



## **Application Notes for Plantronics Voyager 5200 Bluetooth Headset with Avaya 96x1 Series IP Deskphones on Avaya Aura® Communication Manager and Avaya Aura® Session Manager - Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required to integrate the Plantronics Voyager 5200 Bluetooth Headset with Avaya 96x1 Series IP Deskphones using H.323 and SIP protocols. The Avaya IP deskphones register with Avaya Aura® Communication Manager or Avaya Aura® Session Manager. Specifically, the Avaya 9641G IP Deskphone, which provides integrated Bluetooth support, was used. Plantronics Voyager 5200 allows users to answer, end, and mute/un-mute calls directly from the headset.

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 5200 Bluetooth Headset with Avaya 96x1 Series IP Deskphones using H.323 and SIP protocols. The Avaya IP deskphones register with Avaya Aura® Communication Manager or Avaya Aura® Session Manager. Specifically, the Avaya 9641G IP Deskphone, which provides integrated Bluetooth support, was used. Plantronics Voyager 5200 allows users to answer, end, and mute/un-mute calls directly from the headset.

## 2. General Test Approach and Test Results

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.

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls to and from the Avaya 9641G IP Deskphone using the Plantronics headset and verifying two-way audio. The call types included calls to voicemail, to local extensions, and to the PSTN.

The serviceability testing focused on verifying the usability of the Plantronics Voyager 5200 Bluetooth Headset after restarting the Avaya 9641G Telephone and pairing (and disconnecting) the headset with the phone using Bluetooth.

## 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 internal extensions 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 headset.
- Receiving dial tone, incoming call notification (beeps), and ringback on headset on incoming and outgoing calls.
- Using the volume control buttons on the Plantronics headset to adjust the audio volume.
- Using the mute control button on the Plantronics headset to mute and un-mute the audio.
- Avaya 9641G IP Deskphones were tested running H.323 and SIP protocols.

For the serviceability testing, the Plantronics headset was paired with the 9641G IP deskphone using Bluetooth and removed from the Bluetooth device list on the phone. In addition, the 9641G IP telephone was restarted to verify proper operation of the headset after the reboot was completed.

## 2.2. Test Results

All test cases passed with the following observations:

- The Avaya 9641G SIP Deskphone does not provide volume or mute synchronization. That is, adjusting the volume or muting/unmuting a call from the headset does not reflect on the 9641G SIP deskphone and vice versa. There is volume and mute synchronization between the 9641G H.323 deskphone at the headset.
- When the 9641G IP deskphone receives an incoming call or an outgoing call is originated with the handset or speakerphone active, not the headset, pressing the call control button on the headset to terminate the results in headset announcing “Answering Call” even though the call is disconnected. This also occurs when the call control button is pressed to transfer the call from the headset to handset.

