



## **Application Notes for Plantronics Blackwire C315/C325 USB Corded Headsets with Avaya one-X® Attendant - Issue 1.1**

### **Abstract**

These Application Notes describe the configuration steps required to integrate Plantronics Blackwire C315/C325 USB Corded Headsets with Avaya one-X® Attendant using H.323 protocol. The Blackwire C315/C325 USB corded headsets provide two-way audio with a flexible mic and call control buttons. This solution provides call control features directly from the headset, such as answering or terminating call from the headset, adjusting volume control and mute from the headset.

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 Blackwire C315/C325 USB Corded Headsets with Avaya one-X® Attendant. The Blackwire C315/C325 USB corded headsets provide two-way audio with a flexible microphone and call control buttons. This solution provides call control features directly from the headset, such as answering or terminating calls from the headset, adjusting volume control and mute/unmute from 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 to and from Avaya one-X® Attendant softphone with the Plantronics Blackwire C315/C325 USB corded headsets and verifying two-way audio, and call control from the headset. The call types included calls to voicemail, local extensions, and the PSTN.

The serviceability testing focused on verifying the usability of the Plantronics headsets after restarting Avaya one-X® Attendant and re-connecting the headset to a USB port on the PC which Avaya one-X® Attendant softphone is installed.

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:

- 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.
- Incoming call alert notification.
- Hearing ringback tone for outgoing calls.
- Using the call control button on the Plantronics headset.
- Using the volume control and mute buttons on the Plantronics headset.
- Answering and terminating the call using Avaya one-X® Attendant to verify status of call control is reflected on the Plantronics headset.

For the serviceability testing, the Plantronics headset is reconnected to USB port, and the Avaya one-X® Attendant softphone is restarted to verify proper operation of the headset.

## 2.2. Test Results

All test cases passed with the following observation(s):

- The light on the call control button on the Plantronics Blackwire C315/C325 USB Headset is used to indicate the status of the call; however, version 4.0 SP11 of Avaya one-X® Attendant currently does not support this feature. The user is still able to use this button to answer and end phone call on the one-X® Attendant but there is no light on the button.
- 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.

