



## **Avaya Solution & Interoperability Test Lab**

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# **Application Notes for Jacada Workspace Agent with Avaya One-X® Agent – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required for Jacada Workspace Agent to interoperate with Avaya one-X® Agent. Jacada Workspace Agent is a contact center solution that enables creation of web-based thin-client unified desktops.

In the compliance testing, the Jacada Workspace Agent web-based thin-client used the Avaya one-X® Agent API to controls calls at Avaya one-X® Agent.

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 for Jacada Workspace Agent to interoperate with Avaya one-X® Agent. Jacada Workspace Agent is a contact center solution that enables creation of web-based thin-client unified desktops.

In the compliance testing, contact center agents were running both Avaya one-X® Agent and Jacada Workspace Agent web client on the desktops. The Jacada Workspace Agent web client used the Avaya one-X® Agent API to register with the local Avaya one-X® Agent, poll notification events, and controls calls at Avaya one-X® Agent.

The compliance test covered the default out-of-the-box CTI Bar on Jacada Workspace Agent web client. Any customized applications developed using Jacada Workspace Agent is outside the scope of this compliance test.

## 2. General Test Approach and Test Results

The feature test cases were performed manually. Calls were placed manually with necessary user actions such as hold and reconnect were performed from the Workspace Agent web client whenever possible to test the different call scenarios. The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet connection to the Workspace Agent server and web client.

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.

### 2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following on Workspace Agent:

- Proper handling of one-X Agent messages in the areas of registration, notification, and call control.
- Proper handling of call scenarios involving inbound, outbound, mute/unmute, hold/unhold, simultaneous calls, and multiple agents.

The serviceability testing focused on verifying the ability of Workspace Agent to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet connection to the Workspace Agent server and web client.

## 2.2. Test Results

All test cases were executed and passed. The following were the observations on Workspace Agent from the compliance testing.

- The integration requires call answer, mute/unmute, and hold/unhold actions to be performed from Workspace Agent exclusively, or the user interfaces will be out of sync between Workspace Agent and one-X Agent due to non-support of notification for these call states in the one-X Agent API.
- Even though Workspace Agent supports mute/unmute, the control is only applicable to one-X Agent in the My Computer mode. For one-X Agent in the Desk Phone mode, these actions have no effect.
- The out-of-the-box CTI bar on Workspace Agent does not support display of prompting digits, user-to-user information, nor support for multiple calls, work items, and IM.
- The multiple call, transfer, and conference actions must be performed from one-X Agent or from the agent desk phone when applicable, and Workspace Agent will become out of sync with one-X Agent until the active calls are dropped.

## 2.3. Support

Technical support on Workspace Agent can be obtained through the following:

- **Phone:** (888) 261-7618
- **Web:** <http://support.jacada.com>
- **Email:** [support@jacada.com](mailto:support@jacada.com)

