephone and VDN extensions from **Section 2**. In the compliance testing, three extension records were created as shown below.

The screenshot shows the TASKE Administrator application window with the 'List Of Extensions' pane updated to show a total of 3 extensions. The table contains the following data:

ID	Name	Nick Name	Extension Type
65001	TASKE Agent 1		Normal
65002	TASKE Agent 2		Normal
65600	TASKE VDN		VDN

6.4. Administer Agents

Select **Agents** from the left pane, followed by **New** in the right pane to create an agent record.

In the lower right pane, enter the first agent ID from **Section 2** in the **ID** field. Enter a desired **Name**.

The screenshot shows the TASKE Administrator application window. The left-hand navigation pane contains a list of menu items: Trunks, Trunk Groups, Extensions, Extension Groups, Agents, Agent Groups, Queues, Queue Groups, Spectrums, Report Options, DNIS, DNIS Groups, Range, and Users. The 'Agents' menu item is selected. The main window is divided into two panes. The top pane, titled 'List Of Agents [Total = 0]', contains a table with columns for ID, Name, and Nick Name. The bottom pane, titled 'Agent Record Details:', contains a 'New' button, an 'Update' button, and input fields for ID (68801), Name (TASKE Agent ID 1), and Nick Name. Below these fields is a section labeled 'Is a Member of:' with a sub-table containing columns for ID, Name, and Nick Name.

Repeat this procedure for all agent IDs from **Section 2**. In the compliance testing, two agent records were created as shown below.

The screenshot shows the TASKE Administrator application window after two agent records have been created. The left-hand navigation pane remains the same. The main window is divided into two panes. The top pane, titled 'List Of Agents [Total = 2]', contains a table with columns for ID, Name, and Nick Name. The bottom pane, titled 'Agent Record Details:', is empty.

ID	Name	Nick Name
68801	TASKE Agent ID 1	
68802	TASKE Agent ID 2	

6.5. Administer Agent Groups

Select **Agent Groups** from the left pane, followed by **New** in the right pane to create an agent group record.

In the lower right pane, enter the first skill group extension from **Section 2** in the **ID** field. Enter a desired **Name**. Under **Available Agents**, select all agents and click the **Add All** button to move under **Agent Members**.

Repeat this procedure for all skill groups from **Section 2**. In the compliance testing, one agent group record was created.

The screenshot shows the TASKE Administrator application window. The title bar reads "TASKE Administrator". The menu bar includes "File", "View", "Tools", and "Help". On the left is a vertical navigation pane with buttons for "Trunks", "Trunk Groups", "Extensions", "Extension Groups", "Agents", "Agent Groups", "Queues", "Queue Groups", "Spectrums", "Report Options", "DNIS", "DNIS Groups", "Range", and "Users". The "Agent Groups" button is highlighted. The main area is titled "List Of Agent Groups (Total = 0)" and contains a table with columns "ID", "Name", and "Nick Name". Below this is the "Agent Group Record Details:" section, which includes "New", "Update", and "Delete" buttons. The "ID" field contains "65666", the "Name" field contains "TASKE Skill Group", and the "Nick Name" field is empty. Below the details section are two tables: "Available Agents" and "Agent Members". The "Available Agents" table has columns "ID", "Name", and "Nick Name" and contains two rows: "68802 TASKE Agent ID 2" and "68801 TASKE Agent ID 1". Between the two tables are buttons for "Add All", "Add", "Remove", and "Remove All". The "Agent Members" table also has columns "ID", "Name", and "Nick Name" and is currently empty.

ID	Name	Nick Name
68802	TASKE Agent ID 2	
68801	TASKE Agent ID 1	

ID	Name	Nick Name
----	------	-----------

6.6. Administer Queues

Select **Queues** from the left pane, followed by **New** in the right pane to create a queue record.

