

Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics DA-70/80 USB Processors Adapters and SupraPlus HW251N/HW261N Headsets with Avaya one-X® Communicator 6.2 FP7 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Plantronics DA-70/80 USB Processors Adapters and SupraPlus HW251N/HW261N Headsets with Avaya one-X® Communicator 6.2 FP7 using H.323 and SIP protocols. The Plantronics DA-70/80 USB Processor adapters connect to PC via USB and to Plantronics SupraPlus HW251N/HW261N headsets via Quick Disconnect connector. The DA-80 adapter provides call control features directly from the adapter, such as answering or terminating a call from the headset, adjusting volume control and mute from the headset while the DA-70 adapter does not have the call control features.

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 Plantronics DA-70/80 USB Processors Adapters and SupraPlus HW251N/HW261N Headsets with Avaya one-X® Communicator 6.2 FP7 using H.323 and SIP protocols. The Plantronics DA-70/80 USB Processor adapters connect to PC via USB and to Plantronics SupraPlus HW251N/HW261N headsets via Quick Disconnect (QD) connector. The DA-80 adapter provides call control features directly from the adapter, such as answering or terminating a call from the headset, adjusting volume control and mute from the headset while the DA-70 adapter does not have the call control features.

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® Communicator softphone with the Plantronics DA-70/80 USB Processors Adapters and SupraPlus HW251N/HW261N headsets and verifying two-way audio, 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® Communicator and re-connecting the DA-70/80 adapter to USB port on the PC which has Avaya one-X® Communicator softphone 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 ring back tone for outgoing calls.
- Using the call control button on the Plantronics DA-80 adapter.
- Using the volume control and mute buttons on the Plantronics DA-80 adapter.
- Answering and terminating the call using Avaya one-X® Communicator to verify status of call control is reflected on the Plantronics DA-80 adapter.
- Using the Plantronics headset with Avaya one-X[®] Communicator softphone using both H323 and SIP protocols.

For the serviceability testing, the Plantronics adapters are reconnected to USB port, and restarting of Avaya one-X® Communicator softphone to verify proper operation of the headset.

2.2. Test Results

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

 Plantronics DA-80 adapter does not go back to idle mode when Avaya one-X® Communicator completes transfer call to another local station. This issue happens intermittently and Plantronics is investigating the same.

2.3. Support

For technical support and information on Plantronics DA-70/80 USB Processor adapters and Plantronics SupraPlus HW251N/HW261N headsets, contact Plantronics Support at:

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

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the Plantronics DA-70/80 USB Processors Adapters and SupraPlus HW251N/HW261N Headsets with Avaya one-X® Communicator. The configuration consists of System Manager, Session Manager, Communication Manager, Aura Messaging, and Media Server appliances that were installed in virtual environment which is a VMware server. The testing used both Media Gateway G450 and 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 PRI/T1 trunk connected to PSTN from the G450. The Plantronics DA-70/80 USB Processor adapters connect to PC via USB and to the HW251N/HW261N headsets via QD connector.

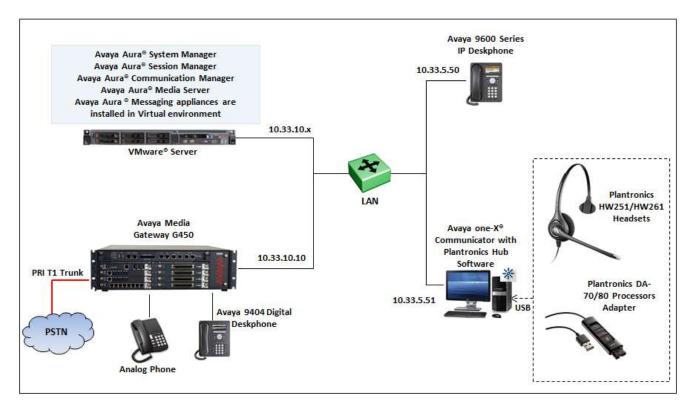


Figure 1: Avaya one-X® Communicator softphone with Plantronics DA-70/80 USB Processors Adapters and SupraPlus HW251N/HW261N Headsets

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	7.0.0.16266			
Avaya Aura® Session Manager in Virtual Environment	7.0.0.700007			
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 Media Gateway G450	37.19.0			
Avaya 96x1 Series IP Deskphones	6.5 (SIP)			
Avaya 96x0 Series IP Deskphones	3.25 (H323)			
Avaya one-X® Communicator running on a Microsoft Windows 2007 SP1	6.2.7.03-SP7			
Avaya 9408 Digital Deskphone	Firmware12			
Analog phone	N/A			
Plantronics DA-70/80 USB Processor Adapters	Base: v.68 Tuning: v.26.26 USB: v.68			
Plantronics SupraPlus HW251N Headset	P/N: 64338-31			
Plantronics SupraPlus HW261N Headset	P/N: 64339-31			
Plantronics Hub Software	3.6.51102.21715			

