



Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics Hub and Blackwire 500 Series with Avaya one-X® Agent - Issue 1.0

Abstract

These Application Notes describe the compliance test and configuration procedures needed to integrate Plantronics Hub and Blackwire 500 Series USB corded headsets to operate with Avaya one-X® Agent.

The Plantronics Hub is a stand-alone application providing call control, settings management, update and battery level notifications and mute alerts to Plantronics headset. Blackwire 500 Series is a full range of portable, wideband audio and USB corded noise-canceling headsets optimized for PC communications. The Blackwire 500 Series features Smart Sensor™ technology enabling users to easily and intuitively juggle PC calls and multimedia using audio alerts to manage connection, mute and volume status, interface with PC-based unified communication systems and USB-equipped softphones such as Avaya one-X® Agent.

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 Plantronics Hub and Blackwire 500 Series USB corded headsets with Avaya one-X® Agent.

In this compliance testing, the following headsets were tested:

- Blackwire C510 – Monaural, USB corded headset
- Blackwire C520 – Binaural, USB corded headset

2. General Test Approach and Test Results

The interoperability compliance test included functionality and serviceability testing. The functionality testing focused on placing and receiving calls to and from Avaya one-X® Agent clients using the Blackwire headsets, and verifying good talk path in both directions. The type of calls made included calls to the voicemail, and calls to and from internal extensions and the PSTN.

The serviceability testing focused on verifying the usability of the Blackwire headsets when Avaya one-X® Agent was restarted, after disconnecting and reconnecting the headsets to the USB port, and after a reboot on the PC where Avaya one-X® Agent was running.

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.

2.1. Interoperability Compliance Testing

The following functionality was 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 and receiving calls to and from internal extensions to verify two way audio path and quality.
- Placing and receiving calls to and from the PSTN to verify two way audio path and quality.
- Answering and ending calls using the Avaya one-X® Agent screen interface.
- Answering and ending calls using call control button on the headset.
- Hearing ring back tone for outgoing calls.
- Hearing ring alert for incoming calls.
- Using the volume control buttons on the Blackwire to adjust the volume on the headset speakers.
- Using the mute control button on the headset and Avaya one-X® Agent to mute and un-mute the transmitted audio.
- Using Hold feature on Avaya one-X® Agent.

For the serviceability testing, the headsets were disconnected and reconnected to the USB port of the PC running Avaya one-X® Agent to verify proper operation. In addition, the PC was rebooted to verify that the headsets were operational after the restart was completed and the application reinitialized.

2.2. Test Results

All compliance test cases passed successfully. However, the following observation was noted:

1. During an active call, if a user makes a modification in the Hub application, the LED green light of the call control button of the headset is turned off. There is no impact to the audio of the call, and the call is still active. Work around is to put the call on hold by pressing the call button delay for 2 seconds and pressing the call control button again to retrieve the call. The light will be lit again.
2. Only the H.323 version of Avaya one-X® Agent was tested, since the SIP version is only used to control one-X® SIP Deskphone and audio does not go through the computer.

2.3. Support

For technical support and information on the Plantronics products described in this solution, contact Plantronics Technical Support at:

- Phone: 800-544-4660 (toll free)
+1 831-426-5858 (International)
- Website: http://www.plantronics.com/north_america/en_US/support

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the Blackwire headset solution. Avaya Aura® Communication Manager on Avaya G450 Media Gateway provides the VoIP resources for the connectivity of Avaya IP Deskphones and the SIP trunk to the simulated PSTN, used during the compliance tests. Avaya one-X® Agent was installed on a computer running Microsoft Windows 7 and register to Communication Manager as H323 endpoint. The Blackwire headset is connected to an available USB port in the PC.