In the lower right pane, enter the first skill group extension from **Section 2** in the **ID** field. Enter a desired **Name**. For **Agent Group**, select the appropriate agent group ID from **Section 6.5**.

Repeat this procedure for all skill groups from **Section 2**. In the compliance testing, one queue record was created.

The screenshot shows the TASKE Administrator application window. On the left is a vertical navigation pane with buttons for Trunks, Trunk Groups, Extensions, Extension Groups, Agents, Agent Groups, Queues (highlighted), Queue Groups, Spectrums, Report Options, DNIS, DNIS Groups, Range, and Users. The main area is divided into two sections. The top section, titled 'List Of Queues (Total = 0)', contains a table with columns ID, Name, and Nick Name. The bottom section, titled 'Queue Record Details:', contains form fields for ID (65666), Name (TASKE Skill Group), Nick Name, and TSF Time (30). Below these are buttons for New, Delete, Update, and Cancel. Further down is a section 'Is a Member Of:' with a table for ID, Name, and Nick Name. To the right of this table are checkboxes for 'Interflow Diverted Calls' and a dropdown for 'Agent Group' (65666). A 'Go To' button is at the bottom left of the details section.

ID	Name	Nick Name
----	------	-----------

Queue Record Details: [New] [Delete] [Update] [Cancel]

ID: 65666 Name: TASKE Skill Group Nick Name: TSF Time: 30

Is a Member Of:

ID	Name	Nick Name
----	------	-----------

☐ Interflow Diverted Calls
Agent Group: 65666

[Go To]

6.7. Administer Supervisors

Select **Users** from the left pane, followed by **New** in the right pane to create a user record.

In the lower right pane, enter the desired **User name**, **Full name**, **Password**, and **Confirm password**. For **Type**, select “Supervisor” from the drop-down list.

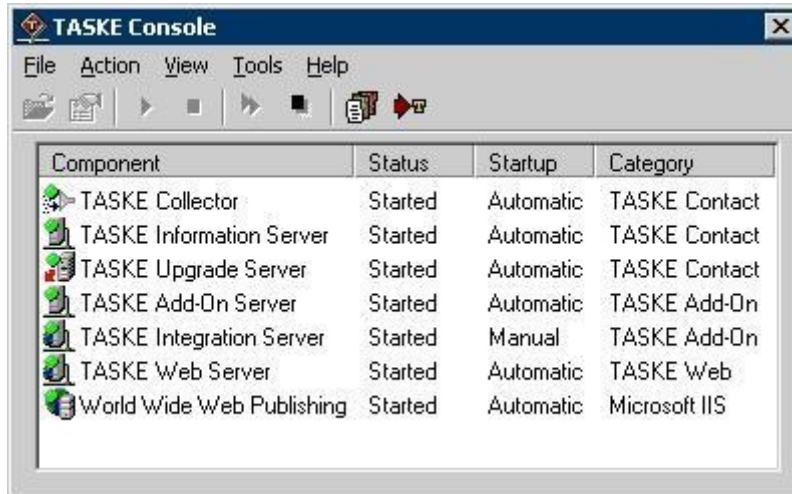
Repeat this procedure for all supervisors from **Section 2**. In the compliance testing, one user record was created.

Select **File > Exit** from the top menu to close the **TASKE Administrator** screen.

