



Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Amcom Smart Console Version 5.1 with Avaya Aura® Contact Center Communication Control Toolkit Release 6.3 and Avaya Communication Server 1000 Release 7.6 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Amcom Smart Console application to successfully interoperate with Avaya Aura® Contact Center Communication Control Toolkit (CCT) Release 6.3 and Avaya Communication Server 1000 Release 7.6. Amcom Smart is an operator console that simplifies the call handling process for hospital call centers.

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 a solution comprised of Avaya Aura® Contact Center Communication Control Toolkit (CCT) Release 6.3, Avaya Communication Server 1000 Release 7.6 (hereafter referred to as Communication Server 1000), and Amcom Smart Console application (hereafter referred to as Smart). Amcom Smart allows a user to operate a physical telephone and view call and telephone display information through a graphical user interface (GUI). Amcom Smart integrates with the Amcom CTI Layer, which is a middleware between Amcom Smart and Application Enablement Services, to control and monitor phone states.

The objective of this compliance test was to validate that Smart successfully interact with the Contact Center CCT server to control and monitor activities of physical agent phone on the Avaya Communication Server 1000 switch.

2. General Test Approach and Test Results

The general test approach was to verify interoperability feature and serviceability test cases between Amcom Smart application and Avaya Aura® Contact Center CCT using Communication Server 1000. All test cases were executed manually.

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 compliance test concentrated on the CCT-based integration of Smart with Contact Center CCT and Communication Server 1000. The compliance test verified the ability for an operator to:

- Receive and answer Automated Call Distribution (ACD) calls in queue and regular calls.
- Generate outgoing calls.
- Over dial DTMF on calls.
- Place calls on hold and resume.
- Perform blind and supervised transfers to any configured station or PSTN number.
- Perform call conferencing to any configured station or PSTN number.
- Serviceability: restart CCT services and pull out Ethernet cable.

2.2. Test Results

All test cases were executed and passed. The followings are observed:

- In the event of losing communication between CCT server and Smart application such as CCT services restarted, Ethernet cable unplugged...etc., the Gen CTI application service on the Smart server needs to be restarted to allow control of the agent phone.
- In case of the application calling an invalid extension, the display shows the destination party is invalid. Clicking the Release button does not clear the display information. Information on display is cleared only if a new call is presented or the Line button is pressed.
- In case of the application calling a busy extension, the display shows that the call is in progress. However the display on the physical phone shows that the destination is busy. Call can be cleared by clicking on the Release button.

2.3. Support

For technical support on the Amcom Smart Console product, contact Amcom software support via the website below.

- **Website:** <http://www.amcomsoftware.com>

3. Reference Configuration

Figure 1 below illustrates the test configuration diagram between Avaya Aura® Contact Center system, Avaya Communication Server 1000 and Amcom Smart Console server. Avaya Communication Server 1000 switch had the Contact Center attached and agent phones registered to it. The compliance test used Avaya Aura® Messaging for testing DTMF only and it is not a part of the solution. The Communication Server 1000 system also had SIP trunk to PSTN for making and receiving external calls.

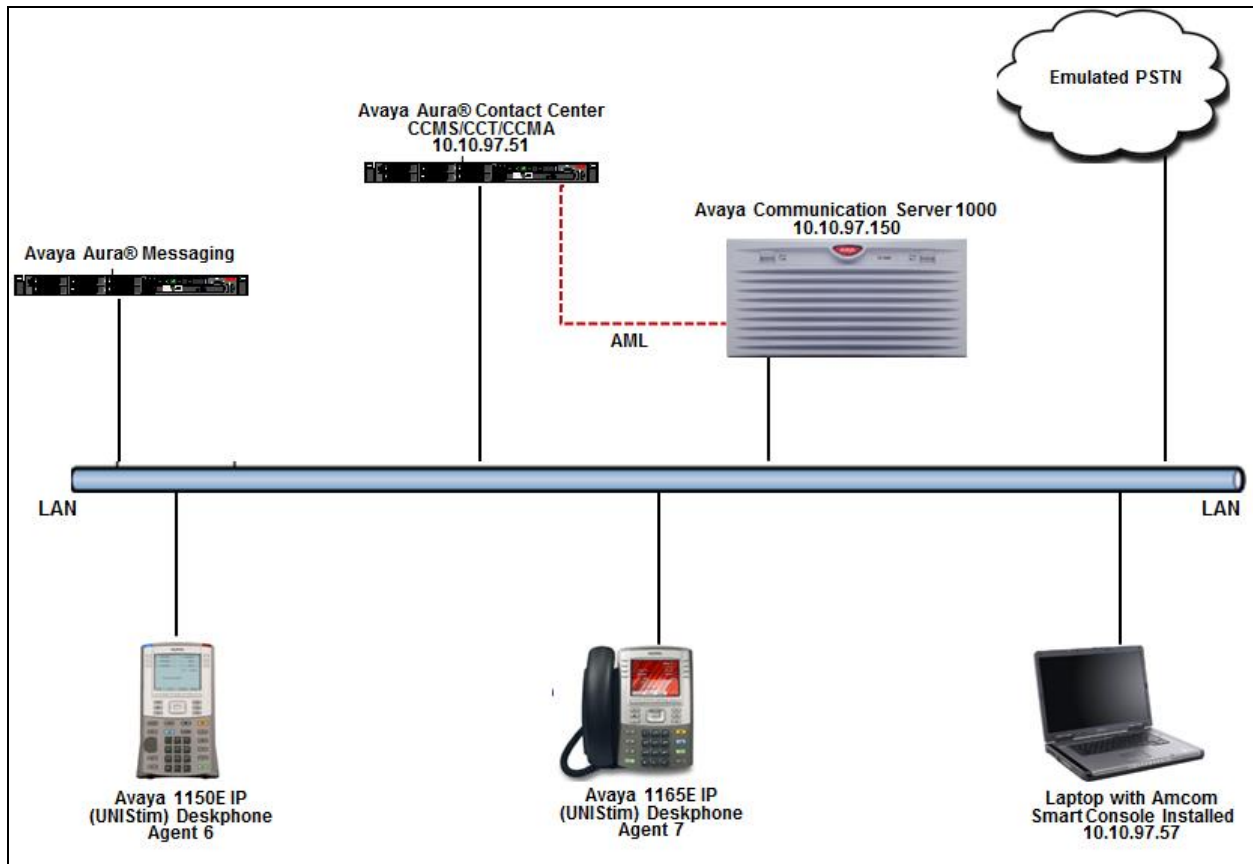


Figure 1: Test Configuration Diagram

4. Equipment and Software Validated

The following equipment and software were used for the compliance test:

Equipment	Software
Avaya S8800 server running Avaya Aura® Contact Center	6.3 SP10
Avaya S8800 server running Avaya Aura® Messaging	6.1 SP2
Avaya Communication Server 1000E/CPPM	7.65
Avaya IP 1165E (Unistim) Deskphone	0x25C8Q
Avaya IP 1150E (Unistim) Deskphone	0x27C8Q
Amcom Server OS	Windows 7 64-bit Enterprise SP1
Amcom Smart Console	5.1.96.96
Amcom CTI Service	5.2.37.37

5. Configure Avaya Communication Server 1000

This document assumes that the Avaya Communication Server 1000 system was properly installed and configured as per the product documents. This section provides the steps on how to provision the Communication Server 1000 to work with Contact Center. For more information about how to install and configure Communication Server 1000, refer to **Section 10**.

The following summarizes the tasks that need to be done on Communication Server 1000. This section shows configurations provisioned by using overlay (LD) commands; the same configurations can be also done by using Element Manager.

- Verify Software Packages for Contact Center Features.
- Configure ELAN and VAS for Contact Center application.
- Configure Automatic Call Distribution (ACD) Queue.
- Configure Control Directory Number (CDN).
- Configure Agent Phone.

5.1. Verify Software Packages for Contact Center Features

Use overlay LD 22 to print software packages required for Contact Center feature. Make sure the following software packages are equipped in the Communication Server 1000 system.

Prompt	Response	Comment
REQ	PRT	Request print
TYPE	PKG	Type of data: package
BACD	40	Basic Automatic Call Distribution
ACDB	41	Automatic Call Distribution B
ACDC	42	Automatic Call Distribution C
LMAN	43	Automatic Call Distribution Load Management
MUS	44	Music
ACDA	45	Automatic Call Distribution A
ACDD	50	Automatic Call Distribution D
NGCC	311	Symposium Call Center

Use the same overlay LD 22 command to print out allowed numbers of ACD agents, AST and AML.

Prompt	Response	Comment
REQ	SLT	Request software list
ACD AGENTS	32767 LEFT 32739 USED 28	
AST	32767 LEFT 32712 USED 55	
AML	16 LEFT 9 USED 7	

5.2. Configure ELAN and VAS for Contact Center application

Use overlay LD 17 to create an Application Module over Ethernet (ELAN) for Contact Center application. Below are the prompts that need to be entered. For other prompts, keep pressing “Enter” key to use default value.

Prompt	Response	Comment
REQ	CHG	Request change
TYPE	ADAN	Type:
ADAN	NEW ELAN 19	Add a new ELAN 19
CTYP	ELAN	Card type: ELAN
DES	AACC63	Designator

Use overlay LD 17 to create a Value Added Server (VAS) to associate with the ELAN above. Enter the information as displayed in the table below.

