AVAYA

Avaya Solution & Interoperability Test Lab

Application Notes for Vien Dat Trading and Services Company LTD., UniSpace-CX© with Avaya Workspaces for Call Center Elite using the Avaya Workspaces Widget API – Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Vien Dat Trading and Services Company LTD., UniSpace-CX© v2022.R1 with Avaya Workspaces for Call Center Elite R3.8.1.1 and Avaya Aura® Communication Manager R10.1. UniSpace-CX© integrates with Avaya Workspaces for Call Center Elite using the Widget Application Programming Interface (API) to call upon a screen pop that populates the agent's Workspaces desktop.

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.

PG; Reviewed:
SPOC 12/2/2022
Solution & Interoperability Test Lab Application Notes
©2022 Avaya Inc. All Rights Reserved.
1 of 25
UCX_WSfE381

1. Introduction

These Application Notes describe the configuration steps required to integrate Vien Dat Trading and Services Company LTD., UniSpace-CX© v2022.R1with Avaya Workspaces for Call Center Elite R3.8.1.1 and Avaya Aura® Communication Manager R10.1. Vien Dat Trading and Services Company LTD., UniSpace-CX© (UCX) integrates with Avaya Workspaces for Call Center Elite (Workspaces) using the Widget Application Programming Interface (API) to call upon a screen pop that populates the agent's Workspaces desktop.

Note: Avaya Workspaces for Call Center Elite, may be referred to as Avaya Workspaces for Elite, Avaya Workspaces, or Workspaces throughout this document.

UCX is customer service management software developed by Vien Dat Trading and Services Company LTD (VIDACO). UCX software allows Workspaces agents to receive, identify customers and manage Omni-Channel interaction information on a single screen, displaying a full history of customer interactions as well as requests that have been and are being processed according to the timeline. Thereby, it is easy to identify customer needs as soon as the customer interacts with the agent through the "Interaction & Ticket management" function. UCX integrates with Workspace for Elite through widgets to unify in one user interface and can send and receive information with Workspace for Elite.

UCX makes use of two Widgets for compliance testing, one for the agent desktop upon login and another for a screen pop when a call is presented to the agent. These UCX Widgets must be imported into Workspaces and the widget folders added to the Workspaces external widget library.
1. Unispace Cx Home Widget is used to populate the agents screen upon login.
2. Unispace Cx Popup Widget is used to populate the agent's screen with the customer details upon the call being presented to the agent.

DevConnect members make use of the Widget Framework documentation which provides a sample project and a sample widget library for development purposes. Using the sample project, widgets can be created and built for production use. The sample library includes a set of widgets that demonstrate key features of the Widget API. The Widget API provides access to the Avaya Workspaces framework and allows the widget to listen to events and take action in the form of activities such as call pick up, hang up, card active, and card inactive. Widgets offer several options for integrating external systems such as CRM systems into Avaya Workspaces.
- IFRAME - a simple widget can be written to encapsulate the CRM website in an IFRAME and make the CRM system accessible via a web page.
- REST API - If the CRM system has a REST API, a widget can be written to directly query the CRM's REST API, this approach would be considered a pure client-side integration.
- SALESFORCE - Workspaces comes with an in-built Salesforce CRM adapter that provides client-side integration out of the box. Salesforce CRM data is available as a data object in the Widget API.
- BACKEND - a custom CRM can be integrated as a Breeze snap-in and integrated with Workspaces via the UAC component and Client JavaScript SDK, then this integration

can be exposed in the Widget API in a similar fashion as the native Salesforce CRM adapter.

- PROXY - a custom CRM can be integrated via a Proxy REST API or a Proxy Web Application. A proxy REST API wraps an existing CRM system and makes it REST capable so that widgets can access CRM data indirectly via the proxy. A proxy web application is a simple web app/page that encapsulates the CRM interface and makes it accessible via an IFRAME indirectly without blocking any content or permission restrictions.

2. General Test Approach and Test Results

The general test approach was to load the UCX Widgets onto Avaya Workspaces to allow the Workspaces agent to receive a screen pop with the relevant customer information. Serviceability testing was carried out to observe the response of the screen pop when various LAN failures were simulated.

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.

2.1. Interoperability Compliance Testing

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

- **Unified Login –** Automatically login to UCX with Workspaces login user information. The UCX widget gets the agent Id information. User only needs one time login on Workspaces.
- **Basic calls**– Observing the screen pop being presented to the agent (on Workspaces for Elite) for incoming calls into the agent.
- **Auto-answer** - Auto-answer was configured also to ensure that incoming calls could be answered automatically without the agent having to press the answer button on Workspaces.
- **Call Transfer/Conference** – Observing the screen pop when a call is transferred or conferenced between Workspaces agents.

- **Outbound calls –** Calls were made out to the PSTN and the screen pop produced was observed.
- **Caller History –** Observing customer information and caller history.
- **Serviceability** – Tests the behaviour of UCX when there are certain failed conditions such as a LAN failure.

2.2. Test Results

All test cases were executed and verified. All test cases passed successfully with the following observations noted.

1. On most occasions there was a delay with the screen pop information being displayed and on a rare occasion there was an error displayed trying to load the information on the screen pop. This was more than likely due to latency issues calling upon the web server hosted by VIDACO over the public internet.
2. For blind transfers and semi-attended transfers, the caller information is passed in the screen pop from agent to agent. For a fully attended transfer and conference, the original caller's information in the screen pop is not passed on and the agent answering the call does not have any screen pop. This is deemed as per design by VIDACO.

2.3. Support

For technical support on the UCX Widget contact Vien Dat Trading and Services Company LTD., via phone, email, or internet.
- Phone: +84 24 3783 0820
- Email: info@viendat.com
- Web: https://www.viendat.com

3. Reference Configuration

Figure 1 shows the network topology during compliance testing. The UCX Widgets were imported into Avaya Workspaces and the Widget folders added to the Widget library hosted on the Avaya web server. Calls were then placed to various VDN's from different customers to simulate a real-life call center environment. Once the calls arrive to the agents, the agent's Workspaces desktop was populated by a screen pop containing information on the customer that is calling in. This information was obtained from a web server and database hosted by VIDACO.
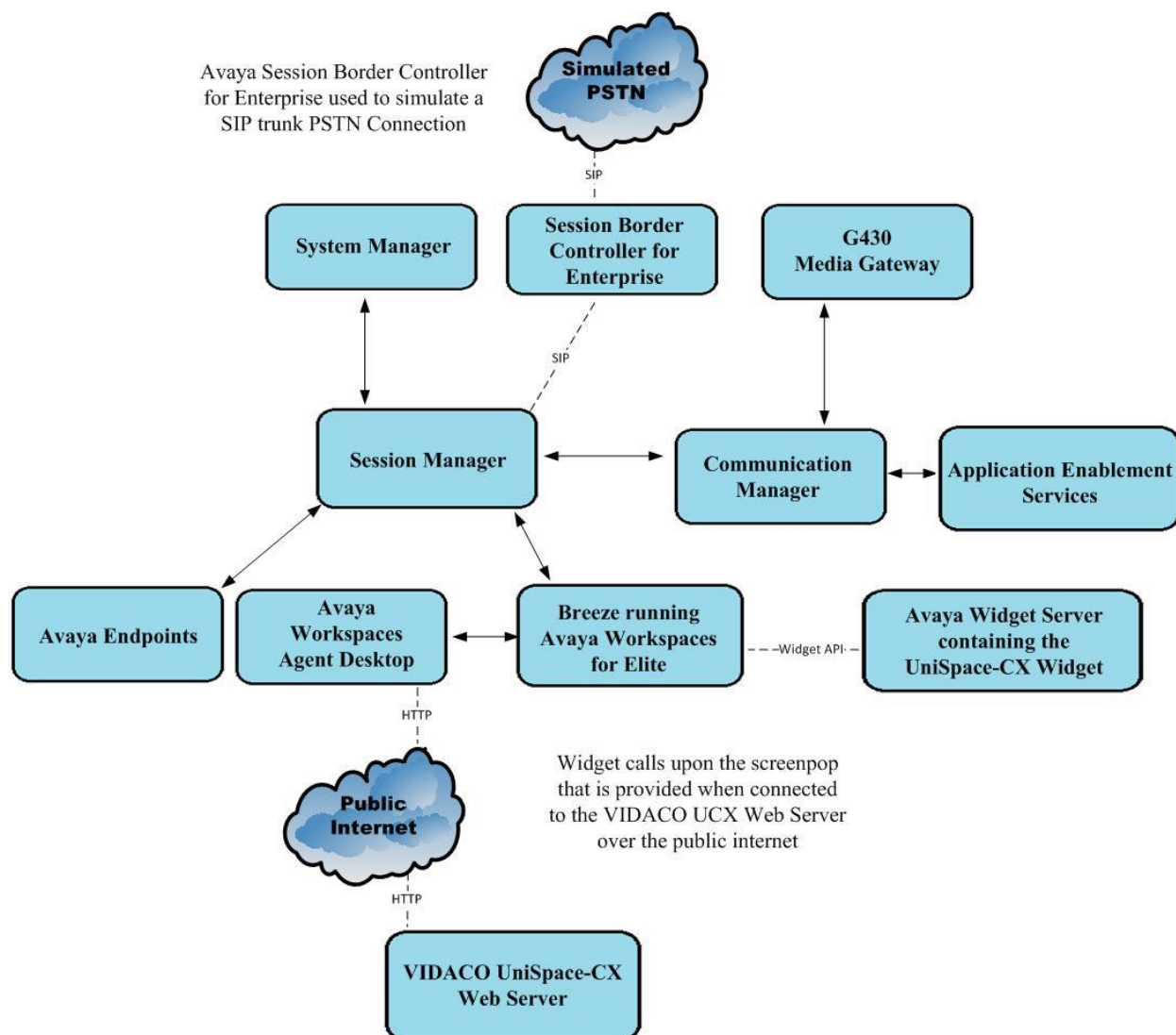
Figure 1: Network solution of VIDACO UniSpace-CX© v2022.R1 and Avaya Workspaces for Elite R3.8.1.1

