

Avaya Solution & Interoperability Test Lab

Application Notes for TASKE Contact with Avaya AuraTM Communication Manager 6.0 using Avaya AuraTM Application Enablement Services – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for TASKE Contact to interoperate with Avaya AuraTM Communication Manager 6.0 using Avaya AuraTM Application Enablement Services.

In the compliance testing, TASKE Contact used the Telephony Services Application Programming Interface from Avaya AuraTM Application Enablement Services to monitor contact center devices on Avaya AuraTM 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 AuraTM Communication Manager 6.0 using Avaya AuraTM Application Enablement Services.

In the compliance testing, TASKE Contact used the Telephony Services Application Programming Interface (TSAPI) from Avaya AuraTM Application Enablement Services to monitor contact center devices on Avaya AuraTM 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

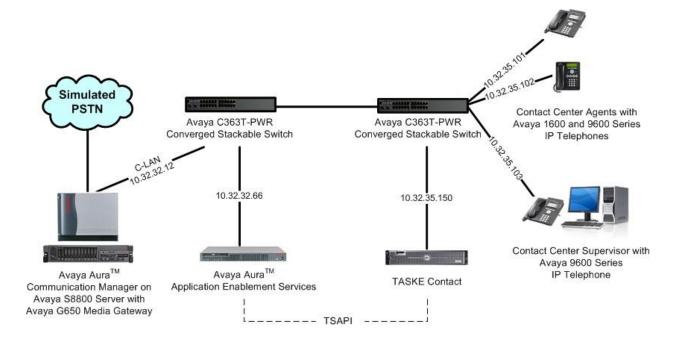
• Web: http://www.taske.com/forms/form asksupport.html

2. Reference Configuration

The detailed administration of basic connectivity between Avaya AuraTM Communication Manager and Avaya AuraTM 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 TM Communication Manager on Avaya S8800 Server	6.0 (R016x.00.0.345.0-18246)		
Avaya G650 Media Gateway TN799DP C-LAN Circuit Pack TN2302AP IP Media Processor	HW01 FW038 HW20 FW121		
Avaya Aura TM 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 AuraTM 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
                                                                      3 of 11
                                                                Page
                               OPTIONAL FEATURES
                                          Audible Message Waiting? n
Authorization Codes? n
   Abbreviated Dialing Enhanced List? y
       Access Security Gateway (ASG)? n
       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? y
                                 ARS? y Computer Telephony Adjunct Links? y
                ARS/AAR Partitioning? y Cvg Of Calls Redirected Off-net? n
                                                             DCS (Basic)? n
         ARS/AAR Dialing without FAC? y
         ASAI Link Core Capabilities? y
                                                       DCS Call Coverage? n
         ASAI Link Plus Capabilities? y
                                                       DCS with Rerouting? n
```

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

CTI LINK

CTI Link: 1

Extension: 60100

Type: ADJ-IP

COR: 1

Name: TASKE TSAPI Link
```

5. Configure Avaya Aura™ Application Enablement Services

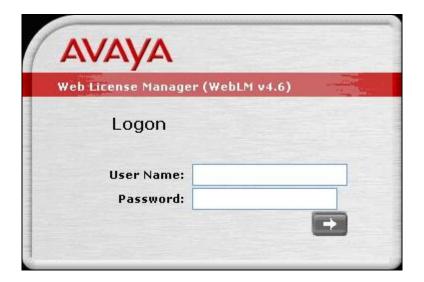
This section provides the procedures for configuring Avaya AuraTM Application Enablement Services. The procedures include the following areas:

- 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

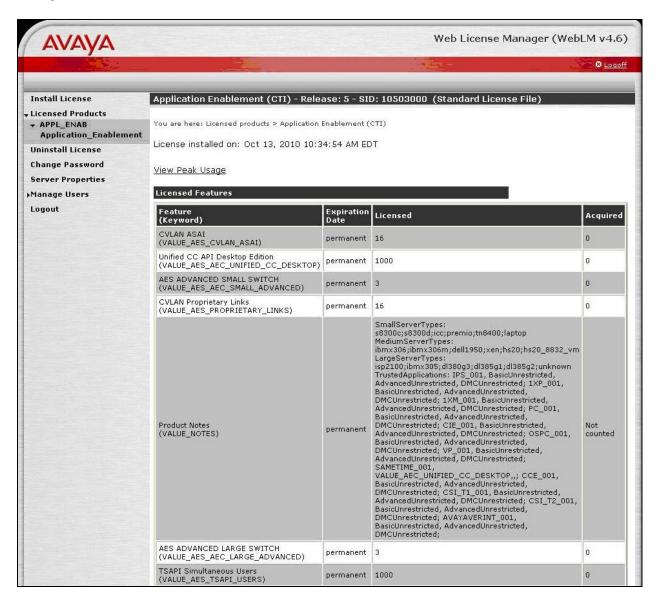
Access the Web License Manager interface by using the URL "https://ip-address/WebLM/index.jsp" in an Internet browser window, where "ip-address" is the IP address of the server hosting the Web License Manager.

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



The 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.

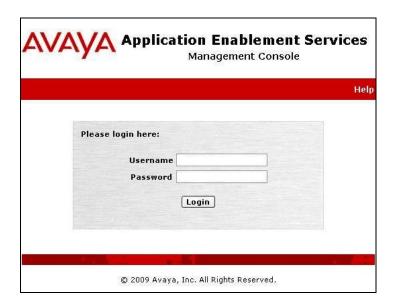
Verify that there are sufficient licenses for **TSAPI Simultaneous Users**, as shown below.



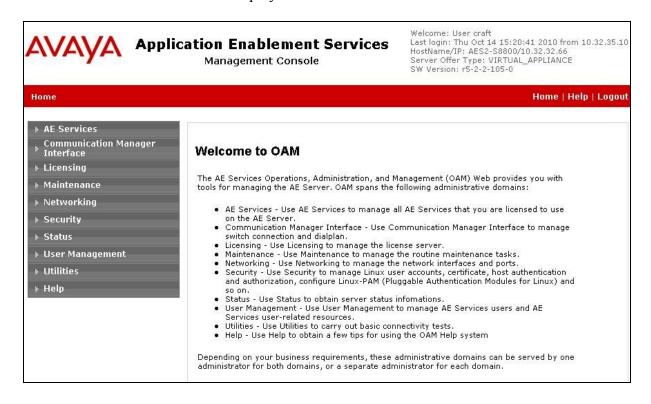
5.2. Launch OAM Interface

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.

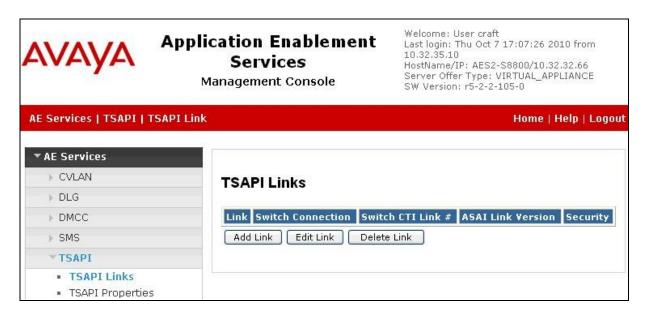


The Welcome to OAM screen is displayed next.



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**.



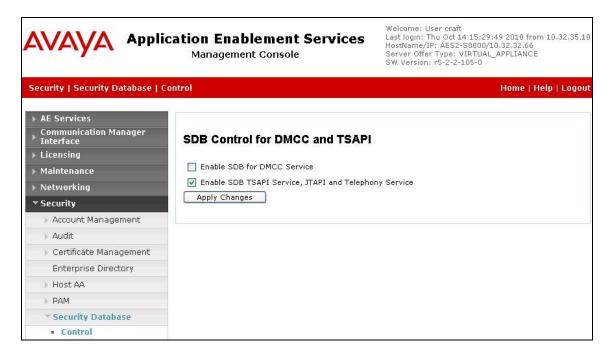
The **Add TSAPI Links** screen is displayed next.

