

#### Avaya Solution & Interoperability Test Lab

# Application Notes for INI Messenger™ with Avaya Aura® Experience Portal and Avaya Proactive Outreach Manager—Issue 1.0

#### **Abstract**

These Application Notes describe the configuration steps required to integrate INI Messenger<sup>TM</sup> with Avaya Aura® Experience Portal and Avaya Proactive Outreach Manager.

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 INI Messenger™ (INI Messenger) with Avaya Aura® Experience Portal (Experience Portal) and Avaya Proactive Outreach Manager (POM).

INI Messenger allows organizations to offer their contacts a configurable menu of options for responding to proactive notifications, extending the standard capabilities of POM to a whole new level of functionality. Integrating INI Messenger allows contacts to select from multiple options (i.e., confirm, cancel, or reschedule an appointment). Menu selections may be configured to simply return response data or to transfer the contact to an agent or self-service application. By transferring to an agent or self-service application, organizations can allow contacts to make payments, reschedule appointments, request further information, or take other important actions.

## 2. General Test Approach and Test Results

General test approach was to test the features provided by INI Messenger.

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 tests. Feature tests included:

- Exercise Menu options provided by INI Messenger; Menu, Announce and Transfer and Announce and Disconnect.
- Exercise Menu actions provided by INI Messenger; Transfer, DNC, Repeat, Disconnect and None.
- Verify DTMF inputs provided by user are detected correctly by INI Messenger.
- Verify Call Classification provided by Experience Portal in conjunction with INI Messenger. i.e., Human Answer vs Machine Answer.
- Calls placed using H.323 and SIP trunks.
- Calls placed to PSTN over PRI and Avaya Extensions.

#### 2.2. Test Results

All test cases were passed.

#### 2.3. Support

To obtain technical support for INI Messenger, contact Interactive Northwest via web, email or phone.

• Web: <a href="http://www.interactivenw.com/support.php">http://www.interactivenw.com/support.php</a>

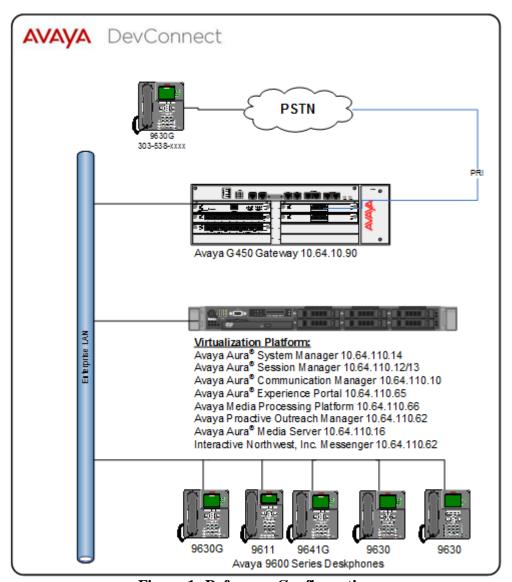
• Email: support@interactivenw.com

• **Phone:** (800) 808-8090, say "Support"

# 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 Proactive Outreach Manager
- Avaya G450 Media Gateway and Avaya Aura® Media Server
- Avaya 9600 Series IP Deskphones
- INI Messenger<sup>TM</sup>



**Figure 1: Reference Configuration** 

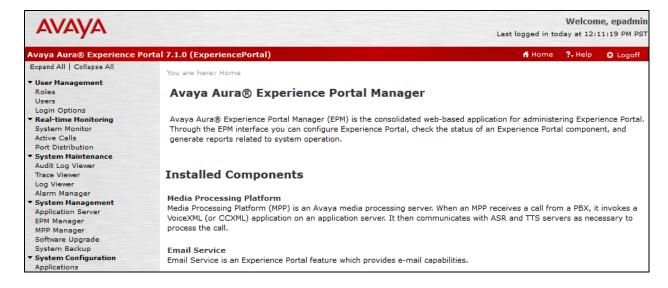
# 3.1. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Experience Portal	EPM 7.1.0.0.1107 MPP 7.1.0.0.1107
Avaya Proactive Outreach Manager	POM.03.00.04.00.022
Avaya G450 Media Gateway	37.19.0
Avaya Aura® Communication Manager	CM 7.0.1.2.0.441.23523
Avaya 9600 Series IP Deskphones	7.0.1.3 (SIP) 6.6.4 (H.323)
Avaya Aura® Session Manager	7.0.1.1.701114
Avaya Aura® System Manager	7.0.1.1.065378
Avaya Aura® Media Server	v.7.7.0.359
INI Messenger <sup>TM</sup>	1.0.4

