AVAYA

Avaya Solution & Interoperability Test Lab

Application Notes for Geomant Buzzeasy CallBack with Avaya Aura® Session Manager 7.0.1 and Avaya Aura® Communication Manager 7.0.1 - Issue 1.0

Abstract

These Application Notes describe the configuration steps for Geomant Buzzeasy Callback to interoperate with Avaya Aura® Session Manager 7.0.1 and Avaya Aura® Communication Manager 7.0.1. Buzzeasy Callback allows customer callbacks to be scheduled based on Estimated Wait Time (EWT) using Avaya Aura® Communication Manager vectors to route calls to a Buzzeasy server in the cloud and connect an available agent to the Customer using a SIP trunk.

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.

SJW; Reviewed:
SPOC 12/20/2016
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1. Introduction

These Application Notes describe the configuration steps for Geomant Buzzeasy Callback to interoperate with Avaya Aura® Session Manager 7.0.1 and Avaya Aura® Communication Manager 7.0.1. Buzzeasy Callback uses an IVR in the Geomant cloud to Schedule customer callbacks based on Estimated Wait Time (EWT) and can be configured to consider other Contact Centre Metrics via Avaya Aura® Communication Manager vectors. Calls are routed to a Buzzeasy server in the cloud and connect an available agent to the Customer using a SIP trunk via a local Buzzeasy server.

2. General Test Approach and Test Results

The general test approach was to configure two Buzzeasy servers to communicate with the Communication Manager via a SIP trunk configured on the Session Manager. One Buzzeasy server was in the Geomant Cloud and the other in the Devconnect lab. Testing was performed by calling inbound to a VDN and using vectors to allow the calling party to schedule a callback by pressing a digit on the telephone and being routed to the Buzzeasy server in the cloud. The call is scheduled and presented over IP to the Buzzeasy server in the Devconnect Lab. It calls a VDN and uses a vector to call an available agent and be connected to the original calling party.

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.

This test was conducted in a lab environment simulating a basic customer enterprise network environment. The testing focused on the standards-based interface between the Avaya solution and the third party solution. The results of testing are therefore considered to be applicable to either a premise-based deployment or to a hosted or cloud deployment where some elements of the third party solution may reside beyond the boundaries of the enterprise network, or at a different physical location from the Avaya components.

Readers should be aware that network behaviors (e.g. jitter, packet loss, delay, speed, etc.) can vary significantly from one location to another, and may affect the reliability or performance of the overall solution. Different network elements (e.g. session border controllers, soft switches, firewalls, NAT appliances, etc.) can also affect how the solution performs.

If a customer is considering implementation of this solution in a cloud environment, the customer should evaluate and discuss the network characteristics with their cloud service provider and network organizations, and evaluate if the solution is viable to be deployed in the cloud.

The network characteristics required to support this solution are outside the scope of these Application Notes. Readers should consult the appropriate Avaya and third party documentation for the product network requirements. Avaya makes no guarantee that this solution will work in all potential deployment configurations.

2.1. Interoperability Compliance Testing

The interoperability compliance test included both feature functionality and serviceability testing. The feature functionality testing focused on scheduling callbacks and receiving calls in different call scenarios. The tests include:

- Callback Placed with Available Agents.
- Callback Placed with No Available Agents.
- Calback not requested.
- Failover/Service – Tests the behaviour of Buzzeasy Servers during certain failed conditions.

2.2. Test Results

All test cases were completed successfully with the following observations.

- When a customer disconnects from a call the agent is still connected due to a feature in Buzzeasy that allows the agent to carry out some after call work before pressing a key set in Buzzeasy for call types to disconnect the call and log the result.
- If there is an outage or failure during a call the buzzeasy server will reschedule the failed call after configurable minutes.

2.3. Support

Technical Support can be obtained for Geomant products from the following.

