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Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics Spokes Software and Plantronics Blackwire C500 Series USB Headsets with Avaya one-X® Attendant - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the Plantronics Spokes Software and Plantronics Blackwire C500 Series USB Headsets with Avaya one-X® Attendant. Plantronics Spokes Software enables the integrated call control features in the Blackwire C500 headsets, including call answer/end and synchronized mute with Avaya one-X® Attendant. The Blackwire C500 headsets connect via a USB port on the PC running Avaya one-X® Attendant. For this compliance test, the Blackwire C510 monaural headset and the Blackwire C520 binaural headset were verified.

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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Solution & Interoperability Test Lab Application Notes
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1 of 15
PlantBW500-Attd

1. Introduction

These Application Notes describe the configuration steps required to integrate the Plantronics Spokes Software and Plantronics Blackwire C500 Series USB Headsets with Avaya one-X® Attendant. Plantronics Spokes Software enables the integrated call control features in the Blackwire C500 headsets, including call answer/end and synchronized mute with Avaya one-X® Attendant. The Blackwire C500 headsets connect via a USB port on the PC running Avaya one-X® Attendant. 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 10** for additional product information.

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 Avaya one-X® Attendant using the Plantronics Spokes Software and Plantronics Blackwire C500 Series USB Headsets and verifying 2-way audio. 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 after restarting the Avaya one-X® Attendant, 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 using the call control button on the headset.
- Using the volume control buttons on the headset to adjust the playback volume.
- Using the mute button on the headset and on one-X Attendant to mute and un-mute the audio, including verifying that the mute status was accurately reflected on the headset and one-X Attendant.

For the serviceability testing, the headset was disconnected and reconnected to verify proper operation. Avaya one-X® Attendant application was also restarted for the same purpose. The desktop PC was also rebooted to verify that one-X Attendant and headset 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 Blackwire C510/C520 and one-X Attendant. That is, the mute status on Blackwire C510/C520 is not accurately reflected on one-X Attendant or vice versa.
- Plantronics Spokes Software throws an exception when rebooting Windows 7. Ignore the exception and continue with the PC reboot.
- When the PC reboots, the following error message is displayed, "HTTP could not register URL https://+:32001/Spokes/ because TCP port 32001 is being used by another application". Click **OK** and continue.

2.3. Support

For technical support and information on Plantronics Spokes Software and Plantronics Blackwire 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 one-X® Attendant and Plantronics Spokes Software were installed on a desktop PC. Plantronics Blackwire C510/C520 was connected to the desktop PC via a USB port.
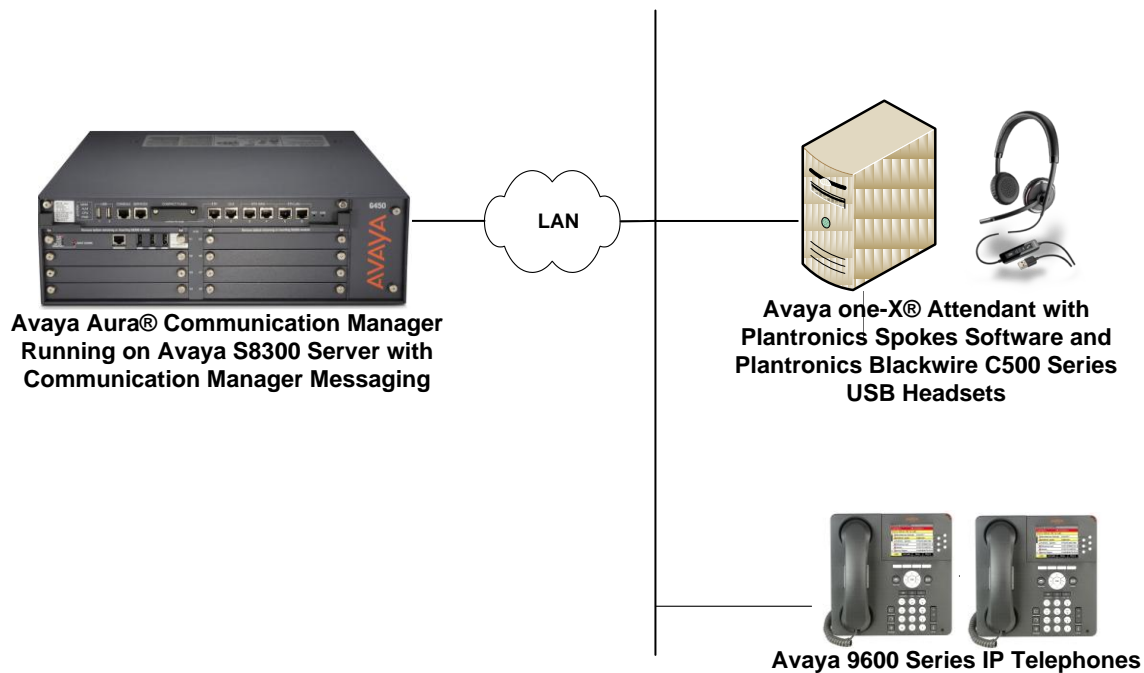
Figure 1: Avaya one-X® Attendant with Plantronics Spokes Software and Plantronics Blackwire C500 Series USB Headsets

