AVAYA

Avaya Solution & Interoperability Test Lab

Application Notes for Jabra Direct and Jabra Evolve2 30 UC Mono/Stereo USB-A/USB-C Headsets with Avaya one-X® Communicator - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the Jabra Direct and Jabra Evolve2 30 UC Mono/Stereo USB-A/USB-C Headsets with Avaya one-X® Communicator.

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.

LYM; Reviewed:
SPOC 6/24/2021
Solution & Interoperability Test Lab Application Notes
©2019 Avaya Inc. All Rights Reserved.
1 of 17
Ev2_30oneXC

1. Introduction

The Jabra Evolve2 30 UC Mono/Stereo USB-A/USB-C Headsets together with Jabra Direct software allow connection and call control with Avaya one-X® Communicator (hereafter referred to as one-X Communicator) using cable via the USB interface to the PC. In this compliance test, Jabra Evolve2 30 UC headset USB-A and USB-C connection are used.

The Jabra Direct is a collection of programs that enable remote call control with Jabra headset and one-X Communicator. With a Jabra headset connected to the PC USB interface, users can directly answer, end, mute/unmute, hold/resume and adjust volume with the headset.

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 Communicator, 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 volume are also tested.

The serviceability testing focused on verifying the usability of the Jabra headset solution after restarting the one-X Communicator, restarting the PC and reconnecting the headset USB cable 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 Communicator.
- Using the call button on the Jabra headset and the soft button on one-X Communicator 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 Communicator to mute and un-mute the audio.
- Verifying incoming call notification.
- Verifying call ended notification.

The serviceability testing focused on verifying the usability of the Jabra headset solution after restarting the one-X Communicator, 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
- Email: JabraSupport.US@jabra.com

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the Jabra Direct and Jabra Evolve2 30 UC Mono/Stereo USB-A/USB-C Headsets with Avaya one-X® Communicator. The Jabra Direct software were installed on the PCs together with Avaya one-X® Communicator. The Jabra headsets are connected via cable into the PCs' USB interface.
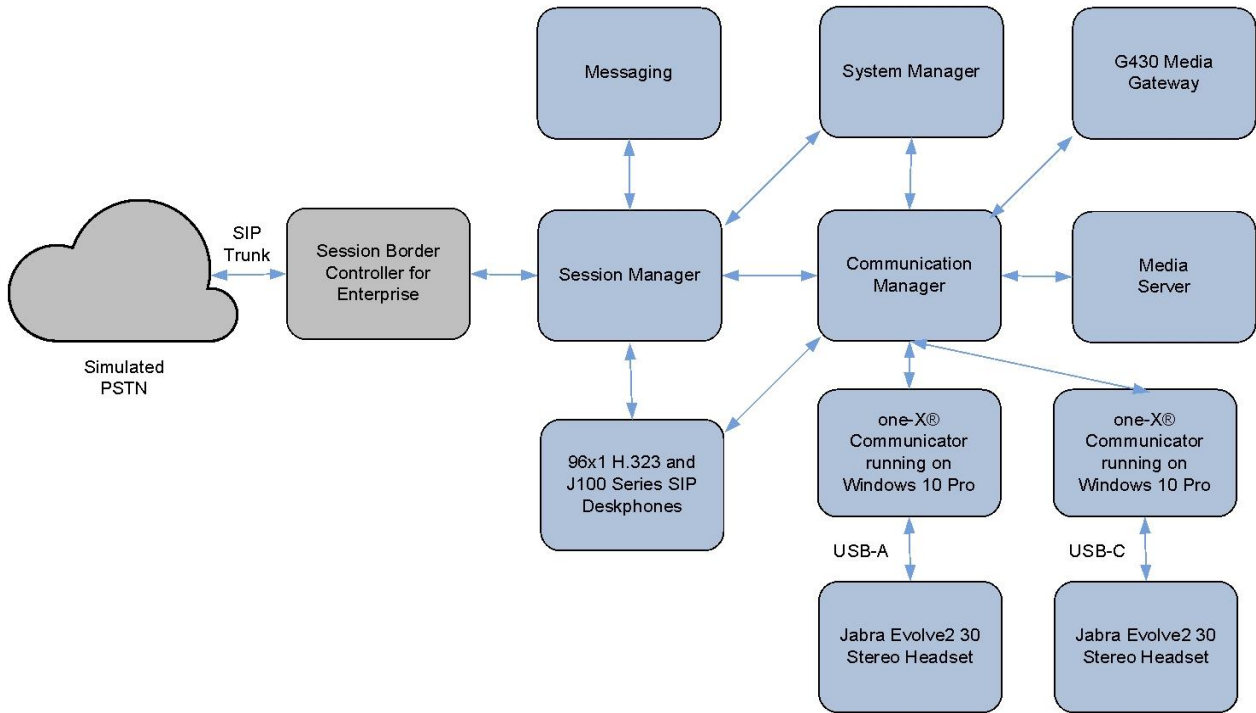
Figure 1: Test Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager	8.1.3.0.1-FP3P1
Avaya G430 Media Gateway MGP	41.34.1
Avaya Aura® System Manager	8.1.3.1 Build No. - 8.1.0.0.733078
Avaya Aura® Session Manager	8.1.3.1.813113
Avaya Aura® Media Server	8.0.2.138
Avaya Messaging	10.8 SP1SU2
Avaya 96x1 Series H.323 Deskphones	6.8502
Avaya J100 Series SIP Deskphones	4.0.7.0.7
Avaya one-X® Communicator running on Windows 10 Pro	6.2 SP14 Patch 5 (6.2.14.1.3-SP14 Patch 5)
Jabra Evolve2 30 UC Mono/Stereo USB-A/USB-C Headsets	1.4.1
Jabra Direct for Windows	5.2.20825

