Avaya Solution & Interoperability Test Lab

Application Notes for Plantronics Hub Software and Plantronics Blackwire C315/C325 USB Corded Headsets with Avaya one-X® Communicator 6.2 FP7 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the Plantronics Hub Software and Plantronics Blackwire C315/C325 USB Corded Headsets with Avaya one-X® Communicator 6.2 FP7 using H.323 and SIP protocols. The Blackwire C315/C325 USB corded headsets provide two-way audio with a flexible mic and call control buttons. This solution provides call control features directly from the headset, such as answering or terminating a call from the headset, adjusting volume control and mute from the headset.

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 Hub Software and Plantronics Blackwire C315/C325 USB Corded Headsets with Avaya one-X® Communicator 6.2 FP7 using H.323 and SIP protocols. The Blackwire C315/C325 USB corded headsets provide two-way audio with a flexible microphone and call control buttons. This solution provides call control features directly from the headset, such as answering or terminating a call from the headset, adjusting volume control and mute/unmute from the headset.

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 Avaya one-X® Communicator softphone with the Plantronics Blackwire C315/C325 USB corded headsets and verifying two-way audio, call control from the headset. 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 Avaya one-X® Communicator and re-connecting the headset to USB port on the PC which Avaya one-X® Communicator softphone installed.

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.
- Incoming call alert notification.
- Hearing ring back tone for outgoing calls.
- Using the call control button on the Plantronics headset.
- Using the volume control and mute buttons on the Plantronics headset.
- Answering and terminating the call using Avaya one-X® Communicator to verify status of call control is reflected on the Plantronics headset.
- Using the Plantronics headset with Avaya one-X® Communicator softphone using both H323 and SIP protocols.

For the serviceability testing, the Plantronics headset is reconnected to USB port, and restarts Avaya one-X® Communicator softphone to verify proper operation of the headset.

2.2. Test Results

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

- Plantronics headset does not go back to idle mode when Avaya one-X® Communicator completes transfer call to another local station. This issue happens intermittently. Plantronics is investigating.

2.3. Support

For technical support and information on Plantronics Blackwire C315/C325 USB Corded 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 Blackwire C315/C325 Headsets with Avaya one-X® Communicator. 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. SIP endpoints registered with Avaya Aura® Session Manager and Avaya Aura® Messaging was used as the voicemail system. The Plantronics Blackwire C315/C325 headsets were connected to USB port of PC which Avaya one-X® Communicator softphone installed.

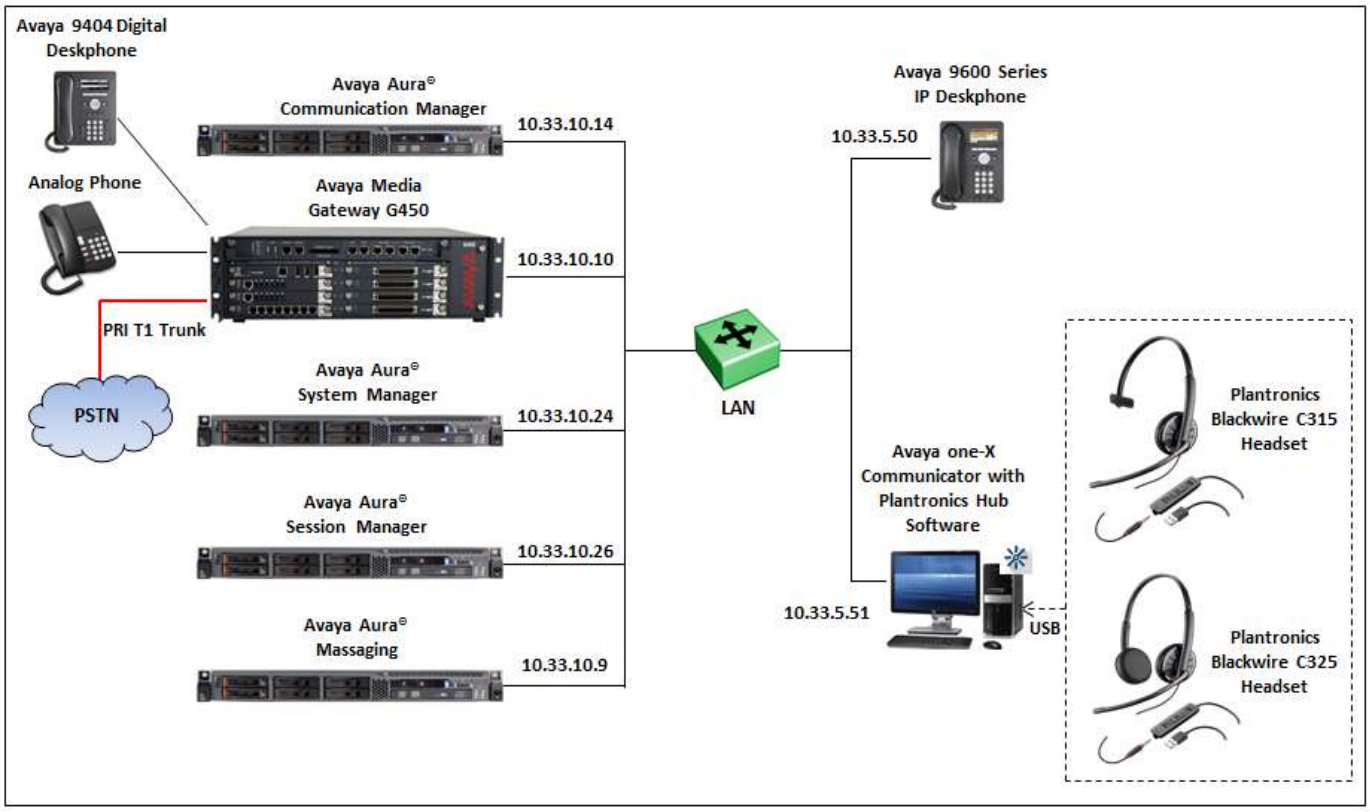


Figure 1: Avaya one-X® Communicator softphone with Plantronics Blackwire C315/325 Headsets and Plantronics Hub Software

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	6.3 SP 12 (R016x.03.0.124.0 w/Patch 22505)
Avaya Media Gateway G450	37.19.0
Avaya Aura® Session Manager	6.3 SP 14 (6.3.14.0.631402)
Avaya Aura® System Manager	6.3. SP 14 (6.3.14.11.3595)
Avaya Aura® Messaging	6.3.1
Avaya 96x1 Series IP Deskphones	6.5 (SIP)
Avaya 96x0 Series IP Deskphones	3.25 (H323)
Avaya one-X® Communicator running on a Microsoft Windows 2007 SP1	6.2.7.03-SP7
Avaya 9408 Digital Deskphone	Firmware12
Analog phone	N/A
Plantronics Blackwire C315/C525 Headsets	V145
Plantronics Hub Software	3.6.51102.21715

5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for the Avaya 9600 one-X® IP endpoint. Configuration is performed via the System Access Terminal (SAT) on Communication Manager or via Avaya Aura® System Manager for SIP station.

