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Avaya Solution & Interoperability Test Lab

Application Notes for GN Netcom Jabra GO 6430 and LINK 350 USB Bluetooth Adapter with Jabra PC Suite, Avaya one-X® Communicator and Avaya one-X® Agent - Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration comprised of a GN Netcom Jabra GO 6430 headset and LINK 350 USB Bluetooth Adapter with Jabra PC Suite and Avaya one-X® Communicator or Avaya one-X® Agent.

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 compliance tested configuration using GN Netcom's Jabra GO 6430 and LINK 350 USB Bluetooth Adapter with Jabra PC suite and Avaya one-X® Communicator or Avaya one-X® Agent. For this compliance test the Avaya one-X® clients, are connected to Avaya Aura™ Communication Manager and installed as standalone clients.

The Jabra GO 6430 headset is a wireless headset that is compatible with nearly all types of Bluetooth wireless technology and provides support for advanced Bluetooth wireless technology features such as call waiting and voice-activated dialing. For this compliance test the Jabra GO 6430 will connect via Bluetooth to the LINK 350 USB Bluetooth Adapter which plugs into a PC USB port enabling the use of the Jabra GO 6430 headset together with one-X® Communicator or one-X® Agent. The Jabra PC Suite integrates with one-X® Communicator and one-X® Agent to provide basic call control functions to the Jabra GO 6430 such as answering or hanging up a call. The Jabra GO 6430 is equipped with a multi function button at the rear of the headset for answering and ending calls and a touch sensitive pad on the side of the headset for mute activation and volume control.

1.1 Interoperability Compliance Testing

Avaya 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 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 both feature functionality and serviceability testing. The feature functionality testing focused on placing calls from Avaya one-X® Communicator and Avaya one-X® Agent clients equipped with the Jabra GO 6430 with LINK 350 USB Bluetooth Adapter and verifying that good quality audio was sent and received. Additional features of the Jabra GO 6430 with LINK 350 USB Bluetooth Adapter headset such as muting the microphone and adjusting incoming volume were also verified. Intra-switch calls were made on the Communication Manager and inbound and outbound calls to and from a simulated PSTN.

The serviceability testing focused on verifying the usability of the Jabra GO 6430 with LINK 350 USB Bluetooth Adapter after restarting Avaya one-X® Communicator or Avaya one-X® Agent and disconnecting and reconnecting the LINK 350 USB Bluetooth Adapter from the desktop PC running the one-X endpoint.

1.2 Support

Technical support for the Avaya products can be obtained from Avaya. See the support link at support.avaya.com for contact information.

Technical support can be obtained for GN Netcom Jabra products from GN Netcom. See the support link at www.jabra.com/avaya for contact information.