4. Equipment and Software Validated

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

Equipment	Software
Avaya S8300 Server with a G450 Media Gateway and Communication Manager Messaging	6.2 SP 5 (R016x.02.0.823.0 with Patch 20396)
Avaya one-X® Attendant on Microsoft Windows 7	4.02.010.000
Avaya 9600 Series IP Telephone	3.1 SP 5 (H.323)
Plantronics Spokes Software	2.8.24304.0
Plantronics Blackwire C510/C520	USB Firmware 123, Base 01.23

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SPOC 6/1/2013
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5 of 15
PlantBW500-Attd

5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for Avaya one-X® Attendant. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

Use the **display system-parameters customer-options** command to verify that **IP Stations** and **IP Attendant Consoles** on **Page 4** are enabled. The license file installed on Communication Manager controls the values for these attributes. If a required feature is not enabled or there is insufficient capacity, contact an authorized Avaya sales representative.

```
display system-parameters customer-options                      Page   4 of  11
                              OPTIONAL FEATURES

   Emergency Access to Attendant? y                             IP Stations? y
          Enable 'dadmin' Login? y
          Enhanced Conferencing? y                        ISDN Feature Plus? n
                  Enhanced EC500? y      ISDN/SIP Network Call Redirection? y
    Enterprise Survivable Server? n                          ISDN-BRI Trunks? y
      Enterprise Wide Licensing? n                                  ISDN-PRI? y
            ESS Administration? y          Local Survivable Processor? n
          Extended Cvg/Fwd Admin? y                       Malicious Call Trace? y
      External Device Alarm Admin? y          Media Encryption Over IP? n
Five Port Networks Max Per MCC? n      Mode Code for Centralized Voice Mail? n
              Flexible Billing? n
 Forced Entry of Account Codes? y                     Multifrequency Signaling? y
      Global Call Classification? y        Multimedia Call Handling (Basic)? y
              Hospitality (Basic)? y    Multimedia Call Handling (Enhanced)? y
Hospitality (G3V3 Enhancements)? y              Multimedia IP SIP Trunking? y
                   IP Trunks? y


         IP Attendant Consoles? y
         (NOTE: You must logoff & login to effect the permission changes.)
```

