



Application Notes for Plantronics Hub Software and Plantronics Blackwire C315/C325 USB Corded Headsets with Avaya one-X® Agent - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the Plantronics Hub Software and Plantronics Blackwire C315/C325 USB Corded Headsets with Avaya one-X® Agent 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.

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 Hub Software and Plantronics Blackwire C315/C325 USB Corded Headsets with Avaya one-X® Agent using H.323 protocol. 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® Agent softphone with the Plantronics Blackwire C315/C325 USB corded 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® Agent and re-connecting the headset to USB port on the PC which Avaya one-X® Agent 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 headset.
- Using the volume control and mute buttons on the Plantronics headset.
- Answering and terminating the call using Avaya one-X® Agent to verify status of call control is reflected on the Plantronics headset.
- Using the Plantronics headset with Avaya one-X® Agent softphone using H323 protocol only.

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

2.2. Test Results

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

- Only Avaya one-X® Agent softphone using H323 protocol was used to test with Plantronics Blackwire C315/C325 headsets since they support “My Computer” mode which is audio going through the computer where the Plantronics headset is attached, the other type of Avaya one-X® Agent supports SIP which is used to control one-X® SIP Deskphone and audio is not gone through the computer.

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 Headsets with Avaya one-X® Agent. The configuration consists of an Avaya S8800 Server running Avaya Aura® Communication Manager with an Avaya G450 Media Gateway providing connectivity to the PSTN via an ISDN-PRI trunk. SIP endpoints registered with Avaya Aura® Session Manager and Avaya Aura® Messaging was used as the voicemail system. The Plantronics Blackwire C315/C325 headsets were connected to USB port of PC which Avaya one-X® Agent softphone installed.

