



Avaya Solution & Interoperability Test Lab

Application Notes for CTIntegrations CT Suite Desktop POM Agent 3.3 with Avaya Proactive Outreach Manager 3.1.1 – Issue 1.1

Abstract

These Application Notes describe the configuration steps required to integrate the CTIntegrations CT Suite Desktop POM Agent with Avaya Proactive Outreach Manager. The CT Suite application is a CTI based contact center solution providing third party call control and multimedia channels.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as any observations noted in **Section 2.2**, to ensure that their own use cases are adequately covered by this scope and results.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

These Application Notes describe the configuration steps required to integrate the CTIntegrations developed CT Suite Desktop POM Agent (CT Desktop) with Avaya Proactive Outreach Manager (POM). The CT Desktop uses the Agent Desktop API of POM to integrate agent functionality and manage agents using an agent desktop. Agents log on to Avaya POM via the CT Desktop application using the POM Agent Plugin. All CT Suite user configurations including POM server configurations are stored in the CT Suite server. CT Desktop with POM agent is a thick client application that is installed on a Windows based agent desktop.

During the compliance testing, Avaya POM was configured as CCElite to allow communications with Avaya Aura® Communication Manager and Avaya Aura® Application Enablement Service. Avaya POM was installed on Avaya Aura® Experience Portal. Calls from Experience Portal were routed via a SIP trunk to Avaya Aura® Session Manager.

These Application Notes focus on the integration between CT Suite and POM, and assume the integration between the Device Manager component of CT Suite with Application Enablement Services for screen pop and call control is already in place as documented in reference [5].

2. General Test Approach and Test Results

The feature tests were performed manually. General test approach was to ensure that the features provided by POM Agent Desktop API were implemented on CT Desktop .

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.

Avaya recommends our customers implement Avaya solutions using appropriate security and encryption capabilities enabled by our products. The testing referenced in these DevConnect Application Notes included the enablement of supported encryption capabilities in the Avaya products. Readers should consult the appropriate Avaya product documentation for further information regarding security and encryption capabilities supported by those Avaya products.

Support for these security and encryption capabilities in any non-Avaya solution component is the responsibility of each individual vendor. Readers should consult the appropriate vendor-supplied product documentation for more information regarding those products.

For the testing associated with these Application Notes, the interface between Application Enablement Services and CT Suite did not include use of any specific encryption features as requested by CTIntegrations.

2.1. Interoperability Compliance Testing

Interoperability compliance testing included feature and serviceability testing. The feature testing focused on the following functionality:

- Agent Login and Logout.
- Agent state: Ready, Not Ready and changing Aux Reason code.
- Nailing the agent and new call notifications.
- Updating contact details.
- Callbacks.
- Adding contacts to Do Not Call (DNC) lists.
- Call features such as: hold/unhold, Consult, Transfer and Conference.

The serviceability testing focused on verifying the ability of the CT Suite server and Avaya POM server to recover from adverse conditions, such as power failures and network disconnects.

2.2. Test Results

All test cases were executed and verified.

2.3. Support

For technical support on the CTIntegrations CT Desktop, contact CTIntegrations via phone, email, or internet.

- **Phone:** +1 877 449 6775
- **Email:** info@ctintegrations.com
- **Web:** <http://www.ctintegrations.com>

3. Reference Configuration

Figure 1 illustrates the configuration used for testing. In this configuration, Avaya Aura® Experience Portal interfaces with Avaya Aura® Session Manager via SIP. The CT Suite server hosted the CT Suite configurations for agents and servers. The CT Desktop was used as the POM Agent desktop.

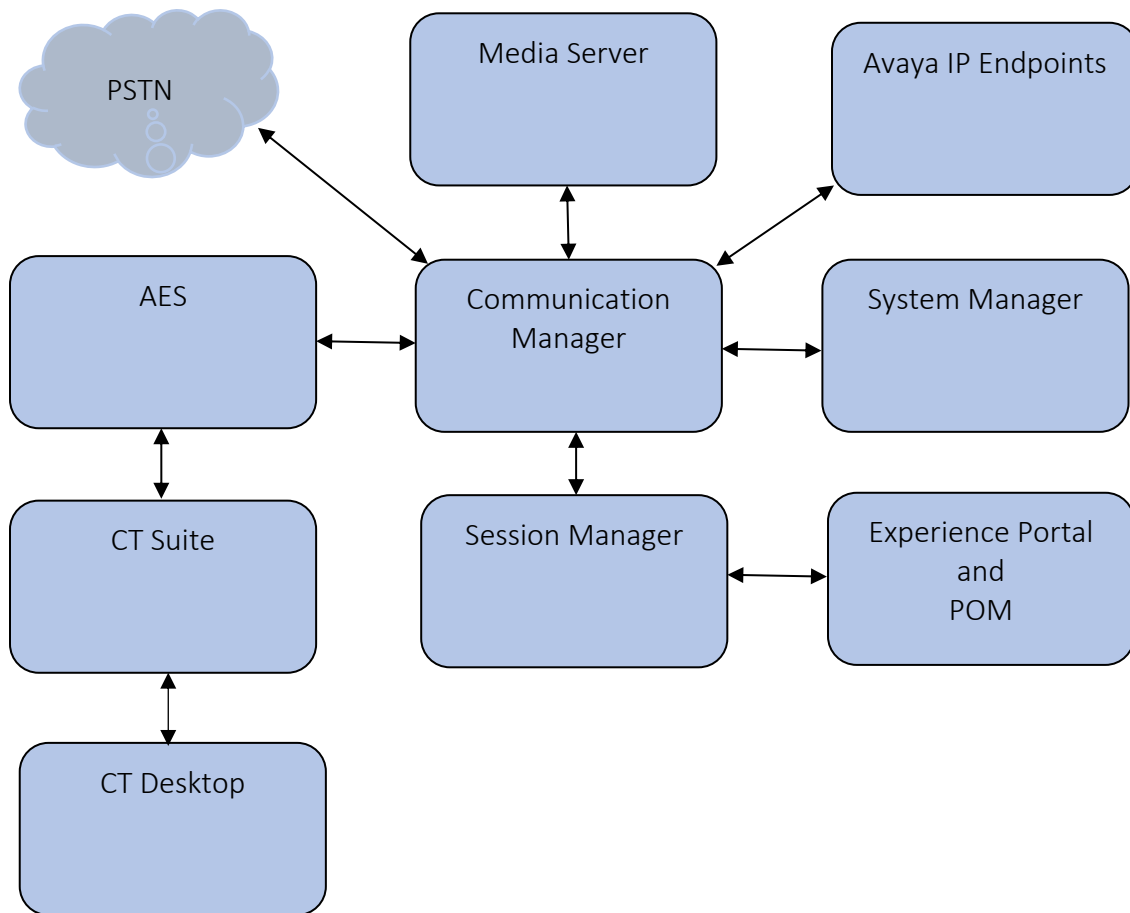


Figure 1: Configuration with Avaya Proactive Outreach Manager with CTIntegrations CT Suite

3.1. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Experience Portal running on Virtualized Environment	7.2.2
Avaya Proactive Outreach Manager	3.1.1
Avaya Aura® Application Enablement Services in Virtual Environment	8.0.1.0.2.5-0
Avaya Aura® Media Server in Virtual Environment	v.8.0.0.183
Avaya Aura® Session Manager in Virtual Environment	8.0.1.1.801103
Avaya Aura® System Manager in Virtual Environment	8.0.1.1.039340
Avaya Aura® Communication Manager in Virtual Environment	8.0.1.1.0-FP1SP1
Avaya G450 Media Gateway	40.20.1
Avaya 96x1 IP Deskphones (H.323)	6.8102
Avaya 96x1 IP Deskphones (SIP)	7.1.5.0.11
Avaya J169 IP Deskphone (H.323)	6.8102
Avaya Agent for Desktop	1.7.22.1
CTIntegrations CT Suite server running on Windows Server 2016	3.3
CTIntegrations CT Desktop POM Agent running on Windows 10 Enterprise	3.3

4. Configure Avaya Aura® Communication Manager

This section provides the procedures for configuring Communication Manager via the System Access Terminal (SAT).

4.1. Administer Hunt Groups

This section provides the Hunt Group configuration for the call center agents. This hunt group will later be configured in Avaya POM.

Administer a skill group to be used for routing of outbound calls to agents. Use the “add hunt-group n” command, where “n” is an available group number. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Group Number:** The available group number.
- **Group Name:** A descriptive name.
- **Group Extension:** An available extension number.
- **ACD:** “y”
- **Queue:** “y”
- **Vector:** “y”

add hunt-group 1		Page 1 of 4
HUNT GROUP		
Group Number: 1	ACD? y	
Group Name: Skill 1	Queue? y	
Group Extension: 59001	Vector? y	
Group Type: ucd-mia		
TN: 1		
COR: 1	MM Early Answer? n	
Security Code:	Local Agent Preference? n	
ISDN/SIP Caller Display:		
Queue Limit: unlimited		
Calls Warning Threshold:	Port:	
Time Warning Threshold:	Port:	

On Page 2 of the Hunt Group form, enable the **Skill** option.

add hunt-group 1		Page 2 of 4	
HUNT GROUP			
Skill? y		Expected Call Handling Time (sec): 180	
AAS? n		Service Level Target (% in sec): 80 in	
20			
Measured: both			
Supervisor Extension:			
Controlling Adjunct: none			
VuStats Objective:			
Multiple Call Handling: none			
Timed ACW Interval (sec):		After Xfer or Held Call Drops? n	

4.2. Administer Agent IDs

The newly created skill needs to be added to the applicable agents. Use the “change agent-loginID n” command, where “n” is the first applicable agent ID. Navigate to **Page 2**, and add the skill group number previous section to an available **SN**, and set the desired skill level under the corresponding **SL**, as shown below.

In this configuration, agent login IDs 55001 and 55002 were used.

change agent-loginID 55001		Page 2 of 2	
AGENT LOGINID			
Direct Agent Skill: 1		Service Objective? n	
Call Handling Preference: skill-level		Local Call Preference? n	
SN	RL SL	SN	RL SL
1: 1	1	16:	31: 46:
2: 2	1	17:	32: 47:
3: 3	1	18:	33: 48:
4: 4	1	19:	34: 49:

4.3. Administer Stations

This section provides the extension that agents will log on.