2 Reference Configuration

Figure 1 illustrates the test configuration used during compliance testing to verify the GN Netcom solution. The configuration comprised of Avaya S8730 Server running Communication Manager and an Avaya G650 Media Gateway as the PBX. Avaya one-X Communicator and one-X Agent are installed on a desktop PC and are connected to the PBX via H.323. GN Netcom's Jabra PC Suite is installed on the desktop PC. The Jabra GO 6430 headset connects via Bluetooth with the LINK 350 USB Bluetooth Adapter, which in turn connects to a USB port on the PC running the Avaya one-X clients and Jabra PC Suite.
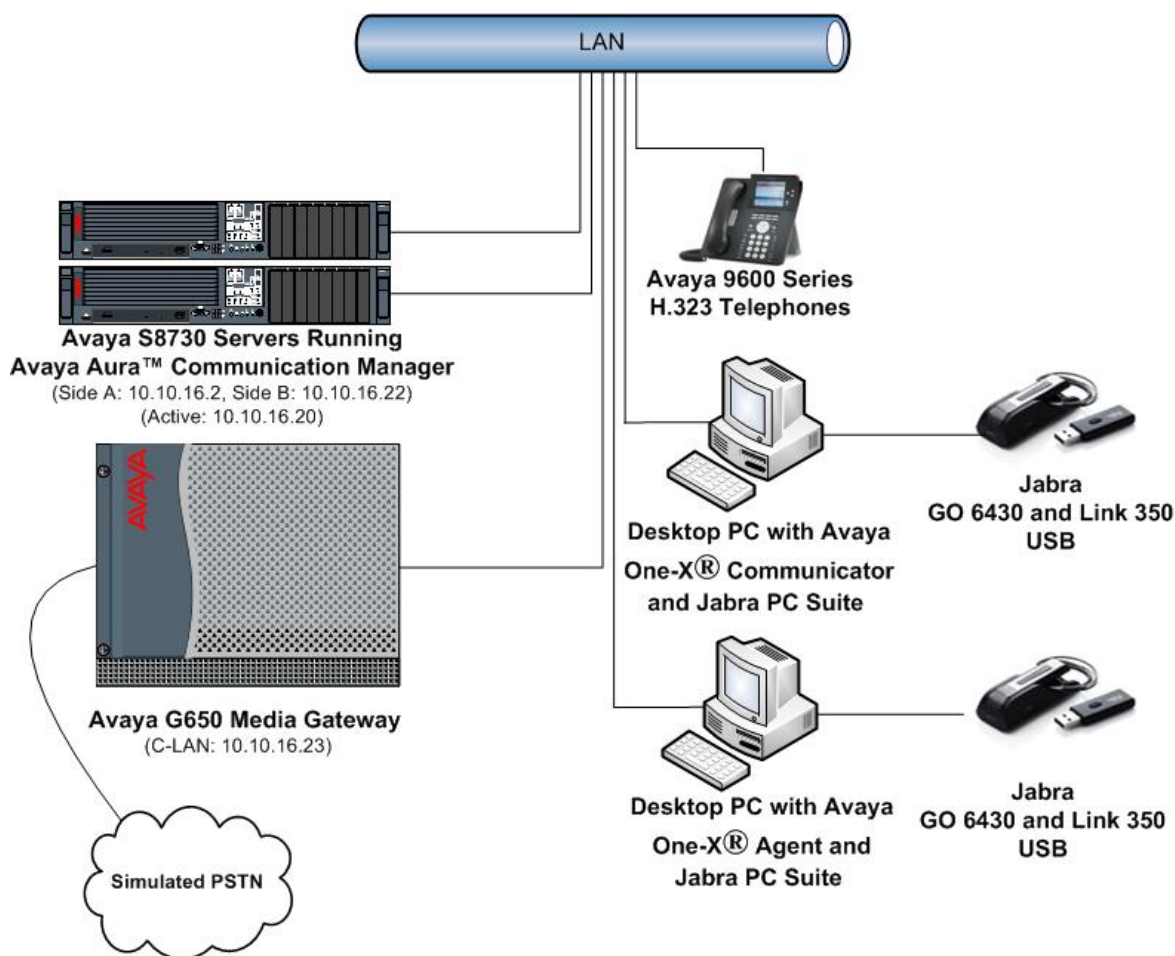
Figure 1: Network Topology

3 Equipment and Software Validated

All the hardware and associated software used in the compliance testing is listed below.

Equipment	Software Version
Avaya S8730 Server	Avaya Aura™ Communication Manager 5.2.1 (R015x.02.1.016.4)
Avaya G650 Media Gateway - CLAN TN799DP - IP Media Processor TN2602AP	HW16, FM38 HW08, FM55
Desktop, Windows XP Professional SP3	Avaya one-X® Communicator 5.2 (5.2.0.14)
Desktop, Windows XP Professional SP3	Avaya one-X® Agent 2.0 (2.0.016.3)
GN Netcom Jabra PC Suite	Release 2.2.6.0
GN Netcom Jabra GO 6430	Firmware 2.5.0
GN Netcom Jabra LINK 350 USB Bluetooth Adapter	N/A

Table 1: Hardware and Software Version Numbers

4 Configuration of Avaya Aura™ Communication Manager

These Application Notes assume that Communication Manager is configured and operational. This section focuses only on the configuration of the station and agent. The values configured in this section were used during the compliance tests, default values may be used for any fields not configured in these Application Notes. The compliance tests with the Jabra GO 6430 with LINK 350 USB Bluetooth Adapter and Jabra PC suite were carried out with the default server settings for audio parameters. Please refer to **[1]** in **Section 12**. The configuration in this section was performed via the System Access Terminal (SAT) on Communication Manager.

4.1 Configure Station for Avaya one-X® Communicator

To create a station to be used by Avaya one-X Communicator use the **add station n** command; where **n** is an available extension in the dial-plan. Set the **Type** field to the IP Telephone type that will be emulated. In this compliance test the type was set to **9630**. In the **Security Code** field enter a password to be used by Avaya one-X Communicator to log in. Ensure that **IP SoftPhone?** is set to **y**. All other fields can be left as default.

```
add station 6640                                              Page   1 of   5
                                 STATION

Extension: 6640                      Lock Messages? n              BCC: 0
    Type: 9630                       Security Code: 6640            TN: 1
    Port: IP                      Coverage Path 1: 1              COR: 1
    Name: 1XC Station             Coverage Path 2:                COS: 1
                                 Hunt-to Station:
STATION OPTIONS
                                         Time of Day Lock Table:
            Loss Group: 19      Personalized Ringing Pattern: 1
                                        Message Lamp Ext: 6640
         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

                                     Customizable Labels? y
```