5. Configure Avaya Aura® Communication Manager

This section assumes the Avaya Aura systems are already installed and configured; this section describes the station configuration for the Avaya 9600 one-X® IP endpoint. Configuration is performed via the System Access Terminal (SAT) on Communication Manager or via Avaya Aura® System Manager for SIP station.

5.1. Configure a Station for Avaya one-X Communicator H323

Use the **add station** command to create a station for the 9650 IP station. Set the **Type** field to the station type to be emulated. In this example, *9650* was used. Set the **Port** field to *IP* and configure a **Security Code** as that password is to be used by Avaya one-X[®] Communicator to log in, set **IP Softphone** to *y*.

Note: To enable Auto Answer on the IP station set the Auto Answer field on Page 2 (not shown) to the appropriate value, such as *all*.

add station 53006		Рас	ge 1 of	5
		STATION		
				_
Extension: 53006		Lock Messages? n	BCC:	0
Туре: 9650		Security Code: 1234	TN:	1
Port: IP		Coverage Path 1:	COR:	1
Name: H.323 9650		Coverage Path 2:	COS:	1
		Hunt-to Station:	Tests?	У
STATION OPTIONS				
		Time of Day Lock Table:		
Loss Group:	19	Personalized Ringing Pattern:	1	
_		Message Lamp Ext:	53006	
Speakerphone:	2-way	Mute Button Enabled?	У	
Display Language:	english	Button Modules:	0	
Survivable GK Node Name:				
Survivable COR:	internal	Media Complex Ext:		
Survivable Trunk Dest?	У	IP SoftPhone?	У	
		IP Video Softphone?	n	
	Short	/Prefixed Registration Allowed:	default	
		-		
		Customizable Labels?	y	
			-	

5.2. Configure a Station for Avaya one-X Communicator using SIP

This section shows configuration in System Manager to create a SIP user that is used to log on from Avaya one-X® Communicator softphone.

From the homepage of System Manager, navigate to Home \rightarrow Users \rightarrow User Management \rightarrow Manager Users, the User Management page is displayed in the right hand side as shown below.

Note: The initial installation, configuration, and licensing of System Manager, Session Manager and Communication Manager servers are assumed to have been previously completed and are not discussed in these Application Notes. These Application Notes focus on describing the sample configuration as it relates to SIP user.

AVAVA Auta [®] System Manager 6.3								oged en at September 30, 201 10:11 Pr
Home User Management	* User Hanageme	ent *					Gom	and the second
* User Management	Home / Users / Us	er Management	/ Manage Users					c
Manage Users	Search			6	E)			Help ?
Public Contacts	STATIST.				2			
Shared Addresses	User Mana	comont						
System Presence ACLs	User Mana	gement						
Communication Profile Password	Users							
Policy	(EE Were) / E	IL O New	🕮 DupReate 📗 🔍 D	Hite []	More Actions	•		Advanced Search +
	44 Items 🤤 S	how 15 *						Filter: Enable
	🗐 Last Nome	First Name =	Display Name	Login	Name	STP Handle	Last Login	
	Avaya SIP	\$3100	Avaya SIP, 53100	5310	0@bvwdev.com	53100		
	📃 Avaya SIP	53101	Avaya SIP, 53101	5310	1@bvwdev.com	53101		
	Avaya SIP	53102	Avaya SIP, 53102	5310	2@bvwdev.com	53102		

Click on **New** button in the **User Management** page shown above to create a new SIP user. The **New User Profile** is displayed; enter parameters of new SIP user in the **Identity** tab as shown below. The fields with red asterisk are mandatory and require to be configured.