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Workspaces for Call Center Elite	3.8.1.1
Avaya Breeze® platform	3.8.1
Avaya Aura® System Manager running on a virtual server	10.1.0.0 Build No. – 10.1.0.0.537353 SW Update Revision No: 10.1.0.0.0614254
Avaya Aura® Session Manager running on a virtual server	10.1 Build No. – 10.1.0.0.1010105
Avaya Aura® Communication Manager running on a virtual server	10.1 Update ID 01.0.974.0-27372
Avaya Aura® Application Enablement Services running on a virtual server	10.1 Build 10.1.0.2.0.12-0
Avaya Session Border Controller for Enterprise	8.1.3.0-31-21052
Avaya G430 Media Gateway	41.16.0/1
Avaya J179 H.323 Deskphone	6.8304
Avaya J159 SIP Deskphone	4.0.7.1.5
VIDACO UniSpace-CX©	2022.R1

5. Configure Avaya Control Manager

This section provides the procedures for configuring the Widget Library on Avaya Control Manager. Avaya Control Manager is used in the provisioning of Workspaces for Elite and although the general configuration of Workspaces for Elite is not covered in these Application Notes, the following screens are specific to the location of the Widget Library.

Log into Avaya Control Manager by opening a web browser to the Control Managers IP address. Enter the appropriate credentials and click on **Log in**.
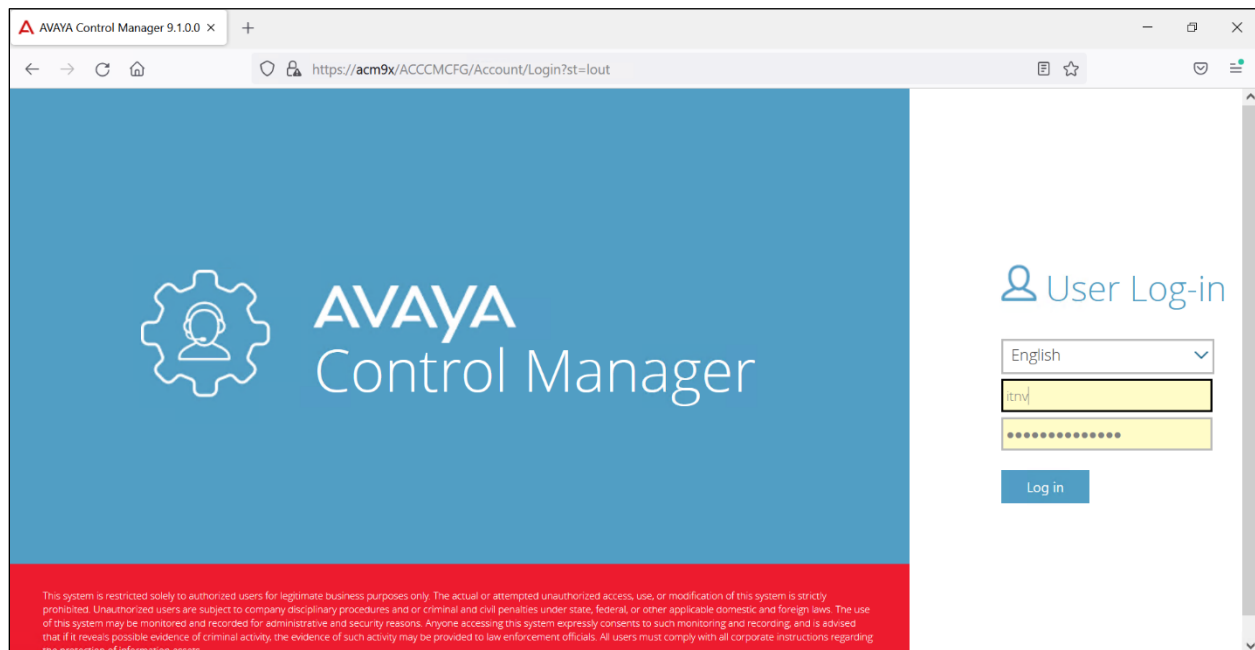
Navigate to **Configuration → Customer Engagement → Workspaces for Elite**, some of which is shown below.
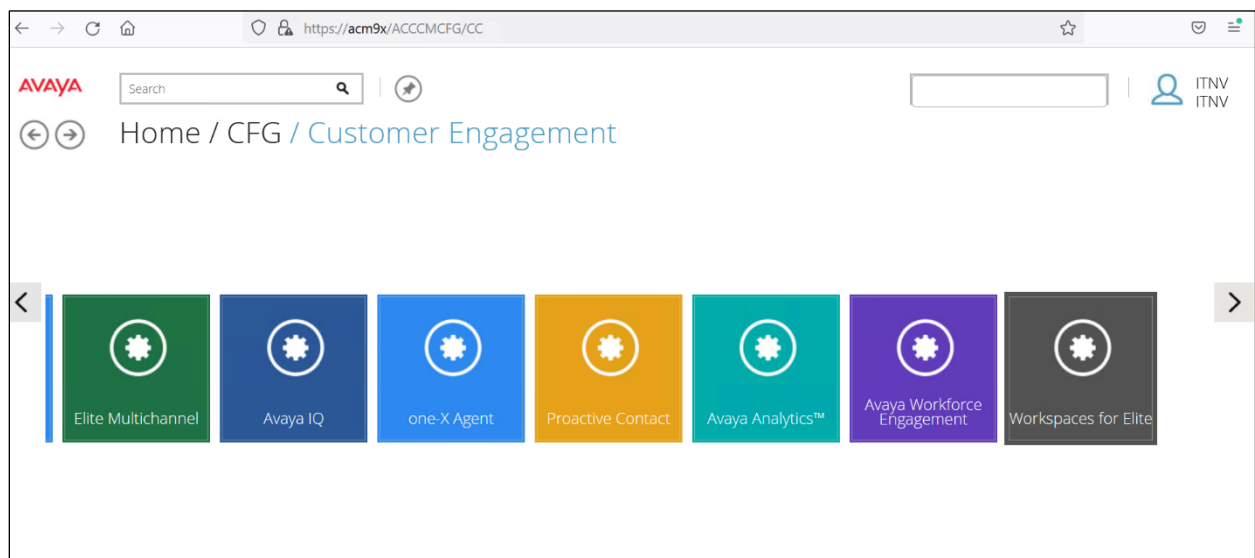
Double-click on the server listed at the bottom of the screen, shown below.
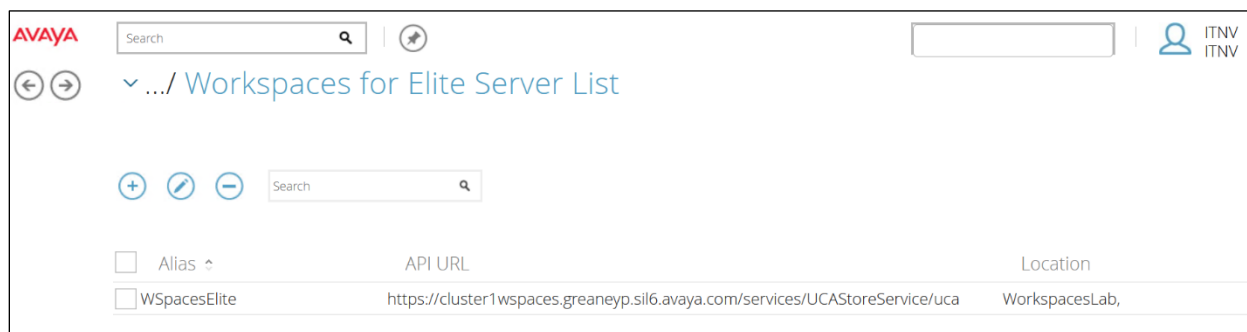
Navigate to **System Properties**, highlighted.
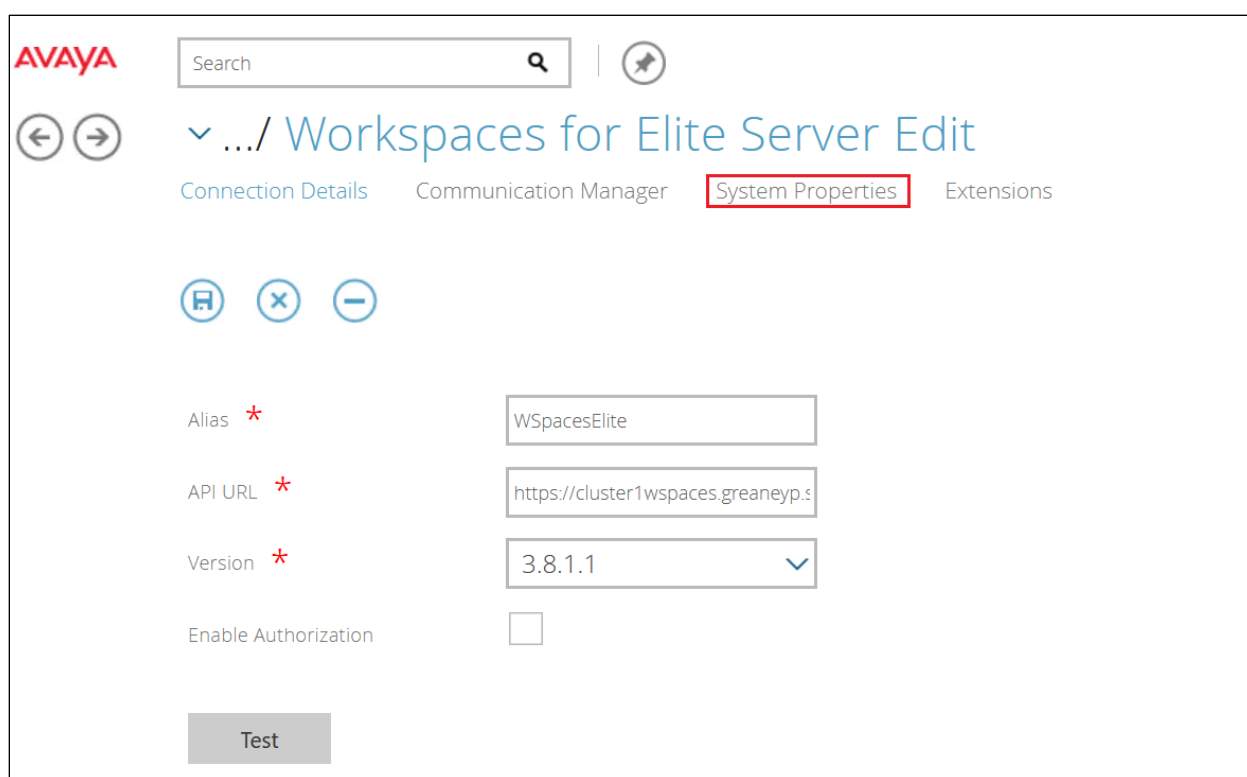
Under the **Widget Library** section in the main window, ensure that **Enable An External Widget Library** is ticked and enter the **Workspaces Library URL**, as shown below. The example below shows that the Windows 2016 server IP address **10.10.40.7** was added as this server running IIS hosts the library.
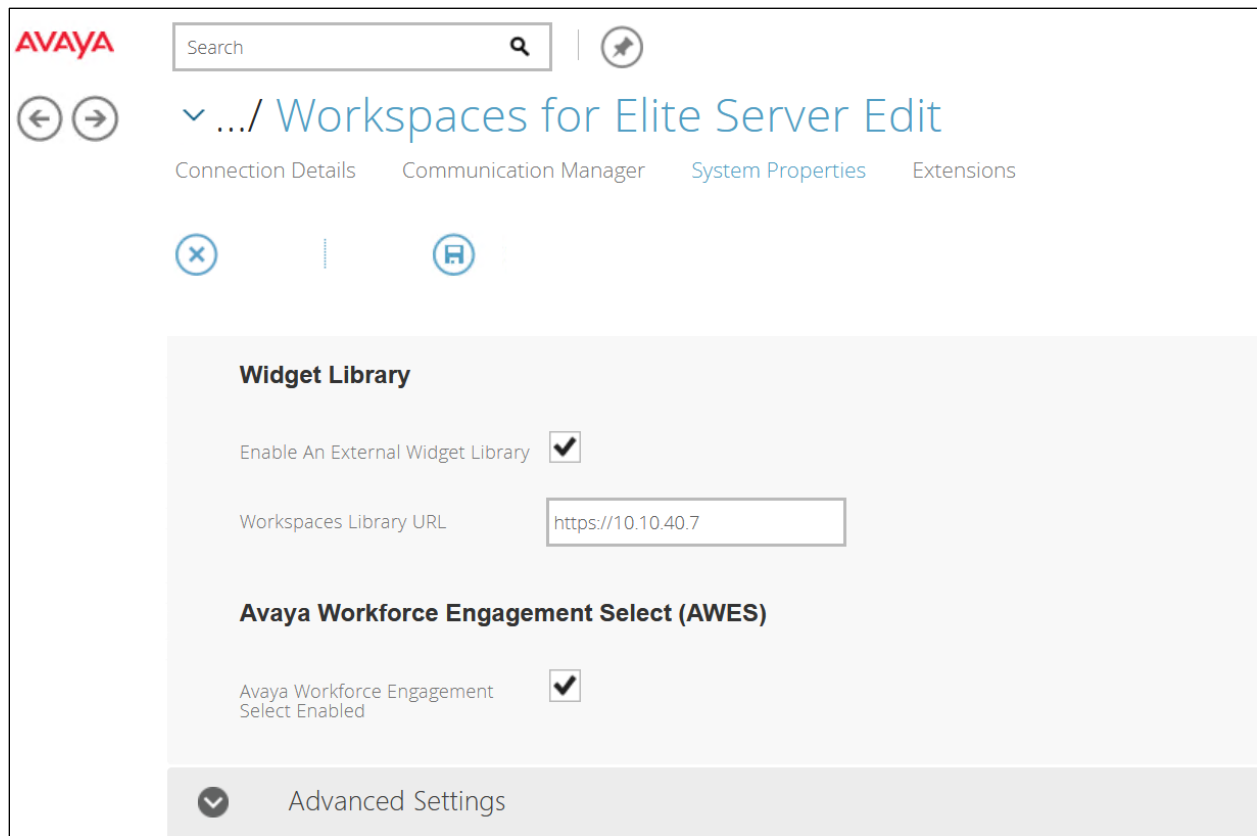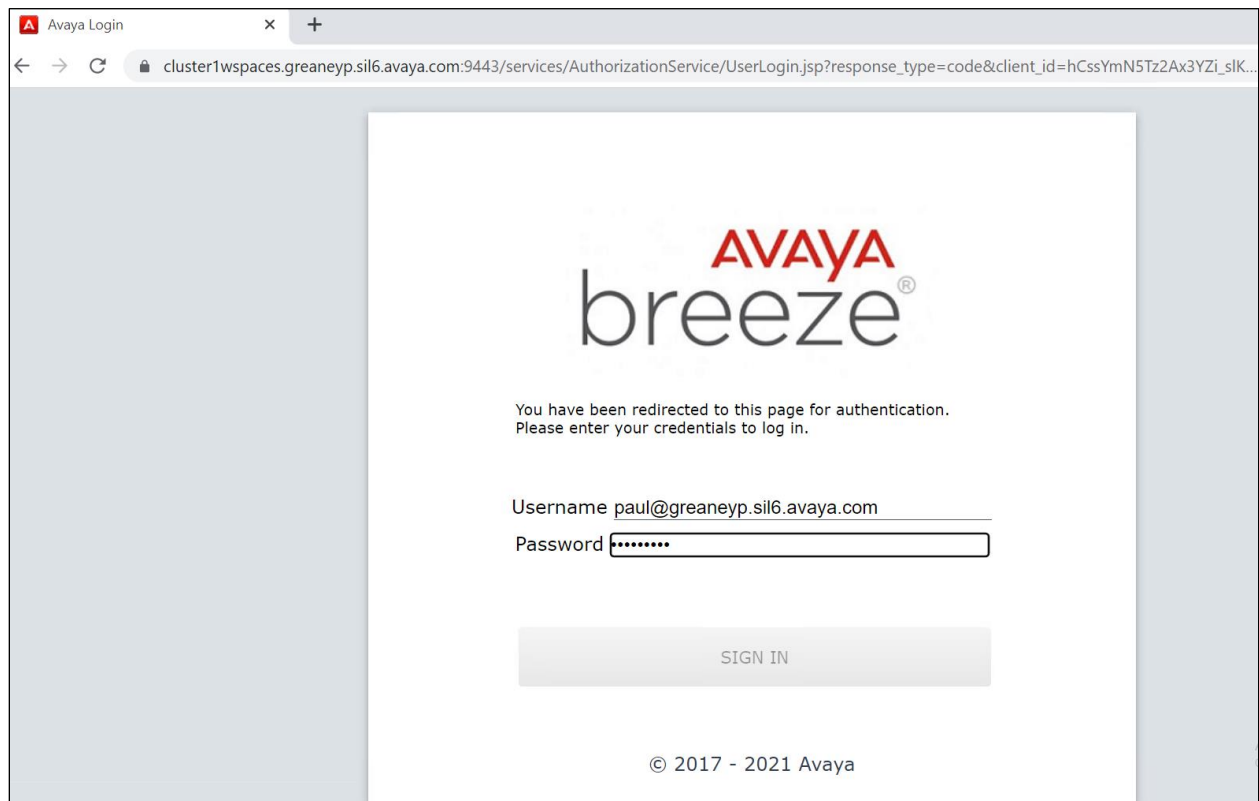
6. Configure Avaya Workspaces for Elite

