



## **Avaya Solution & Interoperability Test Lab**

---

# **Application Notes for Configuring KANA Enterprise from Sword Ciboodle with SIP-Enabled Avaya Aura® Contact Center R6.3 and Avaya Aura® Communication Manager R6.3 using Web Services - Issue 1.0**

## **Abstract**

These Application Notes describe the configuration steps for provisioning KANA Enterprise from Sword Ciboodle with a SIP-Enabled Avaya Aura® Contact Center R6.3 connecting to Web Services on the Communication Control Toolkit (CCT) module of Contact Center utilising the Service Oriented Architecture (SOA) Open Interface (OI) Application Programming Interface (API).

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 for provisioning KANA Enterprise from Sword Ciboodle with a SIP-Enabled Avaya Aura® Contact Center R6.3 connecting to Web Services on the Communication Control Toolkit (CCT) module of Contact Center utilising the Service Oriented Architecture (SOA) Open Interface (OI) Application Programming Interface (API).

Avaya Aura® Contact Center Release 6.3 is a suite of software applications that provide context-sensitive assisted voice and multimedia customer contact solutions. The server type for this compliance test was a SIP-enabled Contact Center with an Avaya Media Server, Avaya Aura® Application Enablement Services server and an Avaya Aura® Communication Manager included in the contact center solution.

The Communication Control Toolkit (CCT) Simple Object Access Protocol (SOAP)-based Open Interfaces are Web services hosted on the CCT Server. They allow third-party applications to access the underlying contact control functionality provided by Avaya Aura® Contact Center, using any run-time server software that supports SOA web services. The Web services provide a SOA-modelled API, with two levels of abstraction: Full and Lite. The Full and Lite APIs provide contact control functionality similar to that offered by the equivalent CCT.

KANA Enterprise (KE) is a customer service suite which comprises of several products: the Agent Desktop, Web Self-Service, Case Management, and customer interaction channels such as Email, Whitemail and Telephony. The Agent Desktop's role is to provide the user, depending on the scenario, with the possible, mandatory or desired options based on context. Agents have the facility at any time to invoke allowed processes through menu models, the most likely options are presented by default. These options include meta-driven desktop features such as displaying the available actions for any in-context items.

KANA Enterprise includes a channel integration model which can handle multiple interactions across channels at point of delivery. The model includes work management, support for blending and swinging, and interruptible work. KANA Enterprise manages multiple interactions across the following channels: Telephony, Email, Whitemail, Social, Campaign, Live Chat, and Co-Browse.

Core Process Platform is a multi-platform, scalable development framework for creating and deploying complex business processes. It comprises of 4 main components:

1. KANA Enterprise Customer Experience Designer (CED) - an integrated development environment for creating business processes;
2. A Repository that stores the processes and software components;
3. The KANA Enterprise Runtime Engine (RE) - executes processes within the context of a J2EE application server;
4. Thin Client - provides the user interface to applications. Different clients can be used to provide multichannel functionality: including, web browser, mobile device, or web-enabled phone.

When an agent logs into the KE Agent Desktop, the Runtime Engine provides the agent with a dedicated session that is responsible for executing the business processes, and handling events from the client, or other back-end systems.

For a CTI-enabled agent, the Runtime Engine uses the OI CCT Avaya Aura® Contact Center Channel Provider to manage the telephony. This channel provider uses the Full API variant of the CCT SOA Open Interfaces. However it doesn't call this directly, rather the Runtime Engine is configured to use this specific class of channel provider for the telephony channel via the generic Interaction Manager. This abstract interface is what is actually invoked by the business process, but is fulfilled by the Channel Provider. This means that different channel providers can be used if the telephony platform is not an Avaya Aura® solution.

An agent login to KANA Enterprise involves the Runtime Engine issuing instructions via Interaction Manager and Channel Provider to log the agent into telephony, and make them available for calls. The agent profile contains the telephony system credentials that enable an agent to login using the agent id and password as configured on the Contact Center. Furthermore, if required, the relationship between a physical phone and a desktop is maintained so that when an agent logs into a desktop computer they are logged into the correct phone.

Once logged in the agent can make themselves available, unavailable and logout, and when a call arrives and is answered (usually automatically) a CTI toolbar is presented within the desktop application which allows them to perform the usual CTI functions such as drop a call, transfer or conference a call and request a break with a not ready reason code. Whenever the agent interacts with the CTI toolbar, the Channel Provider, the CCT Server and some aspect of the Avaya Aura® Contact Center may be engaged to fulfil the agent's intention.

## 2. General Test Approach and Test Results

The interoperability compliance testing evaluates the ability of the KANA Enterprise Test Harness to make and receive calls to and from Avaya 9600 Series H.323 and SIP deskphones along with the Avaya one-X® Communicator softphone. Although KANA Enterprise agent desktop is used to make and receive calls, the KANA Enterprise Test Harness offers the exact same functionality in a slimmed down version allowing a greater insight into the events received for testing purposes and this is what was used during compliance testing. Four agents were logged into the KANA Enterprise Test Harness from four separate client PC's logging agents into four separate Avaya endpoints.

- Agent avaya1011 → Logged into KANA Enterprise using SIP 9641
- Agent avaya1012 → Logged into KANA Enterprise using H.323 9608
- Agent avaya1013 → Logged into KANA Enterprise using H.323 9608
- Agent avaya1014 → Logged into KANA Enterprise using H.323 one-X® Communicator

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

### 2.1. Interoperability Compliance Testing

The interoperability compliance testing included feature and serviceability testing, there was no load testing performed as a part of this compliance test. The feature testing focused on verifying the KANA Enterprise Test Harness' handling of CTI messages in the areas of call control, event notification and routing. Various types of calls including internal switch calls, PSTN calls, outgoing and incoming calls were tested. The following call types were tested:

- Private DN Inbound/Outbound Calls.
- Hold/Transfer Functionality.
- Agent Skillset calls.
- Failover Testing.

### 2.2. Test Results

All Test Cases passed except for the following minor issues.

- Only the conference initiator has the ability to add people to a conference.
- Once added to a conference the hang up button was unable to hang-up the call, this had to be performed manually using the phoneset.

The following observation was noted.

- Single Step Transfer is not supported in SIP-enabled Avaya Aura® Contact Center.

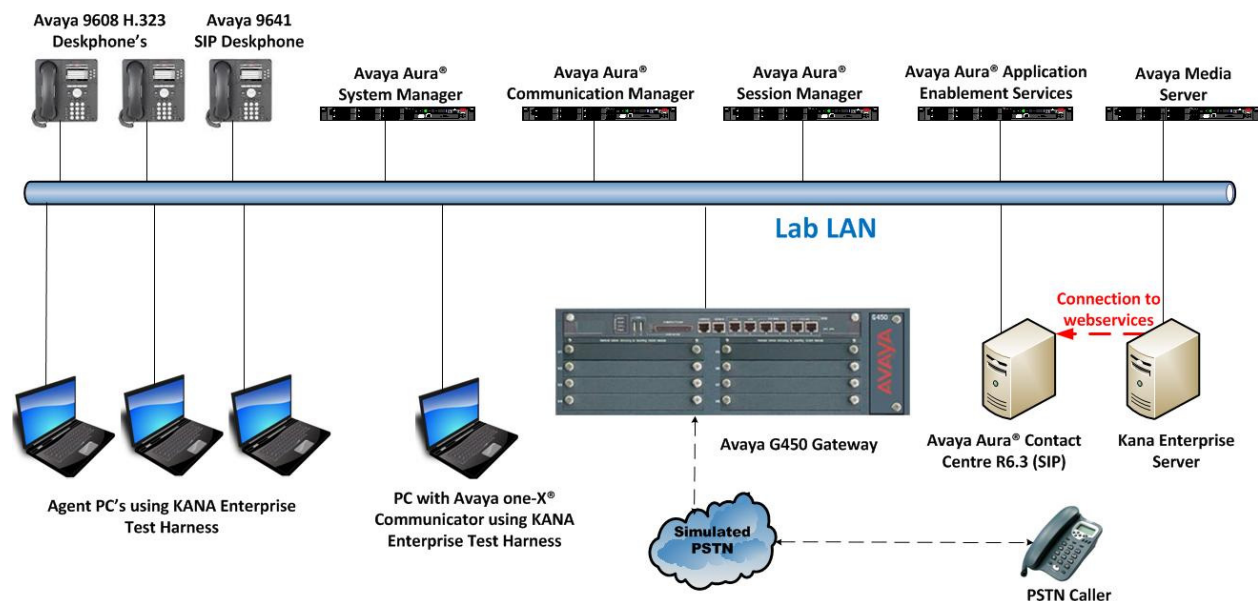
## 2.3. Support

Support from Avaya is available by visiting the website <http://support.avaya.com> and a list of product documentation can be found in **Section 12** of these Application Notes. Technical support for the KANA Enterprise product can be obtained as follows.

- Tel USA: + +1-800-737-8738
- Tel EMEA: +44 141 533 4000
- Email: [info@kana.com](mailto:info@kana.com)

## 3. Reference Configuration

**Figure 1** shows the network topology during compliance testing. The KANA Enterprise server is placed on the Avaya Telephony LAN. The Web Services interface on the SIP-Enabled Contact Center provides CTI capability. Four agents logged into four PC using Chrome web browser are logged into the KANA Enterprise Server in order to make and receive calls on four different Avaya endpoints.



**Figure 1: Network solution of Kana Enterprise with SIP –Enabled Avaya Aura® Contact Center R6.3 and Avaya Aura® Solution.**

## 4. Equipment and Software Validated

The following equipment and software was used for the compliance test.

Equipment/Software	Release/Version
Avaya Aura® System Manager	System Manager 6.3.0 - FP2 Build No. - 6.3.0.8.5682-6.3.8.1628
Avaya Aura® Session Manager	R6.3 Build No - 6.3.2.0.632023
Avaya Aura® Communication Manager	R6.3 Build No - R016x.03.0.124.0
Avaya G450 gateway	R6.3
Avaya Aura® Application Enablement Services	R6.3 Build No - 6.3.0.0.212-0
SIP-Enabled Avaya Aura® Contact Center running on Windows 2008 R2 Server	R6.3 SP10 (See Appendix for Patch Level)
Avaya Media Server running on an S8800 Server	R6.3 SP10
Avaya 9608 IP Deskphone (with Avaya one-X® H.323 firmware)	H.323 6.2.009
Avaya 9641 IP Deskphone (with Avaya one-X® SIP firmware)	SIP 6.0.3
Avaya one-X® Communicator (with Avaya one-X® H.323 firmware)	H.323 6.1 (SP7)
KANA Enterprise Server	13 R1
KANA Enterprise Test Harness	13 R1
Client PC Running Windows XP	Chrome browser v22

**Note:** Avaya Aura® System Manager, Session Manager, Communication Manager and Application Enablement Services are all virtual instances running on VMware ESXi 5.0.

## 5. Configure Avaya Aura® Communication Manager

It is assumed that a fully functioning Communication Manager is in place with the necessary licensing and a SIP connection is already made to Session Manager. For further information on the configuration of Communication Manager please see **Section 12** of these Application Notes. Site Administration Application was used to access Communication Manager to make changes.

To add an Avaya endpoint to Communication Manager such as a 9608 H.323 Deskphone, open Site Administration Application and connect to Communication Manager (not shown). Type **add station x**, where x is the extension number to be added. On **Page 1** ensure that **IP Softphone** is set to **y**.

<b>add station 1014</b>		<b>Page 1 of 5</b>
STATION		
Extension: 1014	Lock Messages? n	BCC: M
Type: <b>9608</b>	Security Code: 1234567	TN: 1
Port: S00025	Coverage Path 1:	COR: 1
Name: Agent 1014	Coverage Path 2:	COS: 1
	Hunt-to Station:	Tests? y
STATION OPTIONS		
	Time of Day Lock Table:	
Loss Group: 19	Personalized Ringing Pattern: 1	
	Message Lamp Ext: 1014	
Speakerphone: 2-way	Mute Button Enabled? y	
Display Language: english	Button Modules: 0	
Survivable GK Node Name:		
Survivable COR: internal	Media Complex Ext:	
Survivable Trunk Dest? y	<b>IP SoftPhone? y</b>	
	IP Video Softphone? y	
	Short/Prefixed Registration Allowed: default	

Below is an example of **Page 2** used during compliance testing.

Add station 1014		<b>Page 2 of 5</b>
STATION		
FEATURE OPTIONS		
LWC Reception: spe	Auto Select Any Idle Appearance? n	
LWC Activation? y	Coverage Msg Retrieval? y	
LWC Log External Calls? n	Auto Answer: none	
CDR Privacy? n	Data Restriction? n	
Redirect Notification? y	Idle Appearance Preference? n	
Per Button Ring Control? n	Bridged Idle Line Preference? n	
Bridged Call Alerting? n	Restrict Last Appearance? y	
Active Station Ringing: single		
	EMU Login Allowed? n	
H.320 Conversion? n	Per Station CPN - Send Calling Number?	
Service Link Mode: as-needed	EC500 State: enabled	
Multimedia Mode: enhanced	Audible Message Waiting? n	
MWI Served User Type:	Display Client Redirection? n	
AUDIX Name:	Select Last Used Appearance? n	
	Coverage After Forwarding? s	
	Multimedia Early Answer? n	
Remote Softphone Emergency Calls: as-on-local Direct	IP-IP Audio Connections? y	
Emergency Location Ext: 1014	Always Use? n IP Audio Hairpinning? n	

Below is an example of **Page 3** used during compliance testing.

isplay station 1014		Page 3 of 5
STATION		
Conf/Trans on Primary Appearance? n		
Bridged Appearance Origination Restriction? n		
Call Appearance Display Format: disp-param-default		
IP Phone Group ID:		
Enhanced Callr-Info Display for 1-Line Phones? n		
ENHANCED CALL FORWARDING		
	Forwarded Destination	Active
Unconditional For Internal Calls To:		n
External Calls To:		n
Busy For Internal Calls To:		n
External Calls To:		n
No Reply For Internal Calls To:		n
External Calls To:		n
SAC/CF Override: n		

On **Page 4** ensure that only two **call-appr** buttons are selected as shown below.

display station 1014		Page 4 of 5
STATION		
SITE DATA		
Room:		Headset? n
Jack:		Speaker? n
Cable:		Mounting: d
Floor:		Cord Length: 0
Building:		Set Color:
ABBREVIATED DIALING		
List1:	List2:	List3:
BUTTON ASSIGNMENTS		
1:	call-appr	
2:	call-appr	
3:		
voice-mail		

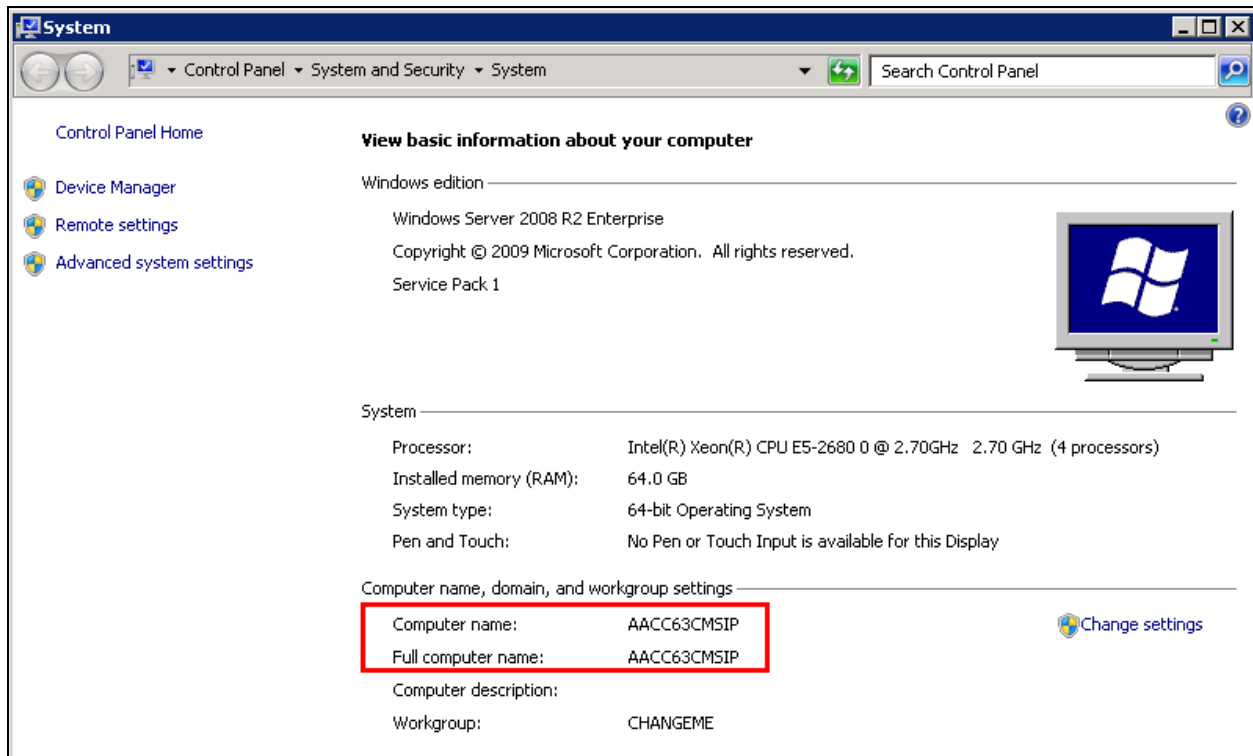
For the addition of the Avaya SIP Endpoints and one-X® Communicator, please refer to the documents listed in **Section 12**.