4.2 Configure Station for Avaya one-X® Agent

To create a station to be used by Avaya one-X Agent use the **add station n** command; where **n** is an available extension in the dial-plan. Set the **Type** field to the IP Telephone type that will be emulated. In this compliance test the type was set to **9630**. In the **Security Code** field enter a password to be used by Avaya one-X Communicator to log in. Ensure that **IP SoftPhone?** is set to **y**.

```
add station 6641                                              Page   1 of   5
                                  STATION

Extension: 6641                          Lock Messages? n              BCC: 0
     Type: 9630                          Security Code: 6641            TN: 1
     Port: IP                        Coverage Path 1: 1                COR: 1
     Name: 1XA Station                Coverage Path 2:                 COS: 1
                                      Hunt-to Station:
STATION OPTIONS
                                      Time of Day Lock Table:
             Loss Group: 19     Personalized Ringing Pattern: 1
                                        Message Lamp Ext: 6641
         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


                                      Customizable Labels? y
```

On **Page 2** of the station **Auto Answer** is set to **acd** to allow any agents logged in to the station to automatically answer Automatic Call Distribution (ACD) calls.

```
add station 6641                                              Page   2 of   5
                                  STATION
FEATURE OPTIONS
         LWC Reception: spe         Auto Select Any Idle Appearance? n
         LWC Activation? y                 Coverage Msg Retrieval? y
 LWC Log External Calls? n                          Auto Answer: acd
          CDR Privacy? n                          Data Restriction? n
   Redirect Notification? y            Idle Appearance Preference? n
Per Button Ring Control? n          Bridged Idle Line Preference? n
   Bridged Call Alerting? n             Restrict Last Appearance? y
  Active Station Ringing: single
                                             EMU Login Allowed? n
       H.320 Conversion? n     Per Station CPN - Send Calling Number?
     Service Link Mode: as-needed              EC500 State: enabled
        Multimedia Mode: enhanced
  MWI Served User Type:                 Display Client Redirection? n
           AUDIX Name:                 Select Last Used Appearance? n
                                          Coverage After Forwarding? s
                                           Multimedia Early Answer? n
 Remote Softphone Emergency Calls: as-on-local Direct IP-IP Audio Connections? y
  Emergency Location Ext: 6641        Always Use? n IP Audio Hairpinning? n
     Precedence Call Waiting? y
```

On **Page 4** assign the necessary agent work mode buttons. The assignment of **after-call, aux-work, release** and either **auto-in** or **manual-in** buttons are mandatory. For the compliance test both manual-in and auto-in buttons were provisioned.

```
add station 6641                                               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: enhanced 1           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 Number:
```

4.3 Configure Agent Login ID for Avaya one-X® Agent

To create an agent login ID to be used by Avaya one-X Agent use the **add agent-loginID n** command; where **n** is an available extension in the dial-plan. Enter and confirm a **Password** to be used by Avaya one-X Agent to log in the agent login ID. Set **Auto Answer** to **station** so that the agent login ID will follow the Auto Answer configuration of the station it logs in to.

```
add agent-loginID 6642                                        Page   1 of   2
                           AGENT LOGINID

             Login ID: 6642                              AAS? n
                 Name: 1XA Agent                       AUDIX? n
                   TN: 1                        LWC Reception: spe
                  COR: 1                LWC Log External Calls? n
        Coverage Path:                  AUDIX Name for Messaging:
        Security Code:
                                        LoginID for ISDN/SIP Display? n
                                                     Password: 6642
                                        Password (enter again): 6642
                                                  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
```

On **Page 2** under **SN** enter the required ACD skill group and under **SL** enter an associated skill level. In the example screen skill group **3** is used with a skill level of **1.**

```
add agent-loginID 6642                                          Page   2 of   2
                              AGENT LOGINID
       Direct Agent Skill:                          Service Objective? n
Call Handling Preference: skill-level              Local Call Preference? n

     SN   RL SL          SN   RL SL          SN   RL SL          SN   RL SL
  1: 3       1       16:                 31:                 46:
  2:                 17:                 32:                 47:
  3:                 18:                 33:                 48:
  4:                 19:                 34:                 49:
```