Use the **add attendant <n>** command, where **<n>** is an available attendant position. The **Type** field should be set to **302** for IP consoles. Enter the **Extension** and the **Security Code,** which will be used when by Avaya one-X® Attendant to register with Communication Manager. Since only one attendant was used, **Console Type** was set to **principal**. Set the **Port** to **IP**.

```
add attendant 1                                             Page   1 of   4
                          ATTENDANT CONSOLE 1


         Type: 302              Name: one-X Attendant
    Extension: 46500            Group: 1               Auto Answer: none
 Console Type: principal          TN: 1                  Data Module? n
         Port: IP               COR: 1          Disp Client Redir? n
Security Code: ******           COS: 1             Display Language: english
                                               H.320 Conversion? n
```
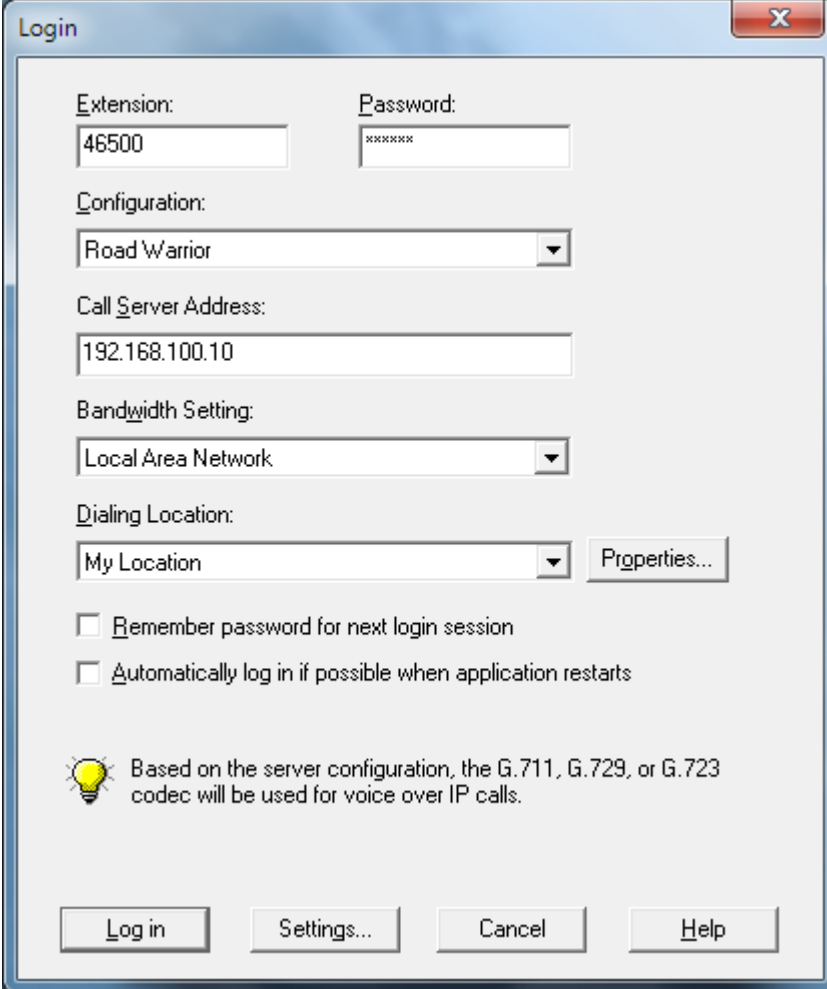
On **Page 2**, set **Auto Start** to *n*. Default values were used for all other fields.

```
add attendant 1                                            Page   2 of   4
                              ATTENDANT CONSOLE

VIS FEATURE OPTIONS

              Auto Start? n
       Echo Digits Dialed? y

IP FEATURE OPTIONS

 Remote Softphone Emergency Calls: as-on-local Direct IP-IP Audio Connections? y
 Emergency Location Ext: 46500          Always Use? n   IP Audio Hairpinning? n
                                                    Service Link Mode: permanent
```

6. Configure Avaya one-X® Attendant

This section describes the configuration steps required for Avaya one-X® Attendant to work with the Plantronics Blackwire C510/C520. These Application Notes do not cover the general installation and configuration of Avaya one-X® Attendant. For additional information refer to **[2]**.

Launch Avaya one-X® Attendant and log into Communication Manager using the attendant **Extension** and **Password** created in **Section 5**. Select *Road Warrior* for **Configuration**. Enter the information in the remaining fields as appropriate. Click **Log in**.