5.1. Configure a Station for Avaya one-X Communicator H323

Use the **add station** command to create a station for the 9650 IP station. 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 Avaya one-X® Communicator to log in, set **IP Softphone** to *y*.

Note: To enable Auto Answer on the IP station set the **Auto Answer** field on **Page 2** (not shown) to the appropriate value, such as *all*.

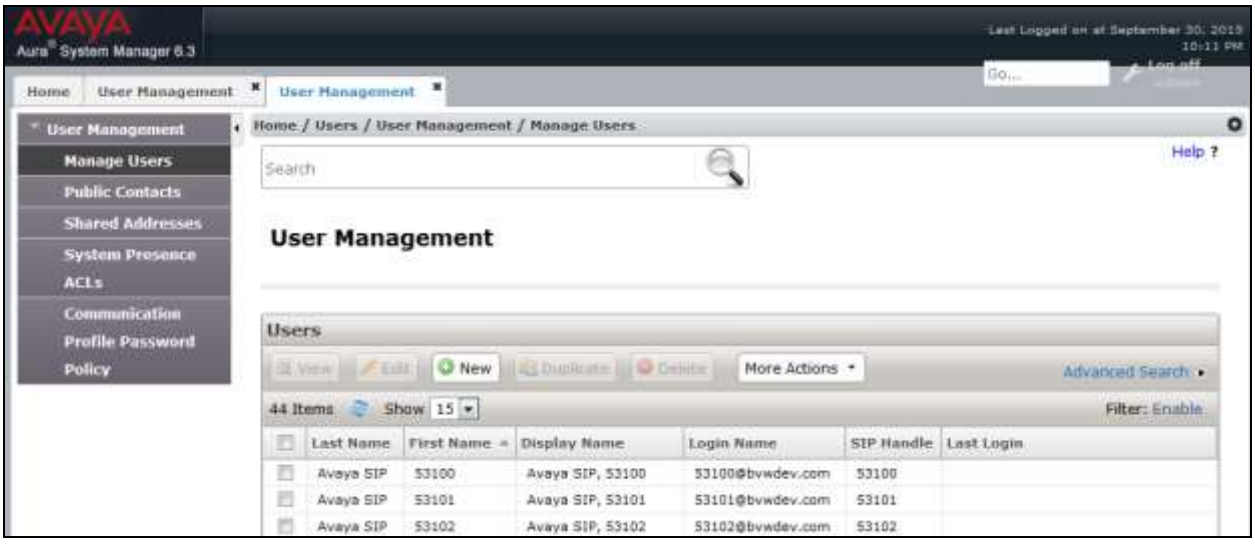
```
add station 53006                                          Page   1 of   5
                                    STATION

Extension: 53006                       Lock Messages? n              BCC: 0
     Type: 9650                        Security Code: 1234            TN: 1
     Port: IP                        Coverage Path 1:                COR: 1
     Name: H.323 9650                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: 53006
           Speakerphone: 2-way              Mute Button Enabled? y
       Display Language: english                 Button Modules: 0
 Survivable GK Node Name:
          Survivable COR: internal             Media Complex Ext:
   Survivable Trunk Dest? y                         IP SoftPhone? y

                                          IP Video Softphone? n
                              Short/Prefixed Registration Allowed: default

                                        Customizable Labels? y
```

5.2. Configure a Station for Avaya one-X Communicator using SIP

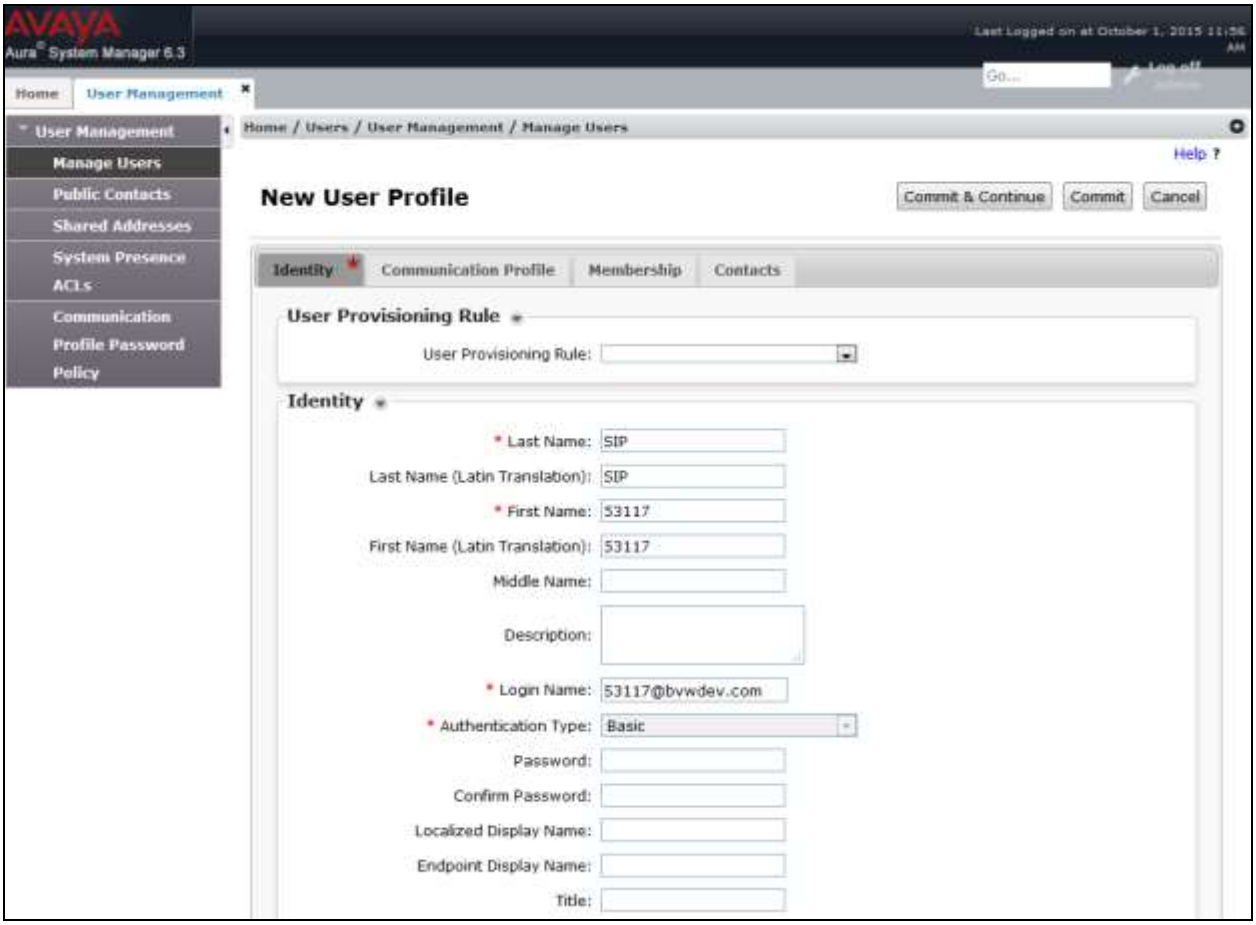
This section shows configuration in System Manager to create a SIP user that is used to log on from Avaya one-X® Communicator softphone.