5   Configure Avaya One-X® Communicator

These Application Notes assume that Avaya one-X Communicator is already configured and operational. This section focuses only on the configuration for the Jabra GO 6430 headset. After starting Avaya one-X Communicator, select ▾☰ → **Settings** from the menu as shown below.
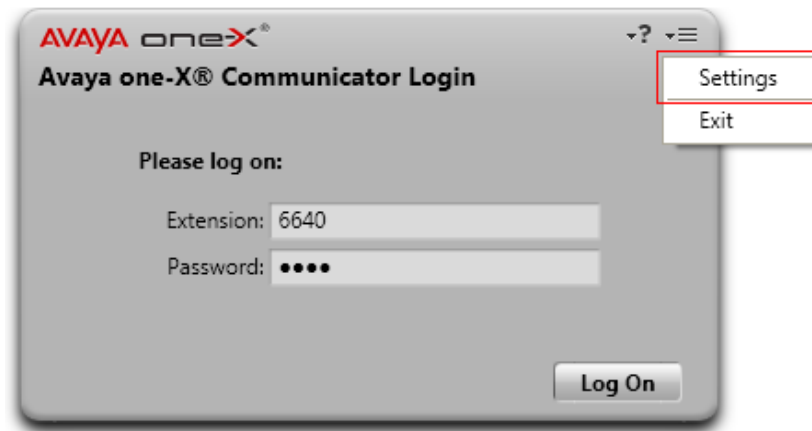
In the resulting screen select **Audio** from the left panel and click the **Audio Tuning Wizard** button in the right panel.

The Jabra LINK 350 USB Bluetooth Adapter is automatically detected in Microsoft Windows XP as **Jabra LINK 350 OC**. Select this device as the **Playback Device** and **Recording Device** as shown below. Click **Next** and follow the remaining procedures to tune the audio.
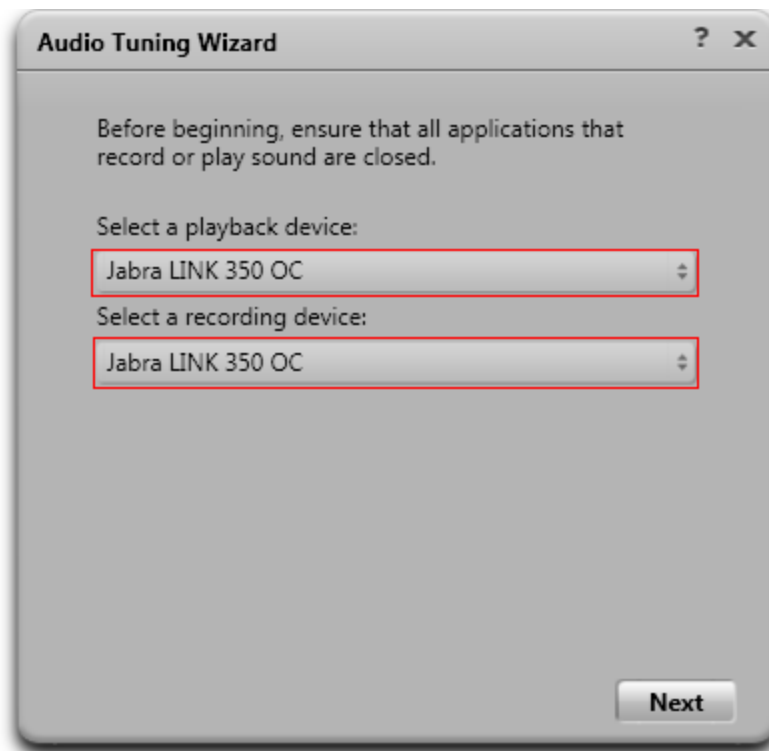
6 Configure Avaya One-X® Agent

These Application Notes assume that Avaya one-X Agent is already configured and operational. This section focuses only on the configuration for the Jabra GO 6430 headset. After logging into Avaya one-X Agent, select [icon] → **Agent Preferences** from the menu as shown below.