Using the add station n command, add a station for each extension in the call center as shown below. In this configuration, station 50001 and station 50001 were created.

add station 50001		Page 1 of 5
STATION		
Extension: 50001	Lock Messages? n	BCC: 0
Type: 9641	Security Code: *	TN: 1
Port: S00054	Coverage Path 1: 98	COR: 1
Name: H.323 Station 1	Coverage Path 2:	COS: 1
Unicode Name? n	Hunt-to Station:	Tests? y
STATION OPTIONS		
Time of Day Lock Table:		
Loss Group: 19	Personalized Ringing Pattern: 1	
	Message Lamp Ext: 50001	
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	IP SoftPhone? y	
	IP Video Softphone? n	
	Short/Prefixed Registration Allowed: default	
	Customizable Labels? y	

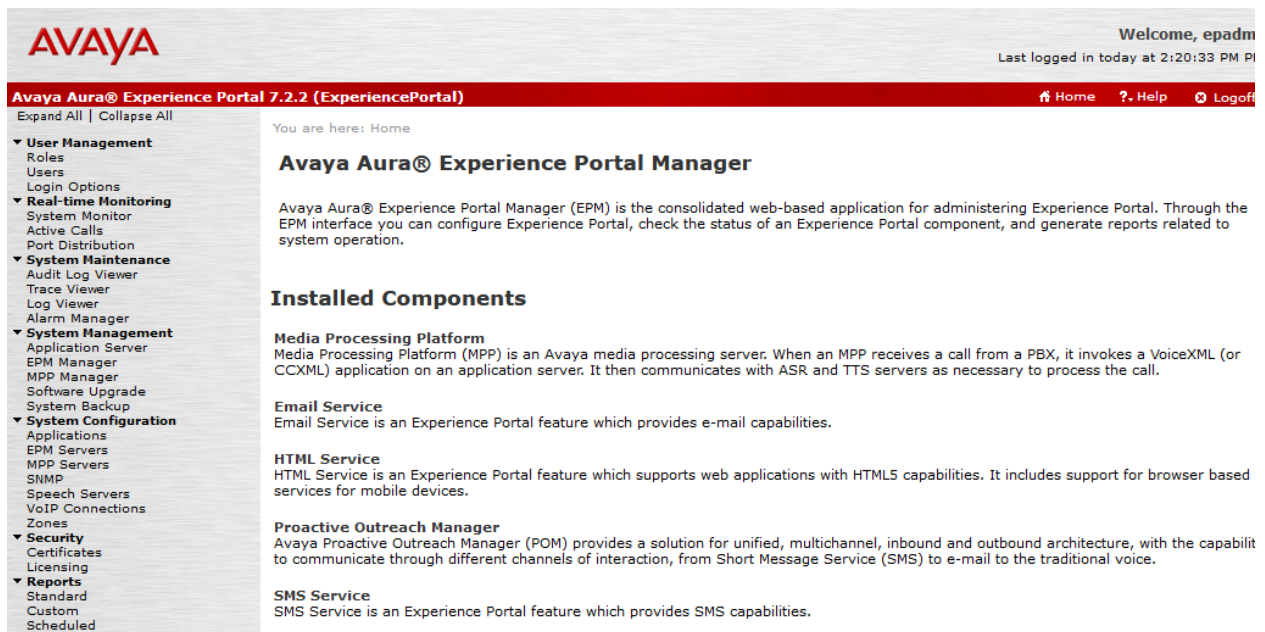
Note: Please note that the configuration of SIP trunk and routing between Communication Manager and Session Manager was preconfigured and is not shown in this document.

5. Configure Avaya Aura® Experience Portal and Proactive Outreach Manager

This section covers the administration of Experience Portal. Configuration for Avaya POM is also covered in the section as Avaya POM was co-resident on Experience Portal.

Experience Portal is configured via the Experience Portal Manager (EPM) web interface. To access the web interface, enter `http://[IP-Address]/` as the URL in an internet browser, where IP-Address is the IP address of the EPM. Log in using the Administrator user role. The screen shown below is displayed.

Note: Some of the screens in this section are shown after the Experience Portal had been configured. Don't forget to save the screen parameters as you configure Avaya Aura® Experience Portal.



AVAYA Welcome, epadm
Last logged in today at 2:20:33 PM PT

Avaya Aura® Experience Portal 7.2.2 (ExperiencePortal) Home Help Logoff

Expand All | Collapse All

You are here: Home

Avaya Aura® Experience Portal Manager

Avaya Aura® Experience Portal Manager (EPM) is the consolidated web-based application for administering Experience Portal. Through the EPM interface you can configure Experience Portal, check the status of an Experience Portal component, and generate reports related to system operation.

Installed Components

Media Processing Platform
Media Processing Platform (MPP) is an Avaya media processing server. When an MPP receives a call from a PBX, it invokes a VoiceXML (or CCXML) application on an application server. It then communicates with ASR and TTS servers as necessary to process the call.

Email Service
Email Service is an Experience Portal feature which provides e-mail capabilities.

HTML Service
HTML Service is an Experience Portal feature which supports web applications with HTML5 capabilities. It includes support for browser based services for mobile devices.

Proactive Outreach Manager
Avaya Proactive Outreach Manager (POM) provides a solution for unified, multichannel, inbound and outbound architecture, with the capability to communicate through different channels of interaction, from Short Message Service (SMS) to e-mail to the traditional voice.

SMS Service
SMS Service is an Experience Portal feature which provides SMS capabilities.

- ▼ **User Management**
 - Roles
 - Users
 - Login Options
- ▼ **Real-time Monitoring**
 - System Monitor
 - Active Calls
 - Port Distribution
- ▼ **System Maintenance**
 - Audit Log Viewer
 - Trace Viewer
 - Log Viewer
 - Alarm Manager
- ▼ **System Management**
 - Application Server
 - EPM Manager
 - MPP Manager
 - Software Upgrade
 - System Backup
- ▼ **System Configuration**
 - Applications
 - EPM Servers
 - MPP Servers
 - SNMP
 - Speech Servers
 - VoIP Connections
 - Zones
- ▼ **Security**
 - Certificates
 - Licensing
- ▼ **Reports**
 - Standard
 - Custom
 - Scheduled

5.1. Configure a SIP VoIP Connection

To configure a SIP connection, navigate to the **VoIP Connections** page and then click on the **SIP** tab (not shown) and select **Add**. On the **Change SIP Connection** page, configure as follows:

- Set **Enable** to **Yes**.
- Set **Proxy Transport** to **TCP**.
- For **Proxy Servers**:
 - Type in the Session Manager SIP interface IP address in **Address**.
 - Type in the Session Manager SIP Port in **Port**.
- Type in **Listener Port** to **5060**.
- Type in **SIP Domain** to **avaya.com**, as configured in Session Manager.
- Type in a value for **Maximum Simultaneous Calls**, as needed.
- Select **All Calls can be either inbound or outbound**.

AVAYA Last logged

Avaya Aura® Experience Portal 7.2.2 (ExperiencePortal) Expand All | Collapse All

You are here: [Home](#) > [System Configuration](#) > [VoIP Connections](#) > [Change SIP Connection](#)

Change SIP Connection

Use this page to change the configuration of a SIP connection.

Name: asm8

Enable: ☒ Yes ☐ No

Proxy Transport:

☒ Proxy Servers ☐ DNS SRV Domain

Address	Port	Priority	Weight	
10.64.110.135	5060	0	0	Remove

[Additional Proxy Server](#)

Listener Port:

SIP Domain:

P-Asserted-Identity:

Maximum Redirection Attempts:

Consultative Transfer: ☒ INVITE with REPLACES ☐ REFER

SIP Reject Response Code: ☒ ASM (503) ☐ SES (480) ☐ Custom

SIP Timers

T1: milliseconds

T2: milliseconds

B and F: milliseconds

Call Capacity

Maximum Simultaneous Calls:

☒ All Calls can be either inbound or outbound

☐ Configure number of inbound and outbound calls allowed

Save **Apply** **Cancel** **Help**

5.2. Verify Applications

Note that the applications needed for Avaya POM were configured during Avaya POM installation. To view the list of application, navigate to **System Configuration → Applications**.

AVAYA

Last logged

Avaya Aura® Experience Portal 7.2.2 (ExperiencePortal)

Home

Expand All | Collapse All

▼ **User Management**

Roles

Users

Login Options

▼ **Real-time Monitoring**

System Monitor

Active Calls

Port Distribution

▼ **System Maintenance**

Audit Log Viewer

Trace Viewer

Log Viewer

Alarm Manager

▼ **System Management**

Application Server

EPM Manager

MPP Manager

Software Upgrade

System Backup

▼ **System Configuration**

Applications

EPM Servers

MPP Servers

SNMP

Speech Servers

VoIP Connections

Zones

▼ **Security**

Certificates

Licensing

▼ **Reports**

Standard

Custom

Scheduled

▼ **Multi-Media Configuration**

Email

HTML

SMS

You are here: [Home](#) > System Configuration > Applications

Applications

This page displays the applications that are currently deployed on the Experience Portal system.

<input type="checkbox"/>	Name	Enable	Type	URI	Launch	ASR	TTS
<input type="checkbox"/>	PomDriverApp	Yes	POM:Driver	https://10.64.110.50:7443/PomDriverApp/ccxml/start.jsp	Outbound	No ASR	English(USA) en-US Jennifer F
<input type="checkbox"/>	Nailer	Yes	POM:Nailer	https://10.64.110.50:7443/Nailer/ccxml/start.jsp	Outbound	No ASR	No TTS
<input type="checkbox"/>	AvayaPOMSMS	Yes	SMS	https://10.64.110.50:7443/AvayaPOMSMS/Start	Inbound Default	No ASR	No TTS
<input type="checkbox"/>	AvayaPOMNotifier	Yes	POM:Application	https://10.64.110.50:7443/AvayaPOMNotifier/Start	Outbound	No ASR	No TTS
<input type="checkbox"/>	AvayaPOMEmail	Yes	Email	https://10.64.110.50:7443/AvayaPOMEmail/Start	Inbound Default	No ASR	No TTS
<input type="checkbox"/>	AvayaPOMAnnouncement	Yes	POM:Application	https://10.64.110.50:7443/AvayaPOMAnnouncement/Start	Outbound	No ASR	No TTS
<input type="checkbox"/>	AvayaPOMAgent	Yes	POM:Application	https://10.64.110.50:7443/AvayaPOMAgent/Start	Outbound	No ASR	No TTS

[Add](#) [Delete](#) [Clear MPP Cache](#) [Global CAVs](#) [Help](#)

5.3. Configure Avaya POM

When Avaya POM is installed on Experience Portal, a sub menu is added to EPM. On the left pane, select **POM Home** under **POM**. All configurations for Avaya POM are performed from this page, **POM Home**.