The screenshot shows the TASKE Administrator application window. The title bar reads "TASKE Administrator". The menu bar includes "File", "View", "Tools", and "Help". On the left is a vertical navigation pane with buttons for "Trunks", "Trunk Groups", "Extensions", "Extension Groups", "Agents", "Agent Groups", "Queues", "Queue Groups", "Spectrums", "Report Options", "DNIS", "DNIS Groups", "Range", and "Users" (which is highlighted). The main area is divided into two sections. The top section, titled "List of Users (Total = 0)", contains a table with columns "ID", "Name", and "Type", which is currently empty. The bottom section, titled "User Record Details:", contains a form for creating or editing a user. It includes buttons for "New", "Duplicate", "Update", and "Delete". The form fields are: "User name" (text box with "super"), "Full name" (text box), "Password" (text box with "xxxxxxx"), "Confirm password" (text box with "xxxxxxx"), "Type" (drop-down menu with "Supervisor"), "Agent ID" (text box with a "Browse..." button), and "Extension" (text box with a "Browse..." button). Below these fields is a "Permissions" section with the instruction "Select the access you want to grant this user." and two checkboxes: "Restrict user's resource access" (unchecked) and "Allow user to access Administrator" (unchecked). At the bottom is an "Application Types" section with four checkboxes: "Desktop" (unchecked), "Web Portal" (checked), "DisplayCentral Designer" (unchecked), and "With Advanced Options" (unchecked). A "With Enterprise" checkbox is also present but unchecked.

6.8. Restart Components

The **TASKE Console** screen is displayed next. Restart all components by selecting **Action > Stop All TASKE Servers** from the top menu, followed by **Action > Start All TASKE Servers**.



7. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Upon start of the TASKE Contact application, the application automatically queried for device status and requested monitoring.

For the manual part of the testing, incoming and outgoing calls were made involving the contact center devices to enable event reports to be sent to TASKE Contact. Manual call controls from the customer and agent telephones were exercised to verify remaining events reports and reported device status by TASKE Contact.

The serviceability test cases were performed manually by disconnecting and reconnecting the LAN cable to the TASKE Contact server.

All test cases were executed and passed.

8. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya Aura™ Communication Manager, Avaya Aura™ Application Enablement Services, and TASKE Contact.

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 4.2**, 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	4	no	AES-Test	established	1319	1090

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 5.3**, as shown below.

**Application Enablement Services**
Management Console

Welcome: User craft
Last login: Thu Oct 7 15:23:14 2010 from 10.32.35.10
HostName/IP: AES-Test/10.32.32.20
Server Offer Type: TURNKEY
SW Version: r5-2-2-105-0

Status | Status and Control | TSAPI Service Summary

Home | Help | Logout

▶ AE Services

▶ Communication Manager Interface

▶ Licensing

▶ Maintenance

▶ Networking

▶ Security

▼ Status

Alarm Viewer

▶ Logs

▼ 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
	1	S8500	1	Talking	Wed Oct 13 13:05:28 2010	Online	15	5	1073	1310	30

Online Offline

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

TSAPI Service Status TLink Status User Status

8.3. Verify TASKE Contact

Access the supervisor web-based interface by using the URL “http://ip-address/taske/login.htm” in an Internet browser window, where “ip-address” is the IP address of the Contact server. The **Sign In** screen is displayed. Log in using the appropriate credentials from **Section 6.7**.



TASKE[®]
CONTACT

[Help](#)