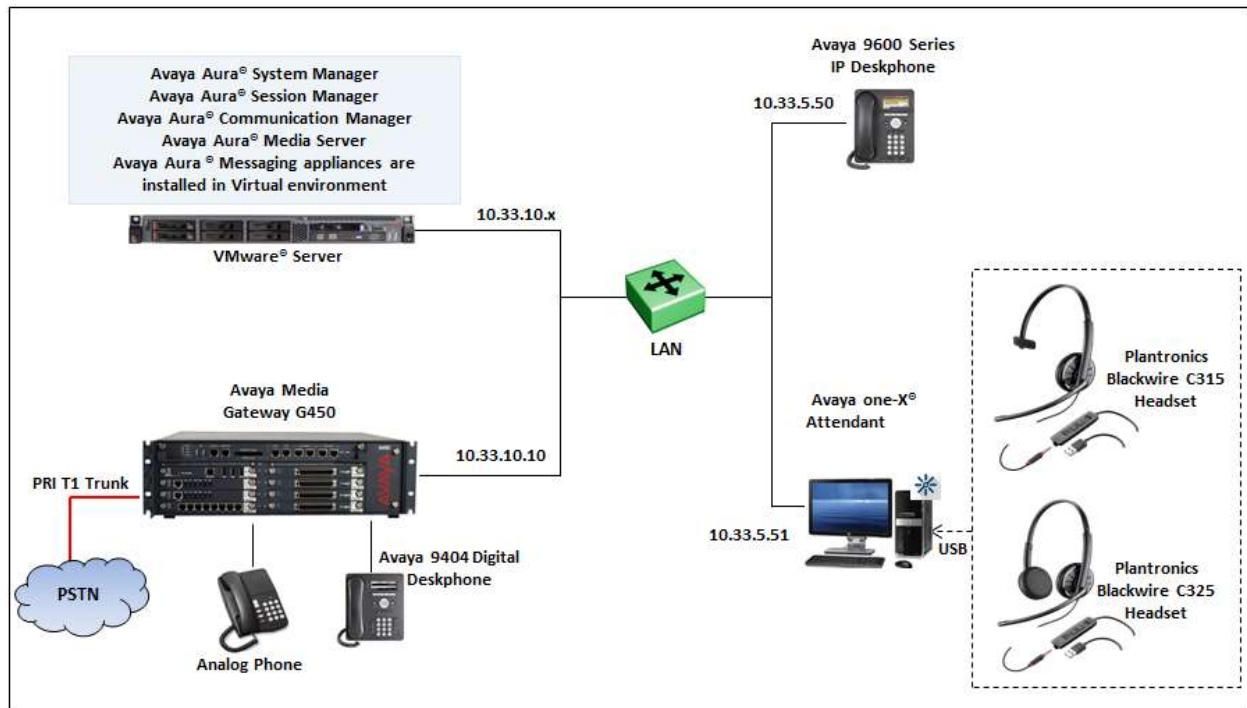
## 2.3. Support

For technical support and information on Plantronics Blackwire C315/C325 USB Corded Headsets, contact Plantronics Support 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 Blackwire C315/C325 USB Corded Headsets with Avaya one-X® Attendant. The configuration consists of Avaya Aura® System Manager, Avaya Aura® Session Manager, Avaya Aura® Communication Manager, Avaya Aura® Messaging, and Avaya Aura® Media Server appliances that were installed in virtual environment which is a VMware server. The testing used both G450 Media Gateway and Avaya Aura® Media Server to balance DSP resources that connect from/to endpoints in Communication Manager. SIP endpoints registered with Avaya Aura® Session Manager and Avaya Aura® Messaging was used as the voicemail system. The system had a PRI/T1 trunk connected to the PSTN from the G450.



**Figure 1: Avaya one-X® Attendant softphone with Plantronics Blackwire C315/325 Headsets**

## 4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® System Manager in Virtual Environment	7.0.0.0.16266
Avaya Aura® Session Manager in Virtual Environment	7.0.0.0.700007
Avaya Aura® Communication Manager in Virtual Environment	7.0 (R017x.00.0.441.0) Patch 22477
Avaya Aura® Messaging in Virtual Environment	6.3.1
Avaya Aura® Media Server in Virtual Environment	7.7.0.236
Avaya G450 Media Gateway	37.19.0
Avaya 96x1 Series IP Deskphones	6.5 (SIP)
Avaya 96x0 Series IP Deskphones	3.25 (H323)
Avaya one-X® Attendant running on a Microsoft Windows 2007 SP1	4.0 SP11 (4.12.010.001)
Avaya 9408 Digital Deskphone	Firmware12
Analog phone	N/A
Plantronics Blackwire C315/C325 USB Headset	V146

## 5. Configure Avaya Aura® Communication Manager

This section covers the station and Attendant configuration for Avaya 9600 IP endpoint. Configuration is performed via the System Access Terminal (SAT) on Communication Manager.

Use the command “**add attendant <ID>**” to add an attendant which the **<n>** is an available attendant in the system. In the **Type** field, enter 302 as the attendant type, the **Extension** field enter an available extension, the **Console Type** enter *principal*, the **Port** field enter *IP*, and enter a security code in the **Security Code** field as this code is to be used by Avaya one-X® Attendant to log in, leave other fields at default.

Add attendant 1		Page 1 of 4	
ATTENDANT CONSOLE 1			
Type: 302	Name: one-X Attendant		
Extension: 3399	Group: 1	Auto Answer: none	
Console Type: principal	TN: 1	Data Module? n	
Port: IP	COR: 1	Disp Client Redir? n	
Security Code: 1234	COS: 1	Display Language: english	
		H.320 Conversion? n	
DIRECT TRUNK GROUP SELECT BUTTON ASSIGNMENTS (Trunk Access Codes)			
Local Remote		Local Remote	
1:	5:	9:	
2:	6:	10:	
3:	7:	11:	
4:	8:	12:	
HUNDREDS SELECT BUTTON ASSIGNMENTS			
1: 3302	5:	9:	13:
2:	6:	10:	14:
3:	7:	11:	15:
4:	8:	12:	16:
			17:
			18:
			19:
			20:

## 6. Configure Avaya one-X® Attendant Softphone

This section illustrates the sample configuration of Avaya one-X® Attendant softphone to register to Communication Manager as an attendant provisioned in **Section 5** above.

