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Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Sennheiser Communications A/S SC 230 USB and SC 260 USB 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 SC 230 USB and SC 260 USB headsets with Avaya One-X® Agent.

The Sennheiser Communications A/S SC 230 USB is a corded monaural headset. The Sennheiser Communications A/S SC 260 USB is a corded binaural 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 Sennheiser Communications A/S SC 230 USB and SC 260 USB headsets with Avaya One-X® Agent.

The Sennheiser Communications A/S SC 230 USB is a corded monaural headset. The Sennheiser Communications A/S SC 260 USB is a corded binaural 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 Deskphones or with a different generation of the same Avaya Deskphone.

Since there is no industry standard for handset interfaces, different manufacturers utilize different handset/headset interfaces with their Deskphones. Therefore, any claim made by a headset vendor that its product is compatible with Avaya Deskphones 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 a PC running Avaya one-X® Agent with the Sennheiser Communications A/S SC 230 USB and SC 260 USB headsets and verifying two-way audio. The call types included calls to voicemail, to and from local extensions, and the PSTN.

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 and receiving calls to and from internal IP (H.323), Digital and Analog extensions to verify two-way audio.
- Placing and receiving calls to and from the PSTN to verify two-way audio.
- Hearing ring back tone on the headsets for incoming and outgoing calls.
- Placing, answering and ending calls using the call control buttons on Avaya one-X® Agent.
- Using the volume control buttons on Avaya one-X® Agent to adjust the audio volume on the headsets.
- Using the Mute control button on Avaya one-X® Agent to mute and un-mute the audio on the headsets.
- Using the Hold button on Avaya one-X® Agent to hold and un-hold active calls.

Serviceability testing was done by exiting and login back into Avaya one-X® Agent and by un-plugging and plugging the headsets from the PC during active calls to ensure that two- way audio is re-established automatically to the headsets.

2.2. Test Results

Testing was completed successfully with the following observations/limitations.

- If the Sennheiser Communications A/S SC 230 USB or the SC 260 USB headsets are un-plugged and plugged back in from the PC during an active call audio in NOT re-established to the headsets. One-X® Agent has to be started with the headsets connected to the USB port on the PC in order for audio to work.

