Avaya Solution & Interoperability Test Lab

Application Notes for Jabra Direct and Evolve 75 UC Stereo Bluetooth/USB Headset with Avaya one-X® Agent - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Jabra Direct and Evolve 75 UC Stereo Bluetooth/USB headset with Avaya one-X® Agent.

Readers should pay particular attention to the scope of testing as outlined in **Section 2.1**, as well as 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 steps required to integrate Jabra Direct and Evolve 75 UC Stereo Bluetooth/USB (Evolve 75) headset with Avaya one-X® Agent. Direct is a PC application that enables Jabra USB devices to have call control over soft phone applications, including Evolve 75 and one-X® Agent respectively. Evolve 75 headset has two kinds of connection to PC, one with a provided wired USB cable and another via Link 370 Bluetooth USB dongle. Link 370 also comes with the Evolve 75 headset.

2. General Test Approach and Test Results

The interoperability compliance test included feature and serviceability testing. The testing utilized two connection methods of Evolve 75 to Direct: USB cable and USB Bluetooth dongle to test with the one-X Agent. The feature testing focused on placing calls to and from one-X Agent using the Direct application and Evolve 75 headset, answering and ending calls using the call control button on the headset, and verifying two-way audio. The call types included calls between local extensions, and with the PSTN.

The serviceability testing focused on verifying the usability of the Jabra headset solution after restarting one-X Agent and reconnecting the Jabra headset to the PC.

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 recommends our customers implement Avaya solutions using appropriate security and encryption capabilities enabled by our products. The testing referenced in these DevConnect Application Notes included the enablement of supported encryption capabilities in the Avaya products. Readers should consult the appropriate Avaya product documentation for further information regarding security and encryption capabilities supported by those Avaya products.

Support for these security and encryption capabilities in any non-Avaya solution component is the responsibility of each individual vendor. Readers should consult the appropriate vendor-supplied product documentation for more information regarding those products.

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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 and from internal extensions to verify two-way audio.
- Placing calls to and from the PSTN and to Voicemail to verify two-way audio.
- Answering and ending calls using the call control button on the headset.
- Verifying incoming call notification on headset.
- Verifying call ended notification on headset.

For the serviceability testing, the headset was reconnected to one-X Agent and the one-X Agent was restarted to verify proper operation of the headset.

2.2. Test Results

All test cases were executed and passed.

2.3. Support

For support on this Jabra headset solution, contact Jabra Technical Support at:

- Phone: (800) 697-8757
- Website: http://www.jabra.com/NA-US/Support/pages/Default.aspx
- Email: JabraSupport.US@jabra.com.

3. Reference Configuration

Figure 1 illustrates a sample configuration with an Avaya SIP-based network that includes the following Avaya products:

- Avaya Aura® Communication Manager running on a virtualized environment with an Avaya G450 Media Gateway.
- Avaya Aura® Session Manager connected to Communication Manager via a SIP trunk and acting as a Registrar/Proxy for SIP telephones.
- Avaya Aura® System Manager used to configure Session Manager.