From the homepage of System Manager, navigate to **Home → Users → User Management → Manager Users**, the **User Management** page is displayed in the right hand side as shown below.

Note: The initial installation, configuration, and licensing of System Manager, Session Manager and Communication Manager servers are assumed to have been previously completed and are not discussed in these Application Notes. These Application Notes focus on describing the sample configuration as it relates to SIP user.

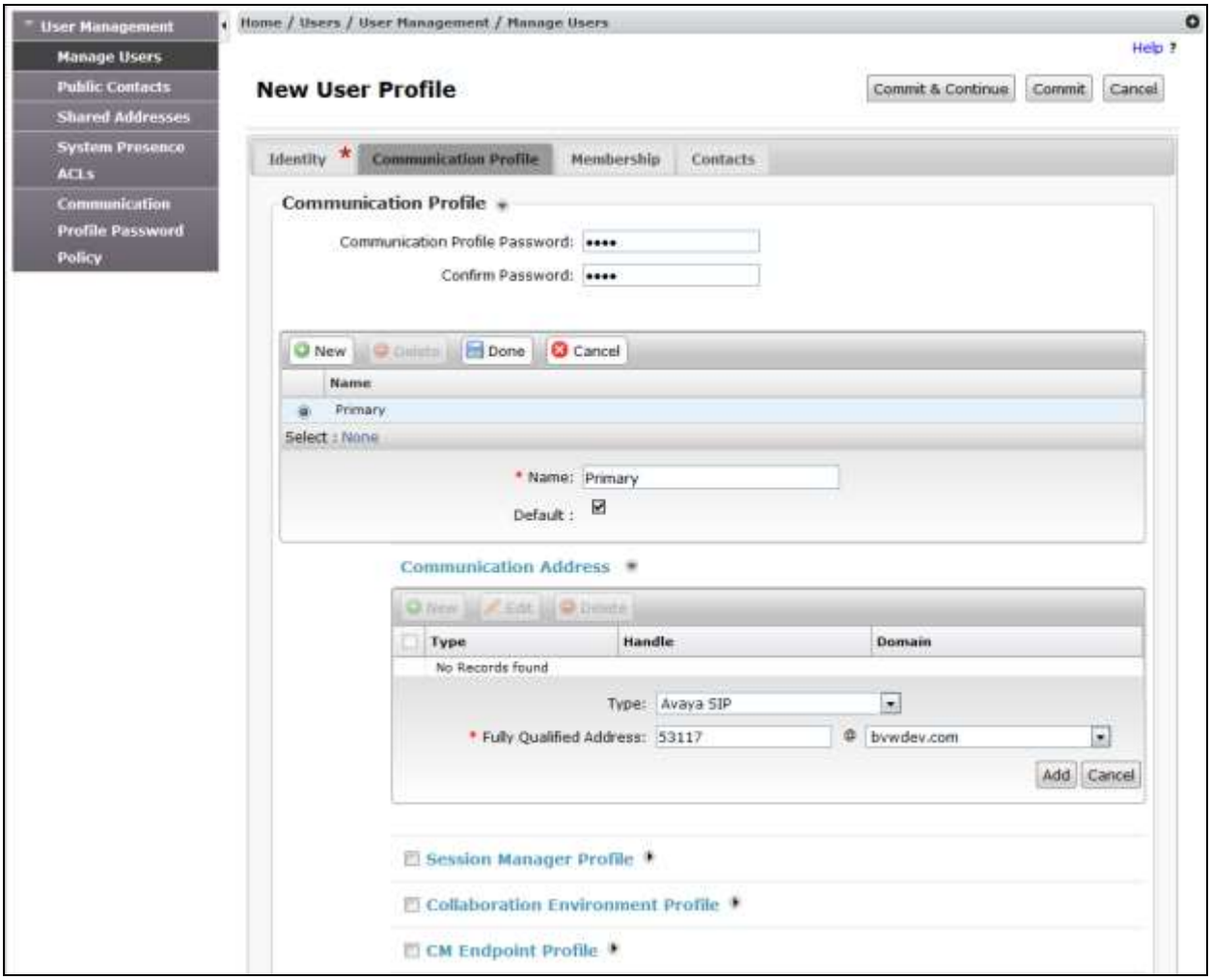


Click on **New** button in the **User Management** page above to create a new SIP user. The **New User Profile** is displayed, enter parameters of new SIP user in the **Identity** tab as shown below. The fields with red star are mandatory and require entering information.