# 4. Configure Avaya Aura<sup>®</sup> Experience Portal, Avaya Proactive Outreach Manager and INI Messenger™

Log onto Experience Portal Manager (EPM) via a browser; <a href="https://<ip-address">https://<ip-address</a>>, where ip-address is the IP Address of Experience Portal.



# 4.1. Verify Licenses

Navigate to **Security** → **Licensing** to verify licensing for **Experience Portal** - **Enhanced Call** Classifications and **Proactive Outreach Manager** – **Maximum Outbound Ports**.

Licensed Products 🔻				
Experience Portal				
Announcement Ports:	100			
ASR Connections:	100			
Email Units:	10			
Enable Media Encryption:	100			
Enhanced Call Classification:	100			
HTML Units:	100			
SIP Signaling Connections:	100			
SMS Units:	10			
Telephony Ports:	100			
TTS Connections:	100			
Video Server Connections:	100			
Zones:	10			
Version:	7			
Last Successful Poll:	Feb 9, 2017 9:26:04 AM PST			
Last Changed:	Jan 25, 2017 12:54:00 PM PST			
Proactive Outreach Manager		Ø		
EMAIL Channels:	100			
Maximum Outbound Ports:	100			
Predictive Agents:	100			
Preview Agents:	100			
SMS Channels:	100			
Version:	3			
Last Successful Poll:	Feb 9, 2017 9:26:04 AM PST			
Last Changed:	Jan 25, 2017 3:52:44 PM PST			

#### 4.2. Create User

INI Messenger requires a user account to access the POM web services. Navigate to **User**Manager → Users → Add, to add a new user. A user named **inimessenger** with password of **inimessenger1** must be added. At a minimum, **Web Service** role must be assigned to the user. As shown below, during compliance testing, **inimessenger** user was assigned all the roles.



#### 4.3. Deploy INI Messenger™

During compliance testing, INI Messenger was deployed on the co-resident Application Server on Experience Portal. Download the INI provided .war file to the Experience Portal. Log on to Experience Portal, as a privileged user, via a SSH client. Copy the downloaded .war file to the Application Server

[sroot@kja-epm logs] # cp /home/cust/INIMessengerVoice-1.0.4.war /opt/AppServer/Tomcat/tomcat/webapps/INIMessengerVoice.war

#### 4.4. Create Applications

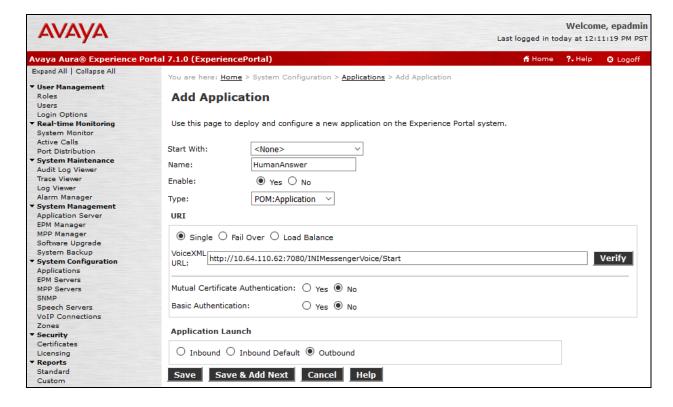
Two INI Messenger applications were created during compliance testing.

- 1. HumanAnswer: Used when a human answers the call
- 2. MachineAnswer: Used when an answering / voicemail system answers the call

Navigate to Home  $\rightarrow$  System Configuration  $\rightarrow$  Applications  $\rightarrow$  Add, to add a new application.