AVAVA						Last Logged	on et Octob	wr 1, 2015 11:56
Aura [®] System Manager 6.3						1.157	-	All
Home User Ranagement	*					G0		
* User Management	Home / Users /	User Management / Manage	Users					0
Manage Users								Help 7
Public Contacts	New Use	r Profile				Commit & Continue	Commit	Cancel
Shared Addresses								
System Presence ACLs	Identity *	Communication Profile	Membership	Contacts)
Communication	User Pro	visioning Rule 🔹						
Profile Password Policy		User Provisioning Rule	e: [
	Identity							
		* Last Name	a: StP					
	21	Last Name (Latin Translation)): SIP					
		* First Name						
	43	First Name (Latin Translation						
	8	Middle Name						
		Description	10.					
		* Login Name	: 53117@byw	dev.com				
		 Authentication Type 	: Basic		+			
		Password	t:	5				
		Confirm Password	t:					
		Localized Display Name		1				
		Endpoint Display Name						
		Title						
		100						

Next, select the **Communication Profile** tab; enter a password e.g. 1234 in **Communication Profile Password** and **Confirm Password** fields. Note that this password is used to log intoAvaya one-X® Communicator softphone as a SIP user.

Under **Communication Address** section, click on **New** button to add a new communication address, select Type as **Avaya SIP**, enter a directory number *53117* which will be the directory number of SIP user and select *bvwdev.com* domain in the dropdown menu. Note: The domain *bvwdev.com* is previously provisioned when Session Manager is installed and configured.

User Management	Home / Users / Use	r Hanagement / Ha	nage Users					0		
Manage Users								Help ?		
Public Contacts	New User	Profile				Commit & Continue	Commit	Cancel		
Shared Addresses										
System Presenco ACLs	Identity * 0	ommunication Profil	e Membershi	p Contacts						
Communication	Communica	tion Profile +						1		
Profile Password	Comm	unication Profile Pasi	sword:	11						
Policy			sword: .							
		CONNIN Pas								
	O New S	Celleta Done	Cancel							
	Name									
	a Primary									
	Select : None									
			Name: Primary							
	Default : 🖻									
	-		evenue.					1		
		Communication	Address ·							
		O New Set	t Streete							
		Type	Han	dle		Domain				
		No Records for	und							
			Type:	Avaya SIP						
		• Fully Q	ualified Address:	53117	0	bywdey.com	1	-1		
							Add			
							A00 C	ancer		
		E Session Mar	ager Profile							
		🖾 Collaboratio	n Environmen	t Profile 🔹						
		CM Endpoin	t Profile 🔹							

Check on the Session Manager Profile section, in the SIP Registration subsection, select the Session Manager system *DevSM* in the Primary Session Manager, under Application Sequences select *DevCM-SEQ* in both Origination Sequence and Termination Sequence and in the Call Routing Settings section, select *Belleville* in the Home Location.

Note: Session Manager SIP entity *DevSM*, Application Sequence *DevCM-SEQ* and home location *Belleville* are previously provisioned.

Session Manager Profile 💌	
SIP Registration	
* Primary Session Manager	DevSM
Secondary Session Manager	(None)
Survivability Server	(None)
Max. Simultaneous Devices	1 💌
Block New Registration When Maximum Registrations Active?	
Application Sequences	
Origination Sequence	DevCM-SEQ
Termination Sequence	DevCM-SEQ 🔹
Coll Deutine Collines	
Call Routing Settings * Home Location	Belleville
Conference Factory Set	(None)
Conference Pactory Sec	(None)
Call History Settings	
Enable Centralized Call History?	
Collaboration Environment Prof	ile 🖲
CM Endpoint Profile 💌	
* System	DevCM 💌
* Profile Type	Endpoint
Use Existing Endpoints	
* Extension	Q 53117 Endpoint Editor
* Template	9640SIP_DEFAULT_CM_6_3
Set Type	9640SIP
Security Code	
Port	IP
Voice Mail Number	
Preferred Handle	(None)

KP; Reviewed: SPOC 12/9/2015 Solution & Interoperability Test Lab Application Notes ©2015 Avaya Inc. All Rights Reserved. 10 of 19 HW261N-oneXCom Check on **CM Endpoint Profile**, select Communication Manager System *DevCM* in the **System** field and select *Endpoint* in the **Profile Type** field. In the **Extension** field, enter the number *53117* and select the SIP template *9640SIP_DEFAULT_CM_3* in the **Template** field.

CM Endpoint Profile 💌	
* System	DevCM 🔹
* Profile Type	Endpoint
Use Existing Endpoints	
* Extension	Q 53117 Endpoint Editor
* Template	9640SIP_DEFAULT_CM_6_3
Set Type	9640SIP
Security Code	
Port	IP .
Voice Mail Number	
Preferred Handle	(None)

Select the **Endpoint Editor** in the screenshot shown above to configure the features for a SIP user. In the **Feature Options** tab select **IP Softphone** check box as shown in the screenshot below. Retain default values for all other fields and click **Done** (not shown) in this page to go back to the **Communication Profiles** page, and in the **Communication Profiles** page click **Commit** button to complete and save the newly added SIP user.

