Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics Hub and DA Series USB Audio Processor and EncorePro 510/520 Headsets with Avaya one-X® Agent - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Plantronics DA Series USB Audio Processor adapter and EncorePro 510/520 headsets with Avaya one-X® Agent running H.323 protocol. The Plantronics DA Series USB Audio Processor adapter connects to PC via USB and to Plantronics EncorePro 510/520 headsets via Quick Disconnect connector.

Plantronics Hub is a stand-alone application providing call control, settings management, update and battery level notifications and mute alerts to Plantronics DA Series USB Audio Processor.

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.

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1. Introduction

These Application Notes describe the configuration steps required to integrate Plantronics DA Series USB Audio Processor adapter and EncorePro 510/520 headsets with Avaya one-X® Agent running H.323 protocol. The Plantronics DA Series USB Audio Processor (DA) adapter connects to PC via USB and to Plantronics EncorePro 510/520 headsets via Quick Disconnect (QD) connector.

In the compliance testing, the DA80 adapter provided 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 DA70 adapter did not have the call control features.

Plantronics Hub is a stand-alone application providing call control, settings management, update and battery level notifications and mute alerts to Plantronics DA Series USB Audio Processor.

In this compliance test the following headsets and accessories used were:
- DA70: USB audio processor without call answer/end, mute and volume controls.
- DA80: USB audio processor with call answer/end, mute and volume controls.
- HW510: Over-the-head, for enhanced stability (monaural) QD-equipped.
- HW520: Over-the-head, for enhanced stability (binaural) QD-equipped.

2. General Test Approach and Test Results

The interoperability compliance test included functionality and serviceability testing. The functionality testing focused on placing and receiving calls to and from Avaya one-X® Agent clients using the DA Series USB Audio Processor and EncorePro 510/520 headsets, and verifying good talk path in both directions. The type of calls made included calls to the voicemail, and calls to and from internal extensions and the PSTN.

The serviceability testing focused on verifying the usability of the DA Series USB Audio Processor and EncorePro 510/520 headsets when Avaya one-X® Agent was restarted, after disconnecting and reconnecting the headsets to the USB port, and after a reboot on the PC where Avaya one-X® Agent was running.

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

The following functionality was 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 and receiving calls to and from internal extensions to verify two way audio path and quality.
- Placing and receiving calls to and from the PSTN to verify two way audio path and quality.
- Answering and ending calls using Avaya one-X® Agent screen interface.
- Answering and ending calls using DA80.
- Hearing ring back tone for outgoing calls.
- Hearing ring alert for incoming calls.
- Using the volume control buttons on the DA80 to adjust the volume on the headset speakers.
- Using the mute control button on the DA80 and Avaya one-X® Agent to mute and un-mute the transmitted audio.
- Using hold feature on Avaya one-X® Agent.

For the serviceability testing, the headsets were disconnected and reconnected to the USB port of the PC running Avaya one-X® Agent to verify proper operation. In addition, the PC was rebooted to verify that the headsets were operational after the restart was completed and the application reinitialized.

2.2. Test Results

All test cases passed with the following observations:

- On the Avaya one-X® Agent, the name of the headset was truncated. It is displayed as follows:

  Microphone: "Headset Microphone (Plantronics"

  Speaker: "Headset Earphone (Plantronics D"
- On the Plantronics Hub, under settings for Softphones and Media Players, the "Target Softphone" needs to be manually selected as "Avaya one-X Agent". This is expected behavior.