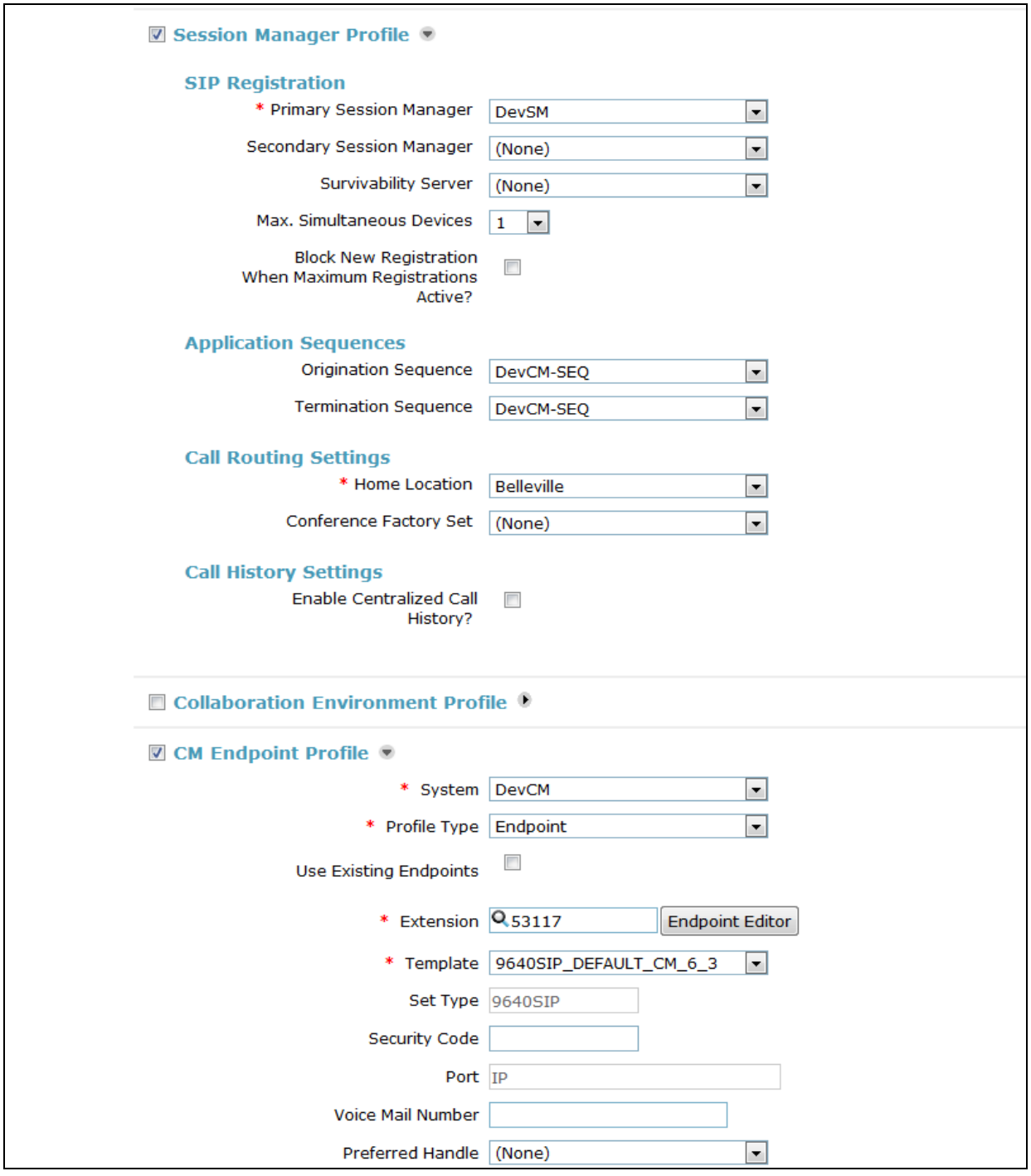


Next, select the **Communication Profile** tab, enter a password e.g. 1234 in **Communication Profile Password** and **Confirm Password** fields. Note that this password is used to log on this SIP user from Avaya one-X® Communicator softphone.

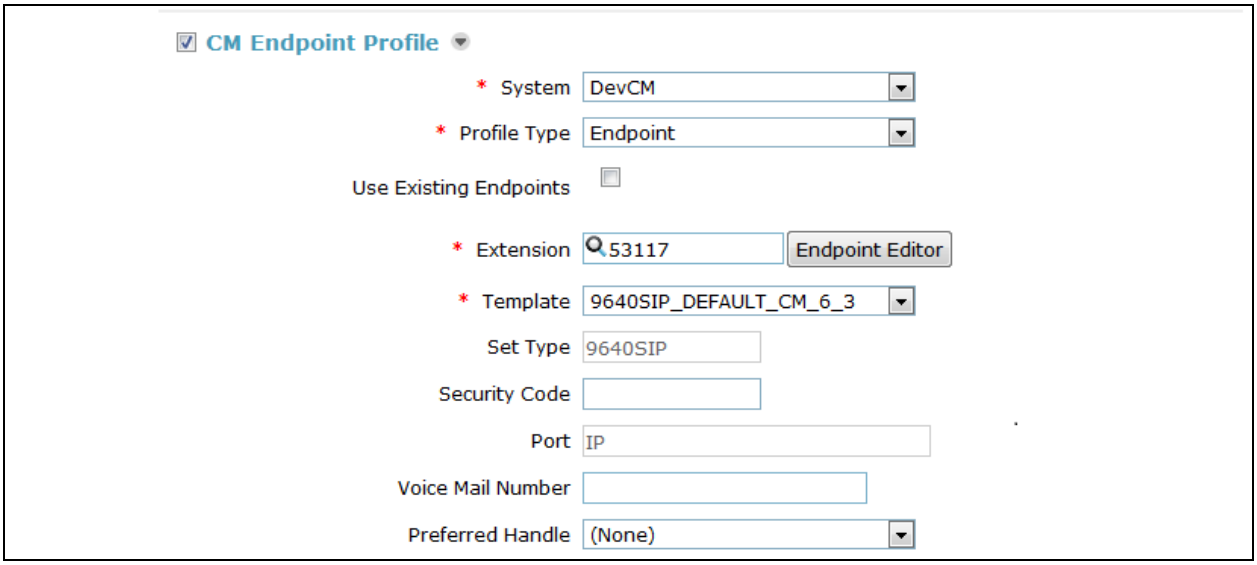
Under **Communication Address** section, click on **New** button to add a new communication address, select Type as **Avaya SIP**, enter a directory number *53117* this is the directory number of SIP user and select *bvwdev.com* domain in the dropdown menu. Note: the domain *bvwdev.com* is previously provisioned when Session Manager installed and configured.



