



Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics Hub and Blackwire 500 Series with Avaya Communicator for Window - Issue 1.0

Abstract

These Application Notes describe the compliance test and configuration procedures needed to integrate a Plantronics Hub and Blackwire 500 Series USB corded headsets to operate with Avaya Communicator for Window.

Plantronics Hub is a stand-alone application providing call control, settings management, update and battery level notifications and mute alerts to Plantronics headset. The Blackwire 500 Series USB corded headsets provide two-way audio with a noise-canceling flexible mic and call control buttons. This solution provides call control features directly from the headset, such as answering or terminating a call, adjusting volume control and mute 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 Plantronics and Blackwire 500 Series with Avaya Communicator for Window. In this compliance testing, the following headsets were tested:

- Blackwire C510 – Monaural, USB corded headset
- Blackwire C520 – Binaural, USB corded headset

2. General Test Approach and Test Results

The interoperability compliance test included functionality and serviceability testing. The functionality testing focused on placing and receiving calls to and from Avaya Communicator for Window clients using the Blackwire headsets, and verifying good talk path in both directions. The type of calls made included calls to the voicemail, and calls to and from internal extensions and the PSTN.

The serviceability testing focused on verifying the usability of the Blackwire headsets when Avaya Communicator for Window was restarted, after disconnecting and reconnecting the headsets to the USB port, and after a reboot on the PC where Avaya Communicator for Window was running.

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

The following functionality was 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 and receiving calls to and from internal extensions to verify two way audio path and quality.
- Placing and receiving calls to and from the PSTN to verify two way audio path and quality.
- Answering and ending calls using the Avaya Communicator for Window screen interface.
- Answering and ending calls using call control button on the headset.
- Hearing ring back tone for outgoing calls.
- Hearing ring alert for incoming calls.
- Using the volume control buttons on the headset to adjust the volume on the headset speakers.
- Using the mute control button on Avaya Communicator for Window and the headset to mute and un-mute the transmitted audio.
- Using Hold feature on Avaya Communicator for Window

For the serviceability testing, the headsets were disconnected and reconnected to the USB port of the PC running Avaya Communicator for Window to verify proper operation. In addition, the PC was rebooted to verify that the headsets were operational after the restart was completed and the application was reinitialized.

2.2. Test Results

All compliance test cases passed successfully. However, the following observation was noted:

1. During an active call, if a user makes a modification in the Hub application, the LED green light of the call control button of the headset is turned off. There is no impact to the audio of the call, and the call is still active. Work around is to put the call on hold by pressing the call button delay for 2 seconds and pressing the call control button again to retrieve the call. The light will be lit again.

2.3. Support

For technical support and information on the Plantronics products described in this solution, contact Plantronics Technical Support 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 solution. Avaya IP Office provides the VoIP resources for the connectivity of Avaya IP Deskphones and the SIP trunk to the simulated PSTN, used during the compliance tests. Avaya Communicator for Window was installed on two computer running Microsoft Windows 7 each Communicator was logged in using SIP user, on PC one SIP user was registered to Avaya IP Office primary Linux Server and the other registered to Avaya IP Office 500 V2. The Plantronics headset is connected to an available USB port in the PC.

