



**Application Notes for TASKE Contact with Avaya
Communication Manager using Avaya Application
Enablement Services – Issue 1.0**

Abstract

These Application Notes describe the configuration steps required for TASKE Contact 8.5 to successfully interoperate with Avaya Communication Manager 3.0.1 using Avaya Application Enablement Services. Information in these Application Notes has been obtained through compliance testing and additional technical discussions. Testing was conducted via the *DeveloperConnection* Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

TASKE Contact is a call management software application that offers real-time call monitoring and historical call reporting for contact centers. TASKE Contact utilizes the CTI event reports from Avaya Communication Manager for call monitoring and reporting, and provides forecasting for effective contact center management.

The integration with Avaya Communication Manager is achieved through the Avaya Application Enablement Services (AES) Telephony Services Application Programming Interface (TSAPI) service, as illustrated in **Figure 1**.

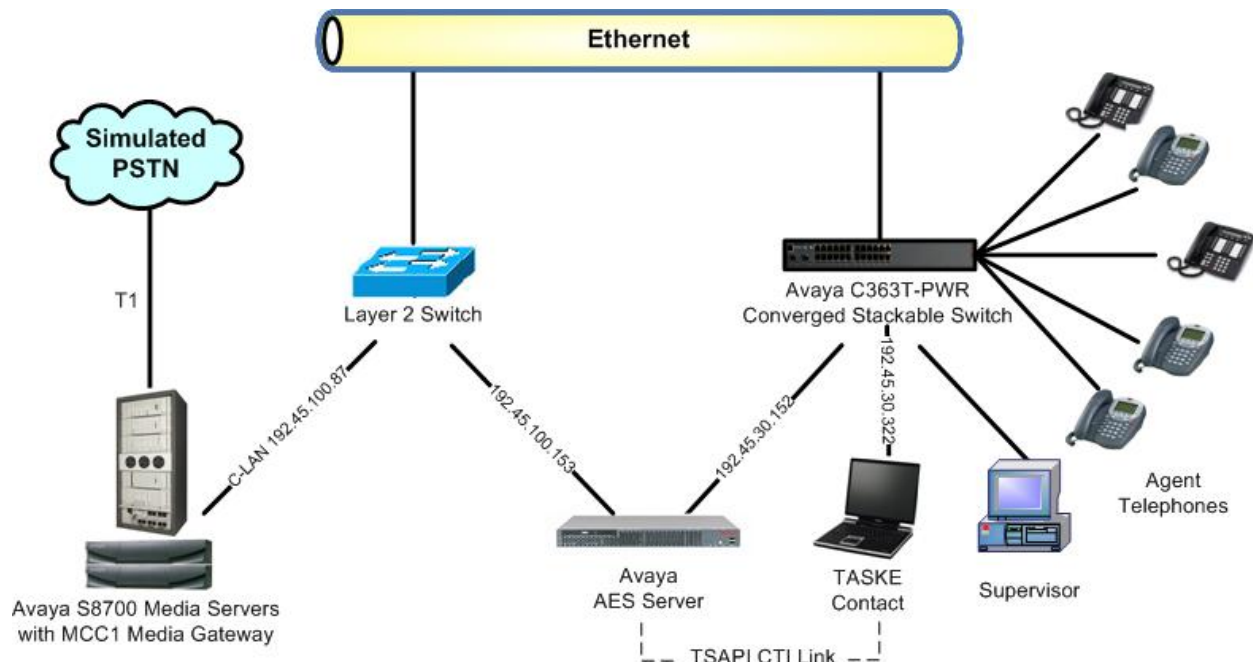


Figure 1: TASKE Contact with Avaya Communication Manager using AES

The contact center supervisor(s) can access TASKE Contact via a browser-based interface from any computer with internet access, to monitor ACD activities and track important indicators such as agent availability, longest call waiting, calls answered, and average talk time.

TASKE Contact provides the following key features:

- Web-based interface
- Real-time queue and agent activity monitoring for inbound, outbound, and internal calls
- Historical reporting on all calls
- Replay historical ACD call activity to review performance indicators
- Call Visualizer for detailed call analysis
- Spectrum readerboard display application
- Workforce management integration
- Call forecasting reports
- Detailed extension and trunk reporting outside of call center

2. Equipment and Software Validated

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

Equipment	Software
Avaya S8700 Media Servers	Communication Manager 3.0.1, load 346.0
Avaya MCC1 Media Gateway <ul style="list-style-type: none">TN799DP C-LAN Circuit PackTN2302AP IP Media Processor Circuit Pack	HW01 FW015 HW13 FW095
Avaya Application Enablement Services	3.0, build 46
Avaya C363T-PWR Converged Stackable Switch	4.3.12
Avaya 4600 Series IP Telephones	2.1.3 (4610SW), 1.8.3 (4624SW)
TASKE Contact on Toshiba Acra with Windows XP Professional SP2	8.5.5001
Contact Center Supervisor PC on Windows 2000	5.00.2195 SP4

3. Configure Avaya Communication Manager

This section provides the procedures for configuring Avaya Communication Manager. The procedures fall into the following areas:

- Administer C-LAN for AES connectivity
- Administer transport link for AES connectivity
- Administer CTI link with TSAPI service

The detailed administration of contact center devices, such as VDN, Skill, Split, Logical Agents and Station Extensions are assumed to be in place and are not covered in these Application Notes.

3.1. Administer C-LAN for AES Connectivity

The C-LAN administration procedure will involve adding an IP node name, an IP interface, and a data module. First, add an entry for the C-LAN in the node-names form. Use the “change node-names ip” command, as shown in **Figure 2**. In this case, “clan-1b09” and “192.45.100.87” are entered as **Name** and **IP Address** for the C-LAN that will be used for connectivity to the AES server. The actual node name and IP address may vary. Submit these changes.

```
change node-names ip
```

IP NODE NAMES	
Name	IP Address
clan-1b09	192.45 .100.87
clanP2-1a04	192.168.61 .21
clanP27-2a03	172.16 .252.200
clanP7-3a04	192.168.1 .10
default	0 .0 .0 .0

Figure 2: IP Node Names

Next, add the C-LAN to the system configuration using the “add ip-interface 1b09” command. Note that the actual slot number may vary. In this case, “1b09” is used as the slot number, as shown in **Figure 3** below. Enter the node name assigned from **Figure 2** above into the **Node Name** field, and then the IP address will be populated automatically.

