

Avaya Solution & Interoperability Test Lab

Application Notes for Alibaba Intelligent Call 2.7.1 with Avaya Aura® Experience Portal 7.2.3 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Alibaba Intelligent Call with Avaya Aura® Experience Portal. Alibaba Intelligent Call is a speech server that provides Automatic Speech Recognizer (ASR) and Text-to-Speech (TTS) resources for applications launched by Avaya Aura® Enterprise Portal. Alibaba Intelligent Call uses Media Resource Control Protocol (MRCP) Version 2 to interface to 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 the 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 Alibaba Intelligent Call with Avaya Aura® Experience Portal. Alibaba Intelligent Call is a speech server that provides Automatic Speech Recognizer (ASR) and Text-to-Speech (TTS) resources for applications launched by Avaya Aura® Enterprise Portal. Alibaba Intelligent Call uses Media Resource Control Protocol (MRCP) Version 2 to interface to Avaya Aura® Experience Portal.

2. General Test Approach and Test Results

Interoperability compliance testing included feature and serviceability testing. The feature testing focused on placing calls to Experience Portal to launch sample VXML applications that use Alibaba ASR and TTS resources. The testing verified that Alibaba could play TTS prompts and translate speech to text. Alibaba Intelligent Call doesn't support DTMF processing nor recognize SRGS grammars. It simply converts speech (as it's heard) to text. For the compliance test, DTMF processing was performed by Experience Portal.

The serviceability testing focused on verifying the ability of the Alibaba Intelligent Call server recovering from adverse conditions, such as simulating loss to IP network and rebooting the Alibaba Intelligent Call and Experience Portal servers.

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 this DevConnect Application Note included the enablement of supported encryption capabilities in the Avaya products only (private network side). 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 Avaya systems and the Alibaba Intelligent Call did not include use of any specific encryption features as requested by Alibaba.

2.1. Interoperability Compliance Testing

The interoperability compliance testing covered the following features and functionality:

- Experience Portal and Alibaba Intelligent Call communicating via MRCP V2.
- Calls to Experience Portal that invoke sample VXML applications and utilize Alibaba ASR and TTS.
- Sample VXML applications to play back prompts using male and female TTS voices.
- Sample VXML applications that require DTMF processing by Experience Portal and the DTMF played back by Alibaba Intelligent Call using TTS.
- Sample VXML applications that accept voice input (speech) and gets converted to text by Alibaba Intelligent Call as it was heard.
- Proper system recovery after a restart of the Alibaba Intelligent Call server and loss of IP connectivity.

2.2. Test Results

All test cases passed with the following observations:

- Alibaba Intelligent Call doesn't support DTMF processing. Experience Portal applications should be configured to allow local DTMF processing (refer to Section 5.4).
- Alibaba Intelligent Call doesn't support SRGS grammars. Therefore, it can't determine whether DTMF or spoken words are valid input according to a grammar. Alibaba Intelligent Call ASR simply converts speech, as it is heard, to text.
- Experience Portal applications shouldn't send VXML code in the TTS request to Alibaba Intelligent Call; otherwise, it will read out the VXML code and play it back to the caller.
- Since Alibaba Intelligent Call TTS cannot process TTS requests with VXML code, Experience Portal cannot control any attributes of the TTS playback, such as prosody, which may include changes to the speech rate volume, or pitch of the TTS voice.

2.3. Support

For technical support on Alibaba Intelligent Call, contact Alibaba Support:

- **Phone:** +1 (833) 732-2135
- Web: <u>https://www.alibabacloud.com</u>

3. Reference Configuration

Figure 1 illustrates the sample configuration used for testing. In this configuration, Experience Portal was connected to Session Manager via a SIP trunk and interfaced to Alibaba Intelligent Call via MRCP V2. Sample VXML applications were hosted in an application server corresident with Experience Portal on the EPM server.

Calls were placed from Avaya H.323 and SIP Deskphones to Experience Portal and routed through Communication Manager and Session Manager. The G450 Media Gateway and the Media Server were used for media resources and System Manager was used to configure Session Manager and SIP users.