Select **Audio** from the left panel and click the **Advanced** tab. The Jabra LINK 350 USB Bluetooth Adapter is automatically detected in Microsoft Windows XP as **Jabra LINK 350 OC**. Select this device as the **Playback Device** and **Record Device** as shown below. Click **OK**.
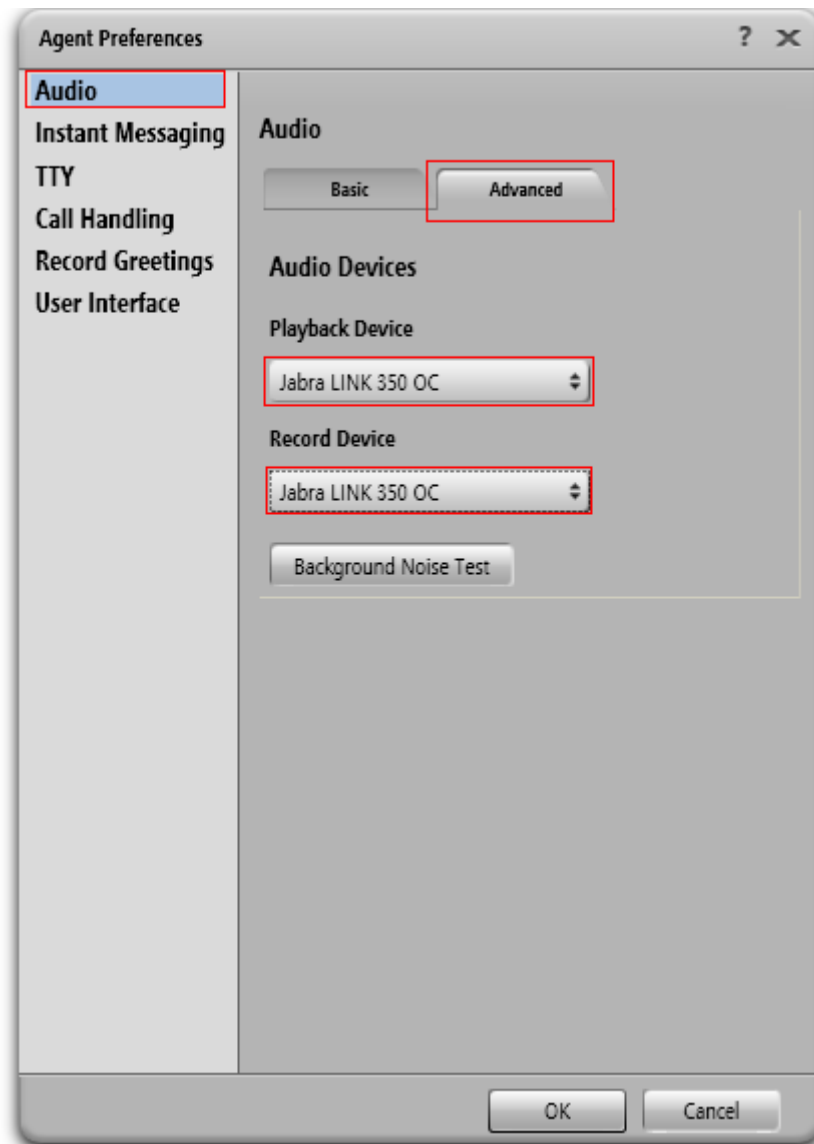
7 Configure Jabra PC Suite

Insert the CD-ROM that came with the Jabra product or download the Jabra PC Suite installer from www.jabra.com. Double-click on the **JabraPcSuiteSetup.exe** file to launch the installer. Click **Next** on the welcome screen and accept the end user license agreement. Click next until the S**tartup Options** page is displayed, make sure the **Start Jabra Device Service every time Windows starts** and **Start Jabra Device Service after installation** check boxes are selected as shown below. Click **Next** and follow the remaining on screen instructions to complete the installation.
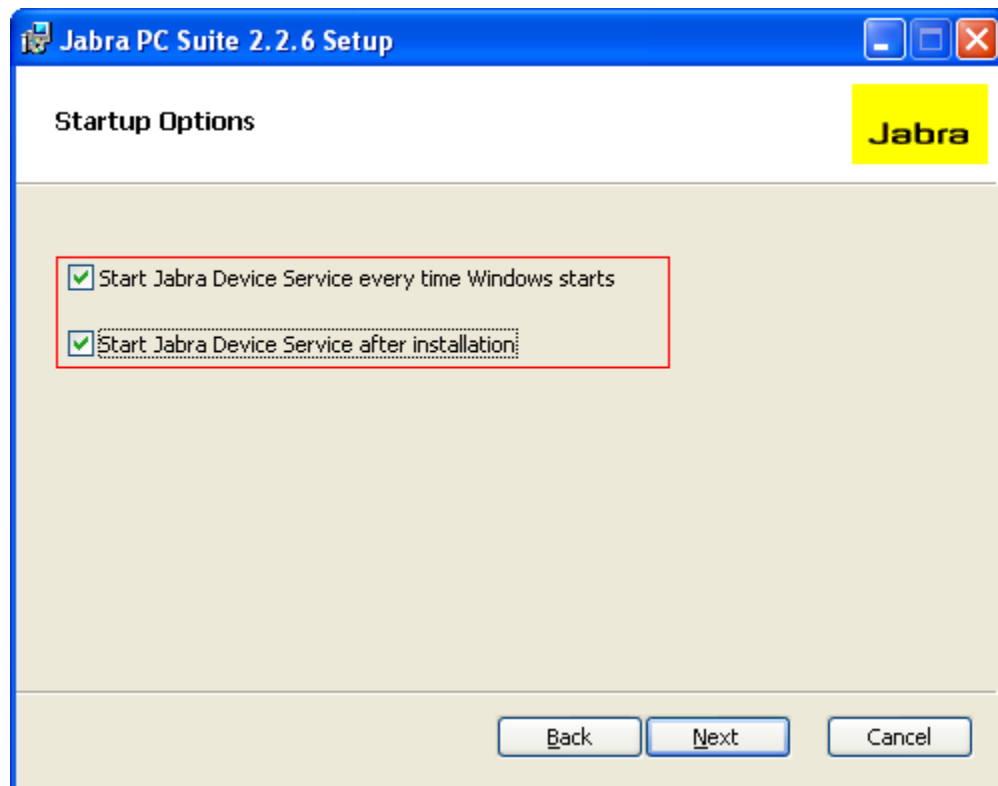
8 Configure Jabra GO 6430 Headset

