Avaya Solution & Interoperability Test Lab

Application Notes for Jabra LINK 33 EHS Adapter with Jabra PRO 920 and Jabra PRO 9470 Headsets with Avaya 96x1 Deskphones from the 9600 Series of IP Deskphones - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Jabra LINK 33 EHS (Electronic Hook Switch) Adapter with Jabra PRO 920 and Jabra PRO 9470 headsets with Avaya 96x1 Deskphones from the 9600 Series of IP Deskphones. Jabra LINK 33 provides the Jabra headsets with the ability to hear ring tones, and to answer and end calls directly from the headset when the user is away from their desk.

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 Jabra LINK 33 EHS (Electronic Hook Switch) Adapter with Jabra PRO 920 and Jabra PRO 9470 headsets with Avaya 96x1 Deskphones from the 9600 Series of IP Deskphones. Jabra LINK 33 provides the Jabra Headsets the ability to hear ring tones, and to answer and end calls directly from the headset when the user is away from their desk.

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 the Avaya 96x1 IP Deskphones equipped with Jabra LINK 33 EHS Adapters and Jabra PRO 920 or 9470 headsets and verifying two-way audio. The call types included calls to and from local extensions, the PSTN and to voicemail.

The serviceability testing focused on verifying the usability of the Jabra headsets after restarting the 96x1 IP Deskphones and power cycling the headset bases.

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 and from internal extensions to verify two-way audio.
- Placing calls to and from the PSTN to verify two-way audio.
- Hearing ring back tone for incoming and outgoing calls.
- Answering and ending calls using buttons on the Deskphone.
- Answering and ending calls using the call control button on the headset.
- Using the volume control buttons on the Jabra headset to adjust the audio volume.
- Using the mute control button on the Jabra headset to mute and un-mute the audio.

For the serviceability testing the 96x1 IP Deskphone was restarted to verify proper operation of the headset after the reboot was completed. Power cycling of the headset base was also performed to verify proper operation after it powered up.

2.2. Test Results

All test cases passed.

2.3. Support

For technical support of Jabra products, please refer to www.jabra.com. On the Jabra website, support hotline numbers can be found for specific countries.

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the Jabra LINK 33 EHS Adapter with Jabra PRO 920 and Jabra PRO 9470 headsets with Avaya 96x1 IP Deskphones from the 9600 Series of IP Deskphones. The configuration consists of an Avaya S8800 Server running Communication Manager with an Avaya G650 Media Gateway providing connectivity to the PSTN via an ISDN-PRI trunk. Avaya Aura® Messaging was used as the voicemail system.