Figure 1: Configuration with Avaya Aura® Experience Portal and Alibaba Intelligent Call

4. Equipment and Software Validated

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

| Equipment/Software | Release/Version |
|--|--|
| Avaya Aura® Communication Manager | 8.1.3.0.1-FP3P1 |
| Avaya G450 Media Gateway | FW 41.24.0 |
| Avaya Aura® Media Server | v.8.0.2.138 |
| Avaya Aura® System Manager | 8.1.3.0 Build No. – 8.1.0.0.733078 Software Update Revision No: 8.1.3.0.1012091 Feature Pack 3 |
| Avaya Aura® Session Manager | 8.1.3.0.813014 |
| Avaya Aura® Experience Portal | 7.2.3 |
| Avaya 96x1 Series Deskphones | 6.8502 (H.323) 7.1.11.0.8 (SIP) |
| Avaya J100 Series Deskphones | 4.0.7.1.5 (SIP) |
| Alibaba Intelligent Call running on CentOS 7.8 | 2.7.1 |

5. Configure Avaya Aura® Experience Portal

This section covers the configuration of Experience Portal using the Experience Portal Manager (EPM) web interface or an Experience Portal SSH connection. The procedure includes the following areas:

- Launch Experience Portal Manager
- Add TTS Custom Voices
- Add Speech Servers
- Add Application

5.1. Launch Experience Portal Manager

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

| AVAYA Avaya Aura® Experience Porta | l 7.2.3 (ExperiencePortal) |
|---------------------------------------|----------------------------|
| User Name: | |
| | Submit |
| Change Password | |

The main page of the EPM web interface is displayed as shown below.

| AVAYA | Last lo | Welcome, epadmin gged in yesterday at 2:14:16 PM PST |
|-----------------------------|--|---|
| Avava Aura@ Experience Der | rtal 7 2 2 (Evennion co Dortal) | Allere 2 liste Discott |
| Expand All Collapse All | | тр ноше ту нер 🔂 содот |
| | You are here: Home | |
| ▼ User Management | | |
| Koles | Avaya Aura® Experience Portal Manager | |
| Login Options | | |
| ▼ Real-time Monitoring | | |
| System Monitor | Avaya Aura® Experience Portal Manager (EPM) is the consolidated web-based application for ad | ministering Experience Portal. |
| Active Calls | Through the EPM interface you can configure Experience Portal, check the status of an Experien | ce Portal component, and |
| Port Distribution | generate reports related to system operation. | |
| ▼ System Maintenance | | |
| Audit Log Viewer | | |
| Trace Viewer | Installed Components | |
| Log Viewer | Instaned Components | |
| Alarm Manager | | |
| ▼ System Management | Media Processing Platform | |
| Application Server | Media Processing Platform (MPP) is an Avava media processing server, When an MPP receives a | call from a PBX, it invokes a |
| EPM Manager | VoiceXML (or CCXML) application on an application server. It then communicates with ASR and T | TS servers as necessary to |
| Software Upgrade | process the call. | |
| System Backup | | |
| ▼ System Configuration | Empil Comico | |
| Applications | Email Service | |
| EPM Servers | Email Service is an Experience Portal reactive which provides e-mail capabilities. | |
| MPP Servers | | |
| SNMP | HTML Service | |
| Speech Servers | HTML Service is an Experience Portal feature which supports web applications with HTML5 capab | ilities. It includes support for |
| VoIP Connections | browser based services for mobile devices. | |
| Zones | | |
| ▼ Security | SMS Service | |
| Certificates | SMS Service is an Experience Portal feature which provides SMS capabilities. | |
| Licensing | | |
| * Reports | | |
| Custom | | |
| Scheduled | Legal Notice | |
| ▼ Multi-Media Configuration | | |
| Email | AVAYA GLOBAL SOFTWARE LICENSE TERMS | <u>^</u> |
| HTML | REVISED: May 22, 2019 | |
| SMS | | |
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| | UN BEHALF OF A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT THAT YOU HAVE | THE AUTHORITY TO BIND |

5.2. Add TTS Custom Voices

To add TTS custom voices supported by Alibaba Intelligent Call, navigate to **System Configuration** \rightarrow **Speech Servers** in the left pane. In the **Speech Servers** page (not shown), select the **TTS** tab and click **Customize**. Configure the following parameters in the **TTS Custom Voices** page.

- Engine Type:
- Voice:
- Country:
- Language Code:
- Voice Name:
- Gender:

Select Nuance.

