



Avaya Solution & Interoperability Test Lab

Application Notes for Jabra Link 400 USB-A/C DECT Adapter and Jabra Engage 55 UC DECT Headset with Avaya Agent for Desktop - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Jabra Link 400 USB-A/C DECT Adapter and Jabra Engage 55 UC DECT Headset with Avaya Agent for Desktop.

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

Jabra Link 400 USB-A/C DECT Adapter and Jabra Engage 55 UC DECT Headset is a Mono/Stereo/Convertible headset that allows connection and call control with Avaya Agent for Desktop 2.0.6 (hereafter referred to as Agent Desktop) via the USB interface to the PC. In this compliance test, only Jabra Engage 55 UC Stereo DECT Headset was used since there are similarities between Jabra Engage 55 UC DECT Mono, Stereo, and Convertible models (see **Attachment 1**, Jabra Engage 55 Declaration of Similarity).

With a Jabra Link 400 USB-A/C DECT Adapter and Jabra Engage 55 UC DECT Headset connected to a PC USB interface, users can directly answer/end calls, mute/unmute, hold/resume and adjust volume with Agent Desktop running on the PC.

2. General Test Approach and Test Results

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls with Agent Desktop, answering and ending calls using the call control button on the Engage 55 UC, 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 volume were also tested.

The serviceability testing focused on verifying the usability of the headset solution after restarting the Agent Desktop, restarting the PC, power cycling the Engage 55 UC, moving the headset out of DECT range, and disconnecting/reconnecting the Link 400 USB dongle 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 tests

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 headset and the soft button on Agent Desktop.
- Using the hold button on the headset and the soft button on Agent Desktop to hold and resume the audio.
- Using the volume buttons on the headset to adjust the audio volume.
- Using the mute button on the headset and the soft button on Agent Desktop to mute and un-mute the audio.
- Verifying incoming call notification on the headset.
- Verifying call ended notification on the headset.
- Verifying ringback notification on the headset.

The serviceability testing focused on verifying the usability of the headset solution after restarting the Agent Desktop, restarting the PC, power cycling the Engage 55 UC, moving Engage 55 UC out of DECT range and disconnecting/reconnecting the Link 400 USB dongle to the PC.

2.2. Test Results

All test cases completed 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>
- Email: JabraSupport.US@jabra.com

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify Jabra Engage 55 UC DECT Stereo Headset with Agent Desktop. Avaya Agent Desktop was installed on the PC. The Jabra Engage 55 UC DECT Stereo Headset communicates via Link 400 USB-A dongle connected to the PC hosting Avaya Agent Desktop. Note that the headset is connected to Link 400 USB dongle via DECT (not shown in the diagram).

