



Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics Spokes Software and Plantronics Calisto 620-M Wireless Speakerphone 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 Calisto 620-M Wireless Speakerphone with Avaya one-X® Attendant. Plantronics Spokes Software enables the integrated call control features for Calisto 620-M, including call answer/end and synchronized mute with Avaya one-X® Attendant. Calisto 620-M uses Bluetooth USB adapter to connect to the PC running Avaya one-X® Attendant.

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 Spokes Software and Plantronics Calisto 620-M Wireless Speakerphone with Avaya one-X® Attendant. Plantronics Spokes Software enables the integrated call control features for Calisto 620-M, including call answer/end and synchronized mute with Avaya one-X® Attendant. Calisto 620-M uses Bluetooth USB adapter to connect to the PC running Avaya one-X® Attendant.

Refer to the appropriate Plantronics documentation listed in **Section 12** 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 one-X Attendant using the Plantronics Spokes Software and Plantronics Calisto 620-M Wireless Speakerphone 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 Calisto 620-M after restarting the one-X Attendant, disconnecting and reconnecting the speakerphone, 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 speakerphone.
- Using the volume control buttons on the speakerphone to adjust the playback volume.
- Using the mute button on the speakerphone and on one-X Attendant to mute and un-mute the audio, including verifying that the mute status was accurately reflected on the speakerphone and one-X Attendant.

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

3. Test Results

All test cases passed with the following observations:

- The call button on Calisto 620-M does not illuminate on incoming calls or while it is active on a call, but the call button is functional.
- There is no mute synchronization between Calisto 620-M and one-X Attendant. That is, the mute status on Calisto 620-M 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.

4. Support

For technical support and information on Plantronics Spokes Software and Plantronics Calisto 620-M Wireless Speakerphone, contact Plantronics at:

- Phone: 800-544-4660 (toll free)
+1 831-426-5858 (International)
- Website: http://www.plantronics.com/north_america/en_US/support/

5. 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 Communication Manager Messaging was used as the voicemail system. Avaya one-X® Attendant and Plantronics Spokes Software were installed on a desktop PC. Plantronics Calisto 620-M was connected to the desktop PC using a Plantronics Bluetooth USB adapter.