Prompt	Response	Comment
REQ	CHG	Request change
TYPE	VAS	Type: Value added server
VAS	NEW	Add a new ELAN 19
VSID	19	Card type: ELAN
ELAN	19	ELAN 19 as configured in the step above
SECU	YES	Security the link

5.3. Configure Automatic Call Distribution (ACD) Queue

Use overlay LD 23 to create an ACD queue for Contact Center agent. The important fields are displayed below. For other fields in the command, keep pressing the “Enter” key to use default value.

Prompt	Response	Comment
REQ	NEW	Request new
TYPE	ACD	Type: ACD
CUST	0	Customer ID
ACDN	54901	ACD DN
MAXP	50	Maximum of agent for this ACD queue, from 1-120

5.4. Configure Control Directory Number (CDN)

Use overlay LD 23 to create a CDN number for Contact Center. The important fields are displayed below. For other fields in the command, keep pressing the “Enter” key to use default value.

Prompt	Response	Comment
REQ	NEW	Request new
TYPE	CDN	Type: CDN
CUST	0	Customer ID
CDN	54900	CDN Directory Number
DFDN	54901	Default DN: assign the ACD DN above to the CDN

5.5. Configure Agent Phone

User overlay LD 11 to create or change the configuration for agent phones. The important fields are displayed below, for other fields in the command keep pressing the “Enter” key to use default values. In the compliance test, 2 agents (agent6 and agent7) created for different phone types were used for testing purpose. The configuration below represents one agent phone type, 1150E.

Prompt	Response	Comment
REQ	NEW	Request new
TYPE	1150	Type: 1150 phone
CUST	0	Customer ID
ZONE	1	Zone for phone it is defined before
AST	00 03	CCT will monitor key 0 and 3
KEY	00 ACD 54901 1005	Key 0 assign to ACD 54901 above
KEY	01 NRD	Key 1 Not Ready
KEY	02 MSB	Key 2 Make Set Busy
Key	03 SCR 54405	KEY 3 secondary DN for agent phone
CPND	NEW	Add a name for agent phone
NAME	Agent6	Enter a name for agent phone

6. Configure Avaya Aura® Contact Center

This section provides steps on how to configure Contact Center to work with Avaya Communication Server 1000 and the Amcom Smart. This section assumes that Contact Center system is already installed and operated. The following provides the steps for configurations:

- Verify Contact Center License.
- Configure Contact Center Manager Server.
- Configure Windows users for CCT Agent.
- Configure CCT Server.
- Configure Contact Center CDN (Route Points).
- Configure Contact Center Phonesets.
- Configure Contact Center Skillset.
- Configure Contact Center Supervisor.
- Configure Contact Center Agent.
- Configure Contact Center Scripting.
- Configure CCT Agent.

In the compliance test, the Contact Center system used is a co-resident system which consists of Contact Center Manager Server, Contact Center Manager Administrator, Contact Center Communication Control Toolkit, and Contact Center License Manager.

6.1. Verify Contact Center License

From the Contact Center server in which the License Manager server is installed, navigate to **Start → All Programs → Avaya → Contact Center → License Manger → Configuration.**

The **Contact Center Licensing** window is displayed. Make sure **Corporate Open Queue Sessions** and **Corporate CCT Package** are presented in the table as shown below.

The screenshot shows the 'Contact Center Licensing' window with the 'Real Time Usage' tab selected. The window contains a table with the following data:

License Type	Max	Current	%Used	Alarms
Corporate Open Interface Open Queue	1	0	0.0 %	<input type="checkbox"/> Applic
Corporate Linkplexer	1	0	0.0 %	<input type="checkbox"/> Applic
Corporate Outbound Feature	1	0	0.0 %	<input type="checkbox"/> Applic
Corporate CCMM Redundancy	1	0	0.0 %	<input type="checkbox"/> Applic
Corporate NCC Hetero Networking	1	0	0.0 %	<input type="checkbox"/> Applic
Corporate Universal Networking	1	0	0.0 %	<input type="checkbox"/> Applic
Corporate CCMA Replication	1	0	0.0 %	<input type="checkbox"/> Applic
LM_CCT_STNC	1	0	0.0 %	<input type="checkbox"/> n/a
Corporate Replication	1	0	0.0 %	<input type="checkbox"/> Applic
LM_OQ_MMC	1	0	0.0 %	<input type="checkbox"/> n/a
Corporate Open Queue Sessions	1	1	100.0 %	<input type="checkbox"/> Applic
Corporate CCT Package	1	1	100.0 %	<input type="checkbox"/> Applic
Corporate CCMM Package	1	1	100.0 %	<input type="checkbox"/> Applic
Corporate Enterprise	1	1	100.0 %	<input type="checkbox"/> Applic

Below the table, there are two input fields for alarm thresholds:

- Critical License Usage %: 90
- Major License Usage %: 80

Buttons for 'Apply' and 'Exit' are located at the bottom right of the window.

6.2. Configure Contact Center Manager Server

From the Contact Center Manager Server machine, navigate to **Start → All Programs → Avaya → Contact Center → Manager Server → Server Configuration**. The **Server Configuration** window is displayed, in the left navigation pane of the **Server Configuration** window, select **Local Settings**. The **Local Settings** window is displayed on the right. Enter the following highlighted fields:

- **Site Name:** It should be matched with the computer name in CCMS server, e.g. “**AMLAACC62**”.
- **RSM IP address:** Enter the Real-Time Statistics Multicast IP address in the box, the IP address **234.5.6.10** is the default one in Contact Center when installed. Check with network administrator to assign a proper multicast IP for your contact center.
- **Avaya Server Subnet:** Enter the contact center subnet IP in the box, e.g. **10.10.97.51**.
- **Elan Subnet:** If Elan is used, select the “**Enter the ELAN Subnet IP address**” checkbox and provide the ELAN IP address of Contact Center in the **IP Address** textbox, e.g. **10.10.97.103**.

The screenshot shows the 'Server Configuration' window with the 'Local Settings' tab selected in the left navigation pane. The main area displays the 'Contact Center Server Configuration' form. The form includes the Avaya logo and the title 'Contact Center Server Configuration'. The left navigation pane lists: Main Menu, Local Settings (selected), Licensing, Switch CS1000, CCT Server, WS Open Interfaces, and Salesforce. The main configuration area is divided into four sections: Customer Information, Avaya Server Subnet, Site Name, and Elan Subnet. The Customer Information section has fields for Customer Name (Avaya) and Company Name (DevConnect). The Avaya Server Subnet section has a label 'Enter the CLAN Subnet IP Address' and an IP Address field (10.10.97.51). The Site Name section has a Site Name field (AMLAACC62). The Elan Subnet section has a checkbox 'Enter the ELAN Subnet IP Address' (checked) and an IP Address field (10.10.97.103). At the bottom, there are buttons for Exit, Apply All, and OK. The RSM IP Address section is also visible, with a label 'Real-Time Statistics Multicast IP Address' and a field (234.5.6.10).

Section	Field	Value
Customer Information	Customer Name	Avaya
	Company Name	DevConnect
Avaya Server Subnet	Enter the CLAN Subnet IP Address	
	IP Address	10.10.97.51
Site Name	Site Name	AMLAACC62
Elan Subnet	Enter the ELAN Subnet IP Address	<input checked="" type="checkbox"/>
	IP Address	10.10.97.103
RSM IP Address	Real-Time Statistics Multicast IP Address	234.5.6.10

Click on the **Licensing** option, the **License** window is displayed on the right. Depending on the CCMS license, select the proper CCMS package in the **CCMS Package** section, e.g. “**Corporate Enterprise**”. Tick the “**Open Queue**” checkbox in the **Optional Packages** window.

Enter the serial number of the Communication Server 1000 system in the **Serial Number** field. The serial number of Communication Server 1000 system can be found by using overlay 22 with REQ ISSP. The **License Server IP Address** section is kept as default, if License Manager server is installed on the same server with CCMS.

The screenshot shows the 'Server Configuration' window for Avaya Contact Center. The window has a blue title bar and a red Avaya logo. The main title is 'Contact Center Server Configuration'. On the left is a 'Main Menu' with icons for 'Local Settings', 'Licensing' (selected), 'Switch CS 1000', 'CCT Server', 'WS Open Interfaces', and 'SalesForce'. The central area is divided into three sections: 'License Manager Package' with a 'CCMS Package' dropdown set to 'Corporate Enterprise' and a list of 'Optional Packages' where 'Open Queue' is checked; 'License Server IP Address' with fields for 'License Server IP' (10.10.97.51) and 'Port' (3998); and 'Optional Alternative License Server IP Address' with a 'License Server IP' field. At the bottom, there is a 'Serial Number' field containing '46379'. The bottom right corner has 'Exit', 'Apply All', and 'OK' buttons.

Click on the **Switch Communication Server 1000** option, the **Switch Communication Server 1000** window is displayed on the right. In the **Communication Server 1000 Switch Data** section, enter the name of the Communication Server 1000 call server in the **Switch Name** field, e.g. “**cppm3**”, an IP address in the **Switch IP**, e.g. “**10.10.97.78**”, and customer number in the **Switch Customer number**, e.g. “**0**”. Leave the **Voice Configuration Services** section as **None** if not used.

Note that the switch name must match the host name of the call server. The switch name of Communication Server 1000 system can be found out by using overlay 117 PRT HOST.