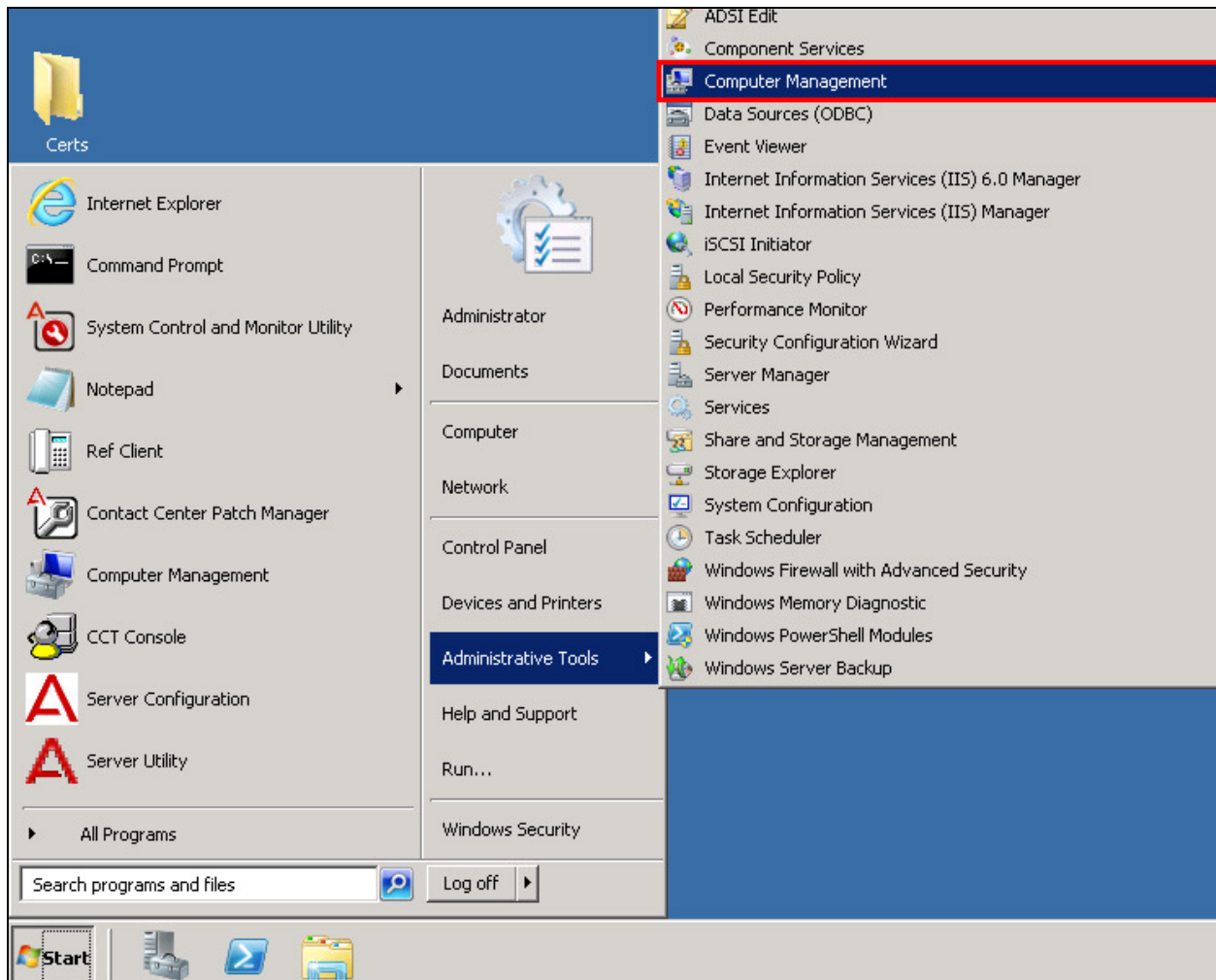
## 6. Adding a Windows User

If there is no domain controller present containing Active Directory Windows users, then these users will need to be created/added on the Contact Center server. A unique Windows user is required for every CCT user added.

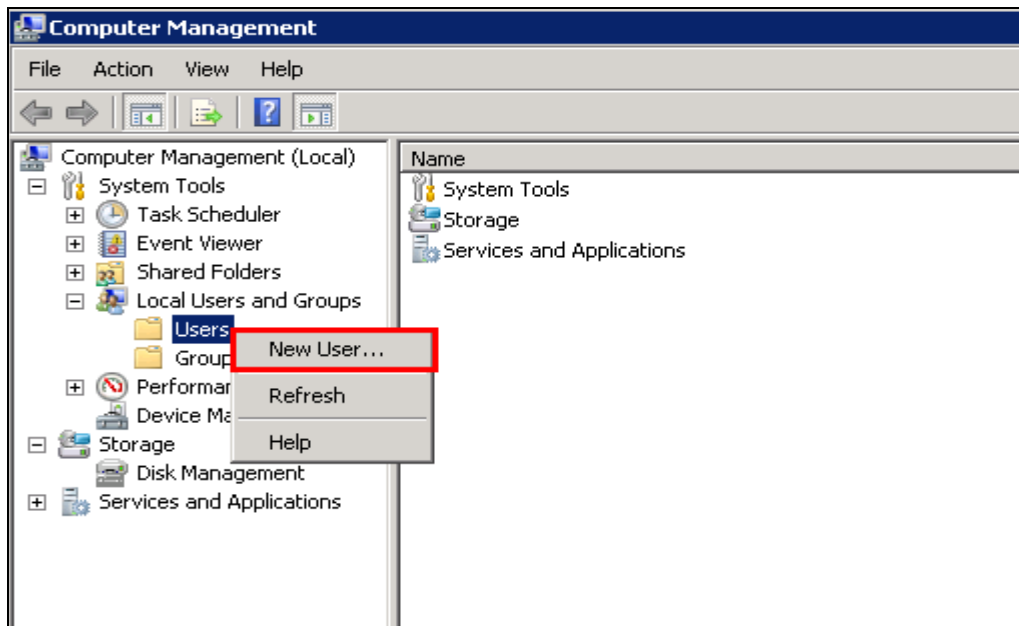
**Note:** Adding these users to CCT will be in the format domain\user. The Contact Center Server Computer name is used as the domain name in this case. In order to find the computer name right-click on **Computer** (not shown), the **Computer name** will be displayed like in the example below for this particular setup.



To create a Windows user on the Contact Center server go to **Start→Administrative Tools→Computer Management** on the Contact Center server as shown below.



In the left window navigate to **Local Users and Groups** and right click on **Users** and select **New User...** as shown below.



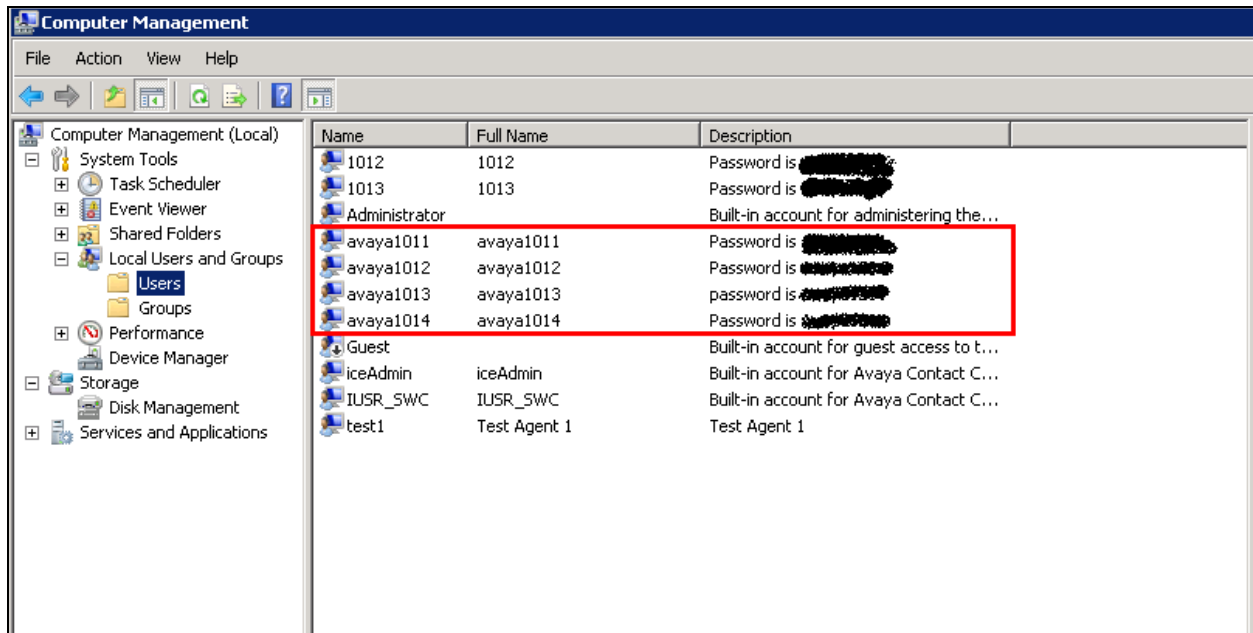
Enter a suitable **User name** and **Password**. It is best practice to tick that the password never expires to avoid issues with passwords in the future.

**Note:** KANA Enterprise does not accept a username beginning with a number or a password with a special character.

A screenshot of the 'New User' dialog box in Windows. The dialog has fields for 'User name:', 'Full name:', 'Description:', 'Password:', and 'Confirm password:'. The 'User name' and 'Full name' fields contain 'avaya1014', and the 'Description' field contains 'Test Agent'. The 'Password' and 'Confirm password' fields are masked with dots. Below these fields are four checkboxes: 'User must change password at next logon', 'User cannot change password', 'Password never expires' (which is checked and highlighted with a red rectangle), and 'Account is disabled'. At the bottom of the dialog are three buttons: 'Help', 'Create' (highlighted with a red rectangle), and 'Close'.

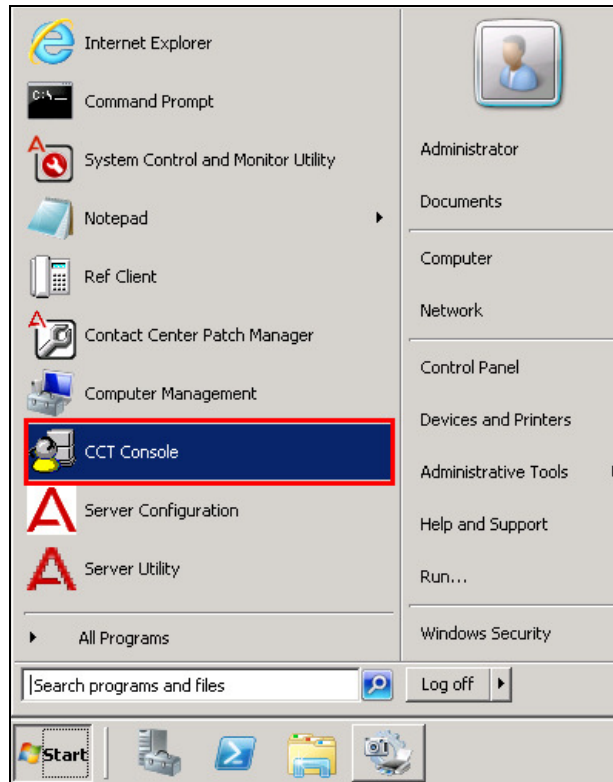
The following 4 users were created for the compliance testing with Sword-Ciboodle. During the testing the users were associated with the following Avaya endpoints.

- **avaya1011** Avaya 9641 IP Deskphone (with Avaya one-X® SIP firmware)
- **avaya1012** Avaya 9608 IP Deskphone (with Avaya one-X® H.323 firmware)
- **avaya1013** Avaya 9608 IP Deskphone (with Avaya one-X® H.323 firmware)
- **avaya1014** Avaya one-X® Communicator (with H.323 firmware)

