



## **Application Notes for Interactions Curo Speech Automated Speech Recognizer and Text-to-Speech Server with Avaya Aura® Experience Portal using MRCP V2 – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required to integrate Interactions Curo Speech Automated Speech Recognizer and Text-to-Speech Server with Avaya Aura® Experience Portal.

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

The objective of compliance test was to validate interoperability of Interactions Curo Speech (hereafter referred as Curo Speech) Automated Speech Recognizer and Text-to-Speech Server with Avaya Aura® Experience Portal (hereafter referred as Experience Portal).

Curo Speech provides a complete set of speech recognition and text-to-speech technologies for use in interactive voice response (IVR) applications. The product set includes the Curo Automatic Speech Recognizer (ASR) and Text-to-Speech (TTS) Server. Both products are used in conjunction with the Curo Media Server which provides an interface to Experience Portal using the Media Resource Control Protocol Version 2 (MRCP V2) and Transport Layer Security (TLS) or Transmission Control Protocol (TCP).

## 2. General Test Approach and Test Results

General test approach was to test various VoiceXML scripts that exercise various types of grammars in Curo ASR and TTS. A predefined set of VoiceXML scripts tested built-in DTMF, voice grammars, and menu grammars.

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

### 2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability tests. Feature tests focused on the ability of Curo ASR and TTS to successfully exercise appropriate grammar and return expected results using MRCP V2 with TCP and TLS.

Serviceability testing focused on verifying the ability of Curo ASR and TTS server to recover from adverse conditions, such as restart, power failures and network disconnects.

### 2.2. Test Results

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

- Voice change within a single TTS request is currently not supported by Curo Speech.
- Two simultaneous calls using TLS MRCP V2 to Curo Speech to query the ASR resource caused the second call not be connected to Curo Speech server. The temporary workaround was that the second call should be made after 10-15 seconds of the first call; the issue does not occur on TCP MRCP V2 and is currently under investigated by Avaya development team.

- Curo Speech server sent an extra BYE SIP request for every call coming to Curo Speech server; this issue did not have any impact on the caller but from SIP perspective it is not a standard behavior. The issue will be addressed in next release of Curo Speech.

