AVAYA

Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Sennheiser Communications A/S HeadSetup™ software, USB-ED CC 01 Cable and Circle™ Series SC 230/SC 260 wired headsets with Avaya one-X® Agent - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the Sennheiser Communications A/S HeadSetup™ software, USB-ED CC 01 cable and Circle™ Series SC 230/SC 260 wired headsets with Avaya one-X® Agent.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as any 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.

LYM; Reviewed:
SPOC 2/6/2017

Solution & Interoperability Test Lab Application Notes
©2017 Avaya Inc. All Rights Reserved.

1 of 16
SCircle-oneXA

1. Introduction

The Sennheiser Communications A/S Circle™ Series Headsets together with HeadSetup™ software allow connection and call control with Avaya one-X® Agent. The HeadSetup™ is a collection of programs that enable remote call control with Sennheiser Circle™ Series Headsets and Avaya one-X® Agent. With Sennheiser Circle™ Series wired headsets connected via Sennheiser USB ED-CC 01 cable to the USB ports on personal computer, users can answer, end, mute/unmute, and adjust volume using buttons on the headsets device.

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/headset 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 with one-X Agent, answering and ending calls using the call control button on the headset, and verifying two-way audio. The call types included calls to voicemail, local extensions, and the PSTN.

The serviceability testing focused on verifying the usability of the Sennheiser headset solution after restarting the one-X Agent, restarting the PC, reconnecting the USB-ED CC 01 cable to the headset and reconnecting the headset via the USB port to the PC.

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/from internal extensions to verify two-way audio.
- Placing calls to/from the PSTN to verify two-way audio.
- Answering and ending calls using the call control button on the headset and the soft button on one-X Agent.
- Using the soft button on one-X Agent to hold and un-hold the audio.
- Using the volume control buttons on the headset to adjust the audio volume.
- Using the voice control button on the headset and the soft button on one-X Agent to mute and un-mute the audio.
- Verifying incoming call notification on headset.
- Verifying call ended notification on headset.

The serviceability testing focused on verifying the usability of the Sennheiser headset solution after restarting the one-X Agent, restarting the PC, reconnecting the USB-ED CC 01 cable to the headset and reconnecting the headset to the USB port of PC.

For Sennheiser headsets the Call Control will only work with the following pre-conditions met:

- Sennheiser HeadSetup™ should be downloaded from the Sennheiser web: www.sennheiser.com/headset-software-pc
- The program version: Headset V.6.0.1902 or later
- The program must be installed on the PC
- The program must be running simultaneously with the Avaya soft phone (Avaya one-X® Agent)

2.2. Test Results

All test cases are successfully completed.

2.3. Support

For support on the Sennheiser Communications A/S headset solution, contact Sennheiser Communications A/S technical support at:

Website: http://cco-support.sennheiser.com/en/global-support-and-service
Phone: +1-800-895-7412