Enter proper values for the **Subnet Mask** and **Gateway Address** fields. In this case, “255.255.255.0” and “192.45.100.1” are used to correspond to the network configuration in these Application Notes. Set the **Enable Ethernet Port** field to “y”, and use a separate **Network Region** for the C-LAN dedicated for AES connectivity. Default values may be used in the remaining fields. Submit these changes.

```
add ip-interface 1b09
```

IP INTERFACES	
Type:	C-LAN
Slot:	01B09
Code/Suffix:	TN799 D
Node Name:	clan-1b09
IP Address:	192.45 .100.87
Subnet Mask:	255.255.255.0
Gateway Address:	192.45 .100.1
Enable Ethernet Port?	y
Network Region:	2
VLAN:	n

Number of CLAN Sockets Before Warning: 400

ETHERNET OPTIONS	
Auto?	y

Figure 3: IP Interface

Next, add a new data module using the “add data-module n” command, where “n” is an available extension. Enter the following values as shown in **Figure 4**:

- **Name:** A descriptive name.
- **Type:** “ethernet”
- **Port:** Same slot number from **Figure 3** and port “17”.
- **Link:** A link number not previously assigned on this switch.

```
add data-module 2001
                                DATA MODULE

Data Extension: 2001           Name: CLAN 1B09 Data Module
      Type: ethernet
      Port: 01B0917
      Link: 11

Network uses 1's for Broadcast Addresses? y
```

Figure 4: Data Module

3.2. Administer Transport Link for AES Connectivity

Administer the transport link to Avaya Application Enablement Services (AES) with the “change ip-services” command. Add an entry with the following values for fields on Page 1, as shown in **Figure 5** below:

- **Service Type:** “AESVCS”
- **Enabled:** “y”
- **Local Node:** Node name for the C-LAN assigned in **Figure 2**.
- **Local Port** Retain the default of “8765”.

change ip-services					Page	1 of	3
IP SERVICES							
Service	Enabled	Local	Local	Remote	Remote		
Type		Node	Port	Node	Port		
SAT	y	clanP27-2a03	5023	any	0		
SAT	y	clan-1b04	5023	any	0		
AESVCS	y	clan-1b04	8765				
AESVCS	y	clan-1b09	8765				

Figure 5: IP Services Page 1

Go to Page 3 of the IP Services form, and enter the following values as shown in **Figure 6**:

- **AE Services Server:** Name obtained from the AES server, in this case “AES-DevCon2”.
- **Password:** Same password to be administered on the AES server.
- **Enabled:** “y”

Note that the name and password entered for the **AE Services Server** and **Password** fields must match the name and password on the AES server. The administered name for the AES server is created as part of the AES installation, and can be obtained from the AES server by typing “uname -n” at the Linux command prompt. The same password entered in **Figure 6** below will need to be set on the AES server using **Administration > Switch Connections > Edit Connection > Set Password** as shown in **Figure 12**.

change ip-services				Page 3 of 3	
AE Services Administration					
Server ID	AE Services Server	Password	Enabled	Status	
1:	devconaes01	*	y	in use	
2:	AES-DevCon2	*	y		
3:					
4:					
5:					

Figure 6: IP Services Page 3

3.3. Administer CTI Link with TSAPI Service

Add a CTI link and set the values as shown in **Figure 7** below 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. Submit these changes.

add cti-link 4		Page 1 of 2	
CTI LINK			
CTI Link: 4			
Extension: 2204			
Type: ADJ-IP			
COR: 1			
Name: AES-DevCon2 TSAPI/JTAPI			

Figure 7: CTI Link

4. Configure Avaya Application Enablement Services

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

- Verify Avaya Application Enablement Services License
- Administer local IP
- Administer switch connections
- Administer TSAPI link
- Administer security database
- Administer TASKE user

4.1. Verify Avaya Application Enablement Services License

Access the AES OAM web based interface. Note that the AES OAM includes two separate administrative accounts, one to manage CTI OAM Admin and a separate one to manage User Management. Log in to AES OAM using the CTI OAM Admin user and password, and the Welcome To OAM screen will be displayed as shown in **Figure 8**.

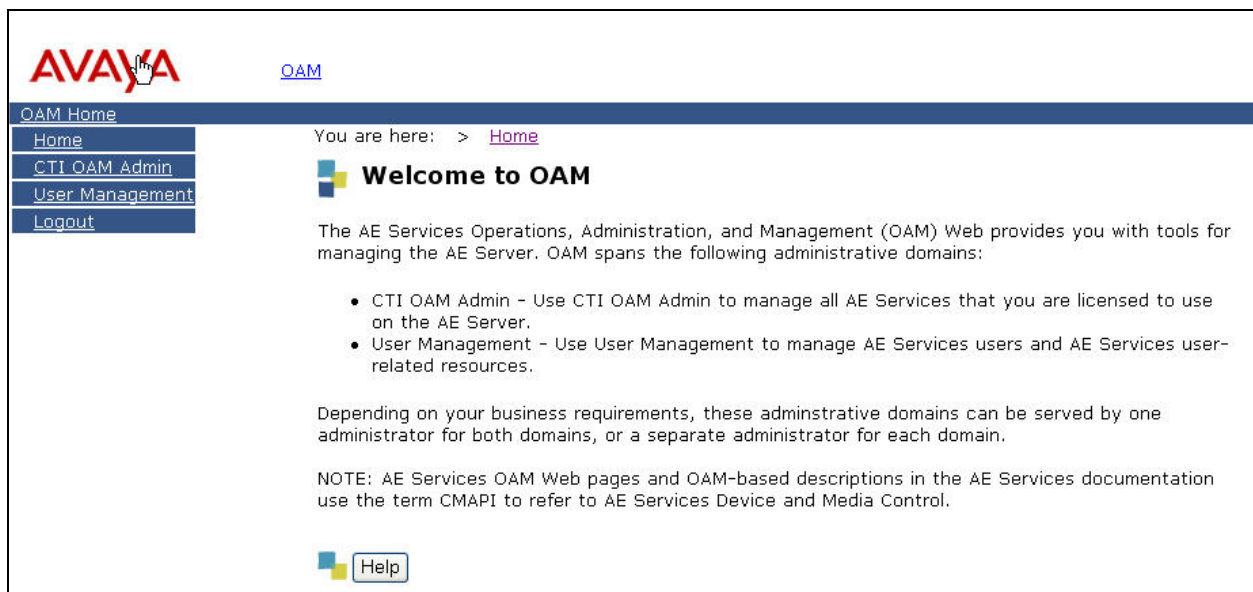


Figure 8: Welcome to OAM

Select **OAM Home -> CTI OAM Admin** to display the Welcome to CTI OAM Screen. From the Welcome to CTI OAM screen shown in **Figure 9**, verify that the Avaya Application Enablement Services license has proper permissions for the features illustrated in these Application Notes by ensuring the TSAPI service is licensed. If the TSAPI service is not licensed, then contact the Avaya sales team or business partner for a proper license file.

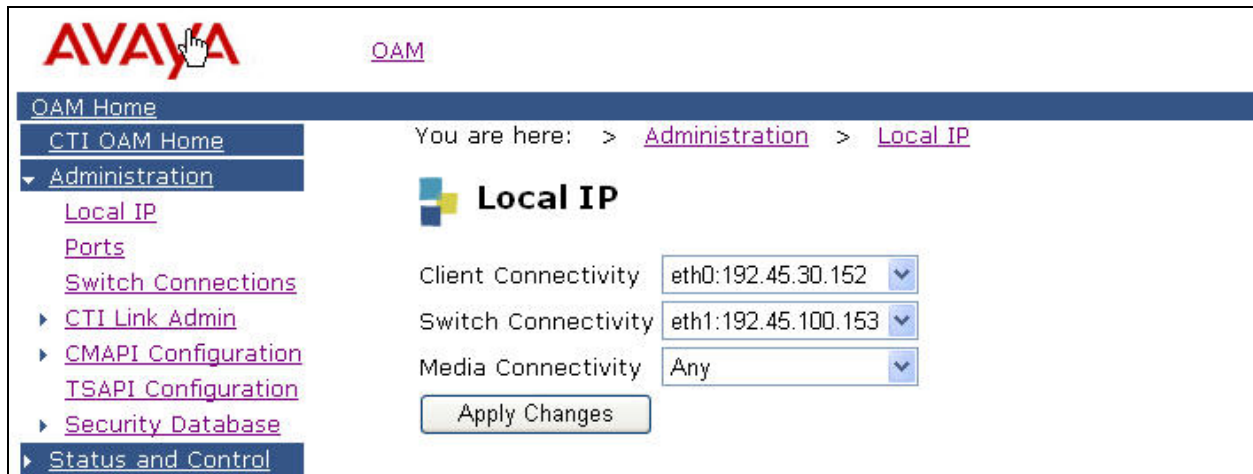
The screenshot displays the CTI OAM Admin web interface. At the top left is the Avaya logo. A navigation menu on the left includes links for OAM Home, CTI OAM Home, Administration, Status and Control, Maintenance, Logs, Utilities, Help, and Logout. The main content area shows a breadcrumb trail 'You are here: > CTI OAM Home' followed by a 'Welcome to CTI OAM Screens' message. Below this, it indicates that user '[craft]' is logged in on Thu Jan 11 16:37:15 E.S.T. 2006. A table lists the status of various services, all of which are 'Running'. A note directs users to 'Status and Control' for more details. An important notice states that AE services must be restarted for administrative changes to take effect. Finally, a 'License Information' section confirms the user is licensed for CTI version 3.0 and lists the supported services: DLG, CVLAN, and TSAPI.

