Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics HIS Adapter and Plantronics SupraPlus Noise-Canceling Headset with Avaya 96x1 Series IP Deskphones - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the Plantronics HIS Adapter and Plantronics SupraPlus Noise-Canceling Headset with Avaya 96x1 Series IP Deskphones using H.323 and SIP protocols.

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 for Plantronics HIS Adapter cable and Plantronics SupraPlus headset with Avaya 96x1 Series IP Deskphone and Avaya Aura® Communication Manager.

The following Plantronics headset and accessory were tested:

- HIS Adapter cable
- SupraPlus HW251N Noise-Canceling 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 96x1 Series IP Deskphones with the HIS Adapter and SupraPlus 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 SupraPlus headset after restarting the Avaya 96x1 Series IP Deskphones and re-connecting the SupraPlus headset.

2.1. Interoperability Compliance Testing

All test cases were performed manually. The following features were verified:

- Using the headset with 9621G H.323 and 9641G SIP telephones.
- 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 phones to adjust the audio volume.
- Using the mute control button on the phones to mute and un-mute the audio.
- Put the call on hold and retrieve it.

For the serviceability testing, a 96x1 IP telephone and headset were restarted to verify proper operation of the headset after the reboot was completed.

2.2. Test Results

The objectives outlined in the **Section 2.1** were verified. All test cases have passed.

2.3. Support

For technical support and information on Plantronics HIS Adapter and SupraPlus Noise-Canceling Headset, contact Plantronics:

- 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 HIS Adapter and HW251N headset with Avaya 96x1 Series IP Deskphones. The configuration consists of an Avaya S8300D Server running Communication Manager on Avaya G450 Media Gateway. Messaging was used as the voicemail system.

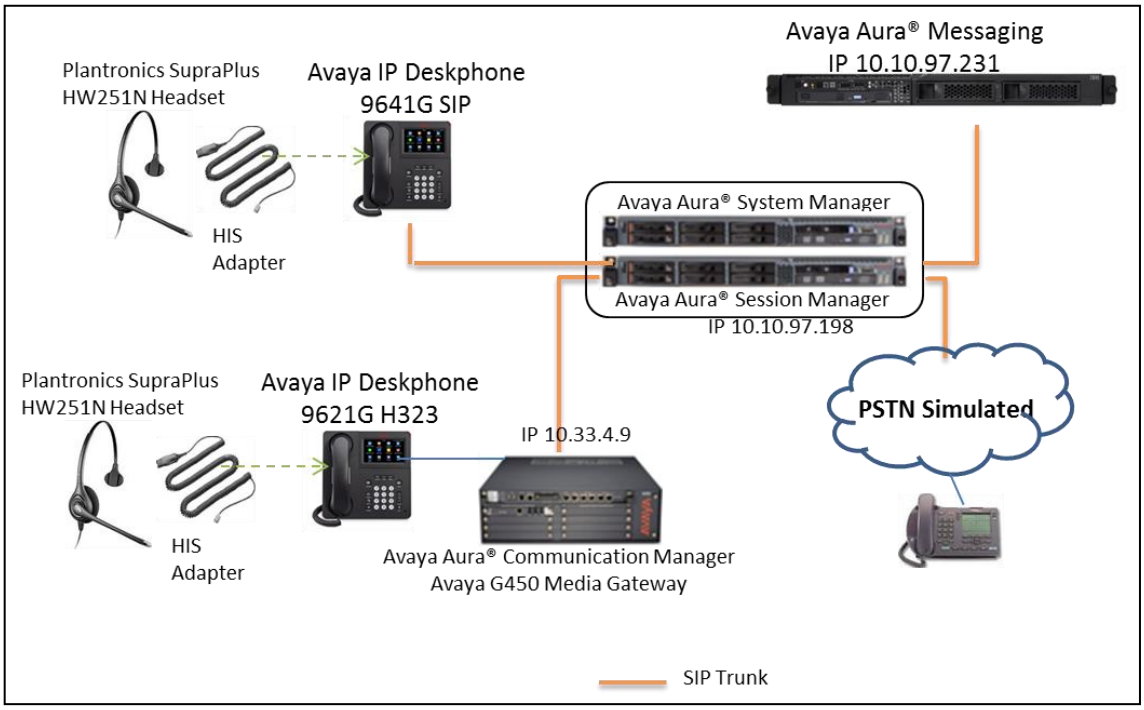

Figure 1: Avaya 96x1 Series IP Deskphones with Plantronics HIS Adapter and SupraPlus Headset

3.1. Answering, Ending, and Placing Calls

To answer, end, or place a call using the Plantronics headset follow the instructions below.

To Answer a Call	Press the headset button on the phone to answer an incoming call. If auto-answer is enabled, upon the incoming call, the headset button on the IP telephone is automatically activated, the call is answered and a two-way audio path will be established to the headset.
To End a Call	Press the headset button on the headset to terminate a call.
To Place a Call	Press the headset button on the IP telephone to activate the headset, when hear the dial tone in the headset start to enter number to make an outgoing call.