- Set to appropriate language (e.g., *English*).
- Set to appropriate country (e.g., USA).
- Set to appropriate language code (e.g., *en-US*).
 - Specify voice name. For the compliance test, *luna* and *luca* were used.
 - Specify the voice gender.

| ΔΥΔΥΔ | | | | | Welcome | e, epadmin |
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| ruryri | | | | Last logged in | today at 7: | 56:58 AM PST |
| Avaya Aura® Experience Port | al 7.2.3 (ExperiencePor | rtal) | | 🕺 Home | ?₊ Help | 🕴 Logoff |
| Expand All Collapse All | You are here. Here > | Sustan Configuration > (| Seeach Servers > T | TS Custom Voicos | | |
| ▼ User Management | fou are here: <u>Home</u> > | System Comiguration > 3 | opeech bervers > 1 | To Custom voices | | |
| Roles | TTS Custon | Voices | | | | |
| Users | 113 Custon | Voices | | | | |
| Login Options | | | | | | |
| Keal-time Monitoring Sustam Manitor | Use this page to add custom voices to the Text to Speech (TTS) servers currently administered on the | | | | | |
| Active Calls | Experience Portal s | ystem. | | | | |
| Port Distribution | | | | | | |
| ▼ System Maintenance | Engine Type: Nuan | co. ¥ | | | | |
| Audit Log Viewer | Engine Type. Nuan | ce + | | | | |
| Trace Viewer | Voices | | | | | |
| Alarm Manager | New | | | | | |
| ▼ System Management | Voient En | aliah | | 1 | | |
| Application Server | voice: | iglish | | | | |
| EPM Manager | Country: US | SA | | | | |
| MPP Manager | Language Codes Lan | | | , | | |
| Software Upgrade | Language Code: en | -03 | | | | |
| ▼ System Configuration | Voice Name: lur | na | | | | |
| Applications | | | | | | |
| EPM Servers | Gender: |) Male 🔍 Female | | Add | | |
| MPP Servers | Configured | | | | | |
| SNMP | Configured | | | | | |
| VoID Connections | English(USA) en-U | JS luna F | A | | | |
| Zones | English(USA) en-U | JS luca M | | | | |
| ▼ Security | | | | | | |
| Certificates | | | ĸ | emove | | |
| Licensing | | | | | | |
| ▼ Reports | | | - | | | |
| Custom | | | | | | |
| Scheduled | Save Apply | Cancel Help | | | | |
| Multi-Media Configuration | | | | | | |
| Email | | | | | | |
| HTMI | | | | | | |

SMS

5.3. Add Speech Servers

This section covers the configuration of Alibaba Intelligent Call as ASR and TTS servers in Experience Portal.

5.3.1. Add ASR Server

To add an ASR server, navigate to **Speech Configuration** \rightarrow **Speech Servers** in the left pane. In the **Speech Servers** page (not shown), select the **ASR** tab and click **Add**. Configure the following parameters in the **Add ASR Server** page.

| - | Name: | Provide a descriptive name (e.g., <i>Alibaba IC ASR</i>). |
|---|---------------------------------|---|
| • | Enable: | Select Yes to enable the ASR server. |
| • | Engine Type: | Set to <i>Nuance</i> . Option available per Section Error! |
| | Reference source not found | |
| • | Network Address: | Set to Alibaba IP address (e.g., 10.64.102.108). |
| • | Base Port: | Set to SIP port configured on Alibaba (e.g., 7010). |
| • | Total Number of Licensed | |
| | ASR Resources: | Set to number of ASR resources per license. |
| • | Selected Languages: | Set to <i>English(USA) en-US</i> supported by Alibaba. |
| • | Protocol: | Set to MRCP V2. |
| • | Transport Protocol: | Set to <i>TCP</i> . |
| • | Listener Port: | Set to SIP port configured on Alibaba (e.g., 1544). |

