



Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics Blackwire C500 Series USB Headsets with Avaya Flare® Experience for Windows - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the Plantronics Blackwire C500 Series USB Headsets with Avaya Flare® Experience for Windows. The Blackwire C500 headsets provide two-way audio and allow the audio volume to be adjusted and the audio to be muted directly from the headset. For this compliance test, the Blackwire C510 monaural headset and the Blackwire C520 binaural headset were verified. This solution does not provide call control features directly from the headset, such as call answer, call terminate, or mute sync.

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 Plantronics Blackwire C500 Series USB Headsets with Avaya Flare® Experience for Windows. The Blackwire C500 headsets provide two-way audio and allow the audio volume to be adjusted and the audio to be muted directly from the headset. For this compliance test, the Blackwire C510 monaural headset and the Blackwire C520 binaural headset were verified.

Refer to the appropriate Plantronics documentation listed in **Section 11** for additional product information.

Note: This solution does not provide call control integration with Flare Experience. That is, a call cannot be answered or terminated directly from the headset, nor is the mute status on the headset synchronized with Flare Experience. The Plantronics Spokes Software is not installed as part of this solution.

2. General Test Approach

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 and from Flare Experience with the Blackwire C500 Series USB Headsets and verifying an audio path in both directions. The type of calls made included calls to voicemail, to local stations, and to the PSTN.

The serviceability testing focused on verifying the usability of the Blackwire C510/C520 headsets after restarting Flare Experience, disconnecting and reconnecting the headset, and rebooting the PC.

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 local stations to verify two-way audio.
- Placing calls to the PSTN to verify two-way audio.
- Answering and ending calls directly from Flare Experience.
- Using the volume control buttons on the headset and Flare Experience to adjust the playback volume.
- Using the mute control button on the headset and Flare Experience to mute and un-mute the audio.

For the serviceability testing, the headsets were disconnected and reconnected to verify proper operation. Flare Experience application was also restarted for the same purpose. The desktop PC was also rebooted to verify that Flare Experience and the headsets were operational when the PC came back into service.

2.2. Test Results

All test cases passed with the following observations:

- There is no mute synchronization between the Blackwire C500 headsets and Flare Experience. If a call is muted through the headset, it is not reflected on Flare Experience, and the call needs to be un-muted through the headset, and vice versa.
- There is no call control support through the headset. Calls need to be answered and terminated through Flare Experience. The call control button on the headset is not operational.

2.3. Support

For technical support and information on Plantronics C500 Series USB Headsets, contact Plantronics 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 Plantronics solution. The configuration consists of an Avaya S8300 Server running Avaya Aura® Communication Manager with an Avaya G450 Media Gateway providing connectivity to the PSTN via an ISDN-PRI trunk (not shown). Avaya Aura® Communication Manager Messaging was used as the voicemail system. Avaya Flare® Experience for Windows was installed on a desktop PC and registered to Avaya Aura® Session Manager as a SIP endpoint. The Plantronics Blackwire C500 Series USB Headsets were connected to the desktop PC via a USB port.