- Type in a name in **Name** field
- Set Type to POM: Application
- In the **VoiceXML URL:** field type in the following URL:
  - o http://<ip-address:port>/INIMessengerVoice/Start

**Note:** ip-address and port are the IP Address and Port of the Application Server.



Continuing from above, select **Verify** to ensure that the application can be launched. A new popup window should result in a similar webpage as shown below.

		AVAYA
Handler: connection	disconnect <u>SetDisconnectCode</u>	
Event :error - errorMessage:message errorEvent:error	e	
Starting application	: INIMessengerVoice	
Application Startup Pa	rameters	
AAI		
ANI		
DNIS		
Protocol Name		

Close the above pop-up window and select **Save** to save changes. Create another Application for answering machine / voicemail systems using identical configuration steps.

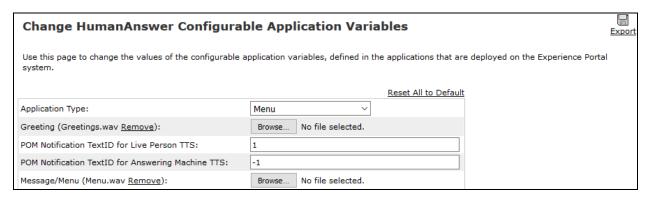
App	Applications									
This	This page displays the applications that are currently deployed on the Experience Portal system.									
									Launch Order	
	Name ‡	Enable	Туре	URI	Launch	ASR	TTS	Requested SIP Calls	Configurable Application Variables	
	AvayaPOMAgent	Yes	POM:Application	http://10.64.110.62:7080 /AvayaPOMAgent/Start	Outbound	No ASR	No TTS	None		
	AvayaPOMAnnouncement	Yes	POM:Application	http://10.64.110.62:7080 /AvayaPOMAnnouncement /Start	Outbound	No ASR	No TTS	None	P	
	AvayaPOMEmail	Yes	Email	http://10.64.110.62:7080 /AvayaPOMEmail/Start	Inbound Default	No ASR	No TTS	None	P	
	AvayaPOMNotifier	Yes	POM:Application	http://10.64.110.62:7080 /AvayaPOMNotifier/Start	Outbound	No ASR	No TTS	None	ø.	
	<u>AvayaPOMSMS</u>	Yes	SMS	http://10.64.110.62:7080 /AvayaPOMSMS/Start	Inbound Default	No ASR	No TTS	None		
	HumanAnswer	Yes	POM:Application	http://10.64.110.62:7080 /INIMessengerVoice/Start	Outbound	No ASR	No TTS	None	P	
	MachineAnswer	Yes	POM:Application	http://10.64.110.62:7080 /INIMessengerVoice/Start	Outbound	No ASR	No TTS	None	P	
	Nailer	Yes	POM:Nailer	https://10.64.110.62:7443 /Nailer/ccxml/start.jsp	Outbound	No ASR	No TTS	None		
	<u>PomDriverApp</u>	Yes	POM:Driver	https://10.64.110.62:7443 /PomDriverApp/ccxml /start.jsp	Outbound	No ASR	English(USA) en-US Jennifer F	None		
	Sample App	Yes	VoiceXML	https://10.64.110.62 /ExperiencePortalTest /intro.vxml	11301	English(USA) en-US	English(USA) en-US Jennifer F	None		
Add	Delete Clear MP	P Cache	Help							

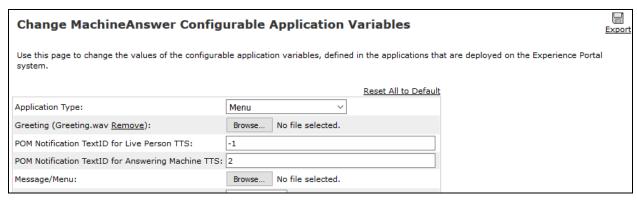
#### 4.5. Configure INI Messenger™

Click on the pencil icon in the **Configurable Application Valuables** to configure variables for HumanAnswer or MachineAnswer application.



