Application Notes for Jabra Direct with Jabra Engage 50 Stereo/Mono USB-A & USB-C Headsets with Avaya one-X® Agent - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Jabra Direct, with Jabra Engage 50 Stereo/Mono USB-A & USB-C Headsets with Avaya one-X® Agent. The Jabra Engage headsets connects to the PC via Jabra Engage Link controller using USB-A or USB-C cables. Jabra Direct is a collection of programs that enable remote call control with Jabra headsets and Avaya one-X® Agent. With a Jabra headset connected via Jabra Engage Link to the USB interface on a PC, users can directly answer, end, mute/unmute, hold/resume, adjust volume and speed dial using buttons on the Jabra Engage Link.

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 Jabra Engage 50 Stereo/Mono USB-A & USB-C Headsets together with Jabra Direct software allow connection and call control with Avaya one-X® Agent (hereafter referred to as one-X Agent) via Jabra Engage Link USB-A or USB-C cables. In this compliance test, a USB-A cable is used for connection to PC. Jabra Direct is a collection of programs that enable remote call control with Jabra headsets and one-X Agent. With a Jabra headset connected via Jabra Engage Link to the USB interface on a PC, users can directly answer, end, mute/unmute, hold/resume, adjust volume and speed dial using button on the Jabra Engage Link. Hence, the words “Jabra headset” hereafter would include the Jabra Engage link.

The Jabra Direct includes two core functions, which were exercised during the compliance testing:

- **Readiness Status**: Status of your device and softphone via a dashboard.
- **Personalized Headset**: This is done via device settings, firmware update and call control.

2. General Test Approach and Test Results
The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls with one-X Agent, answering and ending calls using the call control button on the Jabra headset, and verifying two-way audio. The call types included calls to voicemail, local extensions, and the PSTN. Call hold and resume, mute and un-mute, and speed dial are also tested.

The serviceability testing focused on verifying the usability of the Jabra headset solution after restarting the one-X Agent, restarting the PC and disconnecting/reconnecting the USB cable of Jabra Engage Link to the PC.

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 these DevConnect Application Notes included the enablement of supported encryption capabilities in the Avaya products. 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 endpoints utilized enabled capabilities of TLS/SRTP.

Avaya’s formal testing and Declaration of Conformity is provided only on the headsets/handsets that carry the Avaya brand or logo. Avaya may conduct testing of non-Avaya headset/handset to determine interoperability with Avaya phones. However, Avaya does not conduct the testing of non-Avaya headsets/handsets for: Acoustic Pressure, Safety, Hearing Aid Compliance, EMC regulations, or any other tests to ensure conformity with safety, audio quality, long-term reliability or any regulation requirements. As a result, Avaya makes no representations whether a particular non-Avaya headset will work with Avaya’s telephones or with a different generation of the same Avaya telephone.

Since there is no industry standard for handset interfaces, different manufacturers utilize different handset/headset interfaces with their telephones. Therefore, any claim made by a headset vendor that its product is compatible with Avaya telephones does not equate to a guarantee that the headset will provide adequate safety protection or audio quality.

2.1. **Interoperability Compliance Testing**

All test cases were performed manually. The following features were verified:

- Placing calls to the voicemail system. Voice messages were recorded and played back to verify that the playback volume and recording level were good.
- Placing calls to internal extensions to verify two-way audio.
- Placing calls to the PSTN to verify two-way audio.
- Answering and ending calls using the call button on the Jabra headset and the soft button on one-X Agent.
- Using the call button on the Jabra headset and the soft button on one-X Agent to hold and resume the audio.
- Using the volume buttons on the Jabra headset to adjust the audio volume.
- Using the mute button on the Jabra headset and the soft button on one-X Agent to mute and un-mute the audio.
- Using the customizable button for speed dial.
- Verifying incoming call notification on Jabra headset.
- Verifying call ended notification on Jabra headset.

The serviceability testing focused on verifying the usability of the Jabra headset solution after restarting the one-X Agent, restarting the PC and reconnecting the USB cable to the PC.