2.3. Support

For technical support and information on the Plantronics products described in this solution, contact Plantronics Technical Support 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 DA Series USB Audio Processor and EncorePro 510/520 headsets solution. Avaya Aura® Communication Manager on Avaya G450 Media Gateway provides the VoIP resources for the connectivity of Avaya one-X® Agent and the SIP trunk to the simulated PSTN, used during the compliance tests. Avaya one-X® Agent was installed on two PCs running Microsoft Windows 7 and registered to Communication Manager as H323 endpoints. The DA adapter was connected to the one-X® Agent PC via a USB port and to EncorePro 510/520 headset via QD connector.
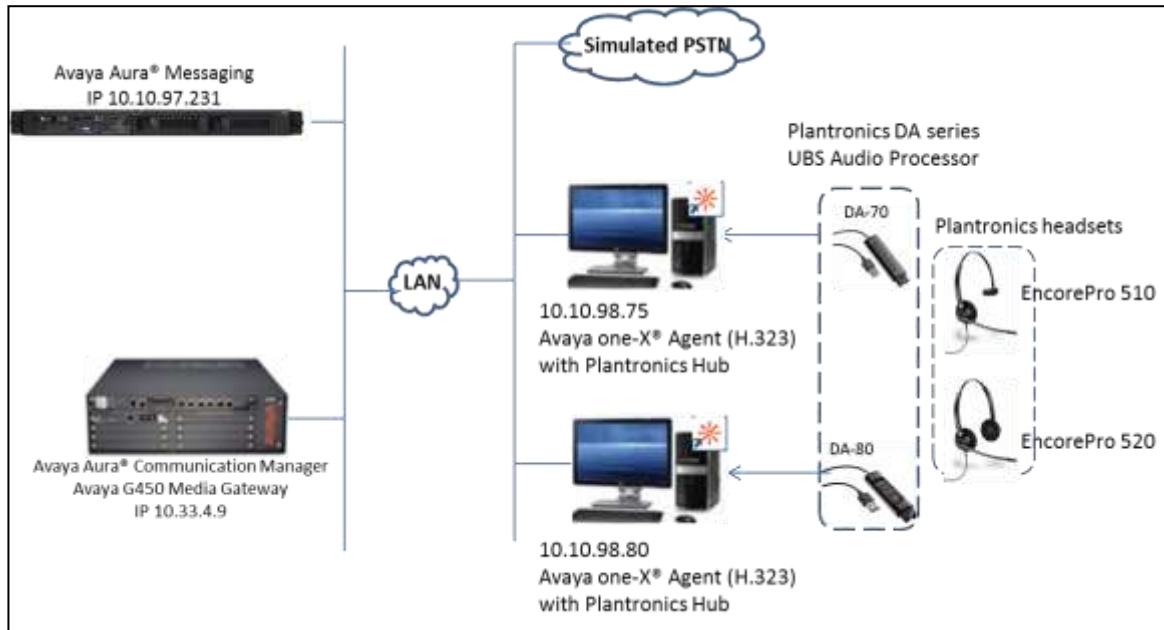
Figure 1: Test configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager	6.3.12
Avaya G450 Media Gateway	36.156.0
Avaya one-X® Agent (H323) running on Microsoft Window 7	2.5.8 SP1
Plantronics DA Series USB Audio Processor	v68.26.26
Plantronics EncorePro HW510	P/N:89433-01
Plantronics EncorePro HW520	P/N:89434-01
Plantronics Hub	3.7.51238.28796

5. Configure Avaya Aura® Communication Manager

An extension must be created in Communication Manager for the Avaya one-X® Agent. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

Use the **add station** command to create a station for Avaya one-X® Agent.   Set the **Type** field to the station type to be emulated. In this example, *9640* was used. Set the **Security Code**, which will be used as the password to log in. Enter a **Name.** Set the **IP Softphone** field to *y*.

```
add station 52156                                               Page   1 of   5
                                    STATION
Extension: 52156                  Lock Messages? n                    BCC: 0
     Type: 9640                    Security Code: 1234                 TN: 1
     Port: S00055               Coverage Path 1: 2                    COR: 1
     Name: Nam Mot               Coverage Path 2:                     COS: 1
                                 Hunt-to Station:                   Tests? y
STATION OPTIONS
                                          Time of Day Lock Table:
               Loss Group: 19    Personalized Ringing Pattern: 1
                                           Message Lamp Ext: 52151
            Speakerphone: 2-way        Mute Button Enabled? y
        Display Language: english          Button Modules: 0
 Survivable GK Node Name:
         Survivable COR: internal        Media Complex Ext:
   Survivable Trunk Dest? y              IP SoftPhone? y

                                         IP Video Softphone? n
                       Short/Prefixed Registration Allowed: default

                                        Customizable Labels? y
```