5. Configure Avaya Aura® Communication Manager

Avaya one-X® Communicator can be login as a H.323 user or SIP softphone user. The information provided in this section covers the H.323 station configuration and the verification of Communication Manager System Capacity for SIP station. The configuration of SIP station will be administered on Session Manager via the System Manager in the next section.

It is implied a working Communication Manager system is already in place, including dial plans and SIP trunks to a Session Manager. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 11**.

5.1. Verify System Capacity

Using Avaya Site Administrator Emulation Mode, use the **display system-parameters customer-options** command to determine the values of user license for **Maximum Off-PBX Telephones** allowed in the system. One OPS station is required per SIP User.

```
display system-parameters customer-options                    Page   1 of  12
                             OPTIONAL FEATURES

   G3 Version: V18                            Software Package: Enterprise
     Location: 2                                System ID (SID): 1
     Platform: 28                               Module ID (MID): 1

                                                              USED
                          Platform Maximum Ports: 65000 381
                                Maximum Stations: 41000 192
                        Maximum XMOBILE Stations: 41000 0
              Maximum Off-PBX Telephones - EC500: 41000 1
              Maximum Off-PBX Telephones -   OPS: 41000 33
              Maximum Off-PBX Telephones - PBFMC: 41000 0
              Maximum Off-PBX Telephones - PVFMC: 41000 0
              Maximum Off-PBX Telephones - SCCAN: 0     0
                    Maximum Survivable Processors: 313   2




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

On **Page 2** of the **system-parameters customer-options form**, verify that the number of **Maximum Administered SIP Trunks** and **Maximum Concurrently Registered IP Stations** supported by the system is sufficient.

If there is insufficient capacity in either one of these parameters, contact an authorized Avaya sales representative.

