# AVAYA

**Avaya Solution & Interoperability Test Lab**

# Application Notes for ReadSpeaker speechServer MRCP with Avaya Aura® Experience Portal – Issue 1.0

## Abstract

These Application Notes describe the configuration steps required to integrate ReadSpeaker speechServer MRCP with Avaya Aura® Experience Portal.  ReadSpeaker speechServer MRCP provides Text-To-Speech (TTS) functionality via 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 ReadSpeaker speechServer MRCP (ReadSpeaker) with Avaya Aura® Experience Portal (Experience Portal).

ReadSpeaker is a Text-To-Speech (TTS) solution provided by ReadSpeaker. ReadSpeaker integrates with Experience Portal via MRCPv2. During the compliance test Experience Portal communicated to ReadSpeaker via a VPN connection.

# 2. General Test Approach and Test Results

General test approach was to test various VoiceXML scripts that exercise various types of grammars in ReadSpeaker. During the compliance test, a predefined set of VoiceXML scripts validated the TTS functionality.

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 this Application Note, the interface between Avaya systems and the ReadSpeaker did not include use of any specific encryption features.

## 2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability tests. Feature tests focused on the ability of ReadSpeaker to successfully exercise appropriate grammar and return expected results.

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

## 2.2. Test Results

All test cases were passed with one observation as noted below.

- In a scenario where the playback of speech needs to be faster or slower, it can be done using the + or – percentage values. Without the usage of + or – the speech playback isn't changed.

## 2.3. Support

To obtain technical support for ReadSpeaker:

- **Web:** https://www.readspeaker.com/contact/
- **Email:** support@readspeaker.com
- **Phone:** +1 (408) 914 2710 (US)

# 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 and Media Server
- Avaya 9600 Series IP Deskphones
- ReadSpeaker speechServer MRCP
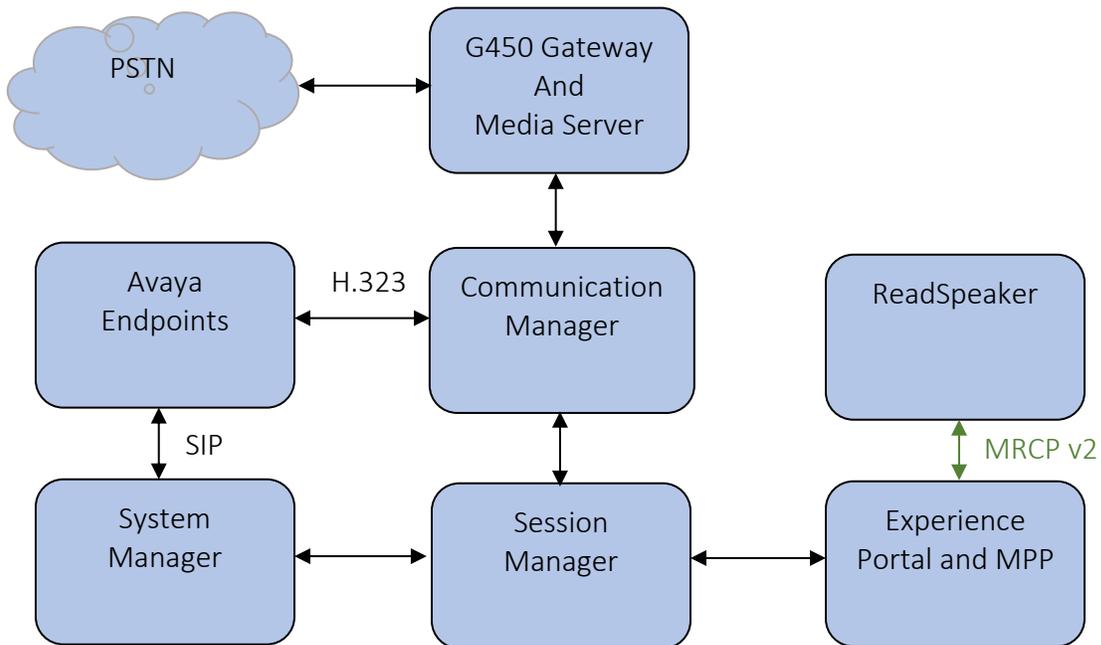