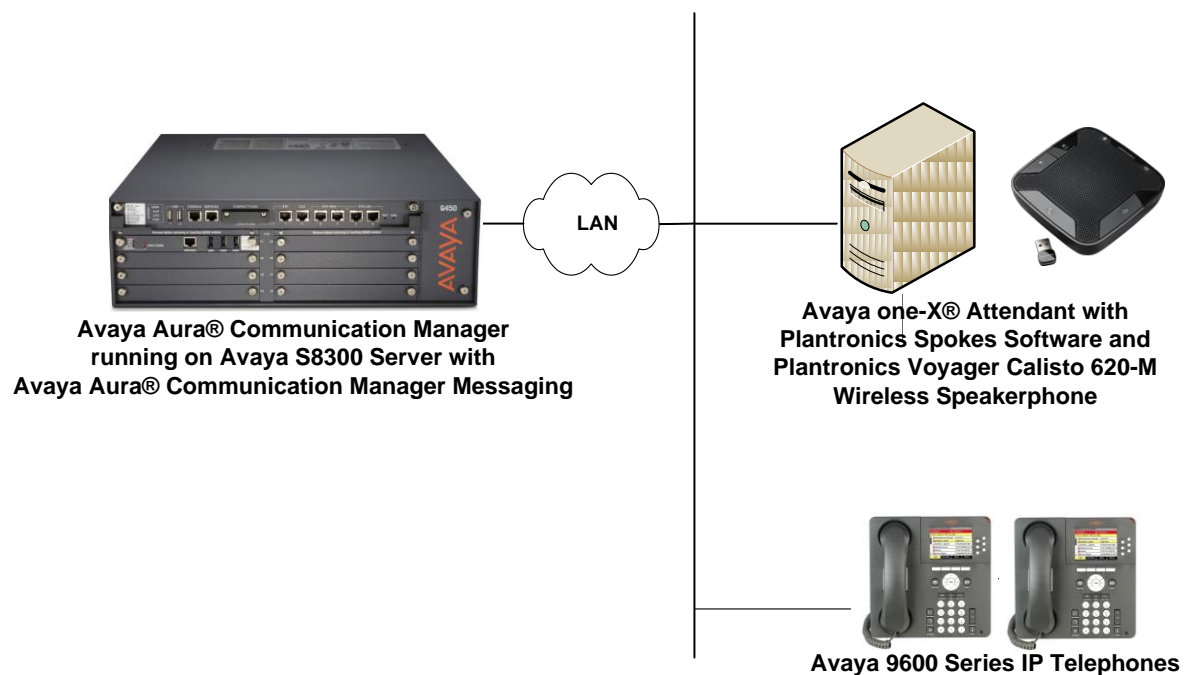


Figure 1: Avaya one-X® Attendant with Plantronics Spokes Software and Plantronics Calisto 620-M Wireless Speakerphone

6. Equipment and Software Validated

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

Equipment	Software
Avaya Aura® Communication Manager running on Avaya S8300 Server with a G450 Media Gateway and Avaya Aura® 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 Calisto 620-M (Microsoft)	USB Firmware 921, USB Adapter 04.70, Headset 02.00

