



## **Avaya Solution & Interoperability Test Lab**

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# **Application Notes for Plantronics Blackwire 500 Series Headsets with Avaya one-X® Attendant - Issue 1.0**

### **Abstract**

These Application Notes describe a compliance-tested configuration comprised of Plantronics Blackwire 500 Series USB Corded Headsets with Avaya one-X® Attendant. Designed for those who spend hours each day on long conference calls, webinars and video conferencing, the Blackwire 500 Series Headsets makes communications more effective and productive.

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 Blackwire 500 Series USB corded headsets with Avaya one-X® Attendant. 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 feature and serviceability testing. The feature testing focused on placing calls to and from Avaya one-X® Attendant using Plantronics Blackwire 500 Series Headsets and verifying good talk path in both directions. The type of calls made included calls to voicemail, to internal extensions and to the PSTN.

The serviceability testing focused on verifying the usability of Plantronics Blackwire 500 Series Headsets after restarting the Avaya one-X® Attendant, disconnecting and reconnecting the Headsets and rebooting 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'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 while operating the Avaya one-X® Attendant:

- 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.
- Hearing incoming ring alert.
- Hearing ring back tone for outgoing calls.
- Answering and ending calls using call control on the headset.
- Answering and ending calls using Avaya one-X® Attendant's buttons.
- Using the mute control button on Avaya one-X® Attendant and the DA-80 to mute and un-mute the audio.
- Using the volume control buttons on the headset to adjust the volume on the headset speakers.
- Using the hold feature from the Avaya one-X® Attendant.

The serviceability testing focused on verifying the usability of Plantronics Blackwire 500 Series Headsets after restarting the Avaya one-X® Attendant, disconnecting and reconnecting the Headsets and rebooting the PC.

## 2.2. Test Results

All executed test cases passed with the following observations,

- When there is an incoming call to one-X Attendant, a beep tone is heard however there is no LED light on the headset call control button to indicate an incoming call. Call can be answered by pressing the call control button however the LED light is not lit to indicate that the headset is active on a call.
- When making an outgoing call from one-X Attendant, the far end ringing tone can be heard however the LED light on the headset call control button is not lit to indicate that the headset is active in making an outgoing call.
- When a PC is restarted after one-X® Attendant is installed, the user may see an indication that the Plantronics Spokes Software, or Hub Software, process is running on the Windows task bar. This process is used by the headset for call control functionality. If the user manually closes or shuts down this process while one-X® Attendant is running, call control functionality will stop. Restarting one-X® Attendant will restore call control functions.

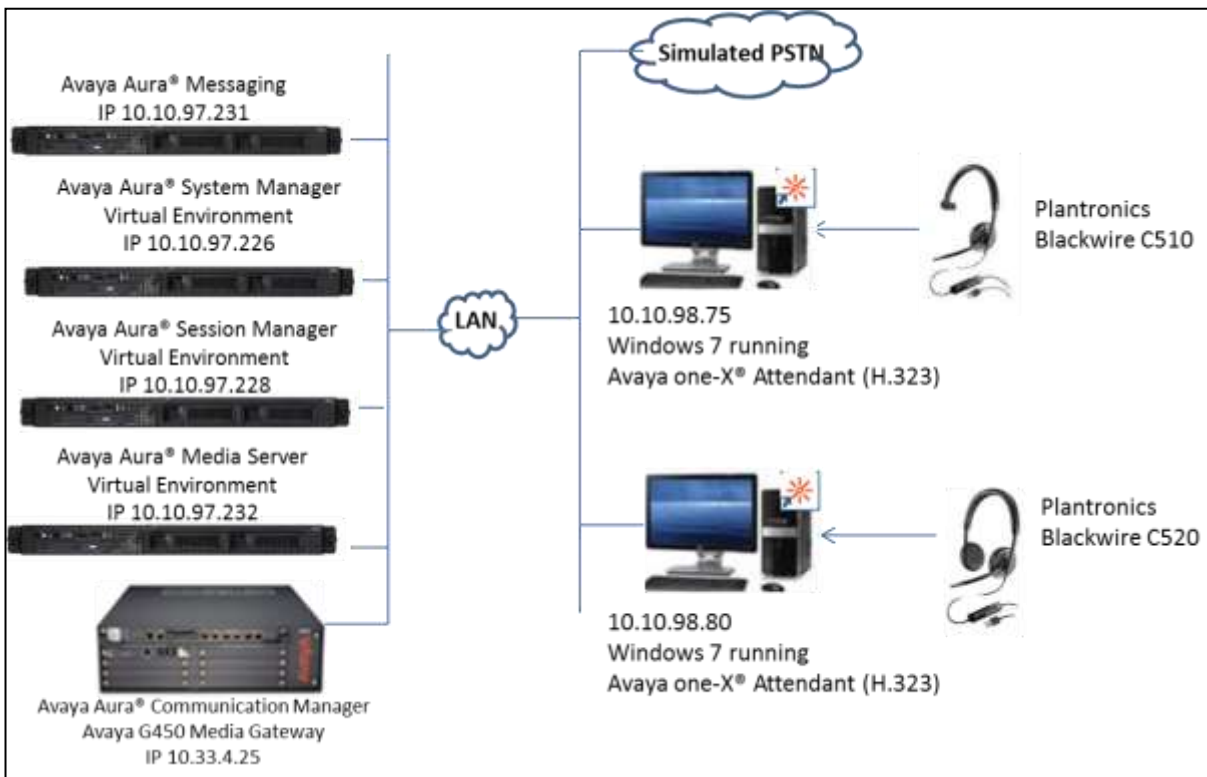
## 2.3. Support

For technical support and information on Plantronics headsets, contact Plantronics at:

- Phone: 1-855-765-7878  
1-831-426-5858 (International)
- Website: <http://www.plantronics.com/us/support/index.jsp>

## 3. Reference Configuration

**Figure 1** illustrates the test configuration used to verify the Plantronics solution. The configuration consists of an Avaya Aura® Communication Manager Virtual Environment (VM) with Avaya Aura® Media Server VM and an Avaya G450 Media Gateway which supports the H.323 endpoint. The Session Manager/System Manager VM provides connectivity to the simulated SIP PSTN via SIP trunk (not shown). The H.323 based stations are registered to the Communication Manager. The Avaya one-X® Attendant were installed on the same PC Windows 7. The Plantronics headsets were connected to this PC via the USB port.