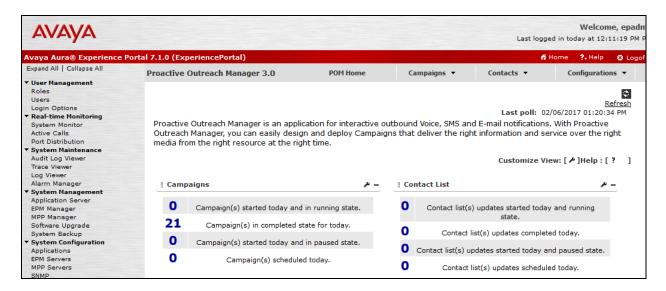
Configure the variables as per the INI Messenger Installation Guide from Section 7. However, note that the values configured in POM Notification TextID for Live Person TTS and POM Notification TextID for Answering Machine TTS will be used when configuring POM Campaign Strategy. For HumanAnswer Application, set POM Notification TextID for Answering Machine TTS to -1 and for MachineAnswer Application, set POM Notification TextID for Live Person TTS to -1. For HumanAnswer Application, POM Notification TextID for Live Person TTS was set to 1 and for MachineAnswer Application, POM Notification TextID for Answering Machine TTS was set to 2.



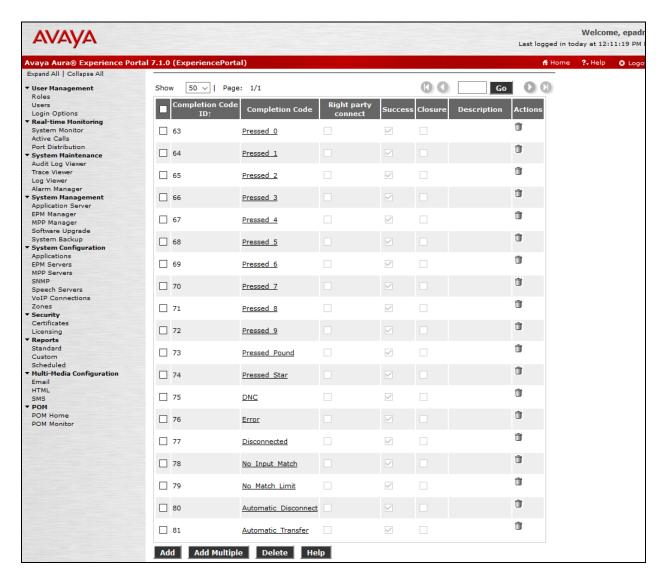


#### 4.6. Configure POM

Configuration for POM is also performed via EPM. On the left pane navigatet to  $POM \rightarrow POM$  Home.

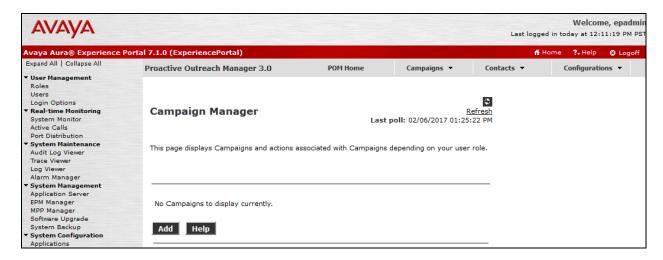


#### 4.6.1. Create Completion Codes



#### 4.6.2. Create Campaign

From POM Home, navigate to **Campaigns** → **Campaign Manager** → **Add** to create a new POM Campaign.

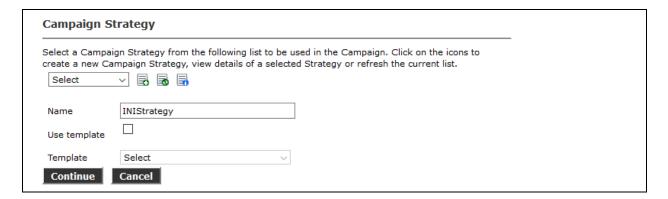


Type in a Name and select Continue.