| AVAYA | | Welcome, epadmin Last logged in today at 7:56:58 AM PST |
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| Avaya Aura® Experience Port | al 7.2.3 (ExperiencePortal) | 👫 Home 📪 Help 😝 Logoff |
| Expand All Collapse All | You are here: Home > System Configuration | > Speech Servers > Add ASR Server |
| ▼ User Management Roles Users | Add ASR Server | |
| Real-time Monitoring System Monitor Active Calls | Use this page to configure Experience P | ortal to communicate with a new ASR server. |
| Port Distribution System Maintenance | Name: | Alibaba IC ASR |
| Audit Log Viewer Trace Viewer | Enable: | ● Yes ○ No |
| Log Viewer Alarm Manager | Engine Type: | Nuance 🗸 |
| ▼ System Management | Network Address: | 10.64.102.108 |
| EPM Manager | Base Port: | 7010 |
| MPP Manager Software Upgrade | Total Number of Licensed ASR Resources | : 2 |
| System Backup System Configuration | New Connection per Session: | ● Yes ○ No |
| Applications | Languages | Selected Languages |
| MPP Servers | Afrikaans(South_Africa) af-ZA | English(USA) en-US |
| SNMP Speech Servers | Arabic(Jordan) ar-JO | |
| VoIP Connections | Arabic(WorldWide) ar-WW | |
| Zones ▼ Security | Assamese(India) as-IN | 0 |
| Certificates | Basque(Spain) eu-ES Basgali(Basgaladash) hp. BD | |
| Licensing | Bengali(Bengladesh) bh-BD | 0 |
| Keports Standard | Bengall(India) bn-IN | - |
| Custom | Bhojpuri(India) bh-IN | |
| Scheduled | Bulgarian(Bulgaria) bg-BG | |
| Multi-Media Configuration | Cantonese(Hong_Kong) cn-HK 🔻 | · · · · · · · · · · · · · · · · · · · |
| Email HTML | MRCP | |
| SMS | Ping Interval: 15 seconds | |
| | Response Timeout: 4 seconds | |
| | Protocol: MRCP V2 V | |
| | Enable Session XML: 🔿 Yes 💿 No | |
| | Transport Protocol: TCP 🗸 | |
| | Listener Port: 1544 | |
| | Save Cancel Help | |

5.3.2. Add TTS Server

To add a TTS server, navigate to **Speech Configuration** \rightarrow **Speech Servers** on the left pane. In the **Speech Servers** page (not shown), select the **TTS** tab and click **Add**. Configure the following parameters in the **Add TTS Server** page.

| • | Name: | Provide a descriptive name (e.g., <i>Alibaba IC TTS</i>). |
|---|---------------------------------|---|
| • | Enable: | Select Yes to enable the TTS server. |
| • | Engine Type: | Set to <i>Nuance</i> . Option available per Section Error! |
| | Reference source not found | |
| • | Network Address: | Set to Alibaba IP address (e.g., 10.64.102.108). |
| • | Base Port: | Set to SIP port configured on Alibaba (e.g., 7010). |
| • | Total Number of Licensed | |
| | ASR Resources: | Set to number of ASR resources per license. |
| • | Selected Voices: | Select supported TTS voices. |
| • | Protocol: | Set to MRCP V2. |
| • | Transport Protocol: | Set to <i>TCP</i> . |
| • | Listener Port: | Set to SIP port configured on Alibaba (e.g., 1544). |
| | | |

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| Avaya Aura® Experience Porta | al 7.2.3 (ExperiencePortal) fi Home 📪 Help 😋 | Logoff |
| Expand All Collapse All | You are here: Home > System Configuration > Speech Servers > Add TTS Server | |
| ▼ User Management Roles Users | Add TTS Server | |
| Login Options Real-time Monitoring System Monitor Active Calls | Use this page to configure Experience Portal to communicate with a new TTS server. | |
| Port Distribution System Maintenance | Name: Alibaba IC TTS | |
| Audit Log Viewer Trace Viewer | Enable: Yes O No | |
| Log Viewer Alarm Manager | Engine Type: Nuance V | |
| System Management Application Server | Network Address: 10.64.102.108 | |
| EPM Manager MPP Manager | Total Number of Licensed TTS Resources: 2 | |
| System Backup | New Connection per Session: | |
| Applications EPM Servers | Voices Selected Voices | |
| MPP Servers SNMP | Afrikaans(South_Africa) af-ZA Tessa F | |
| Speech Servers VoIP Connections | Arabic(WorldWide) ar-WW Maged M | |
| ▼ Security Certificates Licensing | Basque(Spain) eu-ES Arantxa F Basque(Spain) eu-ES Miren F | |
| ▼ Reports Standard Custom | Bulgarian(Bulgaria) bg-BG Daria F Catalan(Spain) ca-ES Jordi M Catalan(Spain) ca-ES Monteorrat E | |
| Scheduled Multi-Media Configuration Email | Catalan(Spain) ca-ES Noria F | - |
| HTML SMS | MRCP | |
| | Ping Interval: 15 seconds | |
| | Protocol: MRCP V2 V | |
| | Enable Session XML: O Yes O No | |
| | Transport Protocol: TCP V | |
| | Listener Port: 1544 | |
| | Save Cancel Help | |