2.2. **Test Results**

All test cases passed successfully.
2.3. **Support**

For support on this Jabra headset solution, contact Jabra Technical Support at:

- Phone: +1-866-697-8757
- Website: [http://www.jabra.com/Support](http://www.jabra.com/Support)
- Email: JabraSupport.US@jabra.com
3. **Reference Configuration**

**Figure 1** illustrates the test configuration used to verify the Jabra Direct, Jabra Engage 50 Stereo/Mono Headsets with Jabra Engage Link solution. The configuration consists of an Avaya Aura® Communication Manager running on a virtualized server with an Avaya G450 Media Gateway providing connectivity to the PSTN via a simulated public trunk. Avaya Aura® Messaging was used as the voicemail system. Avaya Aura® Media Server provides the audio media processing. The Jabra Direct software was installed on the PC together with Avaya one-X® Agent. The Jabra headsets are connected via Jabra Engage Link USB-A cable to the PC.

**Figure 1: Test Configuration**
4. **Equipment and Software Validated**

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

<table>
<thead>
<tr>
<th>Equipment/Software</th>
<th>Release/Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avaya Aura® Communication Manager</td>
<td>8.0 FP1 (R018x.00.0.822.0 Patch 25031)</td>
</tr>
<tr>
<td>Avaya Aura® Media Server</td>
<td>8.0.0.150</td>
</tr>
<tr>
<td>Avaya G450 Media Gateway</td>
<td>40.20.0</td>
</tr>
<tr>
<td>Avaya Aura® Messaging</td>
<td>7.0 SP0 Patch 2</td>
</tr>
<tr>
<td>Avaya one-X Agent running on Windows 10</td>
<td>2.5.12 (H.323)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Jabra Direct 2.0</td>
<td>4.0.3912.0</td>
</tr>
<tr>
<td>Jabra Engage 50 Stereo/Mono Headsets</td>
<td>1.24 (SP2)</td>
</tr>
<tr>
<td>Jabra Engage Link USB-A</td>
<td>1.22 (SP1)</td>
</tr>
</tbody>
</table>
5. **Configure Avaya Aura® Communication Manager**

This section covers the station configuration for one-X Agent. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

Use the `add station` command to create a station for one-X Agent. Set the **Type** field to the station type to be emulated. In this example, 9641G was used. Set the **Port** field to **IP** and configure a **Security Code**, which will be used as the password by one-X Agent to log in. Set the **IP Softphone** field to **y**.

```
add station 10004  
  Extension: 10004  
  Type: 9641G  
  Port: S00005  
  Name: one-X Agent  
  Security Code: xxxxxx  
  TN: 1  
  Coverage Path 1:  
  Coverage Path 2:  
  Hunt-to Station:  

STATION OPTIONS
  Location:  
  Loss Group: 19  
  Speakerphone: 2-way  
  Display Language: english  
  Survivable GK Node Name:  
  Survivable COR: internal  
  Survivable Trunk Dest? y  
  Message Lamp Ext: 10003  
  Mute Button Enabled? y  
  Button Modules: 0  
  Media Complex Ext:  
  IP SoftPhone? y  
  IP Video Softphone? n  
  Short/Prefix Registration Allowed: default  
  Customizable Labels? y
```

On **Page 4** of the Station form, configure the additional feature buttons shown in bold, which are used by one-X Agent to log in as an Automatic Call Distribution (ACD) agent.

```
add station 10004  

SITE DATA
  Room:  
  Jack:  
  Cable:  
  Floor:  
  Building:  
  Headset? n  
  Speaker? n  
  Mounting: d  
  Cord Length: 0  
  Set Color:  

ABBREVIATED DIALING
  List1: system  
  List2:  
  List3:  

BUTTON ASSIGNMENTS
  1: call-appr  
  2: call-appr  
  3: call-appr  
  4:  
  5: abrv-dial List: 1 DC: 01  
  6: abrv-dial List: 1 DC: 02  
  7: auto-in Grp:  
  8: aux-work RC: Grp:  

  voice-mail 10000
```
6. **Configure Avaya one-X® Agent**

Before configuring the one-X Agent, the headset has to be configured and provisioned as in Section 7 first. After logging into one-X Agent, click on and then select **Agent Preferences** as shown below.