2.3. Support

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

Website: http://www.sennheisercommunications.com/comm/home_en.nsf/root/service

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the Sennheiser Communications A/S SC 230 USB and SC 260 USB headsets with Avaya One-X® Agent. The configuration consists of an Avaya S8300 server running Avaya Aura® Communication Manager with an Avaya G450 Media Gateway and a mix of Deskphones (IP, analog and digital) for placing calls to and from the equipment under test.
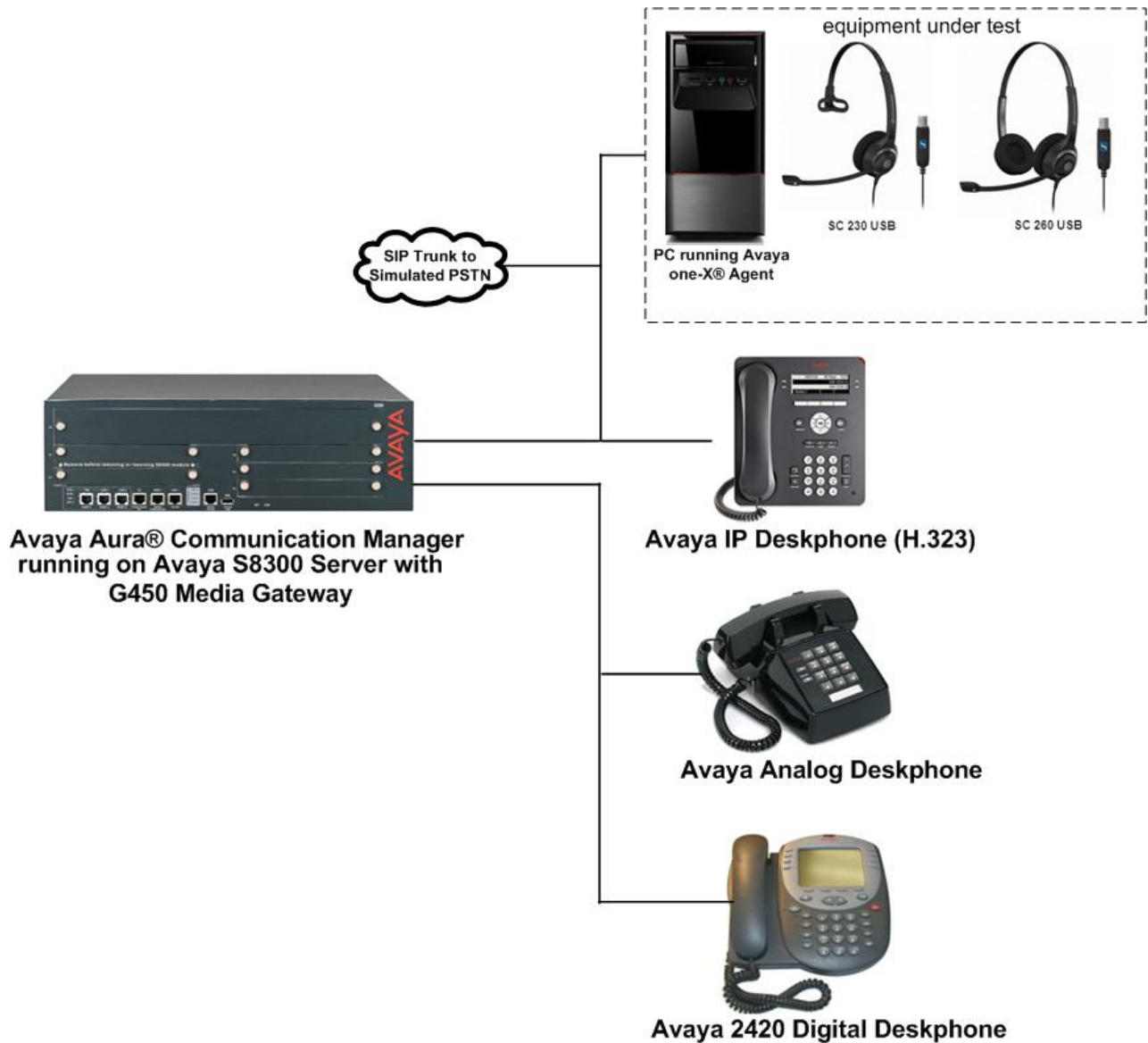

Figure 1: Avaya one-X® Agent with Sennheiser Communications A/S SC 230 USB and SC 260 USB Headsets.

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager running on Avaya S8300 Server with a G450 Media Gateway.	6.0.1 SP8.01 (00.1.510.1-19917)
Microsoft Windows® XP Professional.	Ver. 2002, Service Pack 3
Avaya One-X® Agent.	2.5.1072.11082
Avaya 9600 Series IP Deskphones (H.323).	Avaya one-X® Desk phone Edition Version 3.104
Avaya Analog Deskphone.	N/A
Avaya 2420 Digital Deskphone.	6.0
Sennheiser Communications A/S SC 230 USB Headset.	N/A
Sennheiser Communications A/S SC 260 USB Headset.	N/A

5. Configure Avaya Aura® Communication Manager

These Application Notes assume that Avaya Aura® Communication Manager is configured and operational. This section focuses only on the configuration of the station to be use with Avaya One-X® Agent. The values configured in this section were used during the compliance tests, default values may be used for any fields not configured in these Application Notes. The configuration is performed via the System Access Terminal (SAT) on Avaya Aura® Communication Manager.