The screenshot displays the Avaya Aura Experience Portal 7.2.2 (ExperiencePortal) interface. The top navigation bar includes the Avaya logo, a welcome message for 'epadr', and a timestamp 'Last logged in today at 2:30:23 PM'. The main navigation menu on the left lists various system management and configuration options, with 'POM Home' selected under the 'POM' category. The main content area shows the 'POM Home' page, which includes a description of Proactive Outreach Manager and a summary of campaign and contact list statistics.

Avaya Aura® Experience Portal 7.2.2 (ExperiencePortal)

Welcome, epadr
Last logged in today at 2:30:23 PM

Home ? Help Logo

Expand All | Collapse All

POM Home Campaigns Contacts Agents Supervisor Configurations

User Management
Roles
Users
Login Options

Real-time Monitoring
System Monitor
Active Calls
Port Distribution

System Maintenance
Audit Log Viewer
Trace Viewer
Log Viewer
Alarm Manager

System Management
Application Server
EPM Manager
MPP Manager
Software Upgrade
System Backup

System Configuration
Applications
EPM Servers
MPP Servers
SNMP
Speech Servers
VoIP Connections
Zones

Security
Certificates
Licensing

Reports
Standard
Custom
Scheduled

Multi-Media Configuration
Email
HTML
SMS

POM
POM Home
POM Monitor

Last poll: 05/30/2019 02:51:28 PM Refresh

Proactive Outreach Manager is an application for interactive outbound Voice, SMS and E-mail notifications. With Proactive Outreach Manager, you can easily design and deploy Campaigns that deliver the right information and service over the right media from the right resource at the right time.

Customize View: [?] Help : [?]

Campaigns	
0	Campaign(s) started today and in running state.
0	Campaign(s) in completed state for today.
0	Campaign(s) started today and in paused state.
0	Campaign(s) scheduled today.

Contact List	
0	Contact list(s) updates started today and running state.
0	Contact list(s) updates completed today.
0	Contact list(s) updates started today and paused state.
0	Contact list(s) updates scheduled today.

Agents	
0	Agent Details

5.4. Add POM Server

From **POM Home**, hover over **Configurations** and select **POM Servers** (not shown); click **Add** to add Avaya POM server. On **Add POM Server** page, type in a name in **POM Server Name** and type in Avaya POM IP Address in **POM Server IP Address** and Select **Continue**. Note that since Avaya POM was installed on the same server as Experience Portal, IP Address of Experience portal was used.

The screenshot displays the Avaya Aura Experience Portal 7.2.2 (ExperiencePortal) interface. The top navigation bar includes the Avaya logo and a red header with the text 'Avaya Aura® Experience Portal 7.2.2 (ExperiencePortal)'. Below the header, there is a navigation menu with options: 'POM Home', 'Campaigns', 'Contacts', 'Agents', and 'Supervisor'. The left sidebar contains a list of menu items under various categories: 'User Management' (Roles, Users, Login Options), 'Real-time Monitoring' (System Monitor, Active Calls, Port Distribution), 'System Maintenance' (Audit Log Viewer, Trace Viewer, Log Viewer, Alarm Manager), and 'System Management' (Application Server, EPM Manager, MPP Manager, Software Upgrade, System Backup). The main content area is titled 'Add POM Server' and contains the instruction: 'Use this page to add a new POM server.' Below this, there are two input fields: 'POM Server Name' and 'POM Server IP Address'. At the bottom of the form, there are three buttons: 'Continue', 'Cancel', and 'Help'.

On the **Edit POM Server** page check box for **Trust this certificate** (not shown) and select **Save**. During compliance test, POM was pre-configured. The screen below displays the POM Server that was configured.

The screenshot displays the Avaya Aura Experience Portal 7.2.2 (ExperiencePortal) interface. The top navigation bar includes the Avaya logo and the title 'Avaya Aura® Experience Portal 7.2.2 (ExperiencePortal)'. Below this, there are tabs for 'POM Home', 'Campaigns', 'Contacts', 'Agents', and 'Supervisor'. A left-hand menu lists various system management options, including User Management, Real-time Monitoring, System Maintenance, System Management, System Configuration, and Security. The main content area is titled 'Edit POM Server' and contains the following information:

- Use this page to change the configuration of a POM Server.
- POM Server Name: **pom**
- Host Address: **10.64.110.50**
- POM Certificate**
 - Owner: CN=epms.avaya.com,O=Avaya,OU=POM
 - Issuer: CN=epms.avaya.com,O=Avaya,OU=POM
 - Serial Number: 950447c4a2961f93
 - Valid from: 03/25/2019 02:26:30 PM until: 06/23/2022 02:26:30 PM
 - Certificate fingerprints
 - MD5: 46:b9:a8:5e:c9:39:62:4c:e6:73:5e:7d:56:4d:13:23
 - SHA: 38:c6:c1:2d:97:71:20:0a:c9:3d:da:d7:2e:25:b5:71:59:e4:fa:5a

Below the certificate information, there is a section titled 'Categories and Trace Levels' with a right-pointing arrow. A warning message states: 'WARNING: POM servers will need to be restarted for changes to take effect.' At the bottom of the page, there are four buttons: 'Save', 'Apply', 'Cancel', and 'Help'.

5.5. Configure POM Server

Outbound settings will need to be configured for Avaya POM to place outbound calls. Navigate to **Configurations → POM Servers → Outbound Setting** (not shown). On the **Voice Servers** Page, click on the name of Voice Server; EPM, in this case.

The screenshot shows the Avaya Aura Experience Portal 7.2.2 (ExperiencePortal) interface. The left sidebar contains a navigation menu with categories: User Management (Roles, Users, Login Options), Real-time Monitoring (System Monitor, Active Calls, Port Distribution), System Maintenance (Audit Log Viewer, Trace Viewer, Log Viewer, Alarm Manager), and System Management (Application Server, EPM Manager, MPP Manager, Software Upgrade, System Backup). The main content area is titled "Voice Servers" and includes a sub-header "This page displays the list of voice servers. Depending on your user role, you can ent". Below this is a table with two columns: "Name" and "IP Address". The table contains one entry: "EPM" with the IP address "epms.avaya.com". A "Help" button is located below the table.

On the **Edit Voice Server** page, type in the user **Name** then **Password**, as configured for Experience Portal. This username and password are obtained from the **Outcall** section of **System Configuration → EPM Server → EPM Settings**.

The screenshot shows the Avaya Aura Experience Portal 7.2.2 (ExperiencePortal) interface. The left sidebar contains a navigation menu with categories: User Management (Roles, Users, Login Options), Real-time Monitoring (System Monitor, Active Calls, Port Distribution), System Maintenance (Audit Log Viewer, Trace Viewer, Log Viewer, Alarm Manager), System Management (Application Server, EPM Manager, MPP Manager, Software Upgrade, System Backup), and System Configuration (Applications, EPM Servers, MPP Servers). The main content area is titled "Edit Voice Server" and includes a sub-header "This page allows you to enter Voice Server password for outbound calling.". Below this is a form with four fields: "Name" (EPM), "IP Address" (epms.avaya.com), "User Name" (admin), and "Password" (a red asterisk indicates a password field). Below the form are three buttons: "Save", "Cancel", and "Help".

5.6. Configure CTI

From **POM Home**, navigate to **Configurations** → **CC Elite Configurations** and select **Add CTI Detail** under **CTI Configuration** (not shown). On the **Add CTI Detail** (not shown) page, configure as follows:

- Type in a name in **CTI group name**.
- Type in Communication Manager IP Address in **CM IP address**.
- Type in username and password in **CM Login** and **CM Password**.
- Type in AES IP Address in **AES IP address**.
- From the **CTI group role** drop down menu, select **Active**.

Screen capture below displays the configuration that was used during the compliance test.

Avaya Aura® Experience Portal 7.2.2 (ExperiencePortal)

Expand All | Collapse All

Navigation: POM Home, Campaigns, Contacts, Agents, Supervisor

Edit CTI Detail

This page allows editing of existing CTI details.

Edit CTI Configuration

- * CTI group name:
- * CM IP address:
- * CM login:
- * CM password:
- * AES IP address:
- AES Secure Connection: ☐
- CTI group role:

Buttons: Save, Cancel, Help

On the **Configure CTI setup details**, **CMS setup details** and **POM Skills** page (not shown), select **Add Skill**. Type in the skill as configured in **Section 4.1** for **CCElite Skill Number**, type in a name in **POM Skill Name** and select **Outbound** from the **Skill Type** drop down menu.

Avaya Aura® Experience Portal 7.2.2 (ExperiencePortal)

Expand All | Collapse All

Navigation: POM Home, Campaigns, Contacts, Agents, Supervisor, Configurations

Create POM Skills

This page allows creation of skills in POM database and associating it with CC Elite skill. For skill type "Outbound", "CC Elite Skill Number"

CC Elite Skill Number	POM Skill Name	Skill Type	Parameter to Monitor for Blending
<input type="text" value="1"/>	<input type="text" value="Skill 1"/>	<input type="text" value="Outbound"/>	<input type="text" value="Select only for Inbound"/>

5.7. Configure Contacts

From **POM Home**, navigate to **Contacts** → **Contact Lists** (not shown) and select **Add**. Type in a name in **Name** and brief **Description** and select **Save**.

The screenshot shows the Avaya Aura Experience Portal 7.2.2 (ExperiencePortal) interface. The left sidebar contains a navigation menu with categories: User Management (Roles, Users, Login Options), Real-time Monitoring (System Monitor, Active Calls, Port Distribution), System Maintenance (Audit Log Viewer, Trace Viewer, Log Viewer, Alarm Manager), and System Management (Application Server, EPM Manager, MPP Manager, Software Upgrade, System Backup). The main content area is titled 'Add New Contact List' and includes the text 'This page allows you to add new Contact List.' Below this, there is a 'Name' field with the value 'POMContacts' and a 'Description' field. At the bottom, there are three buttons: 'Save', 'Cancel', and 'Help'.

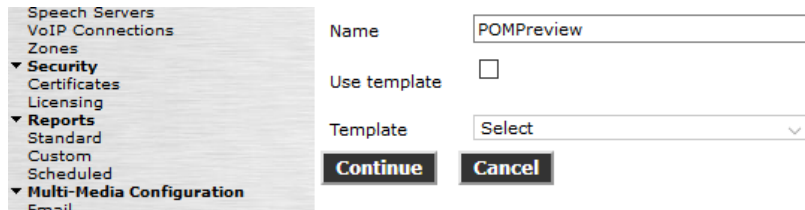
On the next page, select **Upload Contacts now** (not shown). Click on **Browse** to browse to the location of .csv for the contacts and select **Upload**.