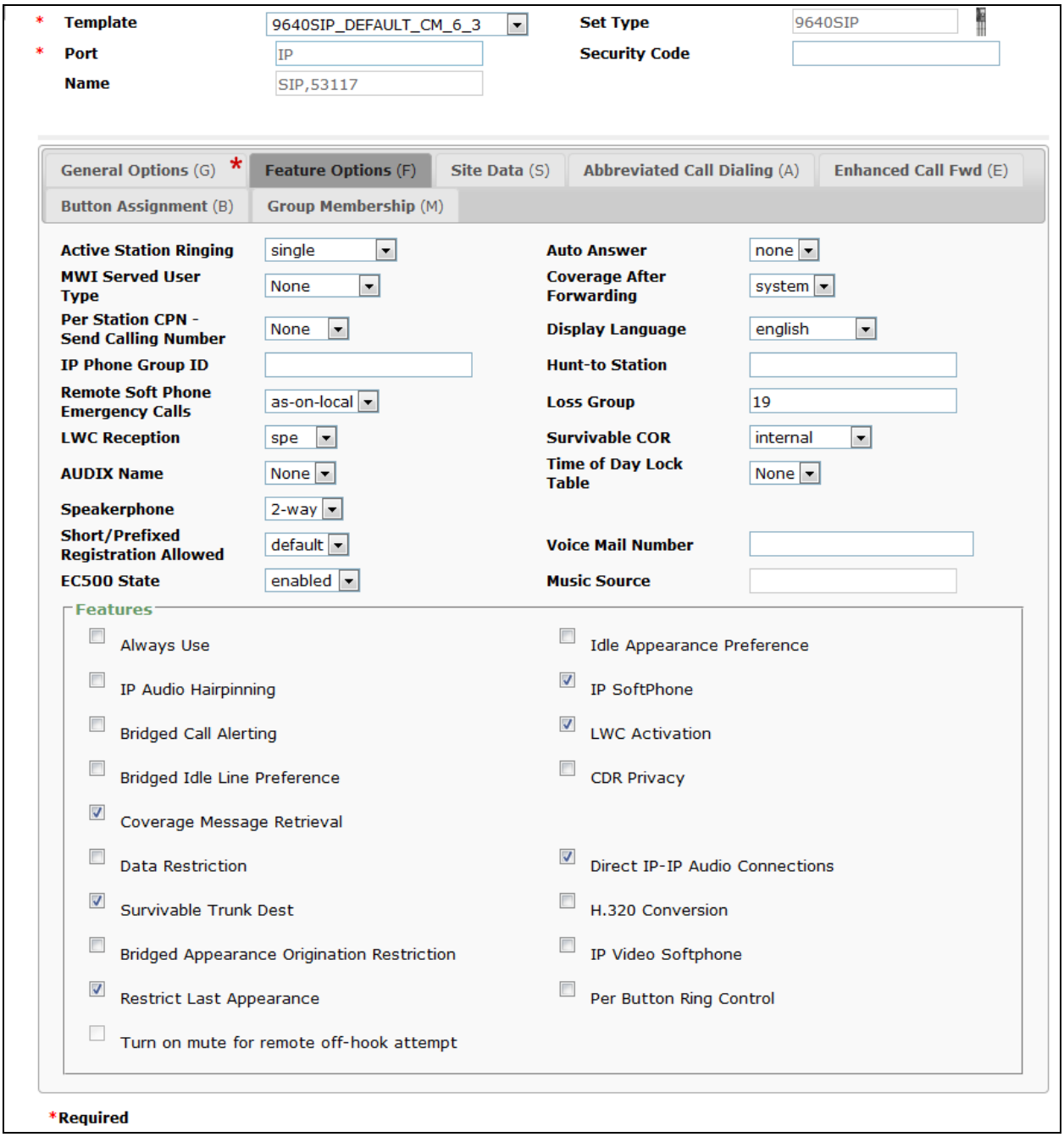
Check on the **Session Manager Profile** section, in the **SIP Registration** subsection, select the Session Manager system *DevSM* in the **Primary Session Manager**, select application sequences *DevCM-SEQ* in both **Origination Sequence** and **Termination Sequence** and in the **Call Routing Settings** section, select *Belleville* in the **Home Location**. Note: Session Manager SIP entity *DevSM*, Application Sequence *DevCM-SEQ* and home location *Belleville* are previously provisioned.



Check on **CM Endpoint Profile**, select Communication Manager system *DevCM* in the **System** field and select *Endpoint* in the **Profile Type** field. In the **Extension** field, enter the number *53117* and select the SIP template *9640SIP_DEFAULT_CM_3* in the **Template** field.