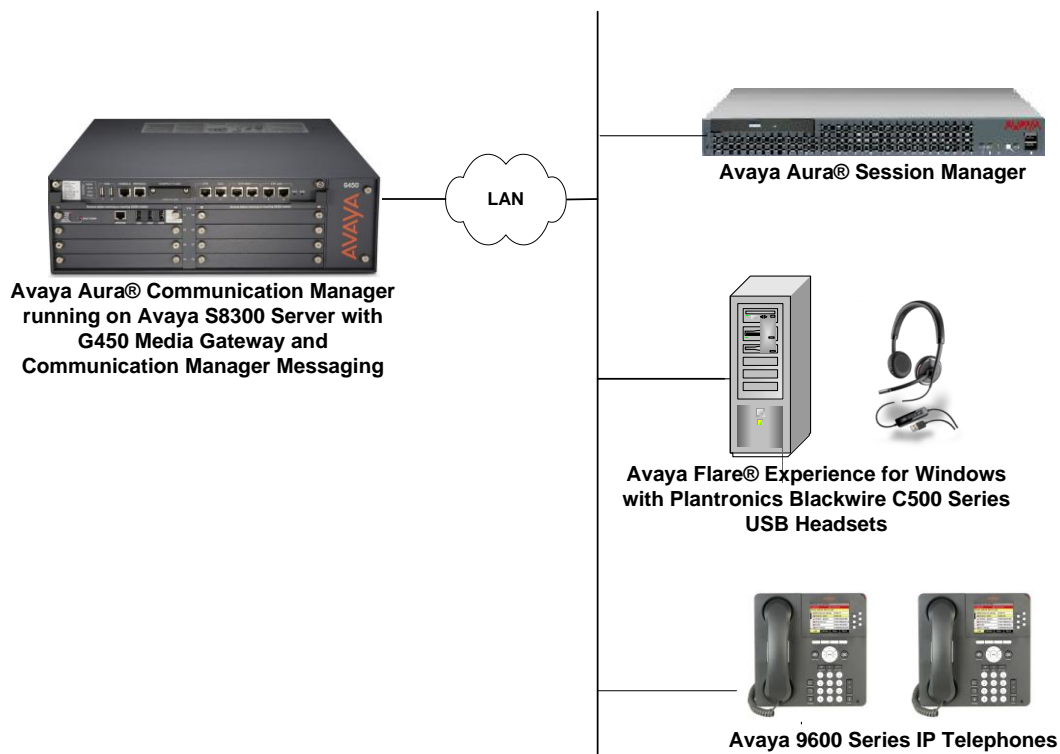


Figure 1: Avaya Flare® Experience for Windows with Plantronics Blackwire C500 Series USB Headsets

4. Equipment and Software Validated

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

Equipment	Software
Avaya Aura® Communication Manager running on an Avaya S8300 Server with a G450 Media Gateway and Communication Manager Messaging	6.2 SP 5 (R016x.02.0.823.0 with Patch 20396)
Avaya Aura® Session Manager	6.2 (6.2.3.0.623006)
Avaya Flare Experience for Windows on Microsoft Windows 7	1.1.1.7
Avaya 9600 Series IP Telephone	3.1 SP 5 (H.323)
Plantronics Blackwire C510/C520 USB Headsets	USB Firmware 123, Base 01.23

5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for Flare Experience. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

Use the **add station** command to add a station for Flare Experience. Use *9621SIP* for the **Station Type**, provide a descriptive **Name**, and enable **IP Softphone**. Use the default values for the other fields on **Page 1**. The SIP station can also be configured automatically by System Manager as described in **Section 6**.

add station 46010		Page 1 of 6
STATION		
Extension: 46010	Lock Messages? n	BCC: 0
Type: 9621SIP	Security Code:	TN: 1
Port: IP	Coverage Path 1:	COR: 1
Name: Flare, Experience	Coverage Path 2:	COS: 1
	Hunt-to Station:	
STATION OPTIONS		
	Time of Day Lock Table:	
Loss Group: 19		
	Message Lamp Ext: 46010	
Display Language: english		
Survivable COR: internal		
Survivable Trunk Dest? y	IP SoftPhone? y	
	IP Video Softphone? y	

Use the **change off-pbx-telephone station-mapping** command to map the Communication Manager extensions (e.g., 46010) to the same extension configured in System Manager. Enter the field values shown. For the sample configuration, the **Trunk Selection** field is set to *aar* so that AAR call routing is used to route calls to Session Manager. AAR call routing configuration is not shown in these Application Notes. The **Configuration Set** value can reference a set that has the default settings.

change off-pbx-telephone station-mapping 46010							Page 1 of 3
STATIONS WITH OFF-PBX TELEPHONE INTEGRATION							
Station Extension	Application	Dial Prefix	CC	Phone Number	Trunk Selection	Config Set	Dual Mode
46010	OPS	-		46010	aar	1	

6. Configure Avaya Aura® Session Manager

This section describes the procedure for configuring a SIP user for Flare Experience as defined in **Section 5**. Alternatively, use the option to automatically generate the SIP station on Communication Manager when adding a new SIP user. It is assumed that the basic installation and configuration of Session Manager has already been completed.