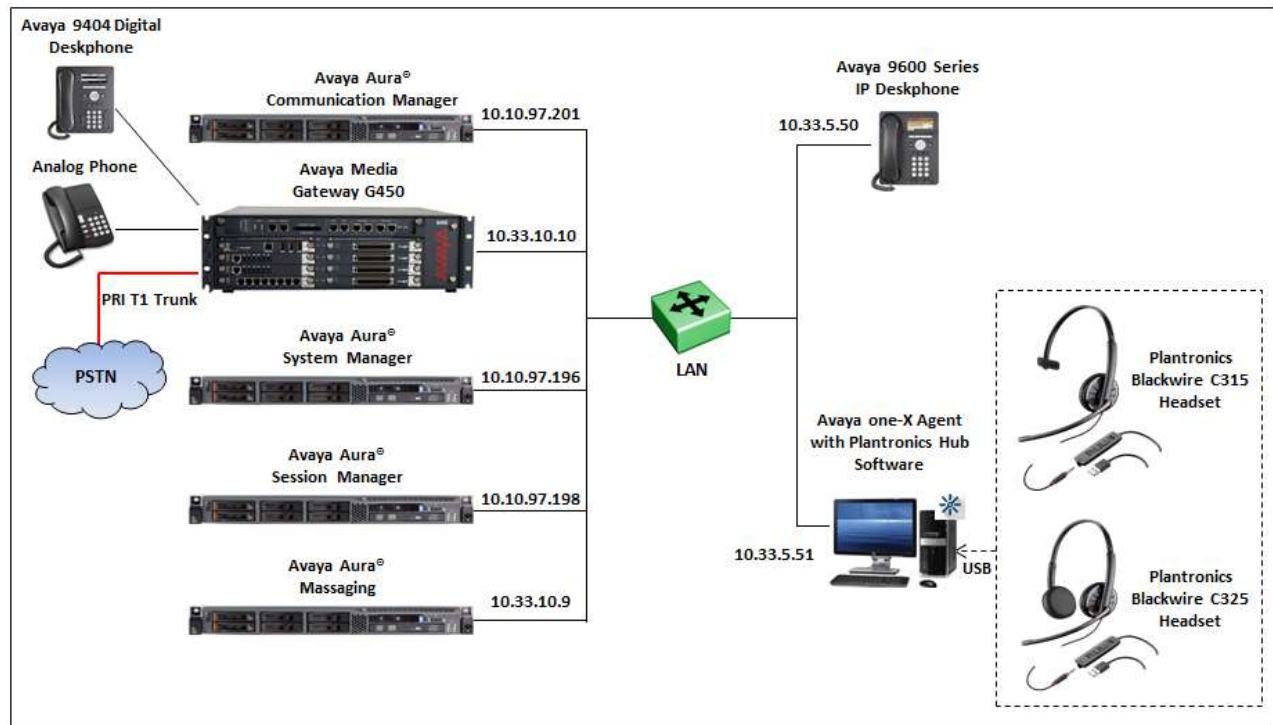


Figure 1: Avaya one-X® Agent softphone with Plantronics Blackwire C315/325 Headsets and Plantronics Hub Software

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 running on an Avaya S8800 Server	6.3 SP 12 (R016x.03.0.124.0 w/Patch 22505)
Avaya Media Gateway G450	37.19.0
Avaya Aura® Session Manager	6.3 SP 14 (6.3.14.0.631402)
Avaya Aura® System Manager	6.3. SP 14 (6.3.14.11.3595)
Avaya Aura® Messaging	6.3.1
Avaya 96x1 Series IP Deskphones	6.5 (SIP)
Avaya 96x0 Series IP Deskphones	3.25 (H323)
Avaya one-X® Agent running on a Microsoft Windows 2007 SP1	2.5.8 (H323)
Avaya 9408 Digital Deskphone	Firmware12
Analog phone	N/A
Plantronics Blackwire C315/C525 Headsets	V146
Plantronics Hub Software	3.6.51102.21715

5. Configure Avaya Aura® Communication Manager

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

5.1. Configure H323 Station

Use the command “**add station <n>**” to add a H323 station which the **<n>** is an available extension in the system. In the **Type** field, enter 9630 as the station type, the **Port** field auto set to use *IP*, enter a security code in the **Security Code** field as this code to be used by Avaya one-X® Agent to log in, set **IP Softphone** to y.

add station 3301		Page 1 of 5
STATION		
Extension: 3301	Lock Messages? n	BCC: M
Type: 9630	Security Code: *	TN: 1
Port: S00011	Coverage Path 1:	COR: 1
Name: H.323 3301	Coverage Path 2:	COS: 1
	Hunt-to Station:	Tests? y
STATION OPTIONS		
Loss Group: 19	Time of Day Lock Table:	
	Personalized Ringing Pattern: 1	
Speakerphone: 2-way	Message Lamp Ext: 3301	
Display Language: english	Mute Button Enabled? y	
Survivable GK Node Name:	Button Modules: 0	
Survivable COR: internal	Media Complex Ext:	
Survivable Trunk Dest? y	IP SoftPhone? y	
	IP Video Softphone? y	
	Short/Prefixed Registration Allowed: default	
	Customizable Labels? y	

Go to the page 4, add the buttons required for agent phone such as **aux-work**, **manual-in**, **auto-in**, **after-call** and **release**.

add station 3301		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: auto-in	Grp:
3: call-appr	7: after-call	Grp:
4: aux-work RC: Grp:	8: release	

5.2. Configure agent login ID

Use the command “**add agent-loginID <agent ID>**”, which the <agent-ID> is an available agent ID in the system. Enter a security code in the **Security Code** field.

add agent-loginID 1001		Page 1 of 2
AGENT LOGINID		
Login ID: 1001		
Name: Agent 1001	AAS? n	
TN: 1	AUDIX? n	
COR: 1		
Coverage Path:	LWC Reception: spe	
Security Code: 1234	LWC Log External Calls? n	
Attribute:	AUDIX Name for Messaging:	
LoginID for ISDN/SIP Display? n		
Password:		
Password (enter again):		
Auto Answer: station		
MIA Across Skills: system		
ACW Agent Considered Idle: system		
Aux Work Reason Code Type: system		
Logout Reason Code Type: system		
Maximum time agent in ACW before logout (sec): system		
Forced Agent Logout Time: :		
WARNING: Agent must log in again before changes take effect		