The screenshot shows the 'Contact Lists' page in the Avaya Aura Experience Portal. The page title is 'Contact Lists' and it includes a 'Refresh' button. Below the title, there is a description: 'This page displays all the Contact Lists. Depending on the user role, you can add, change, delete and empty Contact List. You can see Contacts in a Contact List. If organizations are enabled, you can associate Contact List with organization.' An 'Upload Contacts' dialog box is open, showing the 'File to upload' field with a 'Browse...' button and the text 'No file selected.' Below this, there is an 'Advanced Options' section with several checkboxes: 'Empty Contact List before import', 'Automatically update time zone for phone numbers', 'Check phone numbers for reject patterns', 'Check phone numbers for phone formats rule', and 'Check phone numbers/E-Mails for DNC'. The 'On duplicate record found' dropdown is set to 'Update existing'. At the bottom of the dialog, there are three buttons: 'Upload', 'Cancel', and 'Help'.

5.8. Configure Campaign

5.8.1. Configure Campaign Strategy

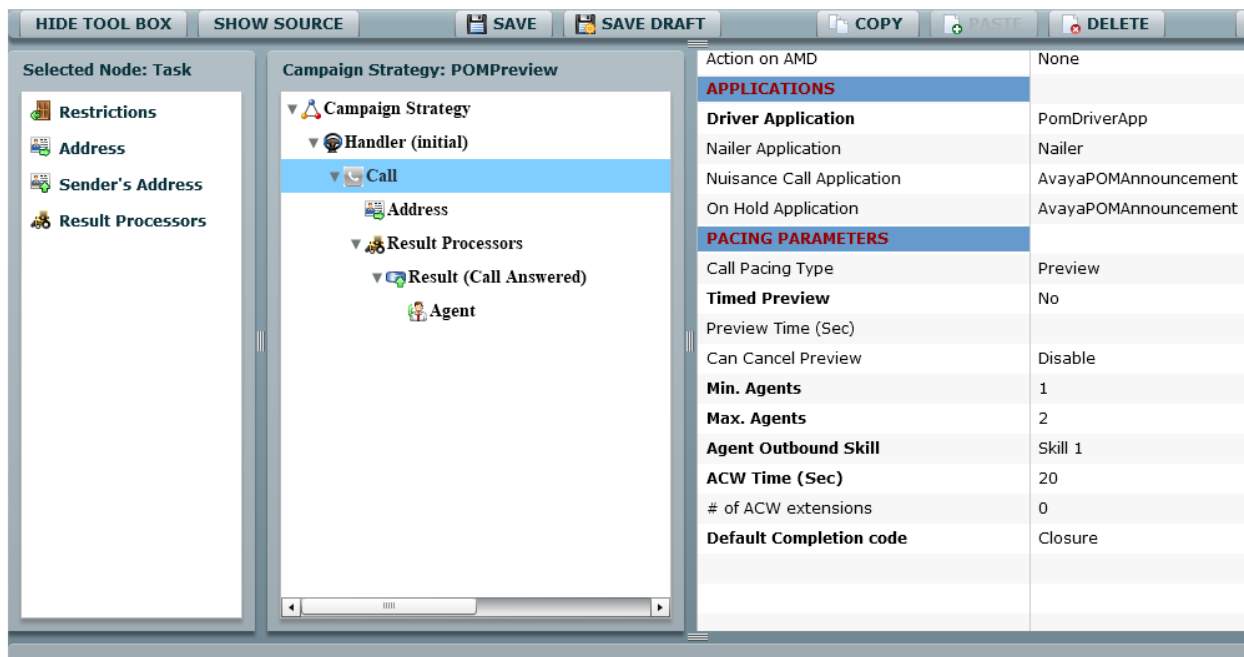
From **POM Home**, navigate to **Campaigns** → **Campaign Strategy** and select **Add** (not shown). Type in a name as shown below and select **Continue**.



The screenshot shows a web interface for configuring a campaign strategy. On the left is a navigation menu with categories like Speech Servers, VoIP Connections, Zones, Security, Reports, and Multi-Media Configuration. The main form has the following fields:

- Name:** A text input field containing "POMPreview".
- Use template:** A checkbox that is currently unchecked.
- Template:** A dropdown menu with "Select" as the current selection.
- Buttons:** "Continue" and "Cancel" buttons at the bottom.

The **Campaign Strategy Editor** page will pop up. Configure a **Campaign Strategy** as needed. Below is an example of the strategy configured during compliance testing.



The screenshot shows the "Campaign Strategy Editor" for a strategy named "POMPreview". The interface is divided into three main sections:

- Left Panel (Selected Node: Task):** Contains a tree view with nodes: Restrictions, Address, Sender's Address, and Result Processors.
- Center Panel (Campaign Strategy: POMPreview):** Shows a hierarchical tree of the strategy configuration:
 - Campaign Strategy
 - Handler (initial)
 - Call
 - Address
 - Result Processors
 - Result (Call Answered)
 - Agent
- Right Panel (Configuration Table):** A table with two columns: Configuration Item and Value.

Configuration Item	Value
Action on AMD	None
APPLICATIONS	
Driver Application	PomDriverApp
Nailer Application	Nailer
Nuisance Call Application	AvayaPOMAnnouncement
On Hold Application	AvayaPOMAnnouncement
PACING PARAMETERS	
Call Pacing Type	Preview
Timed Preview	No
Preview Time (Sec)	
Can Cancel Preview	Disable
Min. Agents	1
Max. Agents	2
Agent Outbound Skill	Skill 1
ACW Time (Sec)	20
# of ACW extensions	0
Default Completion code	Closure

5.8.2. Configure Campaign Manager

From **POM Home**, navigate to **Campaigns → Campaign Manager** and select **Add** (not shown). Type in a name in **Name** field and select **Continue**.

Advanced

Show 50 | Page: 1/1

Name	Type	Campaign
POMExpertCallRatio	Finite	POMExpertCallRatio
POMPreviewCampaign	Finite	POMPreviewCampaign
POMProgressiveCampaign	Finite	POMProgressiveCampaign

* In Progress means Campaign job can't be started.

Add Help

Add a Campaign

Create Campaign

You can start creating a Campaign either by using already created Campaign as template or create new altogether.

Name

☒ New Campaign
☐ Copy existing Campaign

Continue Cancel Help

On the **Define Campaign** page, select the strategy added in previous section for **Campaign Strategy**. Select the contact list from **Section 5.7** and select **Finish** (not shown).

AVAYA

Last logged in: [User Name]

Avaya Aura® Experience Portal 7.2.2 (ExperiencePortal)

Expand All | Collapse All

- ▼ User Management
 - Roles
 - Users
 - Login Options
- ▼ Real-time Monitoring
 - System Monitor
 - Active Calls
 - Port Distribution
- ▼ System Maintenance
 - Audit Log Viewer
 - Trace Viewer
 - Log Viewer
 - Alarm Manager
- ▼ System Management
 - Application Server
 - EPM Manager
 - MPP Manager
 - Software Upgrade
 - System Backup
- ▼ System Configuration
 - Applications
 - EPM Servers
 - MPP Servers
 - SNMP
 - Speech Servers
 - VoIP Connections
 - Zones
- ▼ Security
 - Certificates
 - Licensing
- ▼ Reports
 - Standard
 - Custom
 - Scheduled
- ▼ Multi-Media Configuration
 - Email
 - HTML
 - SMS
- ▼ POM
 - POM Home
 - POM Monitor

Campaign Strategy

Select a Campaign Strategy from the following list to be used in the Campaign. Click on the icons to create a new Campaign Strategy, view details of a selected Strategy or refresh the current list.

POMPreview

Campaign type

☒ Finite ☐ Infinite

☐ Do not associate any Contact List at start

Contact Record Assignment to Agent

☐ Attributes ☐ Agent ID

Contact List

From the following list select one or more Contact Lists to be used with this Campaign. Click on the icons next to the list to create a new Contact List or refresh the current list.

POMContacts(Default)

5.9. Start POM Server

Once POM Server is completely created, start it by navigating to **Configurations → POM Servers → POM Manager** (not shown). On the **POM Manager** page, select the check box of Avaya POM server and click **Start**. Note that in the picture below POM server was already started, if it is stopped the **Start** button is available to start POM server.

AVAYA Welcome, eadmin
Last logged in today at 2:30:23 PM PDT

Avaya Aura® Experience Portal 7.2.2 (ExperiencePortal) Home ? Help Logoff

Expand All Collapse All

POM Home Campaigns Contacts Agents Supervisor Configurations

POM Manager Refresh

Use this page to manage the POM servers connected to this EPM.

Last poll: 05/30/2019 03:00:32 PM

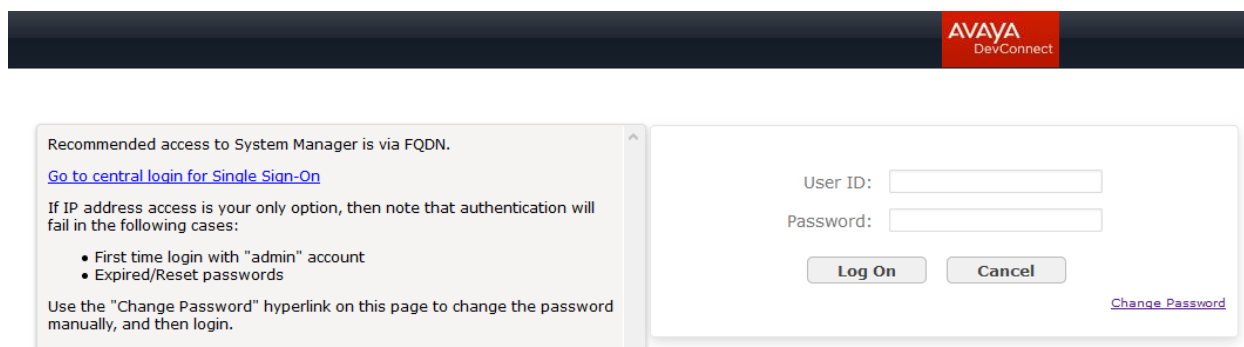
<input checked="" type="checkbox"/>	POM Server Name	Host Address	Campaign Manager Status	Campaign Director Status	Agent Manager Status	ActiveMQ Status	RuleServer Status	Kafka Server Status	Ports In Use
<input checked="" type="checkbox"/>	pom	10.64.110.50	RUNNING	MASTER	MASTER	MASTER	MASTER	RUNNING	0

Start Stop Help

6. Configure Session Manager

Configuration for Session manager is performed via System Manager. From a web browser, type in “[https://IP-Address\]/SMGR](https://IP-Address]/SMGR)”, where IP-Address is the IP Address of System Manager. Log in using appropriate credentials.