Server Configuration

AVAYA **Contact Center Server Configuration**

Main Menu

- Local Settings
- Licensing
- Switch CS1000**
- CCT Server
- WS Open Interfaces
- SalesForce

CS1000 Switch Data

Switch Name
cppm3

Switch IP
10.10.97.78

Switch Customer Number
0

Alternative Switch IP

Alternative Switch Customer Number

Alternative Switch Serial ID

Voice Services Configuration

☐ Call Pilot ☐ AAEP ☒ None

IP Address

Port
10008

CPHA Managed CLAN IP (optional)

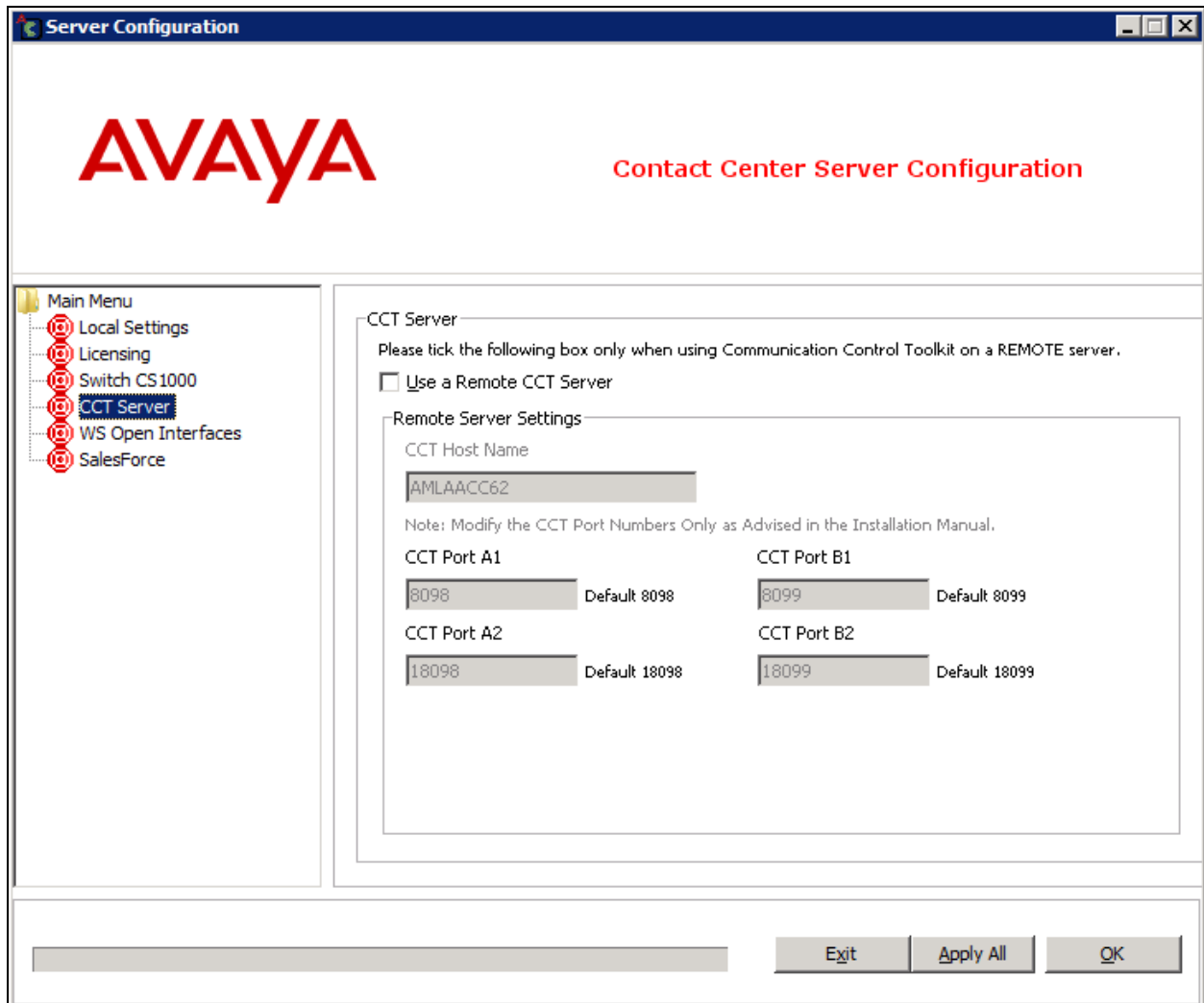
Call Pilot CLAN IP Address

Done

Exit Apply All OK

Click on **CCT Sever** option. Leave the settings as default since the CCT server is installed on the same server with CCMS.

Click **Apply All** button to apply configuration to **Contact Center Server Configuration** and click **Exit** to close the window. The Contact Center CCMS needs a reboot for the changes to take effect.

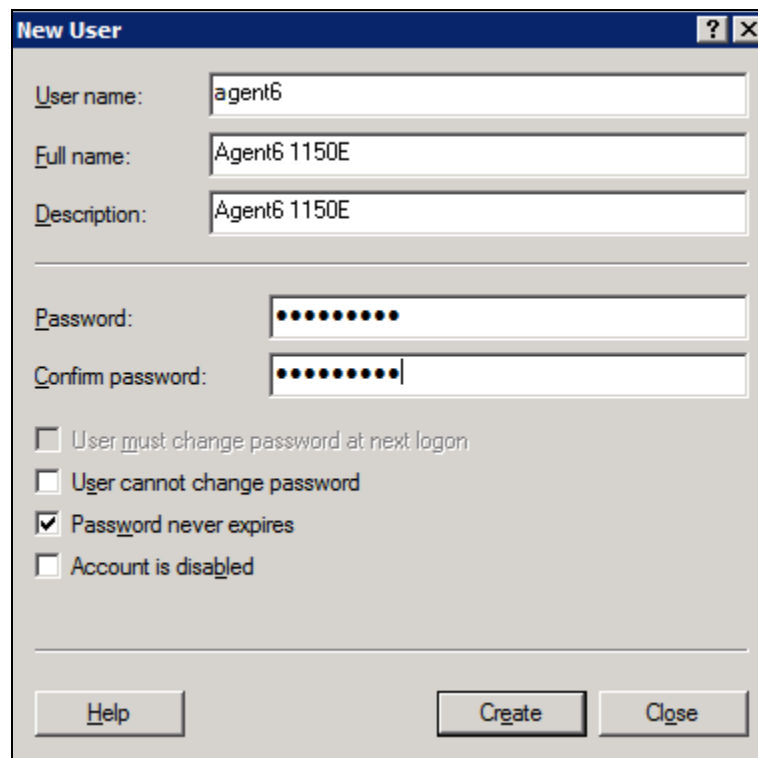


6.3. Configure Windows Users for CCT Agent

In the compliance test, the Contact Center CCT server is not joined to a Windows domain; therefore, the Windows User used for CCT user login will be created in the local CCT server. In case the CCT server joins a domain, the Windows User needs to be created in the domain controller.

From the Contact Center CCT server, navigate to menu **Start → Administrative Tools → Computer Management**. The **Computer Management** window is displayed. Right click on

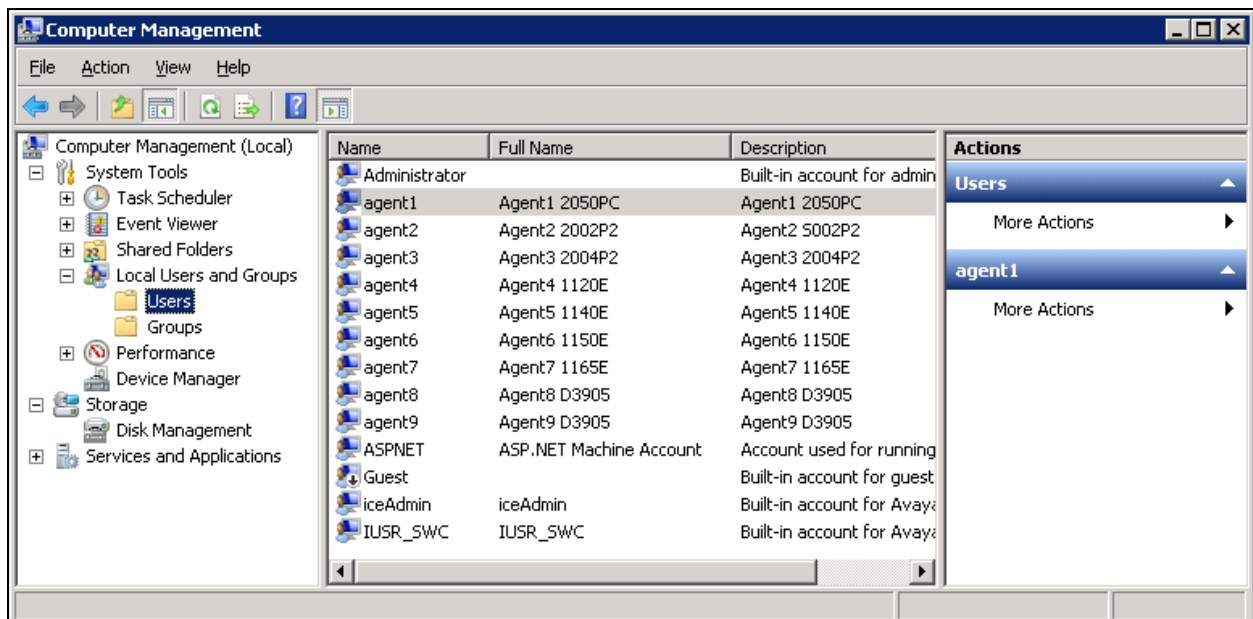
Users (not shown) folder under **Local Users and Groups** and then select **New**. The **New User** window is displayed Enter information for user as shown below. Click **Create** button to complete.