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 "CM8800" is selected. For **Switch CTI Link Number**, select the CTI link number from **Section 4.2**. Retain the default values in the remaining fields.



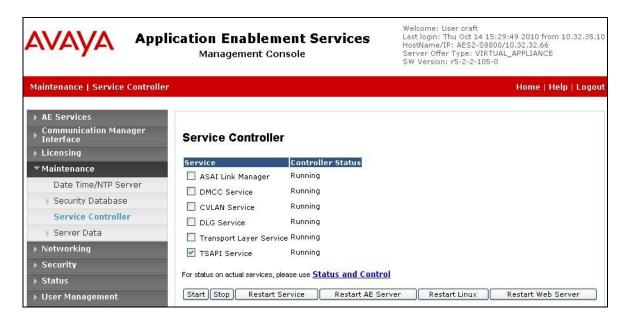
5.4. Enable Security Database

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.



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.

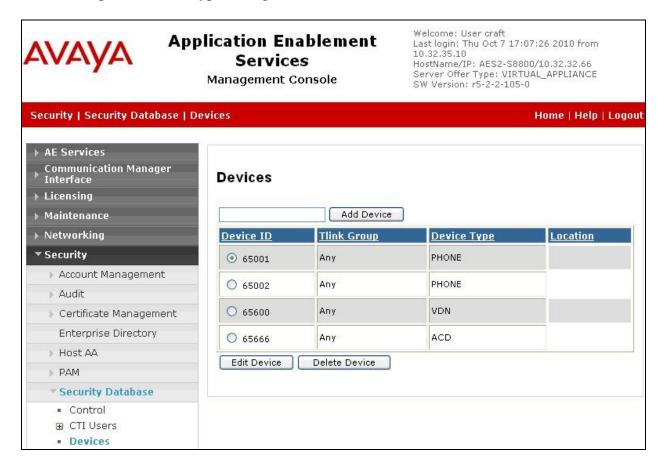


5.6. Administer Security Database

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.



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.

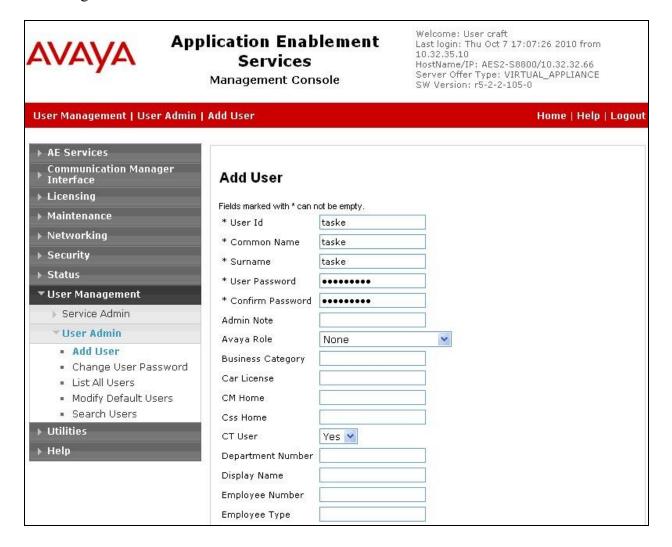
In this case, the associated Tlink name is "AVAYA#CM8800#CSTA#AES2-S8800". Note the use of the switch connection "CM8800" from Section 5.3 as part of the Tlink name.