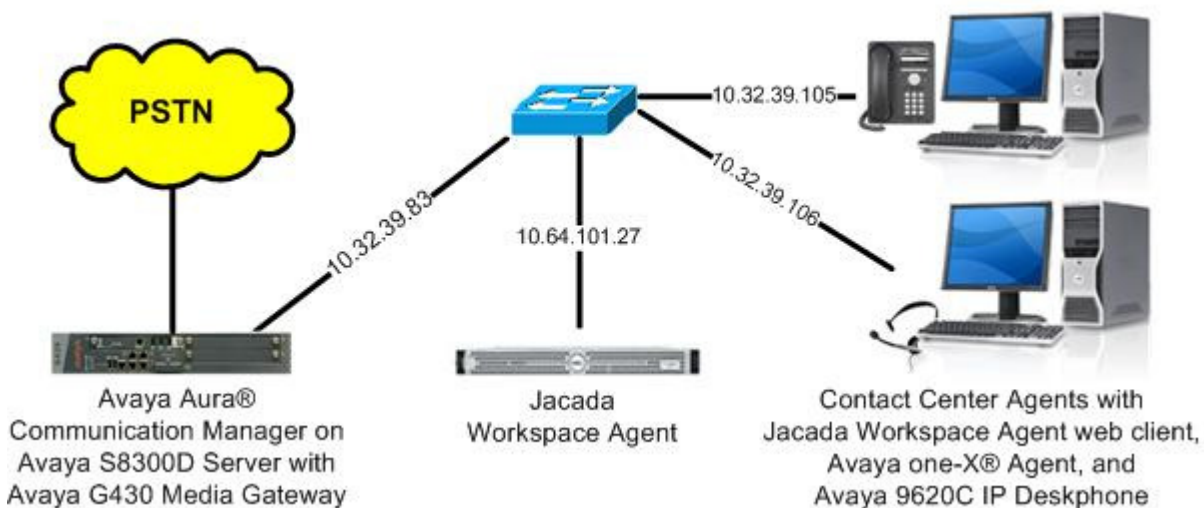
### 3. Reference Configuration

Workspace Agent can be configured on a single server or with components distributed across multiple servers. The compliance test configuration used a single server configuration.

As shown in **Figure 1**, contact center agents were running both one-X Agent and Workspace Agent web client on the desktops, with integration occurring at the local client level.

The detailed administration of connectivity between Communication Manager and one-X Agent, and of contact center devices are not the focus of these Application Notes and will not be described. In the compliance testing, the contact center devices consisted of two VDNs, two skill groups, and two agents shown in the table below.

| Device Type   | Extension    |
|---------------|--------------|
| VDN           | 48001, 48002 |
| Skill Group   | 48101, 48102 |
| Agent ID      | 45881, 45882 |
| Agent Station | 45001, 45002 |



**Figure 1: Compliance Testing 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 on<br>Avaya S8300D Server with<br>Avaya G430 Media Gateway   | 6.3 SP3<br>(R016x.03.0.124.0-20553)            |
| Avaya one-X® Agent   | 2.5  |
| Avaya 9620C IP Deskphone (H.323)   | 3.105S   |
| Jacada Workspace Agent on<br>Microsoft Windows 2008 Server <ul style="list-style-type: none"><li>• Apache Tomcat</li><li>• MySQL</li></ul> | 6.2.3<br>R2 Enterprise SP1<br>7.0.28<br>5.5.29 |

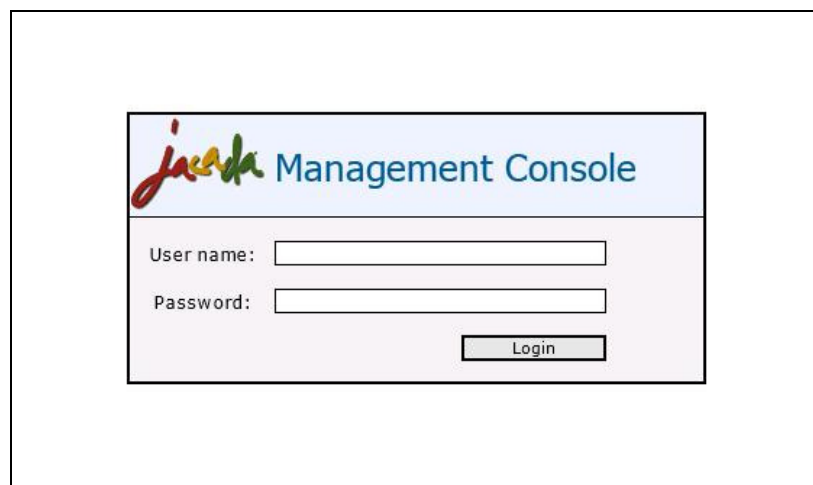
## 5. Configure Jacada Workspace Agent Server

This section provides the procedures for configuring the Workspace Agent server. The procedures include the following areas:

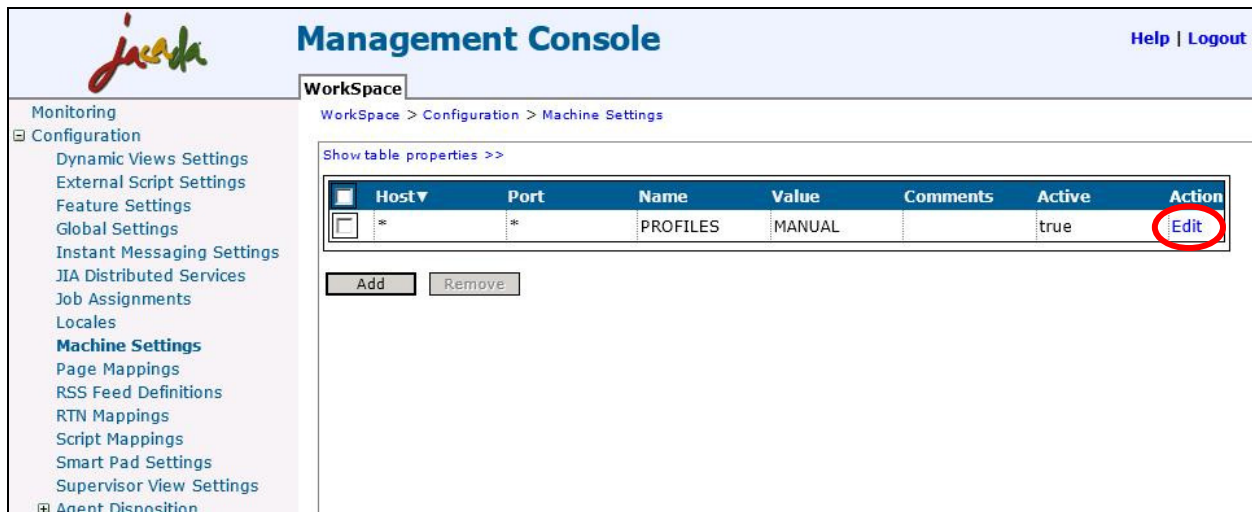
- Administer machine settings
- Administer users

### 5.1. Administer Machine Settings

From the Workspace Agent server, access the Management Console by using the URL <http://localhost:8080/mc> in an Internet browser window. Log in using the appropriate credentials.



In the subsequent screen, select **Configuration** → **Machine Settings** from the left pane. In the displayed machine entry, click **Edit**.



Management Console

Help | Logout

WorkSpace

WorkSpace > Configuration > Machine Settings

Show table properties >>

| Host | Port | Name     | Value  | Comments | Active | Action               |
|------|------|----------|--------|----------|--------|----------------------|
| *    | *    | PROFILES | MANUAL |          | true   | <a href="#">Edit</a> |

Add Remove

The **Edit Machine Setting** screen is displayed. For **Value**, update the parameter to include the one-X profile as shown below.

**Management Console** Help | Logout

Workspace

Workspace > Configuration > Machine Settings

**Edit Machine Setting**

Host: \* The IP of the server on which the CTI Gateway resides. An asterisk (\*) specifies any IP.

Port: \* The port number of the server on which the CTI Gateway resides. An asterisk (\*) specifies any port.

Name: PROFILES The PROFILES name, used to specify the names of the profiles to be supported by the CTI Gateway.

Value: MANUAL,MANUAL\_AVAYA\_ONEX A comma-separated list of profiles to be supported by the CTI Gateway. All gateways implicitly support the MANUAL profile (used for manual mode: no CTI).

Comments: Comments providing information about the setting.

Active: ☒ Specifying that an entry is not active, enables you to disable an entry without removing it from the table, for testing purposes for example.

Save Cancel

## 5.2. Administer Users

Select **Configuration** → **Authentication-Authorization** → **Users** from the left pane, to display a list of users. Click **Add**.

**Management Console** Help | Logout

Workspace

Workspace > Configuration > Authentication-Authorization > Users

Show table properties >>

| Name      | Action |
|-----------|--------|
| admin     | Edit   |
| guest     | Edit   |
| workspace | Edit   |

Add Remove

The **Edit User** screen is displayed. Enter desired **Name** and **Password** for the first agent user from **Section 3**. Select the desired groups from the **Available Groups** sub-section and move to the **Assigned Groups** sub-section, as shown below.