Configuration is accomplished by accessing the browser-based GUI of Avaya Aura® System Manager using the URL “https://<ip-address>/SMGR”, where <ip-address> is the IP address of System Manager. Log in with the appropriate credentials.

From the main webpage, navigate to **Users → User Management**. From the User Management webpage, click on **Manage Users** in the left pane, and then click the **New** button to display the **New User Profile** webpage.

Enter values for the following required attributes for a new SIP user in the **Identity** section of the new user form.

- | | |
|-------------------------------|--|
| ▪ Last Name: | Enter the last name of the user. |
| ▪ First Name: | Enter the first name of the user. |
| ▪ Login Name: | Enter <extension>@<sip domain> of the user (e.g., 46010@devcon.com). |
| ▪ Authentication Type: | Select <i>Basic</i> . |
| ▪ Password: | Enter the password which will be used to log into System Manager. |
| ▪ Confirm Password: | Re-enter the password from above. |

The screen below shows the information when adding a new SIP user.

AVAYA Avaya Aura® System Manager 6.2 Last Logged on at April 5, 2013 6:20 PM
Help | About | Change Password | **Log off admin**

[User Management](#) * [Home](#)

Home / Users / User Management / Manage Users [Help ?](#)

New User Profile [Commit & Continue](#) [Commit](#) [Cancel](#)

Identity * **Communication Profile** * **Membership** **Contacts**

Identity ▾

* **Last Name:**

* **First Name:**

Middle Name:

Description:

* **Login Name:**

* **Authentication Type:** ▾

* **Password:**

* **Confirm Password:**

Localized Display Name:

Endpoint Display Name:

Select the **Communication Profile** tab and configure the following fields:

- **Communication Profile Password:** Enter the password which will be used by Flare Experience to log into Session Manager.
- **Confirm Password:** Re-enter the password from above.

AVAYA Avaya Aura® System Manager 6.2 Last Logged on at April 5, 2013 6:20 PM
Help | About | Change Password | **Log off admin**

[User Management](#) * [Home](#)

Home / Users / User Management / Manage Users [Help ?](#)

New User Profile [Commit & Continue](#) [Commit](#) [Cancel](#)

Identity * **Communication Profile** * **Membership** **Contacts**

Communication Profile ▾

Communication Profile Password:

Confirm Password:

[New](#) [Delete](#) [Done](#) [Cancel](#)

Click **New** to define a **Communication Address** for the new SIP user. Enter values for the following required fields:

- **Type:** Select *Avaya SIP*.
- **Fully Qualified Address:** Enter extension number and select SIP domain.

The screen below shows the information when adding a new SIP user to the sample configuration. Click **Add**.

Communication Address

New Edit Delete

	Type	Handle	Domain
No Records found			

Type: Avaya SIP

* Fully Qualified Address: 46010 @ devcon.com

Add Cancel

In the *Session Manager Profile* section, specify the Session Manager entity and assign the **Application Sequence** to both the originating and terminating sequence fields. Set the **Home Location** field to the appropriate **Location**.

☒ **Session Manager Profile**

* Primary Session Manager lz-asm

Primary	Secondary	Maximum
25	0	25

Secondary Session Manager (None)

Primary	Secondary	Maximum

Origination Application Sequence devcon14

Termination Application Sequence devcon14

Conference Factory Set (None)

Survivability Server (None)

* Home Location Lincroft

In the **CM Endpoint Profile** section, fill in the following fields:

- **System:** Select the managed element corresponding to Communication Manager.
- **Profile Type:** Select *Endpoint*.
- **Use Existing Stations:** If field is not selected, the station will automatically be added in Communication Manager.
- **Extension:** Enter extension number of SIP user.
- **Template:** Select template for type of SIP phone.
- **Port:** Enter *IP*.
- **Delete Endpoint on Unassign of Endpoint From User or on Delete User:** Enable field to automatically delete station when **Station Profile** is un-assigned from user.

