



Avaya Solution & Interoperability Test Lab

Application Notes for Jabra Direct 3.1 and Jabra BIZ 2400 II CC USB Headsets with Avaya one-X® Agent 2.5 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Jabra Direct and Jabra BIZ 2400 II CC USB Headsets with Avaya one-X® Agent. Jabra Direct is a collection of programs that enable call control with Jabra headsets and one-X Agent. This means that with a Jabra headset, users can directly answer, end, and mute/unmute calls using button on the Jabra headsets. The Jabra BIZ 2400 II CC USB headset was used to exercise the call control functions provided by Jabra Direct.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in Section 2.1 as well as the 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

These Application Notes describe the configuration steps required to integrate the Jabra Direct and Jabra BIZ 2400 II CC USB headsets with Avaya one-X® Agent. Jabra Direct is a collection of programs that enable call control with Jabra headsets and one-X® Agent. This means that with a Jabra headset, users can directly answer, end and mute/unmute calls using button on the Jabra headsets. The Jabra BIZ 2400 II CC USB headset was used to exercise the call control functions provided by Jabra Direct.

Jabra Direct includes the following programs, which were exercised during the compliance testing:

- **Jabra Direct Device Service:** This program runs in the background and monitors the Jabra BIZ 2400 II CC USB. It enables the **Jabra Direct** and the one-X® Agent driver used to interact with the Jabra headset.
- **Jabra Direct:** This program is used to configure the settings of the Jabra headset.
- **Jabra Direct Firmware Updater:** This program allows the headset firmware to be updated whilst it is connected to a Windows PC

2. General Test Approach and Test Results

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'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.

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls to Communication Manager Extensions, answering and ending calls using the call control button on the headset, and verifying two-way audio. The call types included calls between local extensions, and from the PSTN.

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

2.1. Interoperability Compliance Testing

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

- Placing calls to internal extensions to verify two-way audio.
- Placing calls from the PSTN and to Voicemail to verify two-way audio.
- Answering and ending calls using the call control button on the headset.
- Using the Volume Control buttons on the Jabra headset to adjust the audio volume.
- Using the Voice Control button on the Jabra headset to mute and un-mute the audio.
- Verifying incoming call notification on Jabra headset.
- Verifying call ended notification on Jabra headset.

For the serviceability testing, the Jabra headset was reconnected to the one-X® Agent and the PC was restarted to verify proper operation of the headset after the reboot was completed.

2.2. Test Results

All test cases passed with the following observations

- One-X Agent only supports shared control with a Desk Phone for SIP. Audio using windows compatible devices is only supported on one-X Agent H323 which was used during this test

2.3. Assumptions

These Application Notes do not provide any configuration details for the following list of assumptions:

- Avaya Aura® Communication Manager has been installed and is operational.
- Avaya one-X® Agent has been installed and is operational.
- Jabra Direct is installed and is operational

2.4. Support

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

- Phone: (800) 697-8757
- Website: <http://www.jabra.com/NA-US/Support/pages/Default.aspx>
- Email: JabraSupport.US@jabra.com

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the Jabra Direct and Jabra BIZ 2400 II CC USB headset solutions. The configuration consists of Avaya Aura® Communication Manager with and Avaya G450 Media Gateway providing connectivity to the PSTN via an ISDN-PRI trunk. The Jabra headsets were connected to the one-X Agent PC via a USB port. The Jabra Direct software was installed on the PC.