5.1. Configure a Station for Avaya One-X® Agent

To create a station to be used with Avaya One-X® Agent use the **add station n** command; where **n** is an available extension in the dial plan, extension **3036** was used in the sample configuration. Set the **Type** field to the IP Telephone type that will be emulated, **9640** was used in the sample configuration**.** In the **Security Code** field enter a password to be used by Avaya One-X® Agent to log in. Set the **Coverage Path 1** field to the Coverage Path configured for Voice Mail, "**1**" was used in the sample configuration. Ensure that **IP SoftPhone?** is set to **y**.

```
display station 3036                                          Page   1 of   5
                                 STATION

Extension: 3036                    Lock Messages? n              BCC: 0
     Type: 9640                   Security Code: *               TN: 1
     Port: S00010              Coverage Path 1: 1               COR: 1
     Name: one-X Agent         Coverage Path 2:                 COS: 1
                                Hunt-to Station:
STATION OPTIONS
                                          Time of Day Lock Table:
          Loss Group: 19        Personalized Ringing Pattern: 1
                                        Message Lamp Ext: 3036
       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** assign the necessary agent work mode buttons. The assignment of **after-call, aux-work, release** and either **auto-in** or **manual-in** buttons are mandatory. For the compliance test both manual-in and auto-in buttons were provisioned.

```
display station 3036                                    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:                  List2:                      List3:




BUTTON ASSIGNMENTS
 1: call-appr                     5: manual-in          Grp:
 2: call-appr                     6: after-call         Grp:
 3: call-appr                     7: aux-work    RC:    Grp:
 4: auto-in           Grp:        8: release

     voice-mail
```

5.2. Configure Agent-LoginID for Avaya one-X® Agent

To create an agent-loginID to be used by Avaya one-X® Agent use the **add agent-loginID n** command; where **n** is an available extension in the dial plan. Enter and confirm a **Password** to be used by Avaya one-X® Agent to log in to the agent-loginID. Set **Auto Answer** to **station** so that the agent-loginID will follow the auto answer configuration of the station it logs in to.

```
display agent-loginID 3501                               Page   1 of   2
                              AGENT LOGINID

            Login ID: 3501                                      AAS? n
                Name: Agent 3501                              AUDIX? n
                  TN: 1                           LWC Reception: spe
                 COR: 1                  LWC Log External Calls? n
       Coverage Path:                  AUDIX Name for Messaging:
       Security Code:

                                      LoginID for ISDN/SIP Display? n
                                                      Password:
                                      Password (enter again):
                                                 Auto Answer: station
                                    MIA Across Skills: system
                            ACW Agent Considered Idle: system
                            Aux Work Reason Code Type: system
                              Logout Reason Code Type: system
               Maximum time agent in ACW before logout (sec): system
                                    Forced Agent Logout Time:   :

        WARNING:  Agent must log in again before changes take effect
```

On **Page 2** under **Direct Agent Skill** enter an agent skill, "1" was used in the sample configuration. Under **SN** enter the required ACD skill group and under **SL** enter an associated skill level. In the sample configuration skill group **1** was used with a skill level of **1.**

```
display agent-loginID 3501                                    Page   2 of   2
                              AGENT LOGINID
        Direct Agent Skill: 1                         Service Objective? n
Call Handling Preference: skill-level                Local Call Preference? n