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify Sennheiser HeadSetup™ software with Circle™ Series Headsets solution. The configuration consists of a Media Server, S8300D Server running Communication Manager with a G450 Media Gateway providing connectivity to a simulated PSTN. Avaya Aura® Messaging was used as the voicemail system. The Sennheiser HeadSetup™ software was installed on the PC. The SC 230 and SC 260 are the Circle™ Series wired headsets connected to the USB port of the PC via Sennheiser USB-ED CC 01 cable.
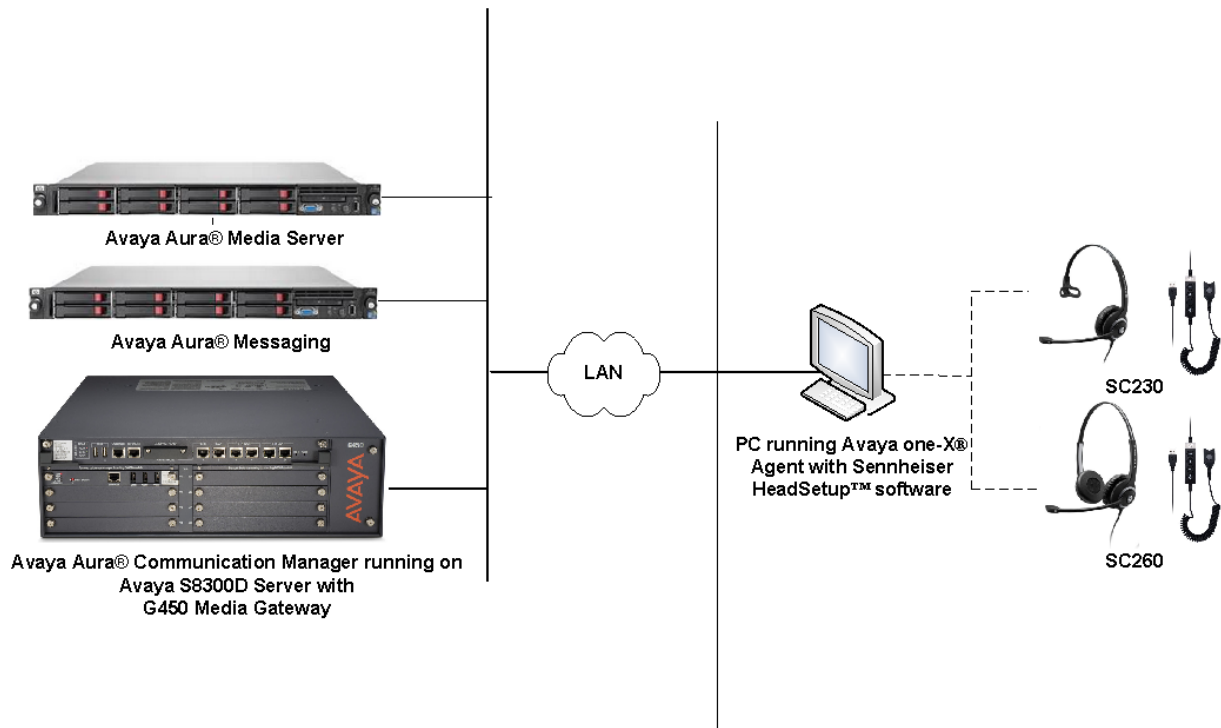
Figure 1: Test Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager	7.0.1.1.1 – FP1SP1 (R017x.0.1.1.0.441.0-23384)
Avaya G450 Media Gateway • MGP Firmware	37.39.0
Avaya Aura® Media Server	7.7.0.19
Avaya Aura® Messaging	6.3.3 SP6
Avaya one-X® Agent running on Microsoft Windows 10 Professional (64 bit)	2.5.58020.720 (H.323)
Sennheiser HeadSetup™ Software	v6.0.1902
Sennheiser USB-ED CC 01 Cable	15.05.63.603
Sennheiser SC230 (Monaural)	-
Sennheiser SC260 (Binaural)	-

5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for one-X Agent. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

Use the **add station** command to create a station for one-X Agent. Set the **Type** field to the station type to be emulated. In this example, *9641G* was used. Set the **Port** field to *IP* and configure a **Security Code**, which will be used as the password by one-X Agent to log in. Set the **IP Softphone** field to *y*.

```
add station 10001                                          Page   1 of   5
                                STATION

Extension: 10001                    Lock Messages? n               BCC: 0
     Type: 9641G                    Security Code: 111222           TN: 1
     Port: IP                       Coverage Path 1:               COR: 1
     Name: one-X Agent              Coverage Path 2:               COS: 1
                                    Hunt-to Station:            Tests? y
STATION OPTIONS
               Location:            Time of Day Lock Table:
           Loss Group: 19    Personalized Ringing Pattern: 1
                                       Message Lamp Ext: 10001
          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
```