On the next screen, click the **Login** button ![login icon] to log in as a one-X Attendant user. The default **Name** is *Avaya* and the **Password** is *000000*. The user will be prompted to change the password once logged in. Select the *one-X Attendant* under **Work profile.** Click **OK.**

On the Avaya one-X® Attendant main screen, click the ![icon] icon on the toolbar to launch the **Audio Tuning Wizard**. Note that the icon is not available during an active telephone call.
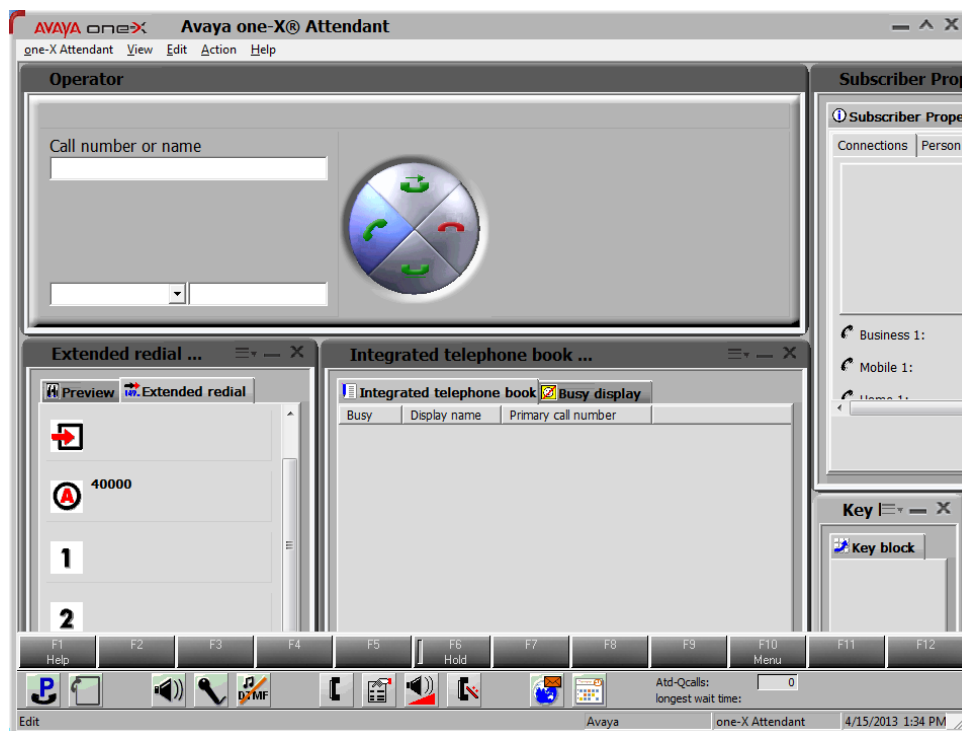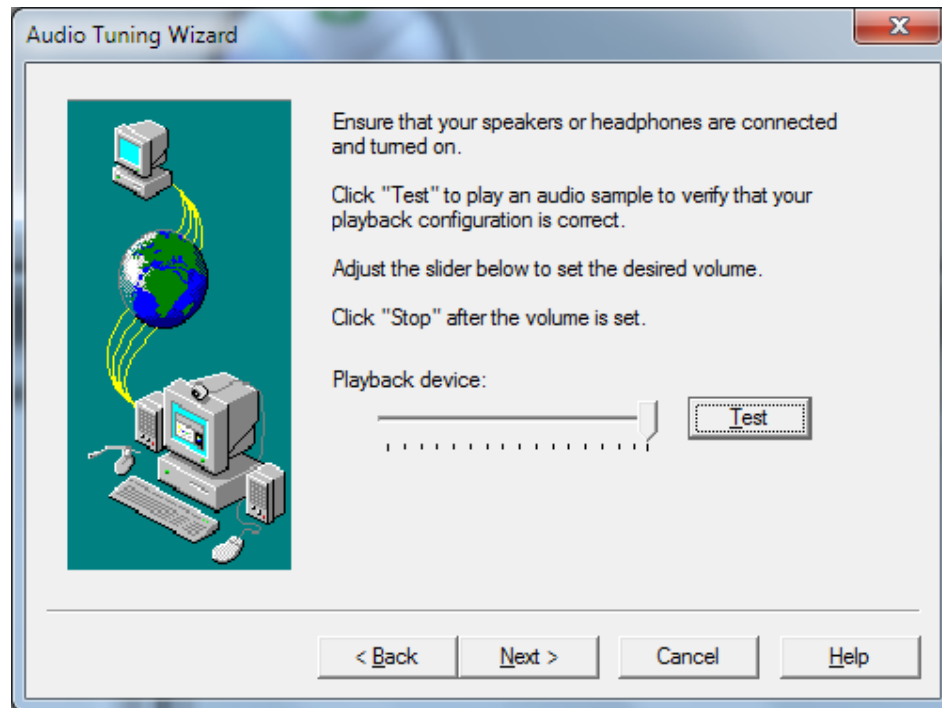
In the Audio Tuning Wizard, set the playback device and recording device to *Speakers (Plantronics C510)* and *Microphone (Plantronics C510),* respectively. Click **Next**.