For compliance testing two widgets were added to Workspaces, one for the agent desktop upon login and another for a screen pop when a call is presented to the agent. These UCX Widgets must be imported into Workspaces and the widget folders added to the Workspaces external widget library.
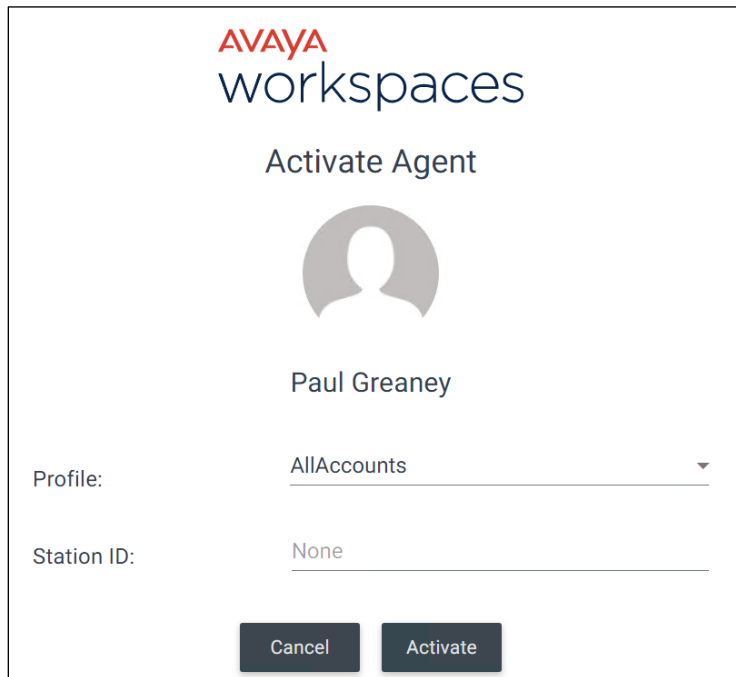
6.1. Import the UCX Widget

Open a browser to the Workspaces cluster, as shown below. Log in using a user with administrative rights on Workspaces. This user must have administrative rights to allow configuration on the widget to take place.

PG; Reviewed:
SPOC 12/2/2022
Solution & Interoperability Test Lab Application Notes
©2022 Avaya Inc. All Rights Reserved.
10 of 25
UCX_WSfE381

Click on **Activate** to continue with the login process.
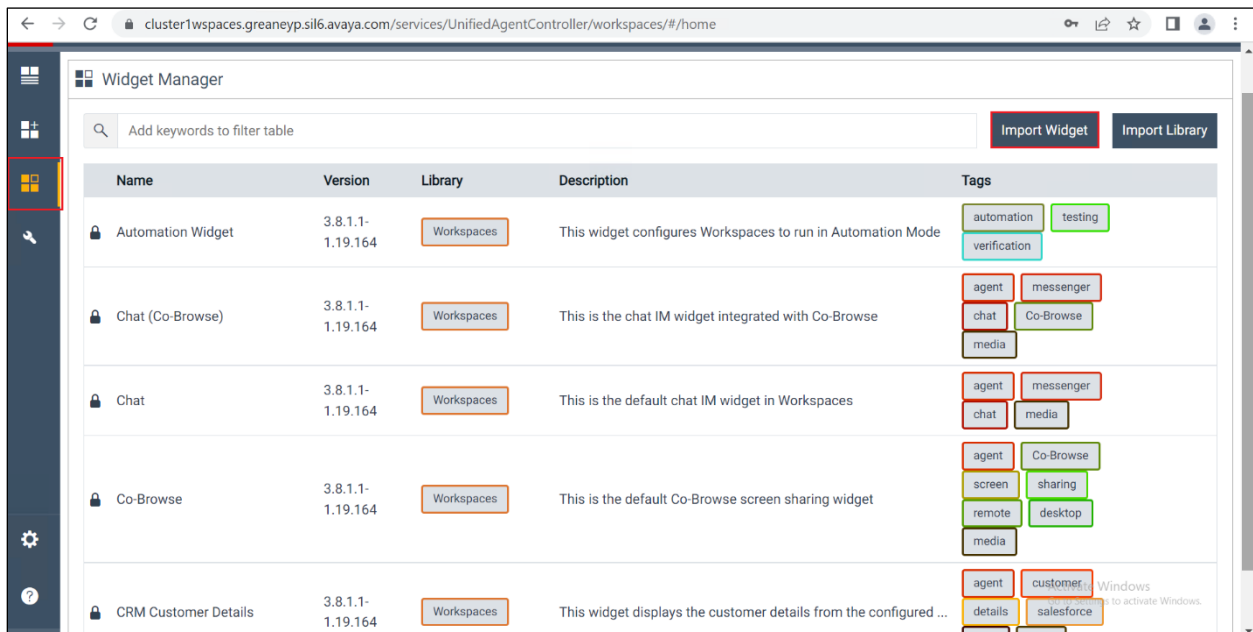
Click on the **Widget Manager** icon, highlighted in the left window, and click on **Import Widget** in the main window.