```
display system-parameters customer-options                    Page   2 of  12
                              OPTIONAL FEATURES

IP PORT CAPACITIES                                               USED
                    Maximum Administered H.323 Trunks: 12000 90
           Maximum Concurrently Registered IP Stations: 18000 6
               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 0
               Maximum Video Capable IP Softphones: 18000 3
                  Maximum Administered SIP Trunks: 24000 28
  Maximum Administered Ad-hoc Video Conferencing Ports: 24000 0
   Maximum Number of DS1 Boards with Echo Cancellation: 522    0




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

5.2. Configure H.323 station

Use the **add station** command to create a station for Avaya one-X® Communicator. On **Page 1**, set the **Type** field to the station type to be emulated. In this example, *9611G* was used. Set the **Port** field to *IP* and configure a **Security Code**, which will be used as the password by Avaya one-X® Communicator to log in. Set the **IP Softphone** field to *y*.

```
add station 10001                                          Page   1 of   5
                                STATION

Extension: 10001                   Lock Messages? n              BCC: 0
     Type: 9611G                   Security Code: xxxxxx         TN: 1
     Port: S00002                  Coverage Path 1:              COR: 1
     Name: one-XC                  Coverage Path 2:              COS: 1
                                   Hunt-to Station:             Tests? y
STATION OPTIONS
               Location:           Time of Day Lock Table:
           Loss Group: 19     Personalized Ringing Pattern: 1
                                     Message Lamp Ext: 10001
         Speakerphone: 2-way        Mute Button Enabled? y
     Display Language: english          Button Modules: 0
 Survivable GK Node Name:
         Survivable COR: internal       Media Complex Ext:
   Survivable Trunk Dest? y            IP SoftPhone? y

                                   IP Video Softphone? n
                   Short/Prefixed Registration Allowed: default

                                   Customizable Labels? y
```
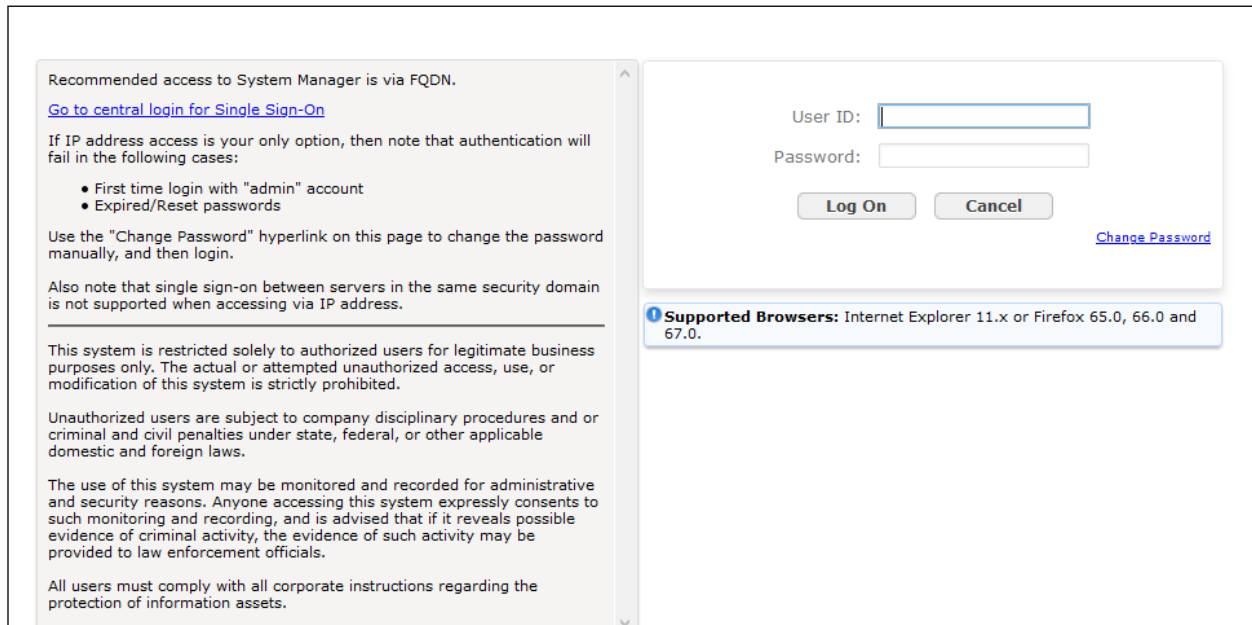
6. Configure Avaya Aura® Session Manager

This section describes aspects of the Session Manager configuration required for Avaya one-X Communicator to register. It is assumed that the Domains, Locations, SIP entities, Entity Links, Routing Policies, Dial Patterns and Application Sequences have been configured where appropriate for Communication Manager, Session Manager and Messaging.