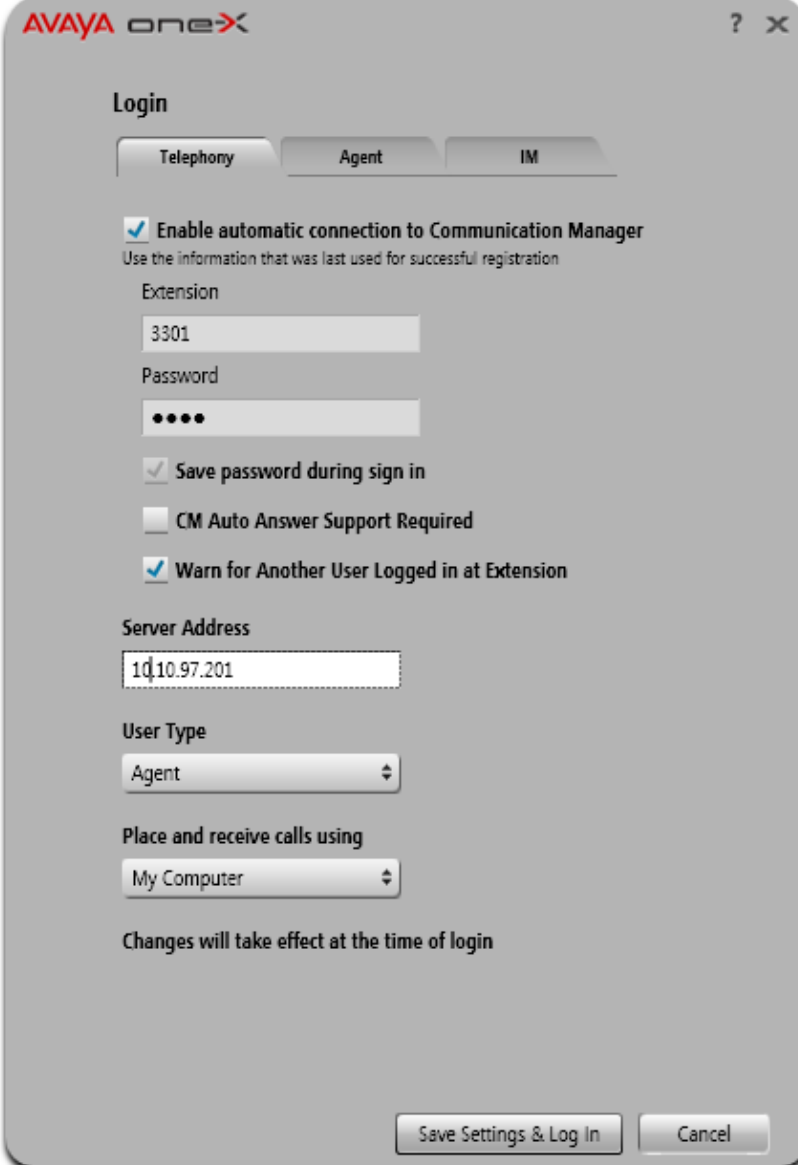
Go to next page, assign the skill number 1 in the **SN** field and 1 in the **SL** field. Note that the skill number 1 was previously provisioned and not discussed in this document.

add agent-loginID 1001			AGENT LOGINID			Page 2 of 2		
Direct Agent Skill:						Service Objective? n		
Call Handling Preference: skill-level						Local Call Preference? n		
	SN	RL SL		SN	RL SL			
1:	1	1	16:					
2:			17:					
3:			18:					
4:			19:					
5:			20:					
6:								
7:								
8:								
9:								
10:								
11:								
12:								
13:								
14:								

6. Configure Avaya one-X® Agent Softphone

This section illustrates the sample configuration of Avaya one-X® Agent softphone to register to Communication Manager as the H323 station provisioned in **Section 5** above.

Navigate to **Start Menu → All Program → Avaya → Avaya one-X Agent** and select **Avaya one-X Agent**. Avaya one-X Agent softphone is present. From Avaya one-X Agent **Welcome** window select **Change Login Settings** (not shown). The **General Settings** window is displayed. In the **Telephony** tab, enter the number **3301** and its password in the **Extension** and **Password** fields as configured in **Section 5.1**, enter the Communication Manager IP **10.10.97.201** in the **Server Address** field, select **My Computer** in the **Place and receive call using** dropdown menu.