Port Name	IP SIP,53117	Security Code	
General Options (G) * Button Assignment (B)	Feature Options (F) Site Da Group Membership (M)	ata (S) Abbreviated Call D	ialing (A) Enhanced Call Fwd (E
Active Station Ringing MWI Served User Type Per Station CPN - Send Calling Number IP Phone Group ID Remote Soft Phone Emergency Calls LWC Reception AUDIX Name Speakerphone	single None Some Some Some Some Some Some Some Som	Auto Answer Coverage After Forwarding Display Language Hunt-to Station Loss Group Survivable COR Time of Day Lock Table	none system english 19 internal None
Short/Prefixed Registration Allowed EC500 State	default 💌 enabled 💌	Voice Mail Number Music Source	
Features Always Use IP Audio Hairpinn Bridged Call Alert Bridged Idle Line	ing Preference	 Idle Appearance P IP SoftPhone LWC Activation CDR Privacy 	reference
Data Restriction Survivable Trunk	-	 Direct IP-IP Audio H.320 Conversion IP Video Softphon 	
Restrict Last App	2	Per Button Ring Co	

6. Configure Avaya one-X® Communicator Softphone

This section provides configuration of Avaya one-X® Communicator softphone to register to Session Manager using the SIP user provisioned in **Section 5.2** above.

Navigate to Start Menu \rightarrow All Program \rightarrow Avaya and select Avaya one-X Communicator. Avaya one-X Communicator softphone is displayed, from Avaya one-X Communicator Login window select Settings (not shown). The General Settings window is displayed, select Telephony tab under Accounts section. In the Telephony section, select SIP radio button, enter the number 53117 and its password as configured in Section 5.2 in the Extension and Password fields. Select Add button to add Session Manager address 10.33.10.26 in the Server List, enter the domain *bvwdev.com* in the Domain field.

General Settings					?	×
Accounts Telephony	Telephony					
Login Messaging	Using: 🔘 I	H.323 🔘 S	IP			
Security	Extension:	53117				
Devices and Services Outgoing Calls Phone Numbers Dialing Rules Audio	Password: Server List:	10.33.10.26	5:5060;trar	nsport=tcp		
Video			Add	Remove		
Public Directory Preferences	Domain:	bvwdev.co	m			
Desktop Integration	Mode:	Proxied \$				
Hot Keys Network	Avaya Environment:	Auto		\$		
Advanced	Failback Policy:	Auto				
	Registration Policy:	Simultaneous ‡				
	Enable Video Ca	lls				
Auto-configure			C	K Car	ncel	

Solution & Interoperability Test Lab Application Notes ©2015 Avaya Inc. All Rights Reserved. Navigate to **Devices and Services** \rightarrow **Audio**, the **Audio** tab is displayed in the right hand. In the **Basic** tab, select Plantronics headset in both **Microphone** and **Speaker** dropdown menu.

Click **OK** button to complete and save the configuration.

General Settings	? ×
Accounts Telephony Login Messaging Security Devices and Services Outgoing Calls Phone Numbers Dialing Rules Audio Video Public Directory Preferences Desktop Integration Hot Keys Network Advanced	Audio Basic Advanced Microphone Headset Microphone (2- Plantron The microphone volume is adjusted automatically as needed Speaker Headset Earphone (2- Plantronic Volume Test Volume Test When a call arrives, an alert will sound through the speakers you have selected above in the "Speakers" dropdown. Ring additional device Speakers (Conexant 20672 SmartA Volume Test
Auto-configure	OK Cancel

The screenshot below displays Avaya one-X® Communication softphone successfully registered as a SIP user 53117.

53117		dev.com	4	ـــــــــــــــــــــــــــــــــــــ	. × €
Enter nam	ne or nu	imber	Q 🌈 🐑 💷	AVAYA	×
Enter a n	umber	or select a	function	?	x
1	ABC 2	DEF 3	0	0	
GHI 4	JKL 5	MNO 6	0	(0 (0	
PQRS 7	TUV 8	WXYZ 9	0	0	
*	0	#	0	0	