Browse to the location of the **.json** file that is associated with the Widget in question and click on **Open**.
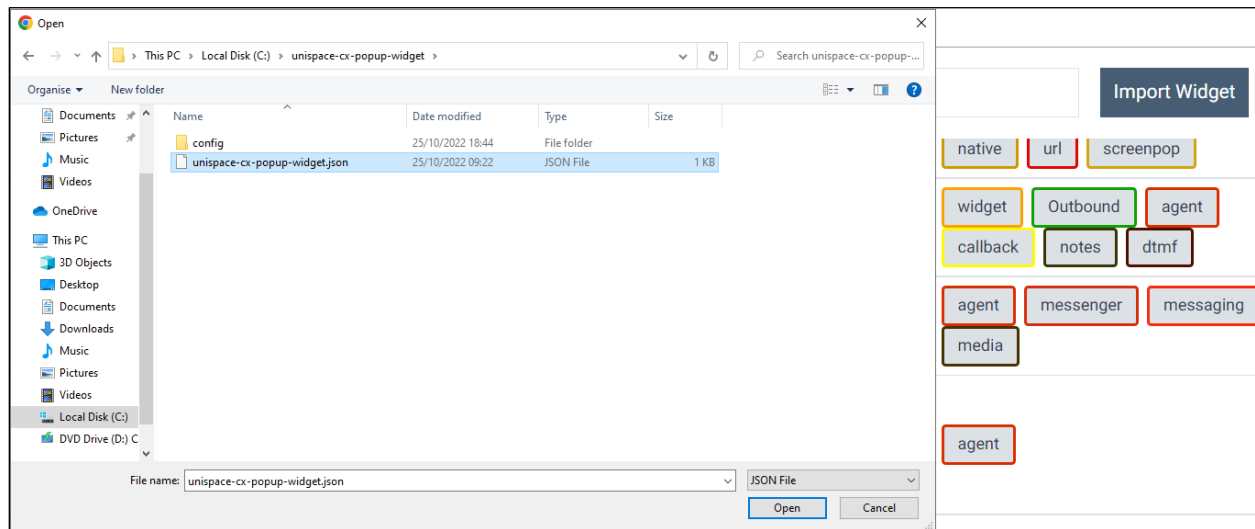
Two widgets were imported, and both are visible at the bottom of the screen. These are **Unispace Cx Home Widget** and **Unispace Cx Popup Widget**.
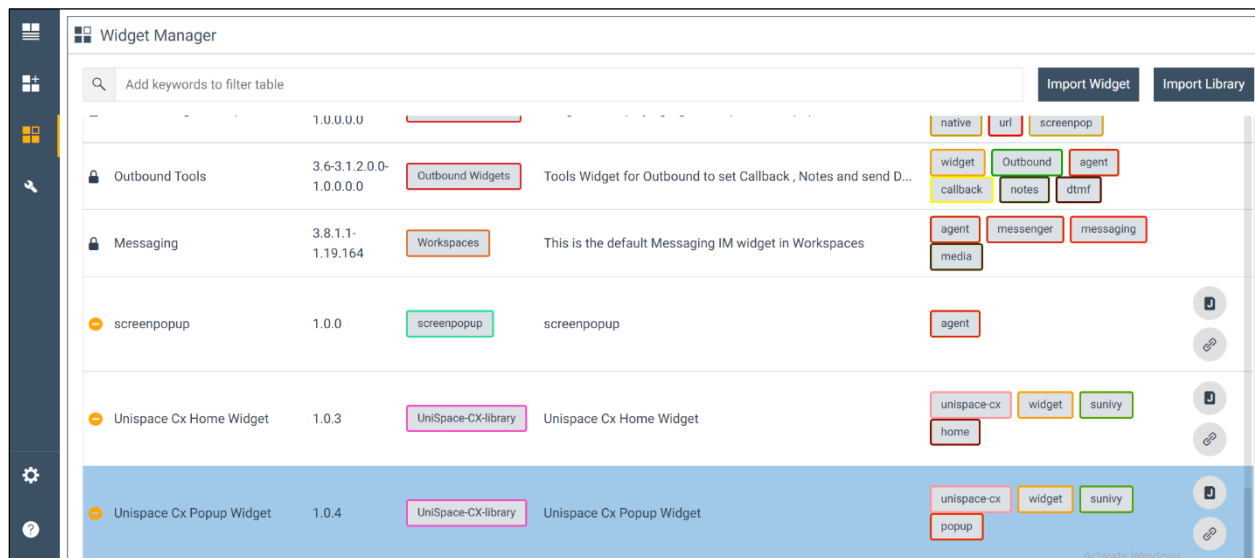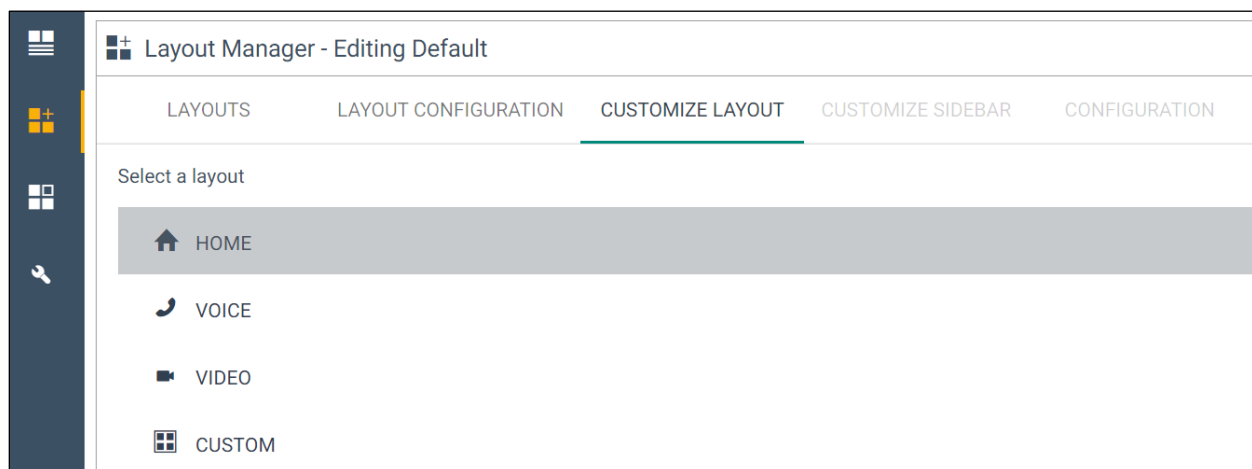
6.2. Configure the UCX Widget

Both the Unispace Cx Home Widget and Unispace Cx Popup Widget need to be configured on the Workspaces Layout Manager. The Unispace Cx Home Widget was configured to pop when the agent logs in and the Unispace Cx Popup Widget configured to pop when a voice call is presented to the agent.

Click on the **Layout Manager** icon in the left window, ensure that **ELITE** is selected as the layout and edit the **Default** layout, as shown below.

Note: A new layout may also be added, but for compliance testing the simplest route was taken and that was to alter/edit the existing default layout.
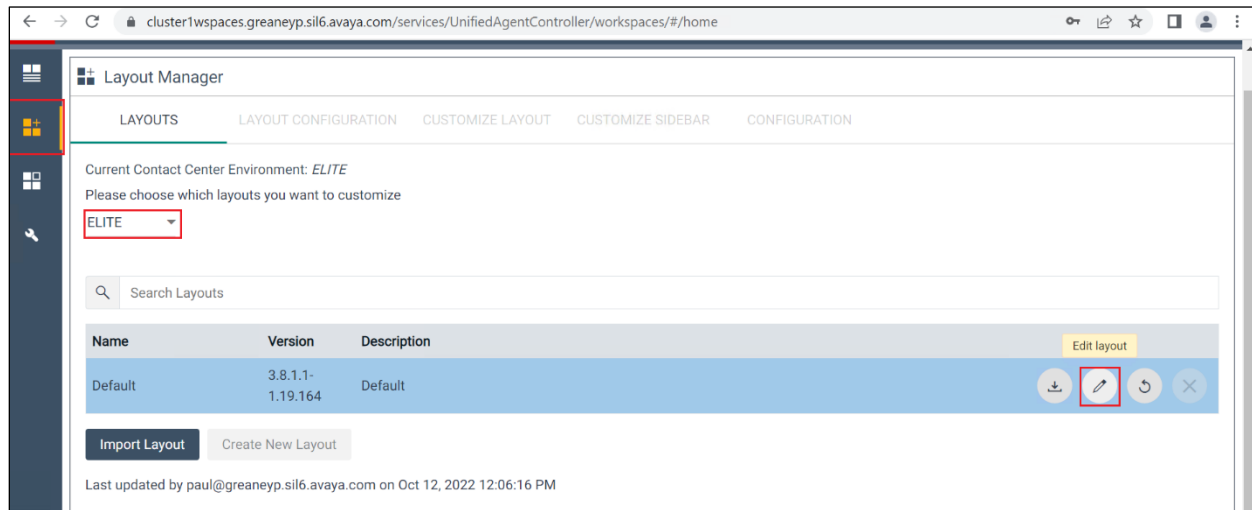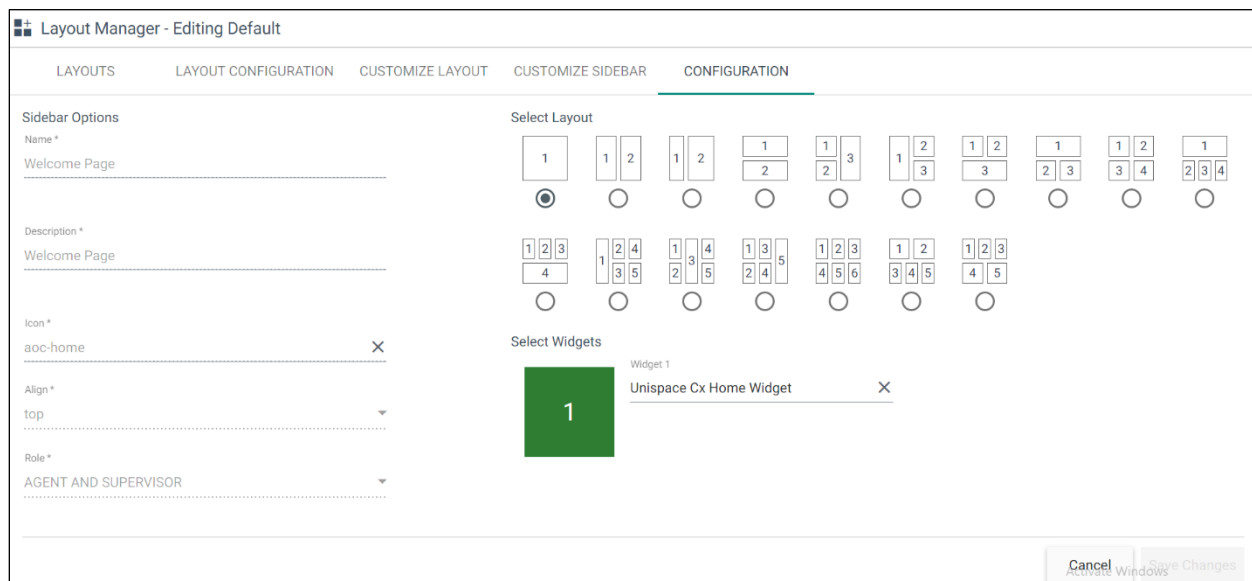

Navigate to the **Customize Layout** tab. Click on **Home**, as we are dealing with what the agents sees when they log in.

PG; Reviewed:
SPOC 12/2/2022

Solution & Interoperability Test Lab Application Notes
©2022 Avaya Inc. All Rights Reserved.