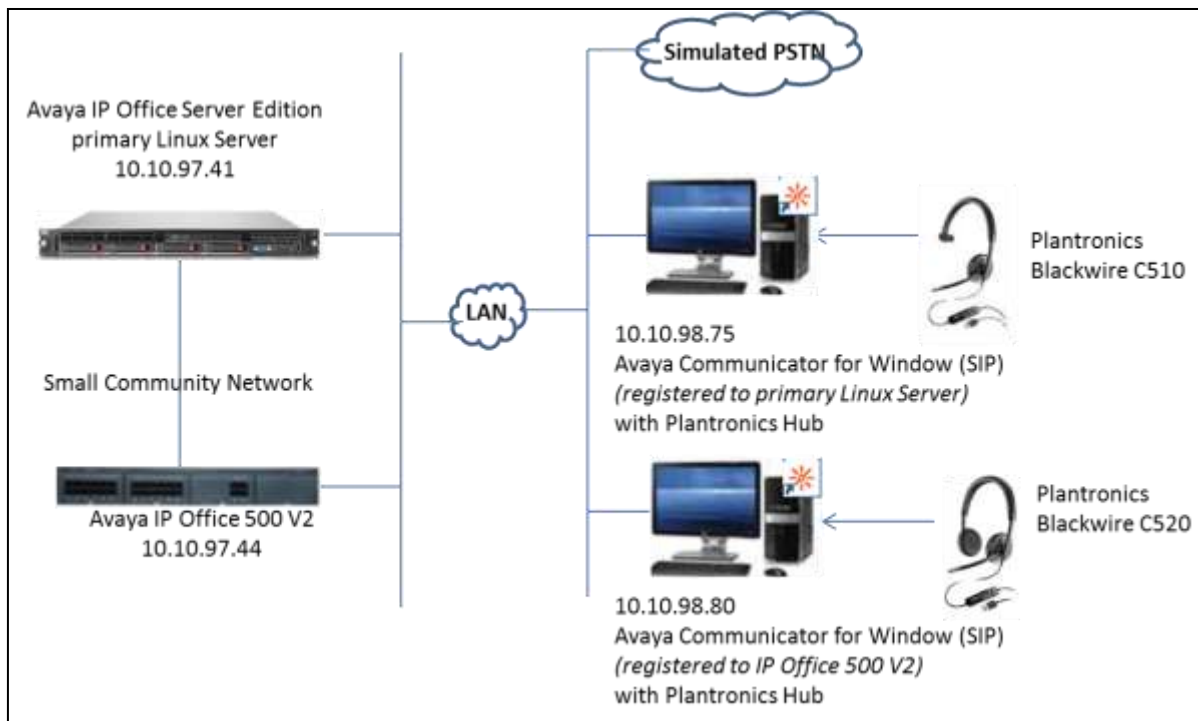


Figure 1: Test Configuration

4. Equipment and Software Validated

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

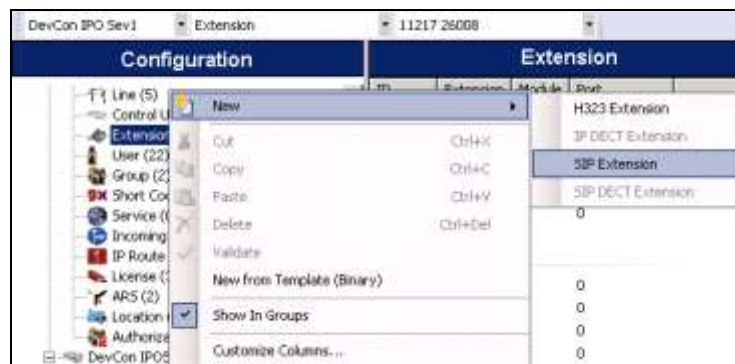
Equipment/Software	Release/Version
Avaya IP Office Primary Linux	9.1 SP 4
Avaya IP Office 500V2	9.1 SP 4
Avaya Communicator for Window	2.1 (2.1.0.9)
Plantronics Blackwire C510/ 520	FW147
Plantronics Hub	3.6.51102.21715

5. Configure Avaya IP Office

It is assumed that a fully functioning IP Office is in place with the necessary licensing. For further information on the configuration of IP Office please see **Section 10** of these Application Notes.

5.1. Configuring SIP Station

This section provides the procedures for configuring SIP user for Communicator for Window. In **Manager** window, from the configuration tree in the left pane, right-click on **Extension**, and select **New → SIP Extension** from the pop-up list to add a new SIP extension.



In the **Extn** tab type in an available extension number for **Base Extension**. Click **Ok** to save changes.



Right click on **User**, and select **New** to add a new user. Enter the following information:

- **Name:** Any descriptive name, ex 26007.
- **Password:** Enter any password, this password is needed to login Window for Communicator if required, example: DevConnect@123.
- **Confirm Password:** Re-enter password.
- **Extension:** Enter extension created in above section.