In addition, the Direct application was installed on a PC that also has the one-X Agent soft phone installed.
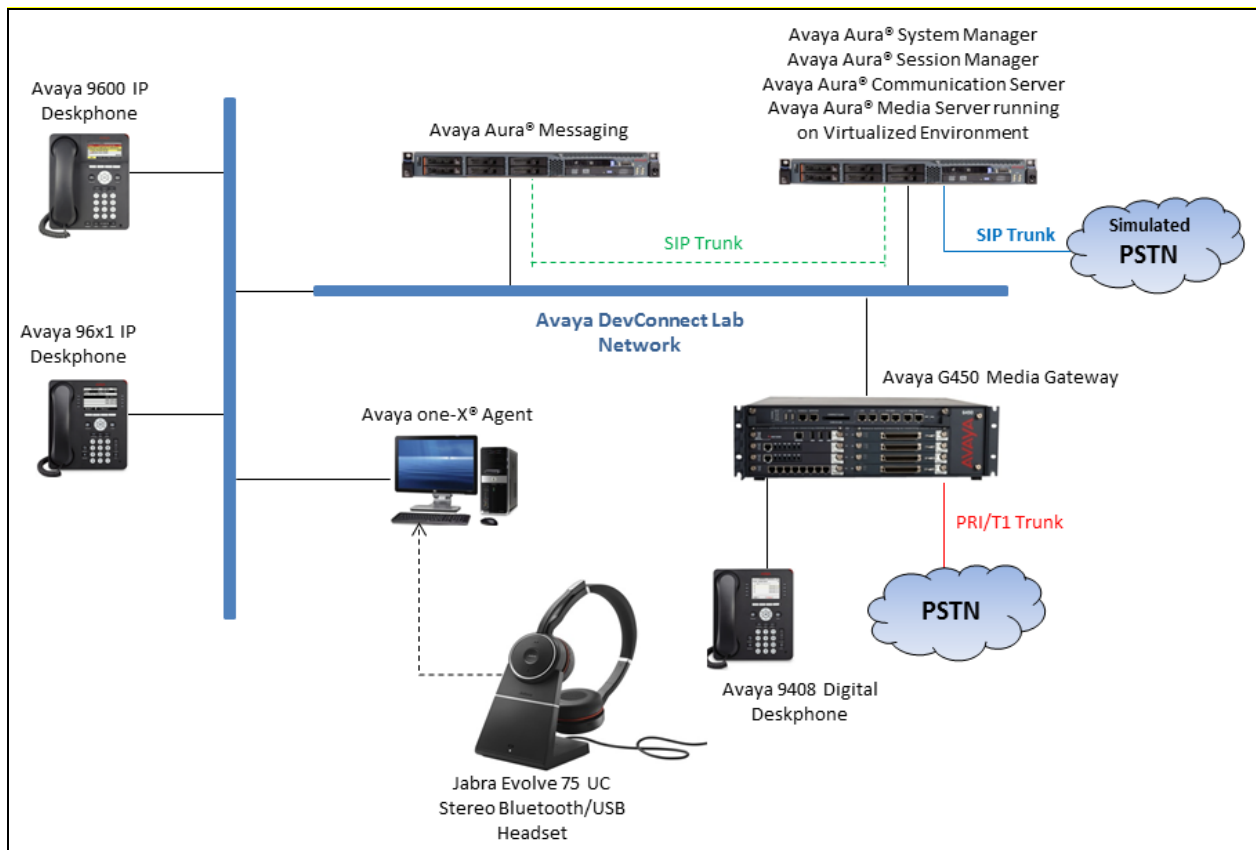
Figure 1: Test Configuration Diagram

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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 a virtual platform	7.1.0.532.0
Avaya Aura® Session Manager running on a virtual platform	7.1.0.0.710028
Avaya Aura® System Manager running on a virtual platform	7.1.0.0.1
Avaya Aura® Messaging running on a virtual platform	7.0 SP0
Avaya Aura® Media Server running on a virtual platform	7.8.0.309
Avaya one-X® Agent running on Microsoft Windows 10 Professional	2.5.10
Avaya 9611G IP Deskphone	7.0.1.2 (SIP) 6.64 (H323)
Avaya 9640 IP Deskphone	3.25
Avaya 9408 Digital Deskphone	V 2.0
Jabra Direct Jabra Link 370 (USB Bluetooth dongle) Jabra Evolve 75 UC Stereo	3.8.689 1.14.0 1.12.0

5. Configure Avaya Aura® Communication Manager

Configuration and verification operations on Communication Manager illustrated in this section were all performed using Avaya Site Administrator emulation mode. The information provided in this section describes the configuration of Communication Manager for this solution. It is implied a working system is already in place, including SIP trunks to Session Manager. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 10**. The configuration described in this section can be summarized as follows:

- Verify System Capacity
- Define the Dial Plan
- Add Agent Station
- Add Agent Login ID

Note: Any settings not in **Bold** in the following screen shots may be left as default.