Please note that configuration of each item is not shown in detail. In the following sections, screen captures of the configured items during compliance testing are shown. For details steps on configuration of each item, refer to Document [3].



Recommended access to System Manager is via FQDN.
[Go to central login for Single Sign-On](#)

If IP address access is your only option, then note that authentication will fail in the following cases:

- First time login with "admin" account
- Expired/Reset passwords

Use the "Change Password" hyperlink on this page to change the password manually, and then login.

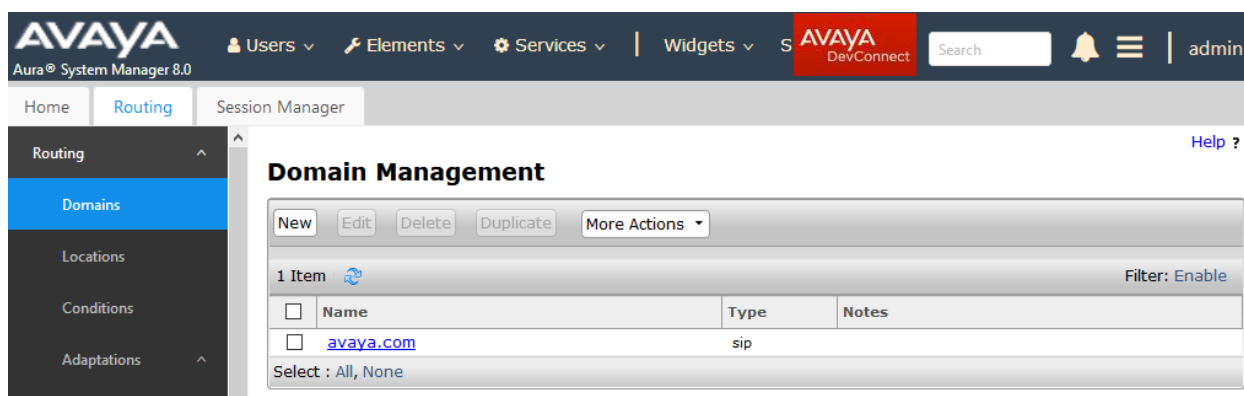
User ID:

Password:

[Change Password](#)

6.1. Configure Domain

Once logged in, select **Elements** → **Routing** (not shown). On the left pane select **Domains**. Click **New** to add a new domain. For compliance testing, domain of **avaya.com** was added.



AVAYA Aura® System Manager 8.0

Users Elements Services Widgets S AVAYA DevConnect Search admin

Home Routing Session Manager

Routing Domains Locations Conditions Adaptations

Domain Management

New Edit Delete Duplicate More Actions

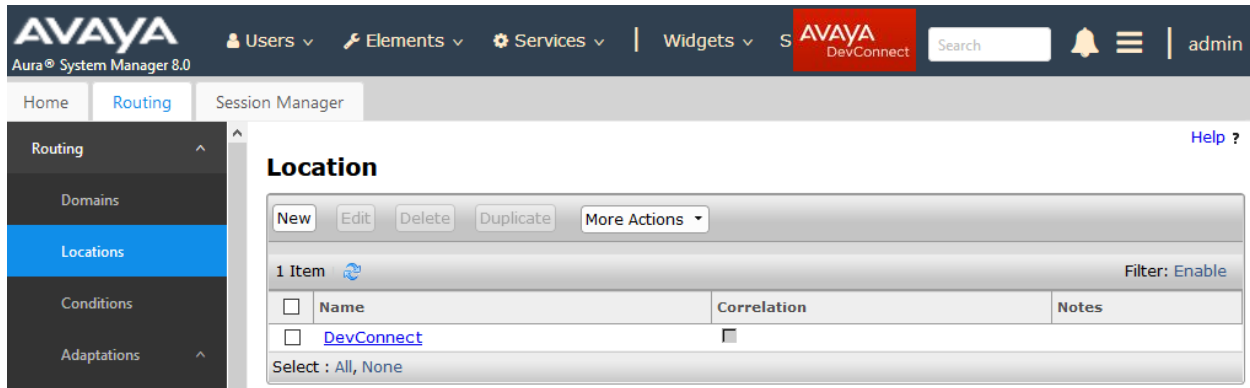
1 Item Filter: Enable

<input type="checkbox"/>	Name	Type	Notes
<input type="checkbox"/>	avaya.com	sip	

Select : All, None

6.2. Configure Locations

From the left pane, select **Location**. To add a new location, select **New**. For compliance testing, location of **DevConnect** were added.



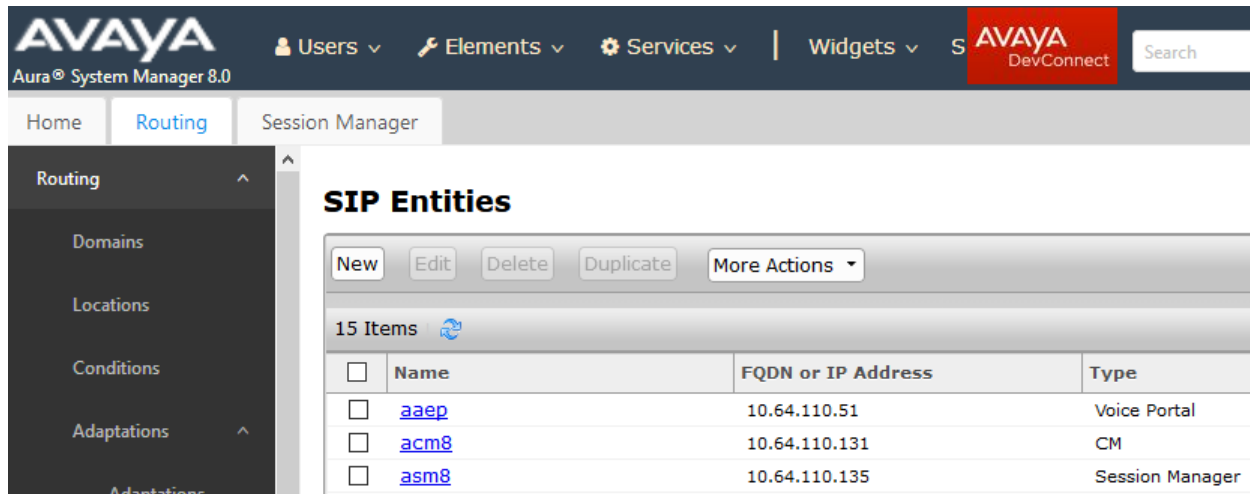
The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes the Avaya logo, 'Aura® System Manager 8.0', and various menu items like Users, Elements, Services, Widgets, and a search bar. The left sidebar has 'Routing' selected, with sub-items Domains, Locations, Conditions, and Adaptations. The main content area is titled 'Location' and shows a table with one item, 'DevConnect'.

Name	Correlation	Notes
DevConnect		

6.3. Configure SIP Entities

From the left pane, select **SIP Entities**. To add a new SIP Entity, select **New**. For compliance testing, two SIP Entities were added as shown below.

- **aaep**: Experience Portal SIP Entity
- **asm8**: Session Manager SIP Entity
- **acm8**: Communication Manager SIP Entity



The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes the Avaya logo, 'Aura® System Manager 8.0', and various menu items like Users, Elements, Services, Widgets, and a search bar. The left sidebar has 'Routing' selected, with sub-items Domains, Locations, Conditions, and Adaptations. The main content area is titled 'SIP Entities' and shows a table with three items: aaep, acm8, and asm8.

Name	FQDN or IP Address	Type
aaep	10.64.110.51	Voice Portal
acm8	10.64.110.131	CM
asm8	10.64.110.135	Session Manager

6.4. Configure Entity Links

For each SIP Entity, with the exception of Session Manager, an entity link needs to be added. On the left pane, select **Entity Links**. To add a new entity link, select **New**. For compliance testing two entity links, one for Communication Manager and another for Experience Portal, were added.

The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes the Avaya logo, "Aura® System Manager 8.0", and tabs for Users, Elements, Services, Widgets, and Search. The left sidebar shows a tree view with "Routing" selected, containing sub-items: Domains, Locations, Conditions, Adaptations, and Adaptations. The main content area is titled "Entity Links" and features a toolbar with "New", "Edit", "Delete", "Duplicate", and "More Actions" buttons. Below the toolbar, it indicates "15 Items" and displays a table of entity links.

<input type="checkbox"/>	Name	SIP Entity 1	Protocol	Port	SIP Entity 2	Port	DNS Override
<input type="checkbox"/>	sm8_mpp722_5060_TCP	sm8	TCP	5060	aaep	5060	<input type="checkbox"/>
<input type="checkbox"/>	sm8_brz8_5061_TLS	sm8	TLS	5061	brz8	5061	<input type="checkbox"/>
<input type="checkbox"/>	sm8_cm8_5061_TLS	sm8	TLS	5061	cm8	5061	<input type="checkbox"/>

6.5. Configure Time Ranges

On the left pane, select **Time Ranges**. To add a new time range, select **New**. For compliance testing, time range of **24/7** was added.

The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes the Avaya logo, "Aura® System Manager 8.0", and tabs for Users, Elements, Services, Widgets, and Search. The left sidebar shows a tree view with "Routing" selected, containing sub-items: Domains, Locations, Conditions, Adaptations, and Adaptations. The main content area is titled "Time Ranges" and features a toolbar with "New", "Edit", "Delete", "Duplicate", and "More Actions" buttons. Below the toolbar, it indicates "1 Item" and displays a table of time ranges.

<input type="checkbox"/>	Name	Mo	Tu	We	Th	Fr	Sa	Su	Start Time	End Time	Notes
<input type="checkbox"/>	24/7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	00:00	23:59	Time Range 24/7

Select : All, None

6.6. Configure Routing Policies

On the left pane, select **Routing Policies**. To add a new routing policy, select **New**. For compliance testing, two routing policies were added, one for Communication Manager and another for Experience Portal.

The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes 'Users', 'Elements', 'Services', 'Widgets', and a search bar. The left sidebar shows the 'Routing' menu expanded. The main area displays the 'Routing Policies' configuration page. It includes a 'New' button and a table with 9 items. The table has columns for 'Name', 'Disabled', 'Retries', and 'Destination'. Two items are visible: 'aaep' and 'acm8'.

