AVAYA

Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics APV-63 EHS Adapter and Plantronics MDA 200 with Avaya 9400/9500 Series Digital Telephones - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the Plantronics APV-63 EHS (Electronic Hook Switch) Adapter and the Plantronics MDA 200 with Avaya 9400/9500 Series Digital Telephones. Plantronics APV-63 EHS provides Plantronics headsets the ability to answer and end calls from the MDA 200. The MDA 200 is a switcher that allows Plantronics USB corded headsets to handle calls from either the Avaya 9400/9500 Series Digital Telephones or from an IP softphone, such as Avaya one-X Communicator. The MDA 200 was used to verify the functionality of the EHS adapter.

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.

JAO; Reviewed:
SPOC 5/1/2013
Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.
1 of 11
PlantMDA-9400

1. Introduction

These Application Notes describe the configuration steps required to integrate the Plantronics APV-63 EHS (Electronic Hook Switch) Adapter and the Plantronics MDA 200 with Avaya 9400/9500 Series Digital Telephones. Plantronics APV-63 EHS provides Plantronics headsets the ability to answer and end calls from the MDA 200. The MDA 200 is a switcher that allows Plantronics USB corded headsets to handle calls from either the Avaya 9400/9500 Series Digital Telephones or from an IP softphone, such as Avaya one-X Communicator. The Plantronics Blackwire C610 USB Headset was used to verify the functionality of the EHS adapter and MDA 200.

Note: The Avaya 9400 Series Digital Telephone is supported on Avaya Aura® Communication Manager and the Avaya 9500 Series Digital Telephone is supported on Avaya IP Office.

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 9400/9500 Series Digital Telephones with the Plantronics APV-63 EHS Adapter, Plantronics MDA 200, and Plantronics Blackwire USB Headset and verifying two-way audio. The call types included calls to voicemail, to local extensions, and to the PSTN. In addition, it was also verified that the MDA 200 could also handle calls with Avaya one-X Communicator. In this configuration, the MDA 200 was connected to both the IP telephone and the IP softphone.

The serviceability testing focused on verifying the usability of the Plantronics wireless headset after restarting the Avaya 9400/9500 Series Digital Telephones.

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 MDA 200.
- Answering calls destined to either the IP telephone or IP softphone.
- 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.

For the serviceability testing, the Avaya 9404/9508 Digital Telephones 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):

- Pressing the headset button on the digital phone does not consistently activate the call control button on the MDA 200 to provide dial tone to the headset. As a workaround, press the call control button the MDA 200 to get dial tone on the headset. This is a known issue with the Avaya 9400/9500 Digital Telephones.
- When auto-answer is enabled on the Avaya 9400/9500 Series Digital Telephones, incoming calls are automatically answered on the handset, but the call control button on the Plantronics headset still needs to be pressed in order to use the headset.
- The MDA 200 does not provide ring alerts for incoming calls to corded headsets.

See **Section 3.1** for instructions on answering, ending, and placing calls with the headset.