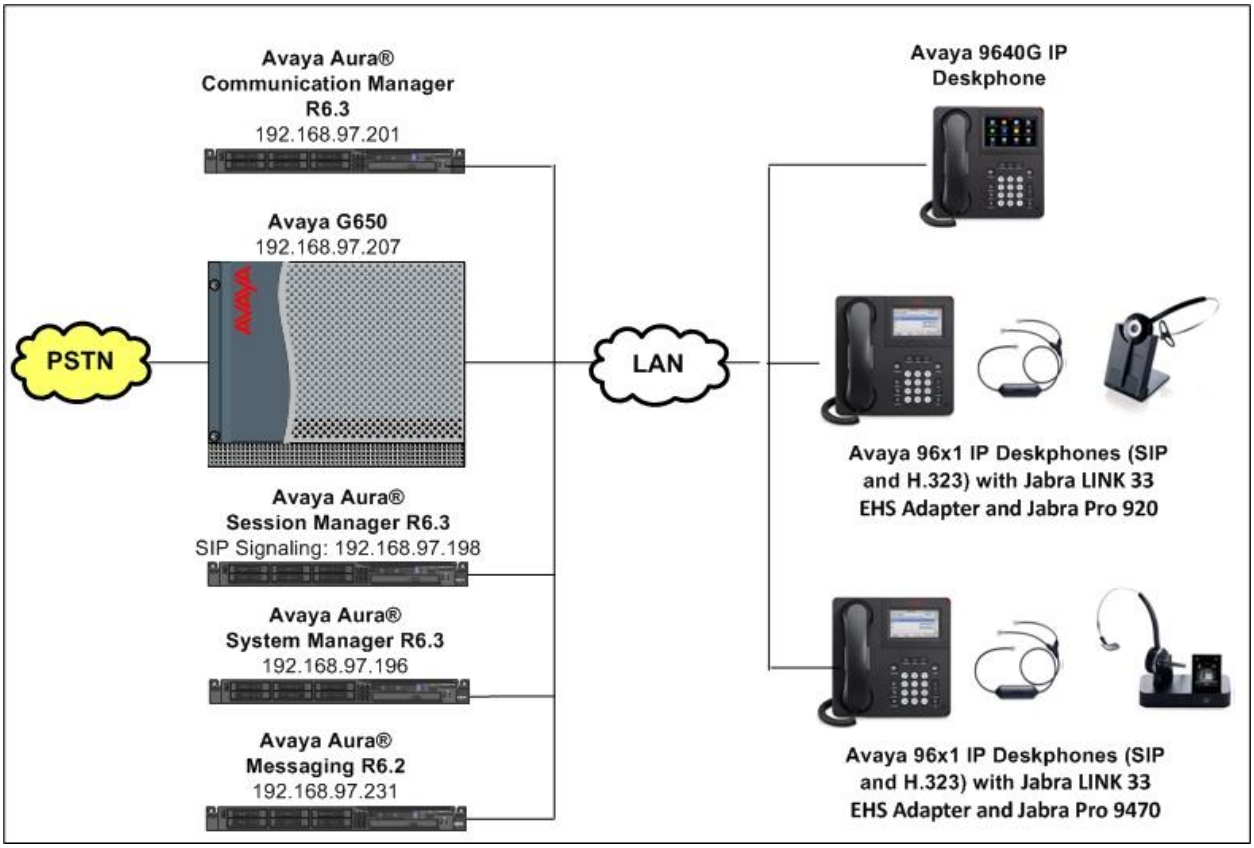

Figure 1: Avaya 96x1 IP Deskphones with Jabra LINK 33 EHS Adapters and Jabra PRO 920 and Jabra PRO 9470 headsets

3.1. Answering, Ending, and Placing Calls

To answer, end, or place a call using the Jabra PRO 920 and Jabra PRO 9470 headsets with the Jabra LINK 33 EHS Adapter follow the instructions below.

To Answer a Call	Press the call control button on the headset to answer an incoming call. This would automatically activate the headset button on the IP telephone. Alternatively, press the headset button on the IP Deskphone to answer an incoming call. This would automatically activate the headset. If auto-answer is enabled incoming calls will be answered automatically and a two-way audio path will be established to the headset.
To End a Call	Press the call button on the headset to terminate a call. This automatically deactivates the headset button on the IP telephone. Alternatively, press the headset button on the IP telephone to terminate a call. This automatically deactivates the headset.
To Place a Call	Press the call control button on the headset to get dial tone and dial the number. This would automatically activate the headset button on the IP telephone. Alternatively, if the headset button on the IP telephone is pressed first, the call control button on the headset will automatically activate and the number can be dialed.

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Session Manager running on S8800 Server	Release: 6.3.2.0.632023
Avaya Aura® System Manager running on S8800 Server	6.3.0 - FP2 Build No. - 6.3.0.8.5682-6.3.8.1627
Avaya Aura® Communication Manager running on Avaya S8800Server	R016x.03.0.124.0 patch 21172
Avaya G650 Media Gateway IPSI TN2312BP CLAN TN799DP IP Media Processor TN2302AP Digital Line TN2224	 HW06, FW043 HW01, FW026 HW20, FW117 000006
Avaya Aura® Messaging	6.2
Avaya 96x1 IP Deskphones (H.323)	6.4 (Release 6.4014)
Avaya 96x1 IP Deskphones (SIP)	6.4 (Version: 6.4.0.33)
Jabra LINK 33 EHS Adapter	P/N 14201-33
Jabra PRO 920 Headset	2.4
Jabra PRO 9470 Headset	3.11.2

5. Configure Avaya Aura® Communication Manager

No special configuration is needed on Communication Manager but for completeness this section covers the station configuration for an Avaya 9621G IP Deskphone. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

5.1. Configure a Station for Avaya 96x1 Series IP Deskphone

Use the **add station** command to create a station for the 9621 IP Deskphone. Set the **Type** field to the station type to be emulated. In this example, *9621* was used. Configure a **Security Code** as the password to be used by the Avaya Deskphone to log in.