13 of 25
UCX_WSfE381

Click in the **Edit** icon opposite the **Welcome Page**, this will allow the alteration on what is shown when the agent logs in.
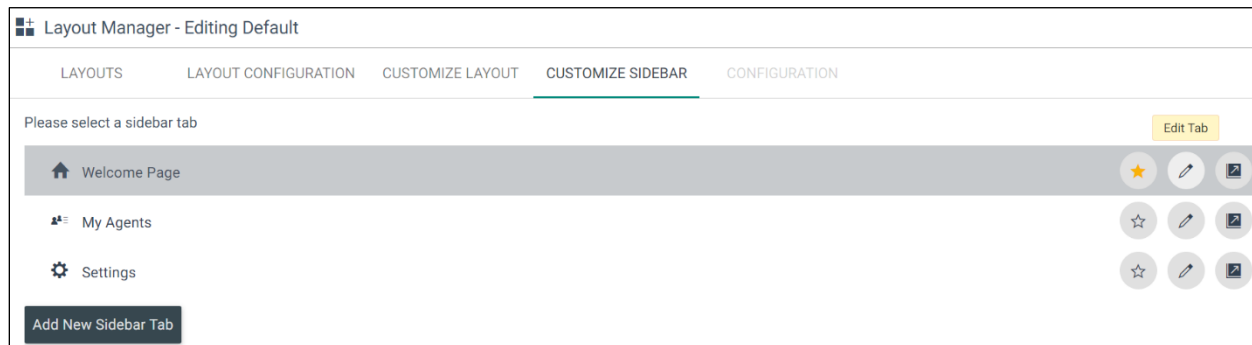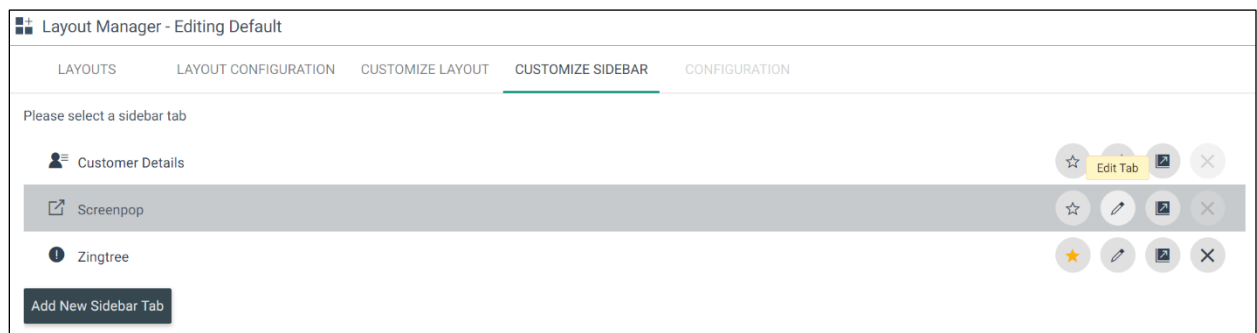

The layout type is chosen, and the **Widget** is selected. The **Unispace Cx Home Widget** is chosen for the **Welcome Page**, as shown below. **Save Changes** (not clearly seen) at the bottom right of the screen is clicked to save these changes.

Navigate to the **Customize Layout** tab. Click on **Voice**, as this governs what happens when a voice call is received by the Workspaces agent.
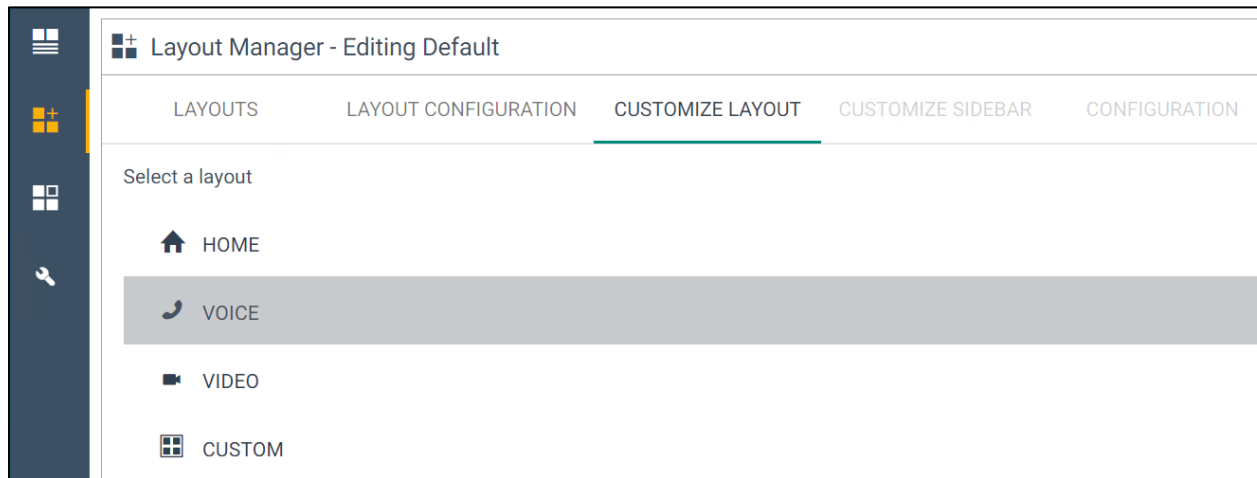
Click on the **Edit** icon opposite **Screenpop**.

Navigate to the **Configuration** tab. There are a number of different ways to configure the presentation of the screen pop, for compliance testing a simple screen pop that filled the agents screen was chosen. The **Unispace Cx Popup Widget** is chosen for the **Screenpop**, as shown below. **Save Changes** (not clearly seen) at the bottom right of the screen is clicked to save these changes.
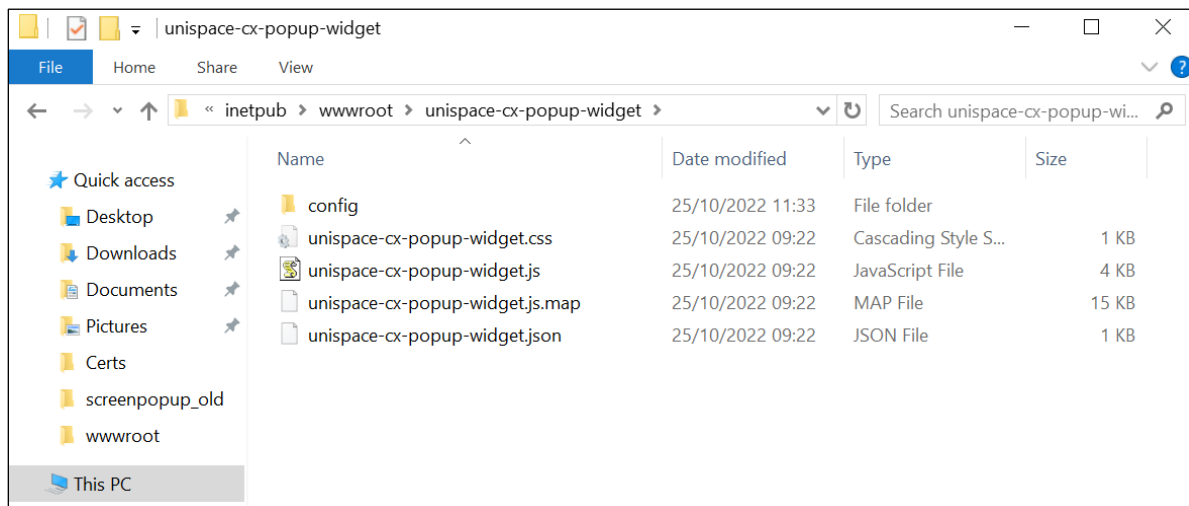
6.3. Import the UCX Widget Library

The Widget folder is added to the web server, the Widget folder must be hosted on the widget library using a web server. Any standard web server can be used e.g., http-server, nginx, tomcat. For compliance testing a Windows 2016 server running IIS was used. Note that both the Unispace Cx Home Widget and Unispace Cx Popup Widget were added to the **wwwroot** folder. The procedure below shows the **Unispace Cx Popup Widget** being added.
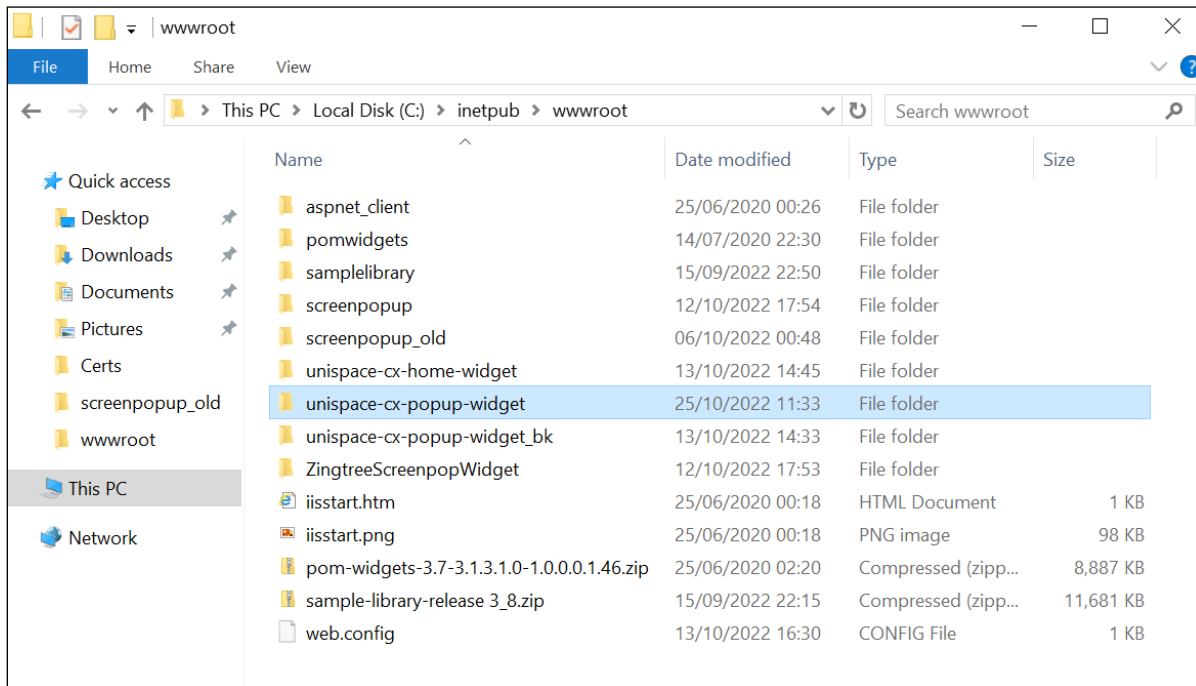
This particular Widget contained the following files. The **Java Script** file can be altered to include various rules for the screen pop to be called upon.