7. Configure Avaya Aura® Communication Manager

This section covers the station configuration for 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 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
```

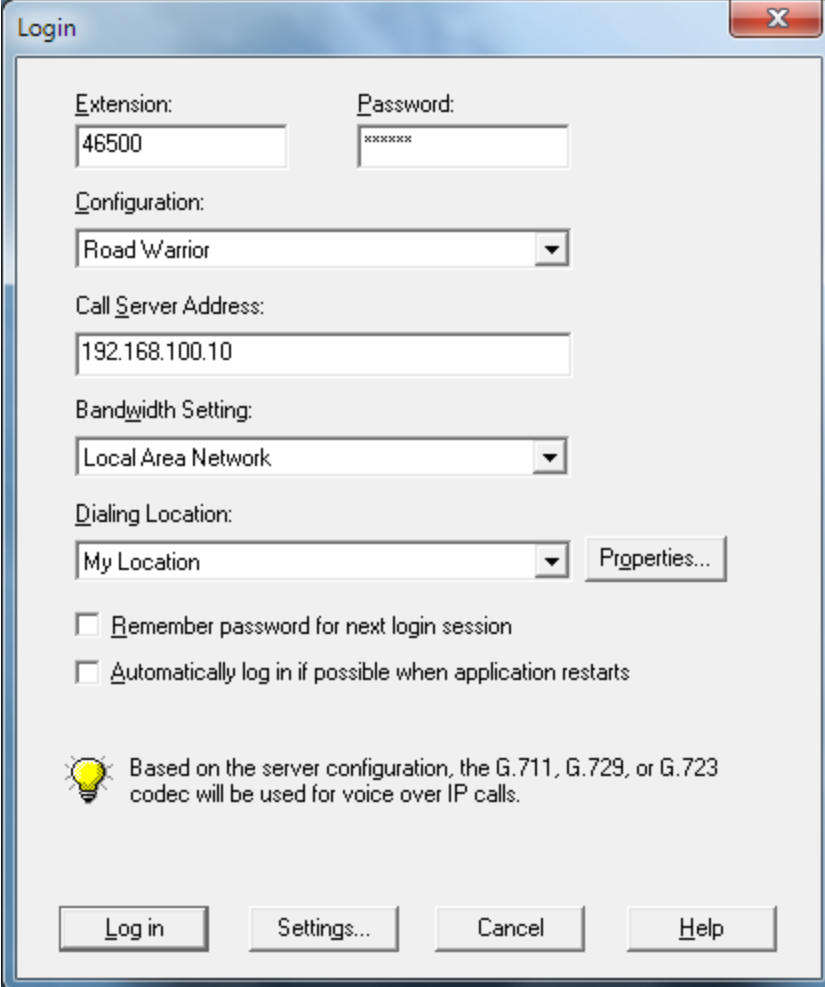
On **Page 2**, set **Auto Start** to *n*. Default values were used for all other fields.

add attendant 1	ATTENDANT CONSOLE	Page 2 of 4
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		

8. Configure Avaya one-X® Attendant


This section describes the configuration steps required for one-X Attendant to work with the Plantronics Calisto 620-M. These Application Notes do not cover the general installation and configuration of one-X Attendant. For additional information refer to [2].

Launch one-X Attendant and log into Communication Manager using the attendant **Extension** and **Password** created in **Section 7**. Select *Road Warrior* for **Configuration**. Enter the information in the remaining fields as appropriate. Click **Log in**.