Navigate to **Start Menu → All Program → Avaya → Avaya one-X Attendant** and select **Avaya one-X Attendant**. The **Login** window is displayed. In the **Extension** tab, enter the attendant number 3399 and its password in the **Extension** and **Password** fields as configured in **Section 5**, select *Road Warrior* in the **Configuration** field, enter the Communication Manager IP 10.33.1.6 in the **Call Server Address** field, select *Local Area Network* in the **Bandwidth Setting** dropdown menu and other fields at default. Click on Log in button.

**Login**

Extension: 3399 Password: xxxx

Configuration: Road Warrior

Call Server Address: 10.33.1.6

Bandwidth Setting: Local Area Network

Dialing Location: My Location Properties...

☒ Remember password for next login session  
☐ Automatically log in if possible when application restarts

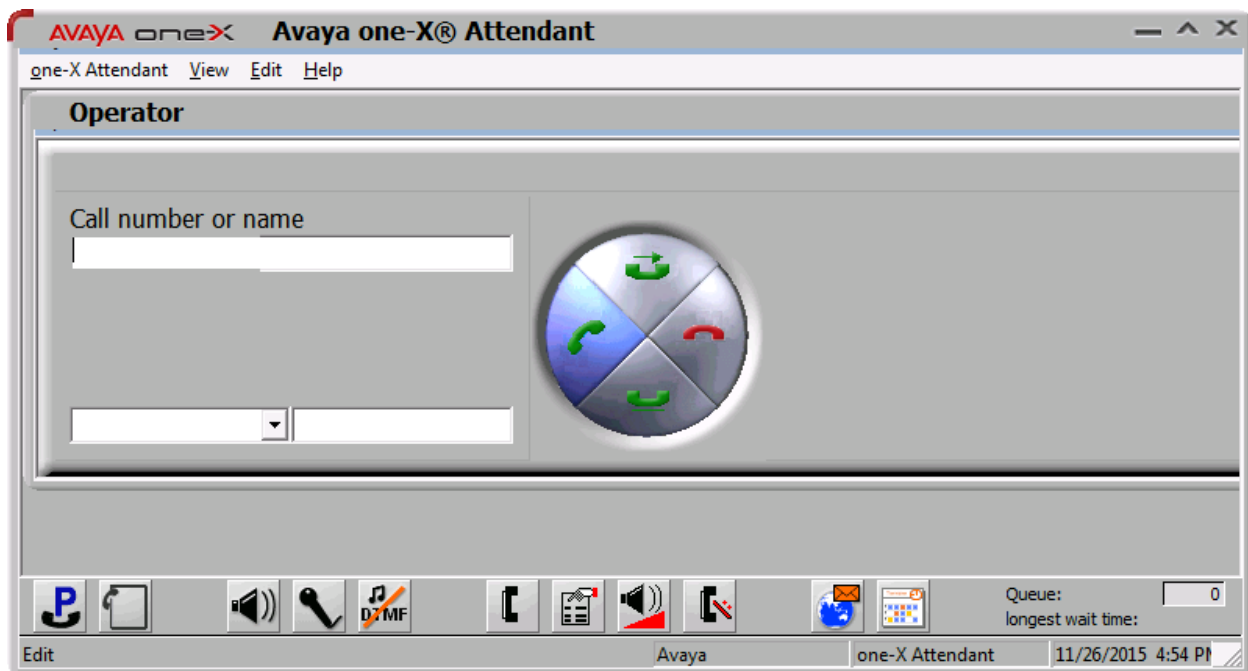
Based on the server configuration, the G.711, G.729, or G.723 codec will be used for voice over IP calls.

Log in Settings... Cancel Help


The **Login Status** window is displayed to show all the information that has been entered, select **Close** button to close the window (not shown). Avaya one-X® Attendant window is displayed, click on **Login** button, the **User Login** window is displayed as shown below. Enter the default user name *Avaya* and its default password *000000* and click **OK** button.