Service	Controller Status
ASAI Link Manager	Running
CMAPI Service	Running
CVLAN Service	Running
DLG Service	Running
Transport Layer Service	Running
TSAPI Service	Running

Figure 9: Welcome to CTI OAM Screens

4.2. Administer Local IP

From the CTI OAM Home menu, select **Administration > Local IP**. As shown in **Figure 10**, in the **Client Connectivity** field, select the AES server IP address that will be used to connect to TASKE Contact. In the **Switch Connectivity** field, select the AES server IP address that will be used to connect to Avaya Communication Manager. Click on **Apply Changes**.



The screenshot shows the Avaya OAM interface. The top navigation bar includes the Avaya logo and a 'QAM' link. Below it, a breadcrumb trail reads 'You are here: > Administration > Local IP'. The left sidebar contains a tree view with 'Administration' expanded, showing 'Local IP' as the selected item. The main content area is titled 'Local IP' and contains three dropdown menus: 'Client Connectivity' (set to 'eth0:192.45.30.152'), 'Switch Connectivity' (set to 'eth1:192.45.100.153'), and 'Media Connectivity' (set to 'Any'). An 'Apply Changes' button is located at the bottom of the form.

Figure 10: Local IP

4.3. Administer Switch Connections

From the CTI OAM Home menu, select **Administration > Switch Connections**. As shown in **Figure 11**, enter a descriptive name for the switch connection and click on **Add Connection**. In this case, “devcon27S8700” is used, and the actual switch connection name may vary.



The screenshot shows the Avaya OAM interface for 'Switch Connections'. The breadcrumb trail is 'You are here: > Administration > Switch Connections'. The left sidebar shows 'Administration' expanded with 'Switch Connections' selected. The main content area is titled 'Switch Connections' and features a text input field containing 'devcon27S8700' and an 'Add Connection' button. Below this, a table lists existing connections. The first entry has a green status icon, a connection name of 'devcon35S8710', and 0 active connections. At the bottom, there are four buttons: 'Edit Connection', 'Edit CLAN IPs', 'Edit H.323 Gatekeeper', and 'Delete Connection'.


	Connection Name	Number of Active Connections
	devcon35S8710	0

Figure 11: Switch Connections

Next, the Set Password screen is displayed. As shown in **Figure 12**, enter the same password that was administered in Avaya Communication Manager using the IP Services form in **Figure 8**. Re-enter the same password in the **Confirm Switch Password** field. Note that the default value of checked may be retained for the **SSL** field. Had the switch been an Avaya DFINITY Server G3csi, the **SSL** field would need to be unchecked. Click on **Apply**.

AVAYA OAM

OAM Home

CTI OAM Home

Administration

Local IP

Ports

Switch Connections

CTI Link Admin

CMAPI Configuration

TSAPI Configuration

Security Database

Status and Control

Maintenance

You are here: > Administration > Switch Connections

Set Password - devcon27S8700

Switch Password: [password field]

Confirm Switch Password: [password field]

SSL: ☒

Please note that changing the password affects only new connections, not open connections.

Apply Cancel

Figure 12: Set Password

The Switch Connections screen is displayed. As shown in **Figure 13**, select the newly added switch connection name and click on **Edit CLAN IPs**.

AVAYA OAM

OAM Home

CTI OAM Home

Administration

Local IP

Ports

Switch Connections

CTI Link Admin

CMAPI Configuration

TSAPI Configuration

Security Database

Status and Control

Maintenance

You are here: > Administration > Switch Connections

Switch Connections

[Search Field] Add Connection

	Connection Name	Number of Active Connections
<input checked="" type="radio"/>	devcon27S8700	0
<input type="radio"/>	devcon35S8710	0

Edit Connection Edit CLAN IPs Edit H.323 Gatekeeper Delete Connection

Figure 13: Switch Connections

In the Edit CLAN IPs screen, enter the host name or IP address of the C-LAN used for AES connectivity as shown in **Figure 14**. In this case, “192.45.100.87” is used, which corresponds to the C-LAN administered on Avaya Communication Manager in **Figure 2**. Click on **Add Name or IP**.

Figure 14: Edit CLAN IPs

4.4. Administer TSAPI Service

To administer a TSAPI link on AES, select **Administration > CTI Link Admin > TSAPI Links** from the CTI OAM Home menu as shown in **Figure 15** below. Click on **Add Link**.

Link	Switch Connection	Switch CTI Link #	ASAI Link Version
2	devcon35S8700	10	4

Figure 15: TSAPI Links

In the Add/Edit TSAPI Links screen, select the following values as shown in **Figure 16**:

- **Switch Connection:** Administered switch connection configured in **Figure 11**.
- **Switch CTI Link Number:** Corresponding CTI link number configured in **Figure 7**.

Note that the actual values for both fields may vary. Click on **Apply Changes**.

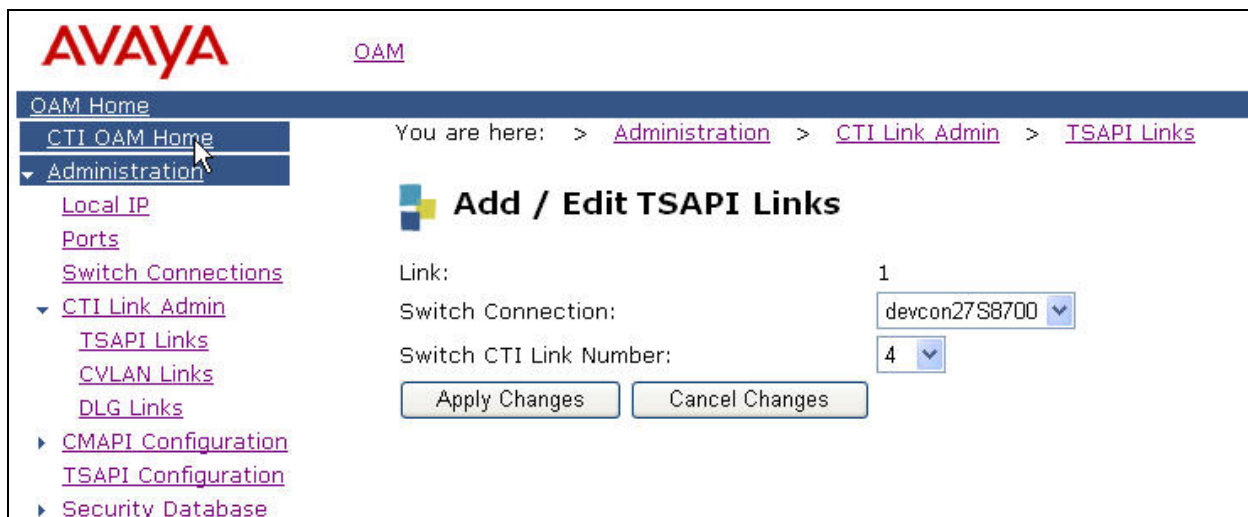


Figure 16: Add/Edit TSAPI Links

Next, enable the security database on AES, as this functionality is utilized by TASKE Contact. From the CTI OAM Home menu, select **Administration > TSAPI Configuration** to display the TS Configuration screen shown in **Figure 17** below. Click on **Enable SDB**, followed by **Apply Changes**.