2.3. Support

For technical support and information on Plantronics APV-63 EHS Adapter and Plantronics MDA 200, contact Plantronics 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 APV-63 EHS Adapter, Plantronics MDA 200, and Plantronics Blackwire C610 USB Headset with an Avaya 9400/9500 Series Digital Telephone. The configuration consists of an Avaya S8300 Server running Avaya Aura® Communication Manager with an Avaya G450 Media Gateway providing connectivity to the PSTN (not shown) and an Avaya IP Office 500 V2. The MDA 200 may be connected to a PC running an Avaya IP softphone, such as Avaya one-X Communicator (not shown). Avaya Aura® Messaging was used as the voicemail system.
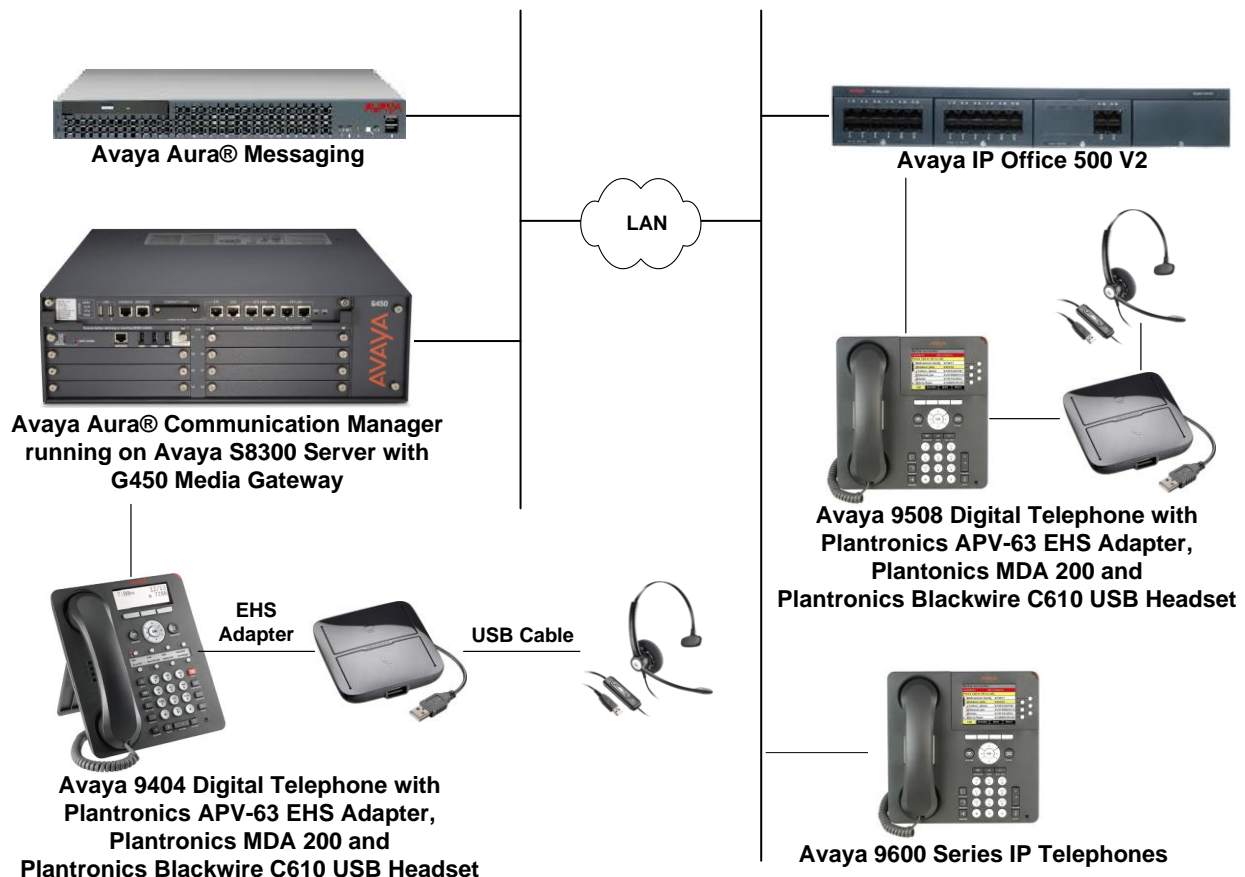
Figure 1: Avaya 9400/9500 Series Digital Telephones with Plantronics APV-63 EHS Adapter, Plantronics MDA 200, and Plantronics Blackwire C610 USB Headset

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 call control button on the headset to answer an incoming call. This would automatically activate the headset button on the digital telephone.

  Alternatively, if the headset button on the digital telephone is pressed first, then press the call control button on the headset, if it isn't already activated, to answer an incoming call. Note that pressing the headset button on the digital telephone does not always activate the call control button on the headset automatically (see **Section 2.2**).

- The 9404 digital telephone cannot auto-answer directly to the headset, it must first auto-answer to the handset and then switch to the headset. When the far-end drops, the headset button on the digital telephone is de-activated.

- The 9508 digital telephone with Avaya IP Office can auto-answer an internal call on the headset if the headset button on the phone and the call control button on the MDA 200 are both activated.

To End a Call
Press the call control button on the MDA 200 to terminate a call. This automatically deactivates the headset button on the digital telephone.

