



Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics EncorePro HW510/HW520 Headsets and Plantronics HIS Adapter Cable with Avaya 9600 Series IP Deskphones - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the Plantronics EncorePro HW510/HW520 Headsets and Plantronics HIS Adapter Cable with Avaya 9600 Series IP Deskphones using H.323 and SIP protocols. The EncorePro HW510/HW520 headsets provide two-way audio with a flexible mic. This solution does not provide call control features directly from the headset, such as answering or terminating a call from the headset. Volume control and mute are provided directly from the Avaya IP deskphone.

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 EncorePro HW510/HW520 Headsets and Plantronics HIS Adapter Cable with Avaya 9600 Series IP Deskphones using H.323 and SIP protocols. The EncorePro HW510/HW520 headsets provide two-way audio with a flexible mic. This solution does not provide call control features directly from the headset, such as answering or terminating a call from the headset. Volume control and mute are provided directly from the Avaya IP deskphone.

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 9600 Series IP Deskphones with the Plantronics EncorePro HW510/HW520 Headsets and verifying two-way audio. The call types included calls to voicemail, local extensions, and the PSTN.

The serviceability testing focused on verifying the usability of the Plantronics headsets after restarting the Avaya 9600 Series IP Deskphones and re-connecting the headset to the deskphone.

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 internal extensions to verify two-way audio.
- Placing calls to the PSTN to verify two-way audio.
- Hearing ring back tone for outgoing calls.
- Toggling between handset, speakerphone, and headset.
- Using the volume control buttons on the Avaya deskphone.
- Using the mute control button on the Avaya deskphone to mute and un-mute the audio.
- Using the headset with 9640G H.323, 9650C H.323 and 9630G SIP deskphones.

For the serviceability testing, the Avaya IP deskphones and headset were restarted to verify proper operation of the headset after the reboot was completed.

2.2. Test Results

All test cases passed with the following observation(s):

- Incoming call alert is not heard through headset, it is heard through phone.

2.3. Support

For technical support and information on Plantronics EncorePro HW510/HW520 Headsets, contact Plantronics Support at:

- Phone: 1-855-765-7878
1-831-426-5858 (International)
- Website: <http://www.plantronics.com/us/support/index.jsp>

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the Plantronics EncorePro HW510/HW520 Headsets with Avaya 9600 Series IP Deskphones. The configuration consists of an Avaya S8800 Server running Avaya Aura® Communication Manager with an Avaya G450 Media Gateway providing connectivity to the PSTN via an ISDN-PRI trunk. In addition, SIP endpoints registered with Avaya Aura® Session Manager and were configured via Avaya Aura® System Manager. Avaya Aura® Messaging was used as the voicemail system. The Plantronics EncorePro HW510/HW520 Headset was connected to the Plantronics HIS Adapter Cable which in turn connected to the headset port of the Avaya IP deskphone.