5.1. Verify System Capacity

The license file installed on the system controls these attributes. If a required feature is not enabled or there is insufficient capacity, contact an authorized Avaya sales representative. Use the **display system-parameters customer-options** command to determine these values. On **Page 11**, verify that the **IP_Agent** allowed in the system is sufficient.

```
display system-parameters customer-options                      age  11 of  12
                  MAXIMUM IP REGISTRATIONS BY PRODUCT ID

Product ID  Rel. Limit           Used
AgentSC     *  : 10000           0
IP_API_A    *  : 18000           0
IP_Agent    *  : 18000           1
IP_NonAgt   *  : 18000           0
IP_Phone    *  : 18000           3
IP_ROMax    *  : 18000           0
IP_Soft     *  : 18000           0
IP_Supv     *  : 18000           0
IP_eCons    *  : 128             0
oneX_Comm   *  : 18000           0
               : 0               0
               : 0               0
               : 0               0
               : 0               0
               : 0               0


        (NOTE: You must logoff & login to effect the permission changes.)
```

5.2. Define the Dial Plan

Use the **change dialplan analysis** command to define the dial plan used in the system. This includes all telephone extensions. In the sample configuration, telephone extensions are 4 digits long and begin with **33** and **34**.

```
change dialplan analysis                                         Page   1 of  12
                           DIAL PLAN ANALYSIS TABLE
                               Location: all            Percent Full: 1

    Dialed    Total  Call      Dialed   Total  Call       Dialed   Total  Call
    String    Length Type      String   Length Type       String   Length Type
    33          4    ext
    34          4    ext
    *           3    fac
    #           3    fac
```

5.3. Add Agent Station

Issue **add station <n>** command, where **n** is an available extension number. Enter the following values for the specified fields, and retain the default values for the remaining fields.
- **Type:** Enter a desired station type, in this case **9641**.
- **Name:** A descriptive name.
- **Security Code:** Enter a valid code ex: 1234.
- **IP SoftPhone: y**

```
add station 3301                                                Page   1 of   6
                                 STATION

Extension: 3301                      Lock Messages? n              BCC: 0
     Type: 9641                       Security Code: 1234           TN: 1
     Port: S00011                   Coverage Path 1: 1             COR: 1
     Name: H323 3301                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: 3301
           Speakerphone: 2-way         Mute Button Enabled? y
       Display Language: english            Button Modules: 1
Survivable GK Node Name: lsp
          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, assign 5 agent buttons in **BUTTON ASSIGNMENTS** section:
aux-work, **auto-in**, **manual-in**, **after-call** and **release**.

```
add station 3301                                         Page   4 of   6
                              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: auto-in          Grp:
 2: call-appr                        6: after-call       Grp:
 3: call-appr                        7: manual-in        Grp:
 4: aux-work     RC:    Grp:         8: release

    voice-mail 3333
```

5.4. Add Agent Login ID

Issue **add agent-loginID <n>** command, where **n** is an available extension number. Enter the following values on **page 1** for the specified fields, and retain the default values for the remaining fields.

- **Name:** A descriptive name.
- **Password:** Enter agent password e.g. **1234**.

```
add agent-loginID 1000                                          Page   1 of   2
                              AGENT LOGINID


                 Login ID: 1000                                   AAS? n
                     Name: Agent 1000                           AUDIX? n
                       TN: 1
                      COR: 1
            Coverage Path:                           LWC Reception: spe
            Security Code: 1234              LWC Log External Calls? n
                Attribute:                  AUDIX Name for Messaging:


                                           LoginID for ISDN/SIP Display? n
                                                         Password: 1234
                                          Password (enter again): 1234
                                                      Auto Answer: station
 AUX Agent Remains in LOA Queue: system          MIA Across Skills: system
AUX Agent Considered Idle (MIA): system    ACW Agent Considered Idle: system
            Work Mode on Login: 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
```

In page 2, assign the pertinent skill number to **SN** and **SL**.

```
add agent-loginID 1000                                          Page   2 of   2
                              AGENT LOGINID
     Direct Agent Skill:                             Service Objective? n
Call Handling Preference: skill-level            Local Call Preference? n