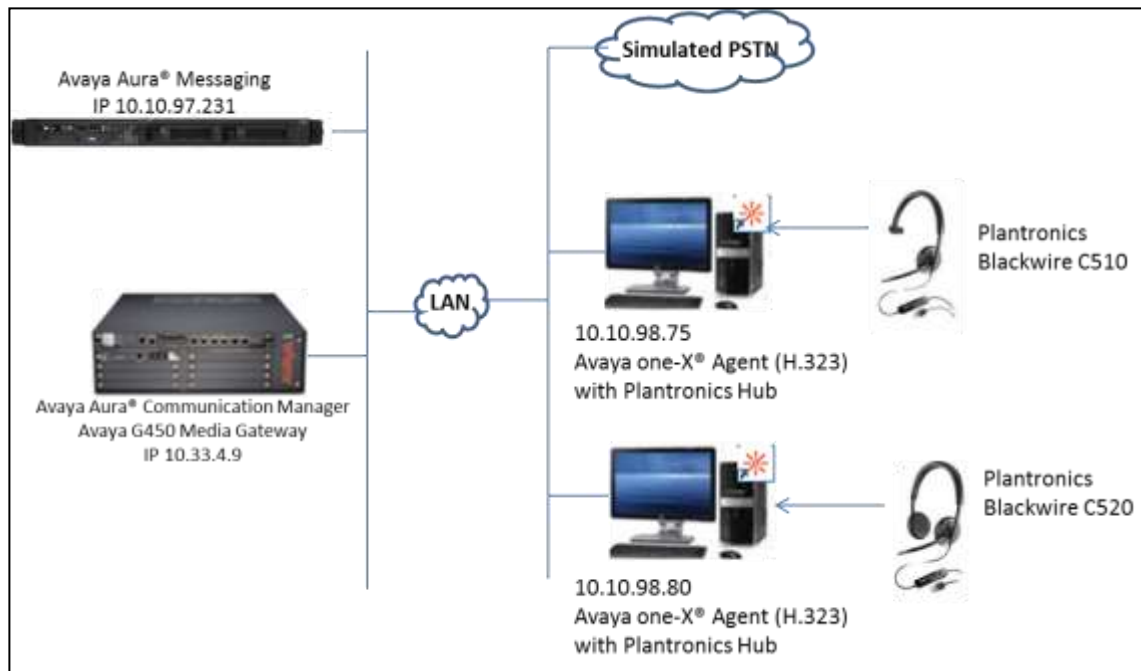


Figure 1: Test configuration Avaya one-X® Agent with Plantronics Blackwire 500 Series Headset

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	6.3.12
Avaya G450 Media Gateway	36.156.0
Avaya Aura® Messaging	6.1
Avaya one-X® Agent (H323)	2.5.8
Plantronics Blackwire C510/ 520	FW147
Plantronics Hub	3.6.51102.21715

5. Configure Avaya Aura® Communication Manager

An extension must be created in Communication Manager for the Avaya 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 Avaya one-X® Agent. Set the **Type** field to the station type to be emulated. In this example, **9640** was used. Create a **Security Code**, which will be used as the password to log in. Enter a **Name**. Set the **IP Softphone** field to **y**.

display station 3036	Page 1 of 5
STATION	
Extension: 3036	Lock Messages? n
Type: 9640	Security Code: 1234
Port: S00055	Coverage Path 1: 2
Name: Nam Mot	Coverage Path 2:
	Hunt-to Station:
STATION OPTIONS	
Loss Group: 19	Time of Day Lock Table:
Speakerphone: 2-way	Personalized Ringing Pattern: 1
Display Language: english	Message Lamp Ext: 52151
Survivable GK Node Name:	Mute Button Enabled? y
Survivable COR: internal	Button Modules: 0
Survivable Trunk Dest? y	Media Complex Ext:
	IP SoftPhone? y
	IP Video Softphone? n
	Short/Prefixed Registration Allowed: default
	Customizable Labels? y

On **Page 4** of the Station form, configure the necessary agent work mode buttons that are used in a contact center. They are used by Avaya one-X® Agent to log in as an Automatic Call Distribution (ACD) agent. The work mode buttons used in the sample configuration are highlighted in the screen below.


display station 52151		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: manual-in	Grp:	
2: call-appr	6: after-call	Grp:	
3: call-appr	7: aux-work	RC:	Grp:
4: auto-in	8: release		
voice-mail 39990	Grp:		