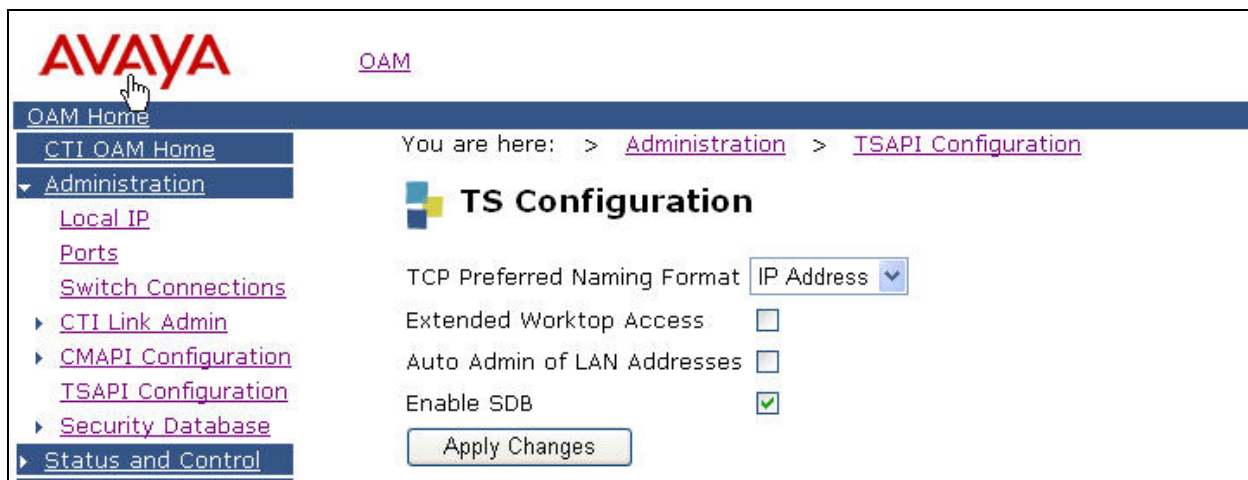


Figure 17: TS Configuration

Navigate to the Tlinks screen by selecting **Administration > Security Database > Tlinks** from the CTI OAM Home menu. Note the value of the **Tlink Name**, as this will be needed for configuring TASKE Contact.

In this case, the **Tlink Name** is “AVAYA#DEVCON27S8700#CSTA#AES-DEVCON2 “, which is automatically created by the AES server and shown in **Figure 18**.

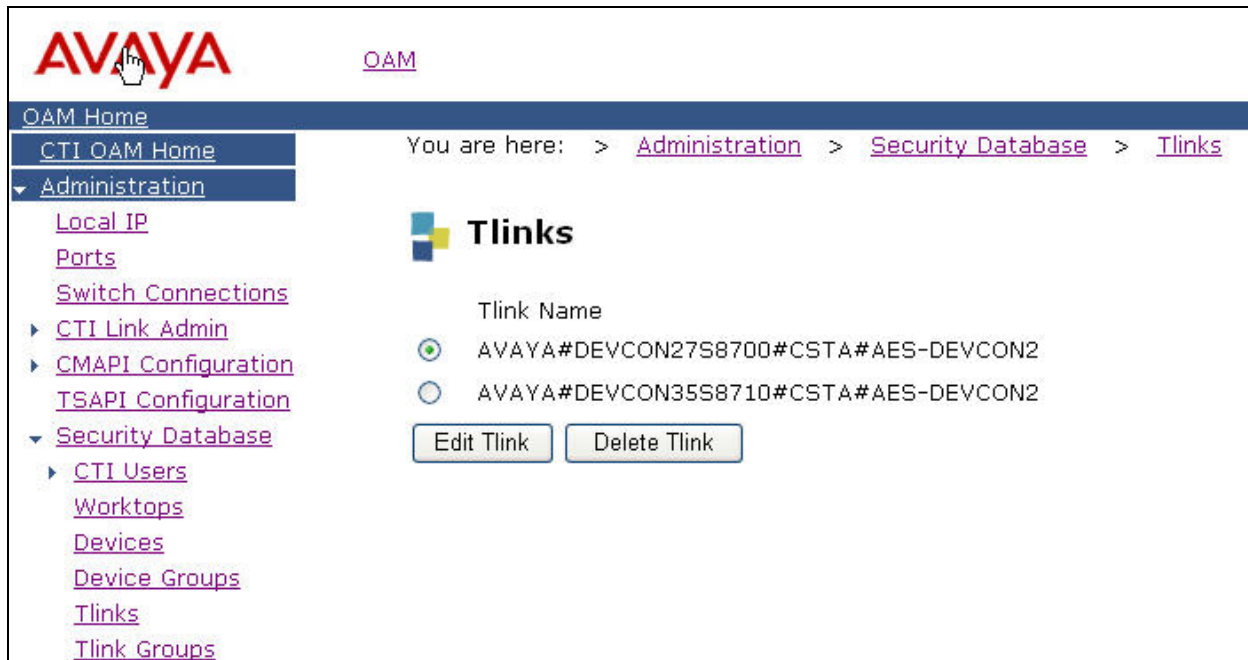


Figure 18: Tlinks

4.5. Administer Security Database

All devices that are monitored and controlled by TASKE Contact need to be configured in the AES security database. From the CTI OAM Home menu, select **Administration > Security Database -> Devices**, and add each device by entering the device extension and clicking on **Add Device**. A sample listing of the configured devices used for compliance testing is shown in **Figure 19**. Note that the total number of devices may vary, as this depends on the number of extensions to be monitored.

The associated field values for each device are entered in the **Add / Edit Device** screen shown in **Figure 20**. The following is a description of the device types that can be monitored by TASKE Contact:


- **PHONE:** Station extensions.
- **VDN:** Vector Directory Number extensions.
- **AGENT ID:** Logical agent extensions.
- **ACD:** ACD split or Skill group extensions.

The screenshot shows the AVAYA OAM web interface. The top navigation bar includes the AVAYA logo and a link to OAM. The left sidebar contains a tree view with the following items: OAM Home, CTI OAM Home, Administration (expanded), Local IP, Ports, Switch Connections, CTI Link Admin, CMAPI Configuration, TSAPI Configuration, Security Database (expanded), CTI Users, Worktops, Devices (selected), Device Groups, Tlinks, Tlink Groups, and Status and Control. The main content area shows the 'Devices' page with a breadcrumb trail: You are here: > Administration > Security Database > Devices. Below the breadcrumb is a search bar and an 'Add Device' button. A table lists the configured devices:

	Device ID	Tlink Group	Device Type	Location
<input checked="" type="radio"/>	22720	Any	PHONE	
<input type="radio"/>	22735	Any	PHONE	
<input type="radio"/>	22888	Any	VDN	
<input type="radio"/>	22999	Any	VDN	
<input type="radio"/>	53001	Any	AGENT ID	
<input type="radio"/>	53002	Any	AGENT ID	
<input type="radio"/>	54101	Any	ACD	

At the bottom of the table are two buttons: 'Edit Device' and 'Delete Device'.

