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Avaya Solution & Interoperability Test Lab

Application Notes for PhoneTech S80 Headset Adapter with Avaya 9600 Series IP Telephones - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the PhoneTech S80 Headset Adapter and PhoneTech R10RJAMP Headset (Configuration 1) with Avaya 9600 Series IP Telephones using H.323 and SIP protocols. The S80 adapter performs a polarity shift of RJ headsets, allowing a Configuration 1 RJ headset to be converted to a Configuration 4 RJ headset and vice versa. In the compliance test, a PhoneTech RJ10RAMP (Conf 1) headset was connected to the S80 adapter, which in turn was connected to the Avaya 9600 Series IP Deskphone. Together, the S80 adapter and the R10RJAMP headset provide two-way audio, allows the audio volume to be adjusted and the audio to be muted/unmuted directly from the headset. This solution does not provide call control features directly from the headset, such as answering or terminating a call 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 PhoneTech S80 Headset Adapter and PhoneTech R10RJAMP Headset (Configuration 1) with Avaya 9600 Series IP Telephones using H.323 and SIP protocols. The S80 adapter performs a polarity shift of RJ headsets, allowing a Configuration 1 RJ headset to be converted to a Configuration 4 RJ headset and vice versa. In the compliance test, a PhoneTech RJ10RAMP (Conf 1) headset was connected to the S80 adapter, which in turn was connected to the Avaya 9600 Series IP Deskphone. Together, the S80 adapter and the R10RJAMP headset provide two-way audio, allows the audio volume to be adjusted and the audio to be muted/unmuted directly from the headset. This solution does not provide call control features directly from the headset, such as answering or terminating a call 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 9600 Series IP Telephones with the PhoneTech S80 Adapter and the PhoneTech R10RJAMP 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 S80 adapter and headset after restarting the Avaya 9600 Series IP Telephones and re-connecting the PhoneTech headset.

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 S80 adapter and headset to adjust the audio volume.
- Using the mute control button on the S80 adapter and headset to mute and un-mute the audio.
- Using the headset with 9620 H.323 and SIP deskphones.

For the serviceability testing, an Avaya 9620 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 observation(s):

- Incoming call alert is not heard through the headset, it is heard through the Avaya 9600 Series IP Telephone.
- There is no mute sync between headset and phone.

2.3. Support

For technical support and information on PhoneTech S80 Headset Adapter, contact PhoneTech in Brazil:

- Phone: 55 (11) 3717-1881
- Website: http://www.phonetech.com.br
- Email: contato@phonetech.com.br

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the PhoneTech S80 Headset Adapter and PhoneTech R10RJAMP Headset with Avaya 9600 Series IP Telephones. The configuration consists of an Avaya S8800 Server running Avaya Aura® Communication Manager with an Avaya G650 Media Gateway providing connectivity to the PSTN via an ISDN-PRI trunk (not shown). Avaya Aura® Messaging was used as the voicemail system. The R10RJAMP headset was connected to the RJ port of the S80 adapter, and the S80 adapter was connected to the headset port of the Avaya phone.
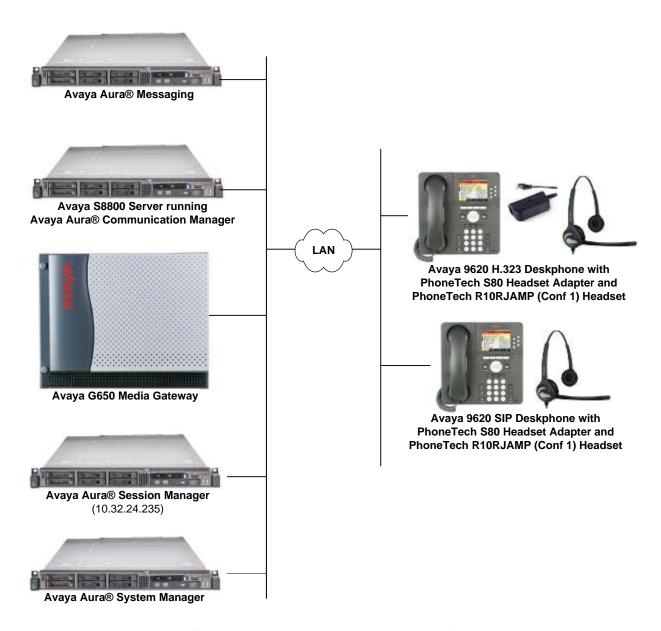
Avaya Aura® Messaging

**Avaya S8800 Server running
Avaya Aura® Communication Manager**

Avaya G650 Media Gateway

LAN

**Avaya 9620 H.323 Deskphone with
PhoneTech S80 Headset Adapter and
PhoneTech R10RJAMP (Conf 1) Headset**

**Avaya 9620 SIP Deskphone with
PhoneTech S80 Headset Adapter and
PhoneTech R10RJAMP (Conf 1) Headset**

Avaya Aura® Session Manager
(10.32.24.235)

Avaya Aura® System Manager

**Figure 1: Avaya 9600 Series IP Telephone with PhoneTech S80 Headset Adapter and
PhoneTech R10RJAMP Headset**

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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 Avaya S8300 Server with a G450 Media Gateway	R016x.03.0.124.0 with Patch 21588
Avaya Aura® Messaging	6.2 SP 2
Avaya 9600 Series IP Telephones	3.240A (H.323) 2.6.13.1 (SIP)
PhoneTech S80 Headset Adapter	N/A
PhoneTech R10RJAMP (Conf 1) Headset	N/A

5. Configure Avaya Aura® Communication Manager

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

5.1. Configure a Station for Avaya 9600 Series IP Telephone

Use the **add station** command to create a station for the 9620 IP telephone. Set the **Type** field to the station type to be emulated. In this example, *9620* was used. Set the **Port** field to *IP* and configure a **Security Code** as that password to be used by the Avaya telephone to log in.

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 77301                                          Page   1 of   5
                                STATION

Extension: 77301                    Lock Messages? n              BCC: 0
     Type: 9620                     Security Code: 1234            TN: 1
     Port: IP                     Coverage Path 1:               COR: 1
     Name: PhoneTech              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: 77301
           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 Avaya Aura® System Manager. Use the **display station** command to view the station for the 9620 IP Deskphone. The **Station Type** was set to *9620SIP* 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 78005                                       Page   1 of   6
                                 STATION

Extension: 78005                      Lock Messages? n             BCC: 0
      Type: 9620SIP                   Security Code:                TN: 1
      Port: S00164                 Coverage Path 1:                COR: 1
      Name: 78005, Avaya           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 PhoneTech R10RJAMP Headset

Connect the R10RJAMP headset to the RJ port of the S80 headset adapter, and then connect the S80 adapter directly to the headset port of the Avaya 9600 Series IP Deskphone. The S80 adapter was in key position 2.

7. Verification Steps

Verify that the PhoneTech S80 Headset Adapter and PhoneTech R10RJAMP Headset have been connected to the Avaya 9600 Series IP Deskphone. 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 provide volume and mute control.

8. Conclusion

These Application Notes describe the configuration steps required to integrate the PhoneTech S80 Headset Adapter and PhoneTech R10RJAMP (Conf 1) Headset with Avaya 9600 Series IP Telephones. All test cases were completed successfully with observations noted in **Section 2.2**.

9. Additional References

This section references the Avaya and PhoneTech 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.

The following PhoneTech product documentation is available with the headset.

[3] *PhoneTech S Series Adapters Technical Information.*

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