     SN    RL SL          SN    RL SL
 1: 1         1      16:
 2:                  17:
 3:                  18:
 4:                  19:
 5:                  20:
 6:
 7:
 8:
 9:
10:
11:
12:
13:
14:
15:
```

6. Connect the Sennheiser Communications A/S SC 230 USB and SC 260 USB Headsets to the PC running Avaya One-X® Agent

During the compliance test the Sennheiser Communications A/S SC 230 USB and SC 260 USB headsets were connected to the PC running Avaya One-X® Agent. The Sennheiser Communications A/S SC 230 USB is a corded monaural headset. The Sennheiser Communications A/S SC 260 USB is a corded binaural headset.

6.1. Cable connections

To connect the Sennheiser Communications A/S SC 230 USB or the SC 260 USB headset to the PC running Avaya One-X® Agent, see diagram below.

SC 230 USB

SC 260 USB

Connect to USB Port

PC running Avaya one-X® Agent
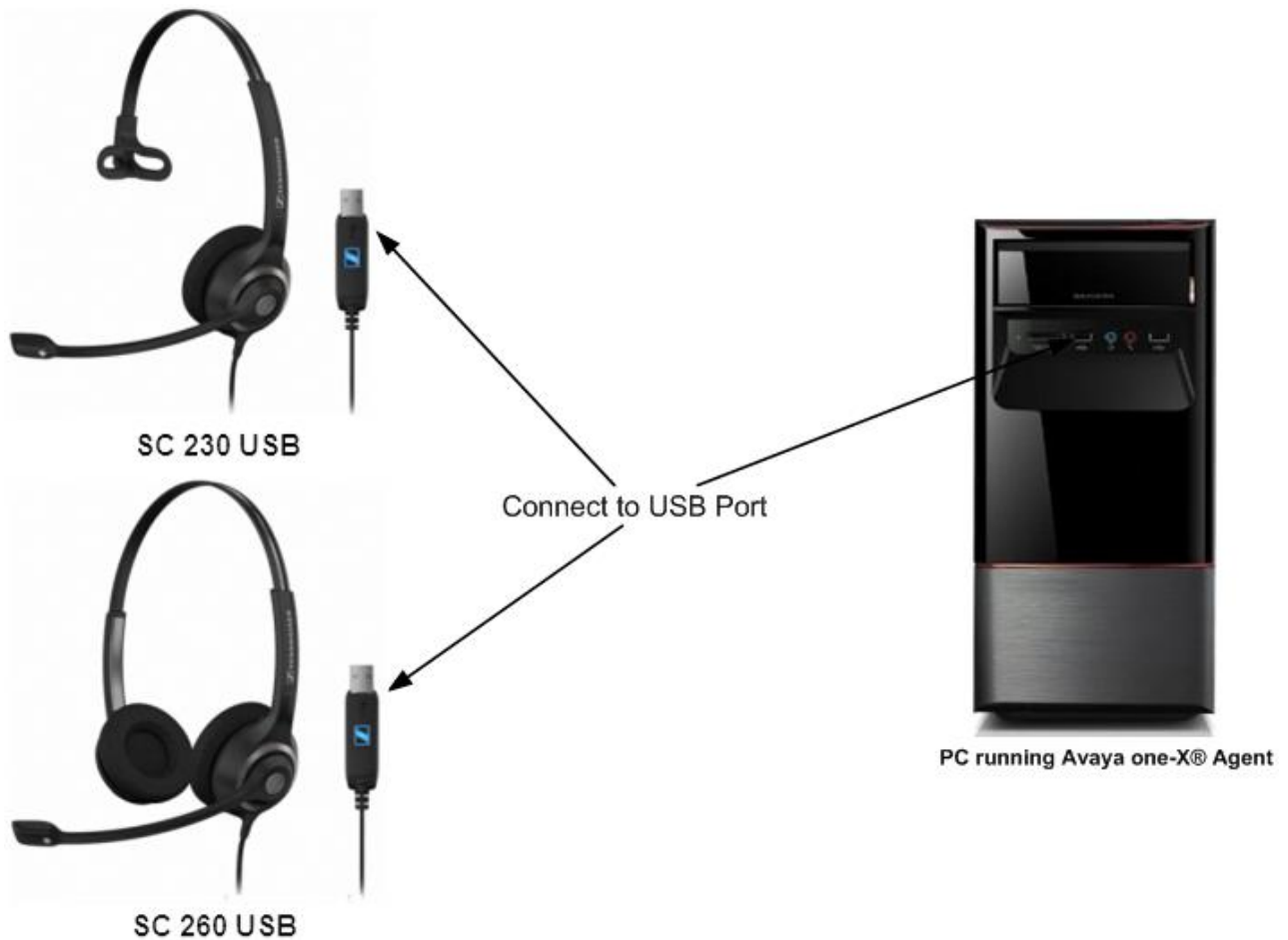
7. Configure Avaya One-X® Agent