Alternatively, if the call is terminated by pressing the headset button on the digital telephone, the call control button on the headset remains activated sometimes. Note that pressing the headset button on the digital telephone does not always deactivate the call control button on the headset automatically as mentioned above.

To Place a Call
Press the call control button on the MDA 200 or the headset button on the phone to get dial tone and dial the number. As mentioned in **Section 2.2**, sometimes pressing the headset button on the digital telephone does not automatically activate the call control button on the MDA 200. In this case, ensure that the call control button on the MDA 200 is activated to get dial tone.

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	6.2 SP 3 (R016x.02.0.823.0 with Patch 19926)
Avaya IP Office 500 V2	8.1 (52)
Avaya Aura® Messaging	6.0.1 SP 1
Avaya 9400 Series Digital Telephones with Avaya Aura® Communication Manager	FW 18
Avaya 9500 Series Digital Telephones with Avaya IP Office	FW 44
Avaya 9600 Series IP Telephones	3.1 SP 5 (H.323)
Plantronics APV-63 EHS Adapter	P/N 38734-11
Plantronics MDA 200	USB Firmware 58
Plantronics Blackwire C610 USB Headset	90

Note: Testing was performed with IP Office 500 R8.1, but it also applies to IP Office Server Edition R8.1. Note that IP Office Server Edition requires an Expansion IP Office 500 v2 R8.1 to support analog or digital endpoints or trunks.

5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for the Avaya 9404 Digital Telephone. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

5.1. Configure a Station for Avaya 9400 Series Digital Telephone

Use the **add station** command to create a station for the 9404 Digital telephone. Set the **Type** field to the station type to be emulated. In this example, *9404* 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 40010                                          Page   1 of   5
                              STATION

Extension: 40010                    Lock Messages? n                 BCC: 0
     Type: 9404                      Security Code:                    TN: 1
     Port: 001V301                   Coverage Path 1:                 COR: 1
     Name: Plantronics               Coverage Path 2:                 COS: 1
                                     Hunt-to Station:
STATION OPTIONS
                                     Time of Day Lock Table:
            Loss Group: 2       Personalized Ringing Pattern: 1
                                        Message Lamp Ext: 40010
          Speakerphone: 2-way          Mute Button Enabled? y
      Display Language: english