**Management Console** Help | Logout

**Workspace**

Workspace > Configuration > Authentication-Authorization > Users

**Edit User**

Name:  User name.

Password:  User password.

Available Groups

Assigned Groups

Administrators  
CTIUsers  
Supervisors  
Agents

Save Cancel

Repeat these procedures for all agents. In the compliance testing, two agent users were created with login name “agent45001” and “agent45002”, as shown below.

**Management Console** Help | Logout

**Workspace**

Workspace > Configuration > Authentication-Authorization > Users

• Data was updated successfully

Show table properties >>

| Name       | Action               |
|------------|----------------------|
| admin      | <a href="#">Edit</a> |
| agent45001 | <a href="#">Edit</a> |
| agent45002 | <a href="#">Edit</a> |
| guest      | <a href="#">Edit</a> |
| workspace  | <a href="#">Edit</a> |

Add Remove

## 6. Configure Jacada Workspace Agent Clients

This section provides the procedures for configuring the agent desktops that will be running the Workspace Agent web client application. The procedures include the following area:

- Administer internet options

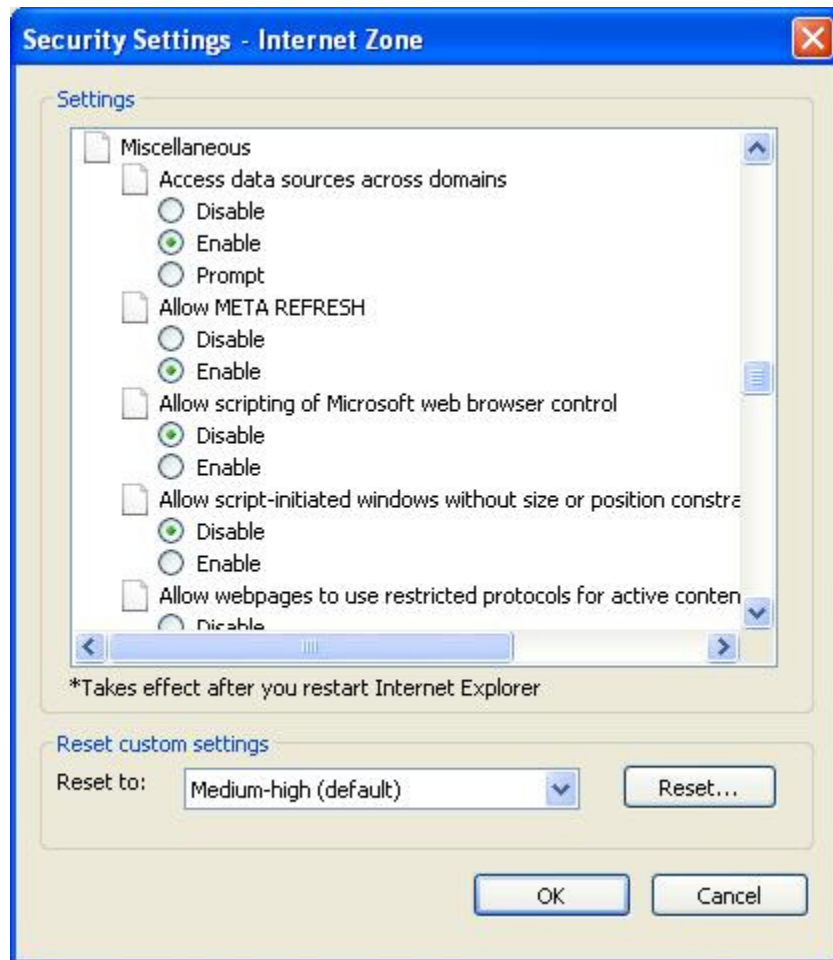
### 6.1. Administer Internet Options

From the agent desktop, launch the Internet Explorer browser and select **Tools → Internet Options**. The **Internet Options** screen is displayed. Select the **Security** tab, followed by the **Internet** zone, and click **Custom level**.