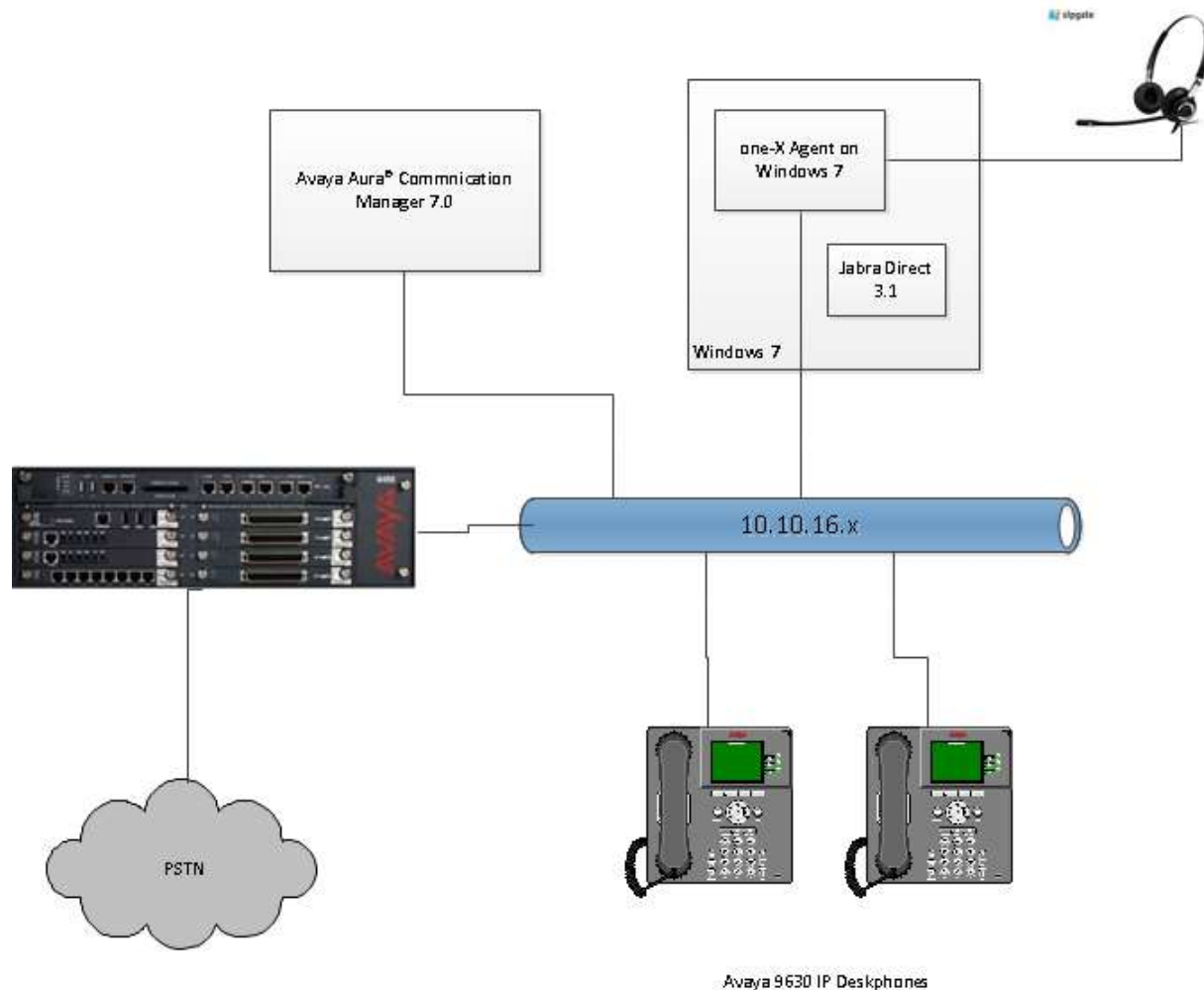


Figure 1: Avaya one-X® Agent with Jabra BIZ 2400 II CC USB Headsets

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	R17x.00.0.441.0
Avaya one-X® Agent H323	2.5.4
G450 Media Gateway	R36.14.0.1
Jabra Direct	3.1.10355
Jabra BIZ 2400 II CC USB Headset	FW 1.6.0

5. Configure Avaya Aura® Communication Manager

This section will add stations for use by the Avaya one-X® Agent. These are H.323 stations that must be configured with the following.

- A maximum of 3 Call Appearance lines per agent station
- Restrict Last Appearance must be enabled on all agent stations
- IP Softphone enabled

Issue **add station <n>** command, where **n** is an available extension number. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Type:** Enter station type **9630**
- **Name:** A descriptive name.
- **Security Code:** Enter a valid code ex: 1234.
- **IP SoftPhone:** **y**

add station 5102		Page 1 of 5
STATION		
Extension: 5102	Lock Messages? n	BCC: 0
Type: 9630	Security Code: 1234	TN: 1
Port: IP	Coverage Path 1:	COR: 1
Name: Jabra Station	Coverage Path 2:	COS: 1
	Hunt-to Station:	
STATION OPTIONS		
Loss Group: 19	Time of Day Lock Table:	
	Personalized Ringing Pattern: 1	
Speakerphone: 2-way	Message Lamp Ext: 5102	
Display Language: english	Mute Button Enabled? y	
Survivable GK Node Name:	Button Modules: 0	
Survivable COR: internal	Media Complex Ext:	
Survivable Trunk Dest? y	IP SoftPhone? y	
	IP Video Softphone? y	
	Short/Prefixed Registration Allowed: default	
	Customizable Labels? y	