5.3.3. Restart MPP Server

Navigate to **System Management** \rightarrow **MPP Manager** to restart the MPP server. Select the MPP and then click **Restart**. After the MPP is started, the **Mode** of the MPP should be *Online* and the **State** should be *Running*.

| AVAYA | Welcome, epadmin Last logged in yesterday at 2:14:16 PM PST |
|---|---|
| Avaya Aura® Experience Po | tal 7.2.3 (ExperiencePortal) 🕺 Home 🖓 Help 🕴 Logoff |
| Avaya Aura® Experience Pol Expand All Collapse All Vuser Management Roles Users Login Options Real-time Monitoring System Monitor Active Calls Port Distribution System Maintenance Audit Log Viewer Alarm Manager Alarm Manager System Manager MPP Manager MPP Manager MPP Manager Software Upgrade System Backup System Configuration Applications EPM Servers MPP Servers | tal 7.2.3 (ExperiencePortal) If Home ?, Help @ Logoff You are here: Home > System Management > MPP Manager MPP Manager (Feb 2, 2021 10:19:31 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: Feb 2, 2021 10:19:23 AM PST Image: Server Name Mode State Config Auto Restart Restart Schedule Active Calls In Out Image: MPP Online Running OK Yes No None 0 0 State Commands State Commands Restart/Reboot Options |
| SNMP Speech Servers VoIP Connections Zones Security Certificates Licensing Reports Standard Custom | Mode Commands Offline Test Online Help |

5.4. Add Application

This section covers the configuration of a sample VXML application that uses ASR and TTS resources from Alibaba Intelligent Call.

On the left pane, navigate to **System Configuration** \rightarrow **Applications**. The **Applications** page is displayed (not shown). Click **Add**. In the **Add Application** page shown below, configure the application. For the compliance test, one of the sample VXML applications was configured as shown below.

- Name: Provide a descriptive name (e.g., *DevConnect Test*). . Set to **Yes** to enable the application. Enable: Type: Set to VoiceXML. VoiceXML URL: Specify the VXML application URL. For the compliance test, the application was located in an application server coresident on the EPM server. Select Nuance. **Selected Engine Types:**
- Selected Languages: Select the language (e.g., *English(USA) en-US*).

| AVAYA | | | Welcome, epadmin Last logged in today at 7:56:58 AM PST |
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| Avaya Aura® Experience Port | 7.2.3 (ExperiencePortal) | | 👫 Home 📪 Help 😆 Logoff |
| Expand All Collapse All | You are here: Home > System Configuration > | Applications > Add Application | |
| User Management Roles Users Login Options | Add Application | | |
| Real-time Monitoring System Monitor Active Calls | Use this page to deploy and configure a ne | ew application on the Experience Portal system. | |
| Port Distribution | Start With: | * | |
| ▼ System Maintenance | Start with: | <u>•</u> | |
| Audit Log Viewer Trace Viewer | Name: DevConnect Test | | |
| Log Viewer | Enable: O Yes O No | | |
| Alarm Manager | Type: | × | |
| Application Server | voicexific | | |
| EPM Manager | Reserved SIP Calls: O None O Minir | mum 🔿 Maximum | |
| MPP Manager | | | |
| Software Upgrade | Requested: | | |
| System Backup | URI | | |
| Applications | | | |
| EPM Servers | Single O Fail Over O Load Balance | e . | |
| MPP Servers | | | |
| SNMP | VoiceXML URL: http://10.64.102.110:70 | 80/DevConnectScripts/VoiceMenu.vxml | Verify |
| Speech Servers | ····· | | |
| VoIP Connections | | | |
| Zones | | | |
| Certificates | Mutual Certificate Authentication: O Yes | No No | |
| Licensing | | | |
| ▼ Reports | Basic Authentication: O Yes | 🖉 🔍 No | |
| Standard | | | |
| Custom | ASR Speech Servers - | | |
| Scheduled | non opecen oerrero | | |
| Multi-Media Configuration Empil | Engine Types | Selected Engine Types | |
| HTMI | (None) | - Nuance | |
| SMS | <note></note> | ▲ ■ Invance | A |
| | ASR: | - | |
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| | Nuance | | |
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| | Nonos | English(UCA) on UC | |
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Solution & Interoperability Test Lab Application Notes ©2021 Avaya Inc. All Rights Reserved. Scroll down to the **TTS Speech Servers** section. Select *Nuance* as the TTS server and select a supported TTS voice (e.g., *English(USA) en-US luna F*) as shown below.