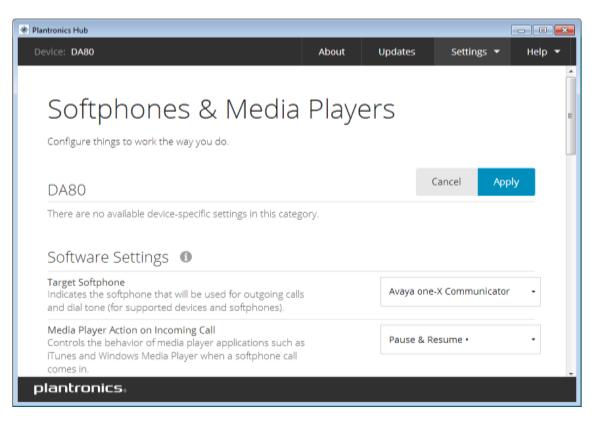
7. Configure Plantronics DA-70/80 USB Processors Adapters & SupraPlus HW251N/261N Headsets

This section provides the configuration steps for Plantronics Hub software and Plantronics DA-70/80 USB Processors & SupraPlus HW251N/HW261N Headsets to work with Avaya one-X® Communicator softphone.

- 1. Install Plantronics Hub software on PC which has Avaya one-X® Communicator softphone installed.
- 2. Connect Plantronics HW251N/HW26N1 headsets to the DA-70/80 USB adapters via QD connector.
- 3. Insert the DA-70/80 adapters to an available USB port on the PC.
- 4. Launch the Plantronics Hub software, there is an icon of the Hub software appears in the System tray bar showing that Plantronics headset is being connected.



- 5. Launch Avaya one-X® Communicator softphone.
- Configure Plantronics Hub software to use with Avaya one-X[®] Communicator softphone, from the Plantronics Hub window, navigate to Settings → Softphones. In the Target Softphone dropdown menu select Avaya one-X Communicator in the list of softphones.



KP; Reviewed: SPOC 12/9/2015 Solution & Interoperability Test Lab Application Notes ©2015 Avaya Inc. All Rights Reserved. 16 of 19 HW261N-oneXCom Scroll down to the list of installed softphone, make sure in the **Connected** column the green check is displayed for Avaya one-X Communicator.

Plantronics Hub					- •
Device: DA80		About	Updates	Settings 🔻	Help 🔻
Softphones & Media Players Listing of all installed softphone module	es, version numbers, and	d status.			
Module Name	Module Version	Enable	Connected		
Avaya Aura Agent Desktop	3.6.51102.21715				
Avaya Communicator	3.6.51102.21715				
Avaya Communicator for Microsoft Lync	3.6.51102.21715				
Avaya IP Agent	3.6.51102.21715				
Avaya IP Softphone	3.6.51102.21715	V			
Avaya one-X Agent	3.6.51102.21715	V			
Avaya one-X Communicator	3.6.51102.21715	V	~		
plantronics					

8. Verification Steps

These typical steps below are used to verify the inter-working between Plantronics Hub software, Plantronics DA-80 USB adapters, SupraPlus HW251N/HW261N headsets and Avaya one-X® Communicator softphone. Note that these steps below are applied on the Plantronics DA-80 adapter. For Plantronics DA-70 adapter that does not have the call control button, only audio of the calls and call status are verified, the call status is verified based on the beep tone heard through the headsets and changing color of Hub icon in the system tray for actions made on the Avaya one-X® Communicator softphone such as mute/unmute and call answer/end.

- 1. From Avaya one-X® Communicator 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 DA-80 adapter should be lit up.
- 3. Answer the call on the other station, verify two-way speech path with clear audio between the Avaya one-X® Communicator softphone and the other station.

- 4. During the call, adjust the volume up and down and mute/unmute from Plantronics DA-80 adapter, verify the volume adjusted successfully and status of mute/unmute reflected properly on Avaya one-X® Communicator 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 DA-70/80 USB Processors Adapters and Platronics SupraPlus HW251N/HW261N Headsets and Avaya one-X® Communicator 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 <u>http://support.avaya.com</u>.

- [1] Administering Avaya Aura® Communication Manager, Release 6.3, Issue 10, August 2015, Document Number 03-300509.
- [2] Administering Avaya Aura System Manager, Release 6.3, Issue 8, September 2015.
- [3] Administering Avaya Aura Session Manager, Release 6.3, Issue 7, September 2015.
- [4] Administering Avaya one-X® Communicator, Release 6.2 FP7, Nov 2015.
- [5] Administering Avaya one-X® Communicator, Release 6.2 Feature Pack 7
- [6] Using Avaya one-X® Communicator, Release 6.2 FP7
- [7] Implementing Avaya one-X® Communicator, Release 6.2 FP7

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

©2015 Avaya Inc. All Rights Reserved.

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and TM 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 <u>devconnect@avaya.com</u>.