Navigate to **Page 2** and enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Restrict Last Appearance: y**

add station 5102		Page 2 of 5
STATION		
FEATURE OPTIONS		
LWC Reception: spe	Auto Select Any Idle Appearance? n	
LWC Activation? y	Coverage Msg Retrieval? y	
LWC Log External Calls? n	Auto Answer: none	
CDR Privacy? n	Data Restriction? n	
Redirect Notification? y	Idle Appearance Preference? n	
Per Button Ring Control? n	Bridged Idle Line Preference? n	
Bridged Call Alerting? n	Restrict Last Appearance? y	
Active Station Ringing: single	EMU Login Allowed? n	
H.320 Conversion? n	Per Station CPN - Send Calling Number?	
Service Link Mode: as-needed	EC500 State: enabled	
Multimedia Mode: enhanced	Audible Message Waiting? n	
MWI Served User Type:	Display Client Redirection? n	
AUDIX Name:	Select Last Used Appearance? n	
	Coverage After Forwarding? s	
	Multimedia Early Answer? n	
Remote Softphone Emergency Calls: as-on-local	Direct IP-IP Audio Connections? y	
Emergency Location Ext: 827-0003	Always Use? n IP Audio Hairpinning? n	

On **Page 4** of the Station form assign two “call-appr” in **Button Assignments** section.

add station 5102		Page 4 of 5
STATION		
SITE DATA		
Room:	Headset? n	
Jack:	Speaker? n	
Cable:	Mounting: d	
Floor:	Cord Length: 0	
Building:	Set Color:	
ABBREVIATED DIALING		
List1:	List2:	List3:
BUTTON ASSIGNMENTS		
1: call-appr	5:	
2: call-appr	6:	
3: call-appr	7:	
4:	8:	

6. Configure Avaya one-X® Agent.

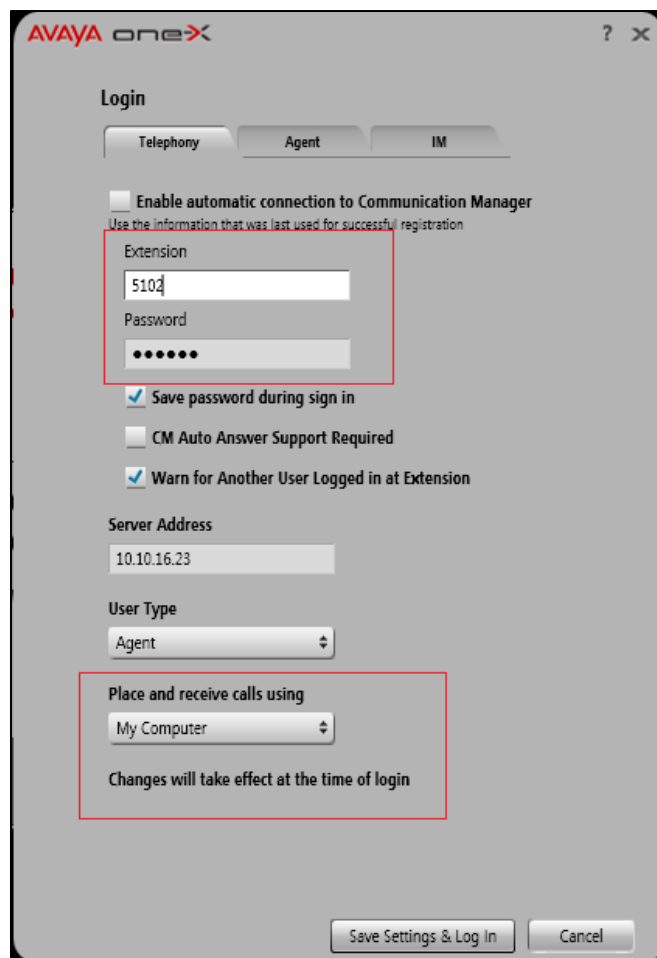
This section describes how to assign the Jabra Biz 2400 II CC USB for use with one-X® Agent.