The screenshot shows the 'AVAYA one-X' login window with the 'Telephony' tab selected. The 'Login' section has three tabs: 'Telephony', 'Agent', and 'IM'. Under 'Telephony', there are several settings: 'Enable automatic connection to Communication Manager' is checked; 'Extension' is '3301'; 'Password' is masked with dots; 'Save password during sign in' is checked; 'CM Auto Answer Support Required' is unchecked; and 'Warn for Another User Logged in at Extension' is checked. The 'Server Address' field contains '10.10.97.201'. The 'User Type' dropdown is set to 'Agent'. The 'Place and receive calls using' dropdown is set to 'My Computer'. At the bottom, it says 'Changes will take effect at the time of login' and there are 'Save Settings & Log In' and 'Cancel' buttons.

AVAYA one-X

Login

Telephony Agent IM

☒ **Enable automatic connection to Communication Manager**
Use the information that was last used for successful registration

Extension
3301

Password
••••

☒ **Save password during sign in**

☐ **CM Auto Answer Support Required**

☒ **Warn for Another User Logged in at Extension**

Server Address
10.10.97.201

User Type
Agent

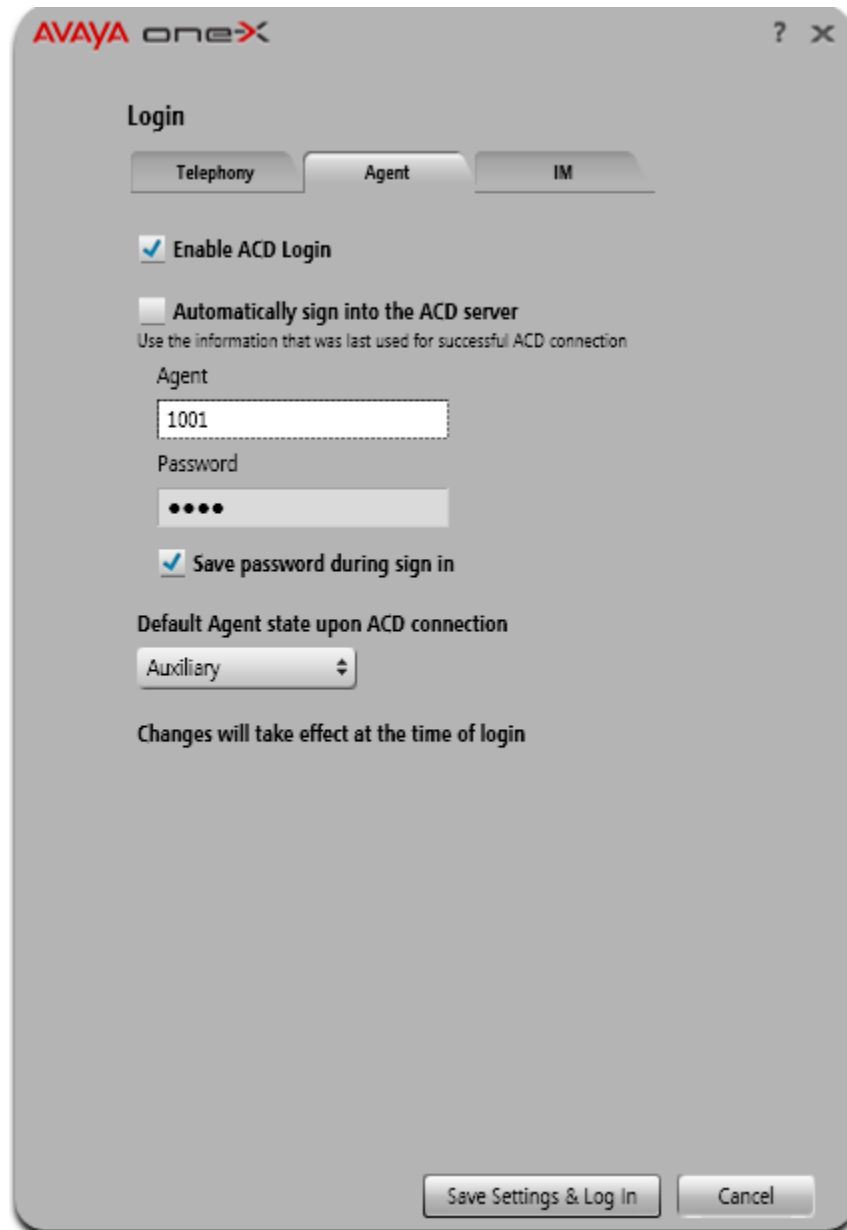
Place and receive calls using
My Computer