In the **Application Launch** section, set the **Called Number** (e.g., 78555) associated with the application and click **Add**. The called number will be added to the text below the field.

| AVAYA | Welcome Last logged in today at 7: | a, epadmin 56:58 AM PST |
|--|---|----------------------------|
| Avaya Aura® Experience P | ortal 7.2.3 (ExperiencePortal) fi Home ?+ Help | 🕴 Logoff |
| Expand All Collapse All | TTS Speech Servers ▼ | ^ |
| Roles Login Options • Real-time Monitoring System Monitor Active Calls Port Distribution • System Maintenance Audit Log Viewer | Voices Selected Voices English(USA) en-US luca M Image: Selected Voices TTS: Nuance Image: Selected Voices | 6. T |
| Trace Viewer | Application Launch 🔻 | |
| Log viewer Alarm Manager Application Server EPM Manager Software Upgrade System Backup System Configuration Applications EPM Servers | Inbound O Inbound Default O Outbound Number Number Range URI Called Number: 78555 Add | |
| MPP Servers SNMP Speech Servers VoIP Connections | <none> Remove</none> | • |

Scroll down and expand the **Advanced Parameters** section. Disable **Support Remote DTMF Processing** to allow Experience Portal to perform local DTMF processing. Alibaba Intelligent Call doesn't support DTMF processing.

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| Avaya Aura® Experience Porta | al 7.2.3 (ExperiencePortal) | fi Home 📪 Help 😮 Log | off |
| Expand All Collapse All | Advanced Parameters 🔻 | | - |
| ▼ User Management Roles | Support Remote DTMF Processing | I: ○ Yes | |
| Login Options • Real-time Monitoring | DTMF Type Ahead Enabled: | ● Yes ○ No | |
| System Monitor Active Calls | Converse-On: | 🔿 Yes 🖲 No | |
| Port Distribution • System Maintenance | Network Media Service: | 🔿 Yes 💿 No | |
| Audit Log Viewer Trace Viewer | Early Media: | 🔿 Yes 🔘 No | |
| Alarm Manager | Sync FROM and PAI Headers: | 🔿 Yes 💿 No | |
| System Management Application Server | Dialog URL Pattern: | | |
| EPM Manager MPP Manager | VoiceXML Event Handler: | <default></default> | |
| Software Upgrade System Backup | CCXML Event Handler: | <default> 🗸</default> | |
| System Configuration Applications | Generate UCID: | O Yes 💿 No | |
| EPM Servers MPP Servers | Operation Mode: | Service Provider 🗸 | |
| SNMP Speech Servers | Transport UCID in Shared Mode: | ○ Yes ● No | |
| VoIP Connections Zones | Maximum UUI Length: | 128 | |
| Security Certificates | Fax Detection Enabled: | O Yes 💿 No | |
| Licensing Percents | Fax Phone Number: | | |
| Standard | Video Enabled: | 🔿 Yes 💿 No | |
| Scheduled | Video Screen Format: | QCIF 🖌 | |
| Multi-Media Configuration Email HTMI | Video Minimum Picture Interval: | 2 | |
| SMS | Save Save & Add Next | Cancel Help | - |

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6. Configure Alibaba Intelligent Call

This section covers the configuration for Alibaba Intelligent Call. The configuration was performed by modifying the **alimrcp-server.xml** file in the /home/admin/v2.7.1service/service/data/servicedata/nls-cloud-sdm/conf directory to set the MRCP ports.