- Log into one-X Agent
- Select Jabra Biz 2400 II CC USB Headset from settings

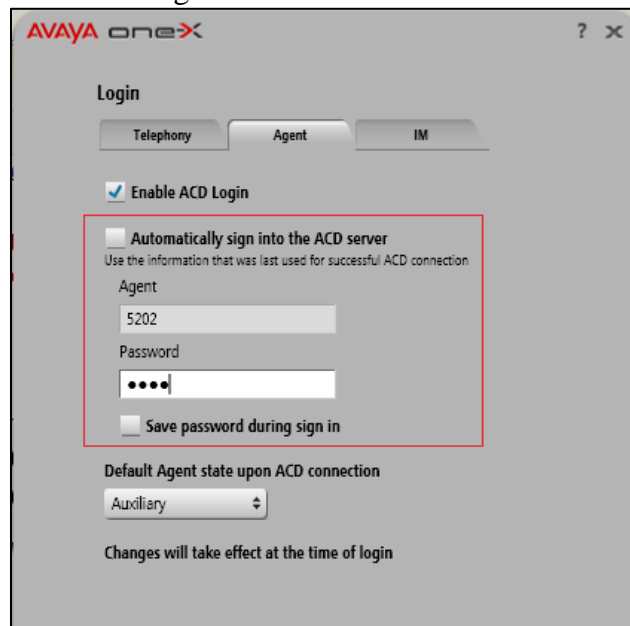
The setting must be configured for one-X® Agent using the Station and Agent administered in **Section 5**. Select **Change Login Setting**



Enter the Station details and select **My Computer** for **Place and receive calls using** on the **Telephony** tab.

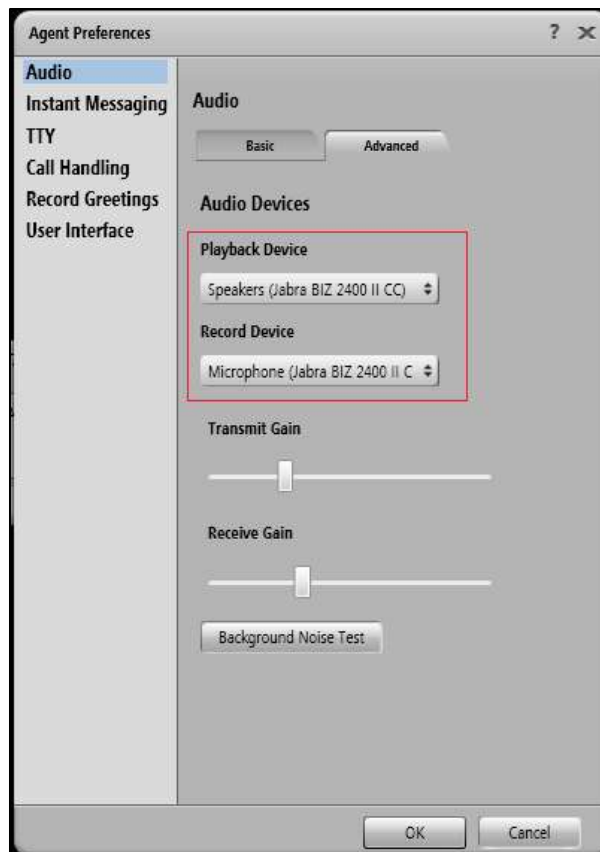


Select the **Agent** tab and Enter the Agent details.



The image shows the Avaya one-X Login window. It has three tabs: 'Telephony', 'Agent', and 'IM'. The 'Agent' tab is selected. Below the tabs, there is a checkbox labeled 'Enable ACD Login' which is checked. Below this, there is a red rectangular box containing the following fields: a checkbox labeled 'Automatically sign into the ACD server' (unchecked), a text field for 'Agent' containing '5202', a password field for 'Password' with masked characters, and a checkbox labeled 'Save password during sign in' (unchecked). Below the red box, there is a dropdown menu for 'Default Agent state upon ACD connection' set to 'Auxiliary'. At the bottom, it says 'Changes will take effect at the time of login'.

Log in the Station and Agent and Select **Agent Preferences** from the top right menu (not shown). Select Audio and on the Advanced tab select **Jabra BIZ 2400 II CC** for **Playback** and **Record Device**.



The image shows the 'Agent Preferences' window. On the left is a sidebar with a list of categories: 'Audio', 'Instant Messaging', 'TTY', 'Call Handling', 'Record Greetings', and 'User Interface'. 'Audio' is selected. The main area has two tabs: 'Basic' and 'Advanced'. The 'Advanced' tab is selected. Under the 'Audio Devices' section, there is a red rectangular box containing two dropdown menus: 'Playback Device' set to 'Speakers (Jabra BIZ 2400 II CC)' and 'Record Device' set to 'Microphone (Jabra BIZ 2400 II C)'. Below these, there are sliders for 'Transmit Gain' and 'Receive Gain', and a button labeled 'Background Noise Test'. At the bottom right are 'OK' and 'Cancel' buttons.