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Select **Power user** as **Profile** and make sure **Enable Communicator** option is checked. Leave other options as default. Click **OK** to save changes. Click save icon to merge changes.

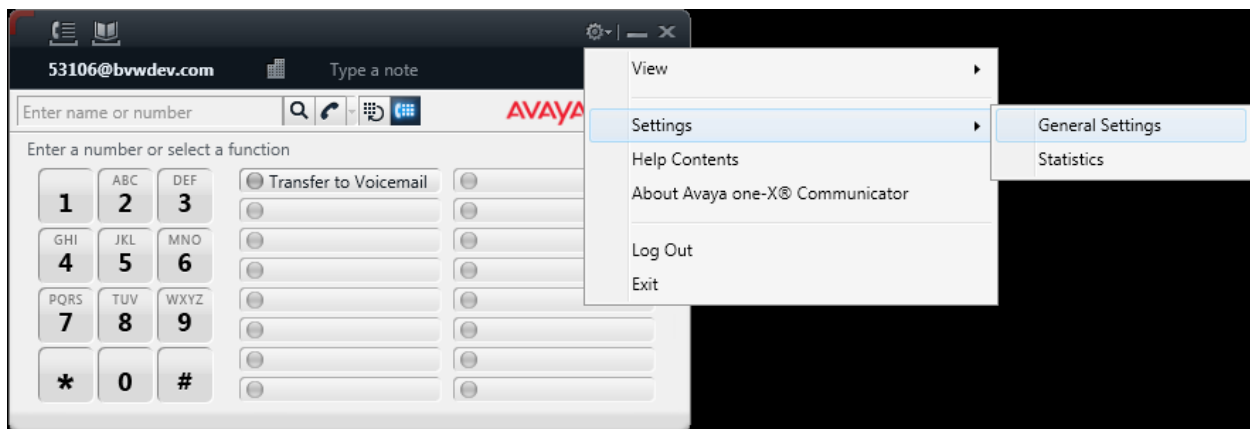
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6. Configure Plantronics Hub and Blackwire 500 Series

The Plantronics Hub application enables the Plantronics Blackwire 500 Series headsets to answer, end, and mute calls using the call control button on the headset itself. Install the application on the PC running the Avaya Communicator for Window. Refer to **Section 10** of these Application Notes for additional information. After the Hub application is installed, connect Blackwire headsets to the desktop PC running Avaya Communicator for Window via USB port.