On **Page 4** of the Station form, configure the necessary agent work mode buttons that are used in a contact center. They are used by Avaya one-X® Agent to log in as an Automatic Call Distribution (ACD) agent. The work mode buttons used in the sample configuration are highlighted in the screen below.

```
add station 52156                                          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: after-call         Grp:
 3: call-appr                        7: aux-work     RC:   Grp:
 4: auto-in             Grp:         8: release
    voice-mail 39990
```

Even though ACD was implemented and used during the compliance tests, ACD and Agents administration is beyond the scope of these Application Notes, and they are assumed to be already in place.

6. Configure Plantronics Hub and DA Series USB Audio Processor and EncorePro 510/520

This section provides the configuration steps for Plantronics Hub software, Plantronics DA Series USB Processor and Plantronics 510/520 headsets to work with one-X® Agent.

1. Install Plantronics Hub software on PC which has one-X® Agent softphone installed.
2. Connect EncorePro 510/520 headset to the DA70/80 USB adapters via QD connector.
3. Insert the DA70/80 adapters to an available USB port on the PC.
4. Launch the Plantronics Hub software, there is an icon of the Hub software that appears in the System tray bar showing that Plantronics headset is being connected.
5. Launch one-X® Agent.
6. Configure Plantronics Hub software to use with one-X® Agent, from the Plantronics Hub window, navigate to **Settings →Softphones**. In the **Target Softphone** verify **Avaya one-X Agent** is displayed.
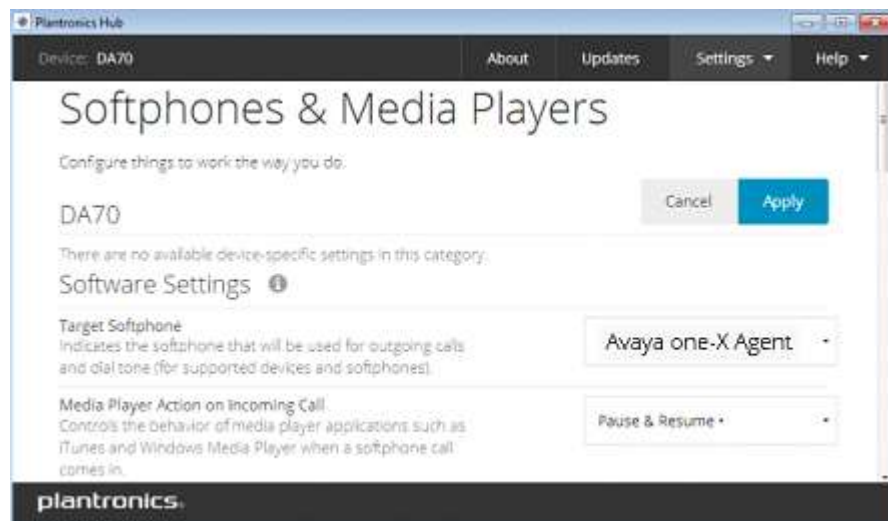
7. Configure Avaya one-X® Agent

Launch Avaya one-X® Agent and log in using the extension number and password created previously. Click the **System Options** ☰▾ icon in the top bar. Select **Agent Preferences**.