Changes will take effect at the time of login

Save Settings & Log In Cancel

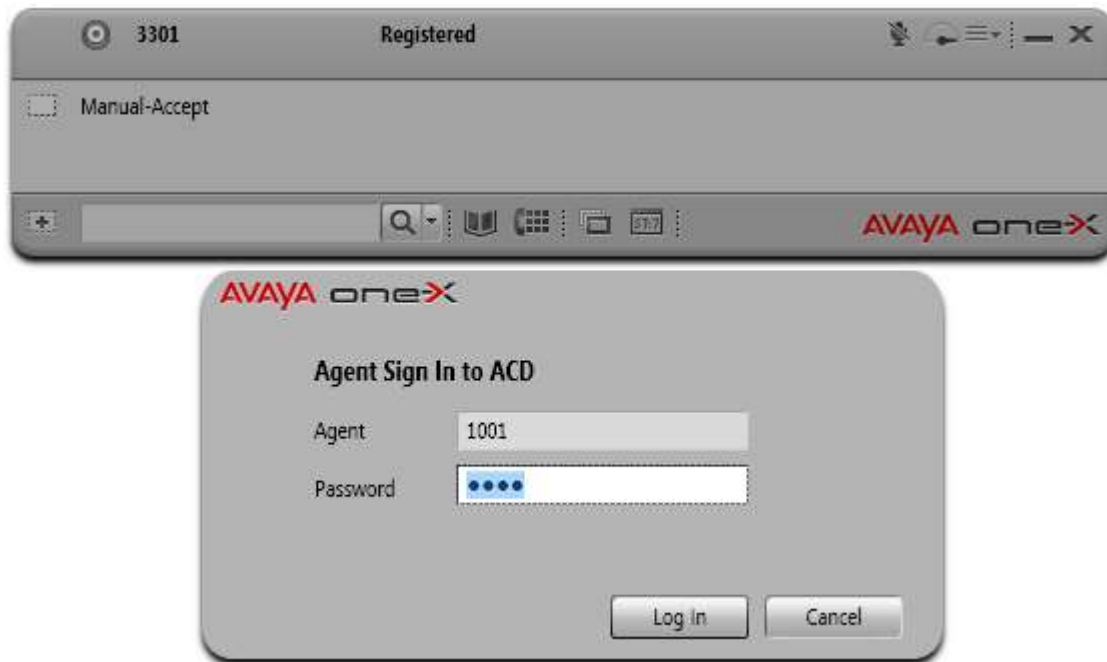
Next is navigate to **Agent** tab, select the check box **Enable ACD Login**, enter the agent ID *1001* and its password in the **Agent** and **Password** fields, and keep all other fields at defaults.

Select **Save Settings & Log In** button to save the configurations and start logging in the one-X® Agent.

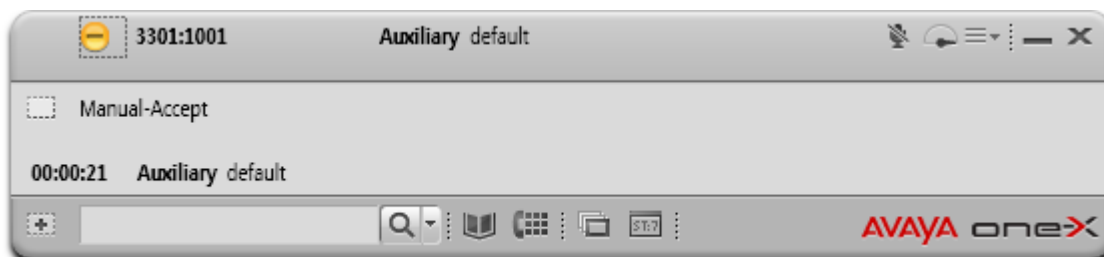


The screenshot shows the AVAYA one-X Agent Login dialog box. The 'Agent' tab is selected. The 'Enable ACD Login' checkbox is checked. The 'Automatically sign into the ACD server' checkbox is unchecked, with a note below it: 'Use the information that was last used for successful ACD connection'. The 'Agent' field contains the text '1001'. The 'Password' field is masked with four dots. The 'Save password during sign in' checkbox is checked. The 'Default Agent state upon ACD connection' dropdown menu is set to 'Auxiliary'. At the bottom, there are two buttons: 'Save Settings & Log In' and 'Cancel'. A message at the bottom states 'Changes will take effect at the time of login'.