    SN   RL SL          SN   RL SL
 1: 1       1       16:                 31:                 46:
 2:                 17:                 32:                 47:
 3:                 18:                 33:                 48:
```
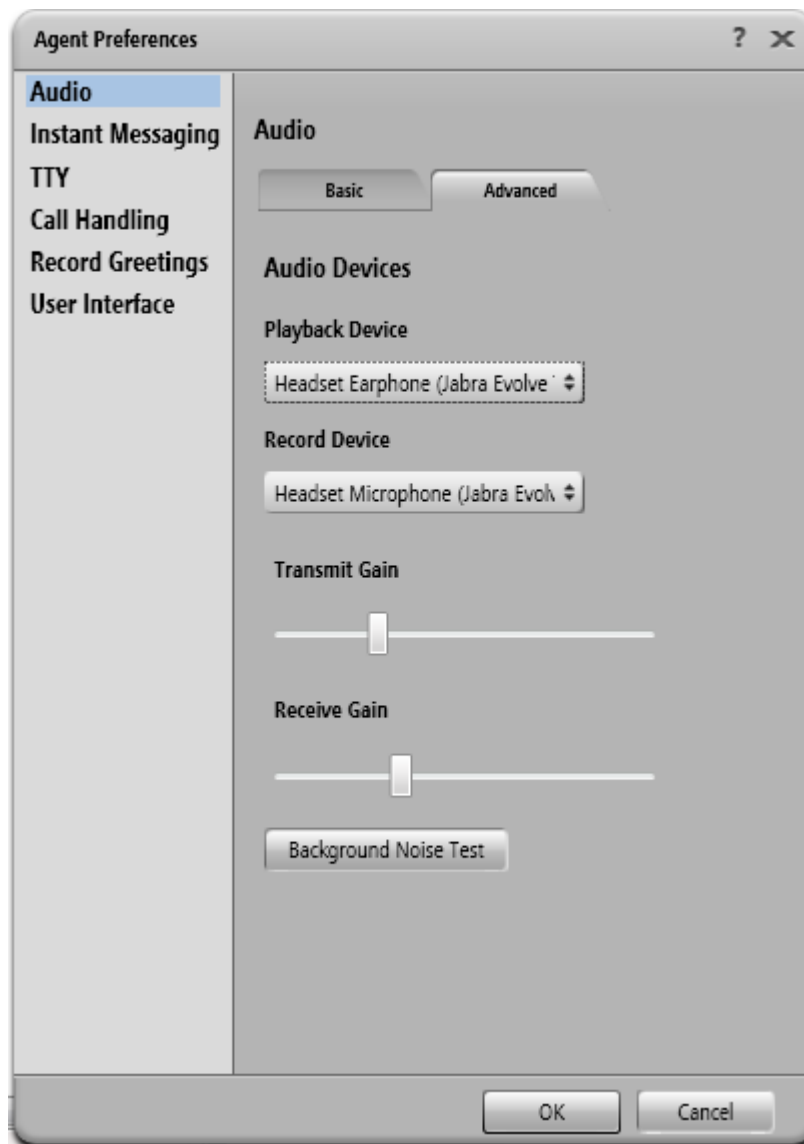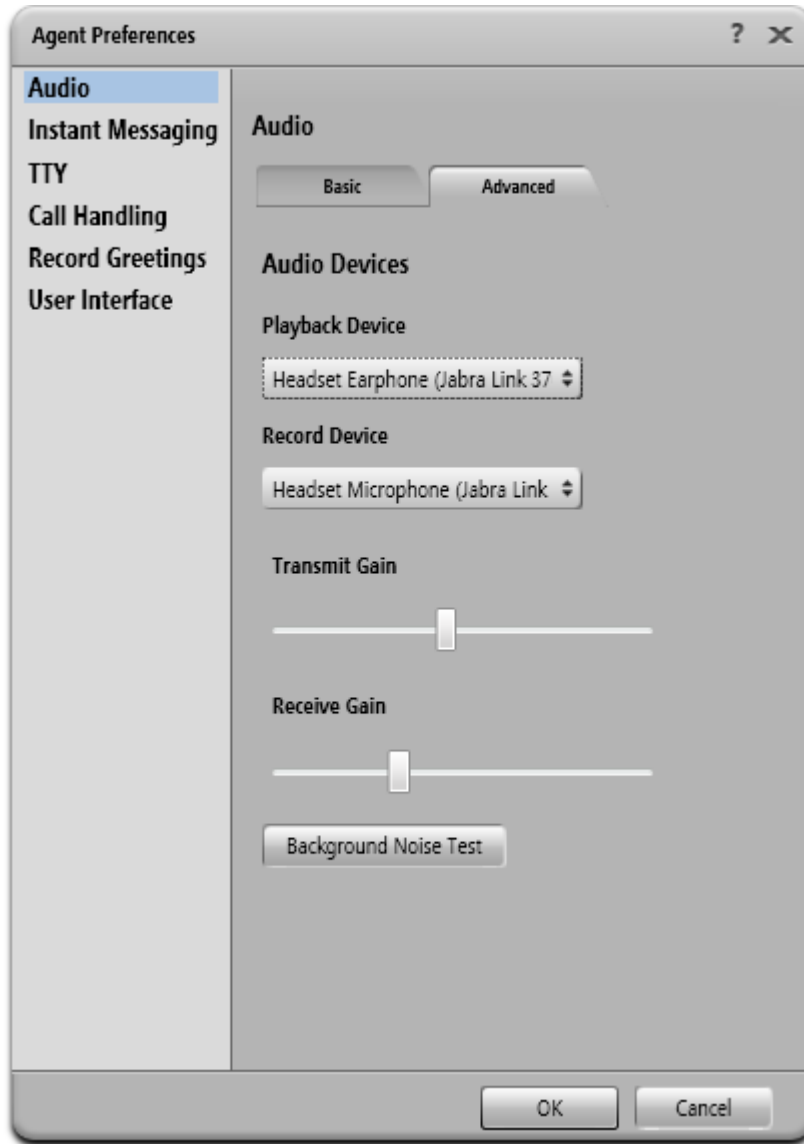
6. Configure Avaya one-X® Agent

This section shows how to configure one-X Agent for integration with Evolve 75 headset.

From one-X Agent window, navigate to the setting icon ☰▾ → **Agent Preferences** → **Audio** → **Advanced** and select *Headset Earphone (Jabra Evolve 75)* and *Headset Microphone (Jabra Evolve 75)* in the **Playback Device** and **Record Device** fields as shown below.
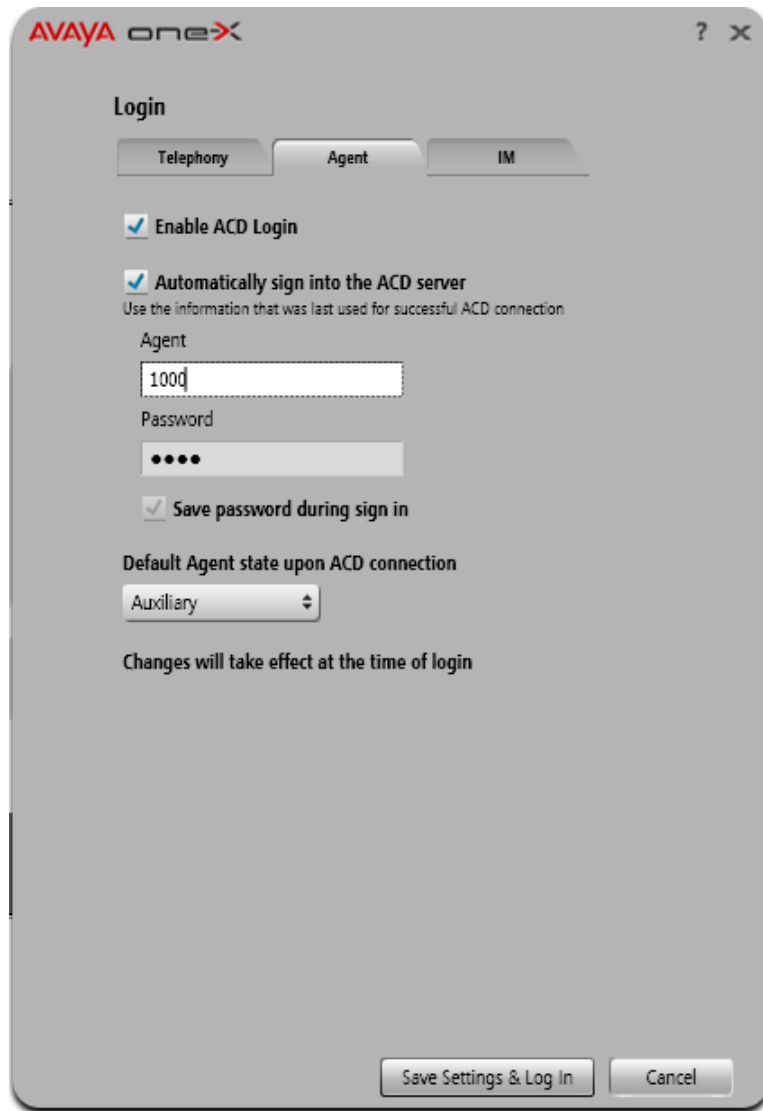