7. Configure Jabra USB Headsets

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

- Installing the Jabra Direct software
- Connecting the Jabra BIZ 2400 II CC USB Headsets

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

7.1. Installing the Jabra PC Suite Software

The installation instructions for Jabra Direct on the one-X® Agent PC is described in **[4]** listed in **Section 10**.

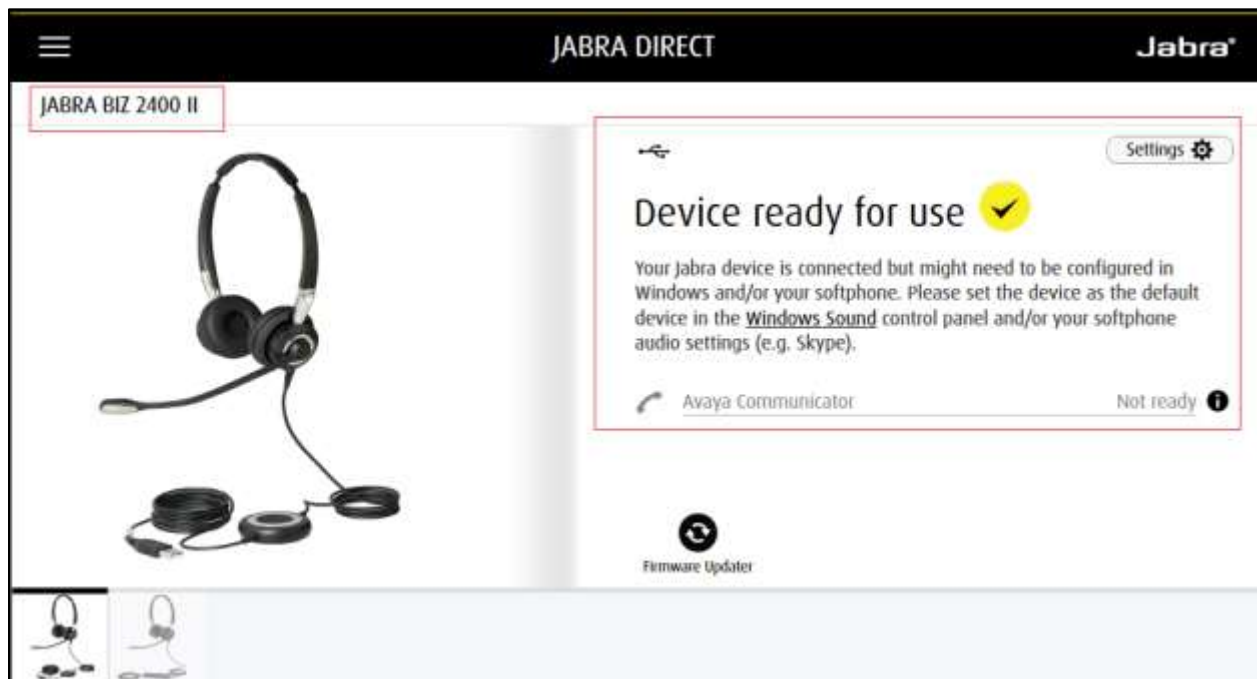
7.2. Connect the Jabra USB Headset

Connect the Jabra USB headset directly to a USB port on the one-X Agent PC.

8. Verification Steps

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

1. Verify that the Jabra headset has been successfully installed and is ready for use with one-X® Agent.
 - Open Jabra Direct.
 - The **JABRA BIZ 2400 II CC** is displayed in the top left hand corner
 - **Device ready for use** is displayed on the right hand side.



2. Once the Jabra headset is selected in one-X® Agent, verify that incoming and outgoing calls can be established with two-way audio to the headset.

9. Conclusion

These Application Notes describe the configuration steps required to integrate Jabra Direct and Jabra BIZ 2400 II CC USB headsets with Avaya one-X® Agent. All test cases were completed successfully with observations noted in **Section 2.2**.

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® Communication Manager*, Release 7.0, Issue 1, August 2015, Document Number 03-300509.
- [2] *Communication Manager Overview and Specification*, Release 7.0, Issue 1.0, August 2015, Document Number 03-604233.
- [3] *Administering Avaya one-X® Agent with Central Management*, Release 2.5, May 3rd 2011
- [4] The installation documentation for Jabra Direct can be found at http://www.jabra.com/support/Jabra-Direct_14501-03 .

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