Repeat the same procedure for the Unispace Cx Home Widget.

PG; Reviewed:
SPOC 12/2/2022
Solution & Interoperability Test Lab Application Notes
©2022 Avaya Inc. All Rights Reserved.
17 of 25
UCX_WSfE381

7. Verification Steps

To verify the connection between UCX and the Avaya platform, calls are made to VDN's answered by an agent logged into Workspaces, and the screen pops that are invoked by the UCX Widget are observed.

Open a web browser to the Workspaces cluster in order to log an agent into Workspaces. Enter the appropriate credentials and click on **Sign In**.
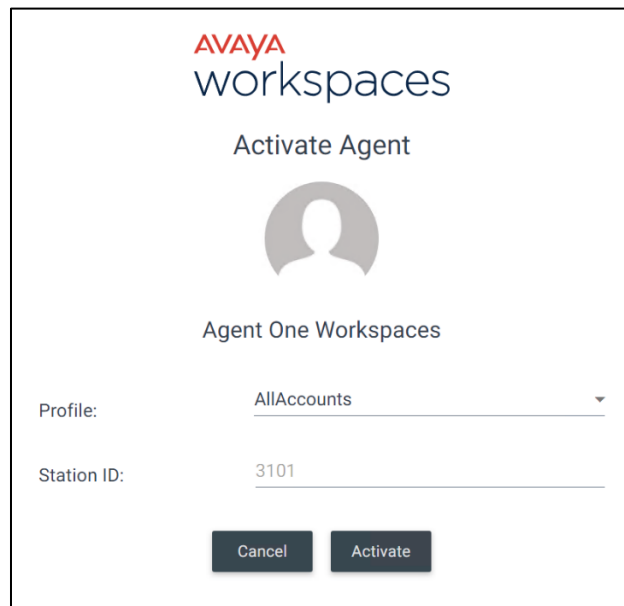
Click on **Activate** to proceed.