The screen below shows the information when adding a new SIP user to the sample configuration. Click **Commit** to add the SIP user.

☒ **CM Endpoint Profile** ▼

* **System**

devcon14 ▼

* **Profile Type**

Endpoint ▼

Use Existing Endpoints

☐

* **Extension**

* **Template**

DEFAULT_9621SIP_CM_6_2 ▼

Set Type

Security Code

* **Port**

Voice Mail Number

Preferred Handle

(None) ▼

Delete Endpoint on Unassign of Endpoint from User or on Delete User.

☒

Override Endpoint Name

☒

Click the **Endpoint Editor** button, and in the subsequent webpage, navigate to the **Feature Options** tab. Enable **IP Softphone** as shown below. Click **Done** (not shown) to return to the previous webpage, and then click **Commit**.


General Options (G) *		Feature Options (F)		Site Data (S)		Abbreviated Call Dialing (A)	
Enhanced Call Fwd (E)		Button Assignment (B)		Group Membership (M)			

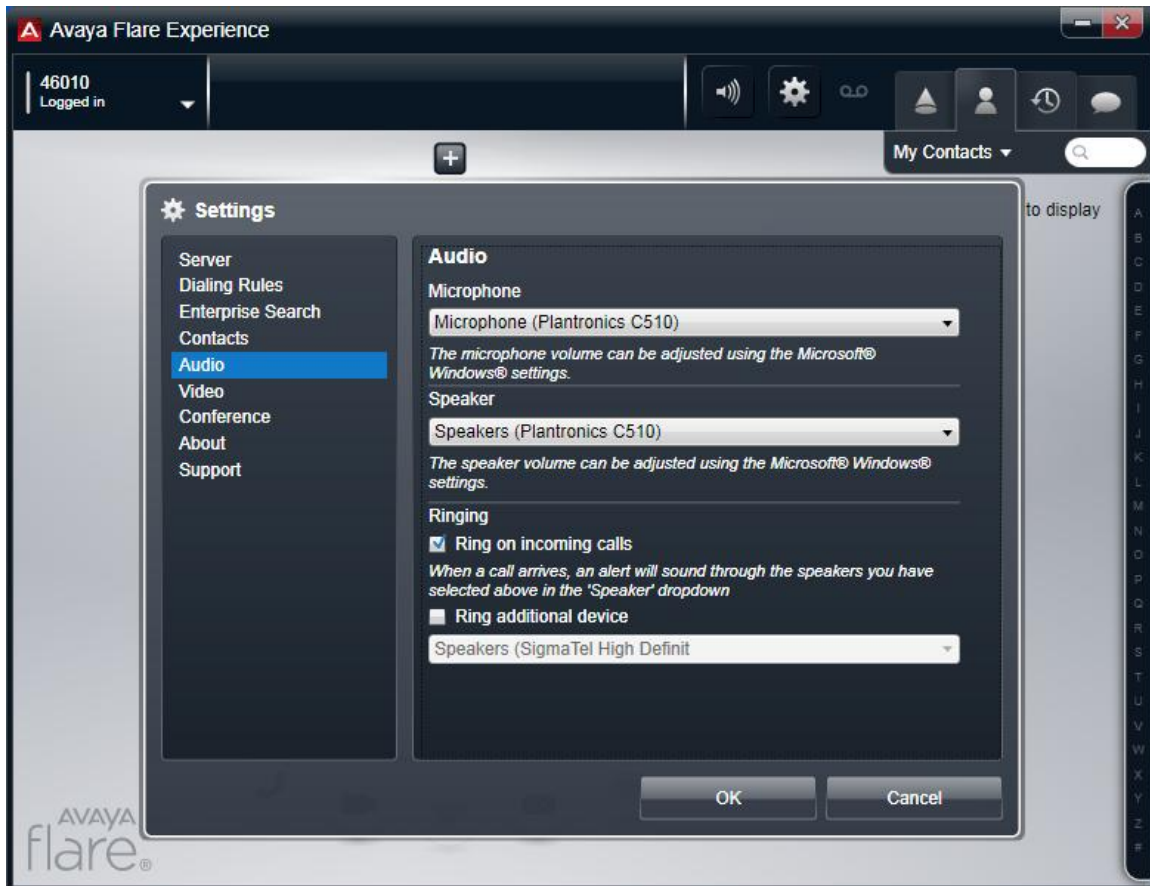
Active Station Ringing	single ▾	Auto Answer	none ▾
MWI Served User Type	Select ▾	Coverage After Forwarding	system ▾
Per Station CPN - Send Calling Number	Select ▾	Display Language	english ▾
IP Phone Group ID	<input type="text"/>	Hunt-to Station	<input type="text"/>
Remote Soft Phone Emergency Calls	as-on-local ▾	Loss Group	19
LWC Reception	spe ▾	Survivable COR	internal ▾
AUDIX Name	<input type="text"/>	Time of Day Lock Table	Select ▾
EC500 State	enabled ▾	Voice Mail Number	<input type="text"/>
Short/Prefixed Registration Allowed	default ▾		