In the MRCPv2 signaling agent section, set the sip-port to 7010 as shown below.

```
<!-- SofiaSIP MRCPv2 signaling agent -->
   <sip-uas id="SIP-Agent-1" type="SofiaSIP">
        <!-- By default, "ip" and "ext-ip" addresses, set in the properties, are used.
These parameters can
        explicitly be specified per "sip-uas" by means of "sip-ip" and "sip-ext-ip"
correspondingly. -->
        <!-- <sip-ip>10.10.0.1</sip-ip> -->
        <!-- <sip-ext-ip>a.b.c.d</sip-ext-ip> -->
        <sip-port>7010</sip-port>
        <sip-transport>udp,tcp</sip-transport>
```

Scroll down to the **MRCPv2 connection agent** section, set the **mrcp-port** to *1544* as shown below.

```
<!-- MRCPv2 connection agent -->
<mrcpv2-uas id="MRCPv2-Agent-1">
    <!-- <mrcp-ip>10.10.0.1</mrcp-ip> -->
    <mrcp-port>1544</mrcp-port>
    <max-connection-count>300</max-connection-count>
    <max-shared-use-count>100</max-shared-use-count>
```

7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Experience Portal and Alibaba Intelligent Call.

From the EPM web interface, verify that the MPP server is online by navigating to **System Management** \rightarrow **MPP Manager**. The **Mode** of the MPP should be *Online* and the **State** should be *Running*.



From the EPM web interface, verify that the ports on the MPP server are in service in the by navigating to **Real-time Monitoring** \rightarrow **Port Distribution** and selecting the MPP in the **Port Distribution** page (not shown).



JAO; Reviewed: SPOC 2/19/21 Solution & Interoperability Test Lab Application Notes ©2021 Avaya Inc. All Rights Reserved. To verify that the **Speech Servers** are connected, navigate to **Real-time Monitoring** \rightarrow **System Monitor** and select the **ExperiencePortal Details** tab. Click on the **MPP**. In the **MPP Details** page, click **Service Menu**. Finally, navigate to **Resources** \rightarrow **Speech Servers** in the left pane to view the status of the speech servers as shown below. The **Status** of the speech servers should be *UP* as shown below.

| Αναγα | | | | | | Web | come, epadmin |
|-------------------------------|---|--------|---------------|-------------------------------------|-------------------------|--|---|
| Avaya Aura® Experience Port | al MPP 7.2.3.0.0505 | on dev | vcon-mpp.avay | a.com | | | ⊗Logoff |
| Home | You are here: <u>Home</u> > <u>Resources</u> > Speech Servers | | | | | | |
| Activity | Speech Servers | | | | | | |
| Calls | Speech Servers | | | | | | |
| Sessions | Name | Туре | Status | Values | Ports | Errors | Latency |
| Applications Statistics | Alibaba IC ASR | ASR | Server is UP | H (Total): 2 M (Simultaneous): 2 | Active: 0 Reserve: 0 | Timeout: 0 Setup: 0 Application: 0 | Average: 0 Maximum: 0 Minimum: 0 |
| Certificates Configuration | Alibaba IC TTS | ття | Server is UP | H (Total): 2 M (Simultaneous): 2 | Active: 0 Reserve: 0 | Timeout: 0 Setup: 0 Application: 0 | Average: 3 Maximum: 10 Minimum: 0 |
| Diagnostics | Wed Eeb 3 10:04:3 | 6 2021 | | | | | |
| Logs | 10.04.5 | 0 2021 | | | | | |
| Resources | | | | | | | |
| ASR | | | | | | | |
| ΠS | | | | | | | |
| Speech Servers | | | | | | | |
| Telephony | | | | | | | |
| Users | | | | | | | |

After performing the verification above, place a call to an Experience Portal number that would launch a VXML application that uses the Alibaba ASR and TTS resources. Verify that the application answers the call, TTS prompts are heard, and Alibaba Intelligent Call plays back the voice input that was heard.

8. Conclusion

These Application Notes describe the configuration steps required to integrate Alibaba Intelligent Call with Avaya Aura® Experience Portal using MRCP V2. Sample VXML applications were used to verify Alibaba Intelligent Call ASR and TTS. Alibaba Intelligent Call was able to play TTS prompts and convert speech to text. All feature and serviceability test cases were completed successfully with observations noted in **Section 2.2**.

9. Additional References

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

[1] *Administering Avaya Aura*® *Experience Portal*, Release 7.2.3, Issue 1, September 2019, available at <u>https://support.avaya.com</u>.

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