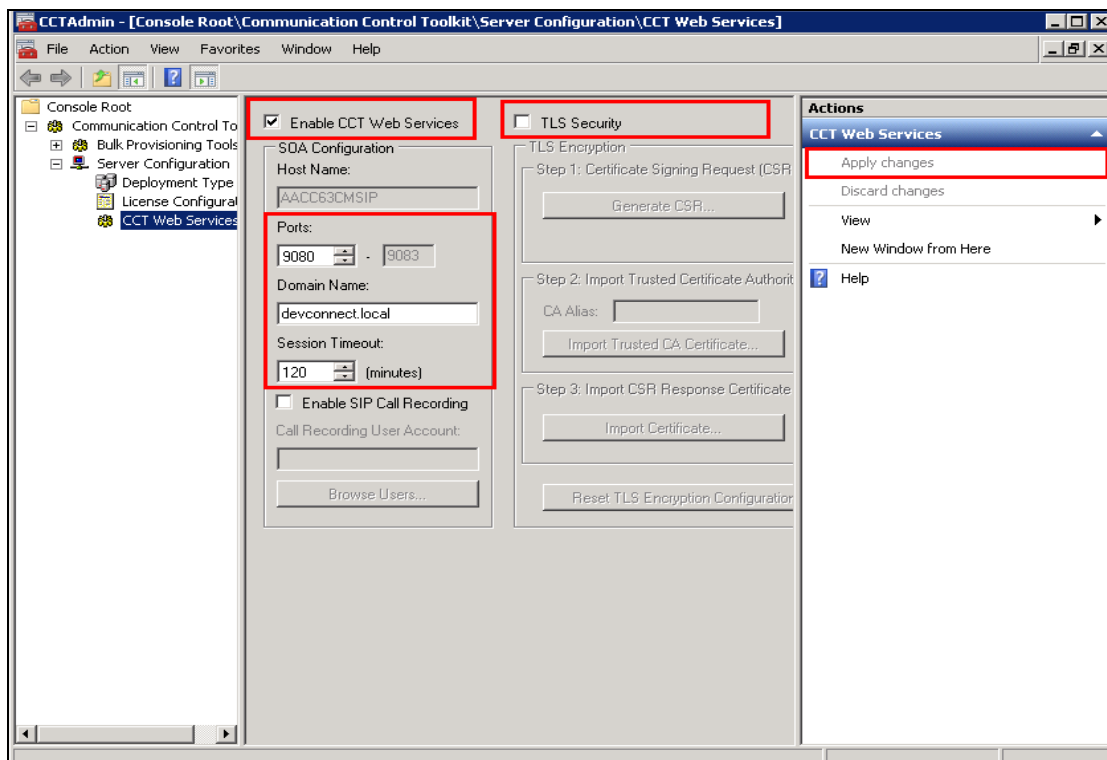


## 7. Configure Web Services on CCT

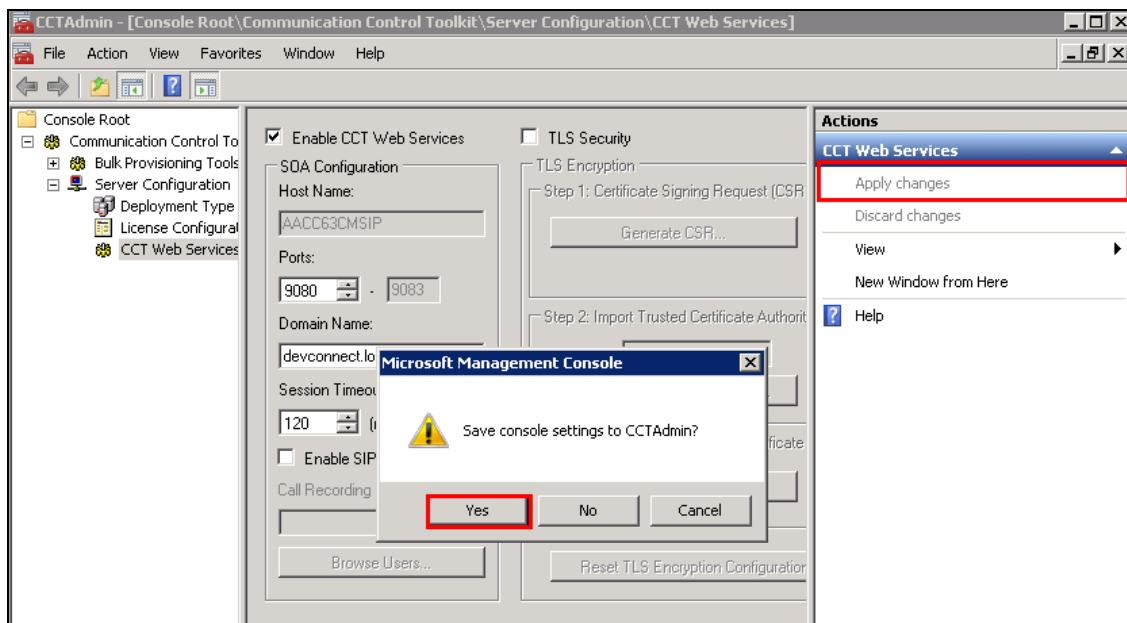
On the Contact Center server navigate to **Start→Programs→Avaya→Communication Control Toolkit→CCT Console** (not shown), or to a shortcut as shown below.



Navigate to **Server Configuration**→**CCT Web Services** in the left window and ensure that **Enable CCT Web Services** is ticked and that **TLS Security** is un-ticked. Ensure that the correct **Domain Name** is selected and note the **Ports** used for the KANA Enterprise setup.

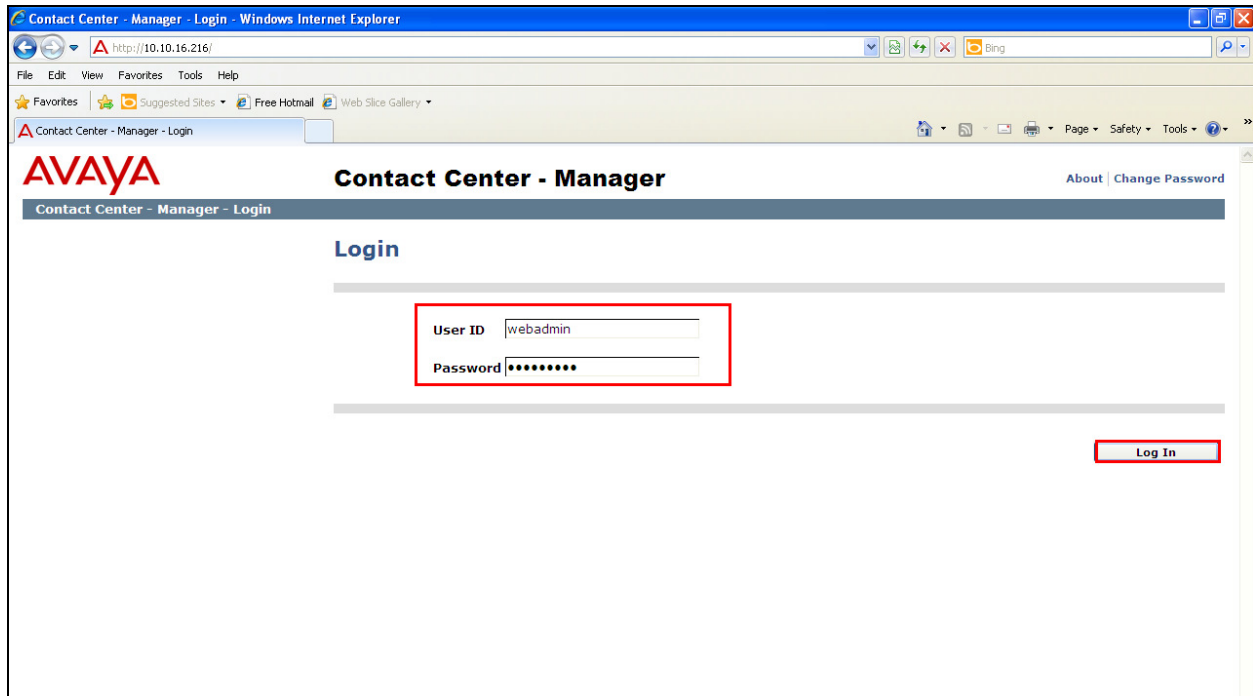


Once the correct configuration is entered, click on **Apply changes** at the top right of the screen and click on **Yes** when prompted by the resulting window.



## 8. Configure Avaya Aura® Contact Center

This section goes through the setup required on the Avaya Aura® Contact Center to ensure that the KANA Enterprise users can login to the Contact Center correctly. Log in to Contact Center by opening a web browser and navigating to the Contact Center FQDN or IP address as shown below. Enter the webadmin **User ID** and **Password** and click on **Log In**.

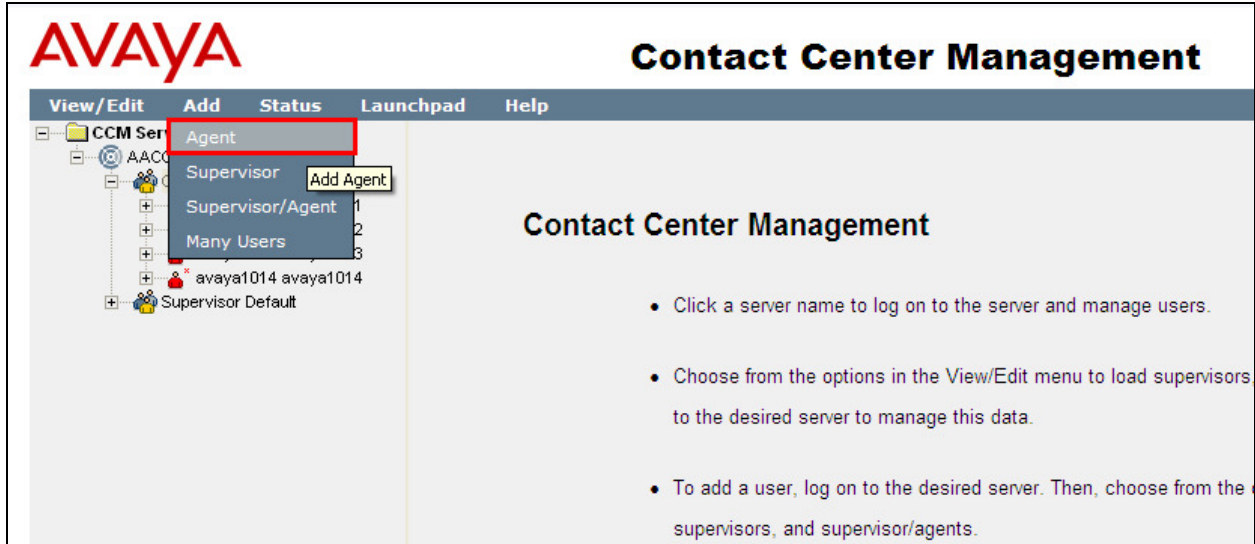


### 8.1. Configure the Avaya Aura® Contact Center Agent

When logged in correctly select **Contact Center Management** from the **Launchpad**.



Select **Add** from the menu and click on **Agent**.

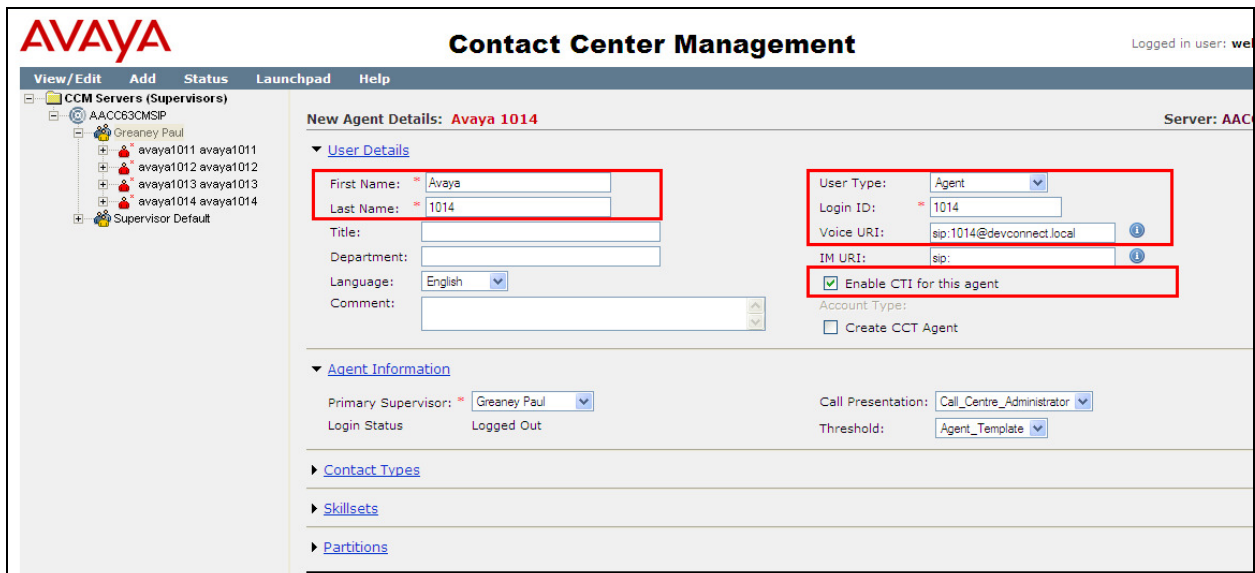


The screenshot shows the Avaya Contact Center Management (CCM) interface. The 'Add' menu is open, and 'Agent' is selected. The 'Add Agent' button is visible. The main area displays the 'Contact Center Management' title and a list of servers: CCM Servers (Supervisors), AAC3CMSIP, Greaney Paul, avaya1011 avaya1011, avaya1012 avaya1012, avaya1013 avaya1013, avaya1014 avaya1014, and Supervisor Default. The right side of the interface contains instructions for adding users.

- Click a server name to log on to the server and manage users.
- Choose from the options in the View/Edit menu to load supervisors to the desired server to manage this data.
- To add a user, log on to the desired server. Then, choose from the supervisors, and supervisor/agents.

Enter the agent's details noting the **Login ID** and **Voice URI**. Ensure that **Enable CTI** is ticked.

- Login ID** will be used by KANA Enterprise to log in the agent.
- Voice URI** is the "*extension number*"@*domain name*.



The screenshot shows the 'New Agent Details' form for 'Avaya 1014'. The form is divided into sections: User Details, Agent Information, Contact Types, Skillsets, and Partitions. The 'User Details' section is highlighted with a red box, showing fields for First Name, Last Name, Title, Department, Language, and Comment. The 'Agent Information' section shows fields for Primary Supervisor, Login Status, Call Presentation, and Threshold. The 'Contact Types' section is expanded, showing 'Skillsets' and 'Partitions'. The 'Voice URI' field is highlighted with a red box, showing the value 'sip:1014@devconnect.local'. The 'Enable CTI for this agent' checkbox is checked and highlighted with a red box.

**User Details**

First Name: \* Avaya  
Last Name: \* 1014  
Title:  
Department:  
Language: English  
Comment:

**Agent Information**

Primary Supervisor: \* Greaney Paul  
Login Status: Logged Out  
Call Presentation: Call\_Centre\_Administrator  
Threshold: Agent\_Template

**Enable CTI for this agent**

☒ Enable CTI for this agent



Click on the **Create CCT Agent** tick-box and under **Associate User Account** select the Windows user that will be associated with this Contact Center agent.

**Note:** for this test environment, **Search local operating system** was selected as this is the manner in which the users are setup as per **Section 6**.

**AVAYA Contact Center Management** Logged in user:

View/Edit Add Status Launchpad Help

CCM Servers (Supervisors)

- AAC063CMSIP
  - Greaney Paul
    - avaya1011 avaya1011
    - avaya1012 avaya1012
    - avaya1013 avaya1013
    - avaya1014 avaya1014
    - Supervisor Default

Account Type: ☒ Create CCT Agent

CCT Agent Login Details

Domain: User ID:

Associate User Account

☒ Search local operating system ☐ Search local security server ☐ Search domain users

Search all user accounts where:

Full Name starts with and includes all users

Search List All

User Name	Full Name (11)	Status
<a href="#">1013</a>	1013	Available
<a href="#">Administrator</a>		Available
<a href="#">avaya1011</a>	avaya1011	Available
<a href="#">avaya1012</a>	avaya1012	Available
<a href="#">avaya1013</a>	avaya1013	Available
<a href="#">avaya1014</a>	avaya1014	Available

In section **Agent Information**, select the **Primary Supervisor**, the **Call Presentation** and **Threshold**. In section **Contact Types** ensure that **Voice** is selected in order to route voice calls to the agent.

**AVAYA Contact Center Management** Logged in user:

View/Edit Add Status Launchpad Help

CCM Servers (Supervisors)

- AAC063CMSIP
  - Greaney Paul
    - avaya1011 avaya1011
    - avaya1012 avaya1012
    - avaya1013 avaya1013
    - avaya1014 avaya1014
    - Supervisor Default

Agent Information

Primary Supervisor: Greaney Paul

Login Status: Logged Out

Call Presentation: Call\_Centre\_Administrator

Threshold: Agent\_Template

Contact Types

Contact Type	
Outbound	<input type="checkbox"/>
Scanned_Document	<input type="checkbox"/>
SMS	<input type="checkbox"/>
Video	<input type="checkbox"/>
Voice	<input checked="" type="checkbox"/>
Voice_Mail	<input type="checkbox"/>

Skillsets

Skillset Name	Contact Type	Priority
---------------	--------------	----------

Assign Skillsets

Once the appropriate skillset is chosen click on **Submit** at the bottom of the screen to save the new agent.

**AVAYA Contact Center Management** Logged in user:

View/Edit Add Status Launchpad Help

CCM Servers (Supervisors)

- AACC63CMSIP
  - Greaney Paul
    - avaya1011 avaya1011
    - avaya1012 avaya1012
    - avaya1013 avaya1013
    - avaya1014 avaya1014
    - Supervisor Default

**Skillsets**

Skillset Name	Contact Type	Priority
Default_Skillset	Voice	5
EM_Default_Skillset	Email	Unassigned
FX_Default_Skillset	Fax	Unassigned
IM_Default_Skillset	IM	Unassigned
<b>INBOUND</b>	Voice	<b>1</b>
OB_Default_Skillset	Outbound	Unassigned
OQ_Default_Skillset	OpenQ	Unassigned

Assign Skillsets

Show all skillsets on server AACC63CMSIP where:

Skillset name contains

**Partitions**

## 8.2. Checking the CCT user

From the **Launchpad** click on **Configuration** as shown below.