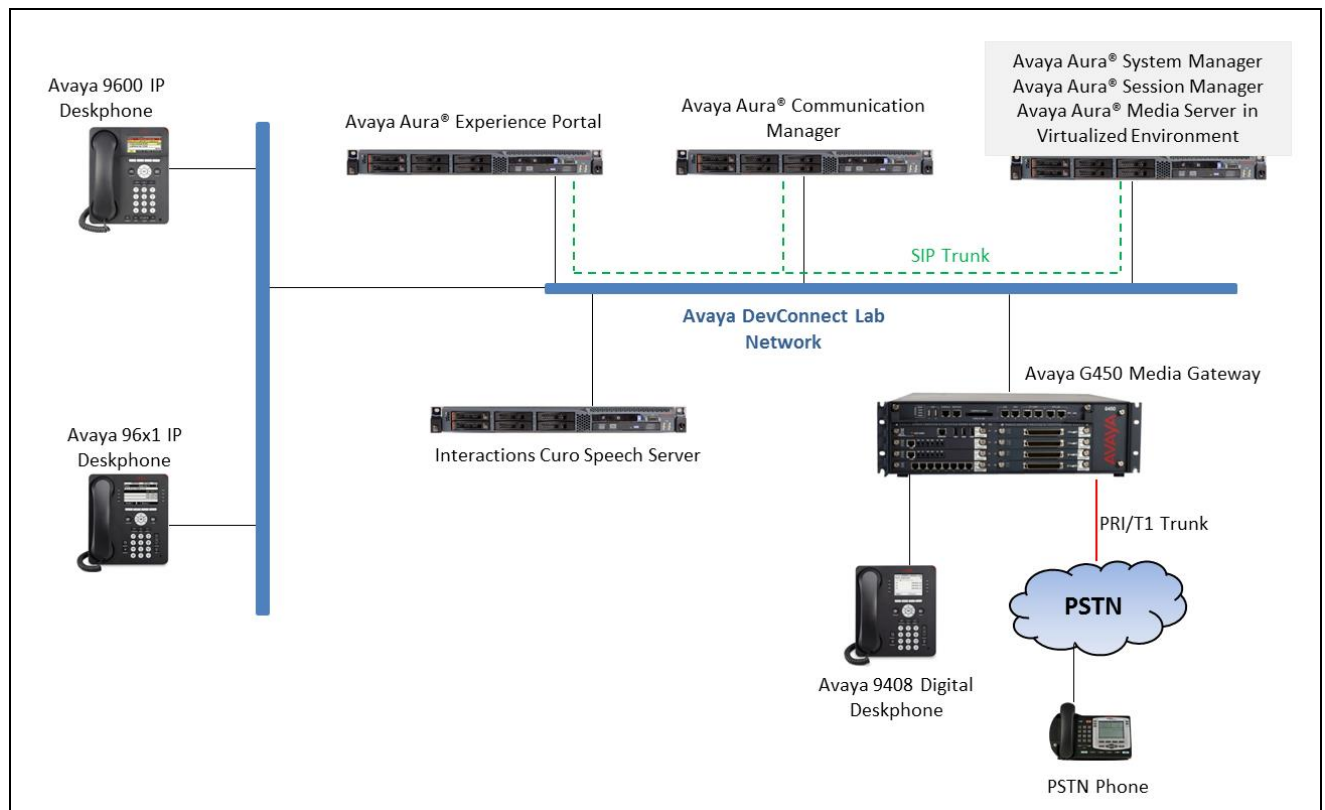
## 2.3. Support

To obtain technical support for Interactions Curo:

- **Web:** <http://www.interactions.com/>
- **Phone:** (866) 637-9049

## 3. Reference Configuration

Following diagram shows the configuration used during interoperability compliance test. Reference configuration consisted of: Avaya Aura® Experience Portal, Avaya Aura® Communication Manager, Avaya Aura® Session Manager, Avaya Aura® System Manager, Avaya G450 Media Gateway, Avaya Aura® Media Server, Avaya 9600 Series IP Deskphones and Interactions Curo Speech server. Simulated PSTN connected to the G450 via PRI/T1 trunk.



**Figure 1: Test Configuration Diagram**

## 4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager running on Virtualized Environment	R017x.00.0.441.0 Patch 23523
Avaya Aura® System Manager running on Virtualized Environment	7.0.1.2
Avaya Aura® Session Manager running on Virtualized Environment	7.0.1.2
Avaya Aura® Media Server running on Virtualized Environment	7.7.0.34
Avaya Aura® Experience Portal running on Virtualized Environment	7.1.0 Designer Patch Pre1117
Avaya G450 Media Gateway	37.19.0
Avaya 9641 H323 IP Deskphone	6.6.4
Avaya 9611 SIP IP Deskphone	7.0.1.29
Avaya 9640 H323 IP Deskphone	3.26A
Interactions Curo Speech running on Virtualized Environment	7.2

## 5. Configure Avaya Aura® Communication Manager

This document assumes installation and configuration of Avaya Aura® Communication Manager (CM) are already in place. For more information on how to configure CM, please refer to **Section 11**.

## 6. Configure Avaya Aura® Experience Portal

Experience Portal is configured via the Experience Portal Manager (EPM) web interface, to access the web interface, enter **http://<ip-addr>/** as the URL in a web browser, where <ip-addr> is the IP address of the EPM. Log in using the appropriate credentials.

**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 Experience Portal.

**AVAYA**

Welcome, epadmin  
Last logged in today at 1:21:13 PM PST

**Avaya Aura® Experience Portal 7.1.0 (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.

License grace period for Experience Portal will end on Jan 16, 2017 10:46:53 AM PST.

### 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.

**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**
- **Multi-Media Configuration**

## 6.1. Administer VoIP Connection

On the left pane, click on the **VoIP Connections** under **System Configuration** (not shown). To add a **SIP Connection**, click on the **SIP** tab on **VoIP Connections** page (not shown).

- **Name:** Enter a descriptive name.
- **Enable:** Select **Yes** radio button.
- **Proxy Transport:** select **TLS** if SIP connection to Session Manager is using TLS otherwise select **TCP**.
- **Proxy Servers:** Enter the signaling IP address of Session Manager in the Address box.
- **SIP Domain:** Enter a SIP domain “bvwddev.com” as configured in **Section 7.3**.
- In the **Call Capacity** section, enter a number of SIP call that in the **Maximum Simultaneous Calls** and select **All call can be either inbound or outbound** option. All other fields can be left at default.