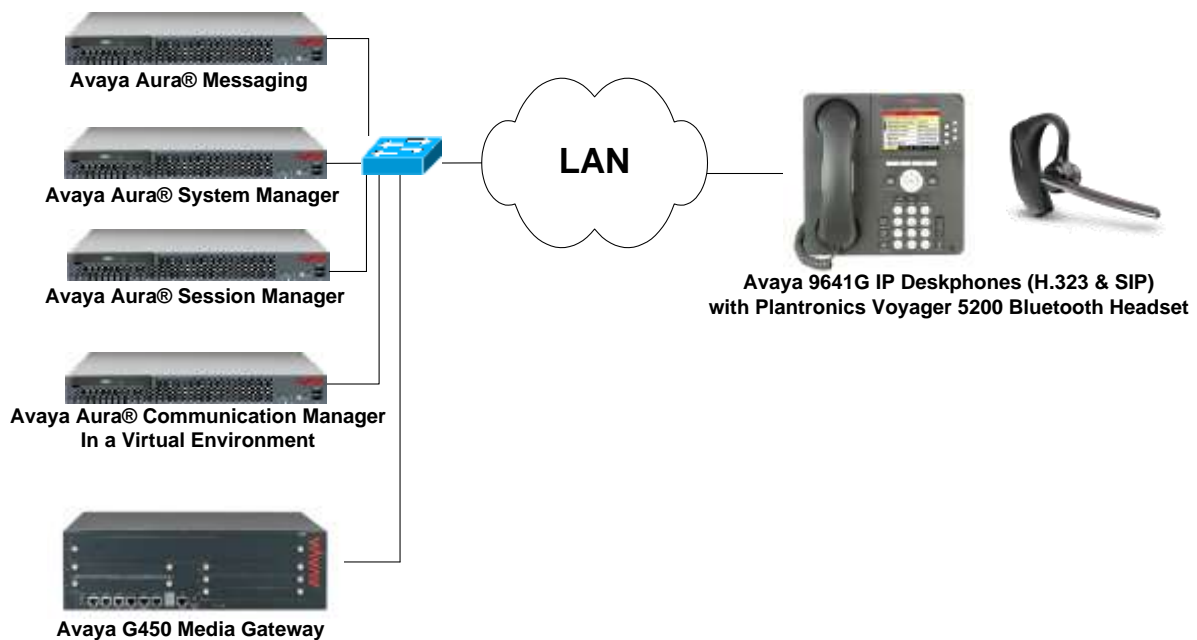
## 2.3. Support

For technical support and information on Plantronics Voyager 5200 Bluetooth Headset, contact Plantronics at:

- Phone: 1-855-765-7878 (toll free)
- Website: <http://www.plantronics.com/us/support/>

### 3. Reference Configuration

**Figure 1** illustrates the test configuration used to verify the Plantronics Voyager 5200 Bluetooth Headset with Avaya 9641G IP Deskphones. The configuration consists of an Avaya Aura® Communication Manager and Avaya Aura® Session Manager running in a virtual environment with an Avaya G450 Media Gateway providing connectivity to the PSTN via an ISDN-PRI trunk (not shown). The Avaya 9641G IP Deskphones registered as H.323 and SIP endpoints. Avaya Aura® Messaging was used as the voicemail system. The Plantronics headset was paired with the 9641G IP telephones as a Bluetooth device.



**Figure 1: Avaya 9641G IP Telephone with Plantronics Voyager 5200 Bluetooth Headset**

## 4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager with an Avaya G450 Media Gateway	7.0.1.0 SP 1 (R017x.00.0.441.0 with Patch 23012)
Avaya Aura® Session Manager	7.0.1 (7.0.1.0.701007)
Avaya Aura® System Manager	7.0.1 (Build No. 7.0.0.016266 Software Update Revision No: 7.0.1.0.064859 Feature Pack 1)
Avaya Aura® Messaging	6.3.2 SP 2 Patch 3
Avaya 96x1 Series IP Deskphones	6.6229 (H.323) 7.0.1.1.5 (SIP)
Plantronics Voyager 5200 Bluetooth Headset	v.117

## 5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for the Avaya 9641G IP Telephone. The configuration is performed via the System Access Terminal (SAT) on Communication Manager. The procedures include:

- Configuring a station for the 9641G IP deskphone
- Pairing the Plantronics headset with the IP deskphone.
- Setting up auto-answer

### 5.1. Configure a Station for Avaya 9641G IP Deskphones

Use the **add station** command to create an H.323 station for the 9641G IP deskphone. Set the **Type** field to *9641*. Set the **Port** field to *IP* and configure a **Security Code** as that password to be used by the Avaya telephone to log in. To create a SIP station for a 9641G deskphone, use System Manager. The only difference is that the **Type** field would be set to *9641SIP*.

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

add station 77304		Page 1 of 5
STATION		
Extension: 77304	Lock Messages? n	BCC: 0
<b>Type: 9641</b>	<b>Security Code: 1234</b>	TN: 1
<b>Port: IP</b>	Coverage Path 1:	COR: 1
Name: Plantronics	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: 77304	
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? n	
	IP Video? n	
	Short/Prefixed Registration Allowed: default	
	Customizable Labels? y	

## 5.2. Pair Plantronics Headset with IP Telephone

After the 9641G IP deskphones are configured and in-service, start the Bluetooth pairing process as described below. The 9641G IP deskphones provide a touch-screen.