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In case of Link 370 USB Bluetooth dongle being used, select the Link 370 values respectively as shown below.

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From the one-X Agent window, click ☰▾ → **System Settings** → **Login** and enter the station extension and password as configured in **Section 5.3**.

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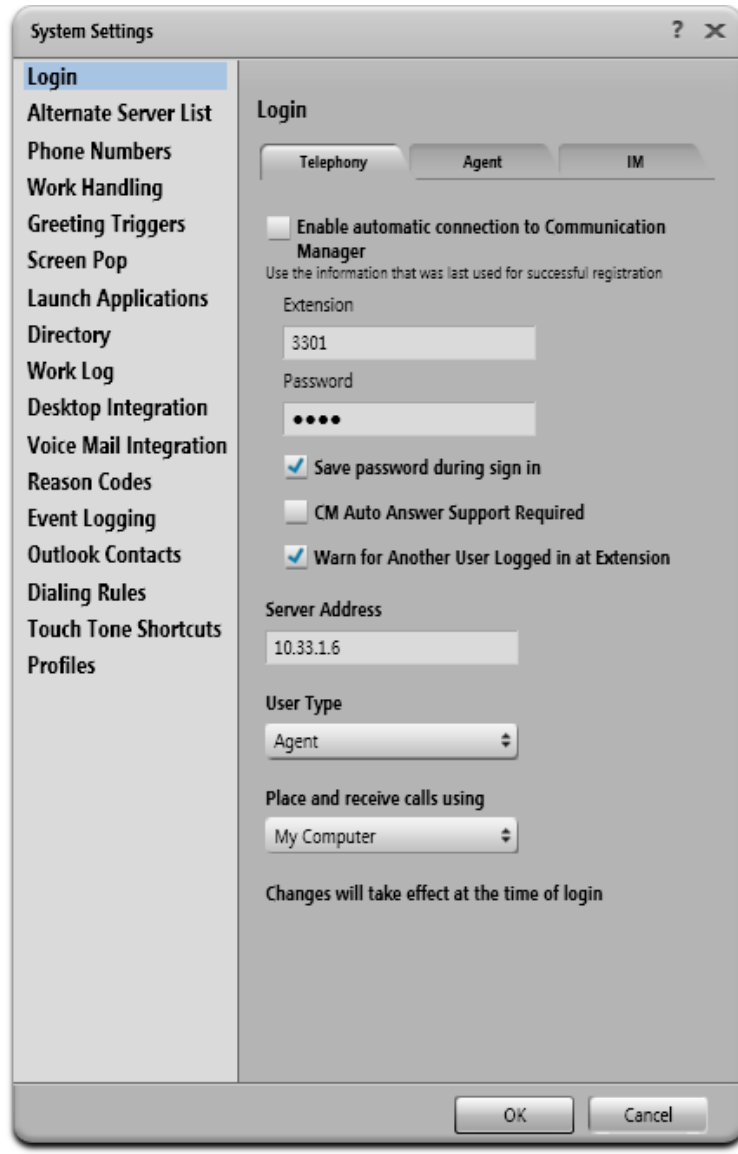
In the **Agent** tab, select **Enable ACD Login** and **Automatically sign into the ACD server** and enter the agent login ID and password as configured in **Section 5.4** in the **Agent** and **Password** fields.

This window shows the one-X Agent successfully registers to Communication Manager.

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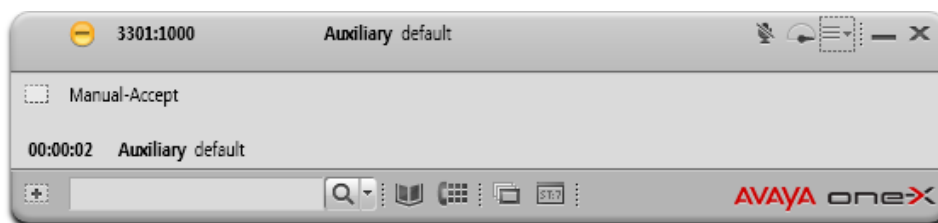