The Jabra GO 6430 headset has three audio tone settings, to program the audio tone connect a
Jabra GO 6430 with LINK 350 USB Bluetooth adapter to a PC running Jabra PC Suite and open the
Jabra Control Center. In the right pane select the **Audio** tab where there is a choice of three audio
tone settings. Select the **Tone setting** according to user preference, for the compliance test **Normal**
was used.
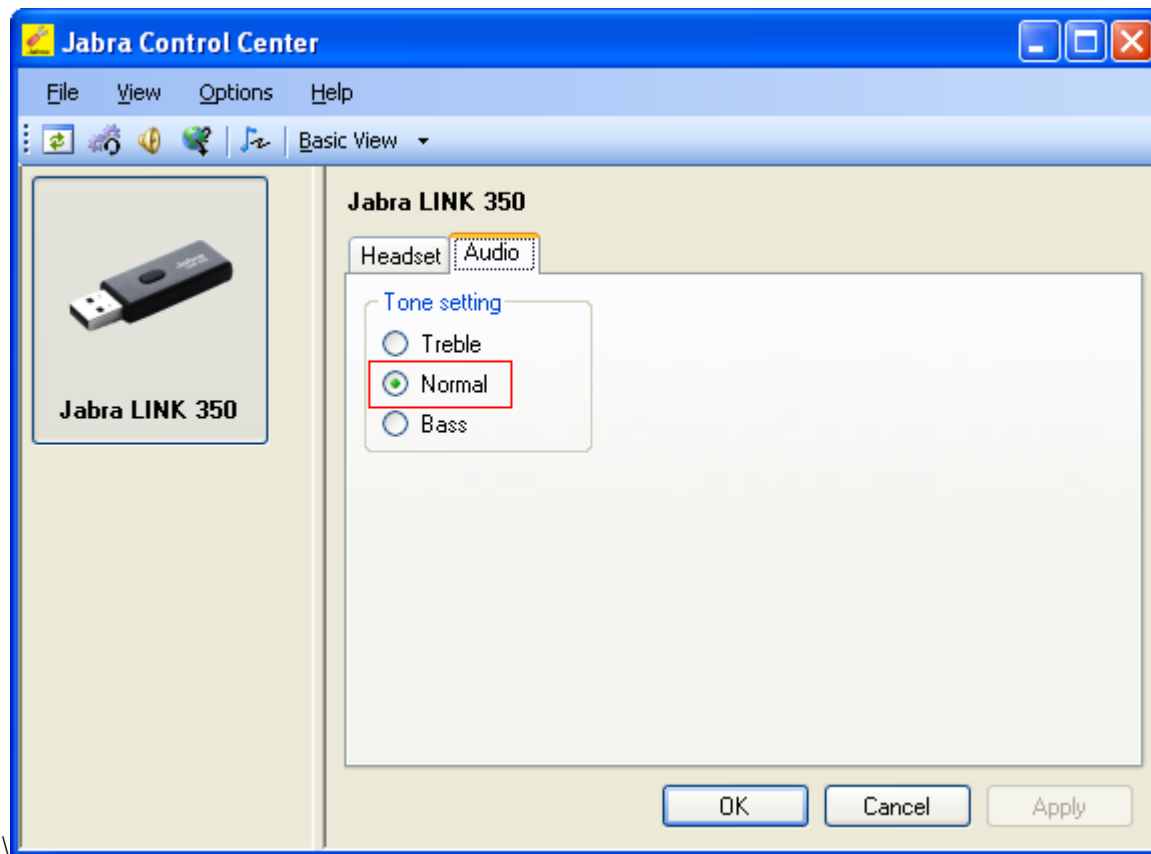
9 General Test Approach and Test Results

The compliance testing focused on the ability of the Jabra GO 6430 with LINK 350 USB Bluetooth
Adapter to work with Avaya one-X Communicator and Avaya one-X Agent. Functionality was
verified by placing and receiving calls using the Jabra GO 6430 headset. The GO 6430 and LINK
350 USB Bluetooth Adapter functioned correctly with good audio transmitted and received.
Functionality was tested during a range of basic telephony operations.