The 'New User' dialog box contains the following fields and options:

- User name:** agent6
- Full name:** Agent6 1150E
- Description:** Agent6 1150E
- Password:** [masked with dots]
- Confirm password:** [masked with dots]
- ☐ User must change password at next login
- ☐ User cannot change password
- ☒ Password never expires
- ☐ Account is disabled
- Buttons:** Help, Create, Close

The screen below shows the **Computer Management** window with 9 Windows users created from **agent1** to **agent9**.



6.4. Configure CCT Server

The CCT server needs to be added into Contact Center, this can be accomplished by using the Contact Center Management Administrator (CCMA) webpage. Log in to the CCMA webpage (not shown) and navigate to **Launch Pad** → **Configuration** → **Server** → **Add Server**.

The **Server Properties** window is displayed on the right, enter server name “**AMLACC62**” in the **Server Name** field, its IP address is automatically filled out in the **IP Address** field because this is a co-resident Contact Center system, enter a display name e.g. “**AMLACC62_CCT**” for CCT in the **Display Name** field, check on radio option **Associated CCMS Servers**, and keep other fields as default. Click **Submit** button to complete.

The screenshot shows the Avaya Configuration web interface. The top navigation bar includes 'Server', 'Download', 'Status', 'Launchpad', and 'Help'. The left sidebar shows a tree view with 'AMLACC62' selected. The main content area is titled 'Server Properties' and contains the following fields and sections:

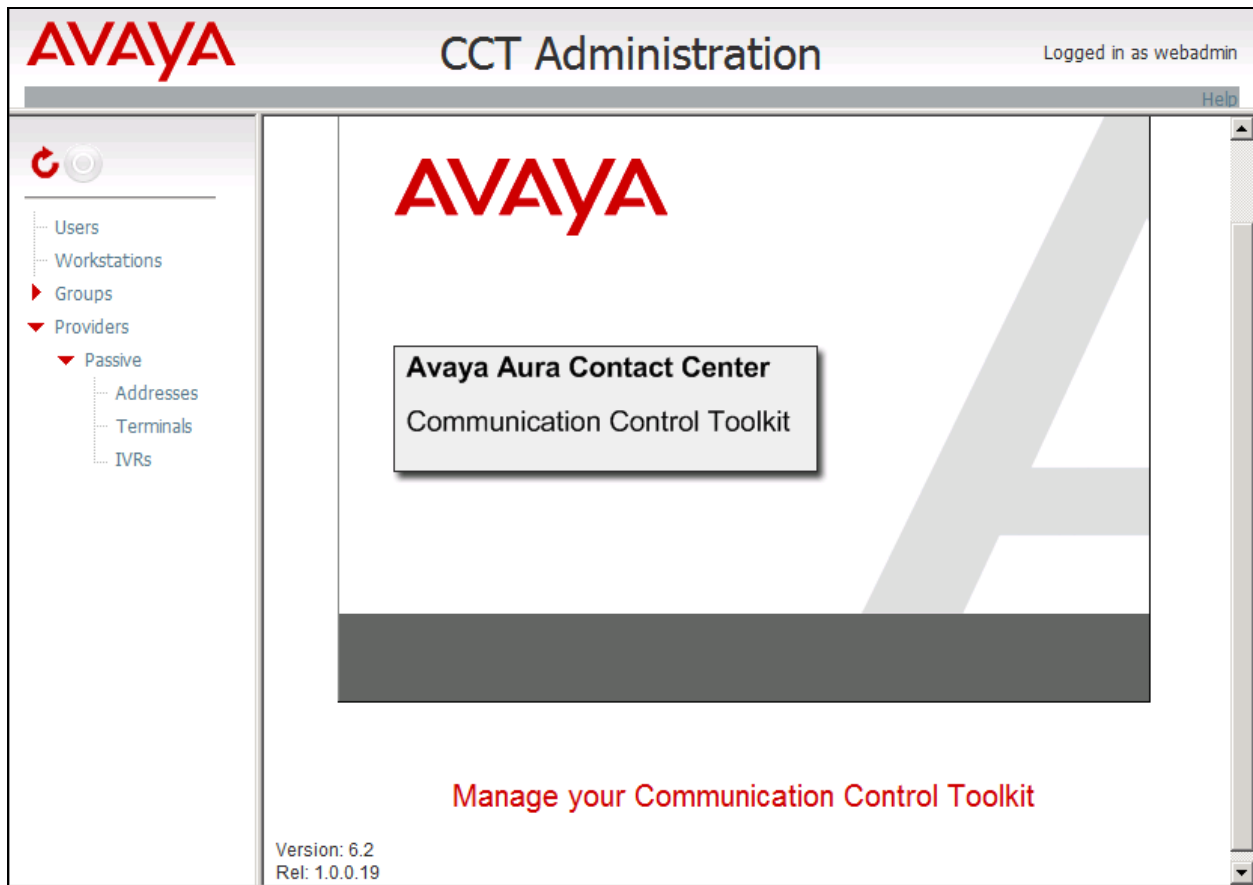
- Type:** A dropdown menu set to 'CCT'.
- Server Name:** A text field containing 'AMLACC62'.
- IP Address:** A text field containing '10.10.97.51'.
- Display Name:** A text field containing 'AMLACC62_CCT'.
- Login ID:** An empty text field.
- Password:** An empty password field.
- DSN Prefix:** A dropdown menu set to 'CCT'.
- Port Number:** A text field containing '8081'.
- CCT Website: URL:** A text field containing the URL 'http://AMLACC62:8081/WebAdmin/'.
- Associated CCMS Servers:** A section titled 'Servers (1)' showing a table with one entry: 'AMLACC62'. To the right of this entry is a radio button that is selected. Below the table is a 'Clear Associations' button.
- Submit and Reset buttons:** Located at the bottom of the form.

The screen below shows the CCT server already added to the Contact Center system.

The screenshot shows the Avaya Configuration web interface after the CCT server has been added. The top navigation bar and left sidebar are the same. The left sidebar now shows a tree view with 'AMLACC62' and 'AMLACC62_CCT' listed, with 'CCT Administration' selected under 'AMLACC62_CCT'. The main content area is titled 'CCT Administration' and shows the following information:

- Server:** A label indicating the server is 'AMLACC62'.
- CCT Administration URL:** A text field containing the URL 'http://AMLACC62:8081/WebAdmin/'.
- Launch CCT Console button:** A button located below the URL field.

Click on **Launch CCT Console** button in the screen above to open CCT Administration webpage. The **CCT Administration** page is displayed as shown below.



Click on **Passive** item in the left navigation pane. The **Update CCT Provider** is displayed on the right. In the **Basic Provider Information** section, enter the IP address of the CCT server **10.10.97.51** in the **IP Address** field, and keep other fields in this section as default. In the **Provider Configuration** section, select the latest release of Communication Server 1000 in the **Communication Server 1000 Software Release** dropdown list, which is **Release 7.0**. Keep other fields in this section as default. Click **Save** button at the bottom to save changes.