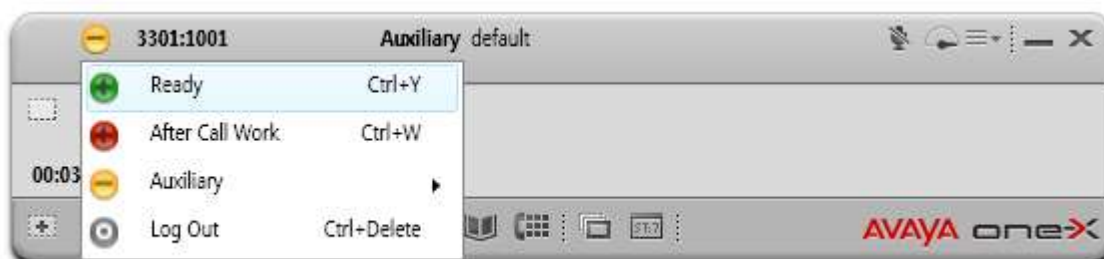
The screenshot below displays Avaya one-X® Agent softphone successfully logs in to the H323 station 3301 and pops up a window to log in the agent 1001. Select the **Log In** button to log in the agent 1001.




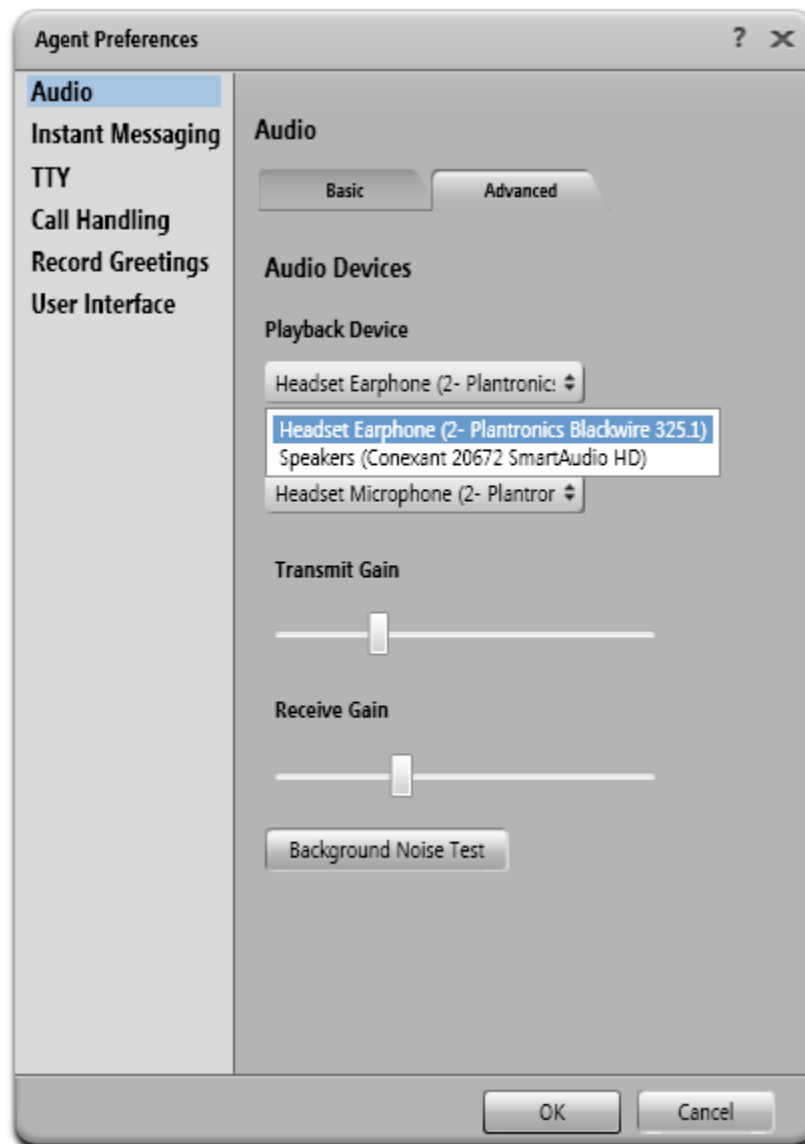
The screenshot below shows the one-X® Agent successfully logs in the agent *1001* and placed in the **Auxiliary** state.