Features

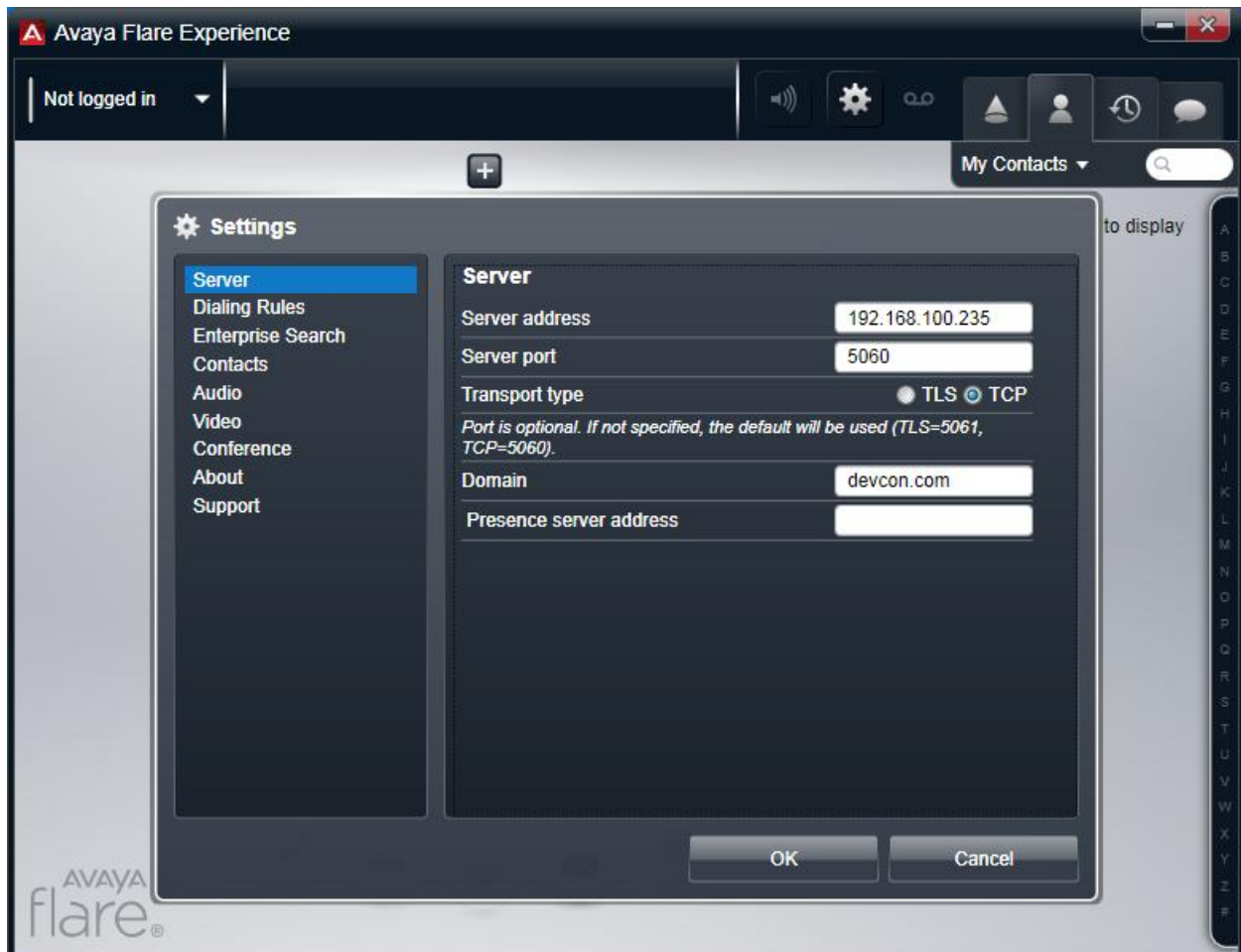
<input type="checkbox"/> Always Use	<input type="checkbox"/> Idle Appearance Preference
<input type="checkbox"/> IP Audio Hairpinning	<input checked="" type="checkbox"/> IP SoftPhone
<input type="checkbox"/> Bridged Call Alerting	<input checked="" type="checkbox"/> LWC Activation
<input type="checkbox"/> Bridged Idle Line Preference	<input type="checkbox"/> CDR Privacy
<input checked="" type="checkbox"/> Coverage Message Retrieval	<input checked="" type="checkbox"/> Direct IP-IP Audio Connections
<input type="checkbox"/> Data Restriction	<input type="checkbox"/> H.320 Conversion
<input checked="" type="checkbox"/> Survivable Trunk Dest	<input checked="" type="checkbox"/> IP Video Softphone
<input type="checkbox"/> Bridged Appearance Origination Restriction	<input type="checkbox"/> Per Button Ring Control
<input checked="" type="checkbox"/> Restrict Last Appearance	