In the **Agent Preferences** window, click on **Audio** and then select the **Advanced** tab as shown below. Check that **Playback Device** and **Record Device** fields display *Jabra Engage 50*. Otherwise, select the device from the click down menu on the respective box.
7. **Configure Jabra Engage 50 headset solutions**

This section covers the steps to integrate Jabra Engage 50 headsets with one-X Agent, including:

- Installing the Jabra Direct software
- Connect the Jabra headset
- Configuring Jabra headset with Jabra Direct

**Note:** After successfully performing this procedure, the Jabra headset will be detected in one-X Agent as described in Section 6.

### 7.1. **Installing the Jabra Direct Software**

Jabra Direct software can be obtained from Jabra support portal at [https://www.jabra.com/support/](https://www.jabra.com/support/). Installation of the software is done through executing the setup file and following the prompts.

### 7.2. **Connect the Jabra headset**

Plug the Jabra Engage 50 headset via Jabra Engage Link to the USB port of the PC. Jabra Engage Link has 2 models, i.e., USB-A and USB-C. In this compliance test, USB-A cable for the Jabra Engage Link is used. The device drivers will automatically be installed.

Open the Jabra Direct program installed on the PC. Select the **Device** tab on the top menu and **Device ready for use** is shown with a **tick** on the right of the sentence for the Jabra Engage 50. The Avaya one-X Agent will be in ready state only when it is running but not necessarily logged in. Below shows the **Avaya One-X Agent in Ready state**.

![Avaya One-X Agent in Ready state](image.png)
7.3. **Configuring Jabra headset with Jabra Direct**

On the default screen (Device tab), click on Device settings near the top right pane shown on the previous screen. Scroll to the lower portion of the screen and expand the Softphone (PC). Assuming one-X Agent is setup and logged in, set the option for the following:

- **Ringtone in headset**: *Slide to On position* [optional for ringtone to be played on headset]

![](image1)

Set the customizable **Speed dial 1** to the number desired after selecting **Speed dial** on the 4 dot icon button.

![](image2)

The rest of the settings can be left as default. Click **Apply** (not shown) at the bottom of the screen to confirm the settings and the Jabra Engage Link device will reboot.
8. **Verification Steps**

This section verifies that the Jabra solution has been successfully integrated with one-X Agent PC.

1. Verify that the Jabra headset has been successfully connected for use with one-X Agent. From the **Jabra Direct** program, select the **Device** tab. Verify that the **Device ready for use** is ticked as shown in **Section 7.2**.

2. Verify that the **Avaya one-X Agent** is shown in **Ready** status. Note that the Ready state does not mean one-X Agent is logged in. The application can be just running without the user being logged in. Once the Jabra headset is connected to one-X Agent, verify that incoming and outgoing calls can be established with two-way audio to the headset. For incoming calls, answer the call by pressing the call button on the Jabra Engage Link as shown below. Refer to [3] for Jabra Engage 50 User Manual for more information on the buttons.

3. End the call by pressing the same call button on the Jabra Engage Link.

4. Verify also that Jabra Headset is able to remotely control call functions such as answer, mute/un-mute, hold/resume and end the call. Call Hold is done by pressing and holding
the call button for a few seconds till you hear a signal. Pressing the call button again will resume the call. Similarly, such call control functions could be done on the one-X Agent.
9. **Conclusion**

These Application Notes describe the configuration steps required to integrate Jabra Direct, Jabra Engage 50 Stereo/Mono USB-A & USB-C Headsets with Avaya one-X® Agent. All test cases were completed successfully.

10. **Additional References**

This section references the Avaya and Jabra documentation that are relevant to these Application Notes.

The following Avaya product documentation can be found at [http://support.avaya.com](http://support.avaya.com).


The following Jabra documentation can be found at [http://www.jabra.com](http://www.jabra.com).