On **Page 4** of the Station form, configure the additional feature buttons shown in bold, which are used by one-X Agent to log in as an Automatic Call Distribution (ACD) agent. Illustrated below is button 5 for Agent Login and button 6 for Agent Logout.

```
add station 10001                                          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: system          List2:                    List3:


BUTTON ASSIGNMENTS
 1: call-appr                    5: abrv-dial  List: 1 DC: 01
 2: call-appr                    6: abrv-dial  List: 1 DC: 02
 3: call-appr                    7: auto-in         Grp:
 4:                              8: aux-work    RC:   Grp:
    voice-mail 10000
```
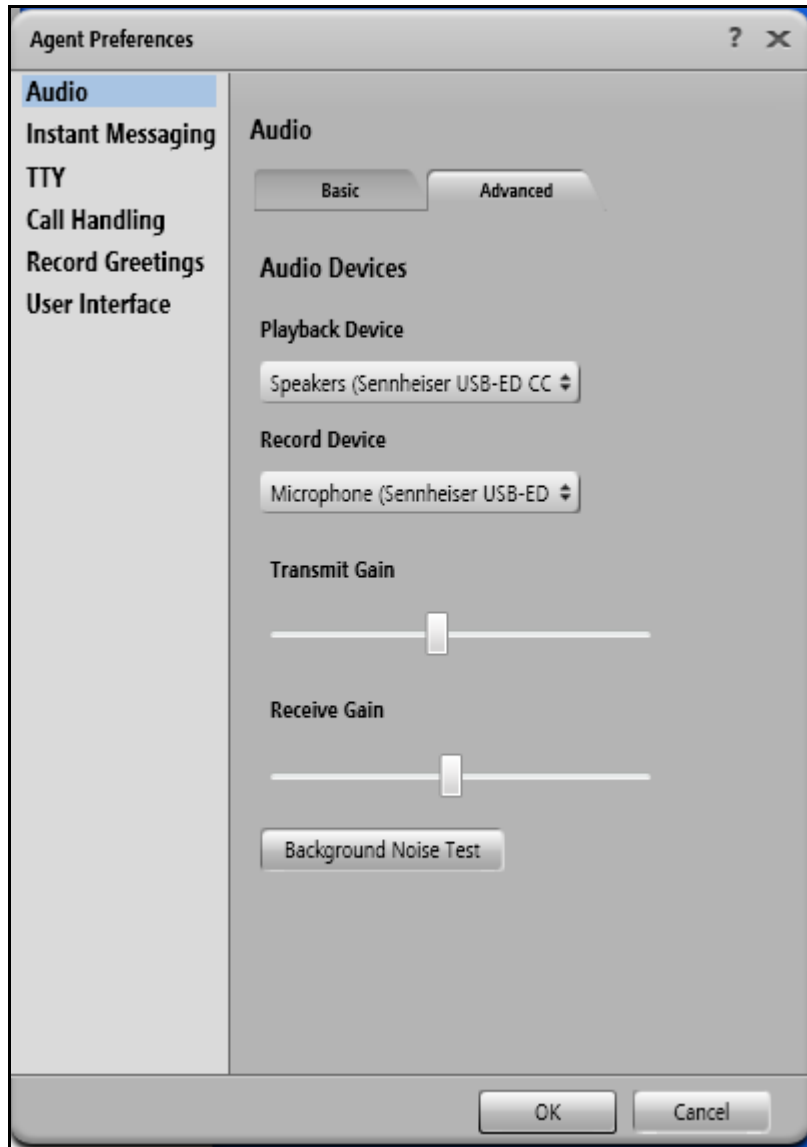
6. Configure Avaya one-X® Agent

Before configuring the one-X Agent, the headset has to be configured and provisioned as in **Section 7** first. After logging into one-X Agent, click on ☰▾ and then select **Agent Preferences** as shown below.
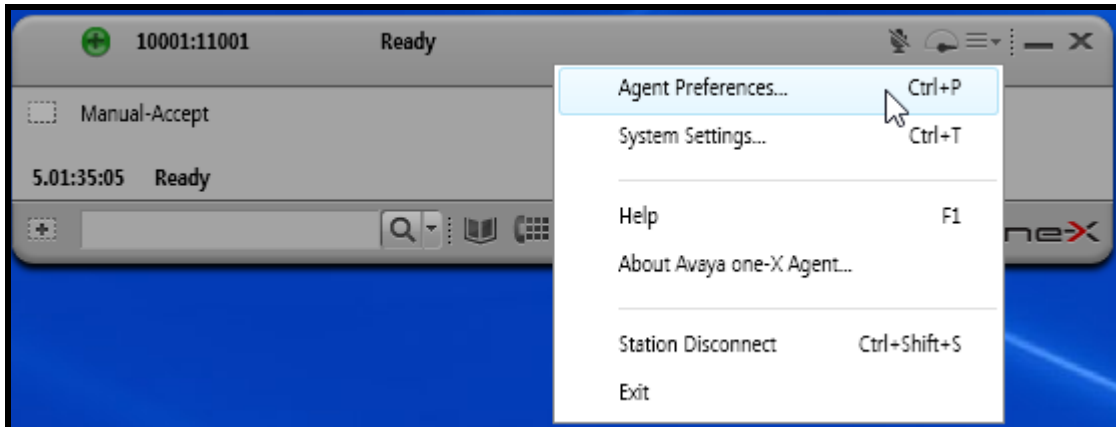
In the **Agent Preferences** window, click on **Audio** and then select the **Advanced** tab as shown below. Select the **Playback Device** and **Record Device** fields to *Speakers (Sennheiser USB-ED CC …)* and *Microphone (Sennheiser USB-ED …)*. Otherwise, if the correct device is not displayed, select them manually from the drop down menu respectively.