Click **Save** button to save changes.

**AVAYA** Welcome, epadmin  
Last logged in Dec 28, 2016 at 6:41:00 AM PST

**Avaya Aura® Experience Portal 7.1.0 (ExperiencePortal)** Home Help Logoff

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](#) > [VoIP Connections](#) > Add SIP Connection

### Add SIP Connection

Use this page to add a new SIP connection.

Name:

Enable: ☒ Yes ☐ No

Proxy Transport:

☒ Proxy Servers ☐ DNS SRV Domain

Address	Port	Priority	Weight	
10.33.1.12	5061	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

Scroll down to **SRTP** section, configure two SRTP profiles as shown in the **Configured SRTP List** below.

**AVAYA** Welcome, eadmin  
Last logged in today at 1:21:13 PM PST

**Avaya Aura® Experience Portal 7.1.0 (ExperiencePortal)** Home ? Help Logoff

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**
- ▼ **Multi-Media Configuration**

B and F: 4000 milliseconds

**Call Capacity**

Maximum Simultaneous Calls: 50

☒ All Calls can be either inbound or outbound  
☐ Configure number of inbound and outbound calls allowed

**SRTP**

Enable: ☒ Yes ☐ No  
 Encryption Algorithm: ☒ AES\_CM\_128 ☐ NONE  
 Authentication Algorithm: ☒ HMAC\_SHA1\_80 ☐ HMAC\_SHA1\_32  
 RTCP Encryption Enabled: ☐ Yes ☒ No  
 RTP Authentication Enabled: ☒ Yes ☐ No

Add

**Configured SRTP List**

SRTP-Yes,AES\_CM\_128,HMAC\_SHA1\_80,RTCP Encryption-Yes,RTP Authentication-Yes  
 SRTP-Yes,AES\_CM\_128,HMAC\_SHA1\_80,RTCP Encryption-No,RTP Authentication-Yes

Remove

Save Apply Cancel Help

## 6.2. Administer Speech Server

### 6.2.1. Administer ASR

On the left pane, navigate to **System Configuration** → **Speech Servers** (not shown). To add an **ASR** server, click on **ASR** tab (not shown) and click **Add** (not shown). Enter a **Name**, set **Enable** to **Yes** and set **Engine Type** to **Nuance**. Fill in the IP address of Curo Speech server in **Network Address**. In **Base Port**, fill in “15060” for **TCP** and “25060” for **TLS**, in this case the port “25060” was used for TLS. Enter appropriate value in **Total Number of Licensed ASR Resources**, set **New Connection per Session** to **Yes**, set **Languages** to **English(USA) en-US**. In the **MRCP** section, select **MRCP V2** in the **Protocol** dropdown menu, select **TLS** in the **Transport Protocol** dropdown menu and enter the port “25060” in the **Listener Port** field.

The screenshot displays the 'Change ASR Server' configuration page in the Avaya Aura Experience Portal 7.1.0. The interface includes a left-hand navigation pane with categories like User Management, Real-time Monitoring, System Maintenance, System Management, System Configuration, Security, Reports, and Multi-Media Configuration. The main content area is titled 'Change ASR Server' and contains the following configuration fields:

- Name:** Curo
- Enable:** ☒ Yes ☐ No
- Engine Type:** Nuance (dropdown menu)
- Network Address:** 10.10.98.43
- Base Port:** 25060
- Total Number of Licensed ASR Resources:** 24
- New Connection per Session:** ☒ Yes ☐ No
- Languages:** English(Australia) en-AU, English(UK) en-GB, English(India) en-IN, English(Singapore) en-SG, English(South\_Africa) en-ZA, English(USA) en-US (selected)
- MRCP Section:**
  - Ping Interval:** 15 seconds
  - Response Timeout:** 4 seconds
  - Protocol:** MRCP V2 (dropdown menu)
  - Transport Protocol:** TLS (dropdown menu)
  - Listener Port:** 25060



Scroll down to **SRTP** section, select SRTP profile as shown in the **Configured SRTP List**. Click **Save** to save changes.