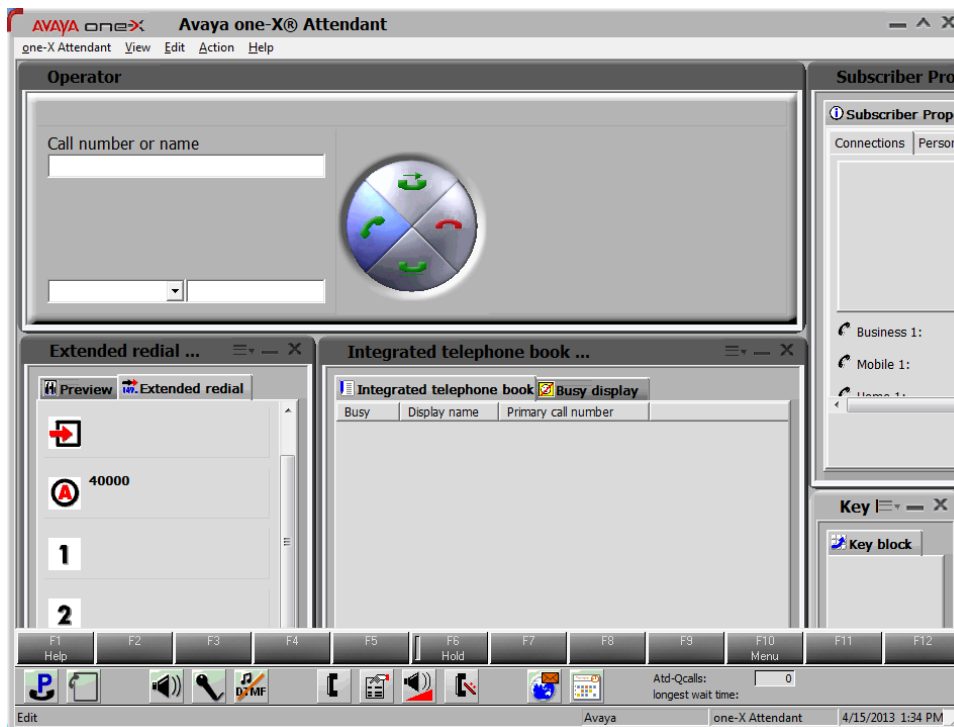
The screenshot shows the 'Login' dialog box for Avaya one-X Attendant. The dialog has a title bar with 'Login' and a close button. Inside, there are several fields and options:

- Extension:** A text box containing '46500'.
- Password:** A text box with masked characters 'xxxxxxx'.
- Configuration:** A dropdown menu currently showing 'Road Warrior'.
- Call Server Address:** A text box containing '192.168.100.10'.
- Bandwidth Setting:** A dropdown menu currently showing 'Local Area Network'.
- Dialing Location:** A dropdown menu currently showing 'My Location', with a 'Properties...' button next to it.
- Two checkboxes:
 - ☐ Remember password for next login session
 - ☐ Automatically log in if possible when application restarts