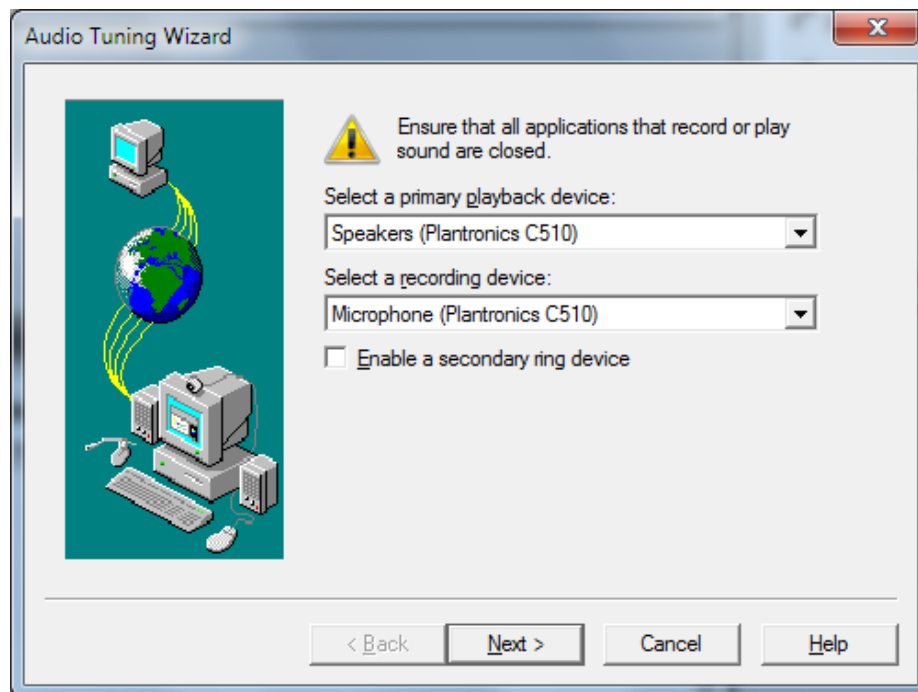
In the next window, select *Headset or Handset* as shown below. Click **Next**.
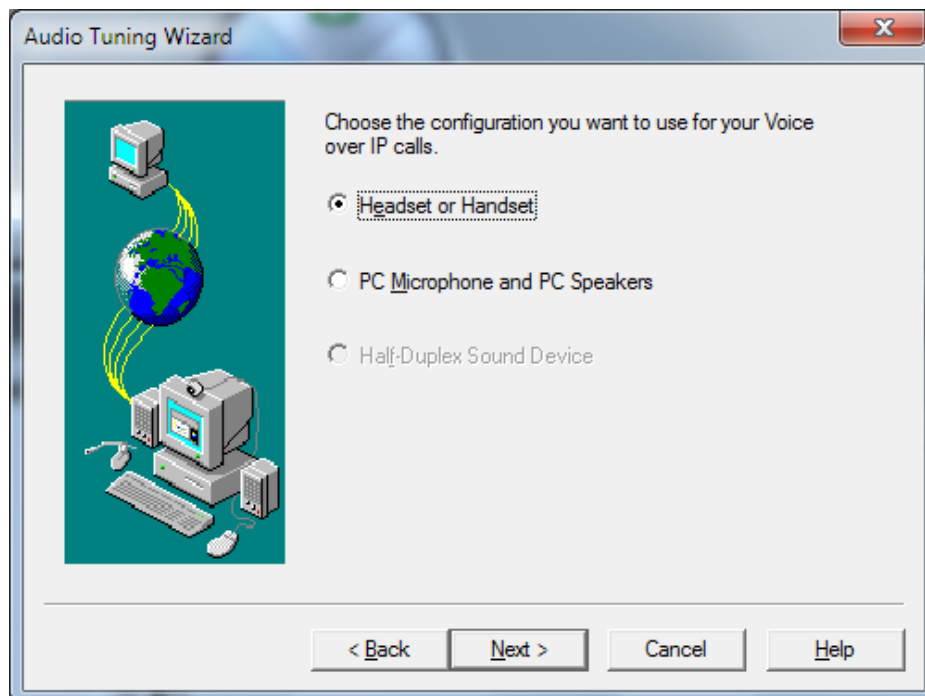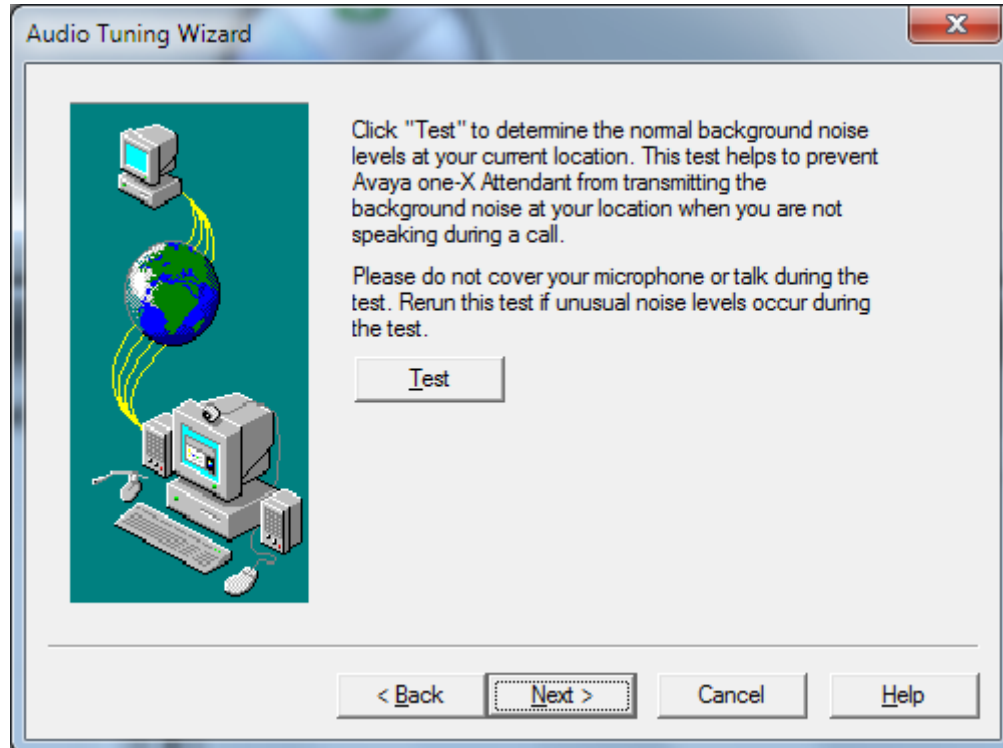
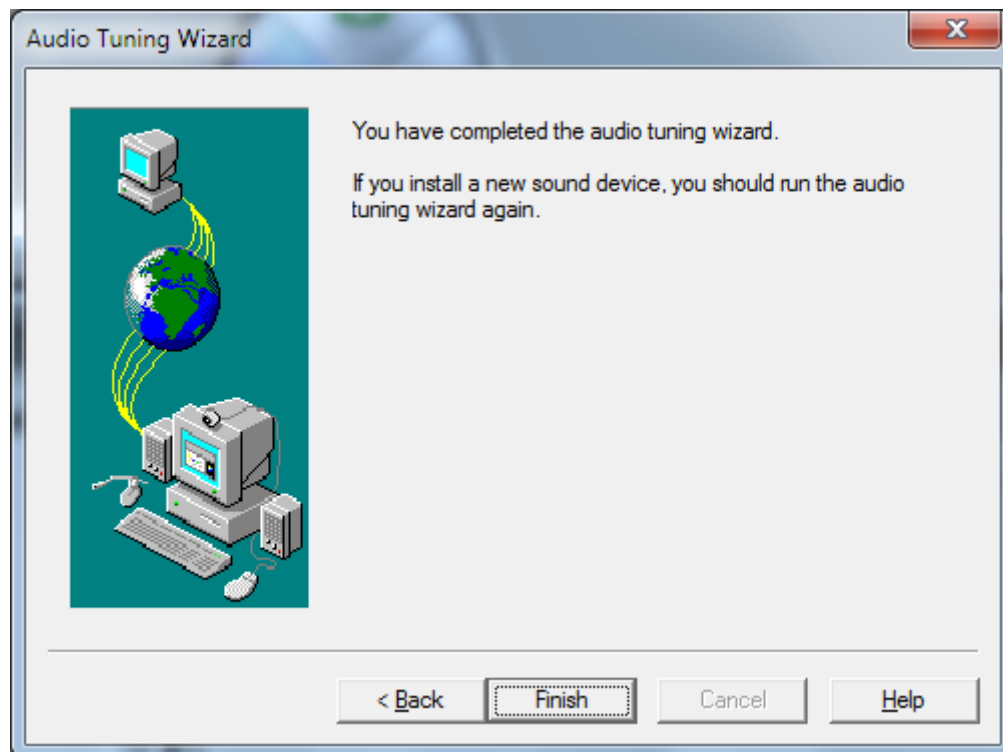Next, click the **Test** button and verify that audio is heard through the Plantronics headset. Click **Next**.

