AVAYA

Avaya Solution & Interoperability Test Lab

Application Notes for GN Netcom Jabra GN1216 with Avaya IP Telephones – Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration comprised of GN Netcom Jabra GN1216 and various GN Netcom headsets with Avaya IP Telephones from the 9600 and 1600 series.

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 GN1216 with Avaya IP telephones. The Avaya telephones used are the 9600 and 1600 series IP telephones. The Avaya telephones are connected to Avaya Aura™ Communication Manager.

The Jabra GN1216 allows the user to connect all GN Netcom's most popular professional Jabra headsets so that they may be used with Avaya 9600 and 1600 series IP telephones. One end of the Jabra GN1216 has a standard RJ9 connector that connects to the headset port of the Avaya 9600 and 1600 series IP telephones. The alternate end of the Jabra GN1216 is equipped with a standard GN Quick Disconnect plug to allow GN headsets equipped with Quick Disconnect to be attached. In the middle of the GN1216 cable is a slider that can be adjusted to alter the headset microphone amplification transmit level.

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 the Avaya telephones equipped with the GN1216 using the connected headset and verifying that good quality audio was sent and received. Intra-switch calls were made on the Avaya Aura™ Communication Manager and inbound and outbound calls to\from a simulated PSTN. The serviceability testing focused on verifying the ability of the GN1216 to recover from disconnection and reconnection of the Avaya telephones. IP link Failure\Recovery was also tested to ensure successful reconnection on link failure.

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 network topology used during compliance testing. The Avaya solution consisted of an Avaya S8500B Server running Communication Manager and Avaya G650 Media Gateway as the PBX. Avaya 9600 series and 1600 series IP telephones are connected to the PBX and used in the testing.
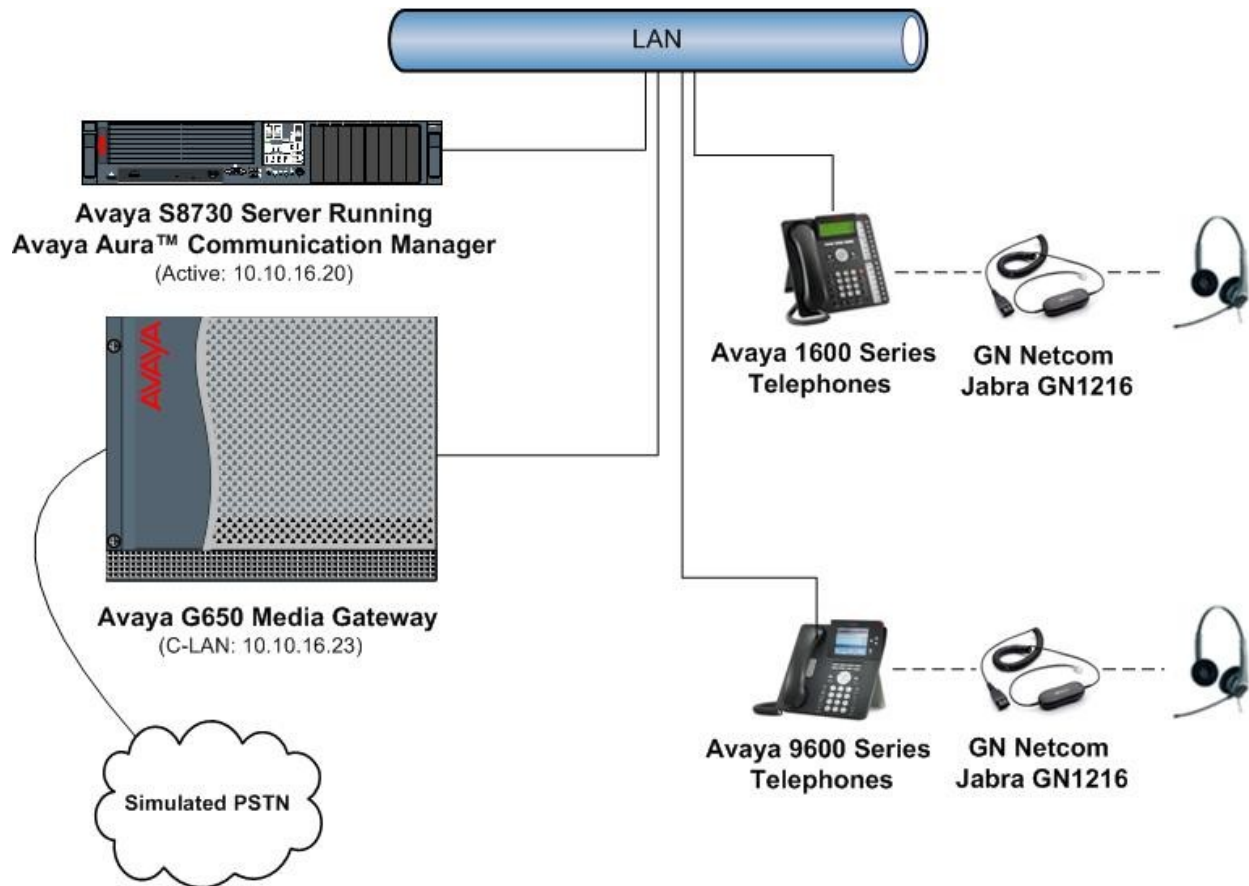

Figure 1: Network Topology

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 - IPSI TN2312BP - CLAN TN799DP - IP Media Processor TN2602AP - DS1 Interface TN2464CP	 HW12, FM49 HW16, FM37 HW08, FM40 HW02, FM18
Avaya 9600 Telephones - 9630	 3.1.1 (H.323)
Avaya 1600 Telephones - 1616	 1.2.2 (H.323)
GN Netcom Jabra GN1216	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. There are no additional settings required to be configured for the connection of the Jabra GN1216 to the Avaya telephones. The compliance tests with the Jabra GN1216 were carried out with the default server settings for audio parameters. Please refer **[1]** in **Section 10**.