To change to Ready state, select the **Auxiliary** icon to show more options and select **Ready** from the list as shown below.



To configure Avaya one-X® Agent using the Plantronics headset, from the Avaya one-X® Agent window, navigates to  **System Options → Agent Preferences**. The **Agent Preferences** window is displayed, select **Advanced** tab in the **Audio** section. Select *2-Plantronics headset Blackwire 325* in the **Playback Device** and **Record Device**. Click **OK** button to save the configuration.



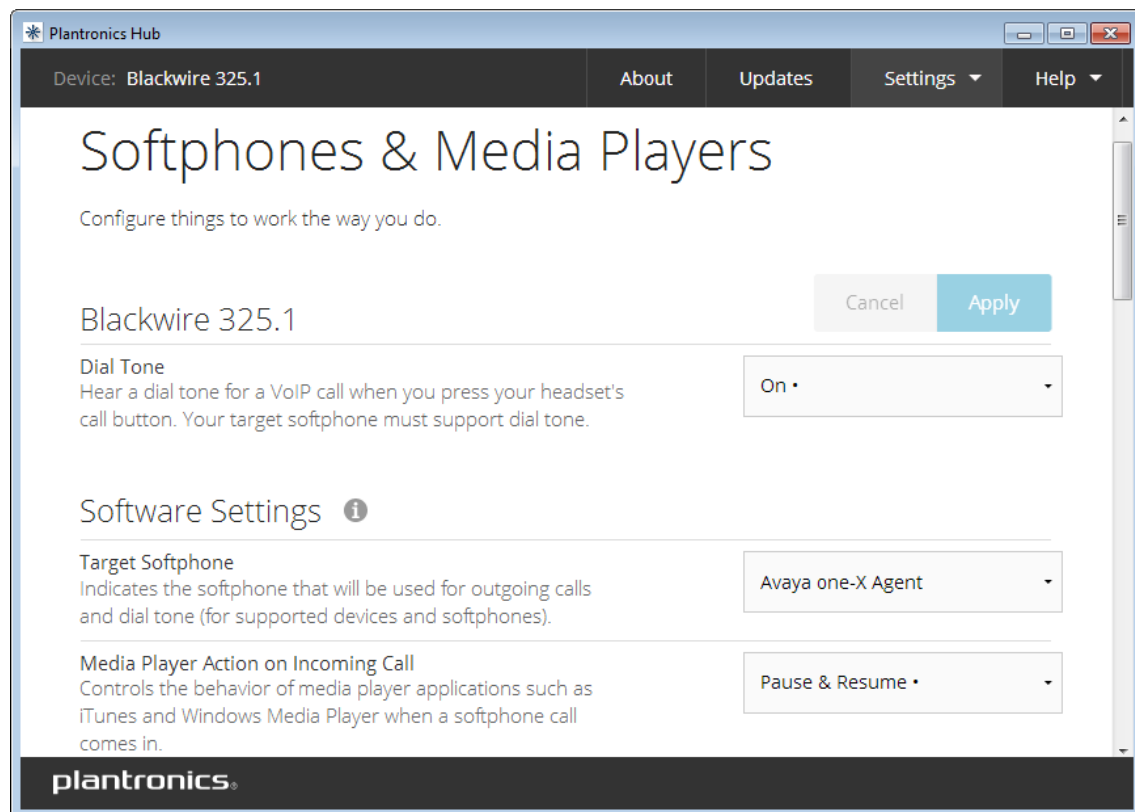
7. Configure Plantronics Hub software and Plantronics Blackwire C315/C325 Headsets

This section provides the sample configuration for Plantronics Hub software and Plantronics Blackwire C315/C325 USB headsets to work with Avaya one-X® Agent softphone with Plantronics C315/C325 headsets.