In the **Agent Preferences** window, click on **Audio** and then select the **Advanced** tab. Verify the **Playback Device** and **Record Device** fields display the applicable Plantronics device as show below. Click **OK**.
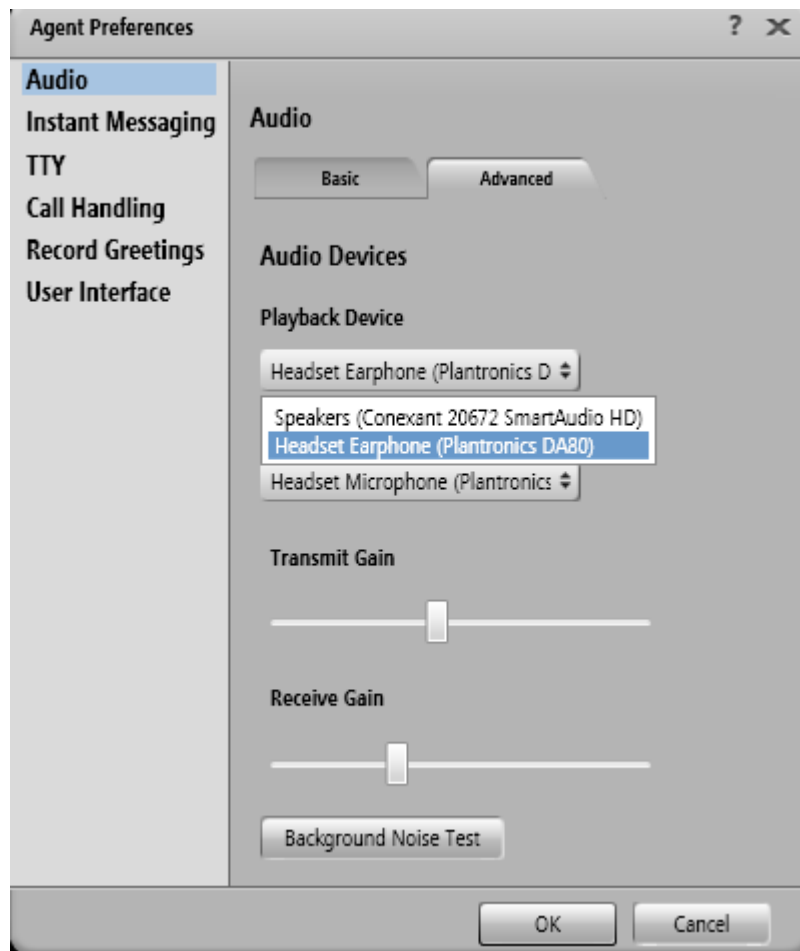
8. Verification Steps

This section provides the steps that can be performed to verify proper installation of the Plantronics Hub and DA Series USB Audio Processor and EncorePro 510/520 headsets with Avaya one-X® Agent.

8.1. Verify Plantronics Hub

Make sure Avaya one-X® Agent is launched and headset is plugged in. Select **Start → Plantronics Hub**.

The page will display the connected device DA70 and its information as shown below:
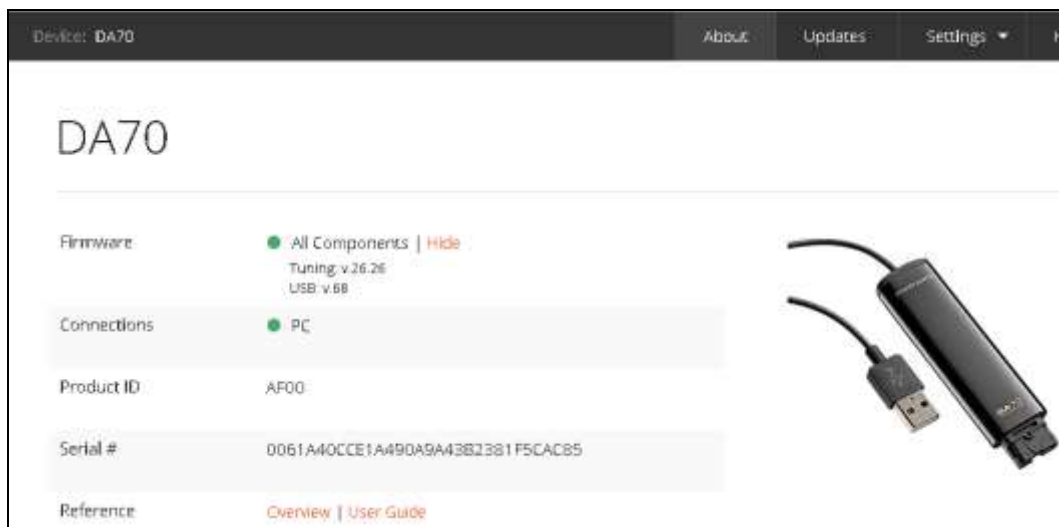
Repeat the same step for DA80. Here is detail page for DA80 Processor and its information as shown below:

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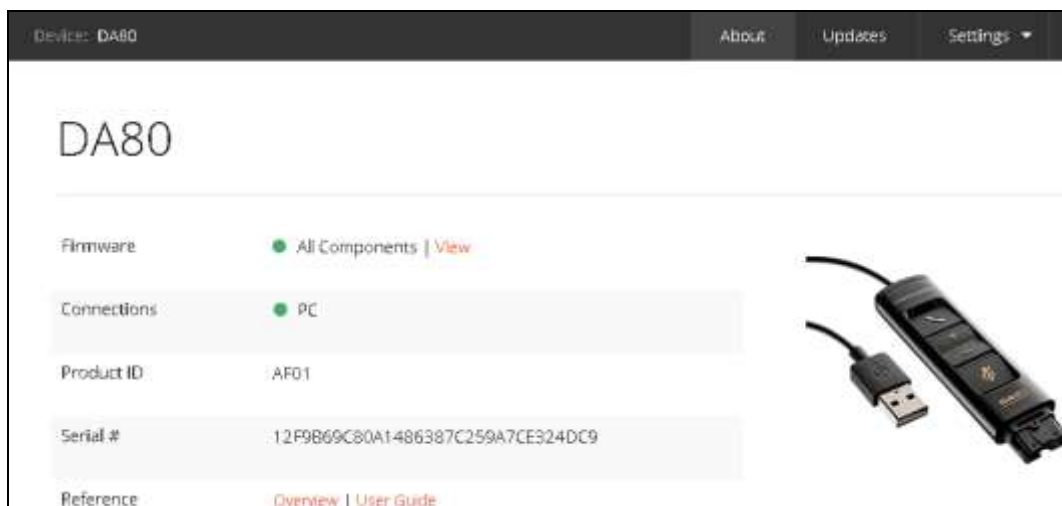
Verify the supported softphone **Avaya one-X® Agent** is checked:

Softphones & Media Players
Listing of all installed softphone modules, version numbers, and status.

Module Name	Module Version	Enable	Connected
Avaya Aura Agent Desktop	3.7.51238.28796	☑	
Avaya Communicator	3.7.51238.28796	☑	
Avaya Communicator for Microsoft Lync	3.7.51238.28796	☑	
Avaya IP Agent	3.7.51238.28796	☑	
Avaya IP Softphone	3.7.51238.28796	☑	
Avaya one-X Agent	3.7.51238.28796	☑	✓
Avaya one-X Communicator	3.7.51238.28796	☑	

8.2. Verify Call via Headset

This section provides tests that can be perform to verify proper installation of headset, Hub and Avaya one-X® Agent:

1. Place a call to Avaya one-X® Agent from another extension. Click the call control on the headset to answer the call.
2. Verify two-way talk path between the headset and the caller.
3. Press the Mute button on the headset and verify the call can be muted/unmuted.
4. Verify mute light on headset, mute icon on one-X® Agent and mute message on Hub are in sync and indicate correct mute status.
5. Verify the volume can be adjusted by using the volume controls on the headset.
6. Disconnect the call from the headset by pressing the call control button again on the headset.
7. Verify that the call is properly disconnected.

9. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics Hub and DA Series USB Audio Processor and EncorePro 510/520 headsets with Avaya one-X® Agent. All test cases were completed successfully, with the observation noted in **Section 2.2**.

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 03-300509 Issue 10 August 2015.*
[2] *Installing and Configuring Avaya one-X® Agent, Release 2.5, March 31, 2011.*

Documentation and information for the DA Series USB Audio Processor and EncorePro 510/520 headsets can be found at the following websites:

[3] *http://www.plantronics.com/us/product/plantronics-hub-desktop*
[4] *http://www.plantronics.com/us/product/da-series*
[5] *http://www.plantronics.com/us/product/encorepro-510-520*