- A lightbulb icon followed by the text: 'Based on the server configuration, the G.711, G.729, or G.723 codec will be used for voice over IP calls.'
- At the bottom, four buttons: 'Log in', 'Settings...', 'Cancel', and 'Help'.

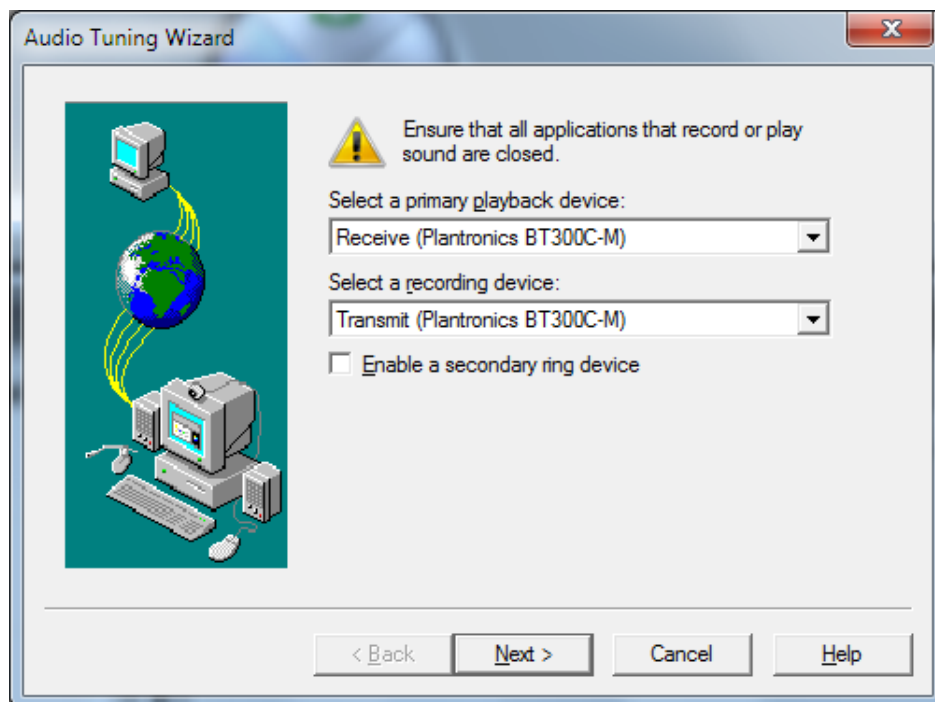
On the next screen, click the **Login** button  to log in as a one-X Attendant user. The default **Name** is *Avaya* and the **Password** is *000000*. The user will be prompted to change the password once logged in. Select the *one-X Attendant* under **Work profile**. Click **OK**.



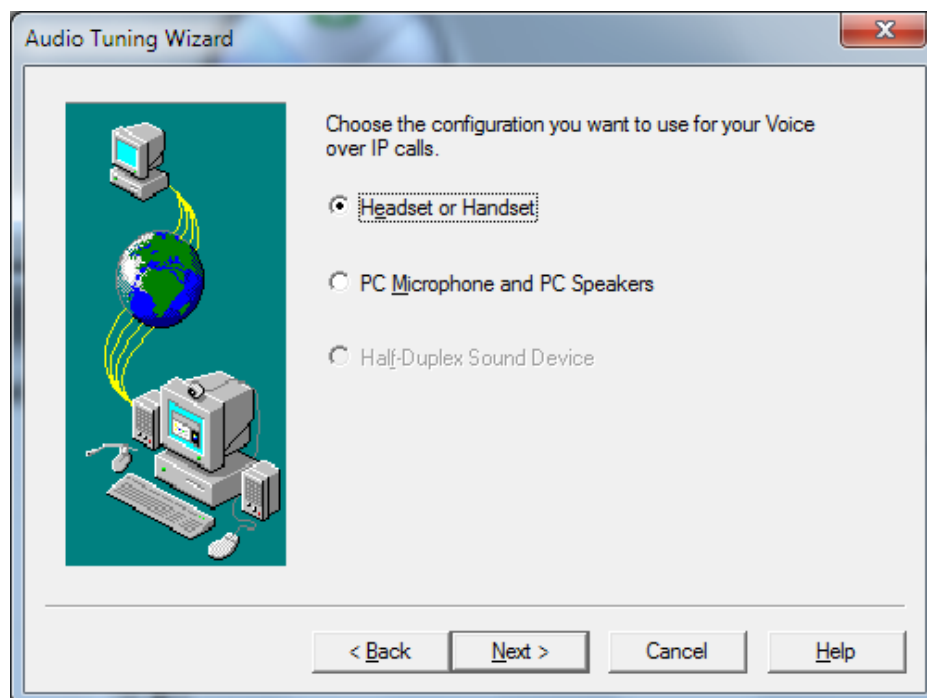
On the one-X Attendant main screen, click the  icon on the toolbar to launch the **Audio Tuning Wizard**. Note that the icon is not available during an active telephone call.



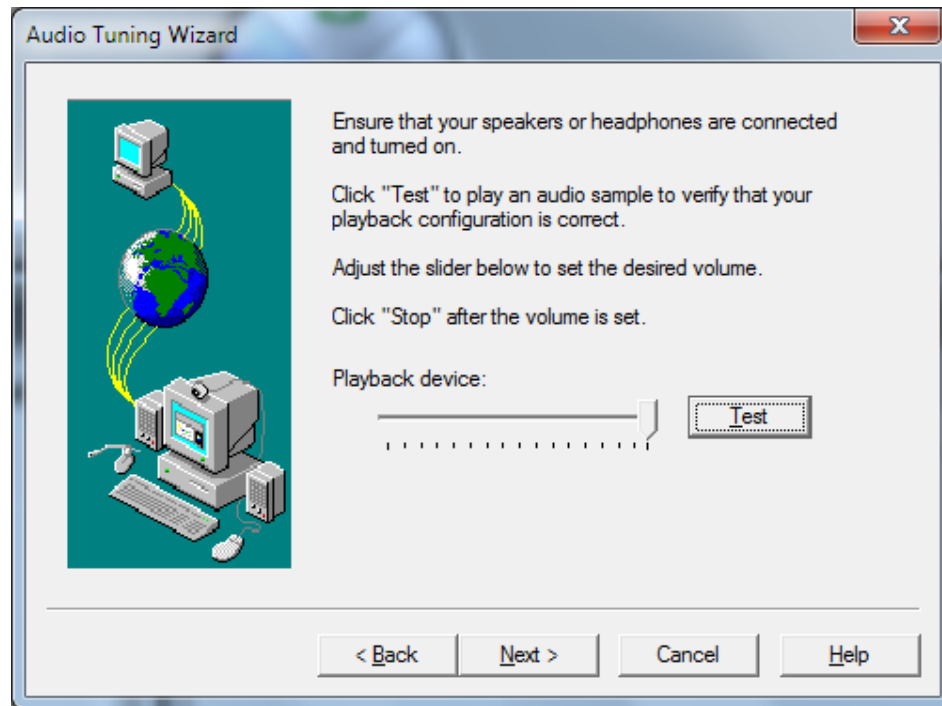
In the Audio Tuning Wizard, set the playback device and recording device to *Receive (Plantronics BT300C-M)* and *Transmit (Plantronics BT300C-M)*, respectively. Click **Next**.