Figure 19: Devices



[OAM](#)

[OAM Home](#)

[CTI OAM Home](#)

▼ [Administration](#)

- [Local IP](#)
- [Ports](#)
- [Switch Connections](#)
- ▶ [CTI Link Admin](#)
- ▶ [CMAPI Configuration](#)
- [TSAPI Configuration](#)
- ▼ [Security Database](#)
 - ▶ [CTI Users](#)
 - [Worktops](#)
 - [Devices](#)

You are here: > [Administration](#) > [Security Database](#) > [Devices](#)

Add / Edit Device

Device ID

Location

Device Type

Tlink Group

Figure 20: Add/Edit Devices

4.6. Administer TASKE User

Select **OAM Home -> User Management** to display the AES login screen. Log in using the User Management user name and password, and the same Welcome To OAM screen from **Figure 8** is displayed.

To create the TASKE user on AES, select **OAM Home > User Management > Add User** from the User Management Home menu. In the **Add User** screen shown in **Figure 21**, enter the following values:

- **User Id:** A meaningful user id.
- **Common Name:** A descriptive name.
- **Surname:** A descriptive surname.
- **User Password:** Password for the TASKE user.
- **Confirm Password:** Re-enter the same password for the TASKE user.
- **Avaya Role:** Retain the default of “None”.
- **CT User:** Select “Yes” from the dropdown menu.

Click on **Apply** at the bottom of the screen (not shown in **Figure 21**).

AVAYA [OAM](#)

OAM Home

User Management Home

User Management

List All Users

Add User

Search Users

Modify Default User

Change User Password

Service Management

Help

Logout

You are here: > [User Management](#) > [Add User](#)

Add User

Fields marked with * can not be empty.

* User Id

* Common Name

* Surname

* User Password

* Confirm Password

Admin Note

Avaya Role

Business Category

Car License

CM Home

Cms Home

CT User

Figure 21: Add User

Select **OAM Home -> CTI OAM Admin** to display the AES login screen again. Log in using the CTI OAM Admin user name and password, and the same Welcome to OAM screen from **Figure 8** is displayed. Bring up the Welcome to CTI OAM Screens in **Figure 9** by following the procedural steps associated with **Figure 9**.

From the CTI OAM Home menu, select **Administration -> Security Database -> CTI Users -> List All Users** to get a listing of all CTI users, as shown in **Figure 22**. Select the TASKE user created back in **Figure 21** and click on **Edit**.

AVAYA [OAM](#)

OAM Home

CTI OAM Home

You are here: > [Administration](#) > [Security Database](#) > [CTI Users](#) > [List All Users](#)

Administration

Local IP

Ports

Switch Connections

CTI Link Admin

CMAPI Configuration

TSAPI Configuration

Security Database

CTI Users

List All Users

Search Users

Worktops

Devices

CTI Users

	User ID	Common Name	Worktop Name	Device ID
<input checked="" type="radio"/>	TASKE	TASKE	NONE	NONE
<input type="radio"/>	trial	trial	NONE	NONE
<input type="radio"/>	zeacom	Zeacom	NONE	NONE

Edit List All

Figure 22: CTI Users

The Edit CTI User screen is displayed, as shown in **Figure 23**. Select “Any” from the drop down menu for the **Call Origination and Termination, Device / Device, Call / Device, and Allow Routing on Listed Device** fields. Click on **Call / Call** , followed by **Apply Changes**.

AVAYA [OAM](#)

OAM Home

CTI OAM Home

Administration

Local IP

Ports

Switch Connections

CTI Link Admin

CMAPI Configuration

TSAPI Configuration

Security Database

CTI Users

List All Users

Search Users

Worktops

Devices

Device Groups

Tlinks

Tlink Groups

Status and Control

Maintenance

You are here: > [Administration](#) > [Security Database](#) > [CTI Users](#) > [List All Users](#)

Edit CTI User

User ID: TASKE

Common Name: TASKE

Worktop Name: NONE

Unrestricted Access: Enable

Call Origination and Termination: Any

Device / Device: Any

Call / Device: Any

Call / Call: ☒

Allow Routing on Listed Device: Any

Apply Changes Cancel

Figure 23: Edit CTI User

5. Configure TASKE Contact

This section provides the procedures for configuring TASKE Contact. At the conclusion of the TASKE Contact 8.5 software installation, the TASKE Database Update Wizard will be invoked automatically and displays the Welcome to the TASKE Database Update Wizard screen shown in **Figure 24**. Click on **Next**.



Figure 24: Welcome to the TASKE Database Update Wizard

The Query MultiVantage Telephone System screen is displayed. Enter the following values as shown in **Figure 25**:

- **Tlink name:** Select the same Tlink Name on the AES from **Figure 18**.
- **Login name:** Enter the TASKE user id administered on the AES from **Figure 21**.
- **Password:** Enter the TASKE user password administered on the AES from **Figure 21**.

If the customer utilizes the Expert Agent Selection feature on Avaya Communication Manager, then click on **The EAS feature is enabled on the telephone system**. Click on **Update** for TASKE Contact to start collecting information from Avaya Communication Manager.



Figure 25: Welcome to Administrator

The Information collection completed screen is displayed, as shown in **Figure 26**. Click on **Next** to proceed to update the TASKE Database.

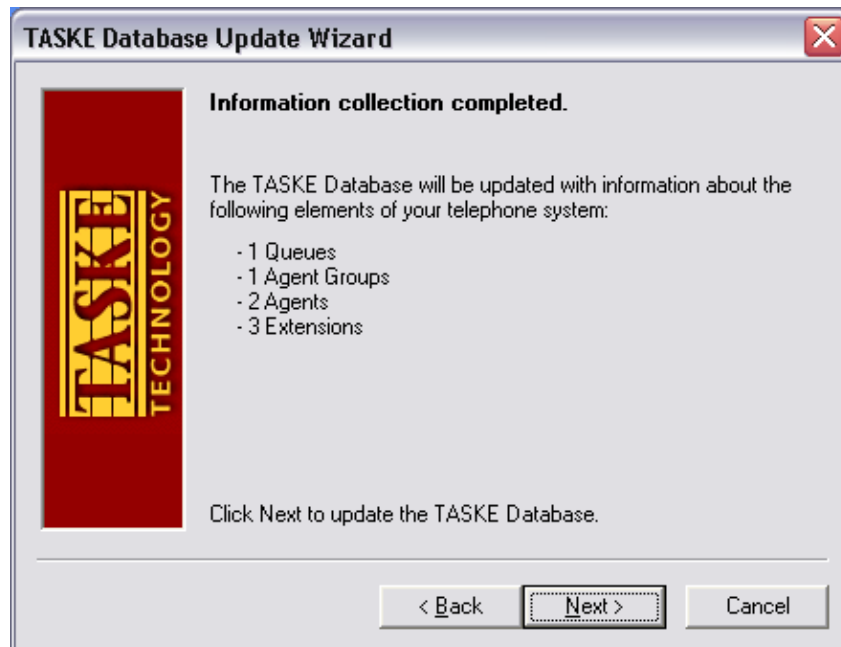


Figure 26: Information Collection Completed

The Update complete screen is displayed, as shown in **Figure 27**. Click on **Launch the TASKE Administrator**, followed by **Done**.