7. Configure Jabra Direct

Direct is PC software that can be downloaded from Jabra website at
http://www.jabra.ca/software-and-services/jabra-direct. Direct enables the Evolve 75 to have call
control over one-X Agent. This section assumes that Direct is already installed and updated to
the latest version.

Direct automatically detects Evolve 75 and the connection method to the PC.

The picture below shows the **Device** tab in Direct dashboard having the Evolve 75 headset
connected to the PC via USB Bluetooth dongle, it displays "Device ready for use" with one-X
Agent in **Ready** state.
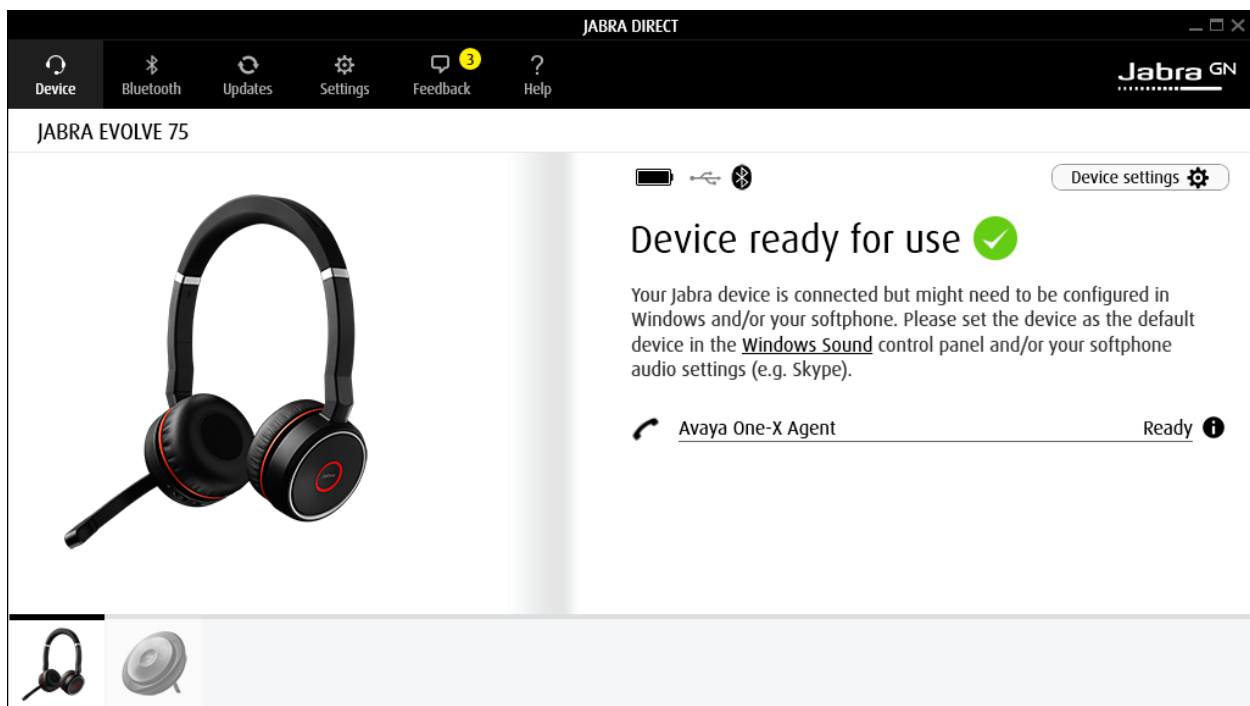
The **Bluetooth** tab displays the Link 370 USB dongle that paired with Evolve 75.
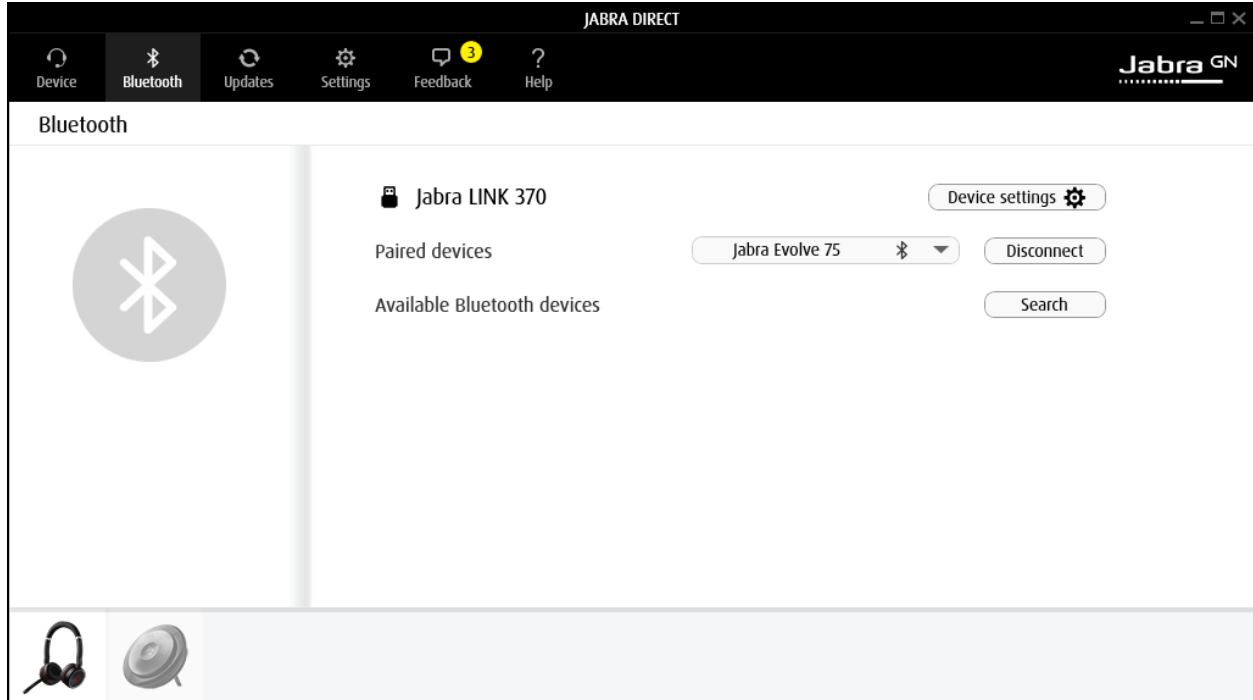
8. Verification Steps