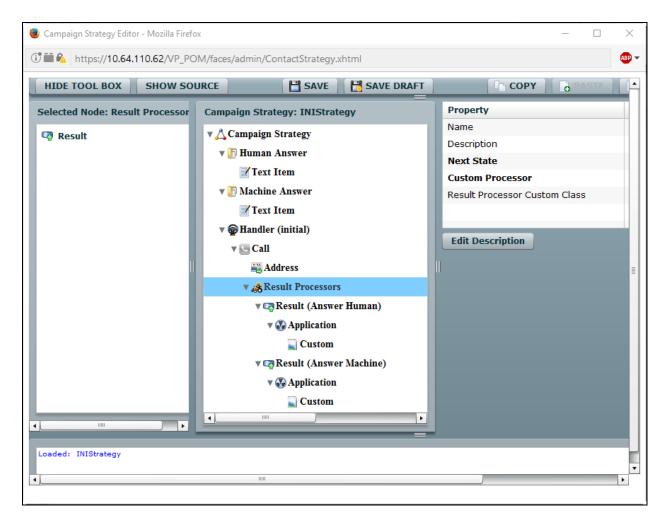


On the **Define Campaign** page, under the **Campaign Strategy** section, select + to add a new **Campaign Strategy**. Type in a name and select **Continue**.

Note: Ensure that pop-ups are allowed for EPM, prior to selecting Continue.



A Campaign Strategy Editor pop-up will open. Configure the strategy, click Save and close the window.



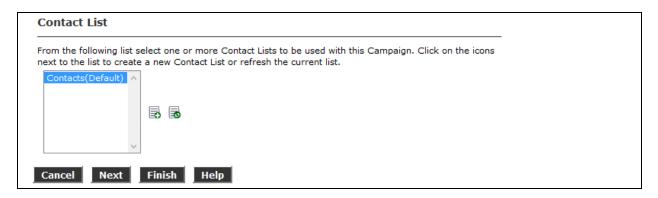
The XML below displays the strategy that was created during compliance testing. Note that the ids, assigned to Notification Text, should match the ones configured for HumanAnswer and MachineAnswer Applications from **Section 4.5**.

```
535327279393dbdb13139999ffff3030fefed9d9f4f4a2a22626f2f216161818#<?xml
version="1.0"?>
<tns:AvayaPIMContactStrategy xmlns:tns="http://www.avaya.com/ContactStrategy"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.avaya.com/ContactStrategy ContactStrategy.xsd
  <NotificationText defaultlang="en-us" foundError="false" id="1" name="Human</pre>
    <textItem foundError="false" isBranch="false" language="en-us">
      <text>Human Answer</text>
    </textItem>
  </NotificationText>
  <NotificationText defaultlang="en-us" foundError="false" id="2"</pre>
name="Machine Answer">
    <textItem foundError="false" isBranch="false" language="en-us">
      <text>Machine Answer</text>
    </textItem>
  </NotificationText>
  <Handler foundError="false" state="initial">
    <action AMDAction="0" BackgroundAMD="OFF" CallPacingType="None"</pre>
DriverApp="PomDriverApp" EnhancedCCA="ON" OnMediaServerFailure="retry"
allocationType="1" foundError="false" guardTime="Disable" priority="5"
type="call">
      <address foundError="false" isBranch="false" weekDaysOnly="false">
        <ContactAttribute>phoneNumber1</ContactAttribute>
      </address>
      <resultprocessors customProcessor="None" foundError="false"</pre>
nextState="done">
        <result foundError="false" nextState="wait" value="Answer Human">
          <Application foundError="false">
            <Custom application="HumanAnswer" campaignCallBack="Enable"</pre>
canCancelCallback="Enable" foundError="false" generalCallBack="Enable"
prefAgentCallback="Enable"/>
          </Application>
        </result>
        <result foundError="false" nextState="done" value="Answer_Machine">
          <Application foundError="false">
            <Custom application="MachineAnswer" campaignCallBack="Enable"</pre>
canCancelCallback="Enable" foundError="false" generalCallBack="Enable"
prefAgentCallback="Enable"/>
          </Application>
        </result>
      </resultprocessors>
    </action>
  </Handler>
</tns:AvayaPIMContactStrategy>
```

Continuing from above, under the **Campaign Strategy** section, select the refresh icon. The name of the strategy created in previous section, should now appear on the drop down list, select it.