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**

► **Multi-Media Configuration**

**MRCP**

Ping Interval: 15 seconds

Response Timeout: 4 seconds

Protocol: MRCP V2

Transport Protocol: TLS

Listener Port: 25060

**SRTP**

Enable: ☒ Yes ☐ No

Encryption Algorithm: ☒ AES\_CM\_128 ☐ NONE

Authentication Algorithm: ☒ HMAC\_SHA1\_80 ☐ HMAC\_SHA1\_32

RTCP Encryption Enabled: ☐ Yes ☒ No

RTP Authentication Enabled: ☒ Yes ☐ No

Add

**Configured SRTP List**

SRTP-Yes,AES\_CM\_128,HMAC\_SHA1\_80,RTCP Encryption-Yes,RTP Authentication-Yes

Remove

Save

Apply

Cancel

Help

## 6.2.2. Administer TTS

On the left pane, navigate to **System Configuration** → **Speech Servers** (not shown). To add a **TTS** server, click on **TTS** tab (not shown) and click **Add** (not shown). Enter a **Name**, set **Enable** to **Yes** and set **Engine Type** to **Nuance**. Fill in the IP address of Curo Speech server in **Network Address**. In **Base Port**, fill in “15060.” Enter appropriate value in **Total Number of Licensed ASR Resources**, set **New Connection per Session** to **Yes**, set **Voices** to **English(USA) en-US Lisa F**. In the MRCP section, select **MRCP V2** and **TLS** in the **Protocol** and **Transport Protocol** dropdown menu, enter “15060” in the **Listener Port** field and keep other values at default.

The screenshot shows the 'Change TTS Server' configuration page in the Avaya Aura Experience Portal 7.1.0. The left sidebar contains a navigation tree with categories like Users, Real-time Monitoring, System Maintenance, System Management, System Configuration, Security, Reports, and Multi-Media Configuration. The 'System Configuration' section is expanded, showing 'Speech Servers'. The main content area is titled 'Change TTS Server' and includes a description: 'Use this page to change the configuration of a TTS server.' The configuration fields are as follows:

- Name:** CuroTTS
- Enable:** ☒ Yes ☐ No
- Engine Type:** Nuance (dropdown)
- Network Address:** 135.10.98.43
- Base Port:** 15060
- Total Number of Licensed TTS Resources:** 24
- New Connection per Session:** ☒ Yes ☐ No
- Voices:** A list box containing several voice options, with 'English(USA) en-US Lisa F' selected.
- MRCP Section:**
  - Ping Interval:** 15 seconds
  - Response Timeout:** 4 seconds
  - Protocol:** MRCP V2 (dropdown)
  - Transport Protocol:** TLS (dropdown)
  - Listener Port:** 15060

Scroll down to the **SRTP** section, add the SRTP profile as shown in the Configured SRTP List below.

The screenshot shows the 'SRTP' configuration page in the Avaya Aura Experience Portal 7.1.0. The left sidebar is the same as in the previous screenshot. The main content area is titled 'SRTP' and includes the following configuration fields:

- Enable:** ☒ Yes ☐ No
- Encryption Algorithm:** ☒ AES\_CM\_128 ☐ NONE
- Authentication Algorithm:** ☒ HMAC\_SHA1\_80 ☐ HMAC\_SHA1\_32
- RTCP Encryption Enabled:** ☐ Yes ☒ No
- RTP Authentication Enabled:** ☒ Yes ☐ No

Below the configuration fields is a table titled 'Configured SRTP List' with one entry: 'SRTP-Yes,AES\_CM\_128,HMAC\_SHA1\_80,RTCP Encryption-Yes,RTP Authentication-Yes'. To the right of the table is a 'Remove' button. At the bottom of the page are buttons for 'Save', 'Apply', 'Cancel', and 'Help'.

### 6.3. Administer Applications

Applications are needed to drive calls in Experience Portal. To add a new application, from the left pane, navigate to **System Configurations** → **Applications** and in the Application page click Add button (not shown). Below is the sample of application used during the compliance test. In the **Speech Server** section, select the ASR and TTS servers as configured in **Section 6.2**.

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

### Change Application

Use this page to change the configuration of an application.