This section verifies that Jabra Direct and Evolve 75 Bluetooth/USB headset has been successfully integrated Avaya one-X Agent.

1. Verify that the Evolve 75 headset has been successfully installed and is ready for use with the one-X Agent.
2. Once the Evolve 75 headset is selected in the one-X Agent, verify that incoming and outgoing calls can be established with two-way audio to the headset.
3. Verify that the Evolve 75 headset is able to control call functions from the headset such as mute/un-mute, hold/un-hold and disconnect the call.

9. Conclusion

These Application Notes describe the configuration steps required to integrate Jabra Direct and Evolve 75 UC Stereo Bluetooth/USB headset with Avaya one-X® Agent. All test cases were completed successfully; refer to **Section 2.2** for details.

10. Additional References

This section references documentation relevant to these Application Notes. The Avaya product documentation is available at http://support.avaya.com where the following documents can be obtained.

[1] Administering Avaya Aura® Communication Manager, Release 7.1, May 2017, Document Number 03-300509, Issue 1.
[2] Avaya Aura® Communication Manager Feature Description and Implementation, Release 7.1, May 2017, Document Number 555-245-205, Issue 1.
[3] Administering Avaya Aura® Session Manager, Release 7.1, May 2017
[4] Administering Avaya Aura® System Manager, Release 7.1, May 2017
[5] Administering Avaya one-X® Agent, 10 November 2015

The Jabra Evolve 75 Headset documentation is available at
https://www.jabra.com/supportpages/jabra-evolve-75#/#7599-832-109
[1] Jabra Evolve 75 User Manual