Web: www.buzzeasy.com
Email: buzzeasysr@support.geomant.com
Telephone: +44 (0)207 022 4874

3. Reference Configuration

The configuration shown in **Figure 1** was used during the compliance test of Buzzeasy Callback with Session Manager and Communication Manager. Buzzeasy utilises a SIP connection through Session Manager to schedule callbacks and place calls to Communication Manager agents' sets.
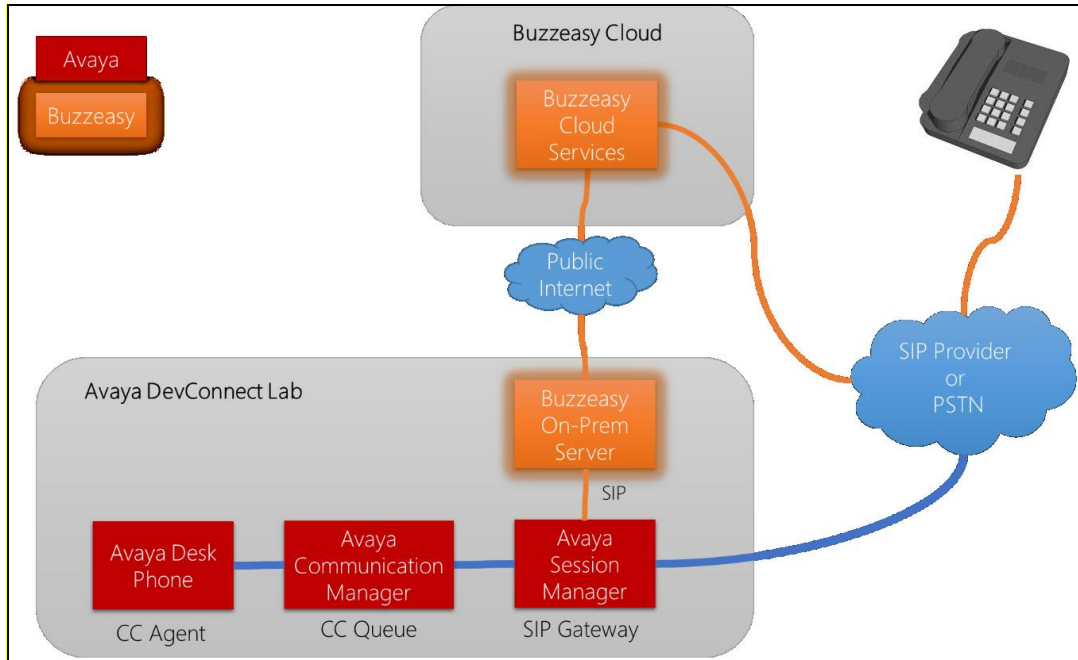
Figure 1: Buzzeasy with Avaya Aura® Session Manager and Communication Manager

4. Equipment and Software Validated

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

Avaya Equipment/Software	Release/Version
Avaya Aura® Communication Manager running on VMware	R7.0 Build R017x.00.0.441.0 S/W update 7.0.1.1.0.441.23169 Platform update PLAT-rhel6.5-0010
Avaya Aura® Session Manager running on VMware	R7.0.1.1.70114
Avaya Aura® System Manager running on VMware	R7.0.1.2 Build No. 7.0.0.0.0.16266 S/W update 7.0.1.2.075662 Service Pack 2
Avaya 96xx IP phones 9611G (H.323)	6.6029
Avaya G430 Media Gateway • MGP Firmware	Version 37.38.0
Geomant Equipment/Software	
Buzzeasy Server (Cloud/Local)	Version 2.5

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5. Configure Avaya Aura® Communication Manager

Configuration and verification operations on Communication Manager illustrated in this section were all performed using Avaya Site Administrator Emulation Mode. The information provided in this section describes the configuration of Communication Manager for this solution. It is implied a working system is already in place, including SIP trunks to Session Manager. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 10**. The configuration described in this section can be summarized as follows:

• Verify System Capacity (SIP)
• Verify System Options (EAS-PHD)
• Define VDN's
• Define Vectors