Name: BothMenu

Enable: ☒ Yes ☐ No

Type: VoiceXML

Reserved SIP Calls: ☒ None ☐ Minimum ☐ Maximum

Requested:

#### URI

☒ Single ☐ Fail Over ☐ Load Balance

VoiceXML URL:  **Verify**

Mutual Certificate Authentication: ☐ Yes ☒ No

Basic Authentication: ☐ Yes ☒ No

#### Speech Servers

ASR: Nuance

TTS: Nuance

Languages: Spanish(USA) es-US  
English(USA) en-US

Voices: English(USA) en-US Lisa F

#### Application Launch

☒ Inbound ☐ Inbound Default ☐ Outbound

☒ Number ☐ Number Range ☐ URI

Called Number:  **Add**

4903 **Remove**

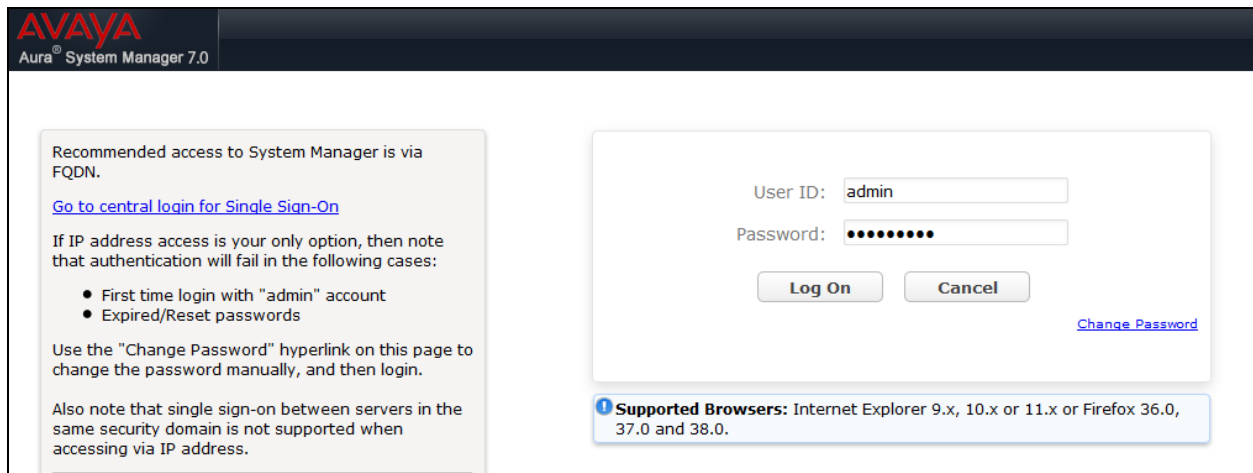
**Speech Parameters** ▶  
**Reporting Parameters** ▶  
**Advanced Parameters** ▶

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

## 7. Configure Avaya Aura® 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.

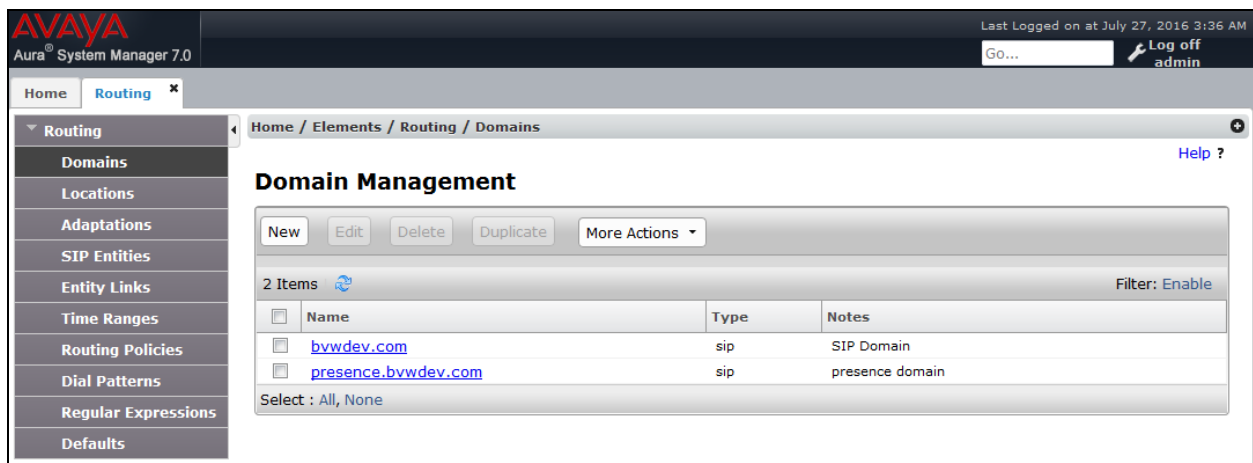
Please note that configuration of each item is not shown in detail. In the following sections, screen captures of the configured items during compliance testing are shown. For details steps on configuration of each item, refer to Document [2].