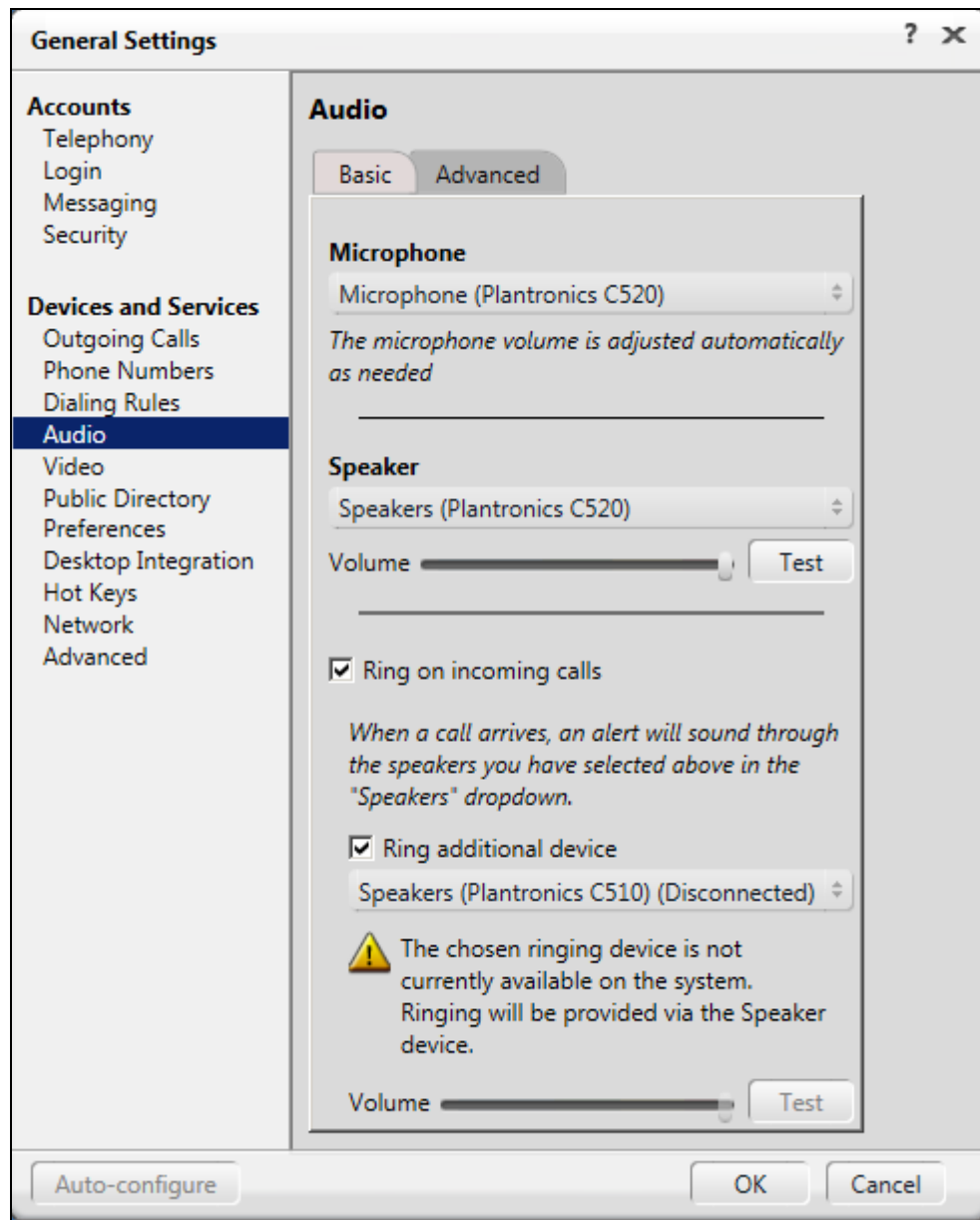
7. Configure Avaya Communicator for Window

Launch Avaya Communicator for Window and log in using the extension number and password created previously. Select  → **Settings** → **General Settings** as shown below:



On the **General Settings** screen, select **Audio**. On the **Basic** tab, select the applicable Plantronics headset from the pull-down menus in the **Microphone** and **Speaker** sections, as shown below.

The volume on the speaker of the headset can be tested and adjusted by clicking the **Test** button in the **Speaker** section. Optionally, the handling of the ring for incoming calls can be configured, and the volume of the ring can be adjusted here also. Click **OK** when done.