Once logged in, click on **Start Work**.
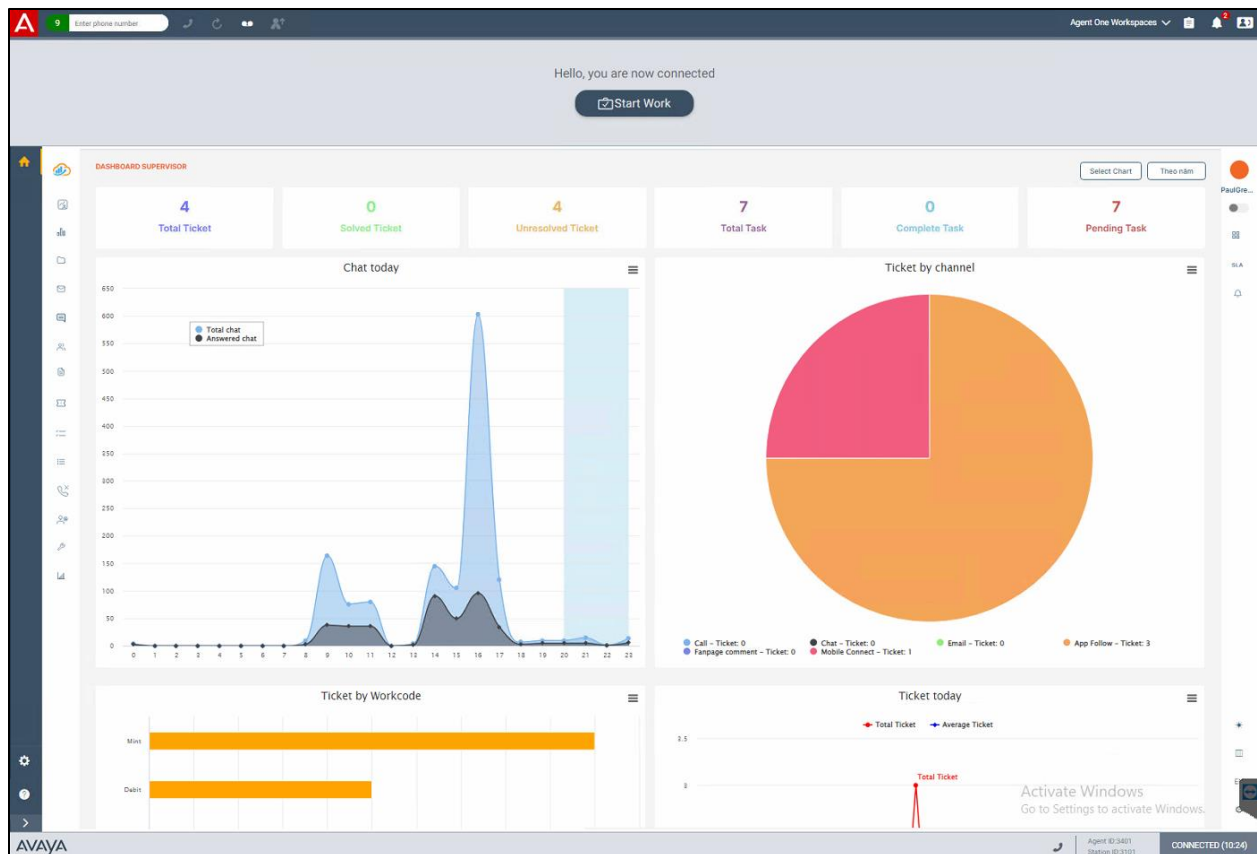
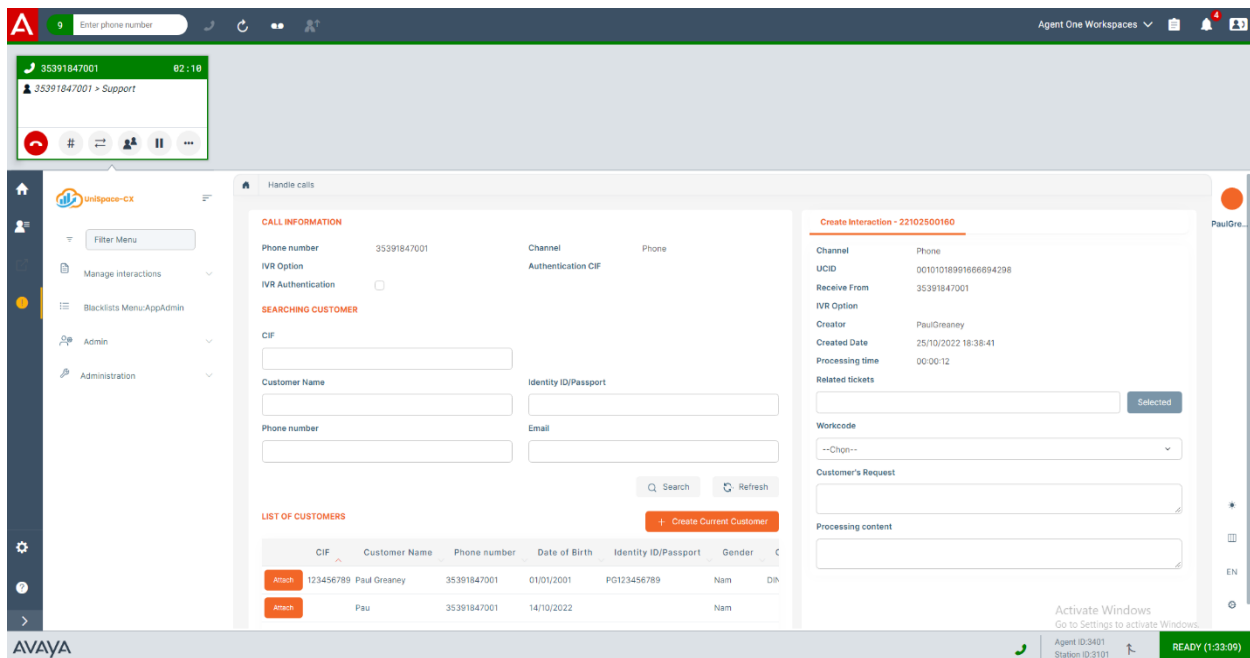After **Start Work** button is pressed (see previous page), the agent is now ready to receive calls. The Unispace Cx Home Widget has called upon the Welcome Page to be populated with the details, as shown below.
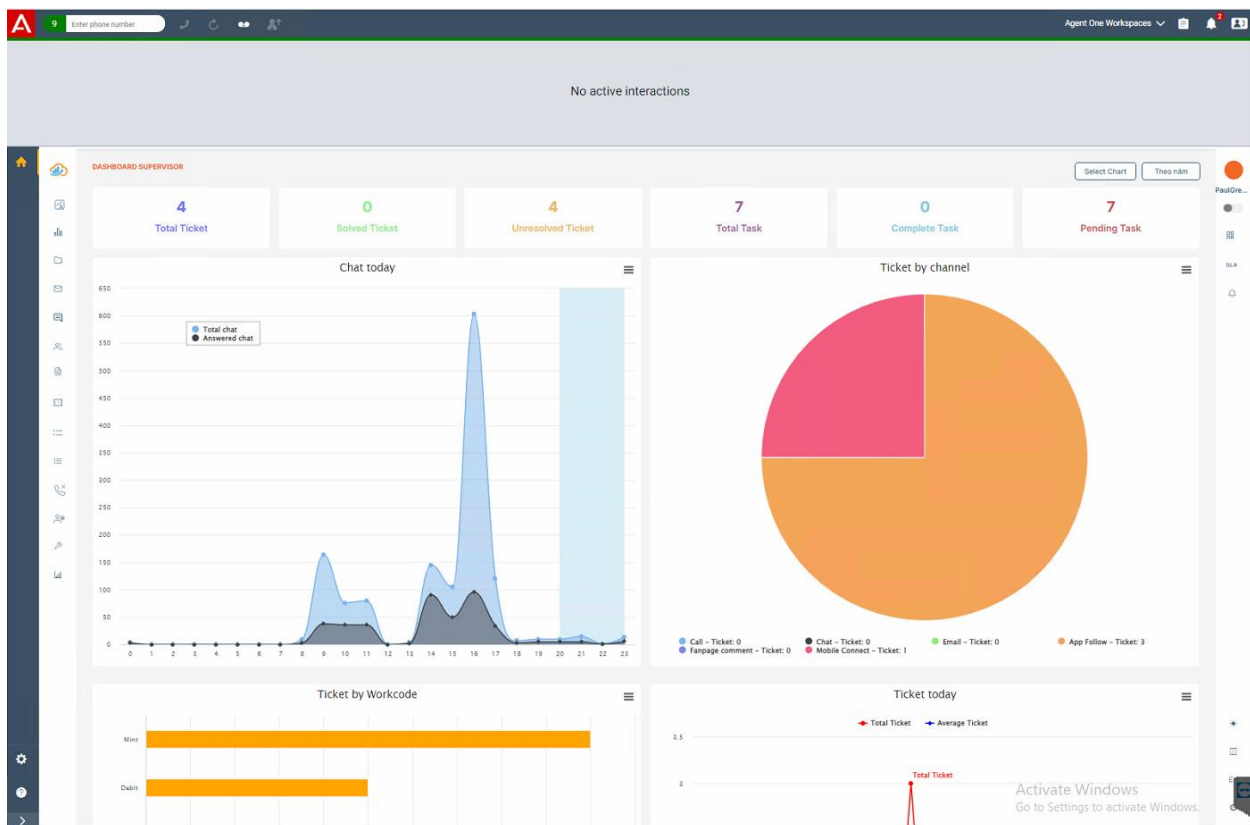
A call was placed to the VDN associated with the **Support** skillset from **35391847001**. Each extension can be configured to answer the call automatically, using 'auto-answer', which allows the call to get answered without the requirement of the agent to press the answer button. Most of the calls for compliance testing were answered manually, which is illustrated by the picture below showing the incoming call and the ring time.
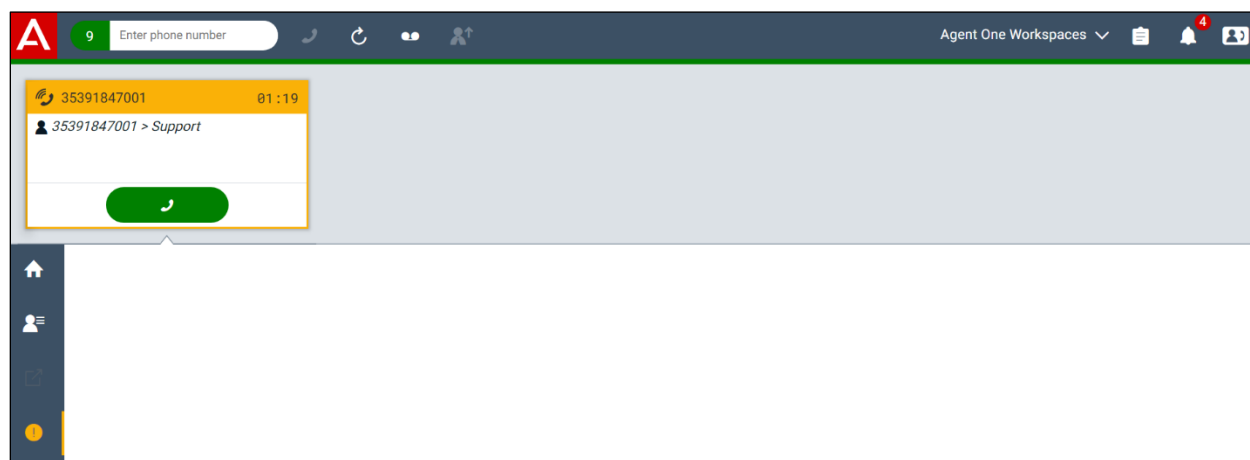
The following screen pop is called upon by the Unispace Cx Popup Widget when the call is answered. This screen pop shows the customer data as well as the customer history. Customers recognized by the system will be displayed in the list of customers.

PG; Reviewed:
SPOC 12/2/2022
Solution & Interoperability Test Lab Application Notes
©2022 Avaya Inc. All Rights Reserved.
21 of 25
UCX_WSfE381

In the list of customers, the system may automatically identify the current caller. The agent can click on the **Attach** button to attach that customer's information to the current interaction, the system will load it to the interaction creation screen with selected customer details.

CALL INFORMATION

Phone number	35391847001	Channel	Phone
IVR Option		Authentication CIF	
IVR Authentication	⬡		

SEARCHING CUSTOMER

CIF

[   ]

Customer Name	Identity ID/Passport
[ ]	[ ]

Phone number	Email
[ ]	[ ]

     🔍 Search   🔄 Refresh

LIST OF CUSTOMERS   **+ Create Current Customer**

	CIF ⌃	Customer Name	Phone number	Date of Birth	Identity ID/Passport	Gender	C
Attach	123456789	Paul Greaney	35391847001	01/01/2001	PG123456789	Nam	DIN
Attach		Pau	35391847001	14/10/2022		Nam	

Clicking on the Attach button (from the previous page), the following window is displayed with the **Customer Information**, **Contact History** and **Service Products** tabs. Details on the customer can be viewed by pressing the **Customer Information** tab, as shown below.

The **Contact History** tab gives details on when the various customers called, as well as details on their requests and other such details.

8. Conclusion

These Application Notes describe the configuration steps required to integrate Vien Dat Trading and Services Company LTD., UniSpace-CX© v2022.R1 with Avaya Workspaces for Call Center Elite R3.8.1.1 and Avaya Aura® Communication Manager R10.1. All feature and serviceability test cases were completed successfully, with any observations noted in **Section 2.2**.

9. Additional References

This section references the product documentation that is relevant to these Application Notes. Documentation for Avaya products may be obtained via http://support.avaya.com

[1] *Deploying Avaya Workspaces for Call Center Elite. Release 3.8, Issue 5, May 2022.*
[2] *Using Avaya Workspaces for Call Center Elite. Release 3.8, Issue 2, April 2021.*
[3] *Avaya Workspaces for Elite 3.8.0.0 Solution Release Notes.*
[4] *Deploying Avaya Breeze® platform. Release 3.8.1, Issue 2, November 2021.*
[5] *Administering Avaya Aura® Communication Manager. Release 10.1, Issue 1, December 2021.*
[6] *Administering Avaya Aura® Application Enablement Services. Release 10.1.x, Issue 4, April 2022.*

Documentation related to UniSpace-CX© may directly be obtained from Vien Dat Trading and Services Company LTD.