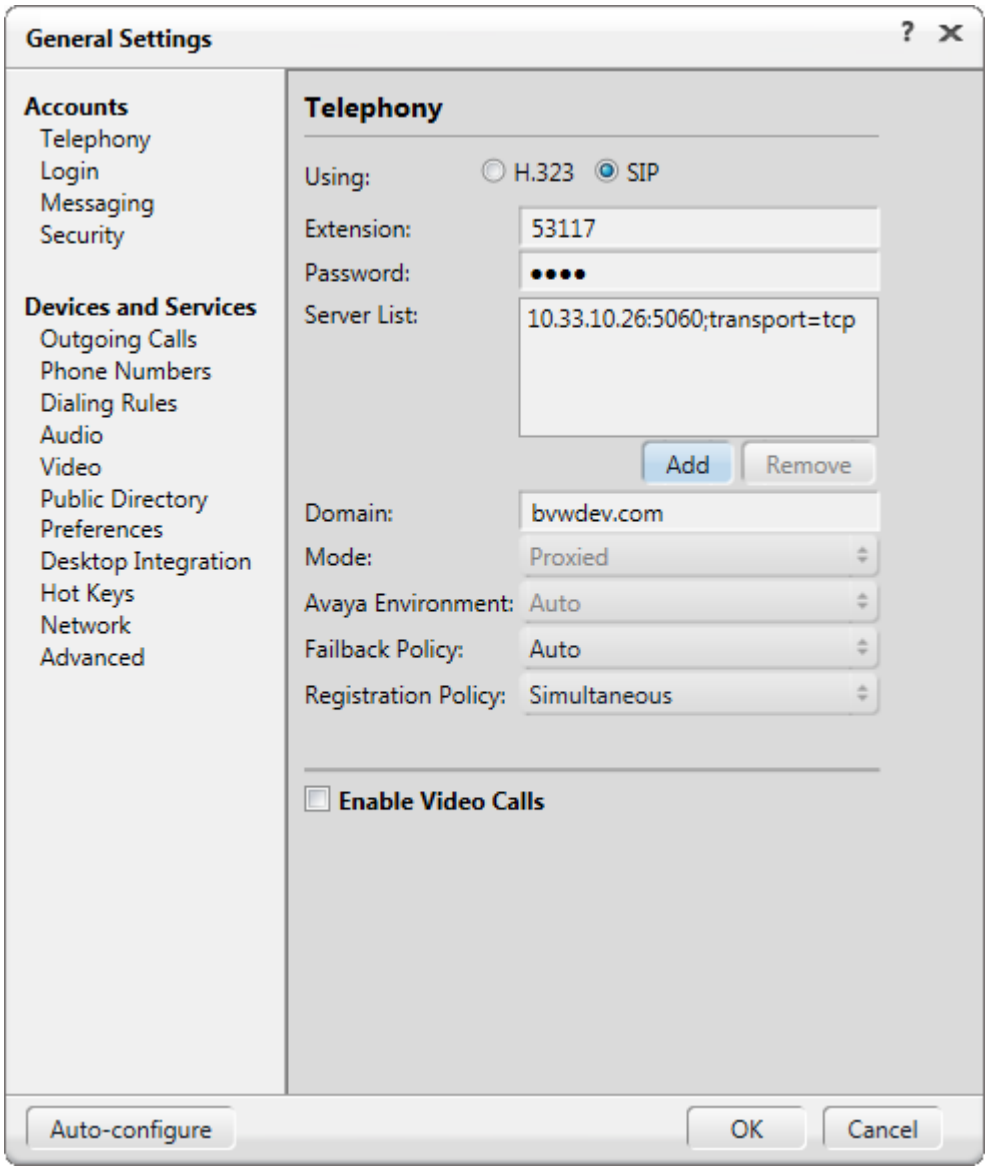
Select the **Endpoint Editor** in the screenshot above to configure feature for SIP user, in the **Feature Options** tab select **IP Softphone** check box as shown in the screenshot below. Click **Done** (not shown) in this page to go back to the **Communication Profiles** page, and in the **Communication Profiles** page click **Commit** button to complete and save the newly SIP user.



6. Configure Avaya one-X® Communicator Softphone

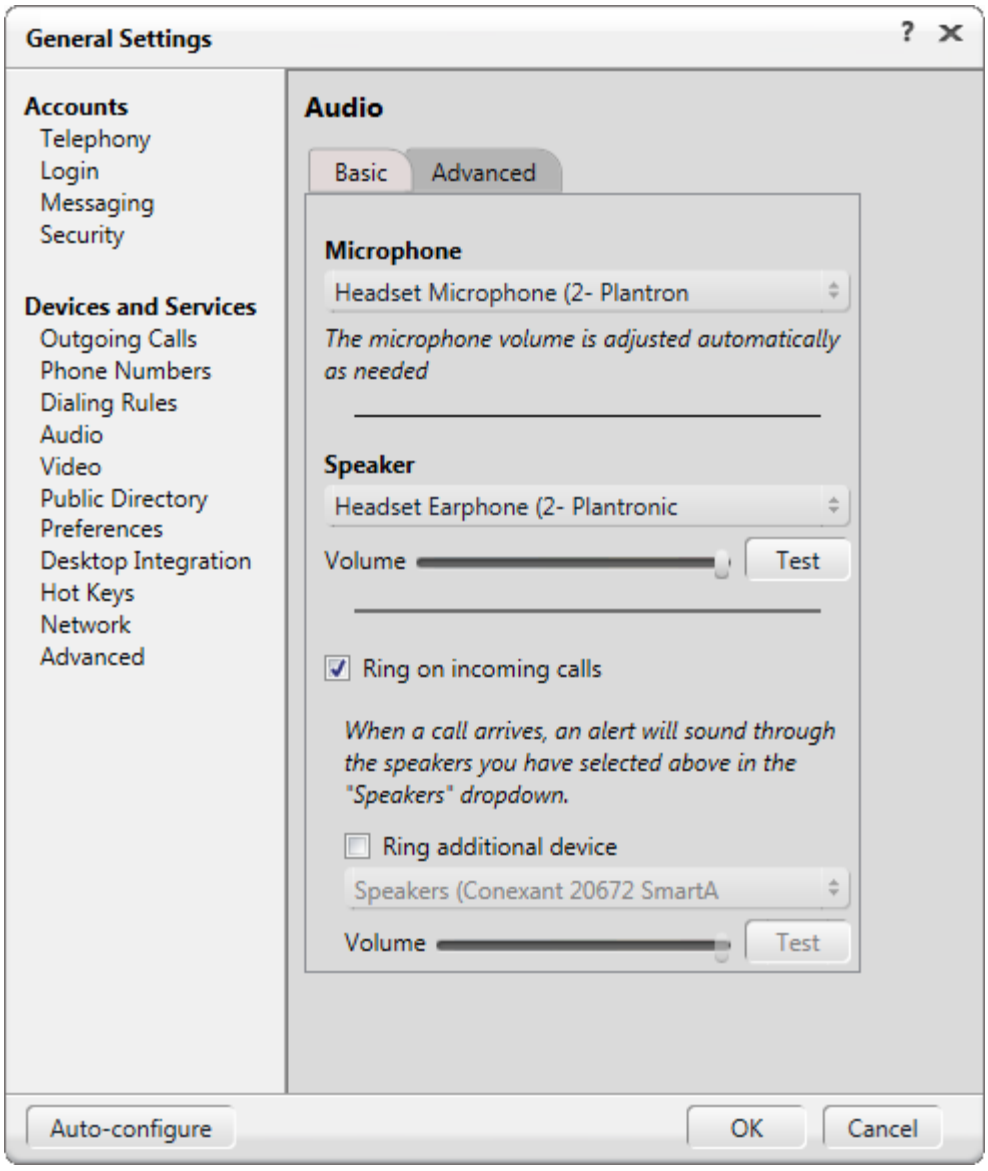
This section provides configuration of Avaya one-X® Communicator softphone to register to Session Manager using the SIP user provisioned in **Section 5.2** above.