5 Configuration of Avaya Telephones Audio Settings

Upon boot-up the Avaya 1600 series and 9600 series telephones will attempt to download the settings file from a pre configured file server. IP Telephones can be fine-tuned to provide optimal audio quality performance by administering audio parameters in the file server settings file. It is important to be aware of these settings as the slider on the Jabra GN1216 also affects audio quality performance; the GN Netcom recommended settings for the Jabra GN1216 are based on the IP telephones having the default settings.

The parameter **SET AGCHEAD** will enable or disable automatic gain control for the connected headset. The default setting is 0 to disable automatic gain control; a value of 1 will enable automatic gain control. The parameter **SET AUDIOENV** customizes the telephone audio quality performance by effecting the dynamic range of the automatic gain control when it is enabled, as well as noise reduction thresholds, and headset transmit gain. It is highly recommended you consult Avaya before changing this parameter. Please refer to **[2]** in **Section 10** for more information.

6 Configuration and Connection of Jabra GN1216

The Jabra GN1216 is used for the connection of Jabra headsets to the Avaya 9600 and 1600 series IP telephones. The Jabra GN1216 should be adjusted for the headset used; each Jabra GN1216 is supplied with a list of headsets and item numbers indicating the slider position that should be used. Users can find the headset item number on the identification barrel which is located on the headset cord as indicated in **Figure 2** below.
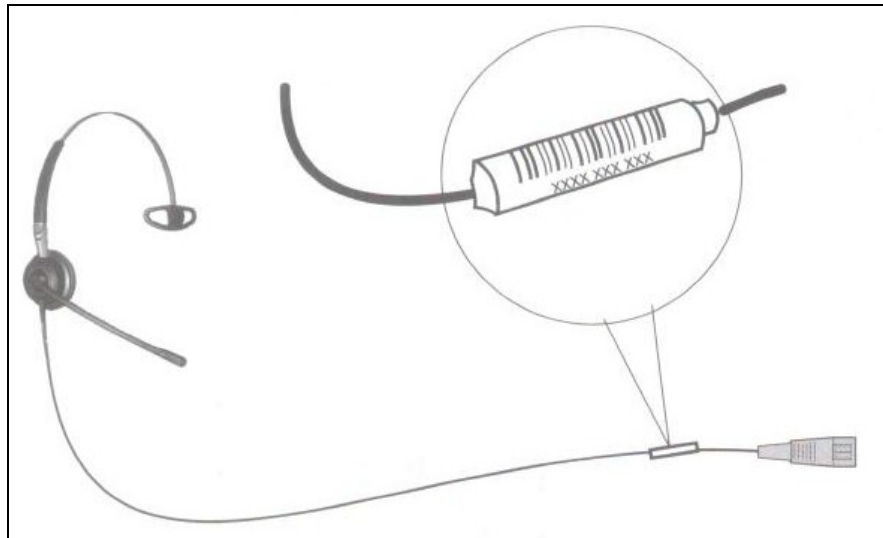

Figure 2: Headset Identification

The Jabra GN1216 is connected to the headset port of the Avaya telephones using the RJ-9 connector. Jabra headsets are connected to the Jabra GN1216 via the quick disconnect plug.

7 General Test Approach and Test Results

The compliance testing focused on the ability of the Jabra GN1216 to work with the Avaya 9600 and 1600 series telephones. Functionality was verified by placing and receiving calls using the Jabra GN1216 and connecting Jabra headsets. The GN1216 functioned correctly with good audio transmitted and received. Functionality was tested during a range of basic telephony operations.

- Calls originating and termination to the telephone equipped with the Jabra GN1216
- Mute activation and deactivation
- Volume control on telephone equipped with the Jabra GN1216 reflected in headset
- Calls placed on hold and retrieved
- Attended and unattended transfers to and from the telephone equipped with the Jabra GN1216
- Call made to and received from a simulated PSTN

The serviceability tests were performed by disconnecting the Jabra GN1216 from the Avaya telephones, disconnecting the Jabra headset from the Jabra GN1216 at the quick disconnect plug and disconnecting and reconnecting the Avaya telephones.

8 Verification Steps

Confirm that the slider is set to the correct position according to the list provided with the Jabra GN1216; make a call from the telephone equipped with the Jabra GN1216 using a Jabra headset to confirm audio is heard at both ends of the call.

9 Conclusion

These Application Notes describe the configuration steps required to use the Jabra GN1216 with Avaya 9600 and 1600 series IP Telephones. All functionality and serviceability test cases were completed successfully.

10 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. *Avaya Audio Quality Tuning for IP Telephones, Issue 2.0, Document No. 120942, July 2007*

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

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