	Name	Disabled	Retries	Destination
<input type="checkbox"/>	aaep	<input type="checkbox"/>	0	aaep
<input type="checkbox"/>	acm8	<input type="checkbox"/>	0	cm8

6.7. Configure Dial Patterns

On the left pane, select **Dial Patterns**. To add a new dial pattern, select **New**. For compliance testing, all calls starting with pattern 5 with 5 digits were routed to communication manager.

The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes 'Users', 'Elements', 'Services', 'Widgets', and a search bar. The left sidebar shows the 'Dial Patterns' menu expanded. The main area displays the 'Dial Pattern Details' configuration page. It includes a 'General' section with fields for 'Pattern', 'Min', 'Max', 'Emergency Call', 'SIP Domain', and 'Notes'. Below the form is a table for 'Originating Locations and Routing Policies'.

Dial Pattern Details

General

* Pattern: 5

* Min: 5

* Max: 5

Emergency Call: ☐

SIP Domain: -ALL-

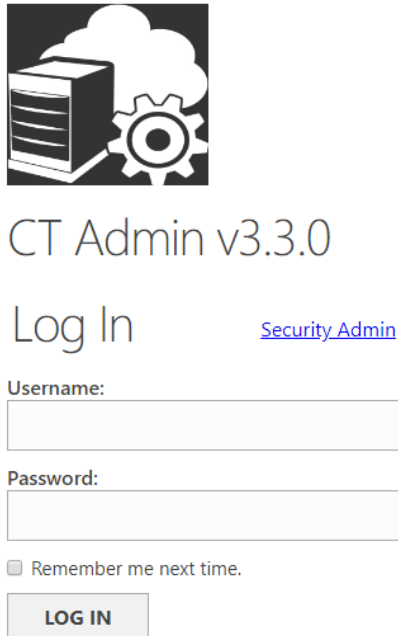
Notes:

Originating Locations and Routing Policies

	Originating Location Name	Originating Location Notes	Routing Policy Name	Rank	Routing Policy Disabled	Routing Policy Destination	Routing Policy Notes
<input type="checkbox"/>	DevConnect		acm8	0	<input type="checkbox"/>	cm8	

7. Configure CTIntegrations CT Suite

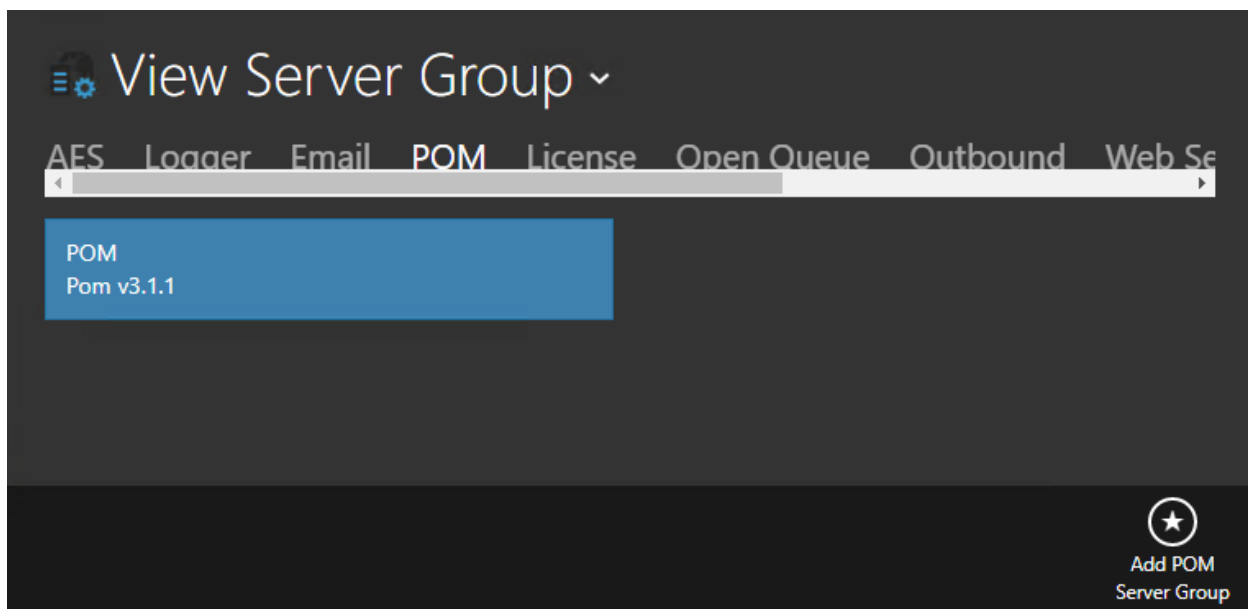
Access the CT Admin web interface by using the URL “http://ip-address/CTAdmin” in an Internet browser window, where “ip-address” is the IP address of the CT Suite server. The **CT Admin** screen below is displayed. Log in using the administrator credentials.



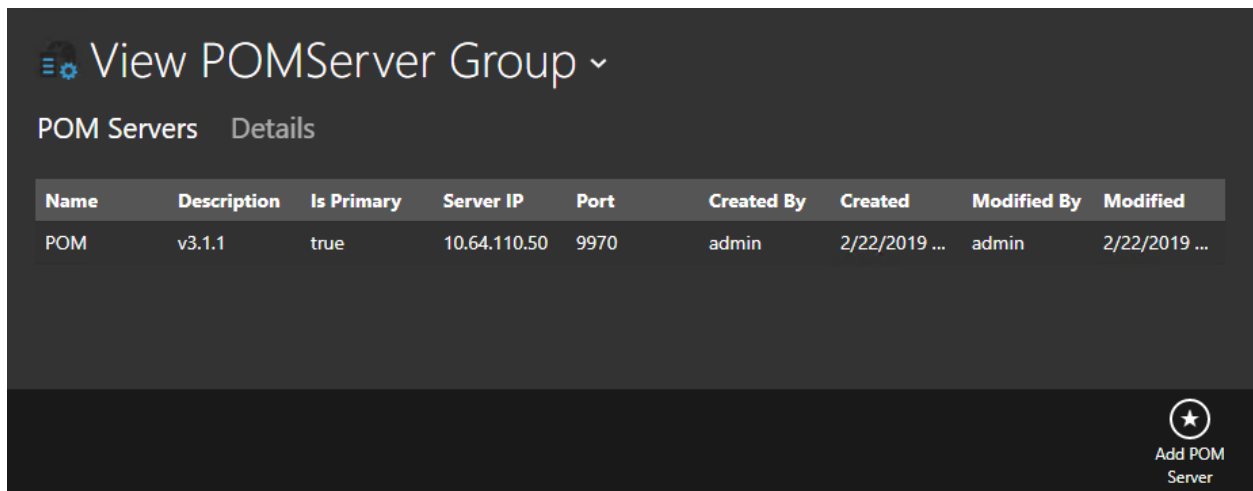
The image shows the CT Admin v3.3.0 login interface. At the top is a logo featuring a server rack, a cloud, and a gear. Below the logo, the text "CT Admin v3.3.0" is displayed. Underneath is a "Log In" section with a link for "Security Admin". There are two input fields: "Username:" and "Password:". Below these fields is a checkbox labeled "Remember me next time." and a "LOG IN" button.

7.1. Administer POM Server

Navigate to: **Site** → **Server** → **Server Group** → **POM**. To add a new POM Server Group, select **Add POM Server Group** to add a new group.

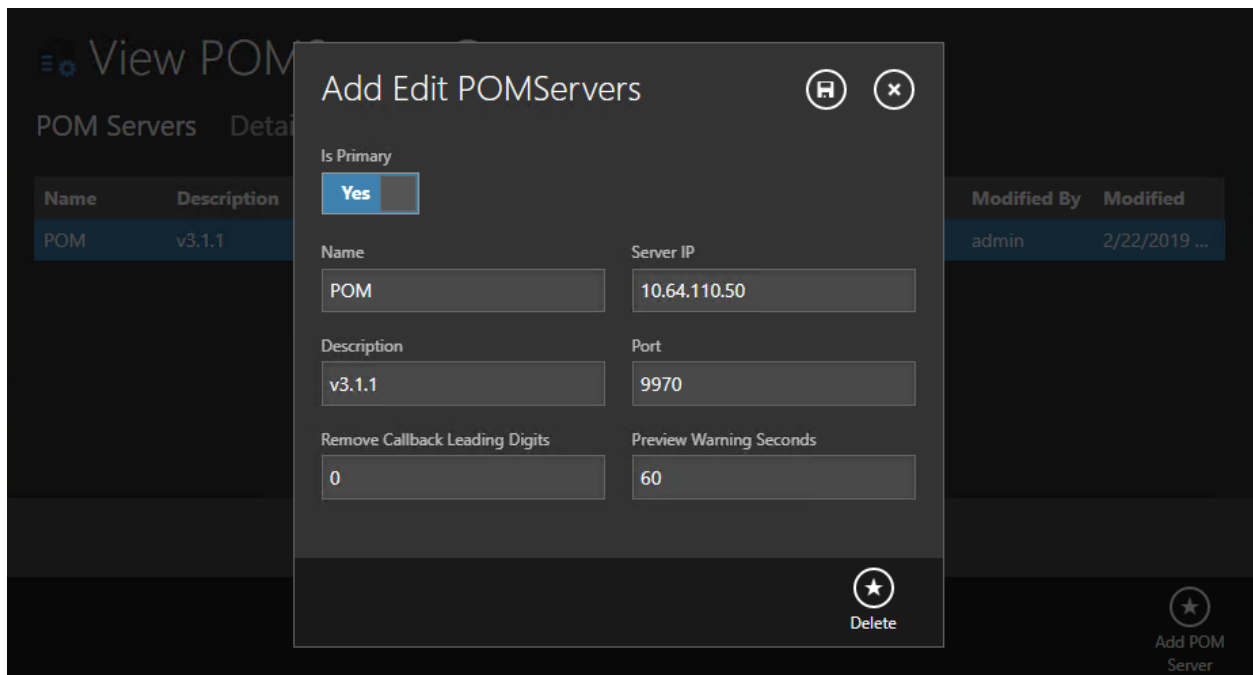


To view/edit settings, select a POM server on the list screen, or click **Add POM Server** to add a new server.