Note that only the Internet Explorer browser is supported by the current version of Workspace Agent.



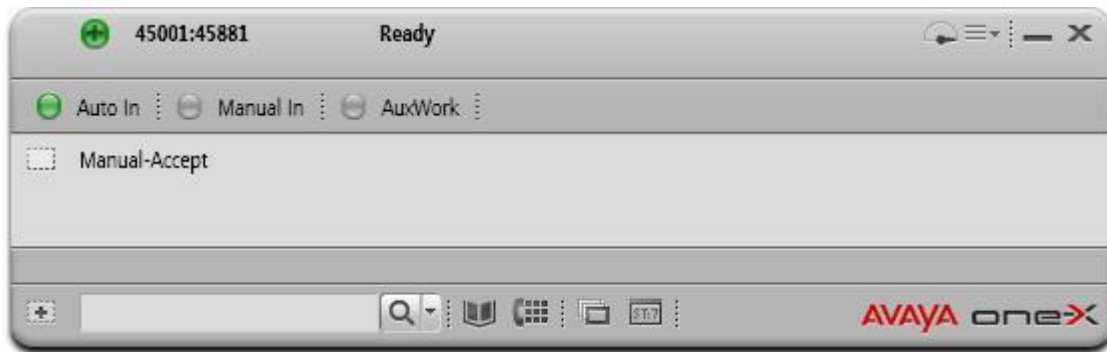
The **Security Settings – Internet Zone** screen is displayed. Scroll down to the **Miscellaneous** sub-section, and enable **Access data sources across domains** as shown below.



## 7. Verification Steps

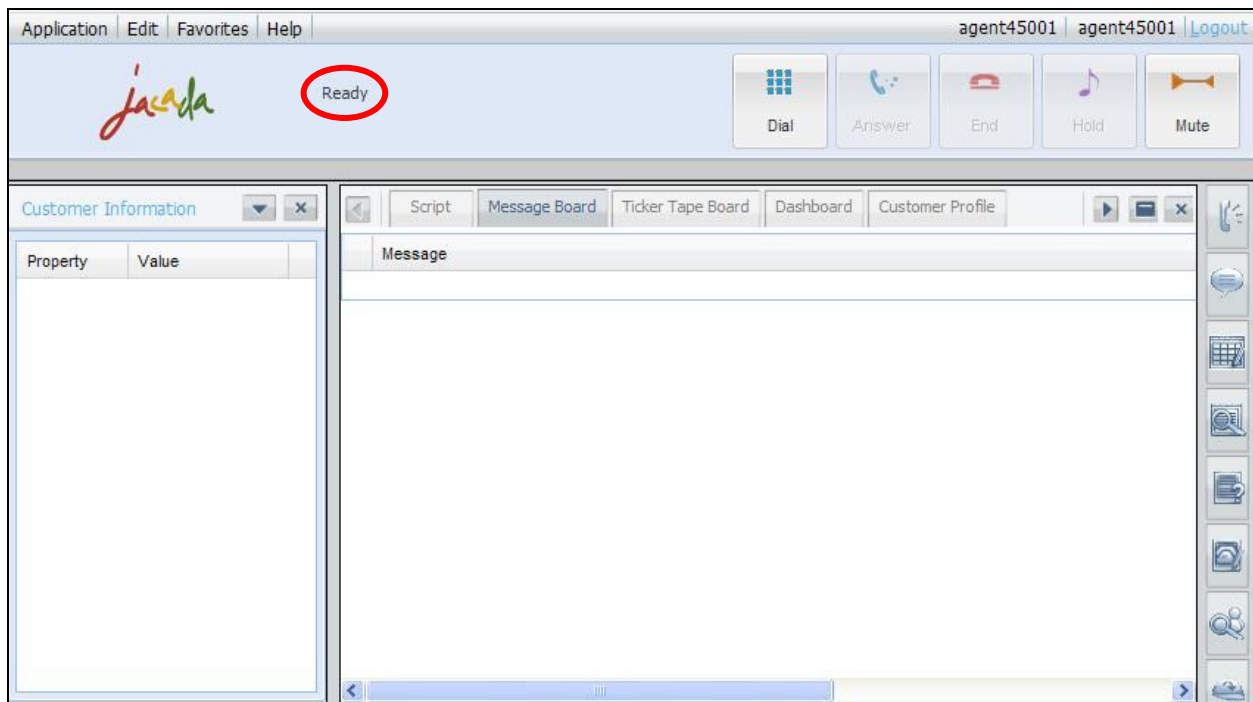
This section provides the tests that can be performed to verify proper configurations.