Figure 27: System Setup

In the TASKE Administrator screen, click on **Users** in the bottom of the left pane, to display the **List of Users** and **User Record Details** panes shown in **Figure 28**.

The screenshot shows the TASKE Administrator application window. The title bar reads "TASKE Administrator". Below the title bar is a menu bar with "File", "View", 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 "Users" button is highlighted. The main area is divided into two panes. The top pane is titled "List of Users (Total = 0)" and contains a table with columns "ID", "Name", and "Type". The bottom pane is titled "User Record Details:" and contains a "New" button and a form with fields for "User name", "Full name", "Password", and "Confirm password". The "Type" field is a dropdown menu currently set to "Agent". A note at the bottom of the form states: "Passwords must be a minimum of 6 characters, are case sensitive, and may contain any combination of alphanumeric characters and punctuation."

ID	Name	Type
----	------	------

User Record Details:

User name:
Full name:
Password:
Confirm password:

Type:

Passwords must be a minimum of 6 characters, are case sensitive, and may contain any combination of alphanumeric characters and punctuation.

Figure 28: TASKE Administrator

From the **User Record Details** pane, select **New** to create a user record for each supervisor that will be monitoring call activities. After clicking on **New**, the fields in the **User Record Details** pane become enabled. Enter the following information as shown in **Figure 29**:

- **User name:** User name for the supervisor.
- **Full name:** Full name for the supervisor user.
- **Password:** Password for the supervisor user.
- **Confirm password:** Re-enter the same password.
- **Type:** Select “Supervisor” from the drop down menu.

Click on **Update** to create the new supervisor user record. Repeat this process to create remaining supervisor users records.

The screenshot shows the TASKE Administrator application window. The title bar reads "TASKE Administrator". The menu bar includes "File", "View", 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 in orange). 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 "New" button, an "Update" button, and a "Cancel" button. Below these buttons are four input fields: "User name" (containing "jsmith"), "Full name" (containing "Jane Smith"), "Password" (containing "xxxxxx"), and "Confirm password" (containing "xxxxxx"). To the right of the "User name" field is a "Type" dropdown menu set to "Supervisor". At the bottom of the "User Record Details" section, a note states: "Passwords must be a minimum of 6 characters, are case sensitive, and may contain any combination of alphanumeric characters and punctuation."

Figure 29: TASKE Administrator with User Record Details

The TASKE Collector – Telephony Services Connection screen is in the background and is displayed next. As shown in **Figure 30**, select the same Tlink Name on the AES from **Figure 18**. Click on **Specific Windows user**, and enter the same TASKE user id and password administered on the AES from **Figure 21**. Click on **OK**.



The screenshot shows a Windows-style dialog box titled "TASKE Collector - Telephony Services Connection". The dialog has a light gray background and a standard Windows XP-style border. Inside the dialog, there is a text area at the top explaining the connection process. Below this, there is a dropdown menu for "Tlink name:" which is currently set to "AVAYA#DEVCON27S8700#CSTA#AES-DEVCON2". Another text area explains the Tserver configuration and the requirement for a Windows user. Below this, there are two radio buttons for "Connect to the Tserver as:". The first radio button is "Logged in Windows user" and is unselected. The second radio button is "Specific Windows user:" and is selected. Below the selected radio button, there are two text input fields: "User name:" with the text "TASKE" and "Password:" with the text "xxxxxx". At the bottom center of the dialog is an "OK" button.

TASKE Collector - Telephony Services Connection

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: AVAYA#DEVCON27S8700#CSTA#AES-DEVCON2

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: xxxxxx

OK

Figure 30: TASKE Collector

The TASKE Console screen is displayed next, as shown in **Figure 31**. Note that the symbols displayed next to the **TASKE Collector**, **TASKE Information Server**, and **TASKE Upgrade Server** components are all in green, with corresponding status of “Started”.

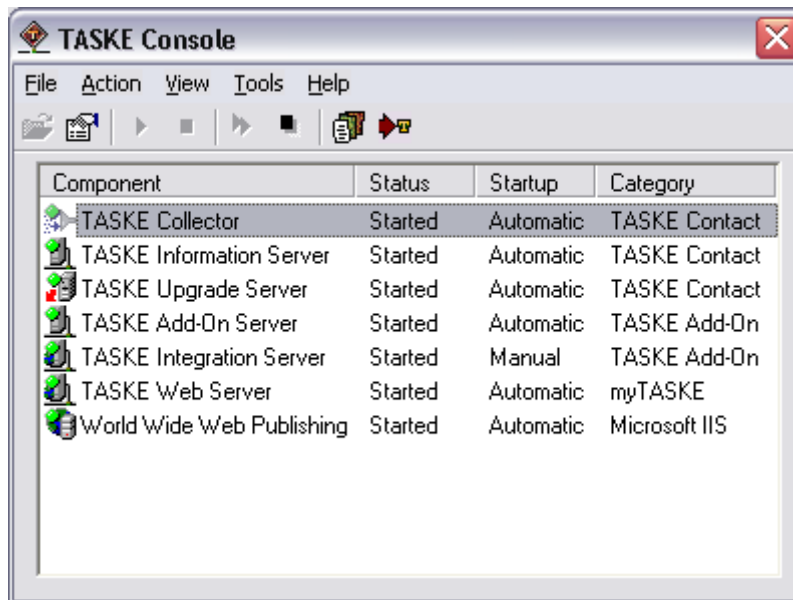


Figure 31: TASKE Console

6. Interoperability Compliance Testing

The Interoperability compliance test included feature functionality, load, and serviceability testing.

The feature functionality testing focused on verifying TASKE Contact handling of TSAPI messages in the areas of value queries and event notification. Testing also included rainy day scenarios to verify successful handling of negative acknowledgements.

The load testing focused on verifying the ability of TASKE Contact to report contact center data gathered over time from a moderate traffic load.

The serviceability testing focused on verifying the ability of TASKE Contact to recover from adverse conditions, such as busying out the CTI link and disconnecting the Ethernet cable for the CTI link.

6.1. General Test Approach

The feature functionality test cases were performed both automatically and manually. Upon start of the TASKE Contact application, the application automatically queries Avaya Communication Manager for device status and requests monitoring. For the manual part of the testing, incoming calls were made to the monitored VDN to enable event reports to be sent to TASKE Contact. Manual call controls from the agent telephones were exercised to verify remaining features such as answering and transferring of calls.

The load test cases were performed by generating ~300 calls over a 2 hour period with 5 available agents, to verify accuracy of various real-time and historical analysis reports. The TASKE Contact reports were compared with the internal Basic Call Management System (BCMS) measurements. BCMS is a software package residing on Avaya Communication Manager, used to provide real-time and historical reports on ACD related activities.

The serviceability test cases were performed manually by busying out and releasing the CTI link, and by disconnecting and reconnecting the LAN cables.

The verification of all tests included human checking of proper states at the telephone sets, and monitoring the event report logs from the TASKE Information Server.

6.2. Test Results

All test cases were executed and passed.