- Calls originating and terminating to the Avaya one-X endpoint equipped with the Jabra GO
  6430 and LINK 350 USB Bluetooth Adapter
- Calls answered and released using both Avaya one-X controls and the Jabra GO 6430 multi
  function button
- Mute activation and deactivation using both Avaya one-X controls and the Jabra GO 6430
  touch sensitive control
- Volume control using both Avaya one-X controls and the Jabra GO 6430 touch sensitive
  control

- Calls placed on hold and retrieved
- Attended and unattended transfers to and from the one-X endpoint equipped with the Jabra GO 6430 and LINK 350 USB Bluetooth Adapter
- Calls made to and received from a simulated PSTN

The serviceability tests were performed by disconnecting and reconnecting the LINK 350 USB Bluetooth Adapter from the PC and restarting either one-X communicator or one-X Agent depending on which client was in use.

10 Verification Steps

Connect a Jabra LINK 350 USB Bluetooth Adapter to a PC running Jabra PC suite and either one-X Communicator or one-X Agent. Open the Jabra control center and confirm that the Jabra LINK 350 is displayed in the left pane and appears as the title in the right hand pane. The **Headset type** connected to the Jabra LINK 350 will appear under the **Headset** tab in the right pane; the **Battery level** of the connected headset will also be shown.
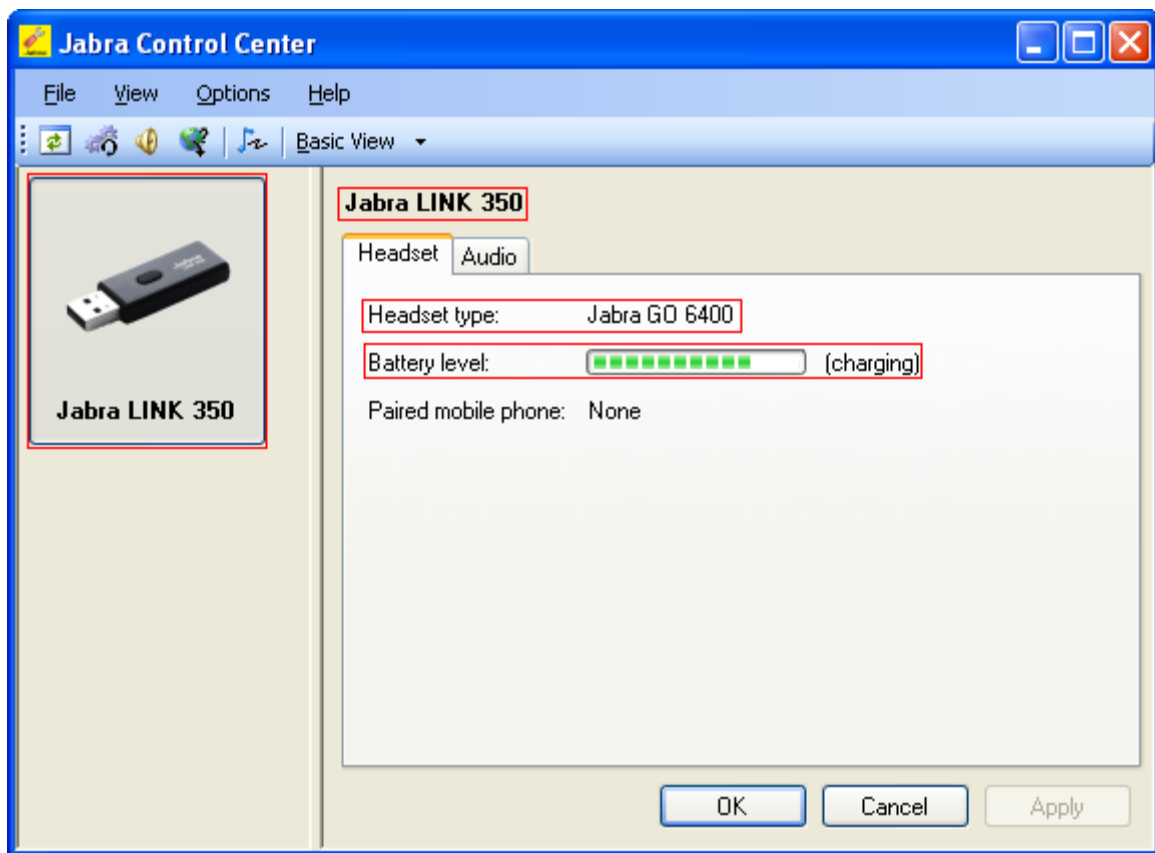