LYM; Reviewed:
SPOC 2/6/2017
Solution & Interoperability Test Lab Application Notes
©2017 Avaya Inc. All Rights Reserved.
9 of 16
SCircle-oneXA

7. Configure Sennheiser Circle™ Series Headsets

This section covers the steps to integrate Sennheiser headsets with one-X Agent, including:

- Installing the Sennheiser HeadSetup™ software
- Configuring HeadSetup™ software
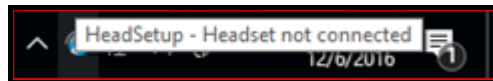- Connecting Sennheiser Circle™ Series Headsets

Note: After successfully performing this procedure, the headset may not be detected in the Audio settings of one-X Agent in **Section 0**. Manual selection may be required as described.

7.1. Installing the Sennheiser HeadSetup™ software

The installation instructions for Sennheiser HeadSetup software on the one-X Agent PC is described in **[5]** listed in **Section 10**.
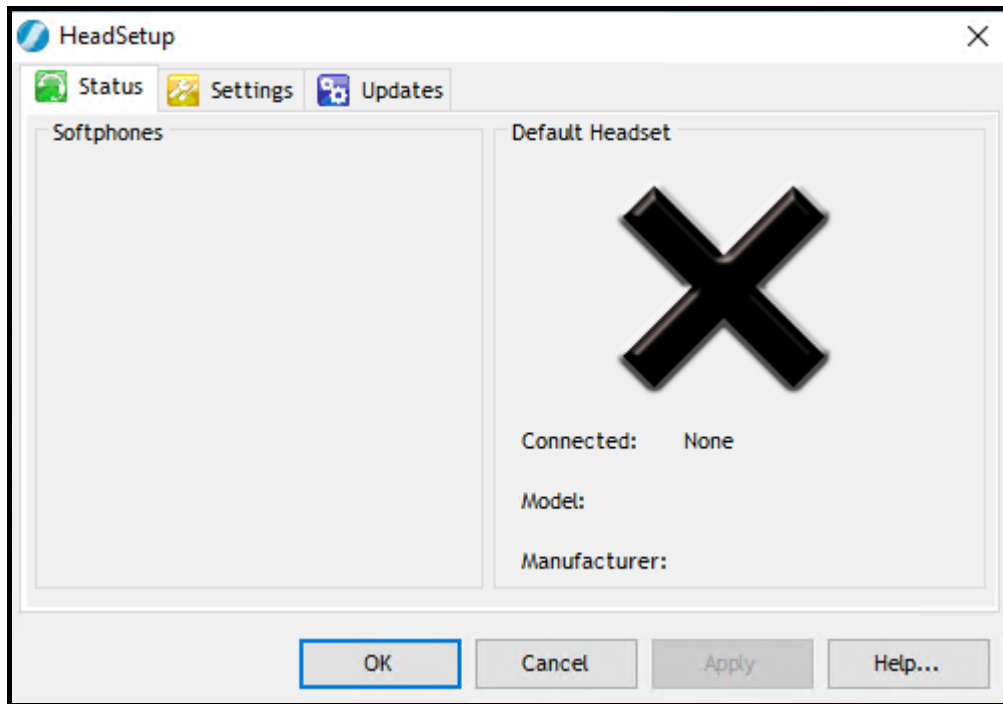
7.2. Configuring HeadSetup™ software

Launch the **HeadSetup** application icon from the desktop. Hover mouse over the HeadSetup icon on bottom right taskbar and it shows "HeadSetup – Headset not connected".


Double Click on the HeadSetup application icon at the bottom right taskbar and the HeadSetup application opens.

Select the **Status** tab and **Default Headset** on the right pane shows no headset is detected with an **X**.

LYM; Reviewed:
SPOC 2/6/2017

Solution & Interoperability Test Lab Application Notes
©2017 Avaya Inc. All Rights Reserved.