Session Manager is managed via System Manager. Using a web browser, access **https://<ip-addr of System Manager>/SMGR**. In the **Log On** screen, enter appropriate **User ID** and **Password** and click the **Log On** button.

6.1. Verify Session Manager Ports for SIP endpoint registration

Each Session Manager Entity must be configured so that the SIP Endpoint can register to it. From the home page, under **Elements**, click **Routing → SIP Entities** (not shown) and select the Session Manager entity used for registration. Make sure that **TCP**, **UDP** and **TLS** entries are present. During the compliance test, one-X Communicator registered to the Session Manager using TLS transport.

LYM; Reviewed:
SPOC 6/24/2021

Solution & Interoperability Test Lab Application Notes
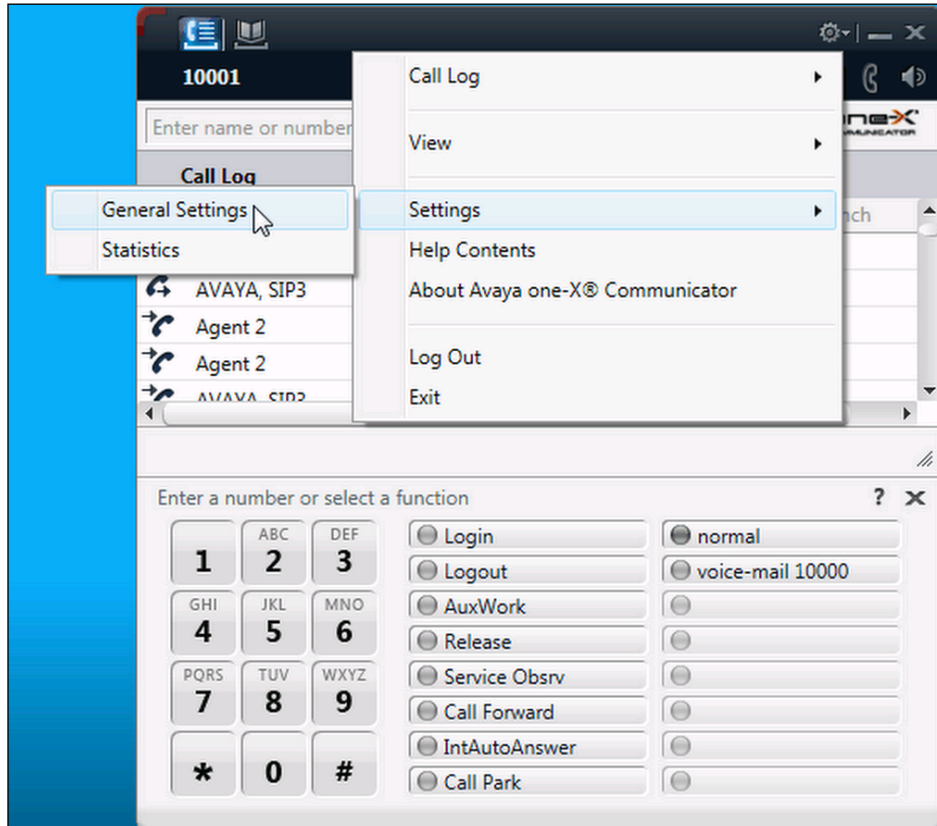©2019 Avaya Inc. All Rights Reserved.

9 of 17
Ev2_30oneXC

6.2. Add SIP User

The addition of SIP User will not be detailed here. Refer to details in adding user in the administration document for Avaya Aura® Session Manager in **[3]**.

7. Configure Avaya one-X® Communicator

Before configuring the one-X Communicator, the headset has to be configured and provisioned as in **Section 8** first. After logging into Avaya one-X® Communicator, select ![gear icon] → **Settings** → **General Settings** as shown below.

LYM; Reviewed:
SPOC 6/24/2021

Solution & Interoperability Test Lab Application Notes
©2019 Avaya Inc. All Rights Reserved.