5.8. Administer TASKE User

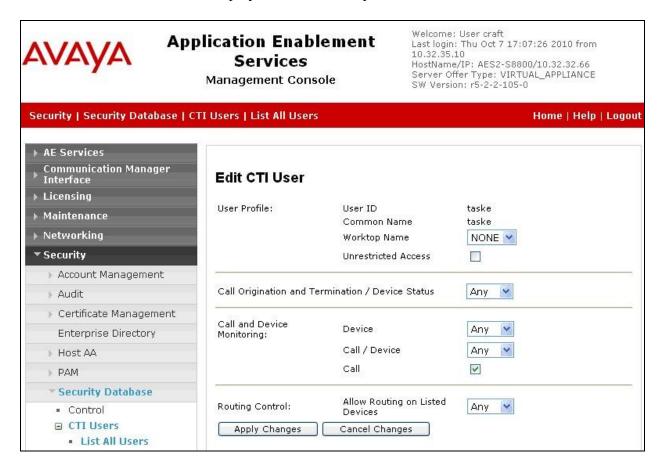
Select User Management > User Admin > Add User from the left pane, to display the Add User screen in the right pane.

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.



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.



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**.

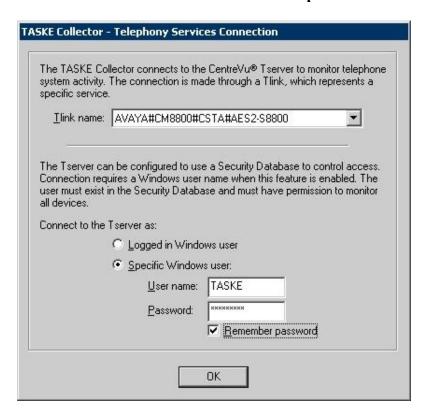
In the compliance testing, the manual method was used to configure the contact center devices on TASKE, therefore all default values were retained on the TASKE Database Update Wizard.



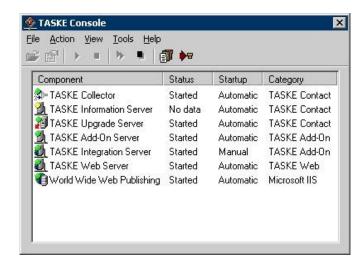
6.2. Administer TASKE Collector

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.



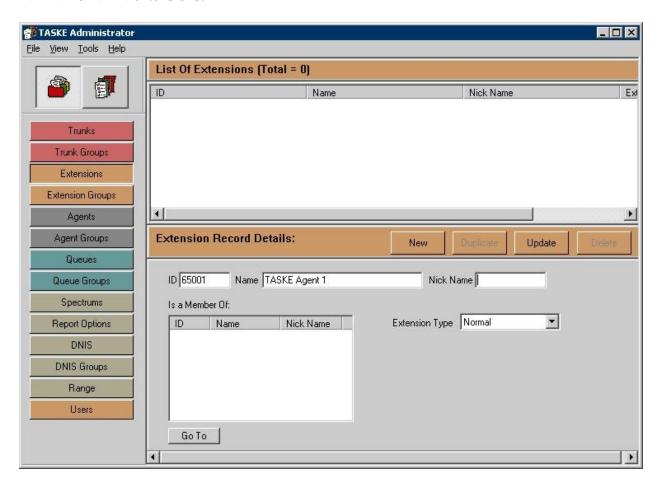
The **TASKE Console** screen is displayed next. Select **Tools > Administrator** from the top menu.



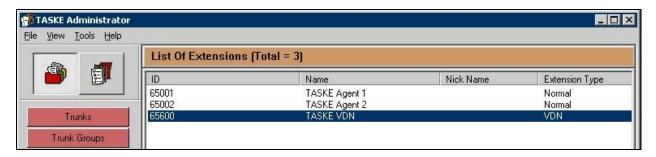
6.3. Administer Extensions

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.