Continuing from above, under the **Contact List** section, select a previously created contact list and select **Next.** 



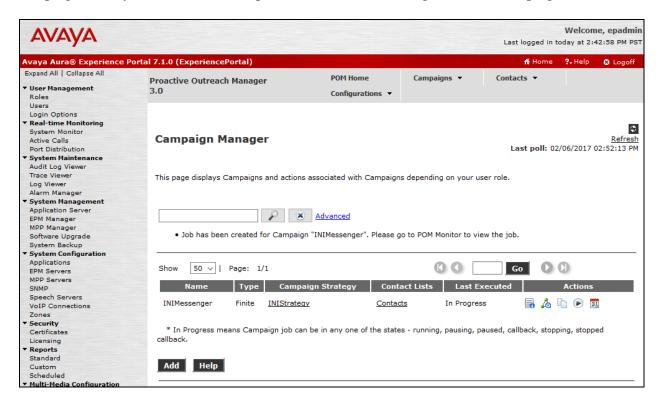
#### 4.7. Configure POM CCA Parameters

During compliance testing, the CCA Parameters had to be tweaked to recognize the Voicemail beep provided by Avaya Aura® Communication Manager Messaging and another third party Voicemail system. To change the CCA Parameters, using a privileged user, log onto the MPP via a SSH client. Modify the call\_progress.conf. For reference, the values that were changed in call\_progress.conf during compliance testing can be found in **Appendix A.** 

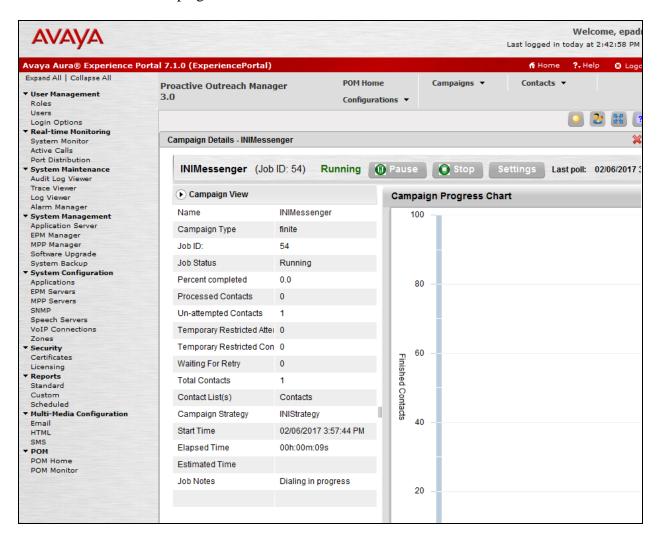
```
[sroot@kja-epm ~]# cd /opt/Avaya/ExperiencePortal/MPP/config/
[sroot@kja-epm config]# ls -l call_progress.conf
-rw-r--r-. 1 avayavp avayavpgroup 10194 Mar 24 2016 call_progress.conf
[sroot@kja-epm config]#
```

### 5. Verification Steps

To verify if the POM Campaign is configured correctly, via EPM, navigate to **Home** → **POM Home** → **Campaigns** → **Campaign Manager.** Select the play icon under **Actions** to run the campaign. Verify outbound calls are placed to the contacts assigned to this campaign.



To monitor the running campaign, navigate to **Home** → **POM Monitor.** Select the campaign to view the state of the campaign.



#### 6. Conclusion

These Application Notes describe the configuration steps required to integrate for INI Messenger<sup>TM</sup> with Avaya Aura® Experience Portal and Avaya Proactive Outreach Manager. All feature and serviceability test cases were completed successfully.

#### 7. Additional References

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

- [1] Administering Avaya Aura® Experience Portal, Release 7.1, Issue 1, May 2016
- [2] Implementing Proactive Outreach Manager, Release 3.0.4, Issue 1, December 2016

INI Messenger documentation used during compliance testing:

- [3] INI Messenger Installation Guide, Date 4/22/2016
- [4] INI Messenger Administration User Guide, Date 4/19/2016

# **Appendix A**

```
MCESS1:

sig VOICE[0,99999], ANTONE
jmp MCESS4

ANTONE:

sig ANYTONE[150,99999], ANTON2
sig SILENT[1000,+], MCESS2
rep R_MCES
end

ANTON2:

sig ANYTONE[0,150], MCESS2
jmp MCESS2
```

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