These Application Notes assume that Avaya one-X® Agent is already configured and operational. This section focuses only on the settings used with the Sennheiser Communications A/S SC 230 USB and SC 260 USB headsets. After logging into Avaya one-X® Agent, select ☰▾→ **Agent Preferences** from the menu as shown below.
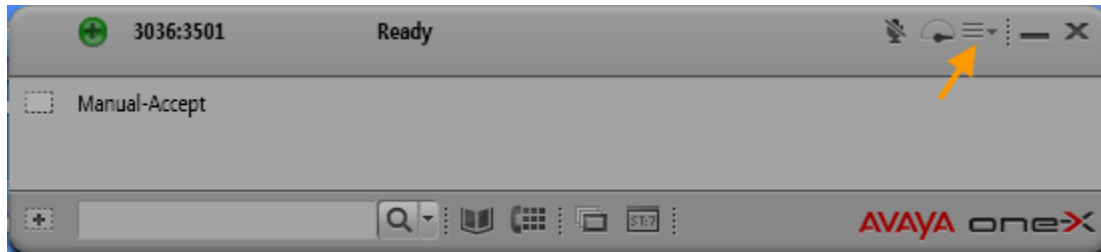
Under **Agent Preferences** select **Audio,** click on the **Basic** tab. Under Volume **Playback** and **Record** adjust the volume of the headset as needed. The Speaker volume of the headset can also be adjusted under **Sounds and Audio Devices Properties** in Microsoft Windows® **Control Panel**.

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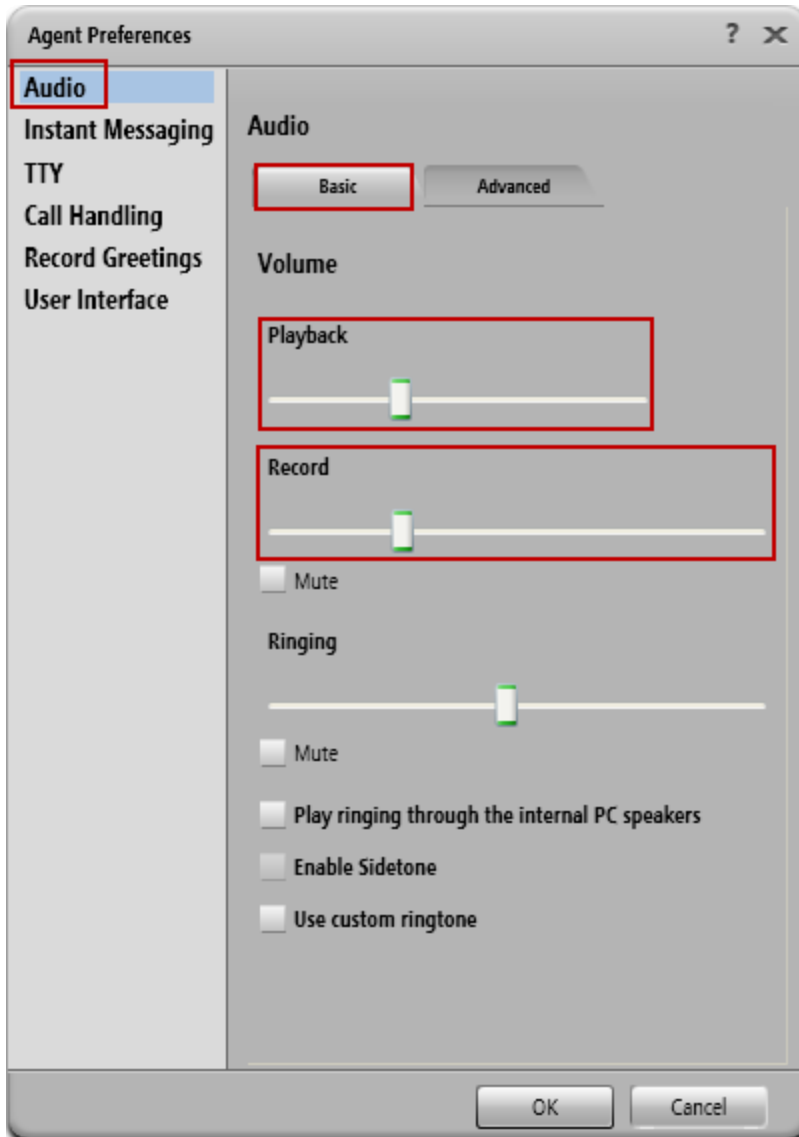
Under **Agent Preferences** select **Audio,** click on the **Advanced** tab. Once login into Avaya one-X® Agent is completed the Sennheiser Communications