Update CCT Provider

Basic Provider Information

Provider Name: Passive

IP Address: 10.10.97.51

Port: 3000

Provider Type: CS 1000 Contact Center

Provider Configuration

Transport: TCP

Customer Number: 0

CS1000 Software Release: Release 7.0

Call Data Life Span (minutes): 10

Disable Copy of Data to Consult Call: ☐

CS1000 Home Location Code (HLOC): 400

Network IVR Port: 2000

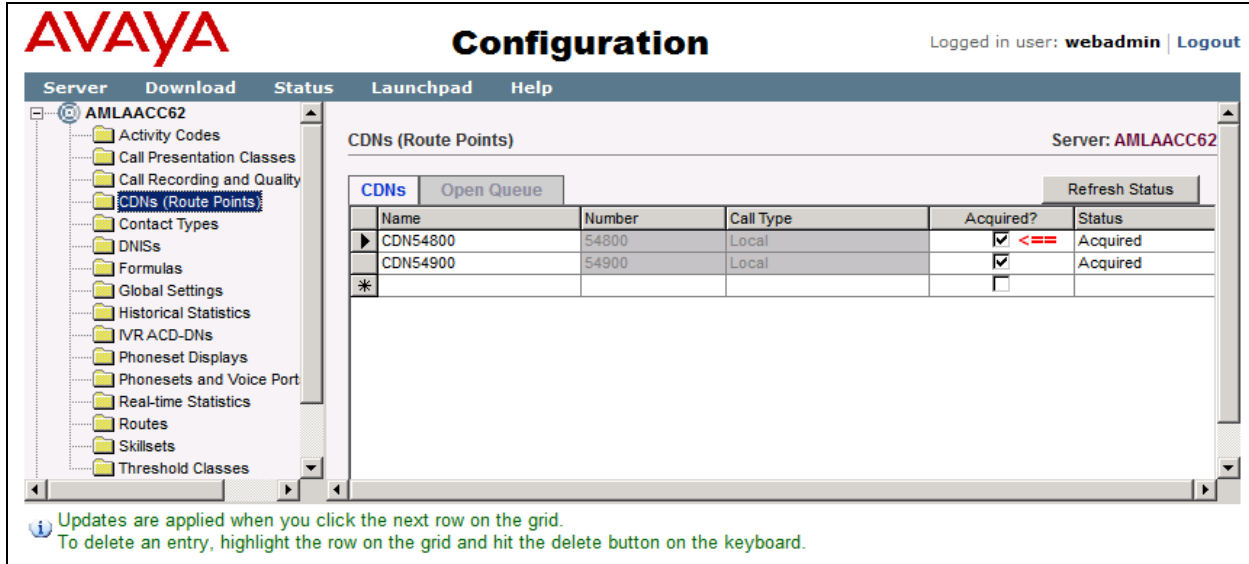
Initialization Timeout (seconds): 32

Command Timeout (seconds): 5

Save

6.5. Configure Contact Center CDN (Route Points)

Log in to CCMA webpage and navigate to **Launch Pad → Configuration**. The **Configuration** page is displayed, expand the Contact Center CCMS “**AMLAACC62**” in the left navigation pane, and select **CDN (Route Points)**. The **CDN (Route Points)** page is displayed on the right. Enter CDN name in the **Name** field, e.g. “**CDN54800**”, CDN number in the **Number** field e.g. “**54800**”, and tick the **Acquired?** checkbox, and click on next row to update the changes. The screen below shows two CDN numbers **54800** and **54900** are already acquired.



AVAYA Configuration Logged in user: webadmin | Logout

Server: AMLAACC62

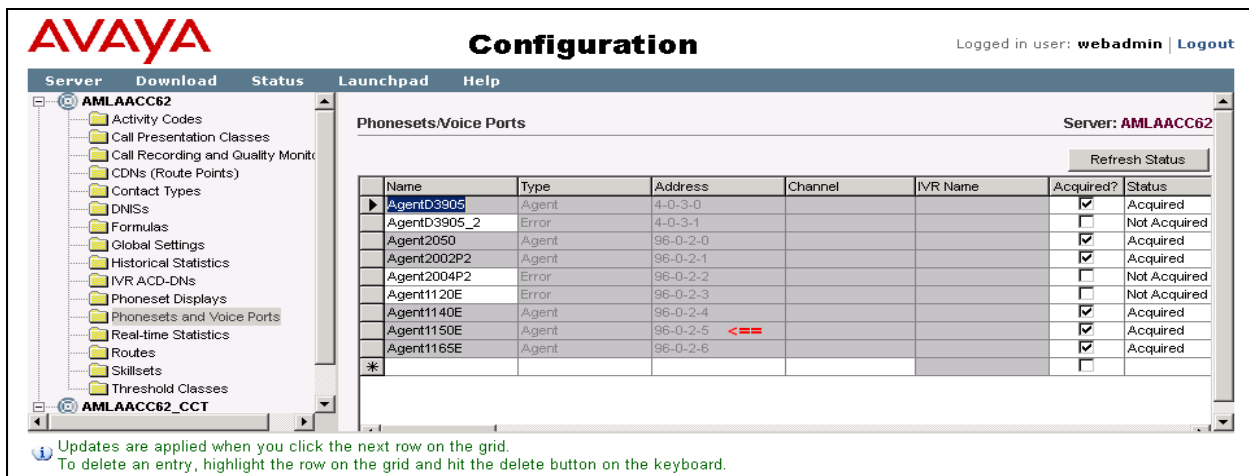
CDNs (Route Points)

CDNs	Open Queue	Refresh Status		
Name	Number	Call Type	Acquired?	Status
CDN54800	54800	Local	<input checked="" type="checkbox"/>	Acquired
CDN54900	54900	Local	<input checked="" type="checkbox"/>	Acquired
*			<input type="checkbox"/>	

Updates are applied when you click the next row on the grid.
To delete an entry, highlight the row on the grid and hit the delete button on the keyboard.

6.6. Configure Contact Center Phonesets

In the **Configuration** page, click **Phonesets and Voice Ports**. The **Phonesets/Voiceports** page is displayed on the right. Enter phone set name in the **Name** field, e.g. “**Agent1150E**”, Terminal number of phoneset as configured in **Section 5.5** in the **Address** field e.g. “**96-0-2-5**”, and tick the **Acquired?** checkbox, and click on next row to update the changes. The screen below shows some phone sets that were already acquired.



AVAYA Configuration Logged in user: webadmin | Logout

Server: AMLAACC62

Phonesets/Voice Ports

Name	Type	Address	Channel	IVR Name	Acquired?	Status
AgentD3905	Agent	4-0-3-0			<input checked="" type="checkbox"/>	Acquired
AgentD3905_2	Error	4-0-3-1			<input type="checkbox"/>	Not Acquired
Agent2050	Agent	96-0-2-0			<input checked="" type="checkbox"/>	Acquired
Agent2002P2	Agent	96-0-2-1			<input checked="" type="checkbox"/>	Acquired
Agent2004P2	Error	96-0-2-2			<input type="checkbox"/>	Not Acquired
Agent1120E	Error	96-0-2-3			<input type="checkbox"/>	Not Acquired
Agent1140E	Agent	96-0-2-4			<input checked="" type="checkbox"/>	Acquired
Agent1150E	Agent	96-0-2-5			<input checked="" type="checkbox"/>	Acquired
Agent1165E	Agent	96-0-2-6			<input checked="" type="checkbox"/>	Acquired
*					<input type="checkbox"/>	

Updates are applied when you click the next row on the grid.
To delete an entry, highlight the row on the grid and hit the delete button on the keyboard.

6.7. Configure Contact Center Skillset

In the **Configuration** page, click on **Skillsets** folder. The **Skillsets** page is displayed on the right. In the **Contact Type** column, select “**Voice**” and type skillset name e.g. “**Voice_SK1**” in the **Skillset Name** column and click on next row to update the changes.

The screenshot shows the Avaya Configuration interface. On the left is a tree view with folders like Activity Codes, Call Presentation Classes, and Skillsets. The Skillsets folder is selected. The main area displays a table of skillsets for server AMLAACC62. The table has columns: Contact Type, Prefix, Skillset Name, Default Activity Code, and Threshold Class. A dropdown menu is open for the 'Voice' contact type, showing 'Voice_SK1' as the selected option. A status message at the bottom left says 'Voice_SK1 updated successfully'.

Contact Type	Prefix	Skillset Name	Default Activity Code	Threshold Class
Voice_Mail	VM_	Default_Skillset	00, Skillset_Default_Activity_Code	Skillset_Template
SMS	SM_	Default_Skillset	00, Skillset_Default_Activity_Code	Skillset_Template
Fax	FX_	Default_Skillset	00, Skillset_Default_Activity_Code	Skillset_Template
Scanned_Document	SD_	Default_Skillset	00, Skillset_Default_Activity_Code	Skillset_Template
OpenQ	OQ_	Default_Skillset	00, Skillset_Default_Activity_Code	Skillset_Template
Predictive_Outbound	PR_	Default_Skillset	00, Skillset_Default_Activity_Code	Skillset_Template
Outbound	OB_	Default_Skillset	00, Skillset_Default_Activity_Code	Skillset_Template
Web_Communications	WVC_	Default_Skillset	00, Skillset_Default_Activity_Code	Skillset_Template
EMail	EM_	Default_Skillset	00, Skillset_Default_Activity_Code	Skillset_Template
Voice		Default_Skillset	00, Skillset_Default_Activity_Code	Skillset_Template
Voice		Voice_SK1	00, Skillset_Default_Activity_Code	Skillset_Template

6.8. Configure Contact Center Supervisor

Log in to CCMA webpage and navigate to **Launch Pad** → **Contact Center Management**. The **Contact Center Management** page is displayed. Navigate to **Add** → **Supervisor**.

The screenshot shows the Avaya Contact Center Management interface. On the left is a tree view with folders like CCM Servers and AMLA. The 'Add' menu is open, showing options: Agent, Supervisor, Supervisor/Agent, and Many Users. The 'Supervisor' option is selected. The main area displays the 'Contact Center Management' page with instructions on how to manage users.

Contact Center Management

- 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, agents, skillsets, or assignments. Then, log on to the desired server to manage this data.
- To add a user, log on to the desired server. Then, choose from the options in the Add menu to add new agents, supervisors, and

The **Supervisor** window is displayed on the right. In the **User Details** section, enter descriptive names in the **First Name** and **Last Name** fields, select **Supervisor** in **User Type** and enter a login ID in the **Login ID** field. In the **Supervisor Information** section, enter a telephone number in the **Telephony/Port** field (screen not shown). The screen below shows an example of Supervisor information.

AVAYA Contact Center Management Logged in user: webadmin | Logout

View/Edit Add Status Launchpad Help

CCM Servers (Supervisors) AMLAACC62

Supervisor Details: **DevConnect Avaya** Server: **AMLAACC62**

User Details

First Name: * DevConnect User Type: Supervisor
 Last Name: * Avaya Login ID: * 12345
 Title: Department: SIL Interop Personal DN:
 Language: English ACD Queue:
 Comment: ACD Queue Error:
 Account Type:
☐ Create CCT Agent

Clear Submit Create New Create Many

6.9. Configure Contact Center Agent

Log in to CCMA webpage and navigate to **Launch Pad** → **Contact Center Management**. The **Contact Center Management** page is displayed. In the left navigation pane, expand the Contact Center server “**AMLAACC62**”, right-click on the supervisor “**Avaya DevConnect**” as created in **Section 6.8** and select **Add Agent** in the menu.

