



Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics Voyager Legend Bluetooth Headset with Avaya 96x1 Series IP Deskphones and IP Office Server Edition 9.1 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the Plantronics Voyager Legend Bluetooth headset with Avaya 96x1 Series IP Deskphones running H.323 protocols. Plantronics Voyager Legend is a Bluetooth headset that provides smart sensor technology that reacts when put the headset on the ear; it will answer a call without a click, or the user can simply tap the call control button to answer if headset is already on. This solution provides call control features directly from the headset, such as answering or terminating a call, volume control and mute.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as the observations noted in **Section 2.2**, to ensure that their own use cases are adequately covered by this scope and results.

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 Voyager Legend Bluetooth headset with Avaya 96x1 Series IP Deskphones running H.323 protocols. Plantronics Voyager Legend is a Bluetooth headset that provides smart sensor technology that reacts when put the headset on the ear; it will answer a call without a click, or the user can simply tap the call control button to answer if headset is already on. This solution provides call control features directly from the headset, such as answering or terminating a call, volume control and mute.

The Avaya IP Office Server Edition configuration consisted of two Avaya IP Office systems, a primary Linux server at the Main site and an expansion IP500V2 at the Remote site that were connected via Small Community Network (SCN) trunks.

For Avaya 96x1 Series IP Deskphone, only 9641G and 9641GS models support Bluetooth connection. In the compliance testing, one 9641G H.323 deskphone was used to connect to primary IP Office system, and one 9641GS H.323 deskphone register to the expansion IP Office system.

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 Series IP Deskphones with Plantronics Voyager Legend Bluetooth headset and verifying two-way audio. The call types included calls to voicemail, to and from local extensions, to and from the PSTN.

The serviceability testing focused on verifying the usability of the Plantronics Voyager Legend headset after restarting the Avaya 96x1 Series IP Deskphones and re-connecting Bluetooth connection.

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

The following functionality was verified:

1. Placing calls to the voicemail system. Voice messages were recorded and played back to verify that the playback volume and recording level were good.
2. Placing and receiving calls to and from internal extensions within and cross-sites to verify two way audio path and quality.
3. Placing and receiving calls to and from the PSTN to verify two way audio path and quality.
4. Answering and ending calls using the Avaya 96x1 Series IP Deskphone.
5. Verifying the headset continues to work in the resiliency scenario where the Avaya 96x1 Series IP Deskphone on the expansion IP Office system registered to the primary.
6. Answering and ending calls using call control button on headset.
7. Hearing ring back tone for outgoing calls.
8. Hearing ring alert for incoming calls.
9. Using the volume control buttons on the headsets to adjust the volume on the headset speakers.
10. Using the mute control button on Avaya 96x1 Series IP Deskphone and the headset to mute and un-mute the transmitted audio.
11. Using Hold feature on Avaya 96x1 Series IP Deskphone.
12. Placing the headsets on the ear for an incoming call and ensuring that the call is answered automatically.
13. Walk away from the deskphone about 30 feet where Bluetooth connectivity is lost and walk back in range and placing a call.

For the serviceability testing, the 96x1 Series IP Deskphones were restarted to verify proper operation of the headsets after the reboot was completed and re-connecting Bluetooth connection.

2.2. Test Results

All test cases have been executed and passed.

2.3. Support

For technical support and information on the Plantronics products described in this solution, contact Plantronics Technical Support 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 Voyager Legend Bluetooth headset with Avaya 96x1 Series IP Deskphones running H.323 protocols. The IP Office Server Edition configuration used in the compliance testing consisted of a primary Linux server and an expansion IP500V2 with SCN trunks connectivity between the two systems. In the compliance testing, 96x1 Series H.323 deskphones were used in each IP Office system. Two Plantronics Voyager Legend headsets were connected to Avaya 9641G and 9641GS deskphones via Bluetooth connection.