The screenshot shows the Avaya Aura System Manager 7.0 login interface. On the left, there is a sidebar with instructions: "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. Also note that single sign-on between servers in the same security domain is not supported when accessing via IP address." On the right, there is a login form with fields for "User ID:" (containing "admin") and "Password:" (masked with dots). Below the fields are "Log On" and "Cancel" buttons, and a "Change Password" link. At the bottom, a blue box states: "Supported Browsers: Internet Explorer 9.x, 10.x or 11.x or Firefox 36.0, 37.0 and 38.0."

### 7.1. Configure Domain

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



The screenshot shows the Avaya Aura System Manager 7.0 Domain Management page. The top navigation bar includes "Home", "Routing" (selected), and "Log off admin". The left sidebar shows a tree view with "Routing" expanded and "Domains" selected. The main content area is titled "Domain Management" and shows a table with 2 items. The table has columns for "Name", "Type", and "Notes". The items are "bvwdev.com" (SIP Domain) and "presence.bvwdev.com" (presence domain). Below the table, there is a "Select : All, None" option.

Name	Type	Notes
<a href="#">bvwdev.com</a>	sip	SIP Domain
<a href="#">presence.bvwdev.com</a>	sip	presence domain

## 7.2. Configure Locations

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

AVAYA  
Aura® System Manager 7.0

Last Logged on at December 27, 2016 9:26 AM

Home Routing

Home / Elements / Routing / Locations

Location

New Edit Delete Duplicate More Actions

2 Items Filter: Enable

<input type="checkbox"/>	Name	Correlation	Notes
<input type="checkbox"/>	<a href="#">AT&amp;T-Location</a>	<input type="checkbox"/>	
<input type="checkbox"/>	<a href="#">BvwDevSIL</a>	<input type="checkbox"/>	

Select : All, None

## 7.3. Configure SIP Entities

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

- AEP71: Experience Portal SIP Entity
- ASM70A: Session Manager SIP Entity
- ACM-Trunk1-Private: Communication Manager SIP Entity

AVAYA  
Aura® System Manager 7.0

Last Logged on at December 27, 2016 9:26 AM

Home Routing

Home / Elements / Routing / SIP Entities

SIP Entities

New Edit Delete Duplicate More Actions

26 Items Filter: Enable

<input type="checkbox"/>	Name	FQDN or IP Address	Type	Notes
<input type="checkbox"/>	<a href="#">ACM-Trunk1-Private</a>	10.33.1.6	CM	
<input type="checkbox"/>	<a href="#">ACM-Trunk3-Public</a>	10.33.1.6	CM	Trunk to CM for public
<input type="checkbox"/>	<a href="#">AEP71</a>	10.33.1.25	Voice Portal	AEP System2 10.33.1.25
<input type="checkbox"/>	<a href="#">ASM70A</a>	10.33.1.12	Session Manager	
<input type="checkbox"/>	<a href="#">ASM70B</a>	10.33.1.22	Session Manager	Secondary SM

## 7.4. 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 7.0 interface. The left sidebar has a menu with 'Entity Links' selected. The main content area is titled 'Entity Links' and shows a table with 27 items. The table has columns: Name, SIP Entity 1, Protocol, Port, SIP Entity 2, DNS Override, Port, Connection Policy, and Deny New Service. Two items are visible:

Name	SIP Entity 1	Protocol	Port	SIP Entity 2	DNS Override	Port	Connection Policy	Deny New Service
<a href="#">ASM70A_AEP71_5061_TCP</a>	ASM70A	TLS	5061	AEP71	<input type="checkbox"/>	5061	trusted	<input type="checkbox"/>
<a href="#">ASM70_ACM_Trunk1_5061_TLS</a>	ASM70A	TLS	5061	ACM-Trunk1-Private	<input type="checkbox"/>	5061	trusted	<input type="checkbox"/>

## 7.5. 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 7.0 interface. The left sidebar has a menu with 'Time Ranges' selected. The main content area is titled 'Time Ranges' and shows a table with 1 item. The table has columns: Name, Mo, Tu, We, Th, Fr, Sa, Su, Start Time, End Time, and Notes. One item is visible:

Name	Mo	Tu	We	Th	Fr	Sa	Su	Start Time	End Time	Notes
<a href="#">24/7</a>	<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