        Survivable COR: internal
   Survivable Trunk Dest? y                       IP SoftPhone? n
                                        Remote Office Phone: n
                                                  IP Video? n
```

6. Configure Avaya IP Office

Avaya IP Office automatically configured a digital station (extension and user) for the 9508 digital telephone, which will use the Plantronics headset. This section displays the extension and user configuration using the Avaya IP Office Manager application.

From a PC running the Avaya IP Office Manager application, select **Start → Programs → IP Office → Manager** to launch the Manager application.   Select the proper IP Office system and log in with the appropriate credentials.

6.1. Extension Configuration

From the configuration tree in the left pane, select the appropriate **Extension** for the digital station to view the configuration, which is shown below. In this example, extension *60010* was used.
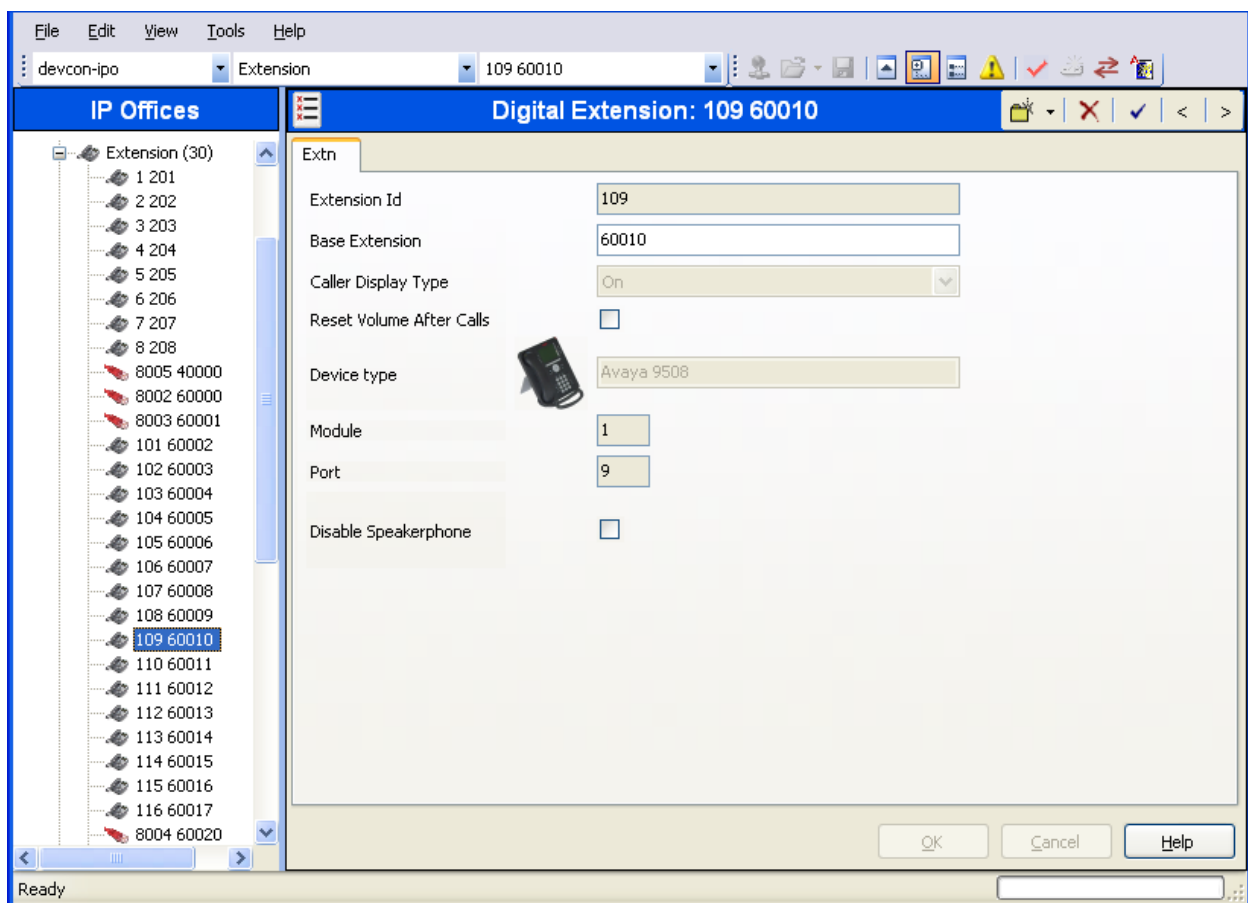
6.2. User Configuration

From the configuration tree in the left pane, select the appropriate **User** for the digital station to view the configuration, which is shown below. In this example, extension *60010* was used.

7. Configure Plantronics APV-63 EHS and Plantronics MDA 200

Use the APV-63 EHS adapter to connect the MDA 200 to the headset port of the digital telephone. Connect the MDA 200 to the PC running the IP softphone via the USB cable on the MDA 200. The Blackwire C610 USB Headset connects to the MDA 200 via USB. The default settings on the MDA 200 were used.

8. Verification Steps

Verify that the Plantronics APV-63 EHS, Plantronics MDA 200, and Plantronics USB headset have been connected to the Avaya 9400/9500 Series Digital Telephone. Once the headset is connected to the phone, verify that incoming and outgoing calls are established with two-way audio to the headset connected to the MDA 200 and that the headset can get dial tone and end an active call from the MDA 200.

9. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics APV-63 EHS Adapter and Plantronics MDA 200 Switcher with Avaya 9400/9500 Series IP Telephones. All test cases were completed successfully with observations noted in **Section 2.2**.

10. 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 6.2, Issue 7.0, December 2012, Document Number 03-300509.
[2] *Avaya one-X® Deskphone Edition for 9600 Series IP Telephones Installation and Maintenance Guide*, Release 3.1, Issue 7, November 2009, Document Number 16-300694.

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

[3] *Plantronics APV-63 EHS Adapter Quick Reference Guide.*
[4] *Plantronics MDA 200 Quick Start Guide.*

©2013 Avaya Inc. All Rights Reserved.
Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

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.