7. Verification Steps

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

7.1. Verify Avaya Communication Manager

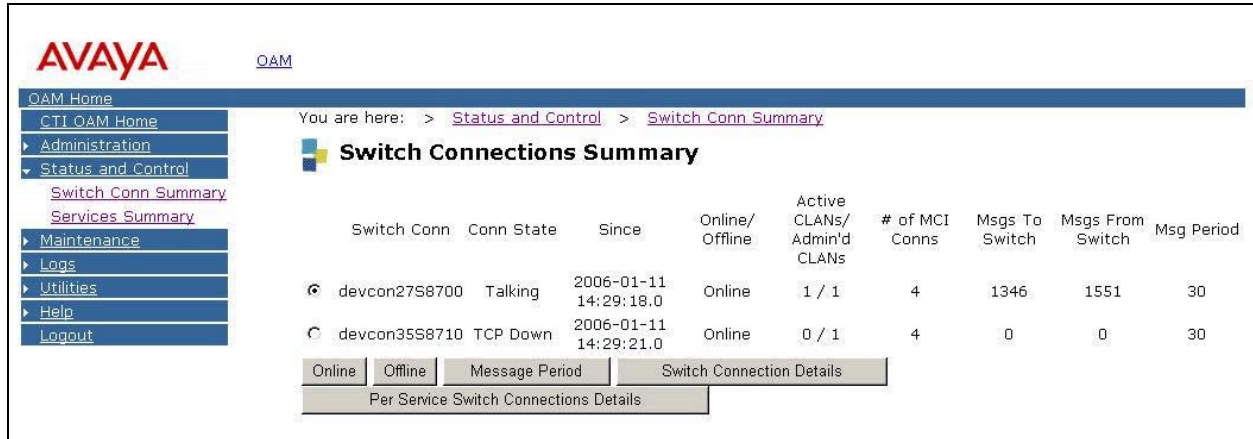
Verify the status of the administered CTI link by using the “status aesvcs cti-link” command as shown in **Figure 32**.

status aesvcs cti-link						
AE SERVICES CTI LINK STATUS						
CTI Link	Version	Mnt Busy	AE Services Server	Service State	Msgs Sent	Msgs Rcvd
1		no		down	0	0
2	4	no	AES-DevCon2	restarted	30	15
3	4	no	AES-DevCon2	restarted	30	15
4	4	no	AES-DevCon2	established	1131	960
15	4	no	devconaes01	established	15	15

Figure 32: Status Aesvcs CTI-link

7.2. Verify Avaya Enablement Services

From the AES CTI OAM Home menu, verify the status of the switch connection by selecting **Status and Control > Switch Conn Summary**, as shown in **Figure 33**.



AVAYA OAM

You are here: > [Status and Control](#) > [Switch Conn Summary](#)

Switch Connections Summary

Switch Conn	Conn State	Since	Online/ Offline	Active CLANs/ Admin'd CLANs	# of MCI Conns	Msgs To Switch	Msgs From Switch	Msg Period
devcon27S8700	Talking	2006-01-11 14:29:18.0	Online	1 / 1	4	1346	1551	30
devcon35S8710	TCP Down	2006-01-11 14:29:21.0	Online	0 / 1	4	0	0	30

[Online](#) [Offline](#) [Message Period](#) [Switch Connection Details](#)

[Per Service Switch Connections Details](#)

Figure 33: Switch Connections Summary

Verify the status of the TSAPI link by selecting **Status and Control > Services Summary** from the CTI OAM Home menu. Click on **TSAPI Service**, followed by **Details**. The TSAPI Link Details screen is displayed, as shown in **Figure 34**.



AVAYA OAM

You are here: > [Status and Control](#) > [Services Summary](#)

TSAPI Link Details

Link	Switch Conn Name	Switch CTI Link Number	Conn Status	Since	Service State	Switch Version	Number of Associations	ASAI Message Rate
1	devcon27S8700	4	Talking	2006-01-11 14:29:21.0	Online	13	7	72
2	devcon35S8710	10	CM Down	2006-01-11 14:29:21.0	Online	13	0	72

[Online](#) [Offline](#)

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

[TSAPI Service Status](#) [TLink Status](#) [User Status](#)

Figure 34: TSAPI Link Details

7.3. Verify TASKE Contact

To verify the status of the administered CTI link, bring up the TASKE Information Server screen by double clicking on the “TASKE Information Server” from the **Component** column in the TASKE Console screen shown in **Figure 31**. Make a call to a monitored device, and CTI events received from Avaya Communication Manager will be logged in the TASKE Information Server screen as shown in **Figure 35**.

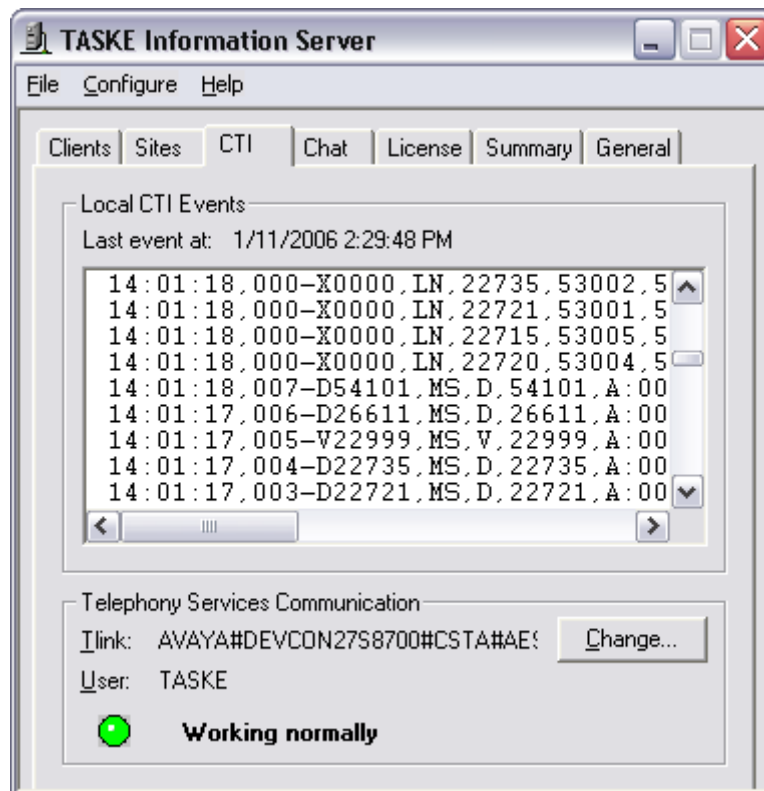


Figure 35: Application Manager Icon

To verify real-time and historical reporting of ACD activities at monitored devices, open up a browser on any PC on the network and access TASKE Contact with the IP address as shown in **Figure 36**. Note that the actual IP address may vary, and in this case the TASKE Contact server has an IP address of “192.45.30.322”. Log in with a valid supervisor user name and password administered on TASKE Contact from **Figure 29**. Click on **Sign In**.