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 S8300D Server with a G450 Media Gateway	6.3 SP4 (R016x.03.0.124.0 w/Patch 21291)
Avaya Aura® Messaging	6.3-03.0.124.0-315
Avaya Aura® Session Manager	6.3 (6.3.5.0.635005)
Avaya Aura® System Manager	6.3.8.1337
Avaya 9621G IP Deskphone	6.4014(H.323)
Avaya 9641G IP Deskphone	6.4.0.33(SIP)
Plantronics HIS Adapter	72442-41
Plantronics SupraPlus Headset	HW251N

5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for the Avaya 9621G IP Deskphone. The configuration is performed via the System Access Terminal (SAT) on Communication Manager and via System Manager for SIP stations.

5.1. Configure a Station for Avaya 96x1 H323 Telephone

Use the **add station** command to create a station for the 9621G IP telephone. Set the **Type** field to the station type to be emulated. In this example, *9621* was used. Set the **Port** field to *IP* and configure a **Security Code** *40000* as that password to be used by the Avaya telephone to log in.

```
add station 40000                                          Page   1 of   5
                                   STATION

Extension: 40000                       Lock Messages? n               BCC: 0
     Type: 9621                        Security Code: 40000            TN: 1
     Port: IP                        Coverage Path 1:                 COR: 1
     Name: SupraPlus                 Coverage Path 2:                 COS: 1
                                     Hunt-to Station:
STATION OPTIONS
                                          Time of Day Lock Table:
             Loss Group: 19          Personalized Ringing Pattern: 1
                                           Message Lamp Ext: 40000
          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
```

5.1.1. Configure Auto Answer

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*. For H323 phones, user can configure auto answer button **int-aut-an** in **BUTTON ASSISGNMENT** section on **Page 4** (show below).

```
                                                Page   4 of   5
                                    STATION
 SITE DATA
       Room:                                        Headset? n
       Jack:                                        Speaker? n
      Cable:                                       Mounting: d
      Floor:                                     Cord Length: 0
   Building:                                       Set Color:

ABBREVIATED DIALING
     List1:                     List2:                    List3:
BUTTON ASSIGNMENTS
 1: call-appr                              5:
 2: call-appr                              6:
 3: call-appr                              7:
 4: int-aut-an                             8:

    voice-mail
```

5.1.2. Enable Switchhook & Alerting Option

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 phone. This allows incoming call alert to be heard through the headset. Below is an example for setting the 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
```

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.

5.2. Configure a Station for Avaya 96x1 Series SIP Telephone

The SIP station was configured automatically through Avaya Aura® System Manager. Use the **display station** command to view the station for the 9641G IP telephone. The **Station Type** was set to *9641SIP* 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 telephone set the **Auto Answer** field on **Page 2** (not shown) to the appropriate value, such as *all*.

```
display station 46010                                        Page   1 of   6
                                    STATION

Extension: 46010                        Lock Messages? n              BCC: 0
     Type: 9641SIP                      Security Code:                 TN: 1
     Port: IP                         Coverage Path 1: 50             COR: 1
     Name: SupraPlus                  Coverage Path 2:                COS: 1
                                      Hunt-to Station:
STATION OPTIONS
                                          Time of Day Lock Table:
             Loss Group: 19
                                                Message Lamp Ext: 46010

        Display Language: english

          Survivable COR: internal
   Survivable Trunk Dest? y                          IP SoftPhone? n

                                                        IP Video? n
```

6. Connect Plantronics HIS Adapter and SupraPlus Headset

During the compliance test, the Plantronics HIS headset adapter cable is used for the connection of the Plantronics headsets to the Avaya 96x1 Series IP Deskphones. The procedure for connecting the cable is:

- Connect the Plantronics HIS adapter cable's RJ11 port to the headset socket on the Avaya IP phone.
- Connect the Plantronics HIS cable and headset through the quick disconnect plug.

7. Verification Steps

- Pick up and put the headset on, press the headset button on the deskphone and the ring back tone is also heard in the speaker of headset.
- From the IP phone with adapter and headset, dial an extension of another Avaya IP telephone and answer the call on that telephone.
- Check audio path on the headset and the handset of the other telephone; it should be clear.
- End the call above by pressing the headset button on the phone or hanging up the handset; the light of the headset button on the Avaya IP telephone goes OFF and the call is now released.

8. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics HIS Adapter and Plantronics SupraPlus Headset with Avaya 96x1 Series IP Deskphones. All test cases were completed successfully.

9. Additional References

This section references the Avaya and SupraPlus 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 9601/9608/9608G/9611G/9608G/9641G Deskphones SIP, Release 6.3.1, Issue 3, January 2014, Document Number 16-601944.

[3] Installing and Maintaining Avaya Deskphone SIP 9601/9608/9608G/9611G/9608G/9641G Deskphones, Release 6.3.1, Issue 4, January 2014, Document Number 16-603504.

[4] Administering Avaya IP Deskphone H.323 9608, 9608G, 9611G, 9608G, and 9641G, Release 6.3.1, Issue 17, January 2014, Document Number 16-300698.

[5] Installing and Maintaining Avaya IP Deskphone H.323 9608, 9608G, 9611G, 9608G, and 9641G, Release 6.3.1, Issue 9, January 2014, Document Number 16-603603.

The SupraPlus product documentation is available with the headset.

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.