Login to either one-X Communicator or one-X Agent and from the Jabra control Center navigate to **View → Device Service Window** and confirm the **Softphone Status** for **Avaya one-X Communicator** displays **Ready.**
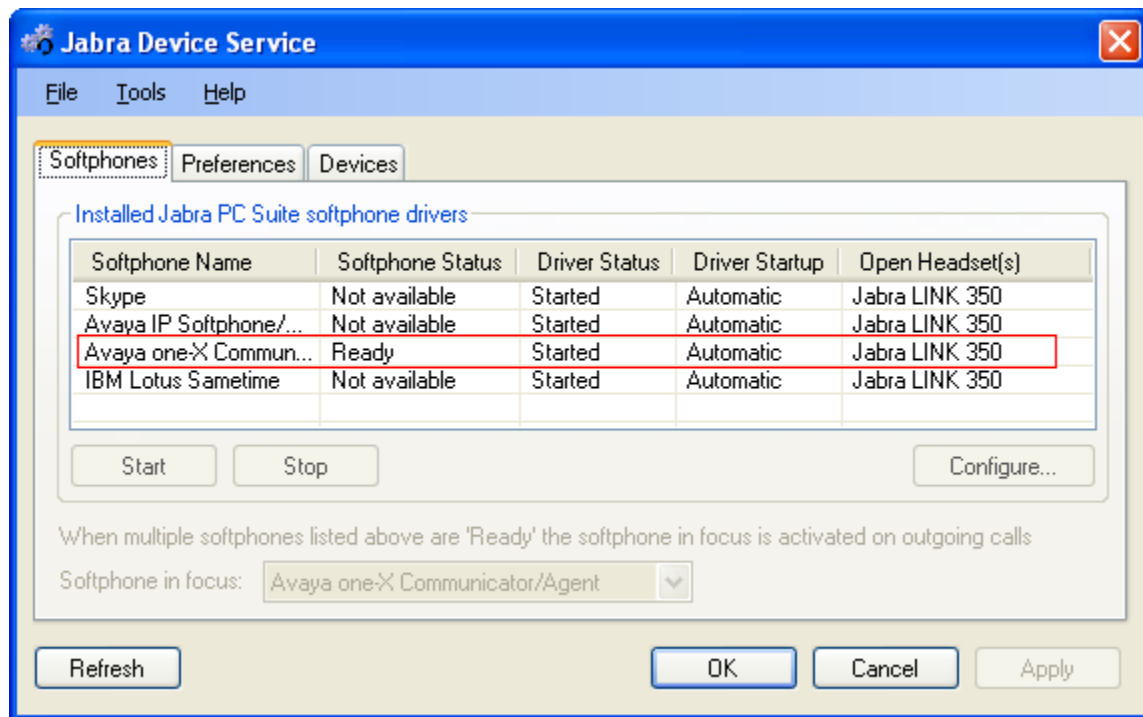
Make a call from the Avaya one-X endpoint equipped with the Jabra GO 6430 and LINK 350 USB Bluetooth Adapter to confirm audio is heard at both ends of the call.

11 Conclusion

These Application Notes describe the configuration steps required to use the Jabra GO 6430 with LINK 350 USB Bluetooth Adapter and Jabra PC Suite integrated to Avaya one-X® Communicator and Avaya one-X® Agent. All feature functionality and serviceability test cases were completed successfully.

12 Additional References

This section references the Avaya and GN Netcom product documentation that are relevant to these Application Notes.

Product documentation for Avaya products may be found at http://support.avaya.com
   1. *Administering Avaya Aura™ Communication Manager, Release 5.2; Document No. 03-300509, May 2009*
   2. *Administering Communication Manager for Avaya one-X Agent*, Dec-2009
   3. *Using Avaya one-X Agent*, Dec 2009
   4. *Avaya one-X® Communicator Getting Started*, Nov-2009

Product documentation for GN Netcom Jabra products may be found at: http://www.jabra.com/avaya

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