**AVAYA Contact Center - Manager** About | Audit Trail

Launchpad

**Launchpad**

- Contact Center Management
- Access and Partition Management
- Real-Time Reporting
- Historical Reporting
- Call Recording and Quality Monitoring
- Configuration**
- Scripting
- Emergency Help
- Outbound
- Multimedia

In the left window expand the CCT server and click on **CCT Administration** as shown. In the main window click on **Launch CCT Console**.

**AVAYA Configuration**

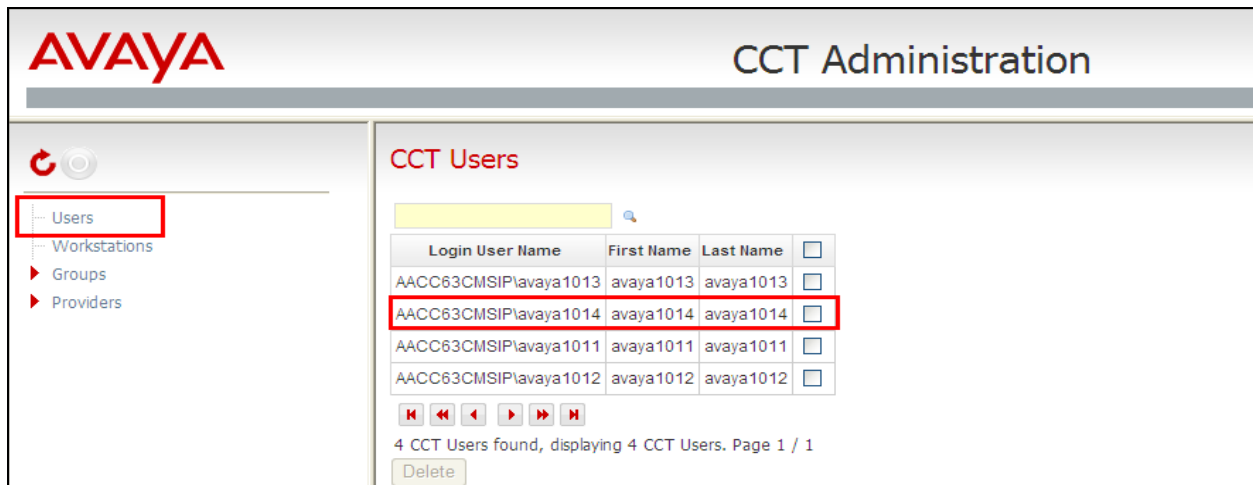
Server Download Status Launchpad Help

- AACC63CMSIP
  - AACC63CCT**
    - CCT Administration**
  - AACC63CCMM

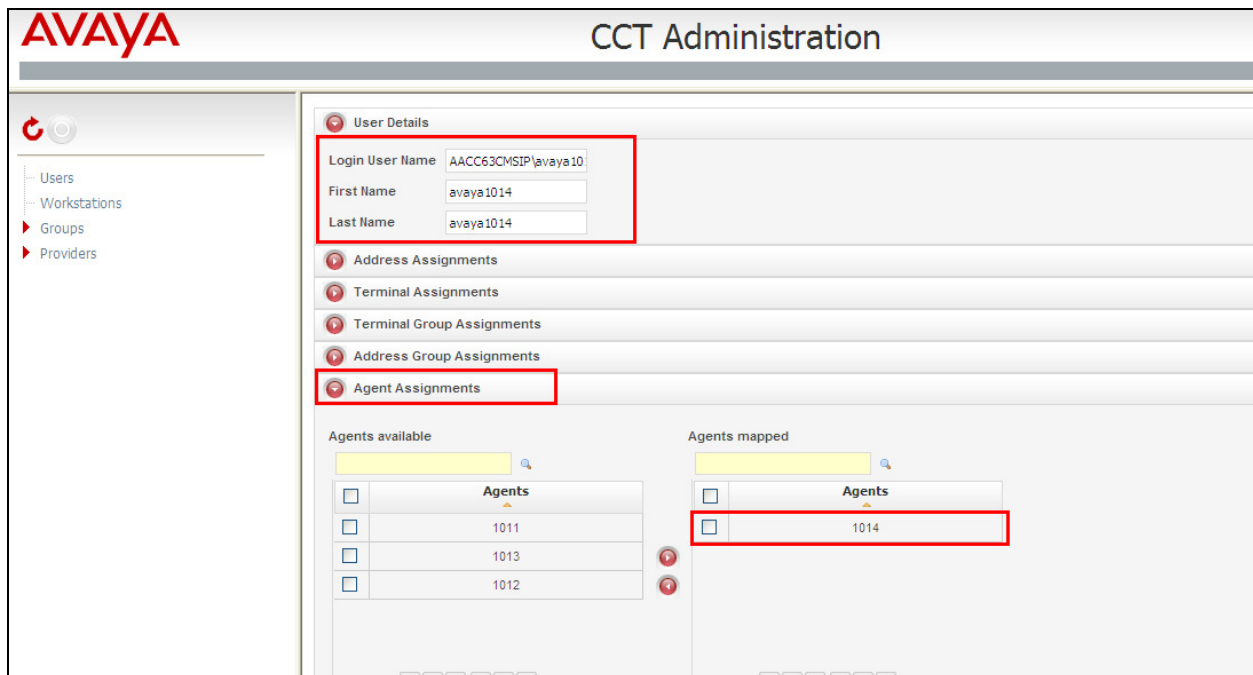
CCT Administration

CCT Administration URL <http://AACC63CMSIP:8081/WebAdmin/>

The following window will be opened and the CCT users will already be created from the procedure outlined in **Section 8.1**. Select **Users** in the left window and double click on the user in question in the main window.



The CCT **User Details** are displayed; note the **Login User Name** is in the format domain\windowsuser. Note the domain name in this case is the Contact Center server name. Open **Agent Assignments** and note the Contact Center agent is already mapped to the CCT user.



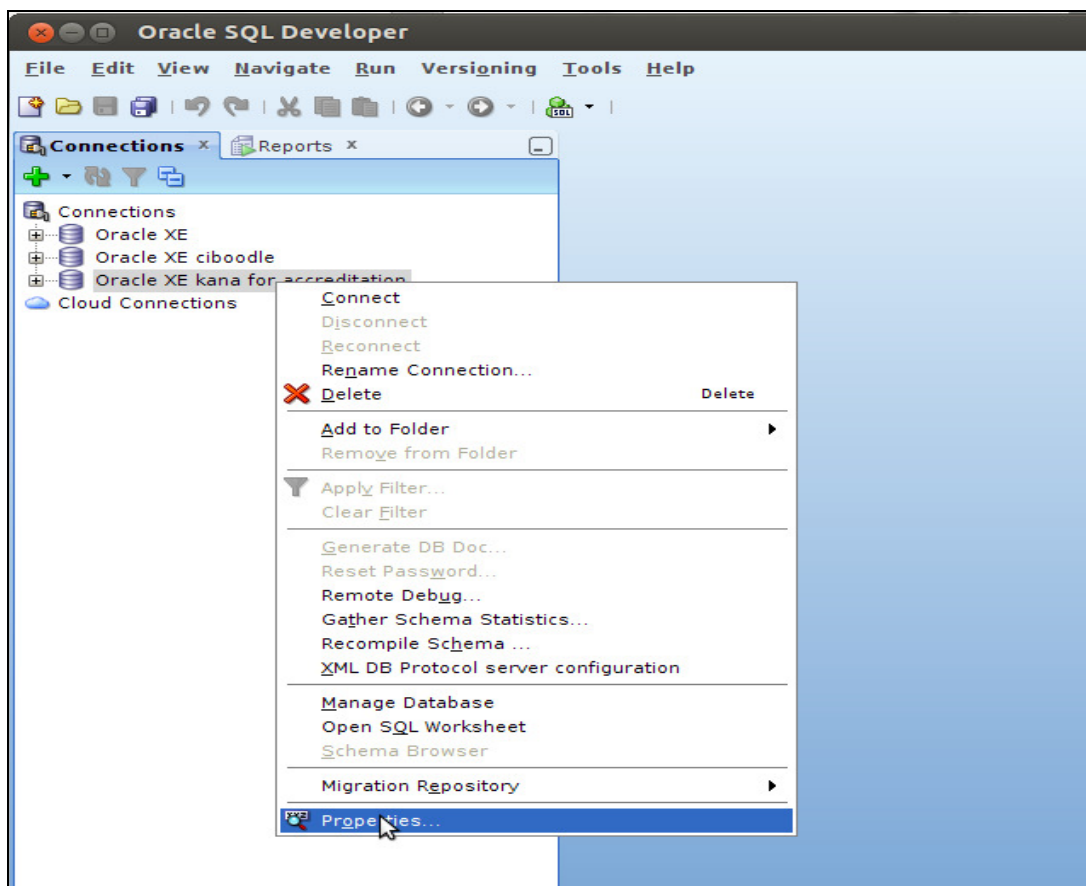
## 9. Configure KANA Enterprise

The following section describes the steps required to configure the KANA Enterprise in order to connect with Avaya Aura® Contact Center R6.3 connecting to Web Services on the Communication Control Toolkit (CCT) module of Contact Center utilising the Service Oriented Architecture (SOA) Open Interface (OI) Application Programming Interface (API). The installation of KANA Enterprise is outside the scope of these Application Notes and is therefore not documented. For information regarding the installation and further configuration of KANA Enterprise please refer to **Section 12**.

**Note:** It is assumed that the KANA Enterprise Server has been fully installed and a database already in place and configured. It is also assumed that any additional software that is required for the connection with Contact Center is installed.

### 9.1. Configure Avaya Aura® Contact Center connection in the KANA Enterprise database

It is assumed that a database client is available to query the Oracle database on the KANA Enterprise Server. Using a suitable SQL editor, open a connection to the KANA Enterprise database as shown below. Right click on the database and select **Properties**.



Fill in the information required such as the **Username**, **Password**, **Hostname** and the **Port** number as shown in the example below.

Connection Name	Connection Details
Oracle XE	sys@//localhost:...
Oracle XE ciboodle	ciboodle@//localh...
Oracle XE kana fo...	kana@//localhost...

Connection Name: Oracle XE kana for accreditation

Username: kana

Password: \*\*\*\*

☒ Save Password

**Oracle**

Connection Type: Basic Role: default

Hostname: localhost

Port: 1521

☒ SID: xe

☐ Service name

☐ OS Authentication ☐ Kerberos Authentication ☐ Proxy Connection

Status :

Buttons: Help, Save, Clear, Test, Connect, Cancel

The following information must be set in order to connect to the Contact Center CCT module. In the example below the Contact Center IP Address is **10.10.16.216**.

- OICCT\_USERSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/UserService?wsdl**
- OICCT\_AGENTSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/AgentService?wsdl**
- OICCT\_SESSIONSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/SessionService?wsdl**
- OICCT\_SERVICE\_DOMAIN AACC63CMSIP
- OICCT\_CONTACTSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/ContactService?wsdl**
- OICCT\_TERMINALCONNECTIONSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/TerminalConnectionService?wsdl**
- OICCT\_NOTIFICATIONPRODUCERSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/NotificationProducer?wsdl**
- OICCT\_TERMINALSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/TerminalService?wsdl**
- OICCT\_AGENTTERMINALSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/AgentTerminalService?wsdl**
- OICCT\_CONNECTIONSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/ConnectionService?wsdl**

- OICCT\_ADDRESSSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/AddressService?wsdl**
- OICCT\_AGENTTERMINALCONNECTIONSERVICE\_URL  
**http://10.10.16.216:9080/SOAOICCT/services/AgentTerminalConnectionService?wsdl**
- OICCT\_NOTIFICATION\_CONSUMER\_PORT **8123**
- OICCT\_USERSERVICE\_CONSUMER\_PATH  
**/SOAOICCT/services/NotificationConsumer**
- OICCT\_NOTIFICATION\_CONSUMER\_HOST **10.10.16.229**
- OICCT\_BLOCKING\_TIMEOUT\_MS **20000**
- OICCT\_CONNECTION\_TIMEOUT\_MS **50000**
- OICCT\_SOCKET\_TIMEOUT\_MS **50000**
- OICCT\_CCT\_SERVER\_IP **10.10.16.216**
- OICCT\_DEPLOYMENT\_TYPE **SIP1**

The screenshot shows the Oracle SQL Developer interface. On the left, the 'Connections' pane shows a tree view of database objects, with 'GTCC\_TELEPHONY\_CONFIG' selected and highlighted by a red box. The main window displays the 'Data' tab for this configuration table. The table has three columns: SERVER\_NAME, PROPERTY\_NAME, and PROPERTY\_VALUE. It contains 24 rows of configuration data, including various OICCT\_\* parameters and their values.

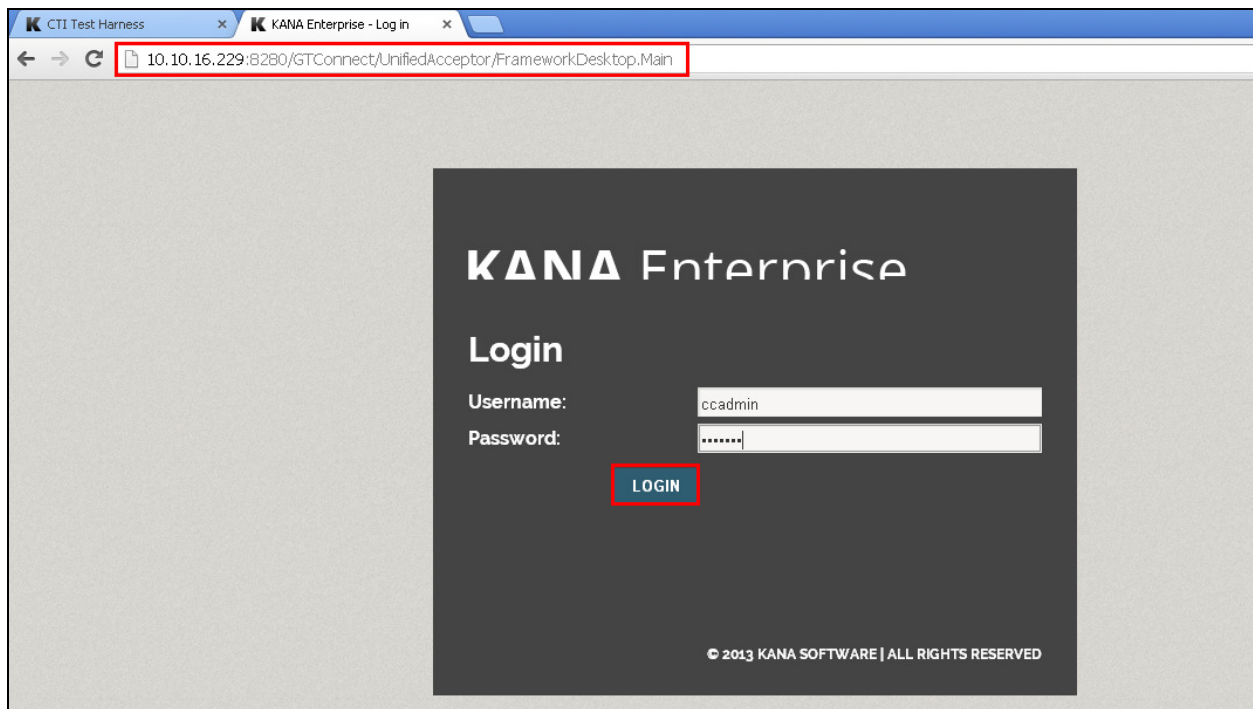
SERVER_NAME	PROPERTY_NAME	PROPERTY_VALUE
1 default	requestTimeoutPeriod	30000
2 default	pollingPeriod	5
3 default	OICCT_USERSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/UserService?wsdl
4 default	OICCT_AGENTSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/AgentService?wsdl
5 default	OICCT_SESSIONSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/SessionService?wsdl
6 default	OICCT_SERVICE_DOMAIN	AACC63CHSIP
7 default	OICCT_SERVICE_PASSWORD	Salmat11
8 default	OICCT_SERVICE_USERNAME	Reach_Kana_CCT_Lab
9 default	OICCT_CONTACTSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/ContactService?wsdl
10 default	OICCT_TERMINALCONNECTIONSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/TerminalConnectionService?wsdl
11 default	OICCT_NOTIFICATIONPRODUCERSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/NotificationProducer?wsdl
12 default	OICCT_TERMINALSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/TerminalService?wsdl
13 default	OICCT_AGENTTERMINALSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/AgentTerminalService?wsdl
14 default	OICCT_CONNECTIONSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/ConnectionService?wsdl
15 default	OICCT_ADDRESSSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/AddressService?wsdl
16 default	OICCT_AGENTTERMINALCONNECTIONSERVICE_URL	http://10.10.16.216:9080/SOAOICCT/services/AgentTerminalConnectionService?wsdl
17 default	OICCT_NOTIFICATION_CONSUMER_PORT	8123
18 default	OICCT_USERSERVICE_CONSUMER_PATH	/SOAOICCT/services/NotificationConsumer
19 default	OICCT_NOTIFICATION_CONSUMER_HOST	10.10.16.229
20 default	OICCT_BLOCKING_TIMEOUT_MS	20000
21 default	OICCT_CONNECTION_TIMEOUT_MS	500
22 default	OICCT_SOCKET_TIMEOUT_MS	50000
23 default	OICCT_CCT_SERVER_IP	10.10.16.216
24 default	OICCT_DEPLOYMENT_TYPE	SIP1

## 9.2. Configure Users on KANA Enterprise

The configuration of KANA Enterprise in the following sections can be performed using a web browser and logging in as an administrator.