**Figure 1: Reference Configuration**

## 3.1. Equipment and Software

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

| Equipment/Software | Release/Version |
|---|---|
| Avaya Aura® Experience Portal <br> • Experience Portal Manager <br> • Media Processing Platform | • 7.2.2.0.2065 <br> • 7.2.2.0.2065 |
| Avaya G450 Media Gateway | 40.20.1 |
| Avaya Aura® Communication Manager | 8.0.1.1 |
| Avaya Aura® Media Server | 8.0.0.183 |
| Avaya Aura® Session Manager | 8.0.1.1 |
| Avaya Aura® System Manager | 8.0.1.1 |
| Avaya 9600 Series IP Deskphones | Various |
| ReadSpeaker speechServer MRCP | v2.15.x (2.15.1.0) |

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# 4. Configure Avaya Aura® Experience Portal

Configuration and verification for Experience Portal illustrated in this section were all performed using either the Experience Portal Manager (EPM) or SSH connection to the Experience Portal server. It is implied a working system is already in place, including Media Processing Platform (MPP), Apache Tomcat Application Server and SIP routing via Session Manager. Installation of Voice XML applications is also out with the scope of this document. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 8**.

Avaya Aura® 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.

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## 4.1. Add Custom Voice

Customer voices will need to be added to be used by ReadSpeaker. Navigate to **System Configuration → Speech Servers → TTS → Customize.** Add two voices as shown below:

- Voice: **English**
- Country: **USA**
- Language Code: **en-US**
- Voice Name: **Julie**
- Gender: set to **Female**

Once done, select **Add.**

Similarly, add another voice with Voice Name of **James** and Gender set to **Male.**

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## 4.2. Add Speech Server

To add a **TTS** server, click on the **TTS** tab on **Speech Servers** page, and click **Add.**

- Type in a **Name**
- Enable: select **Yes**
- Engine Type: **Nuance**
- Network Address: set to the IP Address of ReadSpeaker
- Base Port: set to the value provided by ReadSpeaker
- Total Number of Licensed TTS Resources: set to the value provided by ReadSpeaker
- New Connection per Session: set to **Yes**
- Voices: select and add the custom voices added in previous section.
- Protocol: **MRCP V2**
- Listener Port: set to the value provided by ReadSpeaker
- Click **Save** to save changes.

Note that the screen capture below displays the configuration during compliance testing.
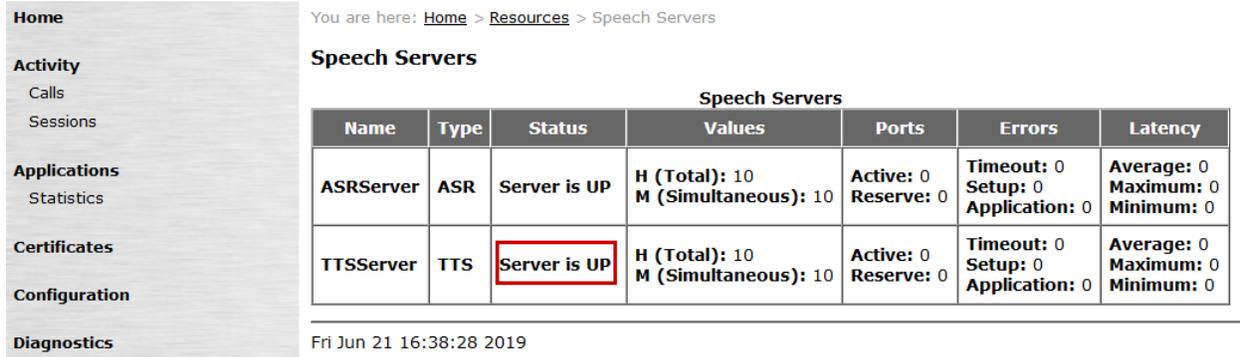
# 5. Configure ReadSpeaker speechServer MRCP

All the configuration for ReadSpeaker is performed by ReadSpeaker engineers, thus, is not included in this document.

# 6. Verification Steps

## 6.1. Avaya Aura® Experience Portal

This section provides the verification steps that may be performed to verify that Experience Portal can communicate with ReadSpeaker successfully.

Verify the TTS server is UP. On the left page, select **System Monitor** and navigate to **MPP →
Service Menu → Resources → Speech Servers**.



# 7. Conclusion

These Application Notes describe the configuration steps required to integrate ReadSpeaker speechServer MRCP Text-to-Speech Server with Avaya Aura® Experience Portal. All feature and serviceability test cases were completed successfully with observations noted in **Section 2.2**.

# 8. 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® Experience Portal, Release 7.2.2, Issue 1, March 2019*

ReadSpeaker speechServer MRCP documentation can be obtained directly from ReadSpeaker.

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