Note: To enable Auto Answer on the IP Deskphone set the **Auto Answer** field on **Page 2** (not shown) to the appropriate value, such as *all*.

```
add station 53008                                          Page   1 of   5
                                  STATION

Extension: 53008                      Lock Messages? n               BCC: 0
     Type: 9621                       Security Code: 12345            TN: 1
     Port: S00035                   Coverage Path 1: 1               COR: 1
     Name: 9621 H323                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: 53008
           Speakerphone: 2-way          Mute Button Enabled? y
        Display Language: english
 Survivable GK Node Name:
          Survivable COR: internal        Media Complex Ext:
   Survivable Trunk Dest? y                    IP SoftPhone? n

                                                  IP Video? n
                            Short/Prefixed Registration Allowed: default

                                           Customizable Labels? y
```

6. Jabra LINK 33 Cable Connections

To connect the Jabra PRO 920 and 9470 headsets to the 96x1 IP Deskphone use the Jabra LINK 33 Adapter as shown in the diagram below.

1. Connect to telephone port on headset base
2. Connect to AUX port on headset base
3. Connect to headset port on Avaya phone

7. Jabra PRO 9470 Configuration

The Jabra PRO 9470 should be configured to use **DHSG** protocol and the clear dial-tone switch should be set to position **"A"**. There are two modes of configuring the desk phone settings, **guided** or **manual**, for the compliance testing the **manual** mode was used. Use the following steps to manually configure the Jabra PRO 9470:

- Select the **tool** icon on the top right hand corner of the headset touch screen.
- Select **phone settings**.
- Select **desk phone**.
- Select **setup desk phone**.
- Acknowledge the warning message given by selecting **confirm**.
- Select **manual** desk phone setup.
- Select **DHSG** adapter type.
- Under set clear dial-tone switch select position **"A"**.
- Select a **microphone level**.
- The base will restart after exiting to apply the settings.

8. Jabra PRO 920 Configuration

The **Clear Dial Tone Switch** on the back of the headset should be set to position "**A**". The Microphone volume controls can also be adjusted if necessary.

9. 96x1 Deskphone Settings

To set the default audio path for the 96x1 Deskphone select **Home → Settings → Options & Settings → Call Settings → Audio Path** and then select **Headset**.

To Enable the EHS functionality on the 96x1 Deskphone select **Home → Settings → Options & Settings → Call Settings → Headset Signaling** and then select **Switchhook & Alerting.**

10. Verification Steps

Verify that the Jabra LINK 33 and Jabra PRO 920 or Jabra PRO 9470 headset have been connected to the Avaya 96x1 Deskphone. Once the headset is connected to the phone, verify that incoming and outgoing calls are established with two-way audio to the headset and that the headset can get dial tone and end an active call.

11. Conclusion

These Application Notes describe the configuration steps required to integrate Jabra LINK 33 EHS Adapter and Jabra PRO 920 or Jabra PRO 9470 headsets with Avaya 96x1 Deskphones from the 9600 Series of IP Deskphones. All test cases were completed successfully.

12. Additional References

This section references product documentation relevant to these Application Notes.

Documentation for Avaya products can be found at http://support.avaya.com.

[1] *Administering Avaya Aura® Communication Manager Release 6.3,* Document Number 03-300509, Issue 9, October 2013

[2] *Avaya Aura® Communication Manager Feature Description and Implementation Release 6.3*, Document Number 555-245-205, Issue 11, October 2013

[3] *Avaya one-X® Deskphone Edition for 9600 Series IP Telephones Installation and Maintenance Guide Release 3.2,* Document Number 16-300694, Issue 9, January 2013

Documentation for Jabra products can be found at http://www.jabra.com.

[4] *Jabra PRO™ 920 User Manual*, Document Number 32-00696 F

[5] *Jabra PRO™ 9470 User Manual*, Document Number 32-00685 Rev J

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at devconnect@avaya.com.