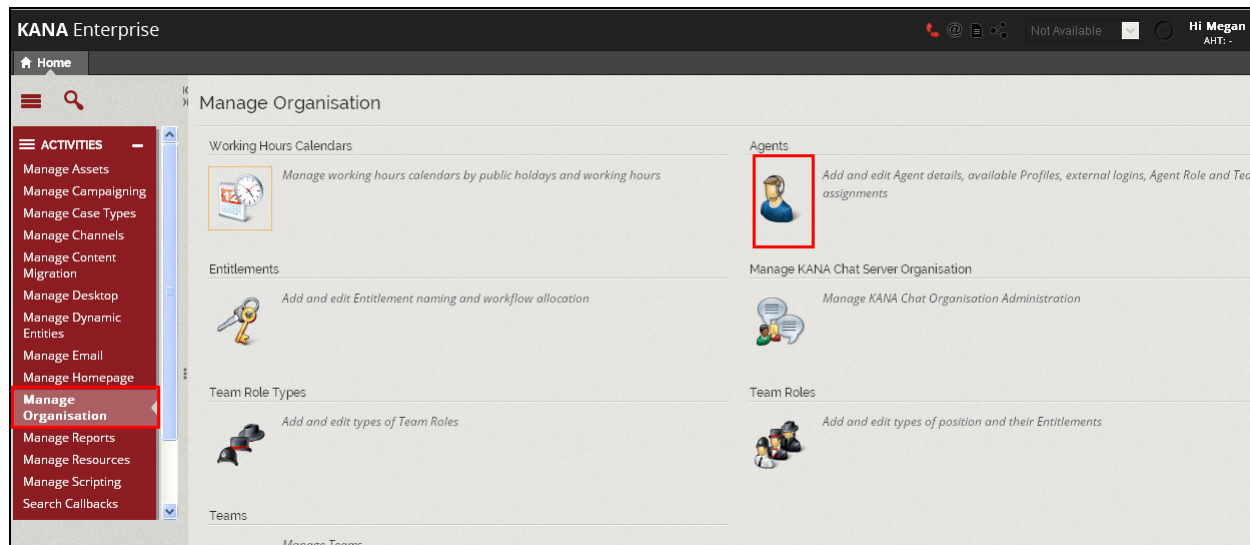
**Note:** Google Chrome is the preferred web browser to use for the configuration of KANA Enterprise.

Open Google Chrome and navigate to <http://<KANAEnterpriseServer>:8280/GTConnect/UnifiedAcceptor/FrameworkDesktop.Main>. Enter the proper credentials and click on **LOGIN** to continue.

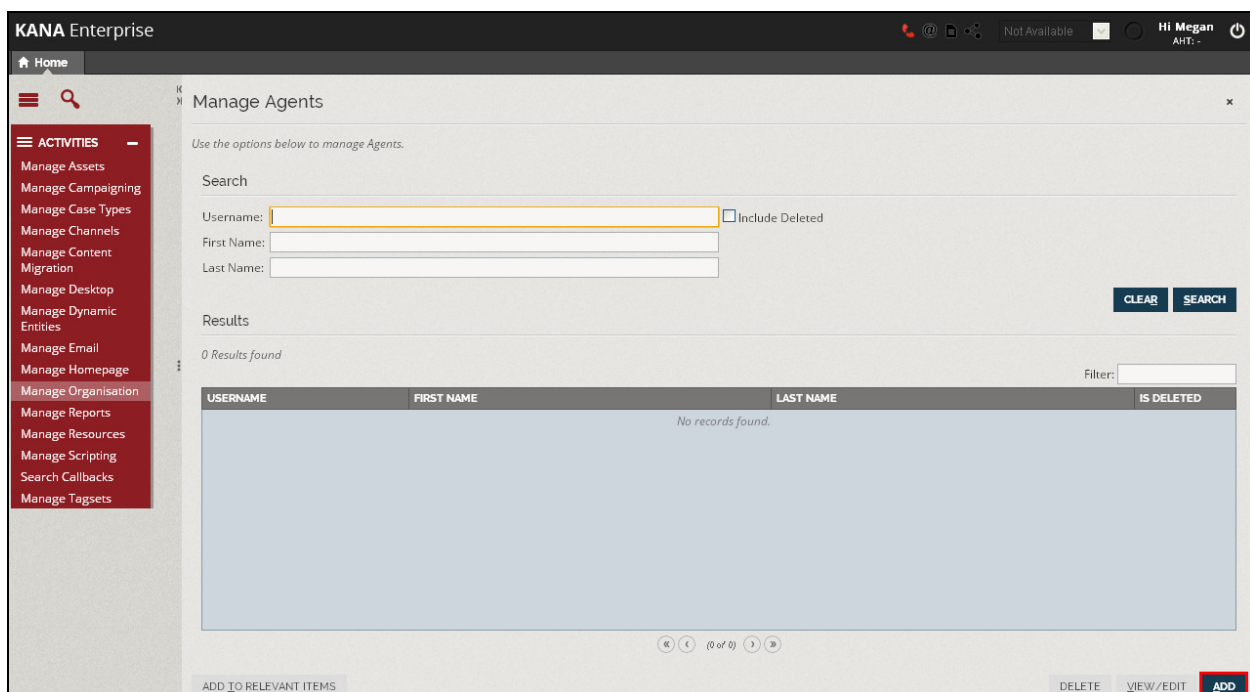




Click on **Manage Organisation** in the left window and select **Agents** highlighted in the main window.



Select **ADD** located on the bottom left of the screen.





Enter the user's information noting that the **Username** and **Password** must be the same as that for the Windows user already created in **Section 6**. Select the tab **Profile Types** and ensure that **Agent Profile** is ticked as shown below.

The screenshot shows the 'View/Edit Agent' page in KANA Enterprise. The 'Profile Types' tab is selected and highlighted with a red box. The 'Agent Profile' row in the table below is also highlighted with a red box, and its 'SELECT FOR USER?' checkbox is checked.

PROFILE NAME	DESKTOP PROCESS	SELECT FOR USER?
Agent Profile	Framework.Desktop.Implementation.ProfileProcess.DesktopProfileProcess	<input checked="" type="checkbox"/>
Business Admin Profile	Framework.Desktop.Implementation.ProfileProcess.DesktopProfileProcess	<input type="checkbox"/>
Developer Profile	Framework.Desktop.Implementation.ProfileProcess.DesktopProfileProcess	<input type="checkbox"/>
ReportsProfile	Framework.Desktop.Implementation.ProfileProcess.DesktopProfileProcess	<input type="checkbox"/>
Supervisor Profile	Framework.Desktop.Implementation.ProfileProcess.DesktopProfileProcess	<input type="checkbox"/>

Select the **External Security Details** tab and click on **ADD** at the bottom right of the screen.

The screenshot shows the 'View/Edit Agent' page in KANA Enterprise. The 'External Security Details' tab is selected and highlighted with a red box. The 'ADD' button at the bottom right is also highlighted with a red box.

TYPE	USERNAME

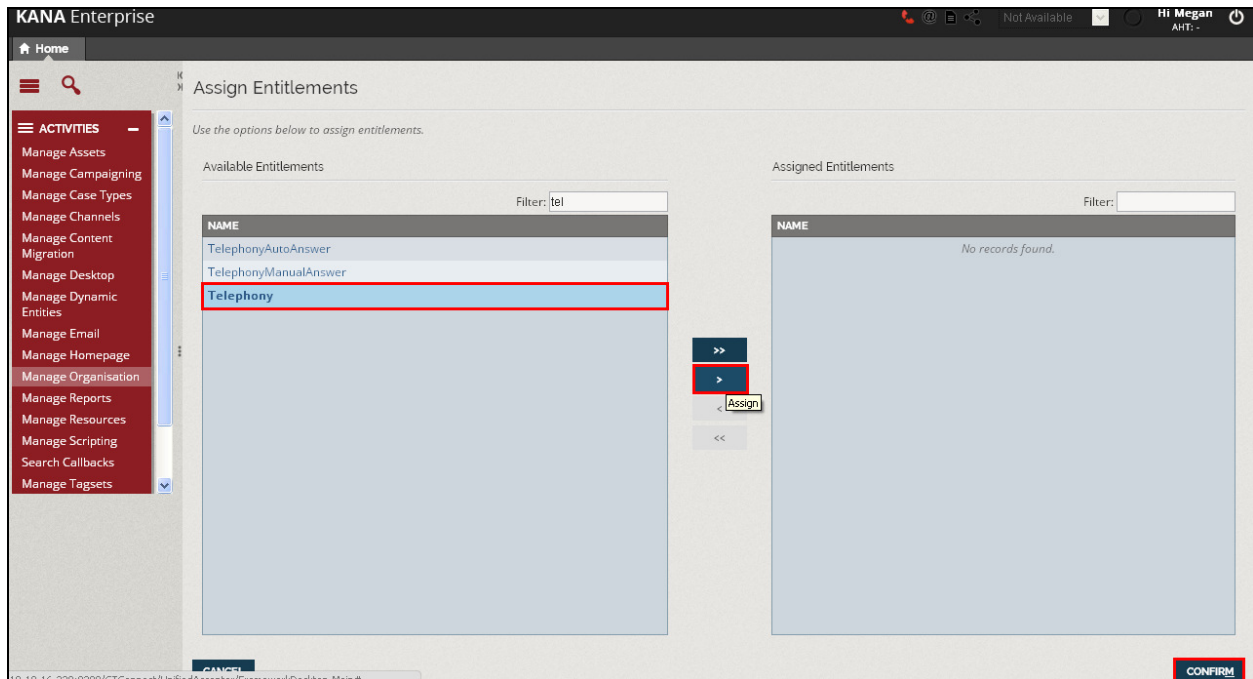
Ensure that the **Type** is set to **Telephony** and that the **Username** entered is that of the extension associated with the user.

The screenshot shows the 'View/Edit Agent' form in the KANA Enterprise application. A modal window titled 'View/Edit External Security Details' is open, displaying the following fields: 'Type' (set to 'Telephony'), 'Username' (set to '1014'), 'Password', and 'Retype Password'. The 'Type' dropdown and the 'Username' text field are highlighted with a red rectangle. The 'CONFIRM' button at the bottom right of the modal is also highlighted with a red rectangle. In the background, the main form shows fields for Title, First Name, Middle Name, Last Name, Previous Last Name, Nickname, Username, Gender, Locale, Password, and Virtual Environment.

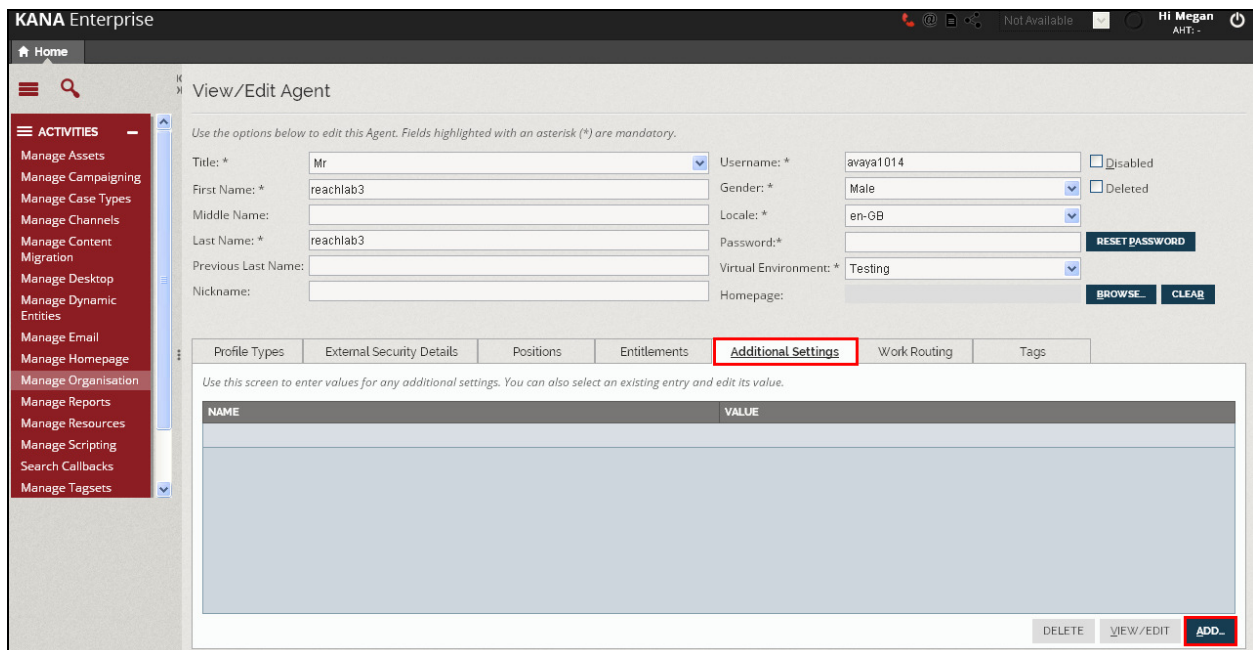
Select the **Entitlements** tab and click **ADD** on the bottom right.

The screenshot shows the 'View/Edit Agent' form with the 'Entitlements' tab selected. The tab is highlighted with a red rectangle. Below the tabs, there is a table with a single header row labeled 'NAME'. At the bottom right of the table, there is a red 'ADD...' button. The 'VIEW INHERITED' button is also visible at the bottom left of the table area. The main form fields are visible in the background, including Title, First Name, Middle Name, Last Name, Previous Last Name, Nickname, Username, Gender, Locale, Password, and Virtual Environment.

Select **Telephony** from the left window and click on the **Assign** icon. Click on **CONFIRM** once selected correctly.



Select the **Additional Settings** tab and click on **ADD** at the bottom right of the screen.



Enter **TELEPHONY\_EXTENSION** for the **Setting** and the telephone extension number associated with this agent for the **Value** field; in this case the extension number was **1014**.

The screenshot shows the 'View/Edit Agent' interface in KANA Enterprise. A modal window titled 'Additional Setting' is open, allowing the user to add a new setting. The 'Setting' field is populated with 'TELEPHONY\_EXTENSION' and the 'Value' field is populated with '1014'. The modal has 'CANCEL' and 'CONFIRM' buttons. In the background, the agent's profile is visible with fields for Title, First Name, Middle Name, Last Name, Previous Last Name, Nickname, Username, Gender, Locale, Password, and Virtual Environment. The 'CONFIRM' button in the modal is highlighted with a red box.