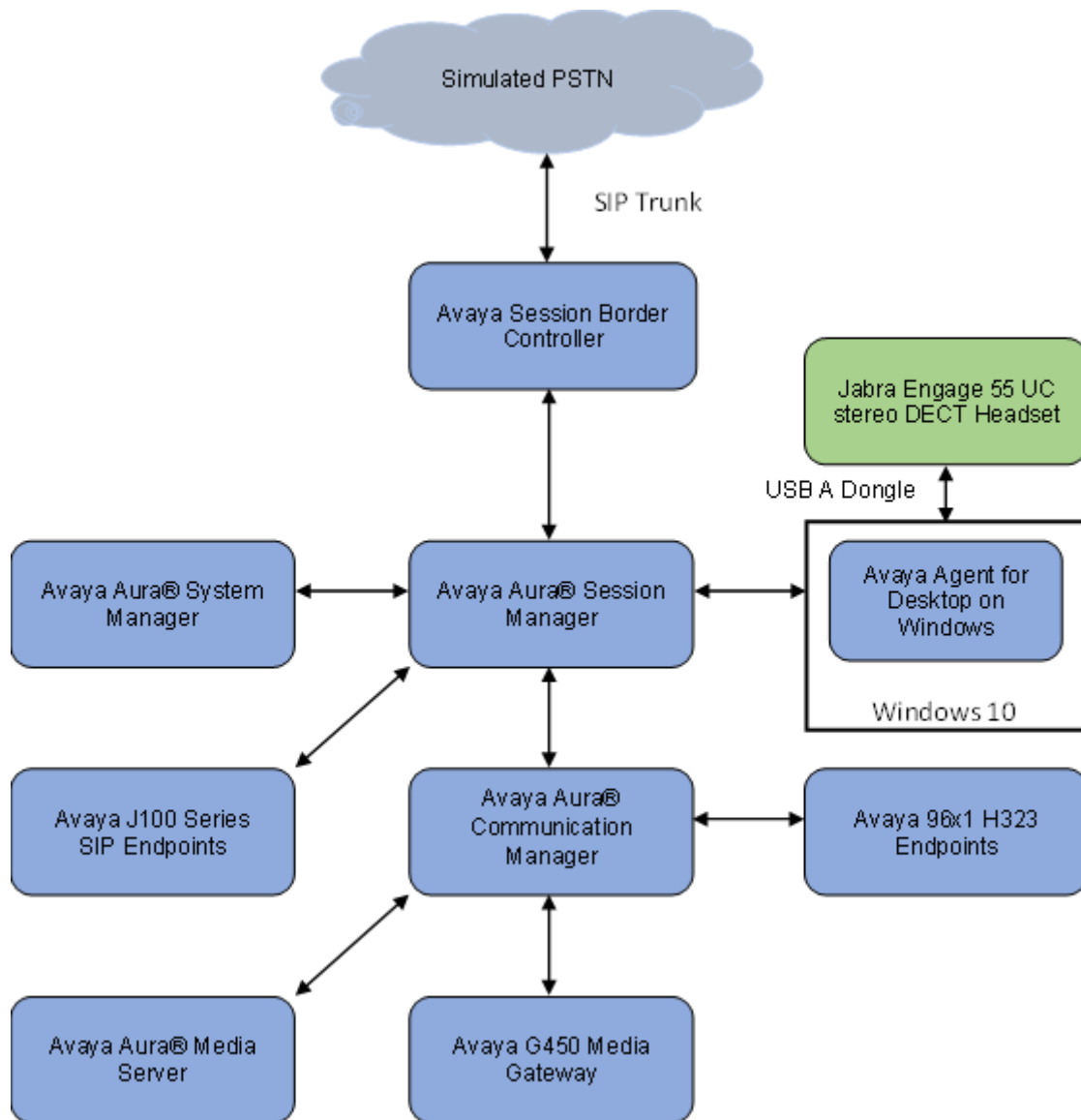


Figure 1: Test Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager running on Virtual Machine	10.1.0.1 R020x.01.0.974.0
Avaya G450 Media Gateway	FW 42.7.0
Avaya Aura® System Manager running on Virtual Machine	10.1.0.1.0614394
Avaya Aura® Session Manager running on Virtual Machine	10.1.0.0.1010105
Avaya Session Border Controller for Enterprise running on Virtual Machine	10.1.1.0-35-21872
Avaya Aura® Media Server running on Virtual Machine	10.1.0.77
Avaya 96x1 Series IP Deskphones	6.8.5.2.3 (H.323)
Avaya J139 SIP Deskphone	4.0.12.0.6 (SIP)
Avaya Agent for Desktop running on Windows 10 Pro	2.0.6.21.3003
Jabra Engage 55 UC DECT Stereo Headset	5.6.0
Jabra Link 400 USB Adapter	1.9.0
Jabra Direct Software	6.1.13901

5. Configure Avaya Aura® Session Manager

This section covers the station configuration for Agent Desktop on Session Manager. The configuration is performed via System Manager. An existing SIP endpoint is assumed to be configured. Refer to [1] for more information on SIP user configuration.

In order to sign in an agent for Agent Desktop, several related feature buttons must be administered. On System Manager, navigate to **Users → User Management → Manage users**. Select an existing administered SIP user, e.g., *User5, SIP*. Click **Edit** (not shown). Click on the **CM Endpoint Profile** on the left side list, then click on the editor icon in the **Extension** test box to open the Endpoint Editor. Select the **Button Assignment** tab. Assign the *manual-in*, *auto-in*, *after-call*, *agnt-login*, and *aux-work* button. Click **Done** to save the endpoint configuration.