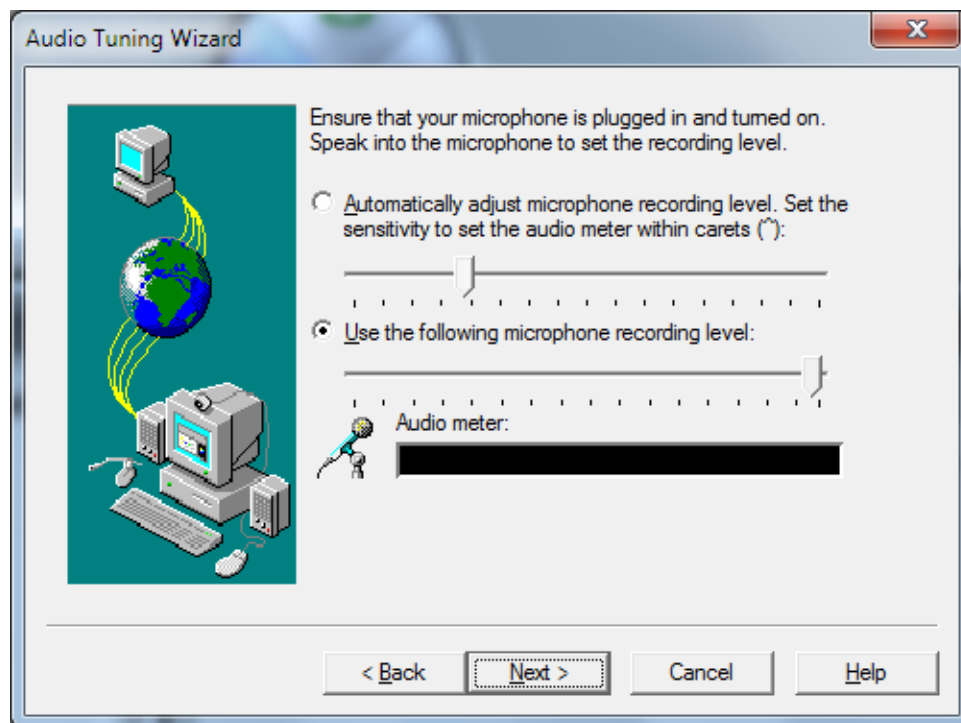
In the next window, select *Headset or Handset* as shown below. Click **Next**.



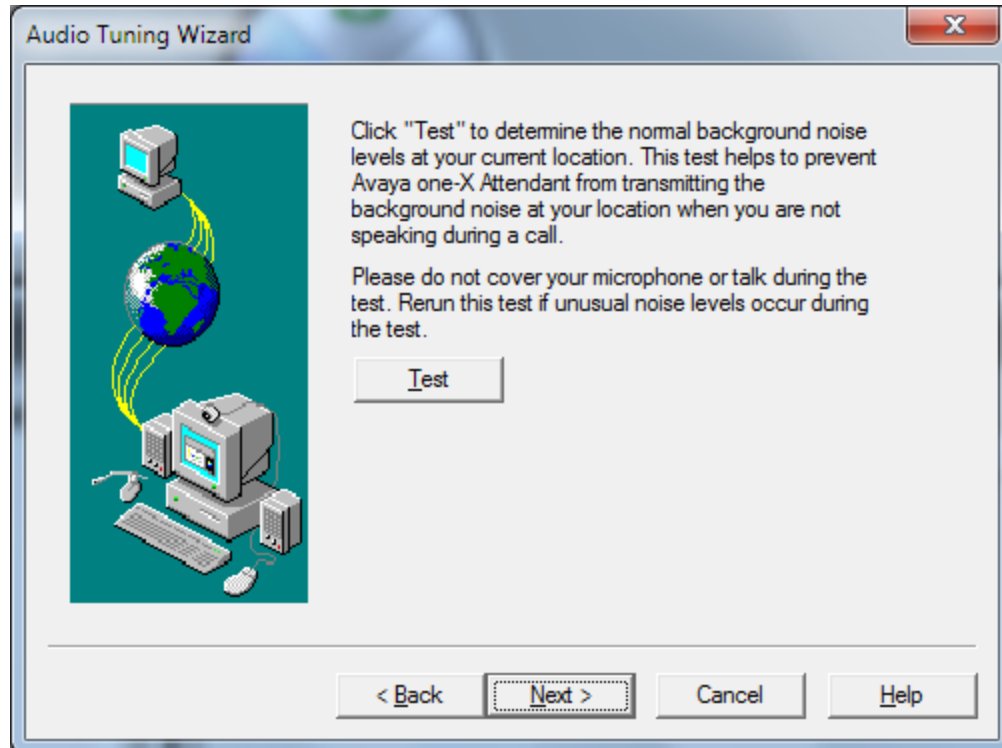
Next, click the **Test** button and verify that audio is heard through the Plantronics speakerphone. Click **Next**.



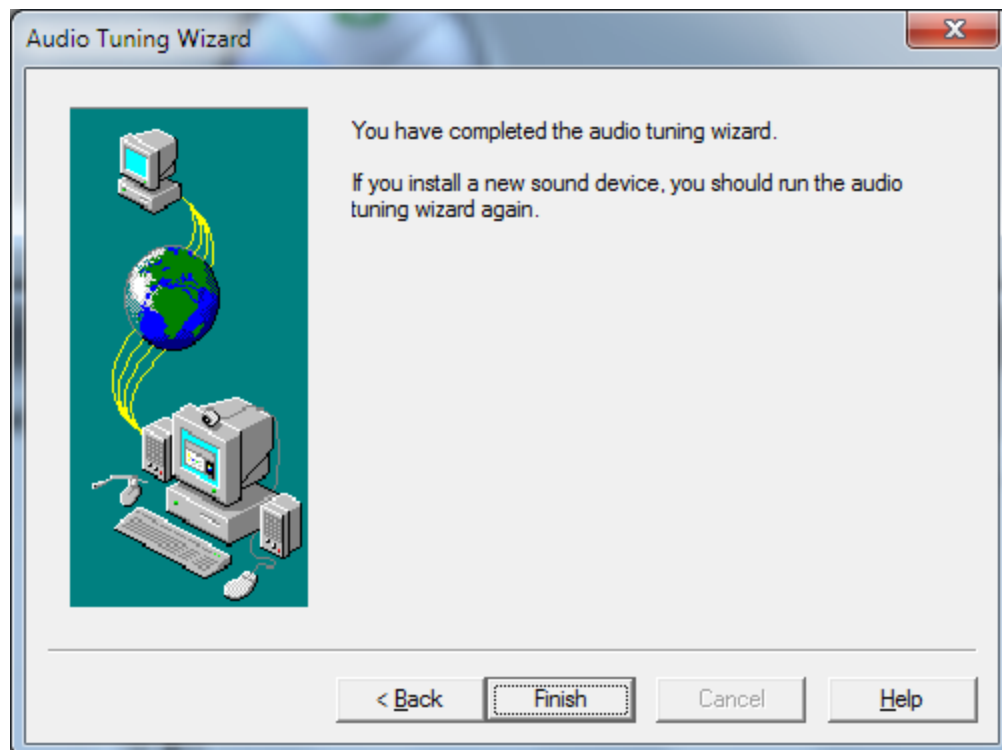
Speak into the speakerphone and verify that the **Audio meter** detects sound to set the recording level. Click **Next**.




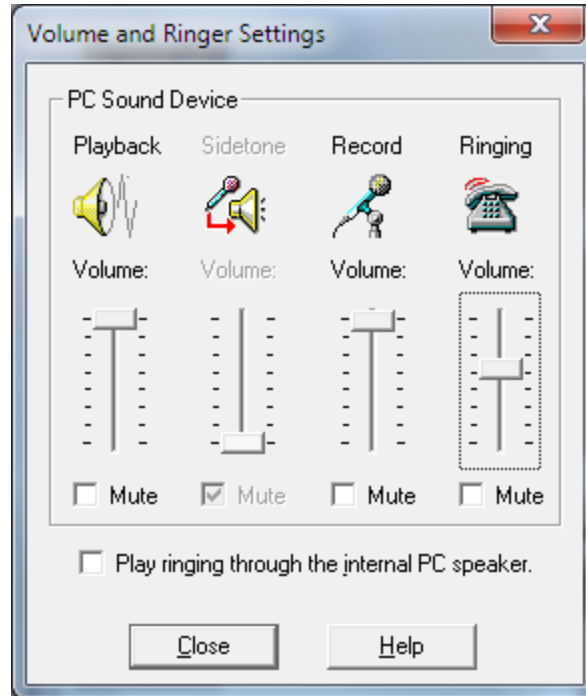
Next, click the **Test** button to determine the normal background noise. Click **Next**.



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 on the toolbar. Set the Playback, Record, and Ringing volume to the desired levels as shown below.

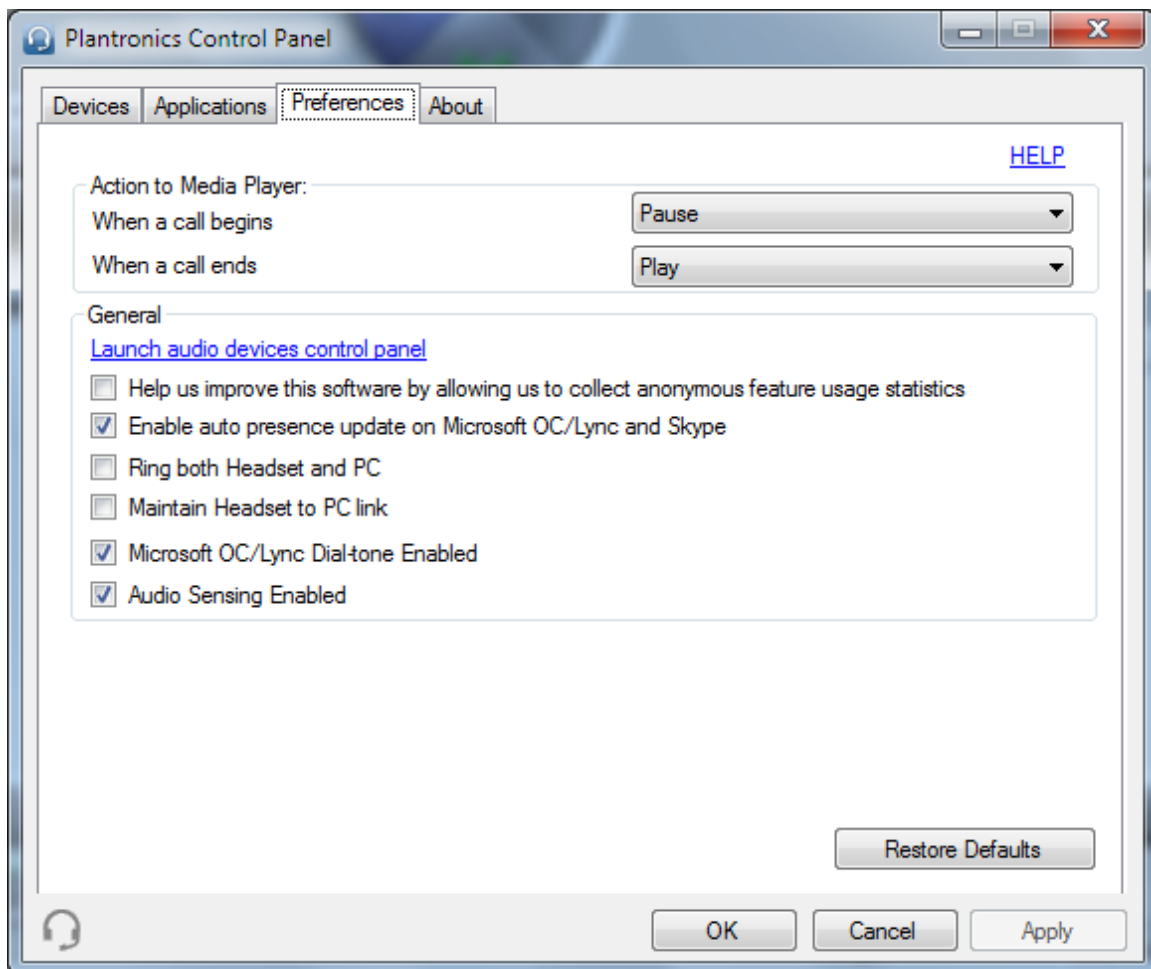


9. Install Plantronics Spokes Software and Plantronics Calisto 620-M