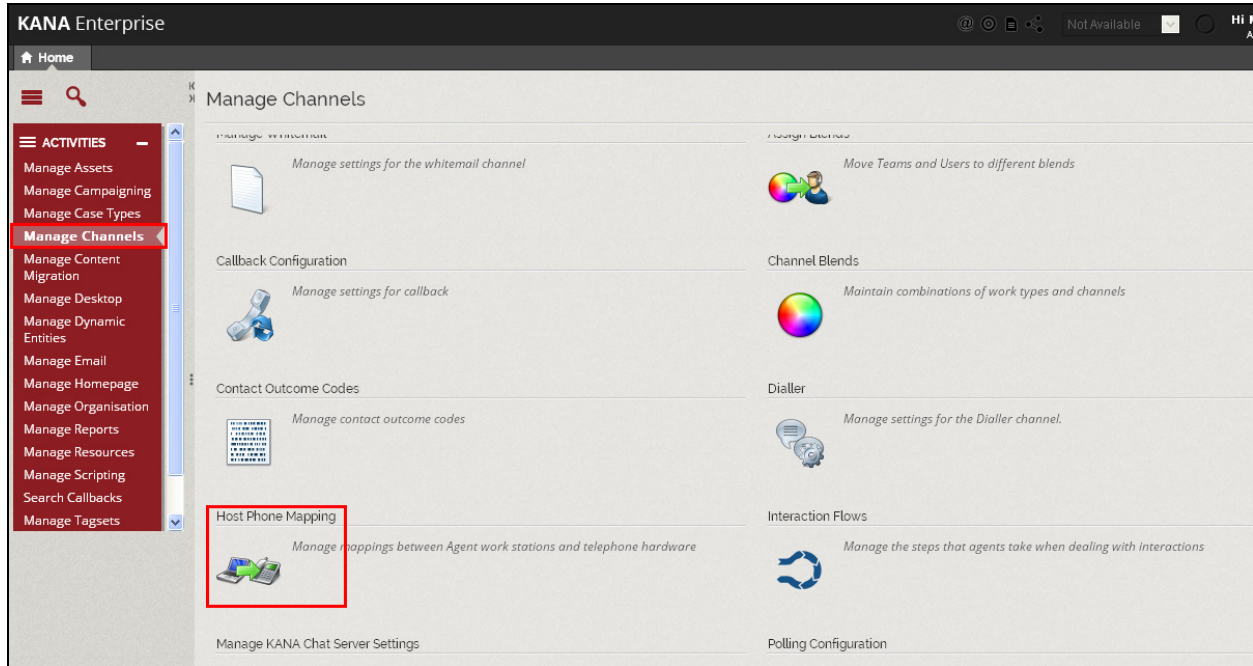
Once this user is added, click on **CONFIRM** at the bottom right of the screen, as highlighted below, to save the user.

This screenshot shows the 'View/Edit Agent' screen with the 'Additional Settings' tab selected. The 'Additional Settings' table is visible, showing the entry 'TELEPHONY\_EXTENSION' with the value '1014'. The 'CONFIRM' button at the bottom right of the screen is highlighted with a red box. The background shows the agent's profile information and various tabs for managing the agent.

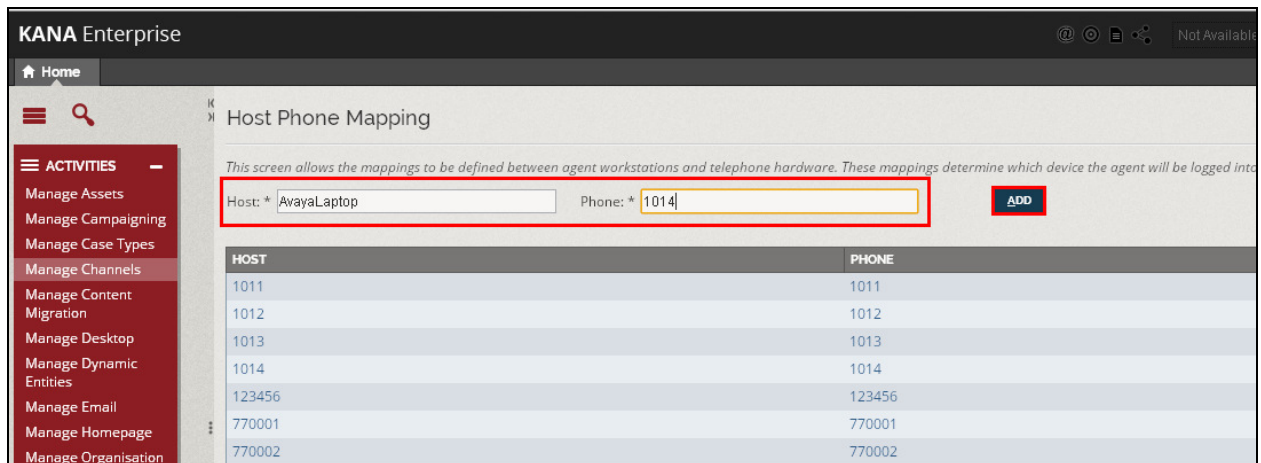


### 9.3. Configure Host to Phone Mapping on KANA Enterprise

Click on **Manage Channels** in the left column and click on **Host Phone Mapping** in the main window.

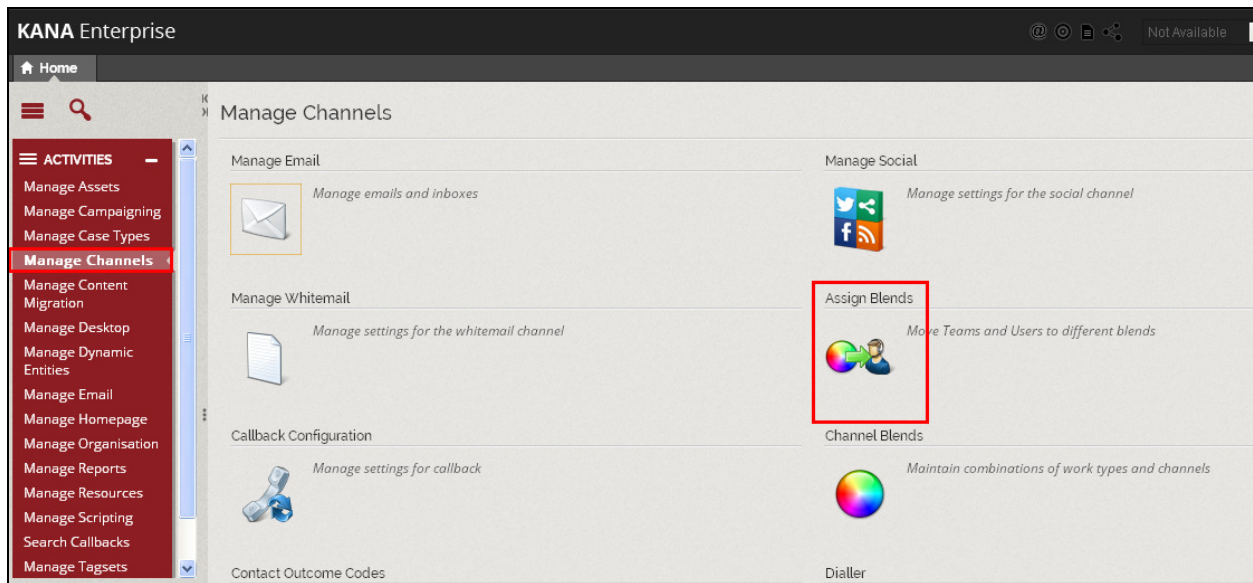


Enter a name for the workstation or laptop to be added under **Host** and the associated deskphone extension number under **Phone**, and then click on **ADD**. This information is used to login the agent into KANA Enterprise. When logging in the name of the workstation is used in the URL.

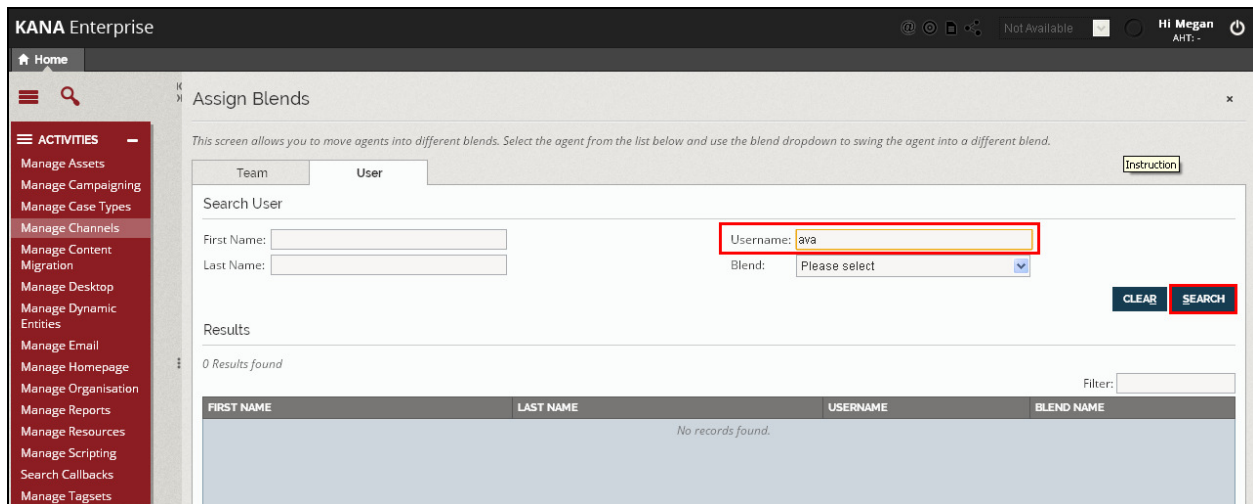


## 9.4. Assign User to Telephony Channel

Select **Manage Channels** in the left window and click on **Assign Blends** in the main window.



Search for the users added in **Section 9.1**.



Select each user that was added and ensure that **Blend** is set to **Telephony Blend** at the bottom of the screen.

**KANA Enterprise** | Hi Megan | AHTE -

**Assign Blends**

This screen allows you to move agents into different blends. Select the agent from the list below and use the blend dropdown to swing the agent into a different blend.

**Team** | **User**

Search User

First Name:  Username:   
Last Name:  Blend:

**CLEAR** **SEARCH**

**Results**

5 Results found

FIRST NAME	LAST NAME	USERNAME	BLEND NAME
reachlab1	reachlab1	avaya1011	Campaign Blend
reachlab10	reachlab10	avaya1012	Telephony Blend
<b>reachlab2</b>	<b>reachlab2</b>	<b>avaya1013</b>	<b>Telephony Blend</b>
reachlab3	reachlab3	avaya1014	Telephony Blend
avayadialler5	avayadialler5	avayadialler5	Campaign Blend

Filter:

1 (1 of 1)

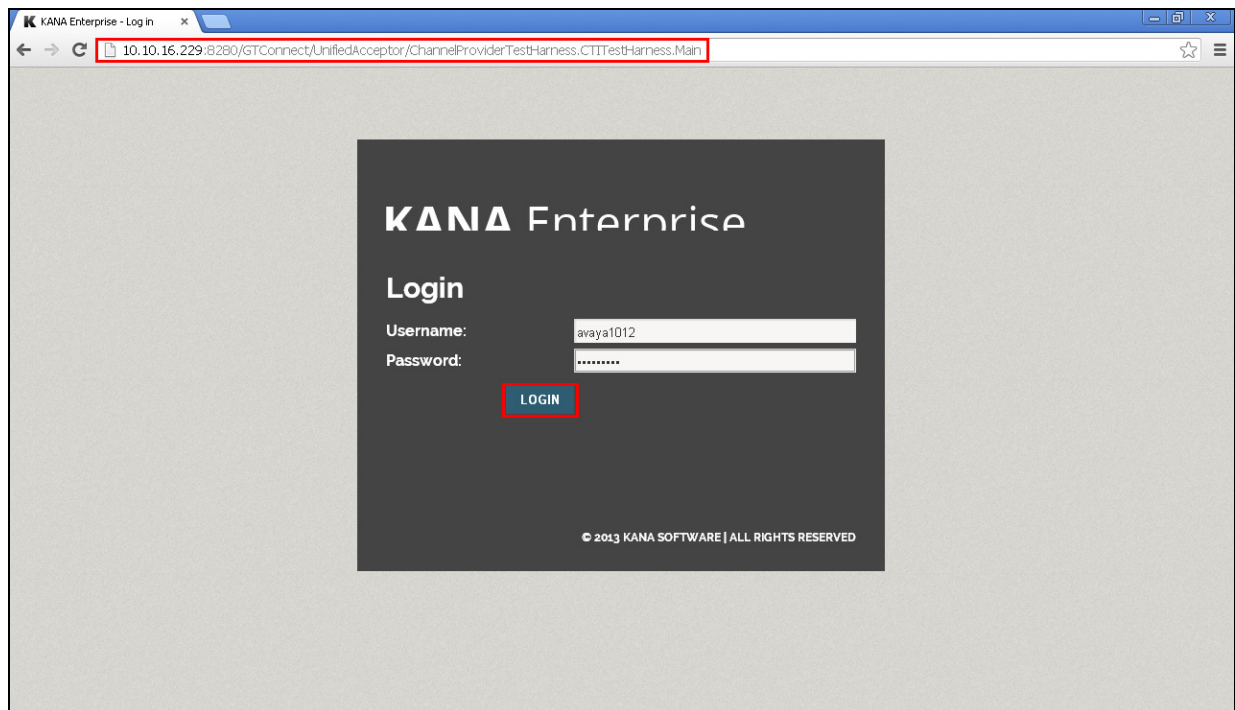
Blend:  **SWING**

## 10. Verification Steps

The following steps can be taken to ensure that all connections between KANA Enterprise and the Avaya Solution are configured correctly.

### 10.1. Verify an Agent can be logged into the Avaya Solution using KANA Enterprise Test Harness

Open the web browser and navigate to <http://<KanaServerIP>:8280/GTConnect/UnifiedAcceptor/ChannelProviderTestHarness.CTITestHarness.Main>. Enter the **Username** and **Password**. Note this is the username and password of the agent created in **Section 6**.





The Test Harness screen appears. Fill in the **Agent Name** and **Agent Place** noting this is the Agent Login ID created in **Section 8.1** and the extension number associated with that Agent. Click on **CONNECT** as shown below.

The screenshot shows the CTI Test Harness interface. On the left, under 'Agent Status', the 'Agent Name' and 'Agent Place' fields are both filled with '1012'. Below these, the 'CONNECT' button is highlighted with a red box. Other buttons like 'DISCONNECT', 'LOG ON', and 'LOG OFF' are also visible. On the right, there's a 'Destination Telephone Number' field and a 'DIAL' button. The 'Communication Messages' area is currently empty.

Once connected to the CCT user, a message should appear in the Communication Messages showing <<<<ConnectSuccess. In order to login an agent click on **LOG ON** highlighted.

This screenshot shows the same interface after the 'LOG ON' button has been clicked. The 'LOG ON' button is now highlighted with a red box. In the 'Communication Messages' area, a new message has appeared: '<<<< ConnectSuccess: Channel - TELEPHONY GTInteractionManager.connect()'. This message is highlighted with a red box.