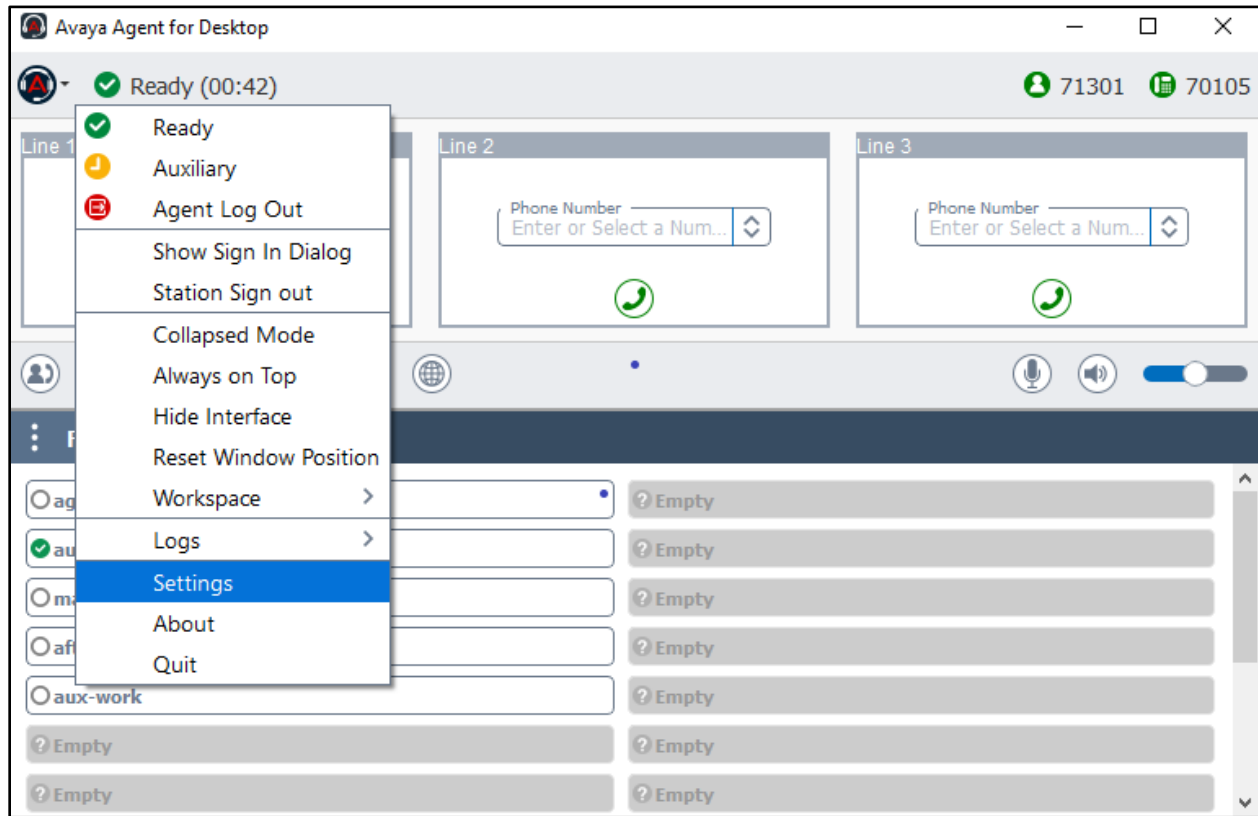
The screenshot shows the 'Endpoint Editor' window for a user named 'User 5, SIP'. The 'System' is 'cm10' and the 'Extension' is '70105'. The 'Template' is 'Select' and the 'Set Type' is '9641SIPCC'. The 'Port' is 'S000118' and the 'Security Code' is empty. The 'Button Assignment' tab is selected, showing a list of buttons and their configurations. The 'Endpoint Configurations' section on the left lists buttons 1 through 8. The 'Button Configurations' section on the right shows the configuration for each button, including the 'Button Feature', 'Argument-1', 'Argument-2', and 'Argument-3'. The 'Button Feature' column includes 'call-appr', 'agnt-login', 'auto-in', 'manual-in', 'after-call', and 'aux-work'. The 'Argument-1' column includes 'auto-in Grp', 'manual-in Grp', 'after-call Grp', and 'Reason Code'. The 'Argument-2' column includes 'Hunt Grp'. The 'Argument-3' column is empty. The 'Done' button is visible in the top right corner.

Endpoint Configurations	Button Feature	Argument-1	Argument-2	Argument-3
1 <input type="checkbox"/>	call-appr			
2 <input type="checkbox"/>	call-appr			
3 <input type="checkbox"/>	call-appr			
4 <input type="checkbox"/>	agnt-login			
5 <input type="checkbox"/>	auto-in	auto-in Grp		
6 <input type="checkbox"/>	manual-in	manual-in Grp		
7 <input type="checkbox"/>	after-call	after-call Grp		
8 <input type="checkbox"/>	aux-work	Reason Code	Hunt Grp	

6. Configure Avaya Agent for Desktop

Prior to configuring Avaya Agent Desktop, configure Engage 55 UC as per **Section 7**.