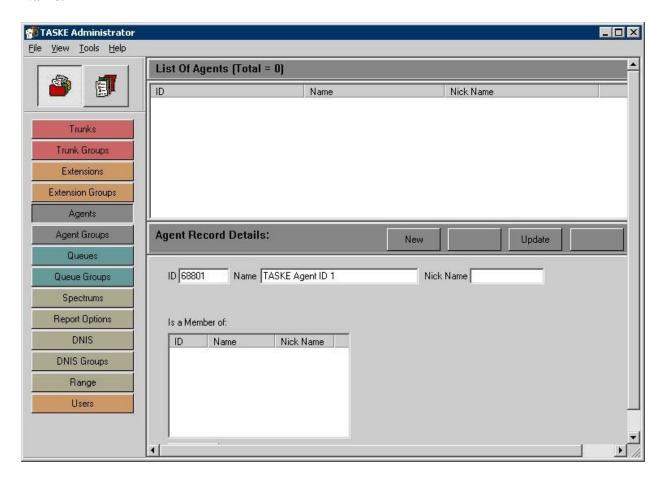
Repeat this procedure for all agent telephone and VDN extensions from **Section 2**. In the compliance testing, three extension records were created as shown below.



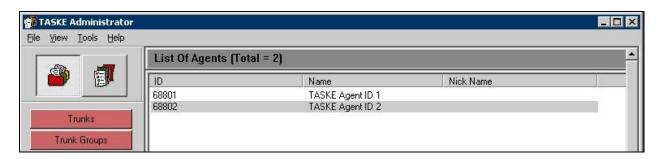
6.4. Administer Agents

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**.



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

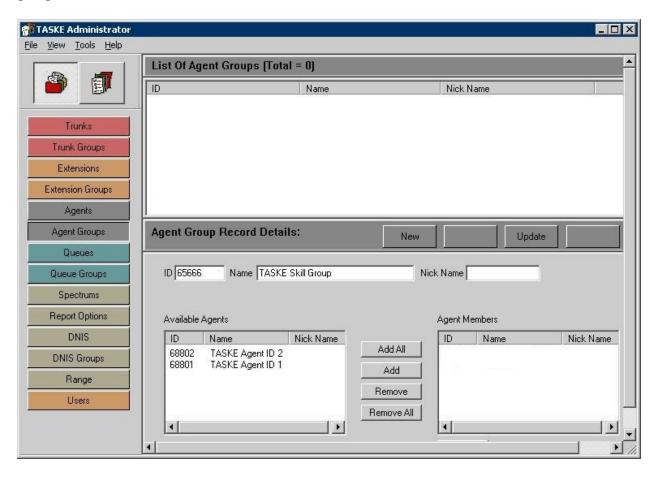


6.5. Administer Agent Groups

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.

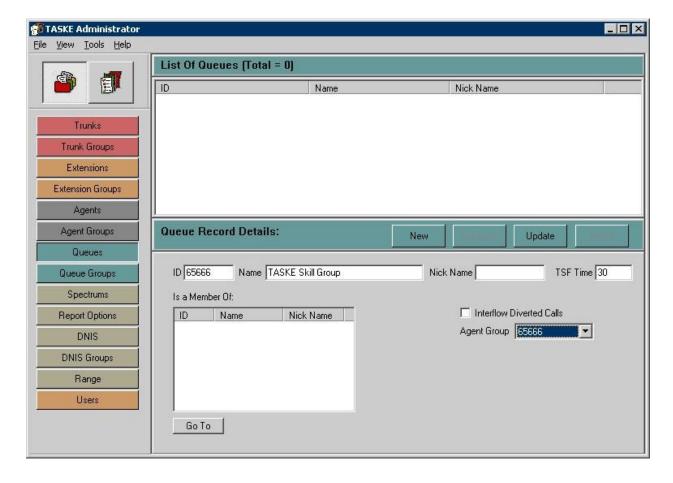


6.6. Administer Queues

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.