**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 <sup>®</sup> System Manager in Virtual Environment	7.0.0.1
Avaya Aura <sup>®</sup> Session Manager in Virtual Environment	7.0 SP1
Avaya Aura <sup>®</sup> Communication Manager in Virtual Environment	7.0 SP1
Avaya G450 Media Gateway	37.20.0
Avaya Aura <sup>®</sup> Media Server Virtual Environment	7.7 SP2 (v.7.7.0.281)
Avaya one-X <sup>®</sup> Attendant	4.12.010.001
Plantronics Blackwire C510/C520 Headsets	v.147
Windows OS	Windows 7 Professional SP1

## 5. Configure Avaya Aura® Communication Manager

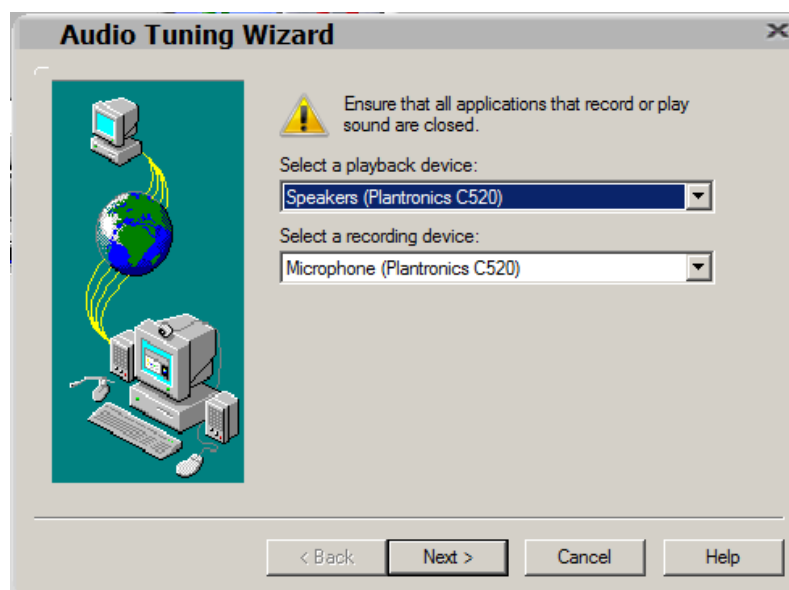
It is assumed that a fully functioning Avaya Aura® Communication Manager is in place with the necessary licensing and that an extension is configured to handle one-X® Attendant. For further information on the configuration of Avaya Aura® Communication Manager and extension for one-X® Attendant please see **reference [7]** of these Application Notes.

## 6. Configure Avaya one-X® Attendant

While installing Avaya one-X® Attendant, if the headset is already plugged in to the PC's USB port then the headset will be recognized as part of the installation. If a headset needs to be plugged in after installations of Avaya one-X® Attendant, then after logging into Avaya one-X® Attendant, navigate to **Edit → Audio → Settings wizard** (not shown) from the main screen shown below.



From the **Audio Tuning Wizard** pop-up window, verify the primary playback device and recording device as shown in the screen below for Blackwire C520. Click **Next** button to go to next steps until it is completed.



## **7. Install Plantronics Blackwire 500 Series Headsets**

The Plantronics Blackwire 500 Series Headsets are USB plug-and-play devices. When plugged into the USB Port of a PC, they are automatically detected in Microsoft Windows without requiring any additional driver software.



## 8. Verification Steps

This section provides the tests that can be performed to verify proper installation and configuration of the Plantronics Blackwire 500 Series with Avaya one-X Attendant.

1. Start the one-X Attendant application and log in.
2. Place an incoming call to one-X Attendant from any local phone.
3. Answer the call using the call control button on the headset.
4. Verify two-way talk path between the headset and phone.
5. Disconnect the call from the headset using the call control button.
6. Verify that the call is properly disconnected.

## 9. Conclusion

These Application Notes describe the configuration steps required for Plantronics Blackwire 500 Series Headsets with Avaya one-X® Attendant. Please refer to **Section 2.2** for test results and observations if any.

## 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, Document ID 03-300509
2. Avaya Aura® Communication Manager Feature Description and Implementation, Document ID 555-245-205
3. Implementing Avaya Aura® Session Manager Document ID 03-603473
4. Administering Avaya Aura® Session Manager, Doc ID 03-603324
5. Avaya one-X® Attendant 4.0 SP11 at CM Release 1.0 User manual
6. Avaya one-X® Attendant 4.0 (SP11) connected to Avaya Communication Manager Installation and Administration Manual, 16-603459-EN
7. Application Notes for Plantronics Spokes Software and Plantronics Blackwire C700 Series USB Headsets with Avaya one-X® Attendant - Issue 1.0 - <https://www.devconnectprogram.com/fileMedia/download/1786ad83-e5dc-4137-8d59-49cc40c0be84>.

The Plantronics product documentation can be found at:

8. <http://www.plantronics.com/us/support/docs/>
9. <http://www.plantronics.com/us/product/blackwire-500>

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