Sign In

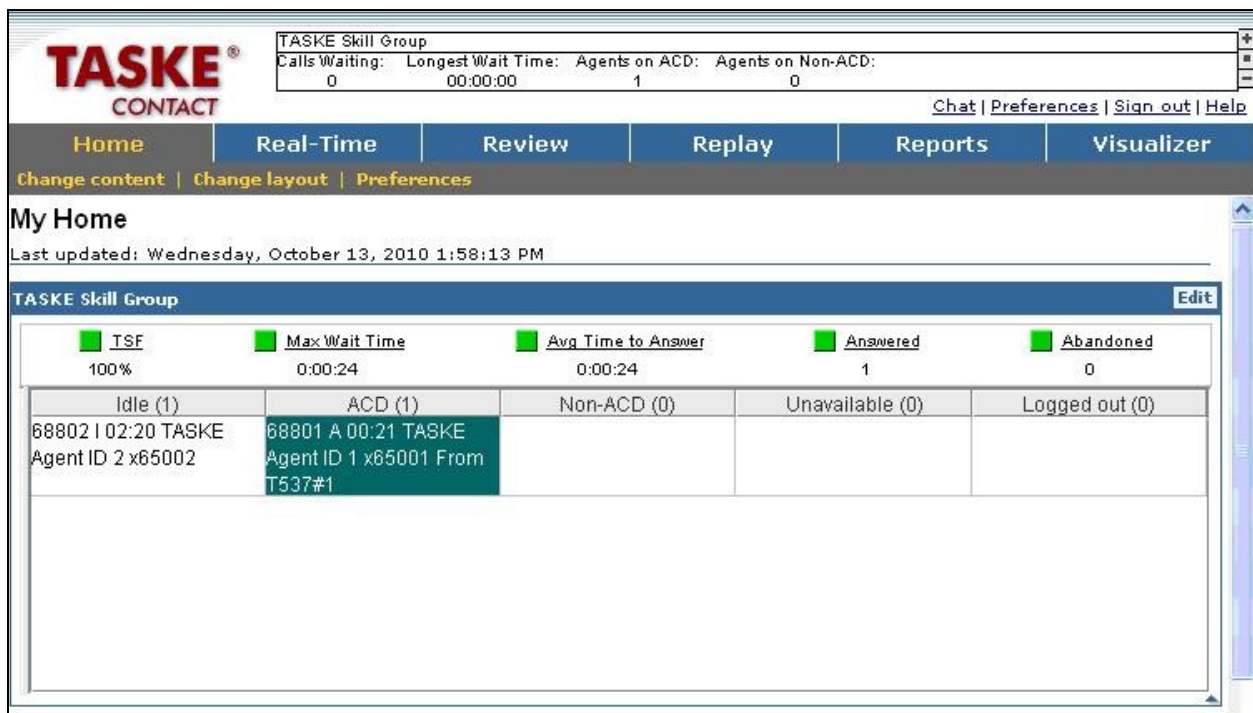
Welcome back! Please enter your user name and password.

User name:

Password:

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The **My Home** screen is displayed next. Log an agent in and answer an ACD call. Verify that the screen is automatically updated with the proper status, as shown below.



TASKE[®]
CONTACT

TASKE Skill Group
Calls Waiting: 0 Longest Wait Time: 00:00:00 Agents on ACD: 1 Agents on Non-ACD: 0

[Chat](#) | [Preferences](#) | [Sign out](#) | [Help](#)

Home | Real-Time | Review | Replay | Reports | Visualizer

[Change content](#) | [Change layout](#) | [Preferences](#)

My Home

Last updated: Wednesday, October 13, 2010 1:58:13 PM

TASKE Skill Group Edit				
☒ TSF	☒ Max Wait Time	☒ Avg Time to Answer	☒ Answered	☒ Abandoned
100%	0:00:24	0:00:24	1	0
Idle (1)	ACD (1)	Non-ACD (0)	Unavailable (0)	Logged out (0)
68802 I 02:20 TASKE Agent ID 2 x65002	68801 A 00:21 TASKE Agent ID 1 x65001 From T537#1			

9. Conclusion

These Application Notes describe the configuration steps required for TASKE Contact to successfully interoperate with Avaya Aura™ Communication Manager 5.2.1 using Avaya Aura™ Application Enablement Services. All feature and serviceability test cases were completed.

10. Additional References

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

1. *Administrator Guide for Avaya Aura™ Communication Manager*, Document 03-300509, Issue 5.0, Release 5.2, May 2009, available at <http://support.avaya.com>.
2. *Avaya Aura™ Application Enablement Services Administration and Maintenance Guide*, Release 5.2, Document ID 02-300357, Issue 11, November 2009, available at <http://support.avaya.com>.
3. *TASKE Contact Version 8.9 Quick Reference Guide*, available from the TASKE Contact Version 8.9 Installation CD.
4. *TASKE Contact Version 8.9 Reporting Reference*, available from the TASKE Contact Version 8.9 Installation CD.

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