## 7.6. 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.

AVAYA  
Aura® System Manager 7.0

Last Logged on at December 27, 2016 9:26 AM

Home Routing

Home / Elements / Routing / Routing Policies

### Routing Policies

New Edit Delete Duplicate More Actions

16 Items Filter: Enable

<input type="checkbox"/>	Name	Disabled	Retries	Destination	Notes
<input type="checkbox"/>	<a href="#">To-CM-Trunk1</a>	<input type="checkbox"/>	0	ACM-Trunk1-Private	
<input type="checkbox"/>	<a href="#">To-AEP</a>	<input type="checkbox"/>	0	AEP71	route to another AEP system
<input type="checkbox"/>	<a href="#">To-ASBCE</a>	<input type="checkbox"/>	0	Avaya SBCE70	Route to SBC A1 IP 10.33.10.102
<input type="checkbox"/>	<a href="#">To-ASBCE-Interface1</a>	<input type="checkbox"/>	0	SBCE70	Route to SBC A1 IP 10.33.10.101

## 7.7. Configure Dial Patterns

On the left pane, select **Dial Patterns**. To add a new dial pattern, select **New**. For compliance testing three dial patterns were added:

- 33 and 34: All calls starting with pattern 33 and 34 with 4 digits were routed to Communication Manager. For compliance test, Experience Portal placed calls to extensions 3301, 3302 and 3401, which were routed to Communication Manager.
- 49: All calls starting with pattern 49 and 4 digits long were routed to Experience Portal.
- 9: All calls starting with 9 and 11 digits long were routed to Communication Manager. This was used for routing calls out to PSTN via PRI trunk configured in Communication Manager.

AVAYA  
Aura® System Manager 7.0

Last Logged on at July 27, 2016 3:36 AM

Home Routing

Home / Elements / Routing / Dial Patterns

### Dial Patterns

New Edit Delete Duplicate More Actions

21 Items Filter: Enable

<input type="checkbox"/>	Pattern	Min	Max	Emergency Call	Emergency Type	Emergency Priority	SIP Domain	Notes
<input type="checkbox"/>	<a href="#">33</a>	4	4	<input type="checkbox"/>			bvwdev.com	
<input type="checkbox"/>	<a href="#">34</a>	4	4	<input type="checkbox"/>			bvwdev.com	
<input type="checkbox"/>	<a href="#">49</a>	4	4	<input type="checkbox"/>			bvwdev.com	
<input type="checkbox"/>	<a href="#">9</a>	11	11	<input type="checkbox"/>			bvwdev.com	

Select : All, None Page 1 of 2

## 8. Configure Interactions Curo Speech Server

The configuration of Interactions Curo Speech Server is done by Interactions engineer and is outside of the scope of these Application Notes. To obtain further information on Interactions Curo Speech Server configuration, please contact an Interactions representative.

## 9. Verification Steps

This section provides the verification steps that may be performed to verify that Experience Portal can run Curo Speech ASR and TTS servers.

1. From the EPM web interface, verify that the Curo Speech resource and status. Navigate to **System Monitor** → **MPP** (click on MPP link) → **Service Menu** (under Miscellaneous section) → **Resources** → **Speech Servers**, the **Speech Servers** is displayed as shown below.

The screenshot displays the Avaya Aura Experience Portal MPP interface. The top header shows the Avaya logo and the user 'Welcome, epadmin'. Below the header, a red banner indicates 'Avaya Aura® Experience Portal MPP 7.1.0.0-1107 on voiceportal.bvwdev.com' with a 'Logout' link. The left sidebar contains a navigation menu with categories: Home, Activity, Applications, Certificates, Configuration, Diagnostics, Logs, Resources, and Users. The 'Resources' category is expanded, showing sub-items: ASR, TTS, Speech Servers, Telephony, and Networking. The main content area shows the breadcrumb 'You are here: Home > Resources > Speech Servers' and the title 'Speech Servers'. Below this is a table titled 'Speech Servers' with columns: Name, Type, Status, Values, Ports, Errors, and Latency. The table contains two rows: 'Curo' (ASR, Server is UP) and 'CuroTTS' (TTS, Server is UP). The 'Curo' row shows H (Total): 24, M (Simultaneous): 24, Active: 1, Reserve: 0, Timeout: 0, Setup: 0, Application: 0, Average: 957, Maximum: 7070, and Minimum: 0. The 'CuroTTS' row shows H (Total): 24, M (Simultaneous): 24, Active: 0, Reserve: 0, Timeout: 0, Setup: 0, Application: 0, Average: 202, Maximum: 850, and Minimum: 0. Below the table, the date 'Thu Jan 12 10:10:07 2017' is displayed.