10 of 17
Ev2_30oneXC

The *Jabra Evolve2 30* will appear as under the **Basic** tab of the **Audio** settings. Check that this device is detected under the **Microphone** and **Speaker** fields as shown below.
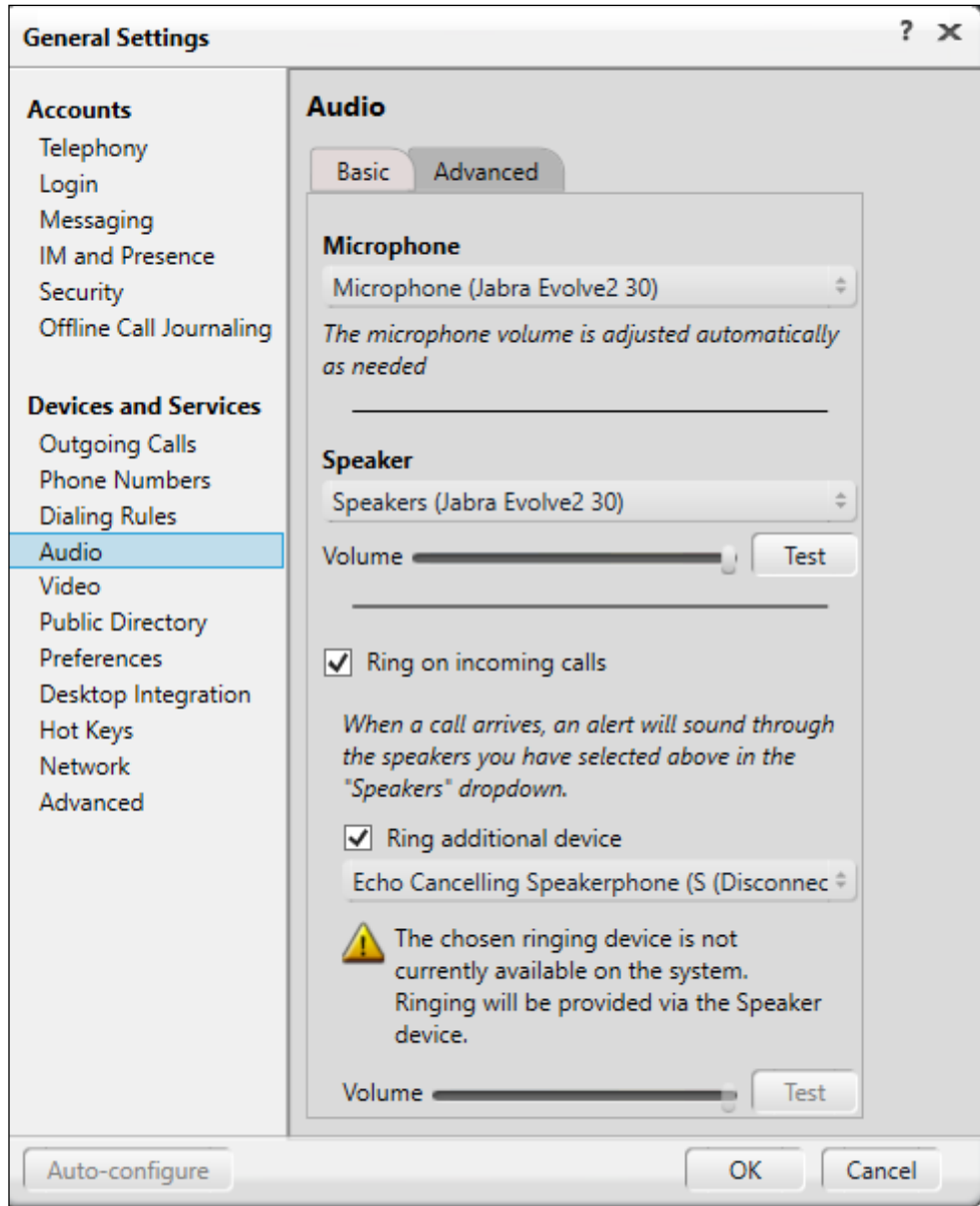
8. Configure Jabra Evolve2 30 UC headset solutions

This section covers the steps to integrate Jabra Evolve2 30 UC headset with one-X Communicator, 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 Communicator as described in **Section 7**.