11 of 16
SCircle-oneXA

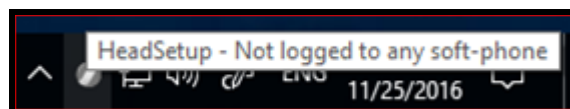## 7.3. Connecting Sennheiser Circle™ Series Headsets

Plug Sennheiser Circle™ Series Headsets via the Sennheiser USB-ED CC 01 cable into USB port of PC. The device drivers will automatically be installed once plugged into the PC. The HeadSetup software **Status** tab shows the "Sennheiser USB-ED CC 01" is **Connected**. Below is the screenshot of Sennheiser SC230 Circle™ Series Headset's USB-ED CC 01 cable connected. Notice that the **Default softphone** is grey out as Avaya one-X Agent is not running.
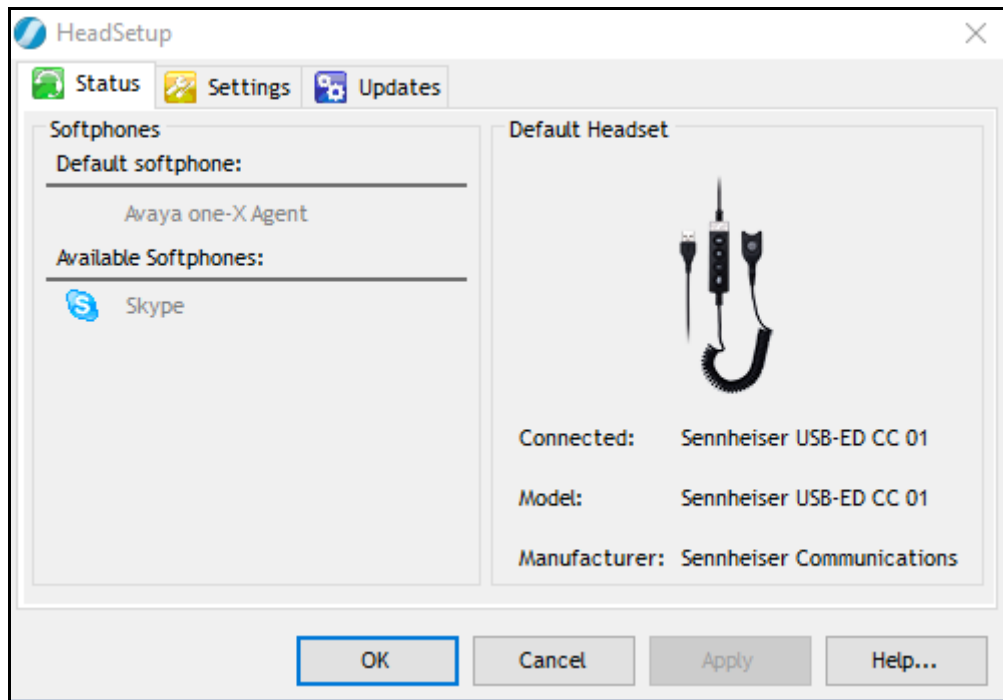
At the same instance the following message pops up and shows "Default Headset changed to Sennheiser USB-ED CC 01".
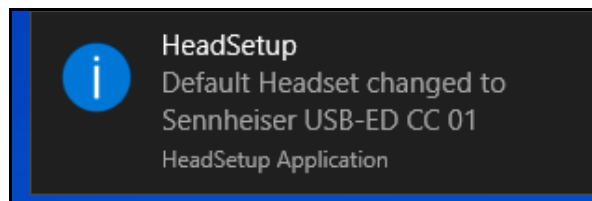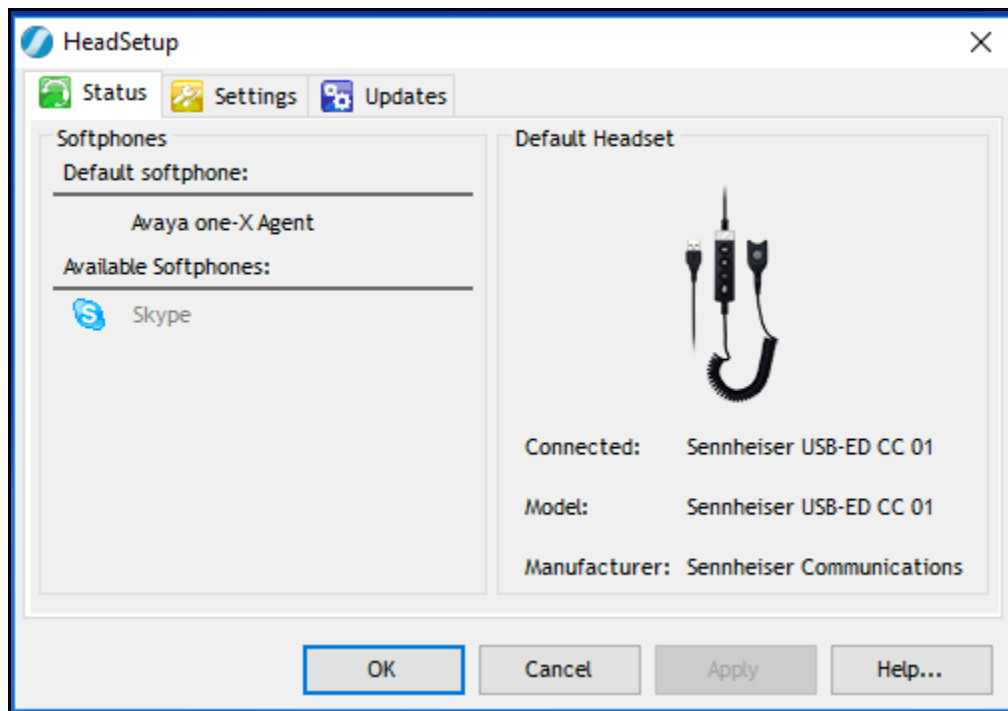