Navigate to **Start Menu → All Program → Avaya** and select **Avaya one-X Communicator**. Avaya one-X Communicator softphone is displayed, from Avaya one-X Communicator **Login** window select **Settings** (not shown). The **General Settings** window is displayed, select **Telephony** tab under **Accounts** section. In the **Telephony** section, select SIP radio button, enter the number 53117 and its password as configured in **Section 5.2** in the **Extension** and **Password** fields, select **Add** button to add Session Manager address 10.33.10.26 in the **Server List**, enter the domain bvwdev.com in the **Domain** field.

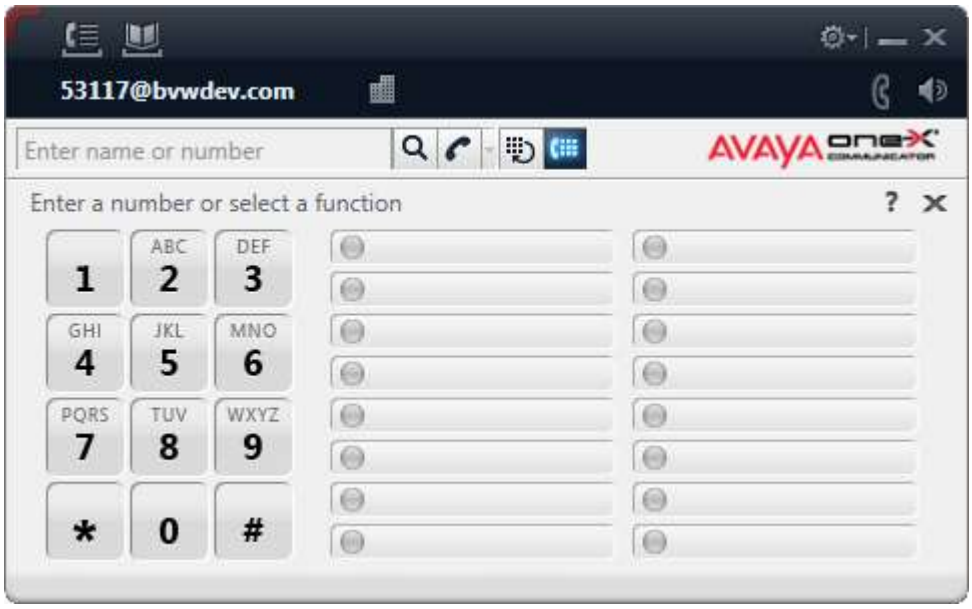


Navigate to **Devices and Services → Audio**, the **Audio** tab is displayed in the right hand. In the **Basic** tab, select Plantronics headset in both **Microphone** and **Speaker** dropdown menu.

Click OK button to complete and save the configuration.



The screenshot below displays Avaya one-X® Communication softphone logs in successfully to the SIP user 53117.