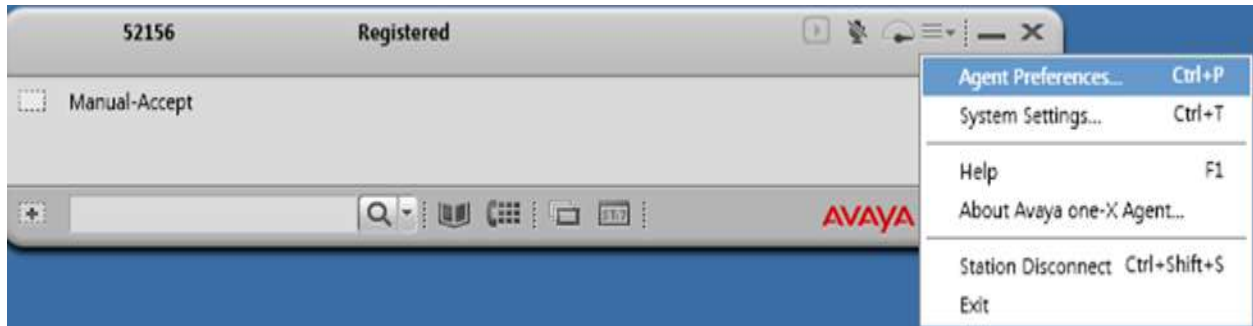
Even though ACD was implemented and used during the compliance tests, ACD and Agents administration is beyond the scope of these Application Notes, and they are assumed to be already in place.

6. Configure Plantronics Hub and Blackwire 500 Series

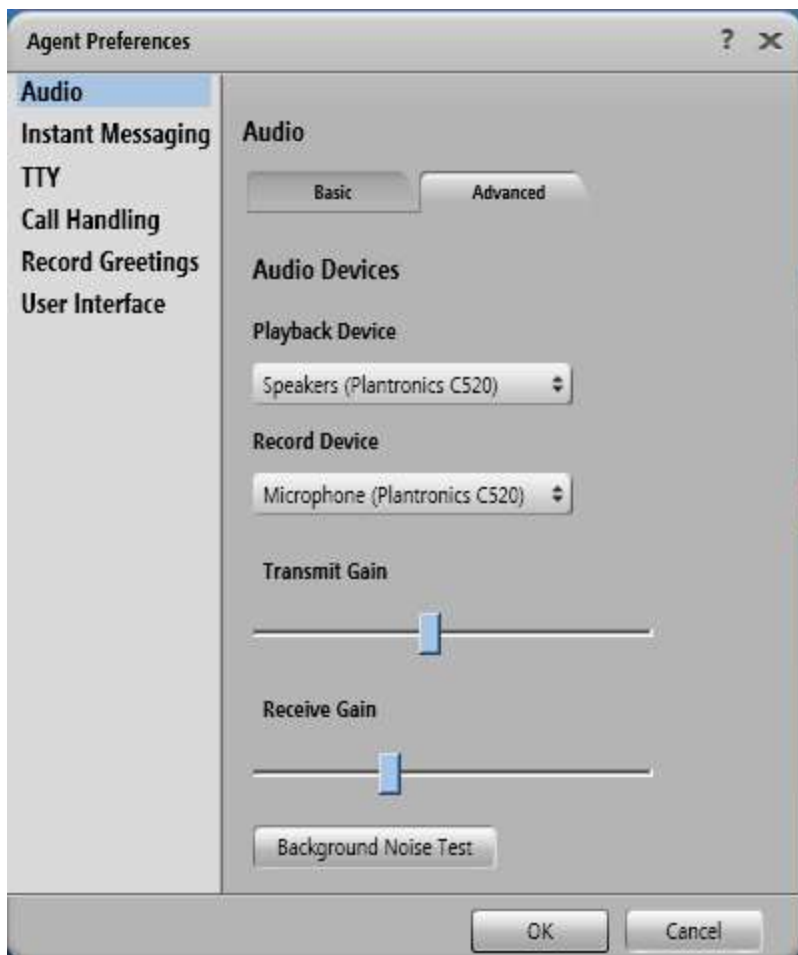
The Plantronics Hub application enables the Plantronics Blackwire 500 Series headsets to answer, end, and mute calls using the call control button on the headset itself. Install the application on the PC running the Avaya one-X® Agent. Refer to **Section 10** of these Application Notes for additional information. After the Hub application is installed, connect Blackwire headsets to the desktop PC running Avaya one-X® Agent via USB port.