In these compliance tests, the local configuration for Agent Desktop is used. After logging into Agent Desktop, select **Settings** as shown below.



In the **Avaya Agent Settings** window, click on **Audio** and check that the **Device** under **Audio Output** and **Audio Input** displays *Jabra Link 400*. Otherwise, select the device from the drop-down menu in the respective box. Below is the screenshot if Link 400 USB Dongle is connected to the PC. The **Ringer Output Device** selection of *Jabra Link 400* is optional.

The screenshot shows the 'Avaya Agent Settings' window with the 'Audio' tab selected. The left sidebar contains a search bar and a list of settings categories: All Settings, Server, Preferences, Dialing Rules, Directory, Audio (highlighted), Security, Advanced, Key Strokes, and Support. The main content area is divided into four sections: Audio Output, Ringer Output, Audio Input, and Advanced Audio Settings. Each section has a 'Device' dropdown menu, a 'Volume' slider set to 50, and a 'Test' button. The 'Audio Output' and 'Ringer Output' sections show 'Speakers (Jabra Link 400)' as the selected device. The 'Audio Input' section shows 'Microphone (Jabra Link 400)' as the selected device. The 'Advanced Audio Settings' section has a 'Control Device' dropdown menu set to 'Jabra Link 400'. At the bottom right, there are 'Cancel' and 'Save' buttons.

Section	Device	Volume	Test Button
Audio Output	Speakers (Jabra Link 400)	50	Test
Ringer Output	Speakers (Jabra Link 400)	50	Test
Audio Input	Microphone (Jabra Link 400)	50	Test
Advanced Audio Settings	Jabra Link 400		

Scrolling further below for **Advanced Audio Settings**, select **Control Device** as *Jabra Link 400* and **Headset Integration** as *Advanced (SDK Native)* which enables the advanced headset feature. Click **Save** to complete the audio settings.

The screenshot displays the 'Avaya Agent Settings' application window. The 'Settings' tab is active, showing a sidebar on the left with options like 'All Settings', 'Server', 'Preferences', 'Dialing Rules', 'Directory', 'Audio' (selected), 'Security', 'Advanced', 'Key Strokes', and 'Support'. The main content area is divided into 'Audio input' and 'Advanced Audio Settings'. In 'Audio input', the 'Device' is set to 'Microphone (Jabra Link 400)', 'Volume' is at 50, and there is a 'Test' button. The 'Advanced Audio Settings' section includes 'Control Device' (Jabra Link 400), 'Headset Integration' (Advanced (SDK Native)), 'Call Button' (Answer), 'Noise Suppression' (Disabled), 'Auto Gain Control' (checked), 'Echo Cancellation' (unchecked), and 'Use DirectSound' (Auto). At the bottom right, there are 'Cancel' and 'Save' buttons.

7. Configure Jabra Engage 55 UC DECT Headset Environment

This section covers the steps to integrate Engage 55 UC with Agent Desktop, including:

- Installing Jabra Direct software
- Connecting the Jabra headset

Note: After successfully performing this procedure, Engage 55 UC will be detected in Agent Desktop as described in **Section 6**.