On the **Add Edit POMServers** screen:

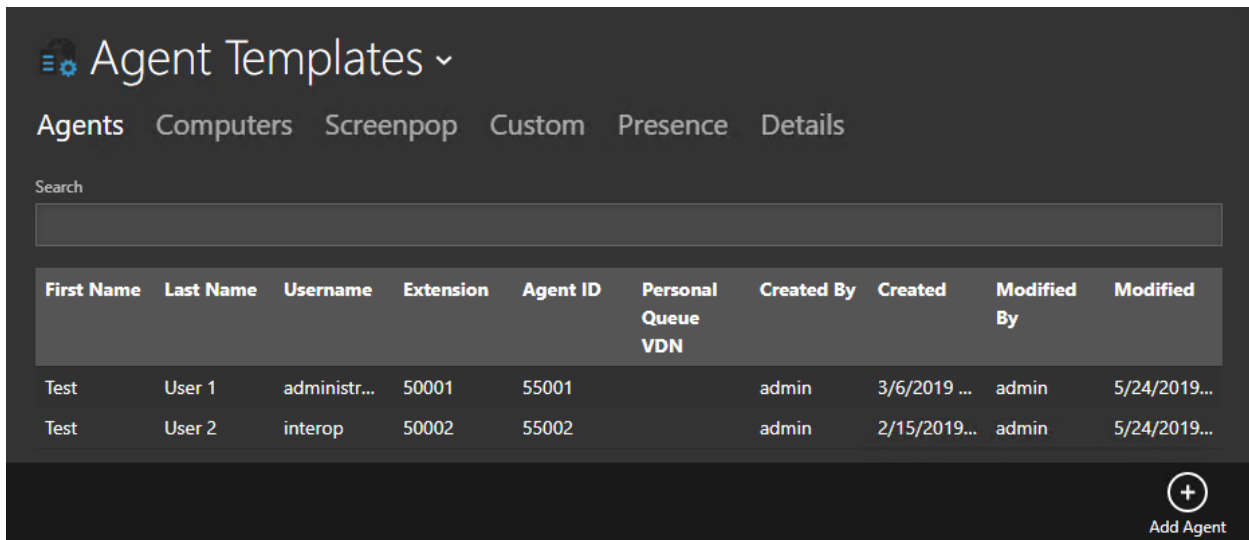
- **Is Primary:** Set as primary.
- **Name:** Name of server.
- **Description:** Description (friendly) name.
- **Server IP:** Enter IP address of POM server from **Section 5.4**.
- **Port:** Enter the default port 9970.



7.2. Administer POM Agents

Note that further details available in CT Suite Administration Guide for agent and server configurations can be found in **Section 10**.

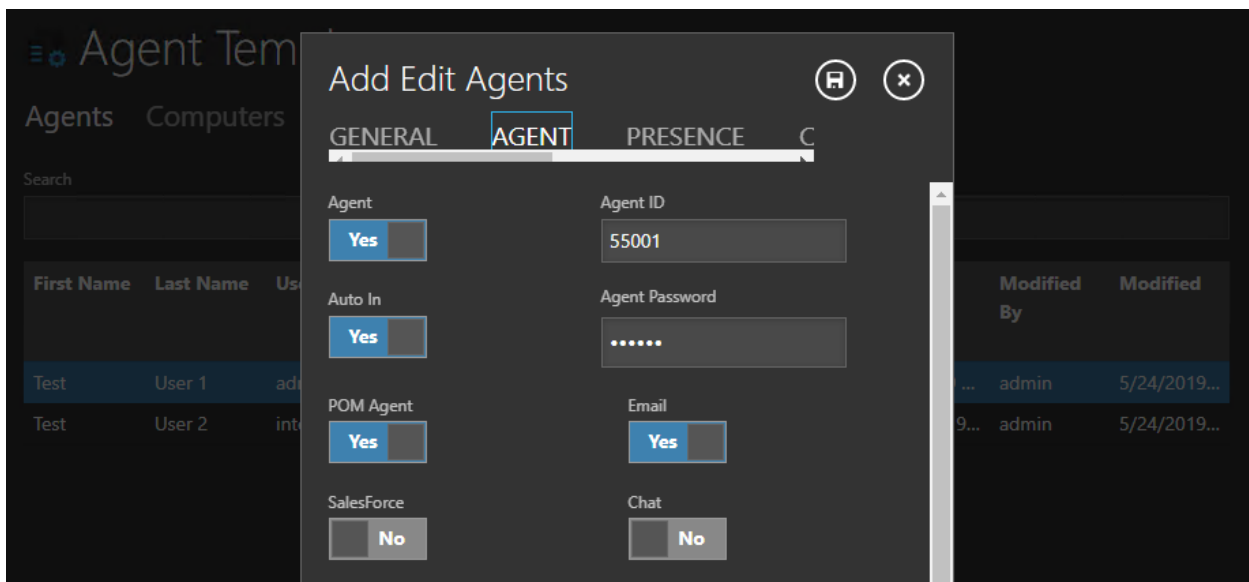
From **CT Admin** navigate to the CT Suite Agent: **Site → Agent Templates → Agent**. The list of configured agents is displayed, if more agents need to be added, select **Add Agent** button.



The screenshot shows the 'Agent Templates' interface with a search bar and a table of agents. The table has columns for First Name, Last Name, Username, Extension, Agent ID, Personal Queue VDN, Created By, Created, Modified By, and Modified. Two agents are listed: 'Test User 1' and 'Test User 2'. An 'Add Agent' button is visible at the bottom right.

First Name	Last Name	Username	Extension	Agent ID	Personal Queue VDN	Created By	Created	Modified By	Modified
Test	User 1	administr...	50001	55001		admin	3/6/2019 ...	admin	5/24/2019...
Test	User 2	interop	50002	55002		admin	2/15/2019...	admin	5/24/2019...

To edit an agent, select the agent and navigate to the **AGENT** tab and ensure **POM Agent** is set to **Yes**.

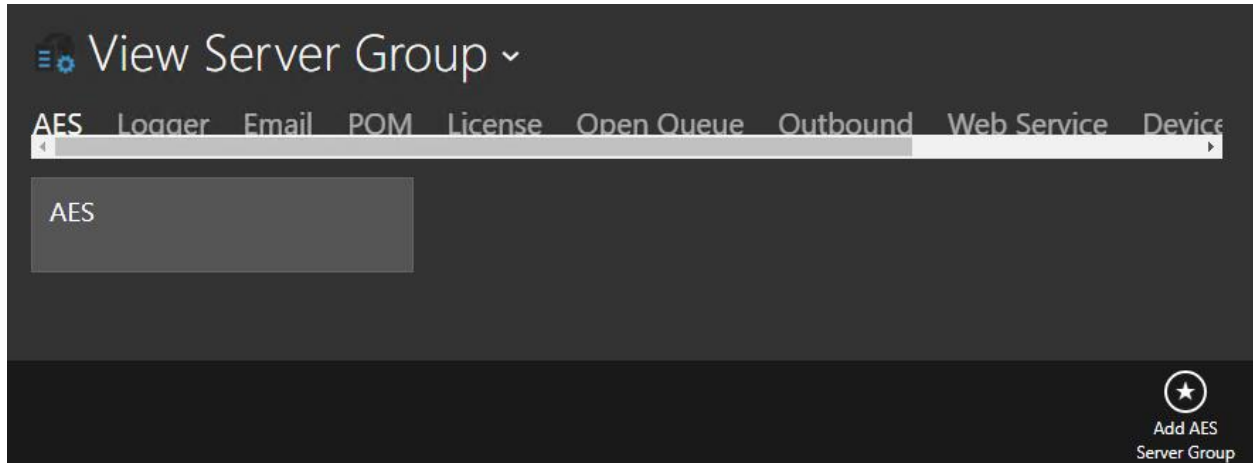


The screenshot shows the 'Add Edit Agents' dialog box with the 'AGENT' tab selected. The dialog has fields for Agent ID, Agent Password, Email, and Chat, and checkboxes for Agent, Auto In, POM Agent, Salesforce, and Chat. The 'POM Agent' checkbox is checked.

Field	Value
Agent	<input checked="" type="checkbox"/>
Auto In	<input checked="" type="checkbox"/>
POM Agent	<input checked="" type="checkbox"/>
SalesForce	<input type="checkbox"/>
Agent ID	55001
Agent Password
Email	<input checked="" type="checkbox"/>
Chat	<input type="checkbox"/>

7.3. AES Server

To view the AES Server navigate to **Site → Server → Server Group → AES**. Select **AES** from the top menu, followed by **Add AES Server Group** from bottom of screen to add a logical group. In the compliance testing, the “AES” group was pre-configured. Note that an AES server group is required to be configured.



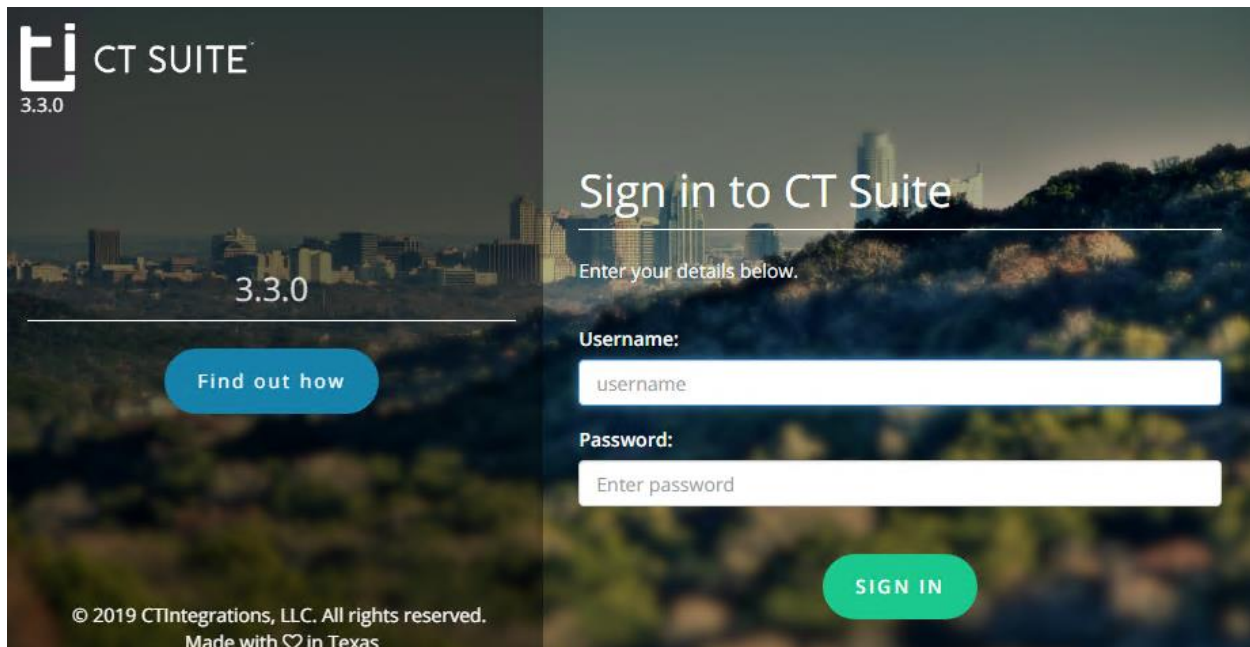
8. Verification Steps

This section provides the verification steps that may be performed to verify that the CT Desktop agent to work with Avaya POM.