5.1. Verify System Capacity

The license file installed on the system controls these attributes. If a required feature is not enabled or there is insufficient capacity, contact an authorized Avaya sales representative. Use the **display system-parameters customer-options** command to determine these values. On **Page 2** of the System-Parameters Customer-Options form**,** verify that the number of **Maximum Administered SIP Trunks** supported by the system is sufficient.

```
display system-parameters customer-options                    Page    2 of  10
                             OPTIONAL FEATURES

IP PORT CAPACITIES                                                  USED
                      Maximum Administered H.323 Trunks: 12000 16
            Maximum Concurrently Registered IP Stations: 18000 2
              Maximum Administered Remote Office Trunks: 12000 0
Maximum Concurrently Registered Remote Office Stations: 18000 0
                 Maximum Concurrently Registered IP eCons: 414   0
  Max Concur Registered Unauthenticated H.323 Stations: 100   0
                       Maximum Video Capable Stations: 41000 1
              Maximum Video Capable IP Softphones: 18000 4
                     Maximum Administered SIP Trunks: 24000 180
  Maximum Administered Ad-hoc Video Conferencing Ports: 24000 0
   Maximum Number of DS1 Boards with Echo Cancellation: 522   0
                            Maximum TN2501 VAL Boards: 128   0
                   Maximum Media Gateway VAL Sources: 250   0
           Maximum TN2602 Boards with 80 VoIP Channels: 128   0
          Maximum TN2602 Boards with 320 VoIP Channels: 128   0
  Maximum Number of Expanded Meet-me Conference Ports: 300   0


        (NOTE: You must logoff & login to effect the permission changes.)
```

On Page 7 On Page 2 of the System-Parameters Customer-Options form, verify that EAS-PHD and the **Vectoring** options are set to **y**.

```
display system-parameters customer-options                      Page   7 of  12
                        CALL CENTER OPTIONAL FEATURES

                        Call Center Release: 7.0

                                ACD? y                      Reason Codes? y
                       BCMS (Basic)? y           Service Level Maximizer? n
         BCMS/VuStats Service Level? y           Service Observing (Basic)? y
  BSR Local Treatment for IP & ISDN? y   Service Observing (Remote/By FAC)? y
                   Business Advocate? y           Service Observing (VDNs)? y
                    Call Work Codes? y                          Timed ACW? y
       DTMF Feedback Signals For VRU? y                 Vectoring (Basic)? y
                   Dynamic Advocate? n              Vectoring (Prompting)? y
        Expert Agent Selection (EAS)? y           Vectoring (G3V4 Enhanced)? y
                          EAS-PHD? y              Vectoring (3.0 Enhanced)? y
                  Forced ACD Calls? n     Vectoring (ANI/II-Digits Routing)? y
                                        Vectoring (G3V4 Advanced Routing)? y
           Lookahead Interflow (LAI)? y                 Vectoring (CINFO)? y
  Multiple Call Handling (On Request)? y    Vectoring (Best Service Routing)? y
      Multiple Call Handling (Forced)? y           Vectoring (Holidays)? y
      PASTE (Display PBX Data on Phone)? y         Vectoring (Variables)? y
            (NOTE: You must logoff & login to effect the permission changes.)
```

5.2. Add Customer Call and Callback VDN's

Use the command **add vdn #** where # is a valid extension in the Communication Manager dial plan. Give the VDN a descriptive **Name*:**. enter the **Destination** as the Vector Number used and enter the first skill as the skill given to the agents assigned to answer the customer calls. Vector **60** was used in testing. This step is repeated for the callback VDN with the Destination being the Vector used to route the callback.

```
add vdn 8274100                                                 Page   1 of   3
                        VECTOR DIRECTORY NUMBER

                             Extension: 827-4100
                                 Name*: GeomantOutbound
                           Destination: Vector Number          60
                   Attendant Vectoring? n
                 Meet-me Conferencing? n
                  Allow VDN Override? n
                                  COR: 1
                                  TN*: 1
                             Measured: both  Report Adjunct Calls as ACD*? n
       Acceptable Service Level (sec): 20

       VDN of Origin Annc. Extension*:
                           1st Skill*: 1
                           2nd Skill*:
                              3rd Skill*:
```

5.3. Add Customer Call and Callback Vector's

The vector examples below are examples of what was used in testing. Use the **change vector #** command where # is the Destination vector added in Section 5.2.