Hover mouse over the HeadSetup icon (in grey) on bottom right taskbar and it shows "HeadSetup – Not logged to any soft-phone".

LYM; Reviewed:
SPOC 2/6/2017

Solution & Interoperability Test Lab Application Notes
©2017 Avaya Inc. All Rights Reserved.
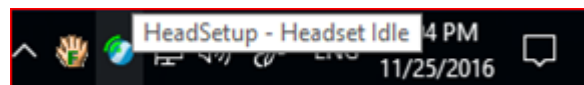
12 of 16
SCircle-oneXA

8. Verification Steps

This section verifies that the headset solution has been successfully integrated with the one-X Agent. Launch and log in to the one-X Agent.

1. Verify that the Sennheiser headset has been successfully connected for use with the one-X Agent. From the **HeadSetup** program, select the **Status** tab. Verify that:
    *   The **Softphones** on the left pane shows **Avaya one-X Agent**.
    *   The **Default Headset** on the right pane shows the **"Sennheiser USB-ED CC 01"** in **Connected** and **Model** field.

2. Hover mouse over the HeadSetup icon (in green) on the bottom right taskbar and it shows "HeadSetup – Headset Idle".

LYM; Reviewed:
SPOC 2/6/2017

Solution & Interoperability Test Lab Application Notes
©2017 Avaya Inc. All Rights Reserved.

13 of 16
SCircle-oneXA

3. Once the headset is connected to one-X Agent; verify that incoming and outgoing calls can be established with two-way audio to the headset. Hover mouse over the HeadSetup icon on bottom right taskbar and it shows "HeadSetup – Headset in use". If the headset call control buttons are not functioning, restart the connection by closing and opening the HeadSetup application; check that the correct Playback and Record Device is selected for one-X® Agent as in **Section 6.**
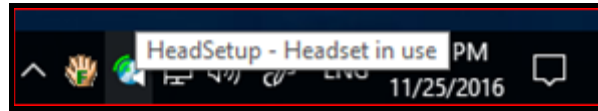
4. For incoming calls, answer the call by pressing the call control button on the headset.
5. End the call by pressing the call control button on the headset.

9. Conclusion

These Application Notes describe the configuration steps required to integrate Sennheiser Communications A/S HeadSetup™ software, USB-ED CC 01 cable and Circle™ Series SC 230/SC 260 wired headsets with Avaya one-X® Agent. All test cases were completed successfully.

10.   Additional References

This section references the Avaya and Sennheiser Communications A/S 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 7.0.1, Issue 2, May 2016, Document Number 03-300509.
[2] *Administering Avaya one-X® Agent*, Release 2.5.4 (H.323), Issue 1, December 2013.
[3] *Installing Avaya one-X® Agent*, Release 2.5.4 (H.323), Issue 1, December 2013.

The following Sennheiser Communications A/S documentation can be found at http://en-us.sennheiser.com/.

[4] *Sennheiser Updater – User Guide for Installation via Mass Deployment*.
[5] *Sennheiser HeadSetup™ Installation Guide*.
[6] *Sennheiser SC 230 SC 260 Quick Guide*.
[7] *Sennheiser USB-ED CC 01 Call Control Instruction Manual*.

©2017 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.