AVAYA Contact Center Management Logged in user: webadmin | Logout

View/Edit Add Status Launchpad Help

CCM Servers (Supervisors) AMLAACC62

Supervisor: DevConnect Avaya Server: AMLAACC62

Add Agent
 Create a new Agent
 Create a new Supervisor
 Create a new Supervisor/Agent
 Add Many Users
 Create a new Skillset

Submit

* Double click an agent to view their details

Assigned Agents

Login ID	Last Name	First Name	Department	Agent Information
54403	1120E	Agent4		⚠️
54404	1140E	Agent5		⚠️
54405	1150E	Agent6		✅
54406	1165E	Agent7		⚠️
54401	2002P2	Agent2		⚠️
54402	2004P2	Agent3		⚠️

Page size: 6 9 agents in 2 pages

The **New Agent Details** window is displayed. In the **User Details** section, enter first and last name for the agent in the **First Name** and **Last Name** fields, select **Agent** in the **User Type** field, enter a login ID e.g. **54405** in the **Login ID** field, the **Personal DN** and **ACD Queue** fields are optional. Tick the **Create CCT Agent** checkbox.

AVAYA Contact Center Management Logged in user: webadmin | Logout

View/Edit Add Status Launchpad Help

CCM Servers (Supervisors)
 AMLAACC62
 Avaya DevConnect
 Supervisor Default

New Agent Details: **Agent6 1150E** Server: **AMLAACC62**

User Details

First Name:
 Last Name:
 Title:
 Department:
 Language: English
 Comment:

User Type: Agent
 Login ID: 54405
 Personal DN: 54405
 ACD Queue: 54901
 ACD Queue Error:

Account Type:
☒ Create CCT Agent

CCT Agent Login Details

Domain: AMLAACC62
 User Name: agent6

After the **Create CCT Agent** field is checked, the **Associate User Account** field will be displayed. Expand the **Associate User Account**, select the **Search local operating system** radio button, and click on **List All** button. The list of windows users created in **Section 6.3** is displayed. Select **agent6** user from the list.

AVAYA Contact Center Management Logged in user: webadmin | Logout

View/Edit Add Status Launchpad Help

CCM Servers (Supervisors)
 AMLAACC62
 Avaya DevConnect
 Supervisor Default

Account Type:
☒ Create CCT Agent

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 (14)	Status
agent3	Agent3 2004P2	Available
agent4	Agent4 1120E	Available
agent5	Agent5 1140E	Available
agent6	Agent6 1150E	Available

In the **Agent Information** section, select the supervisor “**Avaya DevConnect**” as configured in **Section 6.8**. Keep the other fields at default. In the **Contact Types** section, select the **Voice** checkbox.

The screenshot shows the Avaya Contact Center Management web interface. The user is logged in as 'webadmin'. The left sidebar shows a tree view of CCM Servers (Supervisors) with 'Avaya DevConnect' selected under 'AMLAACC62'. The main content area has two sections: 'Agent Information' and 'Contact Types'. In 'Agent Information', 'Primary Supervisor' is set to 'Avaya DevConnect', 'Call Presentation' is 'Call_Centre_Administrator', 'Agent Key' is empty, 'Threshold' is 'Agent_Template', 'Login Status' is 'Logged Out', and 'Tr Name' is empty. In 'Contact Types', a table lists various contact types with checkboxes. The 'Voice' checkbox is checked.

Contact Type	
Predictive_Outbound	<input type="checkbox"/>
Scanned_Document	<input type="checkbox"/>
SMS	<input type="checkbox"/>
Voice	<input checked="" type="checkbox"/>
Voice_Mail	<input type="checkbox"/>
Web_Communications	<input type="checkbox"/>

In the **Skillsets** section, click on the **Assign Skillsets** field, and click on the **List All** button. The list of Skillset Name is displayed below. Select priority “**1**” in the **Priority** column for the **Voice_SK1** skillset as configured in **Section 6.7**.

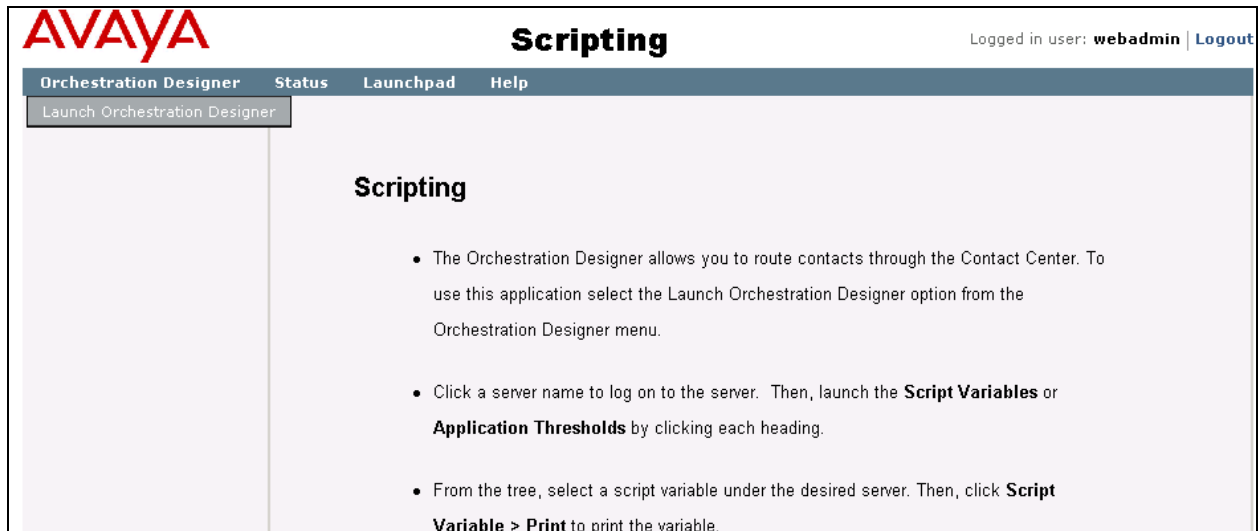
Leave the **Partitions** section as default and click on the Submit button to save and create new contact center agent.

The screenshot shows the Avaya Contact Center Management web interface with the 'Skillsets' section selected. The left sidebar is the same as the previous screenshot. The main content area shows the 'Skillsets' section with a table of skillsets. Below the table is a search bar and a 'List All' button. The 'Voice_SK1' skillset is highlighted with a red background, and its priority is set to '1'.

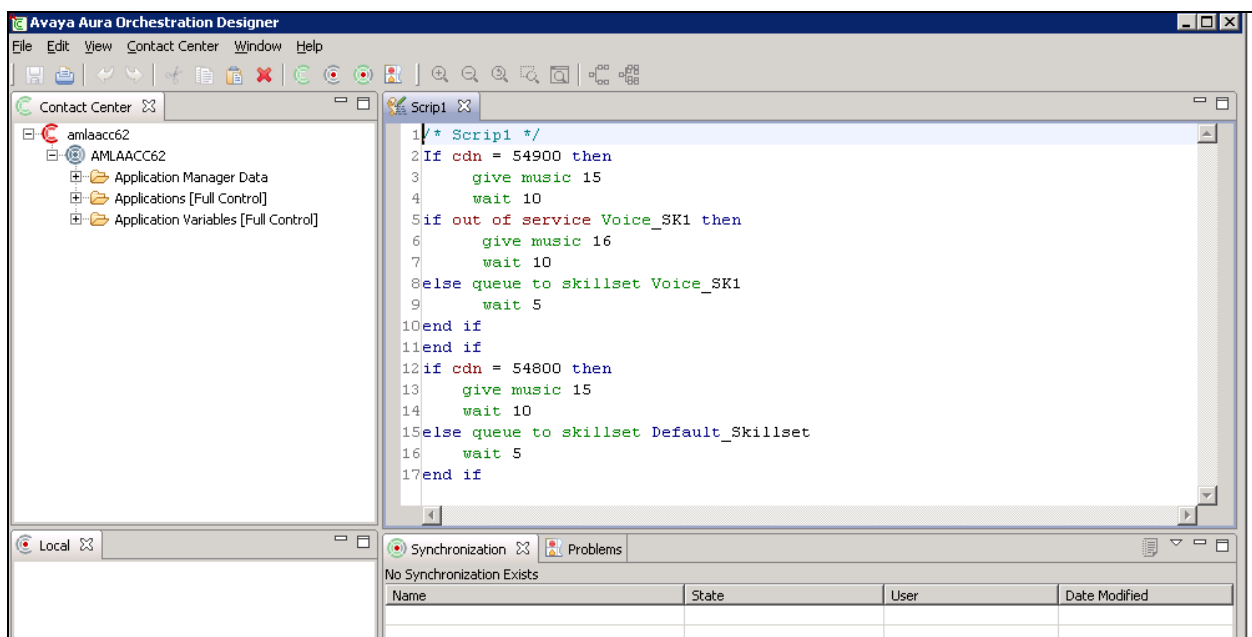
Skillset Name	Contact Type	Priority
OQ_Default_Skillset	OpenQ	Unassigned
PR_Default_Skillset	Predictive_Outbound	Unassigned
SD_Default_Skillset	Scanned_Document	Unassigned
SM_Default_Skillset	SMS	Unassigned
VM_Default_Skillset	Voice_Mail	Unassigned
Voice_SK1	Voice	1
WC_Default_Skillset	Web_Communications	Unassigned

6.10. Configure Contact Center Scripting

Log in to CCMA webpage and navigate to **Launch Pad** → **Scripting**. The Configuration page is displayed. Expand the Contact Center **AMLAACC62** in the left navigation pane, and select **Scripting**. Navigate to **Orchestration Designer** → **Launch Orchestration**.