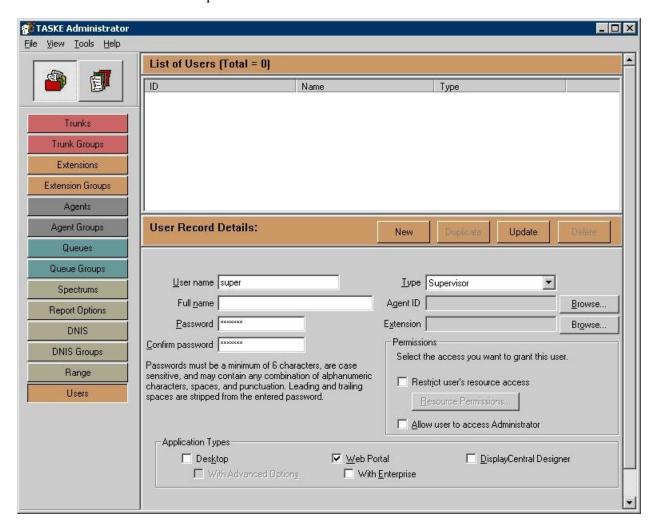
6.7. Administer Supervisors

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.

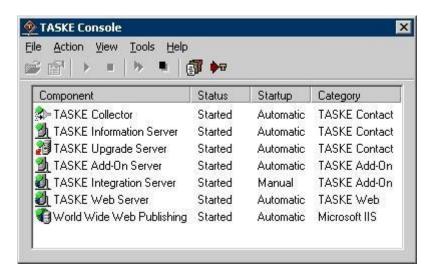
Repeat this procedure for all supervisors from **Section 2**. In the compliance testing, one user record was created.

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



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 AuraTM Communication Manager, Avaya AuraTM Application Enablement Services, and TASKE Contact.

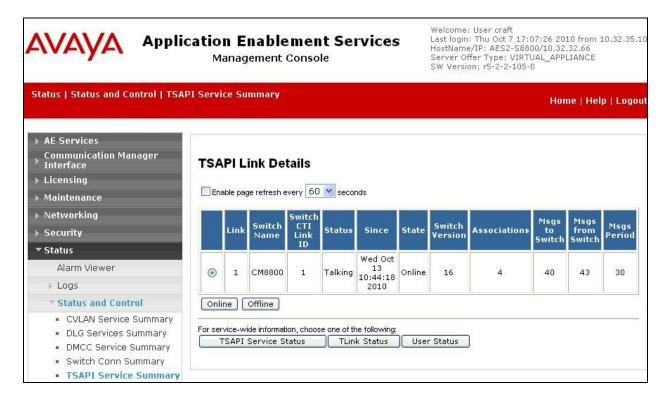
8.1. Verify Avaya Aura™ Communication Manager

On Communication Manager, verify the status of the administered CTI link by using the "status aesves 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	AES2-S8800	established	890	866			

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.

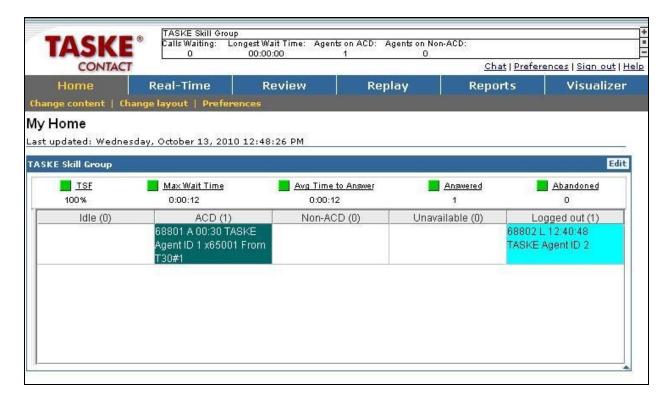


8.3. Verify TASKE Contact

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**.



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.



9. Conclusion

These Application Notes describe the configuration steps required for TASKE Contact to successfully interoperate with Avaya AuraTM Communication Manager 6.0 using Avaya AuraTM 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.** Administering Avaya Aura™ Communication Manager, Document 03-300509, Issue 6.0, Release 6.0, June 2010, available at http://support.avaya.com.
- **2.** Avaya AuraTM 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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