7.1. Install Jabra Direct Software

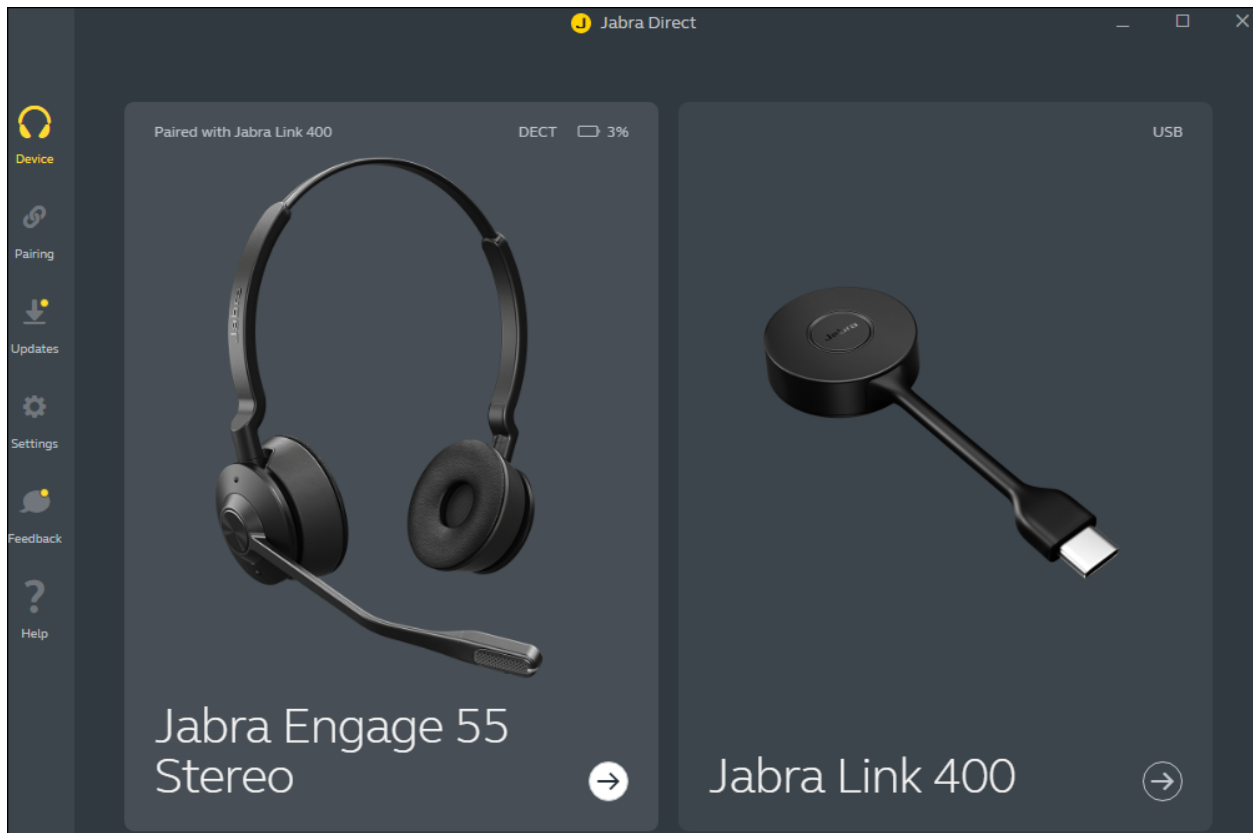
Jabra Direct software can be obtained from the Jabra support portal at <https://www.jabra.com/support/>. Installation of the software is done through executing the setup file and following the prompts.

7.2. Connect the Jabra Headset

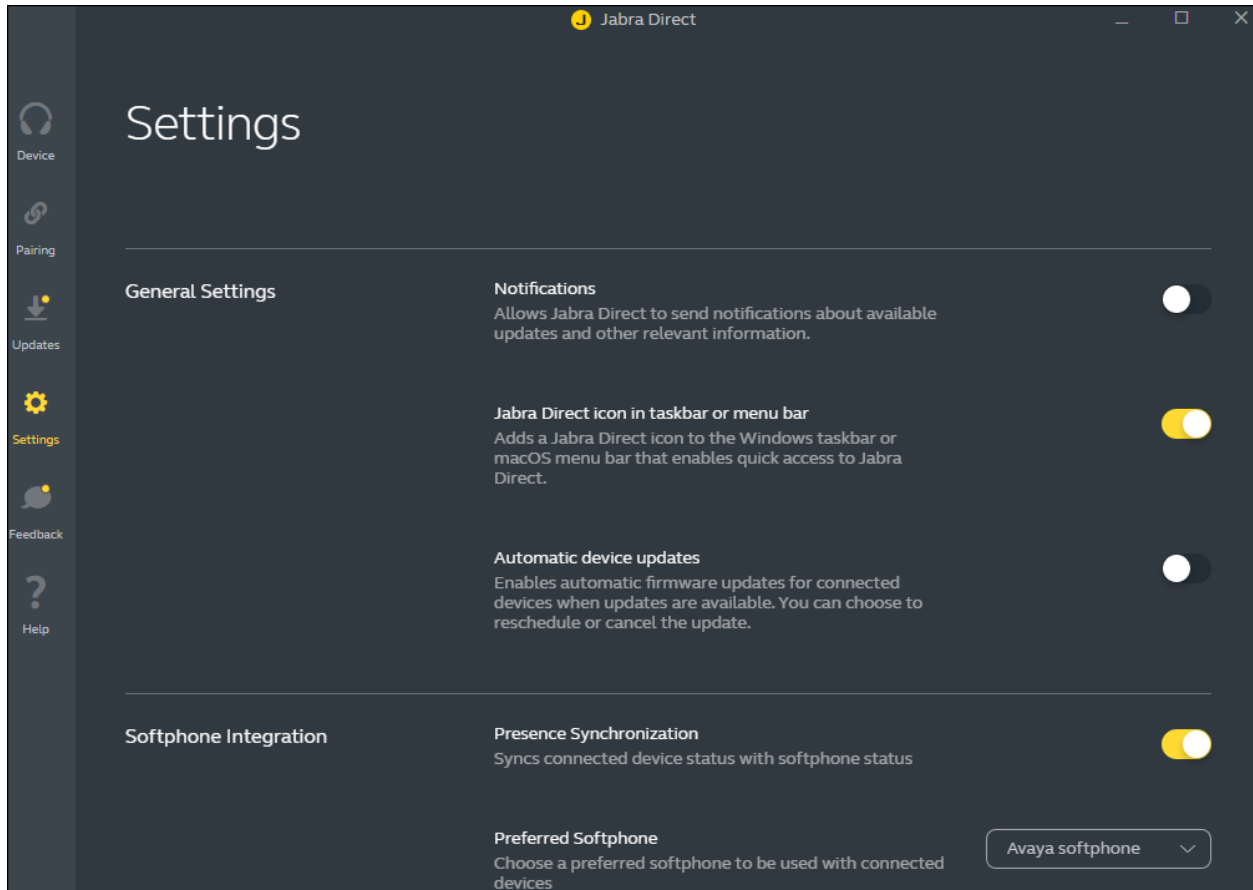
Plug Link 400 USB dongle in a USB port of the PC. Link 400 USB dongle has two models, i.e., USB-A and USB-C. In this compliance test, USB-A for Link 400 USB dongle is used.