8.1. Installing the Jabra Direct Software

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

8.2. Connect the Jabra headset

Plug the Jabra Evolve2 30 cable into the USB port of the PC. The device drivers will automatically be installed.

Open the Jabra Direct program installed on the PC. Select the **Device** tab on the left menu (not shown) and **Device ready for use** is shown at the bottom left. Open the one-X Communicator program and check Jabra Direct program that the **Avaya One-X Communicator** status at the bottom right is in **Ready** state. Note that the **Avaya One-X Communicator** status can be in **Ready** state when one-X Communicator is running but not necessary logon.

## 8.3. Configuring Jabra headset with Jabra Direct

Select the **Device** from the previous screen. Select the **SOFTPHONE** tab and check that **Call control with softphone** is enabled as shown below (by default). Otherwise, enabled it by sliding the button towards the right and click **Apply** to save it.

LYM; Reviewed:
SPOC 6/24/2021

Solution & Interoperability Test Lab Application Notes
©2019 Avaya Inc. All Rights Reserved.

14 of 17
Ev2_30oneXC
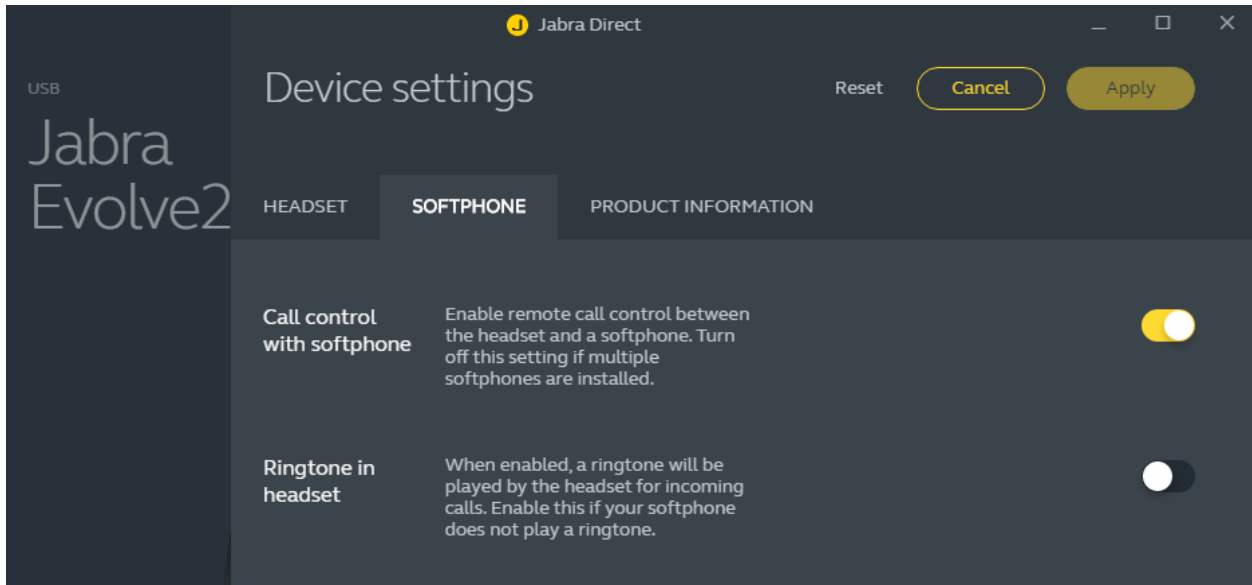
9. Verification Steps