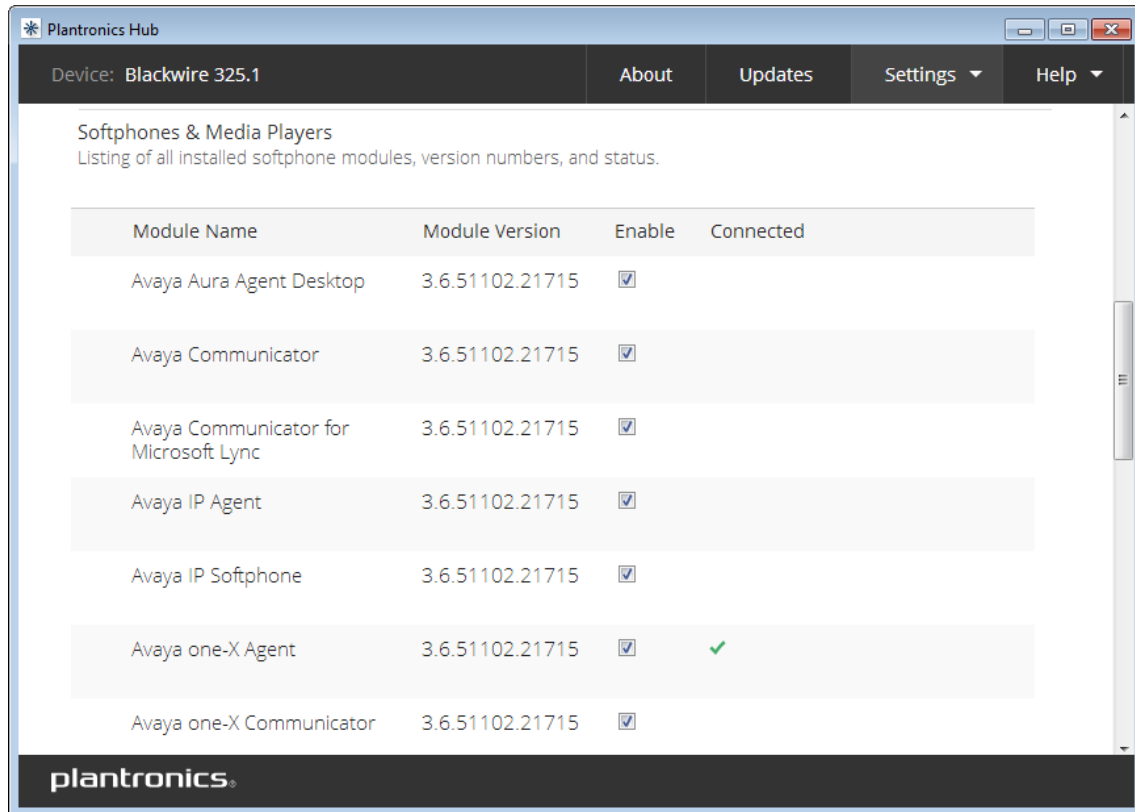
1. Installed Plantronics Hub software on PC which Avaya one-X® Agent softphone installed.
2. Insert the Plantronics C315/C325 headset to an available USB port on the PC.
3. Launch the Plantronics Hub software, there is an icon of the Hub software appears in the System tray bar showing that Plantronics headset is being connected.



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



Scroll down to the list of installed softphone, make sure in the **Connected** column the green check displayed in Avaya one-X Agent.



8. Verification Steps

These typical steps below are used to verify the inter-working between Plantronics Hub software and Plantronics Blackwire C315/C325 USB Corded Headsets and Avaya one-X® Agent softphone.

1. From Avaya one-X® Agent softphone with Plantronics headset places 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 should be lighted up.
3. Answer the call on the other station, verify two-way speech path with clear audio between the Avaya one-X® Agent 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® Agent 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 Hub software and Plantronics Blackwire C315/C325 USB Corded Headsets and Avaya one-X® Agent 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 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.

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