5.3.1. Customer Call Vector GeomantINB

The Vector must have a prompt after announcement to enter a digit to request a callback. If the digit is pressed the call is routed to Buzzeasy and if not the call is queued to an agent.

```
change vector 60                                              Page   1 of   6
                              CALL VECTOR

    Number: 60              Name: GeomantINB
Multimedia? n     Attendant Vectoring? n    Meet-me Conf? n         Lock? n
     Basic? y   EAS? y   G3V4 Enhanced? y   ANI/II-Digits? y   ASAI Routing? y
 Prompting? y   LAI? y  G3V4 Adv Route? y   CINFO? y   BSR? y   Holidays? y
 Variables? y   3.0 Enhanced? y
01 wait-time    2   secs hearing ringback
02 collect      1    digits after announcement 8278060  for none
03 route-to     number 8200001         with cov n if digit        = 1
04 queue-to     skill 1st  pri m
05 wait-time    10  secs hearing ringback
06 collect      1    digits after announcement 8278060  for none
07 route-to     number 8200001         with cov n if digit        = 1
08 wait-time    10  secs hearing ringback
09 goto step    8          if unconditionally
10 stop
```

5.3.2. Callback Vector

The Vector queues the callback for an available agent and when the call is answered Buzzeasy will prompt the agent to press any key to make the outbound call to the customer.

```
change vector 61                                              Page   1 of   6
                              CALL VECTOR

    Number: 61              Name: GeomantCB
Multimedia? n     Attendant Vectoring? n    Meet-me Conf? n         Lock? n
     Basic? y   EAS? y   G3V4 Enhanced? y   ANI/II-Digits? y   ASAI Routing? y
 Prompting? y   LAI? y  G3V4 Adv Route? y   CINFO? y   BSR? y   Holidays? y
 Variables? y   3.0 Enhanced? y
01 wait-time    2   secs hearing ringback
02 queue-to     skill 1st  pri m
03 wait-time    10  secs hearing ringback
04 goto step    3          if unconditionally
05 stop
```

6. Configure Avaya Aura® Session Manager

The section describes the steps required to allow Buzzeasy to communicate with Session Manager. All configuration was done using the Avaya Aura® System Manager web interface and it is assumed that a working Session Manager has been previously installed and configured; making this out with the scope of this document.

Browse to **https://System Manager IP/Hostname/SMGR** to access the web interface of the System Manager. Login with authorized credentials.

The dashboard will be loaded and from this select **Routing** from the **Elements** section.

6.1. Add Buzzeasy Entity

The Buzzeasy server must be added as a trusted entity on System Manager. On the **Routing** tab select **SIP Entities** from the left hand menu and click on **New**

Enter a descriptive **Name** and valid **FQDN or IP Address**. Select **SIP Trunk** from the **Type** drop down. All other entries can be default. Click on **Commit** to save the changes (not shown).

6.2. Add Buzzeasy Entity Link

A trusted link between the Session Manager and Buzzeasy must be created to allow SIP communication to be made between the servers. On the **Routing** tab Select **Entity Links** from the left hand menu and click on **New**.

Enter a descriptive **Name** and Select the Session Manager entity as **SIP Entity 1** used to communicate. **SM72676** was used for testing. Enter the **Buzzeasy** entity as **SIP Entity 2** and then select the **Protocol** as **UDP**. The Port will automatically reset to 5060.