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

1. Open the Jabra Direct program to verify that the headset has been successfully connected to PC for use with one-X Communicator running. Observed that Jabra Evolve2 30 headset is detected as detailed in **Section 8.2**.
2. Make incoming and outgoing calls and verify that calls can be established with two-way audio. For incoming calls, answer the call by pressing the answer/end call button on the headset (as shown below). Alternatively, move the microphone boom-arm down to answer the incoming call.
3. End the call by pressing the same answer/end call button on the headset.
4. Verify also that the headset is able to remotely control call functions such as answer, mute/un-mute and adjust the volume. Call Hold is done by pressing the answer/end-call button once for more than 2 seconds until a tone is heard. Pressing the button again will resume the call. Similarly, verify such call control functions could be done on the one-X Communicator.
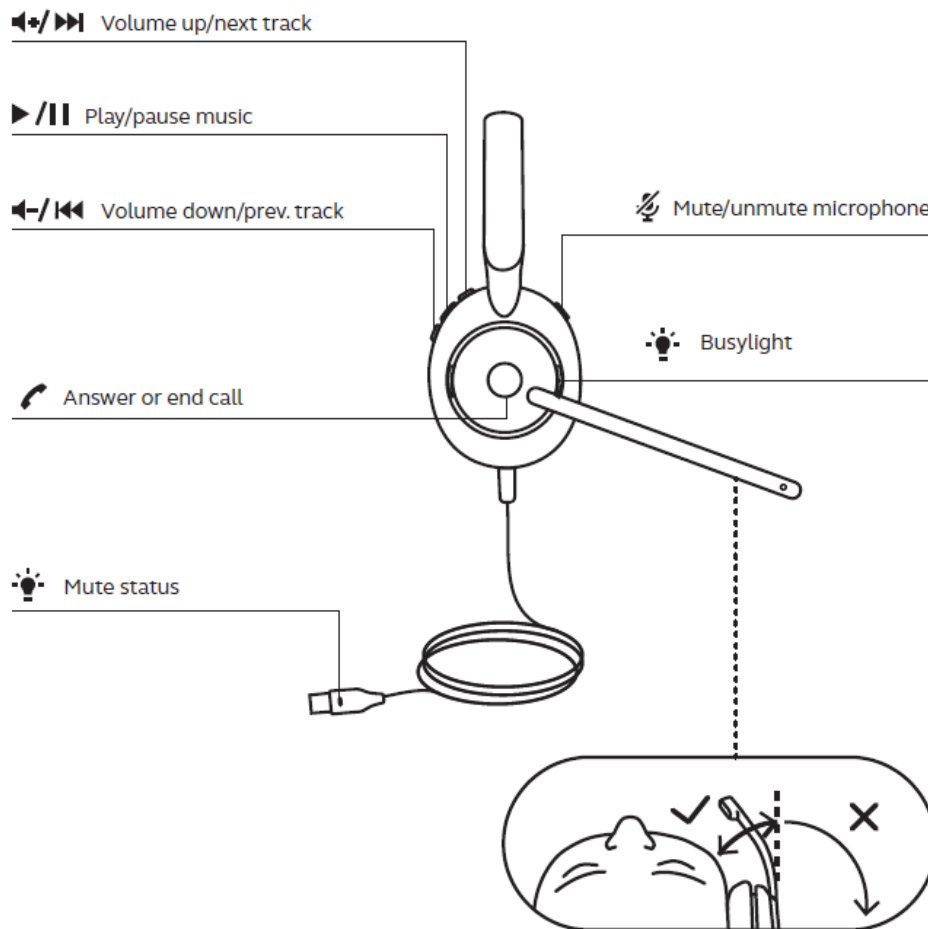
10. Conclusion

These Application Notes describe the configuration steps required to integrate Jabra Direct and Jabra Evolve2 30 UC Mono/Stereo USB-A/USB-C Headsets with Avaya one-X® Communicator. All test cases were completed successfully.

11. 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® Communication Manager*, Release 8.1.x, Issue 8, Nov 2020.
[2] *Implementing Avaya one-X® Communicator*, Release 6.2 FP10, Nov 2015.
[3] *Administering Avaya Aura® Session Manager,* Release 8.1.x, Issue 7, Oct 2020.

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

[4] *Jabra Evolve2 30 Quick start guide.*