A popup is displayed (not shown) to ask for installing the **Orchestration Designer** application if this is first time it is run. After the Orchestration Designer is installed, navigate again to **Orchestration Designer** → **Launch Orchestration Designer**. The **Avaya Aura Orchestration Designer** window is displayed. Create a sample script as shown below. This script is configured to connect to Master script. Note that the music route 15 and 16 in the sample script needs to be configured in the **Script Variables** under **Route_Number** before it can be used in the script.



6.11. Configure CCT Agent

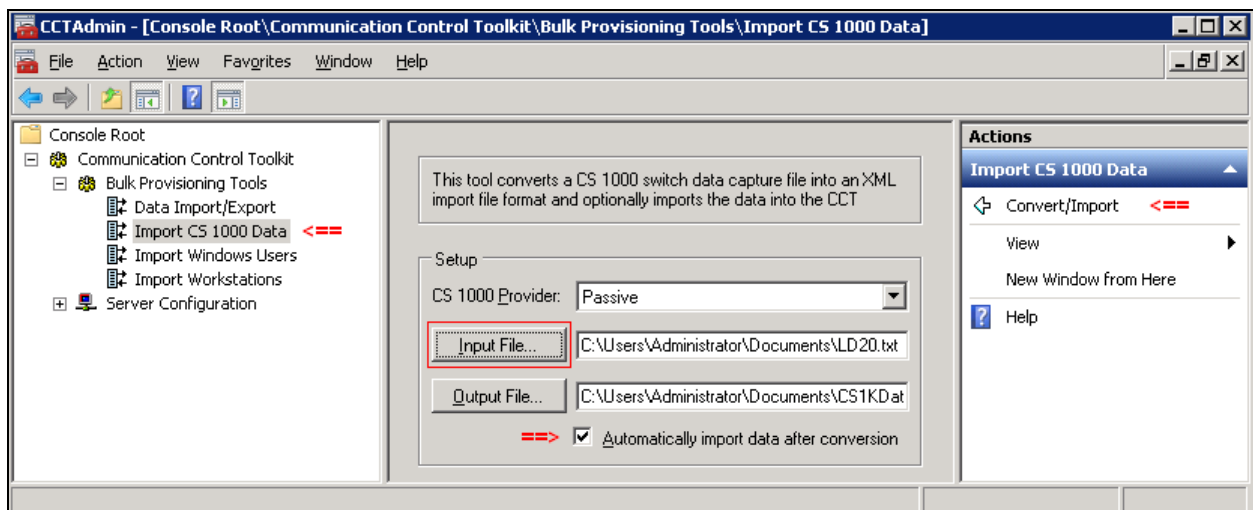
The terminal number (TN) of physical agent phone needs to be imported or manually added to the CCT database. This section shows the steps on how to import Communication Server 1000 data into the CCT database. Use overlay LD 20 in the call server to print all terminal numbers of Communication Server 1000 call server and copy it to a text file e.g. “LD20.txt”.

Prompt	Response	Comment
REQ	PRT	Request print
TYPE	TN	Type: Terminal number
TN		Keep pressing Enter key on the keyboard

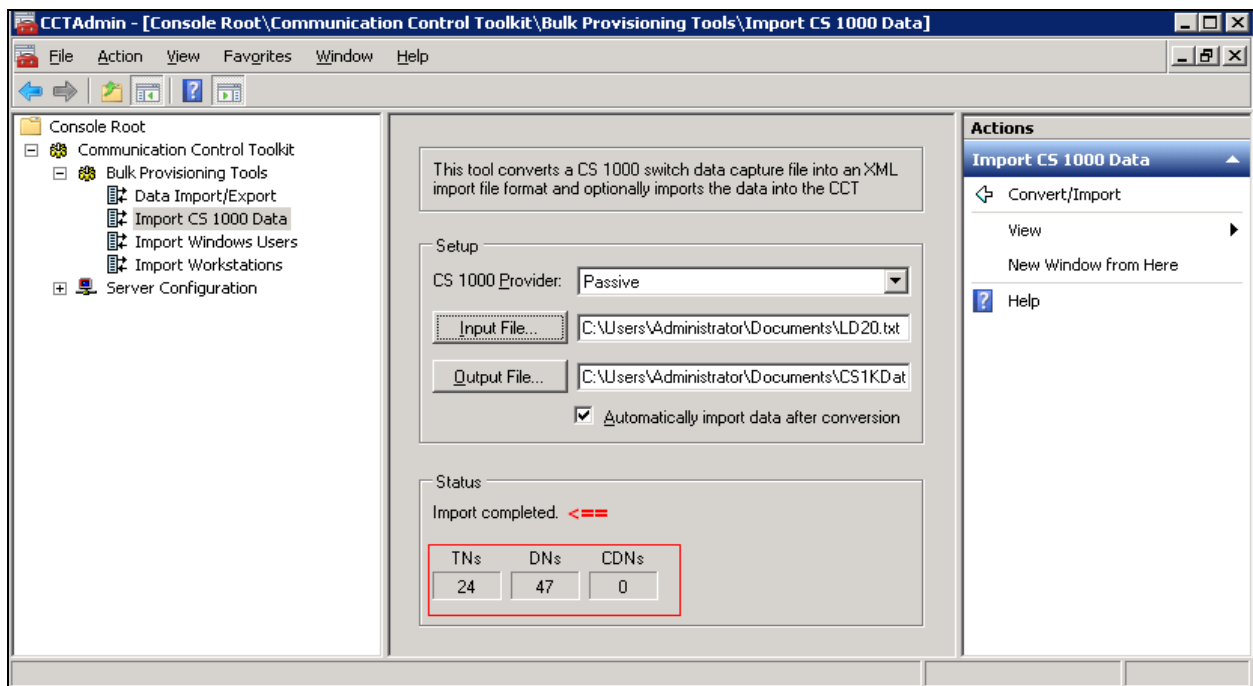
In case of just wanted to print out a specific virtual card in which the agent phones locate, issue the same command but specify the specific virtual terminal number card.

Prompt	Response	Comment
REQ	PRT	Request print
TYPE	TN	Type: Terminal number
TN	96 0 2	All 32 TNs of this card printed

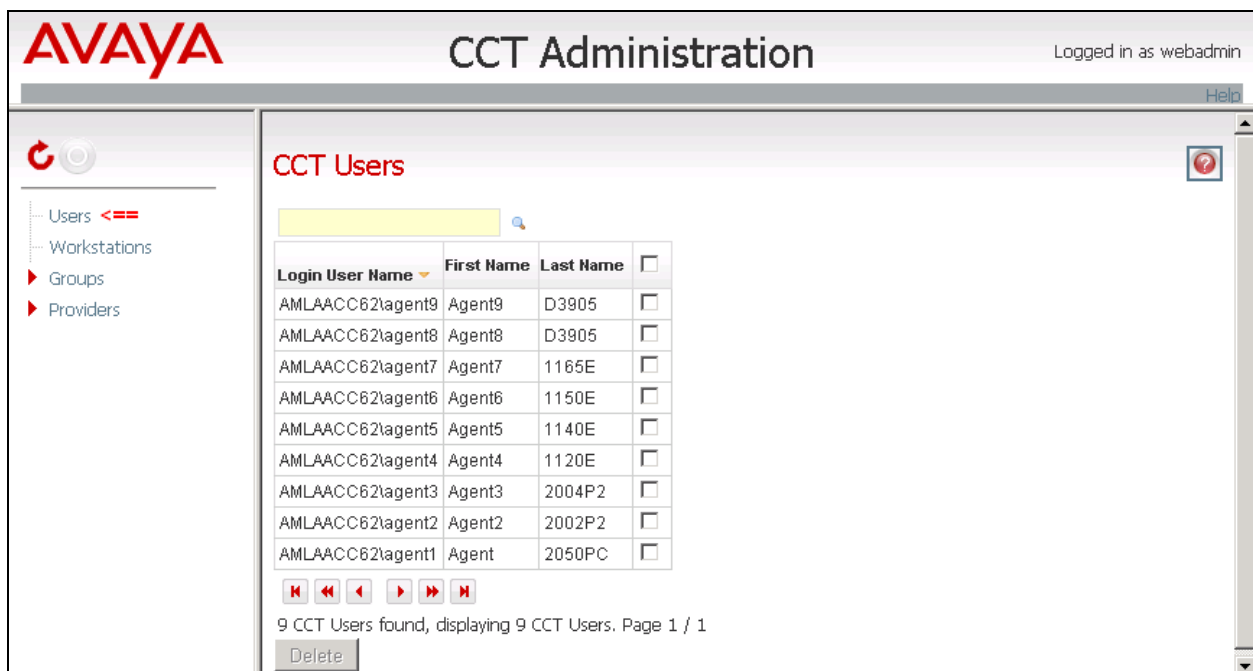
In the CCT server, navigate to **Start → All Program → Avaya → Contact Center → Communication Control Toolkit → CCT Console**. The CCT Console window is displayed. In the left navigation, expand **Communication Control Toolkit → Bulk Provisioning Tools → Import Communication Server 1000 Data**. The **Import Communication Server 1000 Data** window is displayed in the middle. Click on **Input File**, browser to the Communication Server 1000 data file “LD20.txt” above, select the “**Automatically import data after conversion**” checkbox, and click on **Convert/Import** in the **Actions** window.