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7. Configure Geomant Buzzeasy

Geomant Buzzeasy is installed and configured by Geomant Technicians. Support can be obtained using the contact information in **Section 2.3**. For testing the following entries were edited in the Buzzeasy configuration file to allow communication with the Buzzeasy Cloud server and Avaya Aura® Session Manager. The **PrimarySIPEndpoint** must be set as the Avaya Aura® Session Manager IP. This will send SIP requests to the target address as a SIP UA;
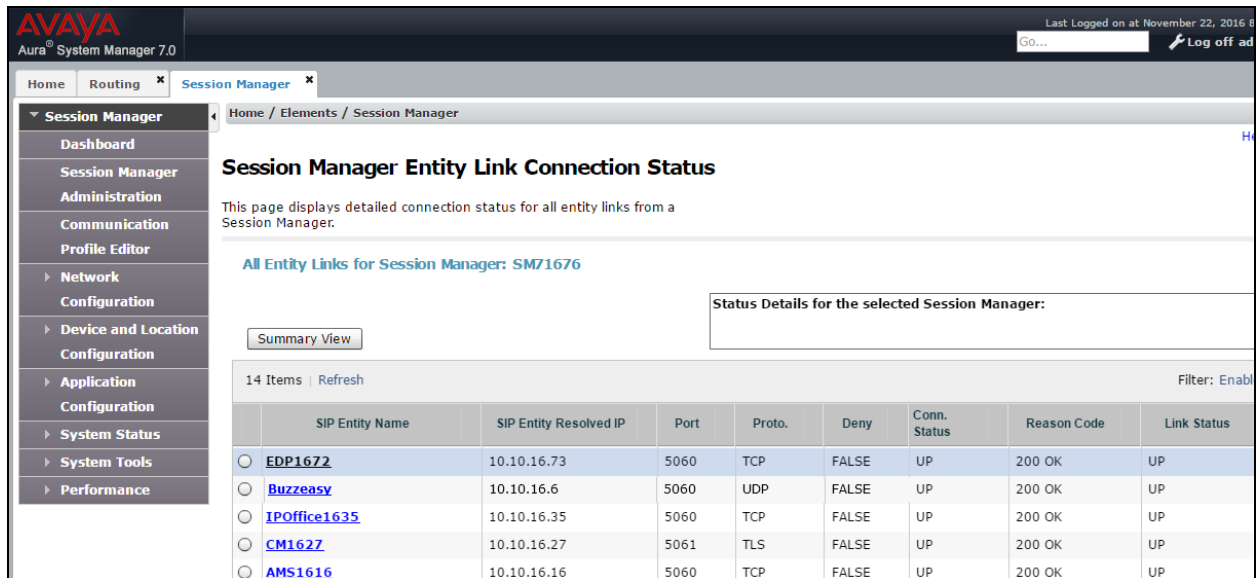
```
<setting name="PrimarySIPEndpoint" serializeAs="String">
        <value>10.44.1.76</value>
  </setting>
```

8. Verification Steps

This section describes the steps needed to verify the link between Buzzeasy and Session manager is established.

8.1. Session Manager

From the System Manager Dashboard (not shown), select Session Manager from the Elements Section. Select SIP Entity Monitoring (not shown) from left hand menu under **System Status**. Verify that the **Buzzeasy** SIP Entity is set to **Deny False**, **Conn. Status** is **UP**, **Reason code** is **200 OK** and **Link Status** is **UP**.

8.2. Buzzeasy

Check Buzzeasy phone server logs to show that port has been established and waiting for requests. Phone Server logs can be found on the local server at *D:\Logging\PhoneServer.log*.

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8.3. Communication Manager

Calls can be made to the cloud Buzzeasy server and from Buzzeasy to the VDN numbers to verify routing.

9. Conclusion

These Application Notes describe the compliance tested configuration of the Geomant Buzzeasy Callback Solution with Avaya Aura® Communication Manager 7.0.1 and Avaya Aura® Session Manager 7.0.1. All tests passed with observations noted in **Section 2.2**.

10. 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, August 2015, Document Number 03-300509, Issue 1.
[2] *Avaya Aura® Communication Manager Feature Description and Implementation,* Release 7.0, August 2015, Document Number 555-245-205, Issue 1.
[3] *Administering Avaya Aura® Session Manager,* Release 7.0, Issue 1 August 2015.
[4] *Administering Avaya Aura® System Manager,* Release 7.0, Issue 1, August, 2015.

Product Documentation for Buzzeasy can be requested from http://kb.buzzeasy.com/