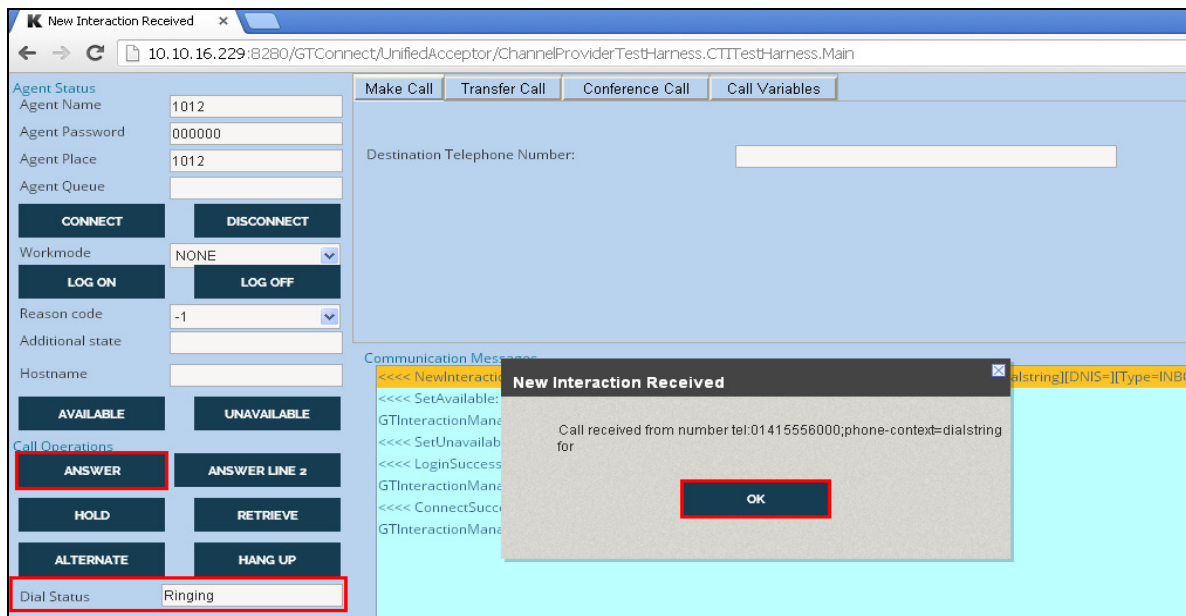
Once logged in, a message should show <<<<LoginSuccess. In order to go from Not Ready to a Ready state click on **AVAILABLE** highlighted.

The screenshot shows the CTI Test Harness web application. The browser address bar displays the URL: 10.10.16.229:8280/GTConnect/UnifiedAcceptor/ChannelProviderTestHarness.CTITestHarness.Main. The interface is divided into several sections:

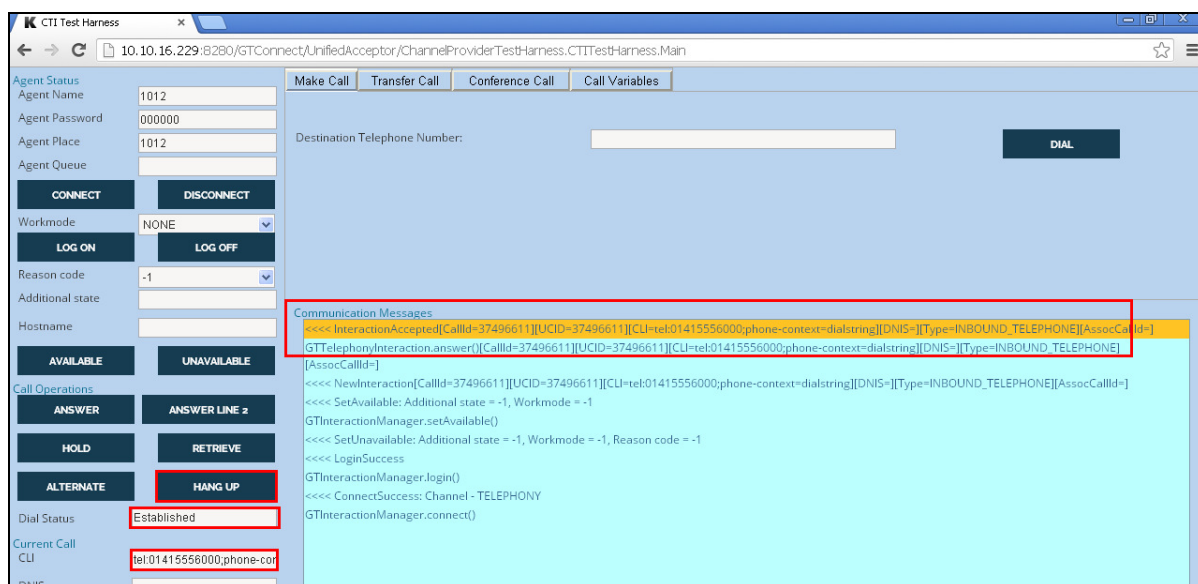
- Agent Status:** Includes input fields for Agent Name (1012), Agent Password (000000), Agent Place (1012), and Agent Queue. Below these are buttons for CONNECT, DISCONNECT, LOG ON, and LOG OFF. There are also dropdown menus for Workmode (set to NONE) and Reason code (set to -1), and input fields for Additional state and Hostname.
- Call Operations:** A section with buttons for ANSWER, ANSWER LINE 2, HOLD, RETRIEVE, ALTERNATE, and HANG UP. A Dial Status input field is located at the bottom left.
- Call Control:** Buttons for Make Call, Transfer Call, Conference Call, and Call Variables are at the top right.
- Destination Telephone Number:** A large input field for entering a phone number.
- Communication Messages:** A log area on the right side showing system messages. A red box highlights the following messages:
  - <<<< SetUnavailable: Additional state = -1, Workmode = -1, Reason code = -1
  - <<<< LoginSuccess

## 10.2. Verify a Skillset Call can be Received Using KANA Enterprise Test Harness

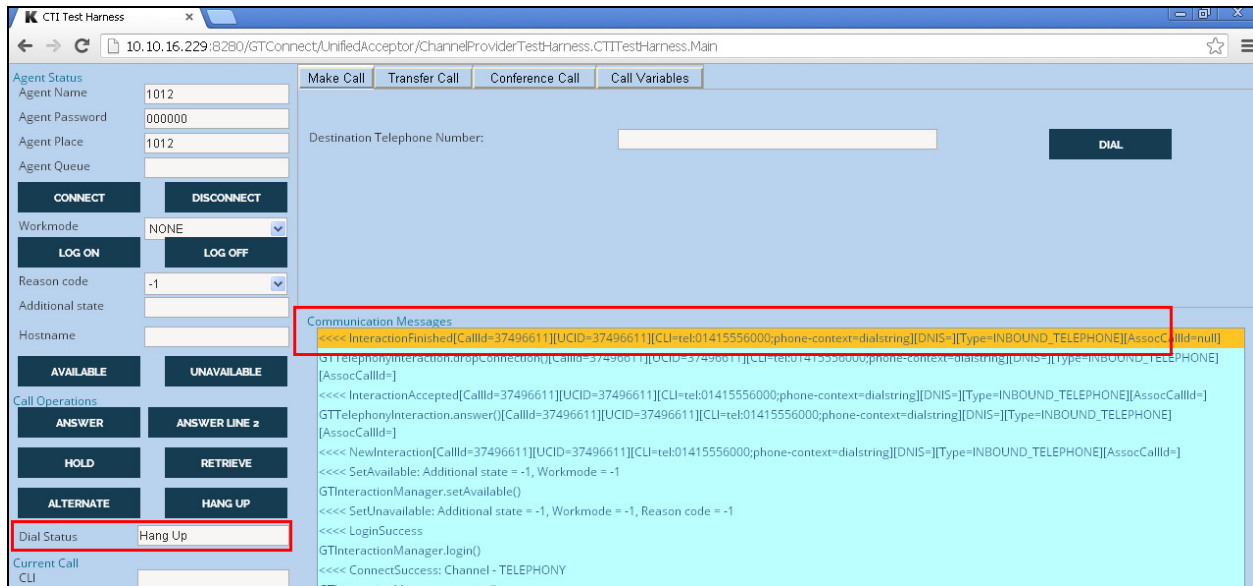
Place a call to a skillset associated with the agent logged in. Once the call appears at the agent's phone, the following screen pop should appear at the agent's desktop Test Harness application. Click **OK** on the **New Interaction Received** window and then click **Answer**. Notice the **Dial Status** shows **Ringing**.



Once the call is answered, the message **<<<<InteractionAccepted** should be shown. Notice the **Dial Status** shows **Established** and the CLI in formation of the caller is available under the **Current Call CLI** field. Click on **HANG UP** to end the call.



Once the call is cleared successfully, the message <<<<InteractionFinished is shown.

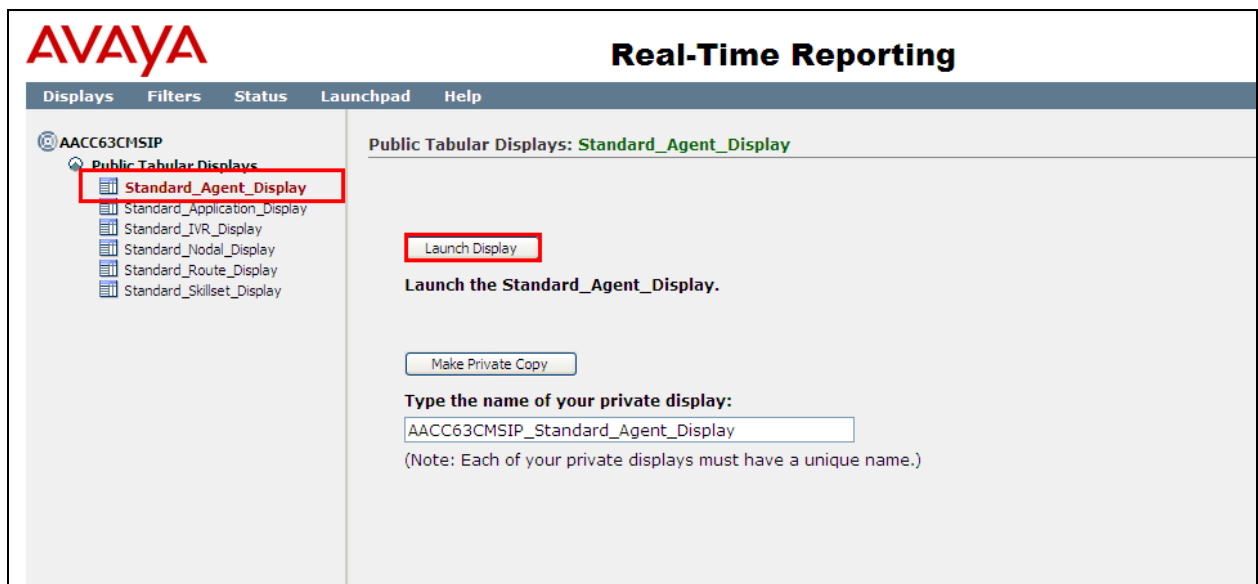


### 10.3. Verify Agent Status on Avaya Aura® Contact Center

Log in to the Contact Center as described in **Section 8**. Click on **Real-Time Reporting** as shown below.



In the left window, click on **Public Tabular Displays** and select **Standard\_Agent\_Display**. Click on **Launch Display** in the main window.



The **Standard Agent Display** should show the agent logged in and the **In Contacts Status** column should display **Idle** indicating the agent is ready to take a call, as shown in the example below.

**AVAYA Real-Time Reporting** Logged in user: webadmin | Logout

Displays Filters Status Launchpad Help

AACC63CMSIP

Public Tabular Displays: Standard\_Agent\_Display Server: AACC63CMSIP

Launch Display

Launch the Standard\_Agent\_Display.

http://10.10.16.216/PD=Standard\_Agent\_Display/AACC63CMSIP/AACC63CMSIP/4 - Standard Agent Displa - Windows Internet Explorer

Header

**Standard Agent Display (AACC63CMSIP)**

Agt ID	Agt First Name	Agt Last Name	Supr First Name	Supr Last Name	Ans SklSet	In Contacts Status	DN In	DN Out	Time In State
1014	avaya1014	avaya1014	Paul	Greaney		Idle			01:34

Moving Window, refreshing every 1 second

Page 1 of 1

Information as of 20/08/2013 15:04:50

## 11. Conclusion

These Application Notes describe the configuration steps required for KANA Enterprise from Sword Ciboodle to successfully interoperate with a SIP-Enabled Avaya Aura® Contact Center R6.3 using Web Services SOA OI. Please refer to **Section 2.2** for test results and observations.

## 12. Additional References

This section references documentation relevant to these Application Notes. The Avaya product documentation is available at <http://support.avaya.com> where the following documents can be obtained.

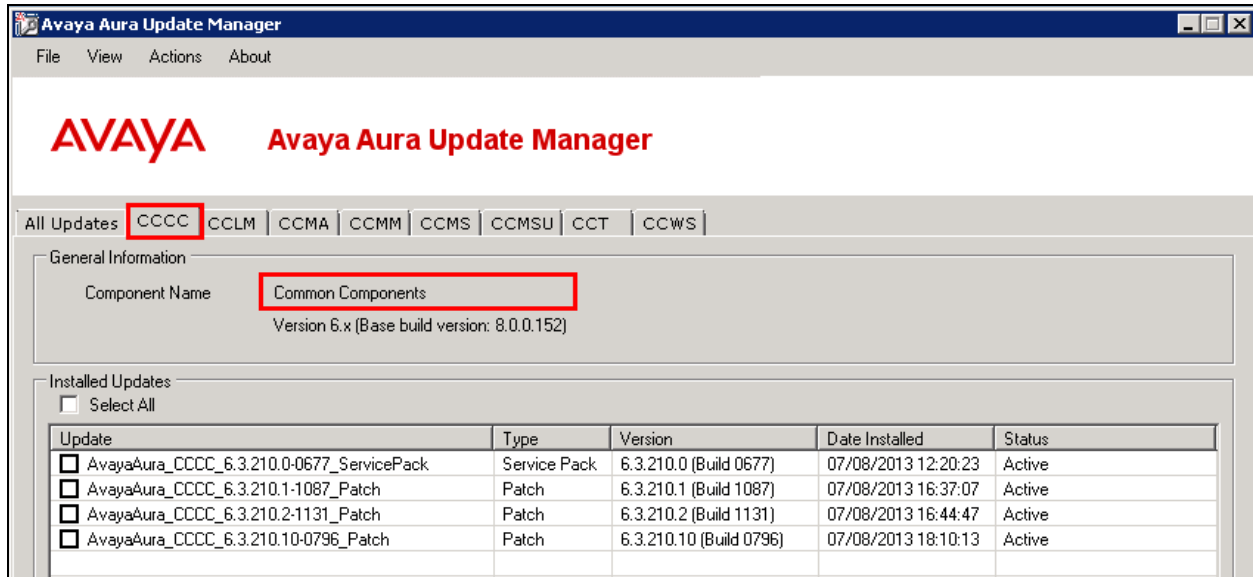
- [1] *Administering Avaya Aura® Communication Manager*, Document ID 03-300509
- [2] *Avaya Aura® Communication Manager Feature Description and Implementation*, Document ID 555-245-205
- [3] *Avaya Aura® Application Enablement Services Administration and Maintenance Guide* Release 6.3
- [4] *Avaya Aura ® Contact Center SIP Commissioning*, Doc # NN44400-511, Issue 3.02 Release 6.3
- [5] *Avaya Aura ® Contact Center Planning and Engineering*, Doc # NN44400-210, Issue 3.03 Release 6.3
- [6] *Avaya Aura ® Contact Center Installation*, Doc # NN44400-311, Issue 3.02 Release 6.3

Product documentation for KANA Enterprise can be requested from Sword Ciboodle or may be downloaded from <http://www.kana.com>

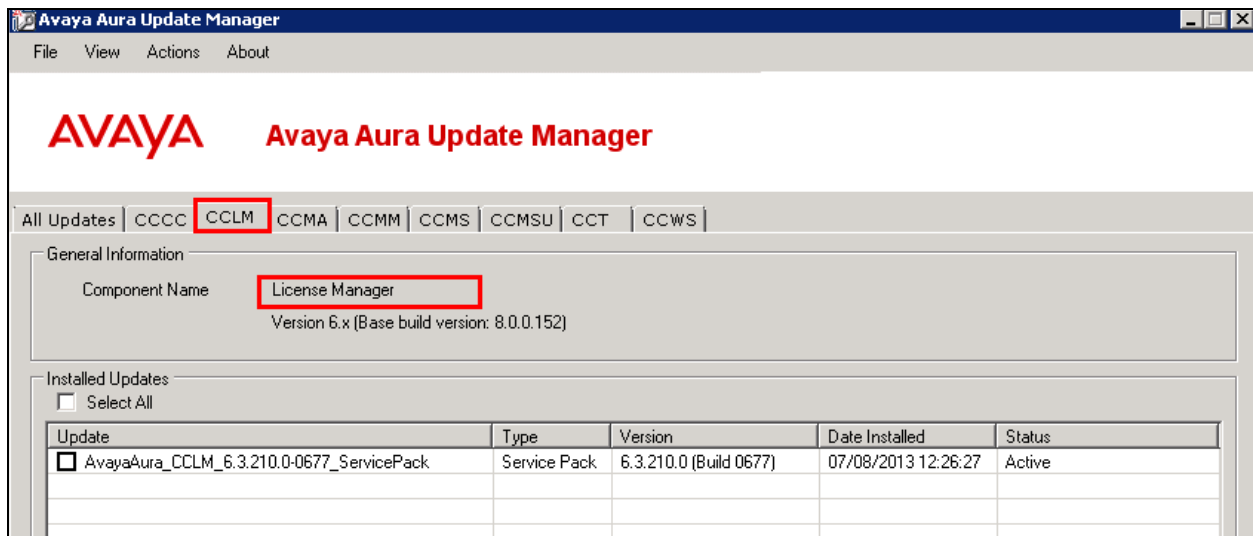
## Appendix A

### Avaya Aura® Contact Center Patches

Contact Center Common Component patches



Contact Center License Manager patches





## Contact Center Manager Administration patches

The screenshot shows the Avaya Aura Update Manager interface. The 'CCMA' tab is selected in the top navigation bar. Under 'General Information', the 'Component Name' is 'Manager Administration'. The 'Installed Updates' section shows a table of updates for the Manager Administration component.