Speak into the headset and verify that the **Audio meter** detects sound to set the recording level. Click **Next**.
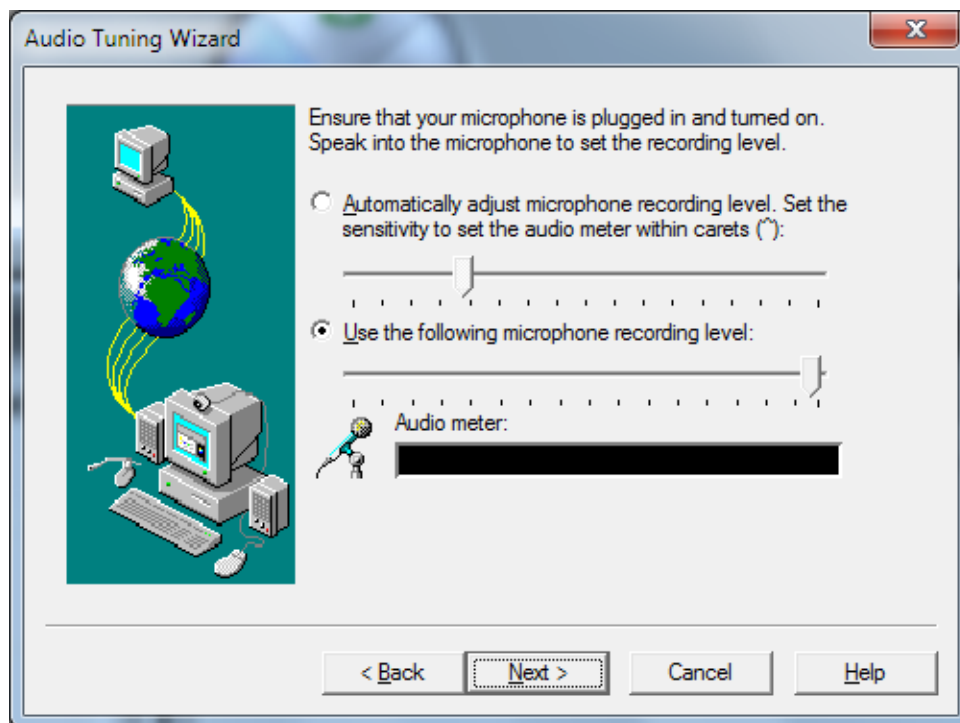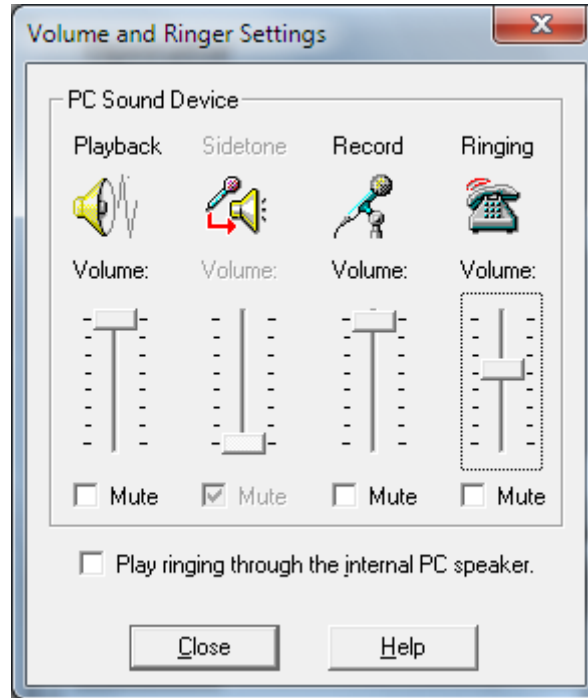
Next, click the **Test** button to determine the normal background noise. Click **Next**.