A/S SC 230 USB or the SC 260 USB headsets are automatically detected by Microsoft Windows® as **Sennheiser SC230** (not shown) **or Sennheiser SC260** (not shown), Avaya one-X® Agent will display **Sennheiser SC230 or Sennheiser SC260** (not shown) under Audio Devices **Playback Device** and **Record Device**. Under **Transmit Gain** and **Receive Gain** adjust the **Transmit** and **Receive Gain** of the headset as needed.

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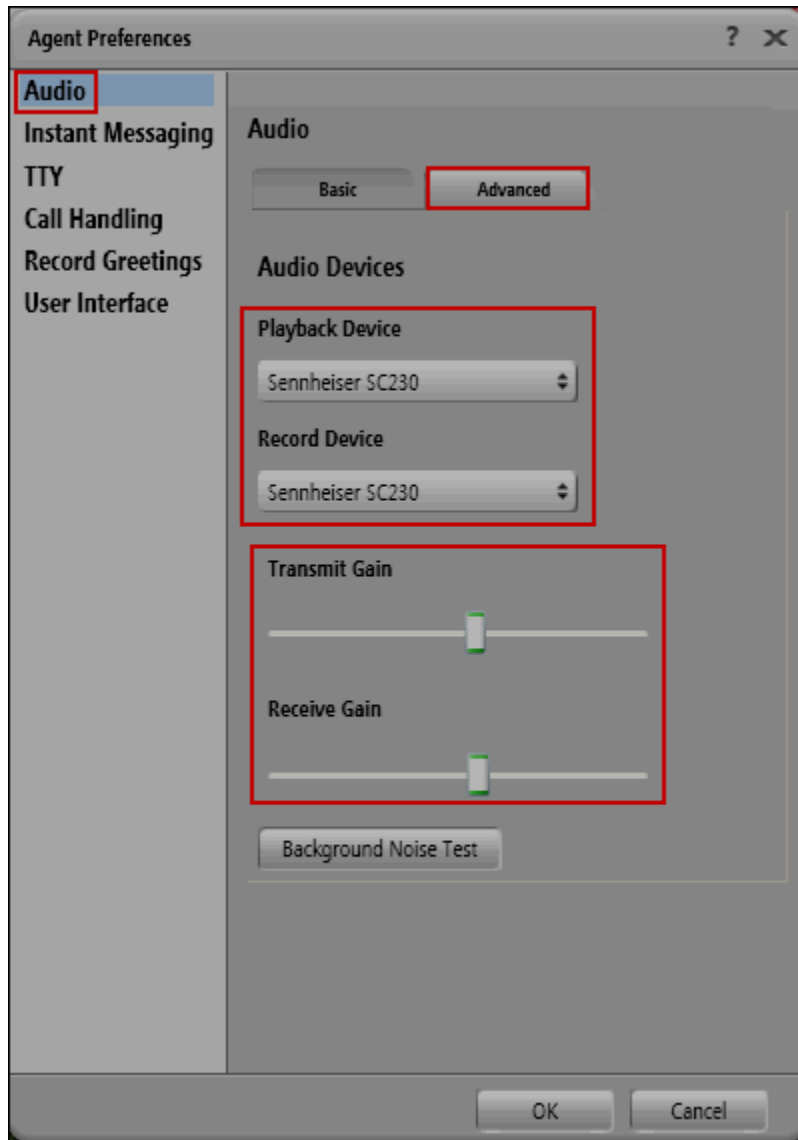
8. Answering, Ending, and Placing Calls

To answer, end, or place a call using the Sennheiser Communications A/S SC 230 USB or the Sennheiser SC 260 USB headsets follow the instructions below.

To Answer a Call:

During incoming calls Avaya one-X® Agent will display "Alerting" as shown below, click on the green telephone handset icon.
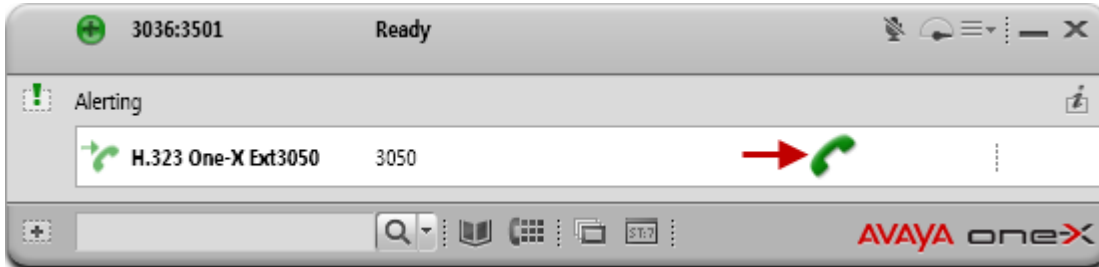
To End a Call:

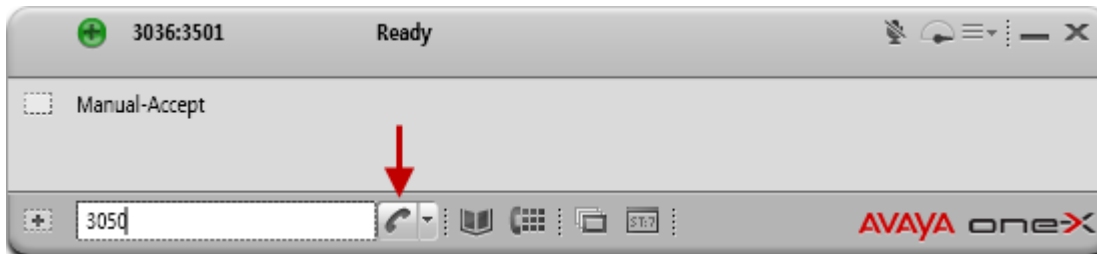Click on the red telephone handset icon on Avaya one-X® Agent to end a call.
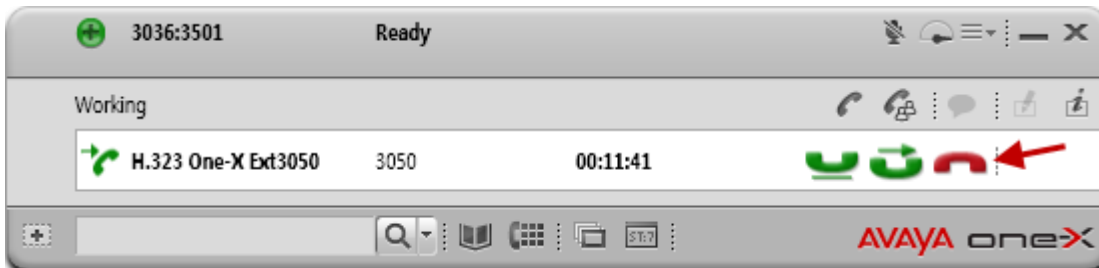
To Place a Call:

Select **Initiate Call** on the pull down menu or enter **Alt+C.**
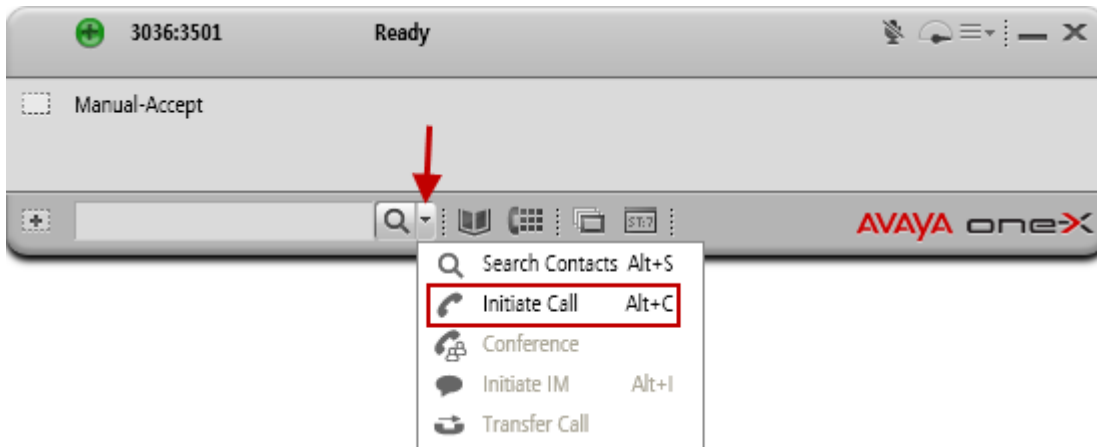
Enter the number, and then press the black telephone handset icon.

To Mute a Call:

Click on the MUTE button on Avaya One-X® Agent to place an active call on mute.
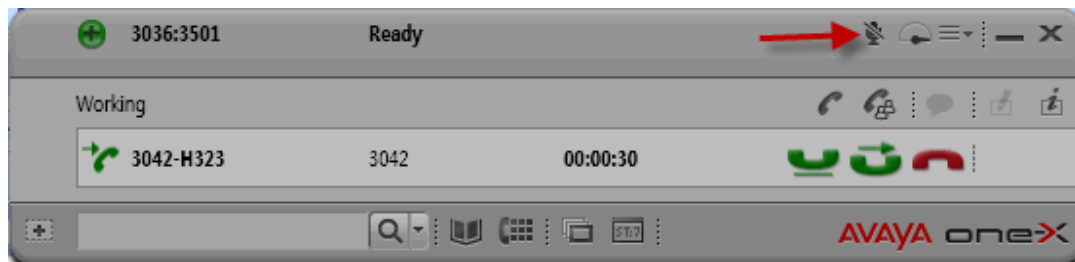
For more information on how to use the headsets refer to the Sennheiser Communications A/S SC30 USB CTRL or the Sennheiser SC 260 USB CTRL headsets Quick Guides included with the headsets. For the link to on-line documentation refer to **Section 11**.

9. Verification Steps

Verify that the Sennheiser Communications A/S SC 230 USB or the Sennheiser SC 260 USB headset have been connected to the PC running Avaya One-X® Agent, as shown in **Section 6.1**. Launch and configure Avaya One-X® Agent as shown in **Section 7**. Verify that incoming and outgoing calls can be established using the call control buttons on Avaya one-X® Agent, and that clear two-way audio, dial tone, ring-back tone can be heard on the headset when making and receiving calls.

10. Conclusion

These Application Notes describe the configuration steps required to integrate the Sennheiser Communications A/S SC 230 USB and SC 260 USB headsets with Avaya One-X® Agent. Testing was completed successfully with all test cases passing.

11. 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 Communication Manager for Avaya one- X® Agent,* Release 2.5, June 2011.
[2] *Avaya One-X® Agent Overview,* Release 2.5, June 2011.

The following Sennheiser Communications A/S documentation can be found at http://www.sennheisercommunications.com/.

[3] *Quick guide for SC 230 USB and SC 260 USB.*