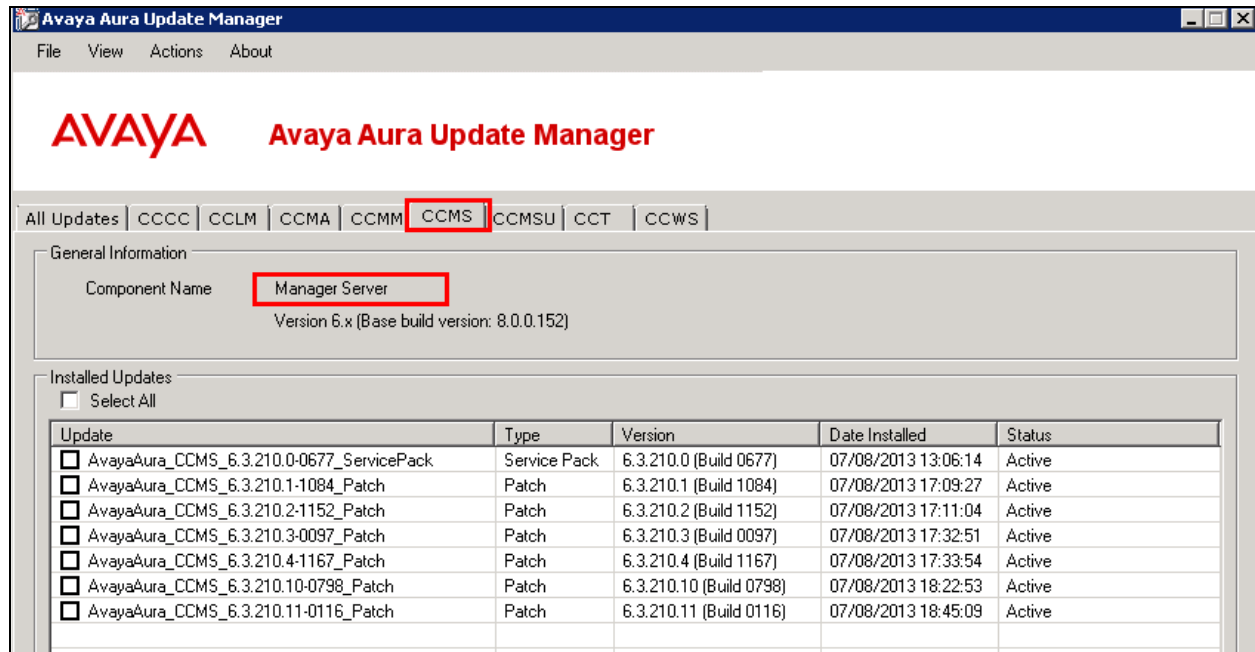
Update	Type	Version	Date Installed	Status
<input type="checkbox"/> AvayaAura_CCMA_6.3.210.0-0716_ServicePack	Service Pack	6.3.210.0 (Build 0716)	07/08/2013 12:29:03	Active
<input type="checkbox"/> AvayaAura_CCMA_6.3.210.1-0689_Patch	Patch	6.3.210.1 (Build 0689)	07/08/2013 16:52:12	Active
<input type="checkbox"/> AvayaAura_CCMA_6.3.210.2-0702_Patch	Patch	6.3.210.2 (Build 0702)	07/08/2013 16:53:32	Active
<input type="checkbox"/> AvayaAura_CCMA_6.3.210.10-0720_Patch	Patch	6.3.210.10 (Build 0720)	07/08/2013 18:14:58	Active

## Contact Center Multimedia patches

The screenshot shows the Avaya Aura Update Manager interface. The 'CCMM' tab is selected in the top navigation bar. Under 'General Information', the 'Component Name' is 'Multimedia / Outbound'. The 'Installed Updates' section shows a table of updates for the Multimedia / Outbound component.

Update	Type	Version	Date Installed	Status
<input type="checkbox"/> AvayaAura_CCMM_6.3.210.0-0670_ServicePack	Service Pack	6.3.210.0 (Build 0670)	07/08/2013 13:00:54	Active
<input type="checkbox"/> AvayaAura_CCMM_6.3.210.1-0481_Patch	Patch	6.3.210.1 (Build 0481)	07/08/2013 16:55:01	Active
<input type="checkbox"/> AvayaAura_CCMM_6.3.210.2-0495_Patch	Patch	6.3.210.2 (Build 0495)	07/08/2013 17:02:02	Active
<input type="checkbox"/> AvayaAura_CCMM_6.3.210.10-0521_Patch	Patch	6.3.210.10 (Build 0521)	07/08/2013 18:17:06	Active

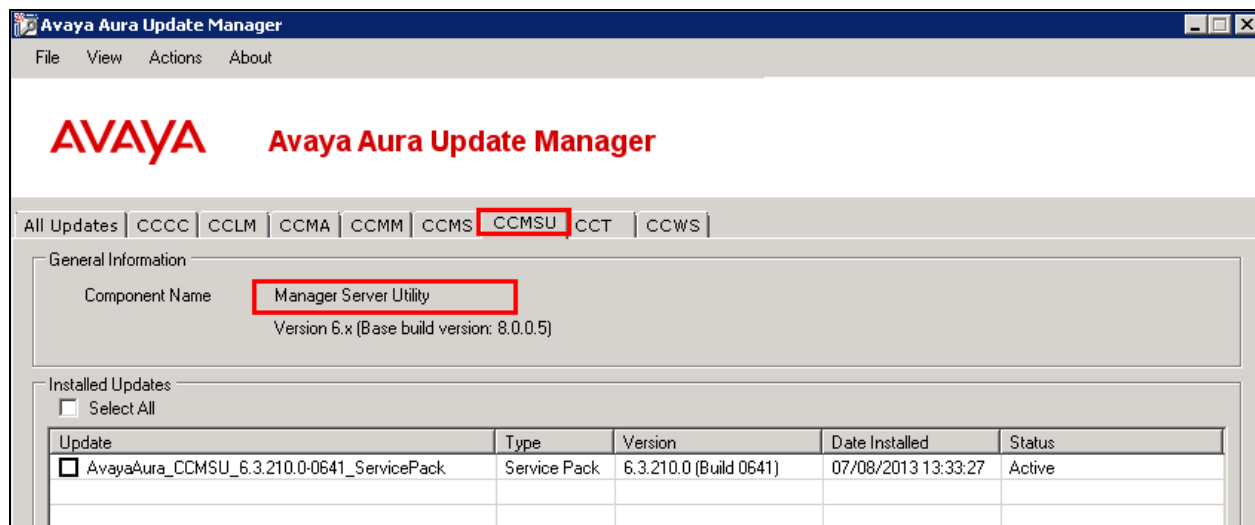
## Contact Center Manager Server patches



The screenshot shows the Avaya Aura Update Manager application window. The title bar reads "Avaya Aura Update Manager". The menu bar includes "File", "View", "Actions", and "About". The Avaya logo and "Avaya Aura Update Manager" are displayed. A tab bar at the top contains "All Updates", "CCCC", "CCLM", "CCMA", "CCMM", "CCMS" (highlighted with a red box), "CCMSU", "CCT", and "CCWS". Below the tabs, the "General Information" section shows "Component Name" as "Manager Server" (highlighted with a red box) and "Version 6.x (Base build version: 8.0.0.152)". The "Installed Updates" section has a "Select All" checkbox and a table of installed updates.

Update	Type	Version	Date Installed	Status
<input type="checkbox"/> AvayaAura_CCMS_6.3.210.0-0677_ServicePack	Service Pack	6.3.210.0 (Build 0677)	07/08/2013 13:06:14	Active
<input type="checkbox"/> AvayaAura_CCMS_6.3.210.1-1084_Patch	Patch	6.3.210.1 (Build 1084)	07/08/2013 17:09:27	Active
<input type="checkbox"/> AvayaAura_CCMS_6.3.210.2-1152_Patch	Patch	6.3.210.2 (Build 1152)	07/08/2013 17:11:04	Active
<input type="checkbox"/> AvayaAura_CCMS_6.3.210.3-0097_Patch	Patch	6.3.210.3 (Build 0097)	07/08/2013 17:32:51	Active
<input type="checkbox"/> AvayaAura_CCMS_6.3.210.4-1167_Patch	Patch	6.3.210.4 (Build 1167)	07/08/2013 17:33:54	Active
<input type="checkbox"/> AvayaAura_CCMS_6.3.210.10-0798_Patch	Patch	6.3.210.10 (Build 0798)	07/08/2013 18:22:53	Active
<input type="checkbox"/> AvayaAura_CCMS_6.3.210.11-0116_Patch	Patch	6.3.210.11 (Build 0116)	07/08/2013 18:45:09	Active

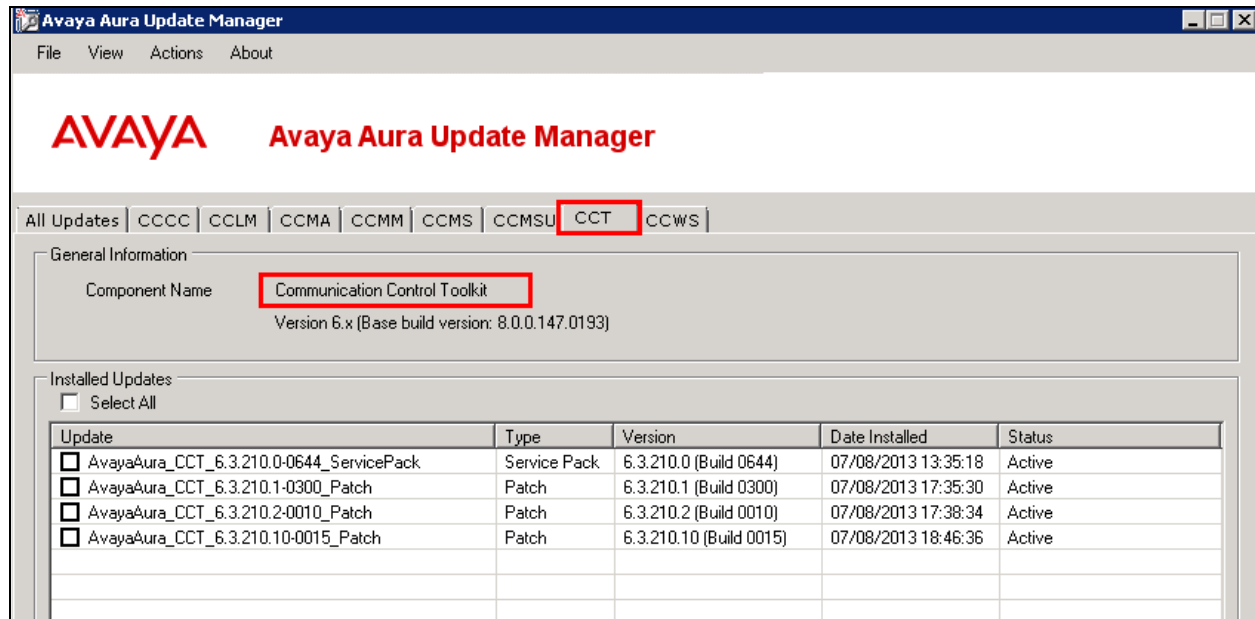
## Contact Center Manager Server Utility patches



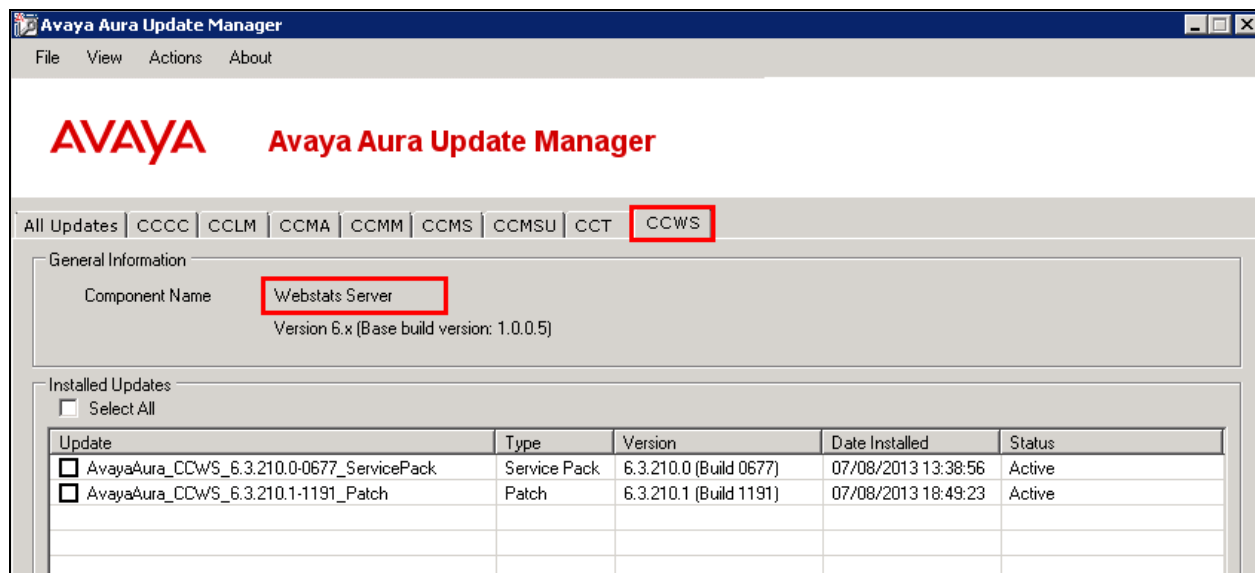
The screenshot shows the Avaya Aura Update Manager application window. The title bar reads "Avaya Aura Update Manager". The menu bar includes "File", "View", "Actions", and "About". The Avaya logo and "Avaya Aura Update Manager" are displayed. A tab bar at the top contains "All Updates", "CCCC", "CCLM", "CCMA", "CCMM", "CCMS", "CCMSU" (highlighted with a red box), "CCT", and "CCWS". Below the tabs, the "General Information" section shows "Component Name" as "Manager Server Utility" (highlighted with a red box) and "Version 6.x (Base build version: 8.0.0.5)". The "Installed Updates" section has a "Select All" checkbox and a table of installed updates.

Update	Type	Version	Date Installed	Status
<input type="checkbox"/> AvayaAura_CCMSU_6.3.210.0-0641_ServicePack	Service Pack	6.3.210.0 (Build 0641)	07/08/2013 13:33:27	Active

## Contact Center Communication Control Toolkit patches



## Contact Center Webstats Server patches



---

**©2014 Avaya Inc. All Rights Reserved.**

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at [devconnect@avaya.com](mailto:devconnect@avaya.com).