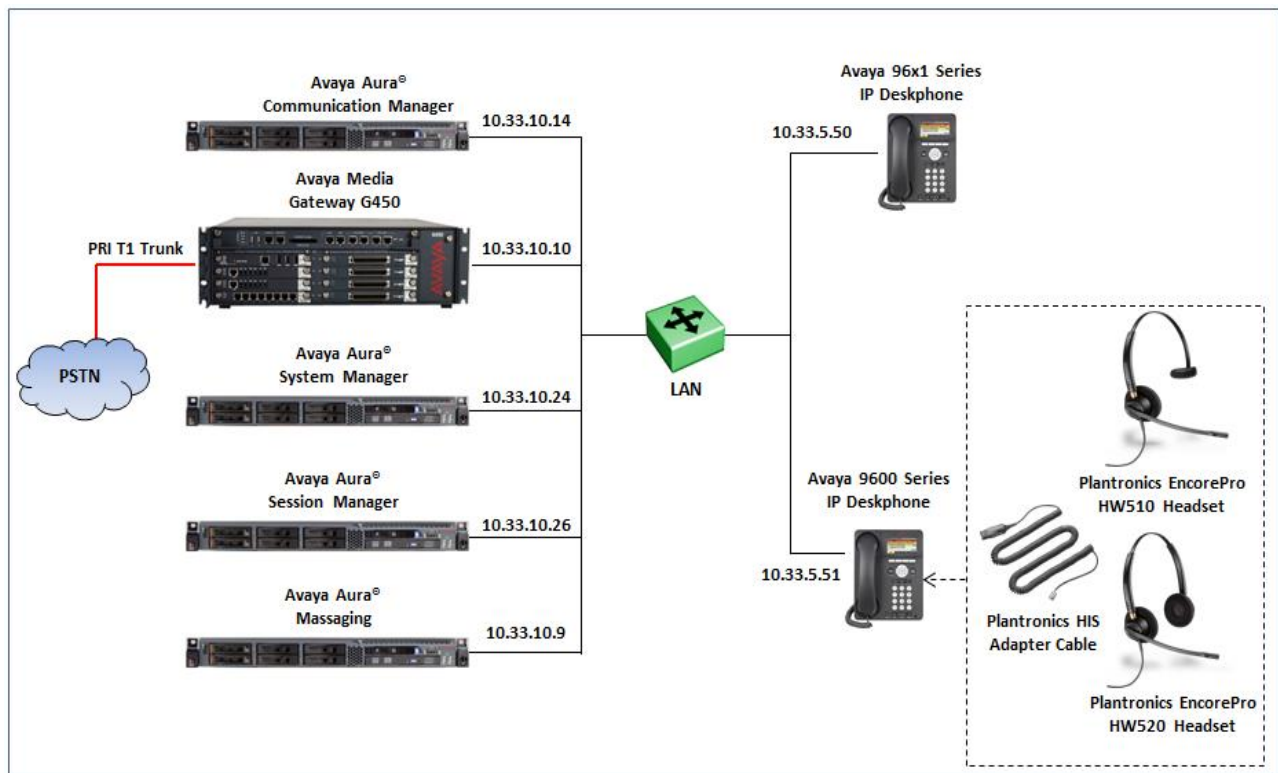


Figure 1: Avaya 9600 Series IP Deskphones with Plantronics EncorePro HW510/HW520 Headsets and Plantronics HIS Adapter Cable

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 running on an Avaya S8800 Server with a G450 Media Gateway	6.3 SP 8 (R016x.03.0.124.0 w/Patch 21588)
Avaya Media Gateway	35.8.0
Avaya Aura® Session Manager	6.3 SP 10 (6.3.10.631009)
Avaya Aura® System Manager	6.3.10 Build No. – 6.3.0.8.5682-6.3.8.3204 Software Update Revision No: 6.3.10.7.2656
Avaya Aura® Messaging	6.3.1
Avaya 9600 Series IP Deskphones	S3.230A (H.323) 2.6.13.1 (SIP)
Plantronics EncorePro 530 Headset	P/N 201500-01
Plantronics EncorePro 540 Headset	P/N 88828-01
Plantronics HIS Adapter Cable	P/N 72442-41

5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for the Avaya 9600 IP Deskphones. Configuration is performed via the System Access Terminal (SAT) on Communication Manager or via System Manager for SIP stations.

5.1. Configure a Station for Avaya 9600 Series IP Deskphone

Use the **add station** command to create a station for the 9650 IP deskphone. Set the **Type** field to the station type to be emulated. In this example, *9650* was used. Set the **Port** field to *IP* and configure a **Security Code** as that 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 60396		Page 1 of 5
STATION		
Extension: 60396	Lock Messages? n	BCC: 0
Type: 9650	Security Code: 1234	TN: 1
Port: IP	Coverage Path 1:	COR: 1
Name: IP 60396	Coverage Path 2:	COS: 1
	Hunt-to Station:	Tests? y
STATION OPTIONS		
Loss Group: 19	Time of Day Lock Table:	
	Personalized Ringing Pattern: 1	
	Message Lamp Ext: 60396	
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	

5.2. Configure a Station for Avaya 9600 Series SIP Deskphone

The SIP station was configured automatically through System Manager. Use the **display station** command to view the station for the 9630 IP Deskphone. The **Station Type** was set to *9630SIP* and a descriptive **Name** was also provided. Use the default values for the other fields on **Page 1**.