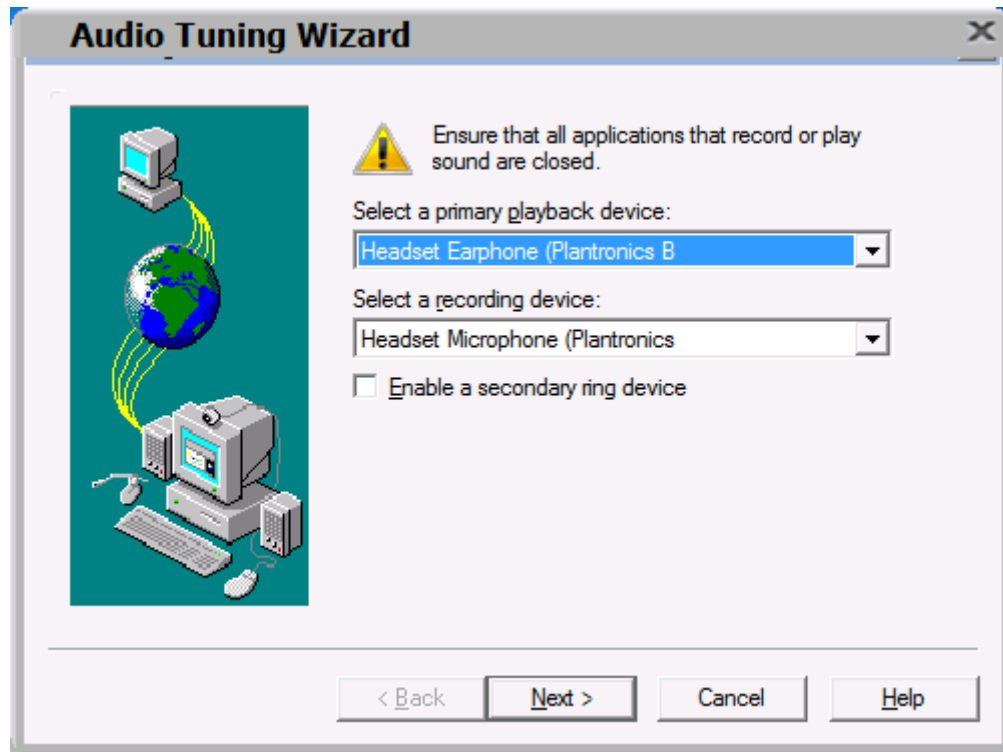


The screenshot below shows the one-X® Attendant successfully logged in.





To configure Avaya one-X® Attendant using the Plantronics headset, from the Avaya one-X® Attendant window, select **Audio Tuning Wizard** icon . The **Audio Tuning Wizard** window is displayed. In the **Select a primary playback device** and **Select a recording device** dropdown menus, select *Plantronics B*. Click **Next** button to go to next steps until it is completed.



## 7. Install Plantronics Blackwire C315/C325 Headsets

Insert the Plantronics C315/C325 headset to an available USB port on the PC running Avaya one-X® Attendant

## 8. Verification Steps

These typical steps below are used to verify the interworking between Plantronics Blackwire C315/C325 USB Corded Headsets and Avaya one-X® Attendant softphone.

1. From Avaya one-X® Attendant softphone with Plantronics headset, place a local call to another station.
2. Verify the ringback tone is heard through the Plantronics headset and the light on the call control button on the headset is lit up.
3. Answer the call on the other station, verify two-way speech path with clear audio between the Avaya one-X® Attendant softphone and the other station.
4. During the call, adjust the volume up and down and mute/unmute from Plantronics headset, verify the volume adjusted successfully and status mute/unmute reflected properly on the Avaya one-X® Attendant softphone.
5. End the call by pressing the call control button on the Plantronics headset, verify the call is terminated and the headset is idle.

## 9. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics Blackwire C315/C325 USB Corded Headsets and Avaya one-X® Attendant softphone. All test cases were completed successfully with observations noted in **Section 0**.

## 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 7.0, Issue 1, August 2015, Document Number 03-300509.*
- [2] *Administering Avaya Aura System Manager, Release 7.0, Issue 8, September 2015.*
- [3] *Administering Avaya Aura Session Manager, Release 7.0, Issue 7, September 2015.*
- [4] *Avaya one-X Attendant Installation and Administration Manual, Release 4.0, Version 1, December 12*

The Plantronics product documentation can be found at <http://www.plantronics.com>.

---

**©2016 Avaya Inc. All Rights Reserved.**

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

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](mailto:devconnect@avaya.com).