The screen below shows the **CCT Console** after the “**LD20.txt**” was successfully imported to CCT database. It shows that import completed and 24 TNs and 47 DNs imported. Note that only Terminal Number (TN) with **AST** field set with **00 03** are imported.



Launch **CCT Administrator** webpage. In the left navigation pane, select **Users** tab. The **CCT Users** page is displayed on the right. Select the user name that needs to be configured, e.g. **agent6**.



The **Update CCT User** for the **agent6** user is displayed. In the **Terminal Assignments** section, select and add terminal number **Line 96.0.2.5** which is terminal number of the **agent6** from **Available Resources** to **Assigned Resources** and click on the **Save** button at the bottom of the page to save changes.

AVAYA CCT Administration Logged in as webadmin [Help](#)

Update CCT User

User Details

Login User Name	AMLACC62\agent6
First Name	Agent6
Last Name	1150E

Address Assignments

Terminal Assignments

Available Resources

Passive

<input type="checkbox"/>	Terminal
<input type="checkbox"/>	Line 4.0.3.0
<input type="checkbox"/>	Line 96.0.2.0
<input type="checkbox"/>	Line 96.0.2.1
<input type="checkbox"/>	Line 96.0.2.10
<input type="checkbox"/>	Line 96.0.2.11

Assigned Resources

Passive

<input type="checkbox"/>	Terminal
<input type="checkbox"/>	Line 96.0.2.5

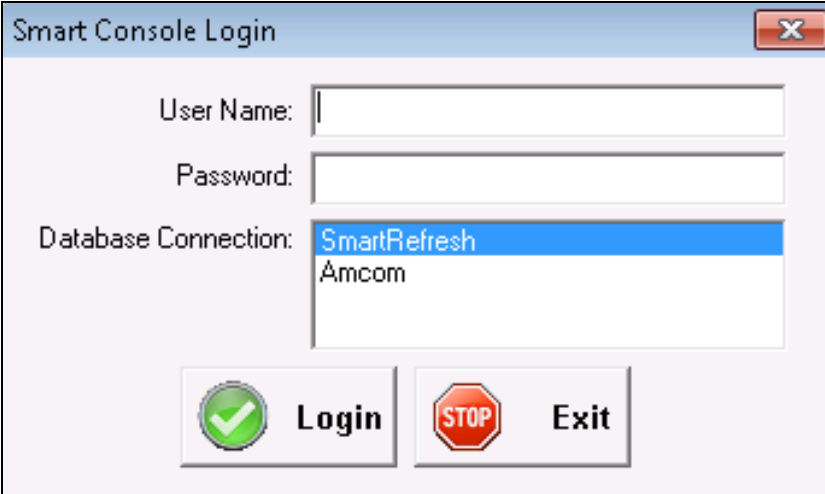
7. Configure Amcom Smart Console

This document assumes that the Amcom CTI Layer and Smart application were properly installed and configured by the Amcom engineer. This section only provides the steps on how to configure the Amcom CTI Layer and the Smart console, working with Contact Center CCT.

Edit the **gencct62.ini** file from the folder C:\Program Files\Amcom\bin\GenCCT62 in the server which the Amcom CTI Layer and Smart application are installed. Open this file by notepad application and scroll to CCT section. Enter the CCT IP address **10.10.97.51** in the **Server** field, the user name “agent6” and its password as configured in **Section 6.3** in the **User** and **Password** fields and Terminal number line of the agent in the **Terminal** field as shown in the screen below. Retain default values for all other fields.

```
[CCT]
Server=10.10.97.51
User=agent6
Domain=amcomaacc
Password=Smart@123
ACDUser=
ACDPWD=
Terminal=Line 96.0.2.5
DN=
DelayedStart=FALSE
```

Launch the Smart Console application from menu **Start → All Programs → Amcom → Smart Console**. The Smart Console login window is displayed; enter correct credentials in the **User Name** and **Password** boxes to log in. Select a valid live database available in the **Database Connection** box and click on the **Login** button.

The image shows a Windows-style dialog box titled "Smart Console Login". It contains three input fields: "User Name:" with a text box, "Password:" with a text box, and "Database Connection:" with a list box. The list box has two items: "SmartRefresh" (which is highlighted with a blue background) and "Amcom". At the bottom of the dialog, there are two buttons: "Login" (with a green checkmark icon) and "Exit" (with a red stop sign icon). The dialog has a standard Windows title bar with a close button (X) in the top right corner.

The screen below shows the Smart Console window after logged in. There are two line appearances **ACD** and **Line-2** that displays grey color which means they are in idle state. Also if an agent is logged in, we see the **Login** and **Ready** status on the display.

The screenshot displays the 'Smart Console - [Individual Profile]' window. At the top, there is a menu bar with 'File', 'Edit', 'View', 'Window', 'Admin', and 'Help'. Below the menu, on the left, are two line appearances labeled 'ACD' and 'Line-2', each with a grey circular indicator. To the right of these is a grid of status buttons: 'Login', 'Logout', 'Ready', 'Not Ready', 'BUSY', 'Dial', 'Conf', 'Asst Xfer', 'Blind Xfer', 'Release', 'Hold', 'Swap Hold', 'Begin Xfer', 'End Xfer', 'Begin Conf', and 'End Conf'. Below this grid, a red box highlights the 'Logged-In' and 'Ready' status. On the far right is a numeric keypad with letters assigned to numbers (1-9, *, 0, #). Below the status buttons is a tabbed interface with 'Individual Profile' selected. This tab contains fields for 'Name', 'Status', 'Exception', 'Title', 'Specialty', 'Phone', 'Pager', 'Location', 'Remark', 'OnCall', 'Covering', and 'Instructions'. To the right of these fields is a large white area with columns for 'ID', 'Name', and '#Msgs'.

8. Verification Steps

The following are typical steps to verify that Amcom Smart Console works with Contact Center CCT in controlling the physical agent phone.

1. Log in the agent phone and place the agent in the queue.
2. Place a call to contact center CDN number. The call is then queued to the skillset Voice_SK1 and come to available agent6.
3. When the ACD call comes to the agent phone, the line appearance **ACD** on the Smart console is also alerted and changes the color from Grey to Yellow (ringing). The display also indicates the Call Information.

Smart Console - [Individual Profile]

File Edit View Window Admin Help

58007 Calling 1005 DNIS=54900

ACD Line-2

Logged-In Ready

Individual Profile On-Call Group Directory Patient Information Group Page Miscellaneous Info

Name Status Exception Title Specialty Phone Pager Location Remark OnCall Covering Instructions

ID Name #Msgs

- Click on the ACD line appearance to answer the call. The status is now changed to Green color which means the call is active.

- Hang up the call from the Smart application by clicking the Release button. The status of ACD line color changes to Grey, which means idle. Repeat the same procedure above for the secondary DN of the agent phone and verify it should be the same.

All steps above were executed on Smart Console to make sure the Smart Console fully and properly controls physical agent phone. Check on the agent phone display for each step that was done by the Smart Console to make sure that they are in sync and vice versa.

9. Conclusion

The compliance test between Amcom Smart Console and Avaya Aura® Contact Center CCT was successfully completed. All executed test cases passed with observations noted in **Section Error! Reference source not found.**

10. Additional References

Product documentation for Avaya Aura® Contact Center and Avaya Communication Server 1000 may be found at <https://support.avaya.com>

Product documentation for Amcom Smart Console application may be found at <http://www.amcomsoftware.com>

Avaya Communication Server 1000 Documents:

1. *Communication Server 1000E Installation and Commissioning*, March 2013, Release 7.6, NN46041-310
2. *Element Manager System Reference – Administration - Avaya Communication Server 1000*, March 2013, Release 7.6, NN43001-632.
3. *Co-resident Call Server and Signaling Server Fundamentals - Avaya Communication Server 1000*, March 2013, Release 7.6, NN43001-509.
4. *Unified Communications Management Common Services Fundamentals - Avaya Communication Server 1000*, March 2013, Release 7.6, NN43001-116.

Avaya Aura® Contact Center 6.3 documents:

1. *Avaya Aura® Contact Center Planning and Engineering* (NN44400-210) May 2013
2. *Avaya Aura® Contact Center Installation* (NN44400-311) May 2013
3. *Avaya Aura® Contact Center Server Administration* (NN44400-610) May 2013
4. *Avaya Aura® Contact Center Overview* (NN44400-111) May 2013
5. *Avaya Aura® Contact Center Fundamentals* (NN44400-110) May 2013
6. *Avaya Aura® Contact Center Manager Administration – Client Administration* (NN44400-611) May 2013.

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