Power up the Engage 55 UC headset. Link 400 USB dongle should be paired with Engage 55 UC out of the box. If not, refer to [4] for pairing instructions.

Open the Jabra Direct application. Select the **Device** icon on the left side of the window. The window should display both the Engage 55 UC headset and Link 400 USB dongle. The Engage 55 UC headset shows *Paired with Jabra Link 400*.



Click on the **Settings** icon on the left side of the window. Under **Softphone Integration**, select *Avaya softphone* if not already selected.



8. Verification Steps

This section provides steps to verify that the Jabra solution has been successfully integrated with Agent Desktop.

- Open the Agent Desktop application. Select the settings window as detailed in **Section 6**. Select **Audio** from the left-hand side. Verify the device shows *Link 400*. Click on the **Test** button for the **Audio Output** and **Audio Input**. Verify the headset hears the output test and lights up the microphone level graphic when speaking into the Engage 55 UC microphone.
- Make calls from and to the Agent Desktop and verify two-way audio using Engage 55 UC headset.
- Make a call to Agent Desktop by answering and ending the call using Engage 55 UC headset controls.
- Make a call and verify mute can be initiated from Engage 55 UC headset.
- Make a call and verify Agent Desktop puts the caller on hold when initiated from Engage 55 UC headset.

9. Conclusion

These Application Notes describe the configuration steps required to integrate Jabra LINK 400 USB-A/C DECT Dongle and Engage 55 UC DECT headset with Avaya Agent for Desktop. 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>.

[1] *Administering Avaya Aura® Session Manager*, Release 10.1.x, Issue 3, April 2022.

[2] *Deploying and configuring Avaya Agent for Desktop*, Release 2.0.6.22, Issue 1, July 2022.

[3] *Using Avaya Agent for Desktop*, Release 2.0.6.20, Issue 1, April 2022.

The following Jabra documentation can be found at <http://www.jabra.com>.

[4] *Jabra Engage 55 User Manual*.

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Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at devconnect@avaya.com.



Jabra Engage 55 -Declaration of Similarity

June 9, 2022

It is hereby declared:

Jabra Engage 55 products consist of a DECT adapter and relevant headset. Jabra Engage 55 use the headset models (with model WHB051HS for Stereo/Mono, WHB050HS for Convertible), and a USB DECT adapter, to create the package.

Engage 55 adapter supports USB connection to a PC running a soft client such as Avaya Agent for Desktop. The Engage 55 adapter has LED light for indication of, including incoming call, answer, end, and mute. This functionality is the same when connected to the Engage 55 Stereo, Mono, and Convertible headsets.

The Engage 55 Stereo, Mono, and Convertible headsets use identical firmware.

A handwritten signature in blue ink, appearing to read "Alex Williams".

Alex Williams | Global Product Manager | Contact Center Products | GN Audio A/S