7. Configure Avaya Flare® Experience for Windows

After logging into Flare Experience, click on  and then select the **Audio** settings as shown below. The Plantronics Blackwire C500 USB headset is automatically detected in Flare Experience. Under **Audio**, set the **Microphone** and **Speaker** fields to the appropriate device as shown below. The example below is configured for the Blackwire C510 headset. Click **OK**.



For Flare Experience to register successfully with Session Manager, the **Server** settings must be configured with the Session Manager IP address, server port, transport type, and domain name as shown below.



8. Connect Plantronics Blackwire C500 USB Headsets

Simply connect the Blackwire C500 Series Headset to a USB port on the PC running Flare Experience. Flare Experience will automatically detect it. Refer to [4] for instructions on using the Plantronics headset.

9. Verification Steps

This section provides the tests that can be performed to verify proper installation and configuration of the Plantronics C500 USB headsets with Avaya Flare® Experience.

1. Start the Flare Experience application.
2. Place an incoming call to Flare Experience from any local phone.
3. Answer the call from Flare Experience.
4. Verify two-way talk path between the headset and phone.
5. Verify that the audio can be muted and the volume can be adjusted directly from the headset.
6. Disconnect the call from Flare Experience.
7. Verify that the call is properly disconnected.

10. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics Blackwire C500 Series USB Headsets with Avaya Flare® Experience. All test cases were completed successfully with observations noted in **Section 2.2**.

11. 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 6.2, Issue 7, December 2012, Document Number 03-300509.
- [2] *Administering Avaya Aura® Session Manager*, July 2012, Issue 3, Release 6.2, Document Number 03-603324.
- [3] *Administering Avaya Flare® Experience for Windows*, Release 1.1, Issue 2, February 2013, Document Number 18-604156.

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

- [4] *Plantronics Blackwire C510/C520 Headset Quick Start Guide*.

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