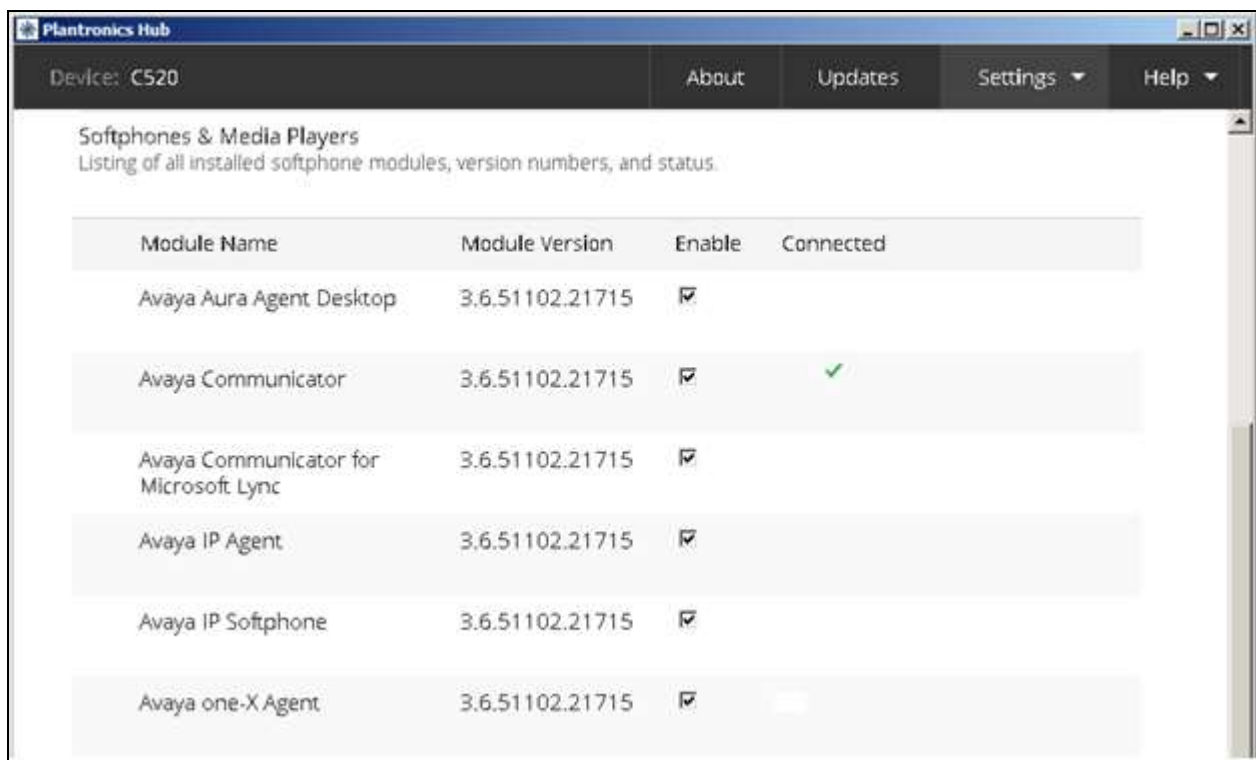
8. Verification Steps

This section provides the steps that can be performed to verify proper installation of the Plantronics Hub and Blackwire 500 Series USB corded headsets with Avaya Communicator for Window.

8.1. Verify Plantronics Hub

Make sure Avaya Communicator for Window is launched and headset is plugged in. Select **Start** → **Plantronics Hub**.

The page will display the connected device, in this case **C520**, and its information as shown below. Verify the **Avaya Communicator** entry is checked.



8.2. Verify Call via Headset

This section provides tests that can be performed to verify proper installation of Blackwire headset, Hub application and Avaya Communicator for Window.

1. Place an incoming call to Avaya Communicator for Window.
2. Verify two-way talk path between the headset and the called extension.
3. Press the Mute button on the Blackwire headset and verify the call can be muted/unmuted.
4. Verify mute light on headset, mute icon on Communicator for Window and mute message on Hub application are in sync and indicate correct mute status.
5. Verify the volume can be adjusted by using the volume controls on the headset.
6. Disconnect the call from the headset by pressing the call control button on the headset.
7. Verify that the call is properly disconnected.

9. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics Hub and Blackwire 500 Series USB corded headsets with Avaya Communicator for Window. All test cases were completed successfully, with the observation 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] *IP Office Manager 9.1, Document 15-601011 Issue 9.14 0, September 2015.*

[2] *Administering Avaya Communicator for Android, iPad, iPhone, and Windows, Release 2.1 Issue 2, March 2015*

Documentation and information for the Plantronics Hub and Blackwire 500 Series corded headsets can be found at the following websites:

[1] <http://www.plantronics.com/ca/product/blackwire-500>

[2] http://www.plantronics.com/media/media-resources/literature/office_callcenter/blackwire-500-ps-en-gb.pdf

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