On the last Audio Tuning Wizard window, click **Finish**.

Configure the **Volume and Ringer Settings** to allow the user to hear ringing. To access the settings, select the [icon] icon on the toolbar. Set the Playback, Record, and Ringing volume to the desired levels as shown below.

7. Install Plantronics Spokes Software and Plantronics Blackwire C510/C520

The Plantronics Spokes software enables the Plantronics Blackwire C510/C520 to answer, end, and mute calls using the call control button on the headset. Install the software on the PC running the Avaya one-X® Communicator. Refer to **[3]** for additional information.

After the Spokes software is installed, connect the Plantronics Blackwire C510/C520 USB Headset to the desktop PC running one-X Communicator.

8. Verification Steps

This section provides the tests that can be performed to verify proper installation and configuration of the Plantronics Spokes Software and Plantronics Blackwire C510/C520 with Avaya one-X® Attendant.

1. Start the one-X Attendant application and log in.
2. Place an incoming call to one-X Attendant from any local phone.
3. Answer the call using the call control button on the headset.
4. Verify two-way talk path between the headset and phone.
5. Disconnect the call from the headset using the call control button.
6. Verify that the call is properly disconnected.

9. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics Spokes Software and Plantronics Blackwire C500 Series USB Headsets with Avaya one-X® Attendant. All test cases were completed successfully.

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 6.2, Issue 7, December 2012, Document Number 03-300509.
[2] *Avaya one-X® Attendant 4.0 connected to Avaya Communication Manager. Installation and Administration Manual,* Document 16-603459, Release 4.01, July 2012.

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

[3] *Plantronics Spokes Software for Windows*, Build 2.8.24304.0.
[4] *Plantronics Blackwire C510/C520 Headset Quick Start Guide.*