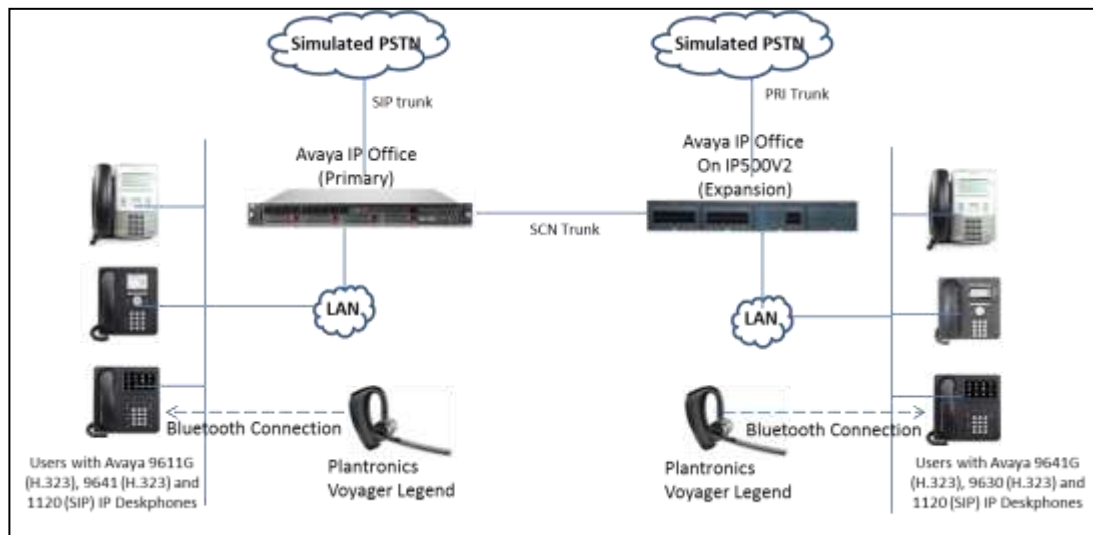


Figure 1: Test Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya IP Office Server Edition (primary)	9.1 SP 5
Avaya IP Office IP500V2 (expansion)	9.1 SP 5
Avaya 9641G Deskphone (H.323)	6.6
Avaya 9641GS Deskphone (H.323)	6.6
Plantronics Voyager Legend	FW v107. P/N: 87300-01

5. Configure Avaya IP Office

It is assumed that fully functioning Avaya IP Office systems are in place with the necessary licensing and that existing H.323 extensions and users are already configured on both IP Office systems for 96x1 Series IP Deskphones. For further information on the configuration of IP Office please see **Section 10** of these Application Notes.

6. Pairing Plantronics Voyager Legend Bluetooth Headset

This section describes steps to pair Voyager Legend Bluetooth headset to Avaya 96x1 Series IP Deskphones.

Note: Avaya 96x1 Series deskphone Bluetooth setup option is available only on the 9641G and 9641GS models, follow steps below to pair the headset with deskphone:

1. On deskphone, press **Home** button.
2. On the deskphone touch screen, tap **Settings**.
3. In the **Main Menu**, check if **Bluetooth Settings** option existed, if yes then process to step 6.
4. If there is no **Bluetooth Settings**, tap **Options & Settings**→**Advanced Options**.
5. Make sure **Enable Bluetooth** option is **YES**. Tap on **Back** button to go back to **Main Menu** and tap on the **Bluetooth Settings**.
6. On the headset, turn power button on and press the call button until hearing “Pairing” and the headset LED flashing blue and red.
7. On the deskphone, in **Bluetooth Settings** screen, tap on **Scan** button.
8. Select “PLT_Legend” to pair the headset to deskphone and user will hear “Pairing successful” and “Phone one connected”.

7. Verification Steps

Verify that the Plantronics Voyager Legend Bluetooth headset has been connected to the Avaya 96x1 Series IP Deskphone. Once the headset is connected to the phone, verify that incoming and outgoing calls can be established with two-way audio to the headset.

8. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics Voyager Legend Bluetooth headset with Avaya 96x1 Series IP Deskphone and IP Office Server Edition 9.1. All test cases were completed successfully.

9. 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] *IP Office Manager 9.1, Document 15-601011 Issue 9.14 0, September 2015.*

[2] *Administering Avaya Communicator for Android, iPad, iPhone, and Windows, Release 2.1 Issue 2, March 2015*

Documentation and information for the Plantronics Voyager Legend Bluetooth headsets can be found at the following websites:

[3] http://www.plantronics.com/us/media/media-resources/literature/cordless_mobile/voyager-legend Ug_en-us.pdf

[4] <http://www.plantronics.com/us/support/product/voyager-legend>

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