1. Place the Plantronics Voyager 5200 Bluetooth Headset in pairing mode. Turn on the headset and then hold down the call control button until a tone is heard and the headset announces, “Pairing...”. In addition, the LED by the power button on the headset will blink red/blue while in pairing mode.
2. Next, on the 9641G, press the **Home** button and then select the **Settings** icon on the touch-screen.
3. Select **Bluetooth Setup** and then press the **Scan** soft button to discover the headset. The Bluetooth pairing process will begin.
4. The 9641G will display “Bluetooth Setup | Scanning...” on the touch-screen.
5. Once found, the 9641G will display the device found. It will indicate “Available Devices: PLT V5200 Series”.
6. On the 9641G, click on the headset to select it
7. The 9641G will proceed to connect to it. It will display, “Connecting to Bluetooth device: PLT V5200 Series”.
8. When the pairing process is completed, the 9641G will display, “Paired devices PLT V5200 Series” and the Plantronics headset will announce, “Pairing Successful”.

## 5.3. Setting UP Auto-Answer

### For H.323 Deskphone Only

In the 46xxsettings.txt file, the HEADSETBIDIR parameter needs to be set to ‘1’ so that switchhook and alerting are enabled for the H.323 deskphone only. This allows incoming call alert to be heard through the headset. Alternatively, the switchhook and alerting options can be enabled through the 96x1 phone menu. Press the **Menu** button on the phone and then navigate to **Options & Settings → Call Settings → Headset Signaling...** Select the **Switchhook & Alerting** option. Below is an example for setting this parameter.

```
##### HEADSET SETTINGS (H.323 ONLY) #####
##
## HEADSETBIDIR specifies whether bidirectional signaling
## on the headset interface will be enabled or disabled.
## Value Operation
## 0 Disabled (default)
## 1 Switchhook and alerting signaling are both enabled
## 2 Only switchhook signaling is enabled
## This parameter is supported by:
## 96x1 H.323 R6.3 and later (values 0-2)
## 96x1 H.323 R6.2.1 and later (values 0-1)
## Note that 96x1 H.323 R6.2 only supported signaling for alerting.
SET HEADSETBIDIR 1
```

### **For SIP Deskphone**

Set the **Auto Path** parameter, via the phone menu or 46xxsettings file to *Headset* so that incoming calls are answered via headset.

## **6. Configure Plantronics Voyager 5200 Bluetooth Headset**

No configuration is required for the Plantronics headset. However, the Plantronics headset does have to be paired with the Avaya 9641G IP telephone as a Bluetooth device. Once the headset has been paired, it will be ready for calls. See [6] for pairing instructions. In summary, to initiate Bluetooth pairing on the Plantronics headset, turn off the headset and then turn it back on by pressing the call control button until the headset plays the “Pairing...” announcement. Also, refer to **Section 5.2** for pairing instructions on the Avaya 9641G IP Deskphone.

## **7. Verification Steps**

Verify that the Plantronics headset has been paired with the 9641G IP telephones using Bluetooth by viewing the Bluetooth device list on the phone under **Bluetooth Setup**. 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.

## **8. Conclusion**

These Application Notes describe the configuration steps required to integrate the Plantronics Voyager 5200 Bluetooth Headset with the Avaya 96x1 IP Deskphone using the H.323 and SIP protocols. 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] *Administering Avaya Aura® Communication Manager*, Release 7.0.1, Issue 2, May 2016, Document Number 03-300509.
- [2] *Administering Avaya 9601/9608/9611G/9621G/9641G/9641GS IP Deskphones SIP*, Release 7.0.1, Issue 1, May 2016.
- [3] *Administering Avaya 9601/9608/9611G/9621G/9641G/9641GS IP Deskphones H.323*, Release 6.6.2, Issue 1, May 2016.

The following Plantronics product documentation can be found at <http://www.plantronics.com>.

- [4] *Plantronics Hub for Windows/MAC User Guide*, v3.8.1.
- [5] *Plantronics Hub for Windows/MAC User Interface Reference*, v 3.8.
- [6] *Plantronics Voyager 5200 UC Wireless Headset System User Guide*.

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