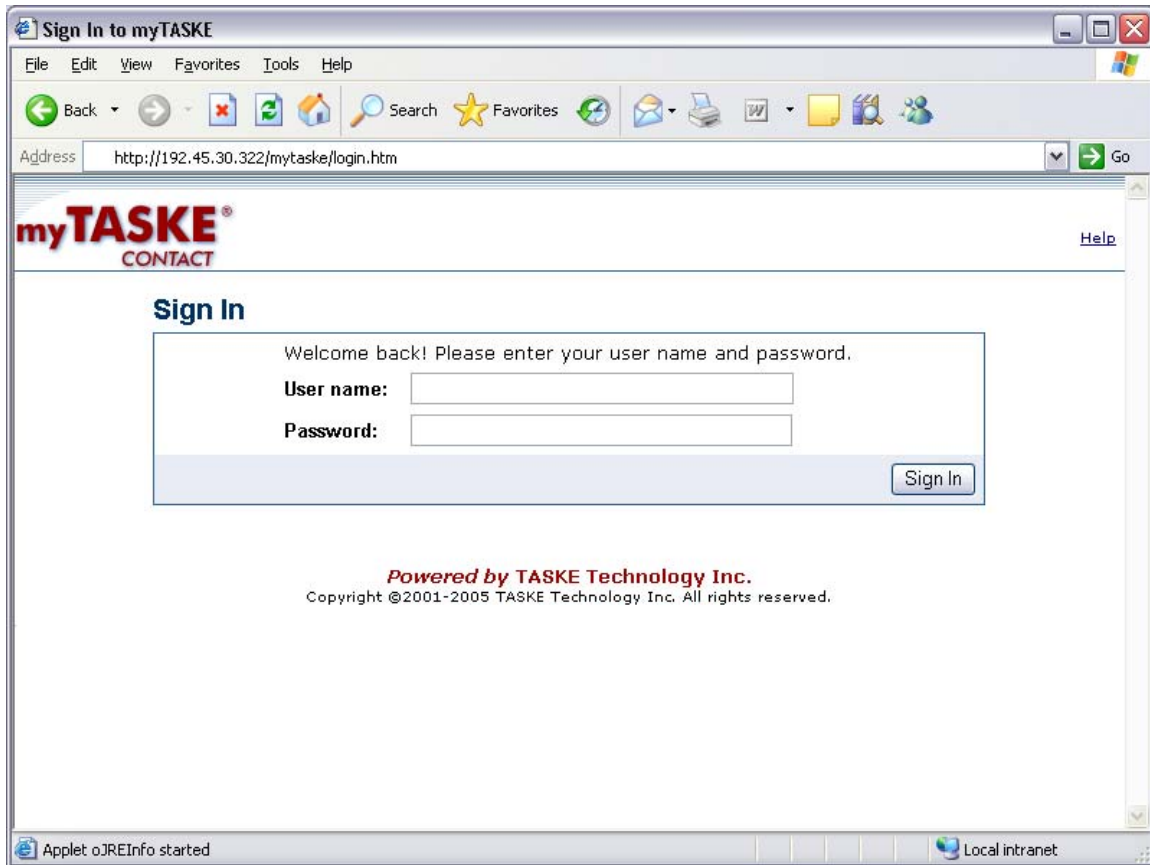


Figure 36: myTASKE Contact Sign In

The myTASKE Contact monitoring screen is displayed. Assuming the user already has a profile established per TASKE Contact documentation, the screen will then be populated with real-time monitoring data reflecting call activities at the monitored devices, as shown in **Figure 37**.

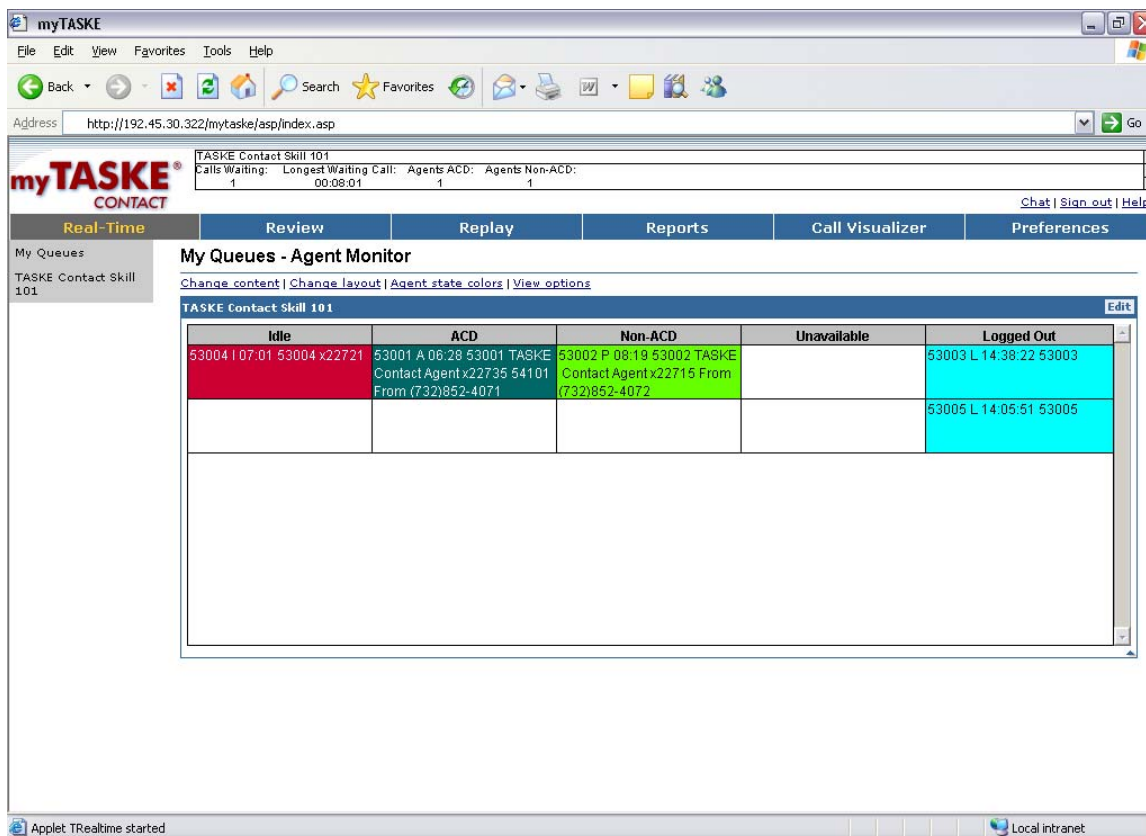


Figure 37: myTASKE Contact Monitoring

8. Support

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

- Call the TASKE technical support at (877) 778-2753.
- Submit a questionnaire to TASKE technical support via http://www.taske.com/forms/form_asksupport.html.

9. Conclusion

These Application Notes describe the configuration steps required for TASKE Contact 8.5 to successfully interoperate with Avaya Communication Manager 3.0.1 using Avaya Application Enablement Services. All feature functionality and serviceability test cases were completed successfully.

10. Additional References

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

- *Avaya Application Enablement Services 3.0 Administration and Maintenance Guide*, Document ID 02-300357, Issue 1, June 2005, available at <http://support.avaya.com>.
- *TASKE Contact Version 8.5 Getting Started Guide*, available from the TASKE Contact Version 8.5 Installation CD.
- *TASKE Contact Version 8.5 Installation Reference*, available from the TASKE Contact Version 8.5 Installation CD.
- *Pre-Installation Reference for TASKE Contact and TASKE Essential*, available from the TASKE Contact Version 8.5 Installation CD.
- *TASKE Contact Version 8.5 Quick Reference Guide*, available from the TASKE Contact Version 8.5 Installation CD.
- *TASKE Contact Version 8.5 Reporting Reference*, available from the TASKE Contact Version 8.5 Installation CD.

Avaya dealers and technicians can also obtain the above TASKE references from the TASKE Dealer Support website at <http://www.taske.com/dealer/index.html>.

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