7. Configure Avaya one-X® Agent

Launch Avaya one-X® Agent and log in using the extension number and password created previously in **Section 5**. Click the **System Options**  icon in the top bar. Select **Agent Preferences**.



In the **Agent Preferences** window, click on **Audio** and then select the **Advanced** tab. Set the **Playback Device** and **Record Device** fields to the applicable Plantronics headset. Click **OK**.

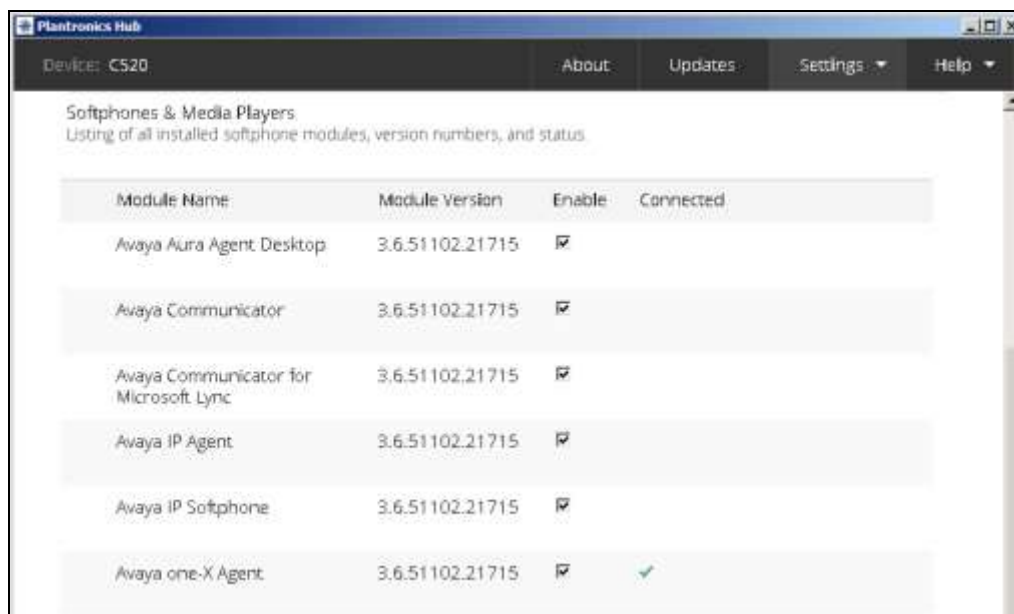


8. Verification Steps

This section provides the steps that can be performed to verify proper installation of the Plantronics Hub and Blackwire 500 Series headsets with Avaya one-X® Agent.

8.1. Verify Plantronics Hub

Make sure Avaya one-X® Agent is launched and headset is plugged in. Select **Start → Plantronics Hub**. The page will display the connected device and its information as shown below. Verify the supported softphone **Avaya one-X Agent** is checked:



8.2. Verify Call via Headset

This section provides tests that can be performed to verify proper installation of Blackwire headset, Hub application and Avaya one-X® Agent:

1. Place a call to Avaya one-X® Agent from another extension. Click the call control on the headset to answer the call.
2. Verify two-way talk path between the headset and the called extension.
3. Press the Mute button on the headset and verify the call can be muted/unmuted.
4. Verify mute light on headset, mute icon on one-X® Agent and mute message on Hub application are in sync and indicate correct mute status.
5. Verify the volume can be adjusted by using the volume controls on the headset.
6. Disconnect the call from the headset by pressing the call control button again on the headset.
7. Verify that the call is properly disconnected.

9. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics Hub and Blackwire 500 Series USB corded headsets with Avaya one-X® Agent. All test cases were completed successfully, with the observation noted in **Section 2.2**.

10. Additional References

This section references the Avaya and Plantronics 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 6.3 03-300509 Issue 10 August 2015.*
- [2] *Installing and Configuring Avaya one-X® Agent, Release 2.5, March 31, 2011.*

Documentation and information for the Plantronics Blackwire headsets can be found at the following websites:

- [3] <http://www.plantronics.com/us/product/blackwire-500>

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