Name	Type	Status	Values	Ports	Errors	Latency
Curo	ASR	Server is UP	H (Total): 24 M (Simultaneous): 24	Active: 1 Reserve: 0	Timeout: 0 Setup: 0 Application: 0	Average: 957 Maximum: 7070 Minimum: 0
CuroTTS	TTS	Server is UP	H (Total): 24 M (Simultaneous): 24	Active: 0 Reserve: 0	Timeout: 0 Setup: 0 Application: 0	Average: 202 Maximum: 850 Minimum: 0



- From the EPM web interface, verify that the MPP servers are online and running. On the left pane, navigate to **System Management** → **MPP Manager** (not shown).

**Avaya Aura® Experience Portal 7.1.0 (ExperiencePortal)**

You are here: [Home](#) > [System Management](#) > [MPP Manager](#)

### MPP Manager (Dec 28, 2016 3:43:57 AM PST)

This page displays the current state of each MPP in the Experience Portal system. To enable the state and mode commands, select one or more MPPs. To enable the mode commands, the selected MPPs must also be stopped.

Last Poll: Dec 28, 2016 3:43:41 AM PST

	Server Name	Mode	State	Config	Auto Restart	Restart Schedule		Active Calls	
						Today	Recurring	In	Out
<input type="checkbox"/>	mpp	Online	Running	OK	Yes	No	None	0	0

**State Commands**

**Mode Commands**

**Restart/Reboot Options**

☒ One server at a time  
☐ All servers

[Help](#)

- Verify that the ports on the MPP server are in service. On the left lane, click on **Port Distribution**. Select the MPP server and click **OK**.

**Avaya Aura® Experience Portal 7.1.0 (ExperiencePortal)**

You are here: [Home](#) > [Real-time Monitoring](#) > [Port Distribution](#) > [Port Distribution Report](#)

### Port Distribution Report (Dec 28, 2016 3:45:28 AM PST)

This page displays information about how the telephony resources have been distributed to the MPPs. You configure the telephony resources on the VoIP Connections page.

Total Ports: 50 Last Poll: Dec 28, 2016 3:45:10 AM PST

Port	Mode	State	Port Group	Protocol	Current Allocation	Base Allocation
50	Online	In service	ASM70	SIP_Trunk	mpp	

- Place calls to the Experience Portal number 4903 as configured in **Section 6.3**, listen to the prompt and select a proper option to test ASR and TTS. Navigate to **Real-time Monitoring** → **Active Calls** to check status of the active call. The **Active Call Report** displays parameters of call such as call type, calling number, called number, application name, ASR and TTS servers as shown below.

You are here: [Home](#) > Real-Time Monitoring > Active Calls Report

**Active Calls Report (Dec 28, 2016 3:47:00 AM PST)** Refresh

This page displays the status of the active calls being handled by the servers.

Total Calls: 1 Last Poll: Dec 28, 2016 3:46:40 AM PST

Port	Port Group	Protocol	Call Type	MPP Server	Start Time	Calling Number/URI	Called Number/URI	Application	ASR Server	TTS Server
1	ASM70	SIP_Trunk	Inbound	mpp	Dec 28, 2016 3:46:58 AM PST	sip:3403@bvwddev.com	sip:4903@bvwddev.com	BothMenu	Curo	CuroTTS

[Help](#)

## 10. Conclusion

These Application Notes describe the configuration steps required to integrate Interactions Curo Automated Speech Recognizer and Text-to-Speech Server with Avaya Aura® Experience Portal. All feature and serviceability test cases were completed successfully refer to **Section 2.2** for details.

## 11. Additional References

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

- [1] Administering Avaya Aura® Communication Manager, Release 7.0.3, Document 03-300509, Issue 10, June 2016
- [2] Administering Avaya Aura® Session Manager, Release 7.0, Issue 7, Jan 2016
- [3] Administering Avaya Aura® Experience Portal, Release 7.0.1, April 2015

Interactions Curo documentation is always available from <http://www.interactions.com/library/>

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