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*.

display station 60371		Page	1 of	6
STATION				
Extension: 60371	Lock Messages? n	BCC: 0		
Type: 9630SIP	Security Code:	TN: 1		
Port: S00164	Coverage Path 1:	COR: 1		
Name: SIP 60371	Coverage Path 2:	COS: 1		
	Hunt-to Station:			
STATION OPTIONS				
	Time of Day Lock Table:			
Loss Group: 19				
	Message Lamp Ext: 78005			
Display Language: english				
Survivable COR: internal				
Survivable Trunk Dest? y	IP SoftPhone? n			
	IP Video? n			

5.3. Configure 46xxsettings.txt File

In the 46xxsettings.txt file, the HEADSYS parameter needs to be set appropriately depending on whether the headset button should be deactivated automatically if the far-end drops the call. For stations configured with auto-answer, set this parameter to '1' so that the headset button is not deactivated when the far-end drops the call. This allows the subsequent call to be answered automatically through the headset. Below is an example for setting this parameter. In this example, the parameter is set to '0', which would cause the headset button to be deactivated when the far-end drops the call first.

```
##### CALL CENTER SETTINGS #####
##
## HEADSYS specifies whether the telephone will go on-hook if the headset is active
## when a Disconnect message is received.
## Value Operation
## 0 The telephone will go on-hook if a Disconnect message is received when the headset is
active
## 1 Disconnect messages are ignored when the headset is active
## Note: a value of 2 has the same effect as a value of 0, and
## a value of 3 has the same effect as a value of 1.
## This parameter is supported by:
## 96x1 H.323 R6.2.1 and later (the default value is 0 unless the value
## of CALLCTRSTAT is set to 1, in which case the default value is 1)
## 96x1 H.323 R6.1 and R6.2 ignore this parameter, and will ignore Disconnect messages
## if the user is logged in as a call center agent. If the user is not logged in
## as a call center agent, the telephone will go on-hook if a Disconnect message
## is received when the headset is active.
## 96x1 H.323 releases prior to R6.1 (the default value is 1)
## 96x1 SIP R6.4 and later (the default value is 0)
## 96x1 SIP R6.0 and later up to R6.4 (not included) (the default value is 1)
## 96x0 H.323 R1.2 and later (the default value is 1)
## 96x0 SIP R1.0 and later (the default value is 1)
## 16xx H.323 R1.3 and later (the default value is 1)
SET HEADSYS 0
```


6. Connect Plantronics EncorePro HW510/HW520 Headsets

Connect the EncorePro HW510/HW520 headset to the Plantronics HIS Adapter Cable, and then connect the HIS cable directly to the headset port of the Avaya 9600 Series IP Deskphones.

7. Verification Steps

Verify that the Plantronics EncorePro HW510/HW520 Headsets and Plantronics HIS Adapter Cable have been connected to the Avaya 9600 Series IP Deskphones. Once the headset is connected to the phone, verify that incoming and outgoing calls are established with two-way audio to the headset.

8. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics Encorepro HW510/HW520 Headsets and Plantronics HIS Adapter Cable with Avaya 9600 Series IP Deskphones. All test cases were completed successfully with observations noted in **Section 2.2**.

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 6.3, Issue 9, October 2013, Document Number 03-300509.
- [2] *Administering Avaya one-X® Deskphone SIP for 9620/9620C/9620L/9630/9630G/9640/9640G/9650/9650C IPDeskphones*, Release 2.6.10, Issue 5, May 2013, Document Number 16-604083.
- [3] *Avaya one-X® Deskphone Edition for 9600 Series IP Telephones Administrator Guide Release 3.2*, Issue 9, January 2013, Document Number 16-300698.

The following Plantronics product documentation is available with the headset.

- [4] *Plantronics HW540 Quick Start Guide*.
- [5] *Plantronics User Guide HIS Headset Adapter Cable Amplifier Installation*.

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