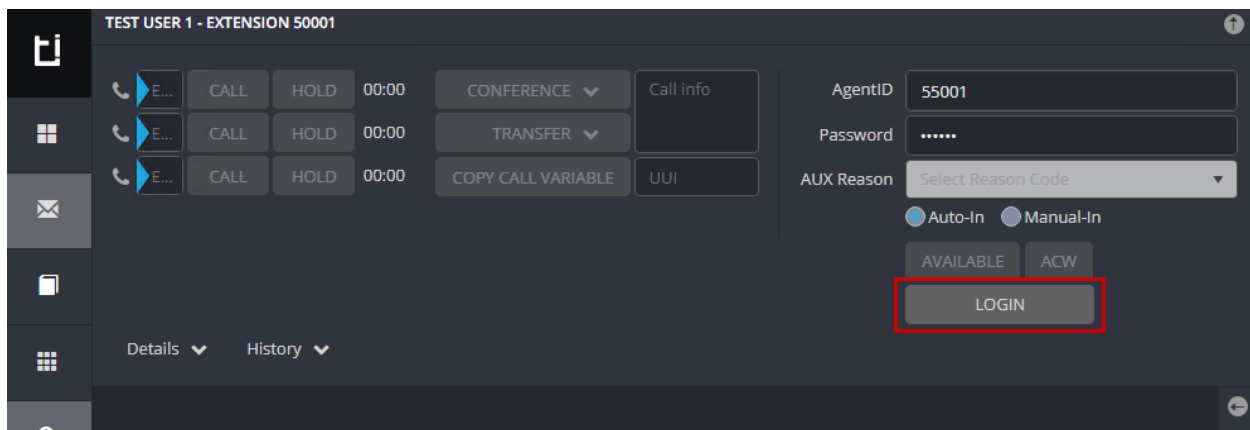
8.1. Verify CTIntegrations CT Suite

From an agent PC, launch an Internet browser window and enter the URL “http://ip-address:8081”, where “ip-address” is the IP address of the CT Suite server.

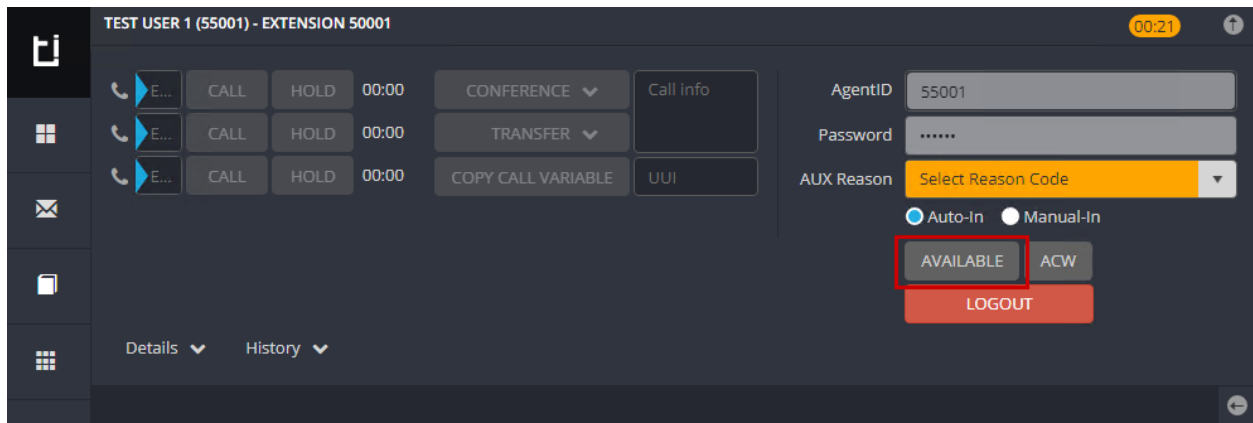
The **Sign in to CT Suite** screen is displayed. For **Username** and **Password**, enter an applicable agent credentials, and retain the default value in the remaining field.



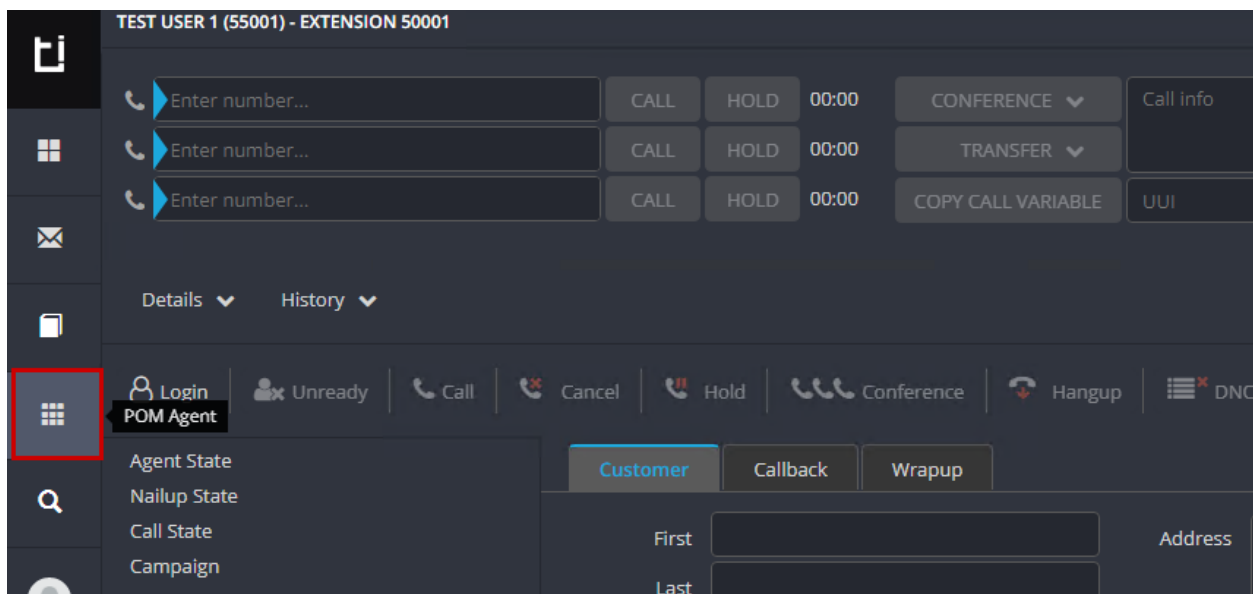
The agent screen below is displayed next. Retain the default values, and select **LOGIN** to log the agent into the ACD on Communication Manager.



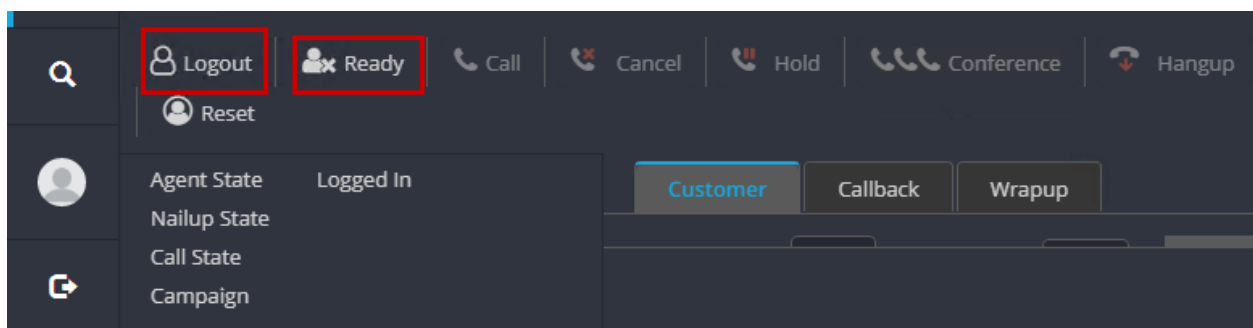
The agent screen is updated, as shown below. Click **AVAILABLE**.



On the left pane, select **POM Agent**.



Select **Login** to log the agent to POM, followed by **Ready**.



Start a POM Campaign and verify the agent receives the call.

TEST USER 1 (55001) - EXTENSION 50001

30355512121 ANSWER HOLD 00:00 CONFERENCE S: Skill

Enter number... CALL HOLD 00:00 TRANSFER

Enter number... CALL HOLD 00:00 COPY CALL VARIABLE UI

Details History

Logout UnReady Call Cancel Hold Conference Hangup

Agent State Ready
Nailup State PendingNailUp
Call State
Campaign

Customer Callback Wrapup

First Add
Last
Phone 1 DNC
Phone 2 DNC
Phone 3 DNC

Check POM Monitor, it should show the same status as displayed in the CT Desktop agent.

Agent	Agent Extension	Agent Name	Skills	Skill Attribute	Agent State	Call State	Campaign Name
55001	50001	Agent 1	1,2,3,4,5		BUSY	Preview	POMPreviewCan

9. Conclusion

These Application Notes describe the configuration steps required to integrate the CTIntegrations CT Suite and CT Desktop with Avaya Proactive Outreach Manager. All feature and serviceability test cases were completed successfully.

10. Additional References

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

1. *Administering Avaya Aura® Communication Manager*, Release 8.0.x, Issue 4, May 2019.
2. *Administering and Maintaining Aura® Application Enablement Services*, Release 8.0.1, Issue 2, December 2018.
3. *Administering Avaya Aura® Session Manager*, Release 8.0.1, Issue 3, December 2018.
4. *Administering Avaya Aura® System Manager for Release 8.0.1*, Release 8.0.x, Issue 9, May 2019.
5. *Application Notes for CTIntegrations CT Suite 3.3 with Avaya Aura® Communication Manager 8.0.1 and Avaya Aura® Application Enablement Services 8.0.1, Release 1.0.*
6. *Administering Avaya Aura® Experience Portal*, Release 7.2.2, Issue 1, March 2019.
7. *Using Avaya Proactive Outreach Manager*, Release 3.1.1, Issue 1.1, September 2018.

Documentation related to CT Desktop may directly be obtained from CTIntegrations.

8. *CTIntegrations CT Suite Admin User Guide*, User Guides v3.2

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