The Plantronics Spokes software enables the Plantronics Calisto 620-M to answer, end, and mute calls using the call control button on the speakerphone. Install the software on the PC running the one-X Attendant. Refer to [3] for additional information.

After the Spokes software is installed, connect the Plantronics Calisto 620-M Bluetooth USB adapter to the desktop PC running one-X Attendant and turn on the speakerphone. When the speakerphone is paired via Bluetooth, a chime should be heard and the Bluetooth LED on the speakerphone should blink blue once. If the speakerphone needs to be paired again, follow the instructions in [4].

Lastly, launch the **Plantronics Control Panel** in Windows Programs and select **Audio Sensing Enabled** in the **Preferences** tab as shown below. Click **OK**.



10. Verification Steps

This section provides the tests that can be performed to verify proper installation and configuration of the Plantronics Spokes Software and Plantronics Calisto 620-M 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 speakerphone.
4. Verify two-way talk path between the Calisto 620-M and phone.
5. Disconnect the call from the speakerphone using the call control button.
6. Verify that the call is properly disconnected.

11. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics Spokes Software and Plantronics Calisto 620-M Wireless Speakerphone with Avaya one-X® Attendant. All test cases were completed successfully.

12. 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.
- [1] *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>.

- [2] *Plantronics Spokes Software for Windows*, Build 2.8.24304.0.
- [3] *Plantronics Calisto 620 Bluetooth Wireless Speakerphone + Bluetooth USB Adapter Quick Start Guide*.

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