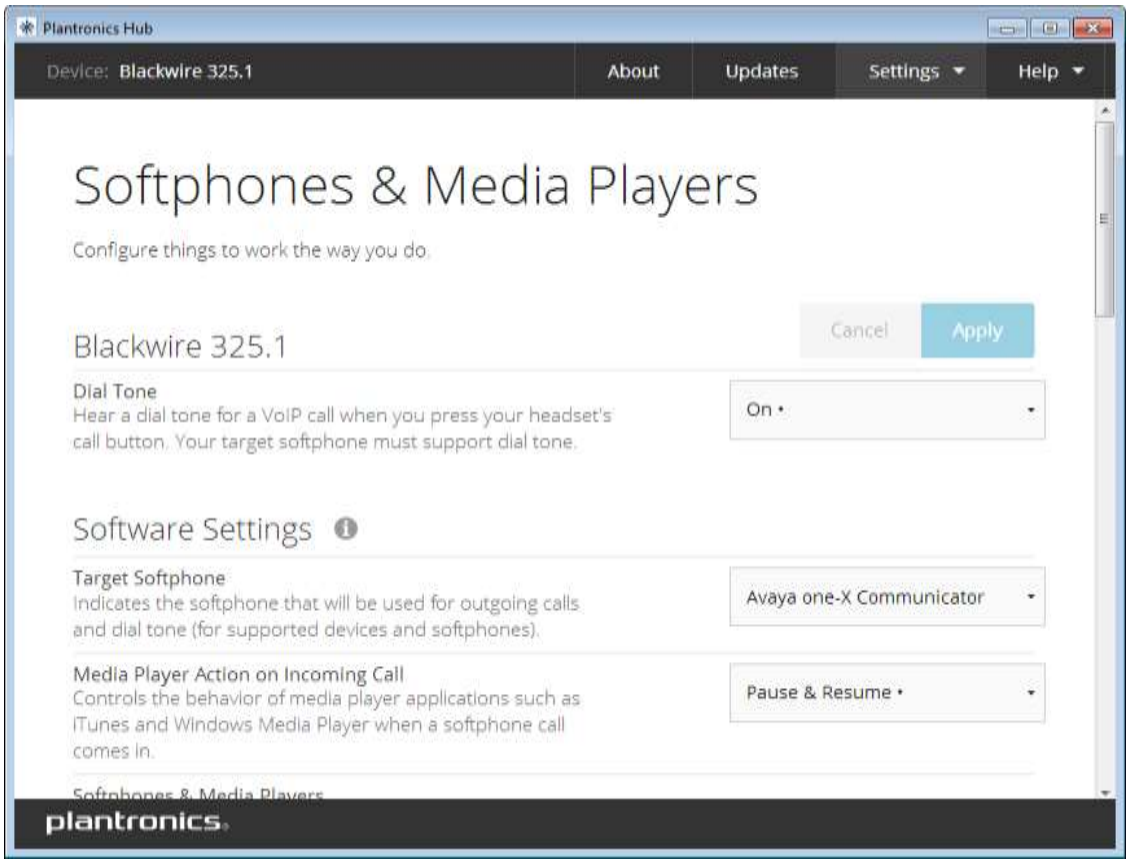


7. Configure Plantronics Hub software and Plantronics Blackwire C315/C325 Headsets

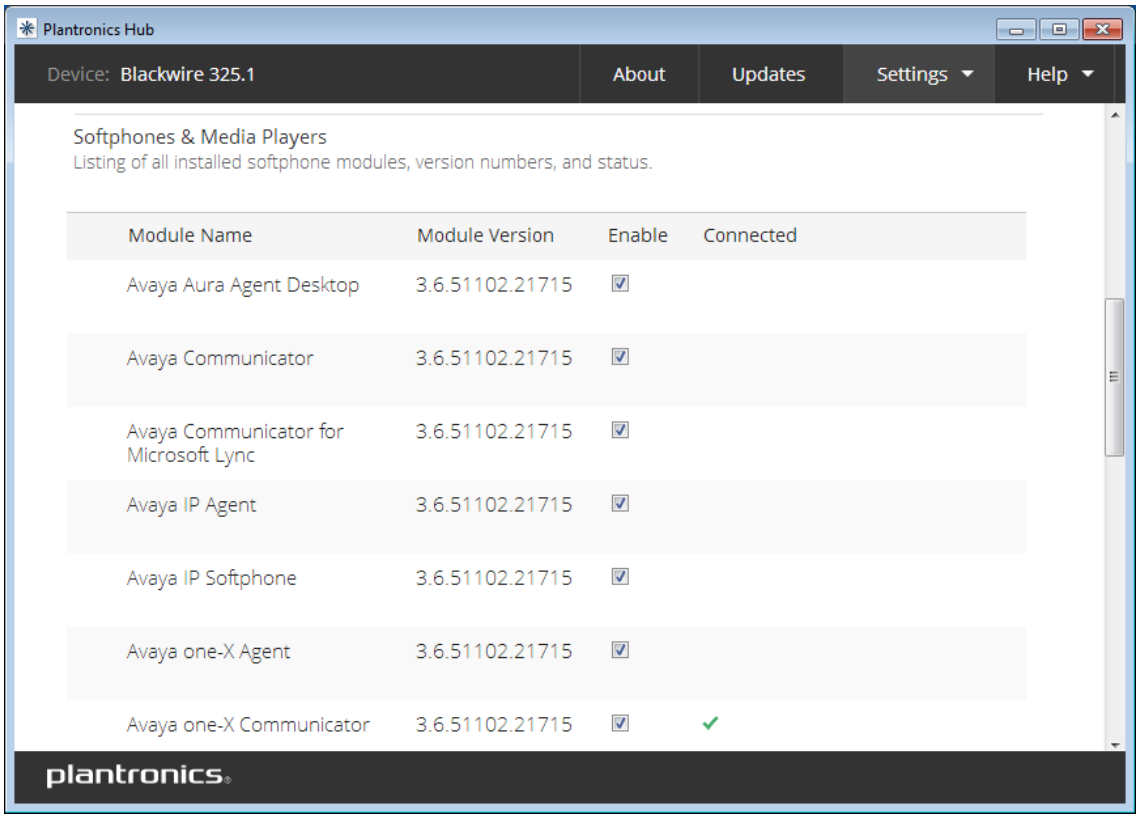
This section provides the steps configuration for Plantronics Hub software and Plantronics Blackwire C315/C325 USB headsets to work with Avaya one-X® Communicator softphone with Plantronics C315/C325 headsets.

1. Installed Plantronics Hub software on PC which Avaya one-X® Communicator softphone installed.
2. Insert the Plantronics C315/C325 headset to an available USB port on the PC.
3. Launch the Plantronics Hub software, there is an icon of the Hub software appears in the System tray bar showing that Plantronics headset is being connected.

4. Launch Avaya one-X® Communicator softphone.
5. Configure Plantronics Hub software to use with Avaya one-X® Communicator softphone, from the Plantronics Hub window, navigate to **Settings → Softphones**. In the **Target Softphone** dropdown menu select **Avaya one-X Communicator** in the list of softphones.



Scroll down to the list of installed softphone, make sure in the **Connected** column the green check displayed in Avaya one-X Communicator.



8. Verification Steps

These typical steps below are used to verify the inter-working between Plantronics Hub software and Plantronics Blackwire C315/C325 USB Corded Headsets and Avaya one-X® Communicator softphone.

1. From Avaya one-X® Communicator softphone with Plantronics headset places a local call to another station.
2. Verify the ringback tone is heard through the Plantronics headset and the light on the call control button on the headset should be lighted up.
3. Answer the call on the other station, verify two-way speech path with clear audio between the Avaya one-X® Communicator softphone and the other station.
4. During the call, adjust the volume up and down and mute/unmute from Plantronics headset, verify the volume adjusted successfully and status mute/unmute reflected properly on Avaya one-X® Communicator softphone.
5. End the call by pressing the call control button on the Plantronics headset, verify the call is terminated and the headset is idle.

9. Conclusion

These Application Notes describe the configuration steps required to integrate the Plantronics Hub software and Plantronics Blackwire C315/C325 USB Corded Headsets and Avaya one-X® Communicator softphone. All test cases were completed successfully with observations noted in **Section 0**.

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 6.3, Issue 10, August 2015, Document Number 03-300509.

[2] Administering Avaya Aura System Manager, Release 6.3, Issue 8, *September 2015*.

[3] Administering Avaya Aura Session Manager, Release 6.3, Issue 7, September 2015.

[4] Administering Avaya one-X® Communicator, Release 6.2 FP7, Nov 2015.

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.