From the agent desktop with one-X Agent and Workspace Agent, launch and log in to the one-X Agent application first.

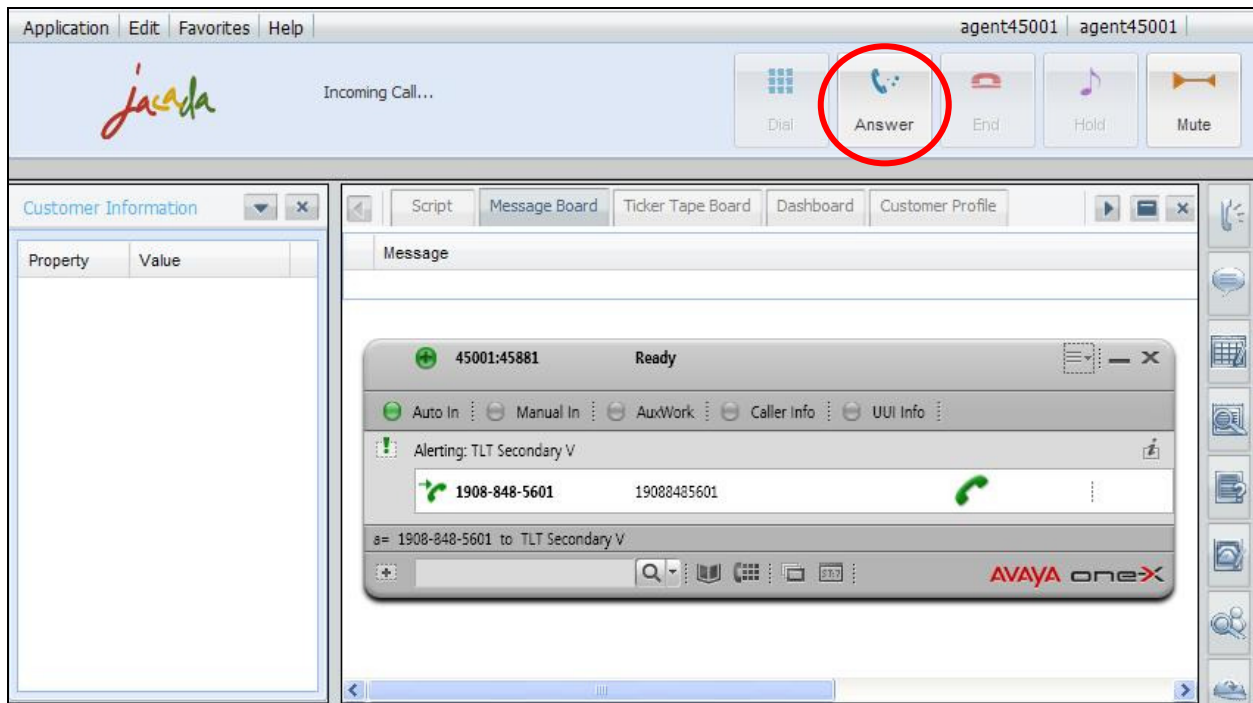


Next, start the Workspace Agent application by using the URL “[http://ip-address:8080/oc?CTIProfile=MANUAL\\_AVAYA\\_ONEX](http://ip-address:8080/oc?CTIProfile=MANUAL_AVAYA_ONEX)” in an Internet Explorer browser window, where “ip-address” is the IP address of the Workspace Agent server. Log in using the appropriate agent credentials from **Section 5.2**.

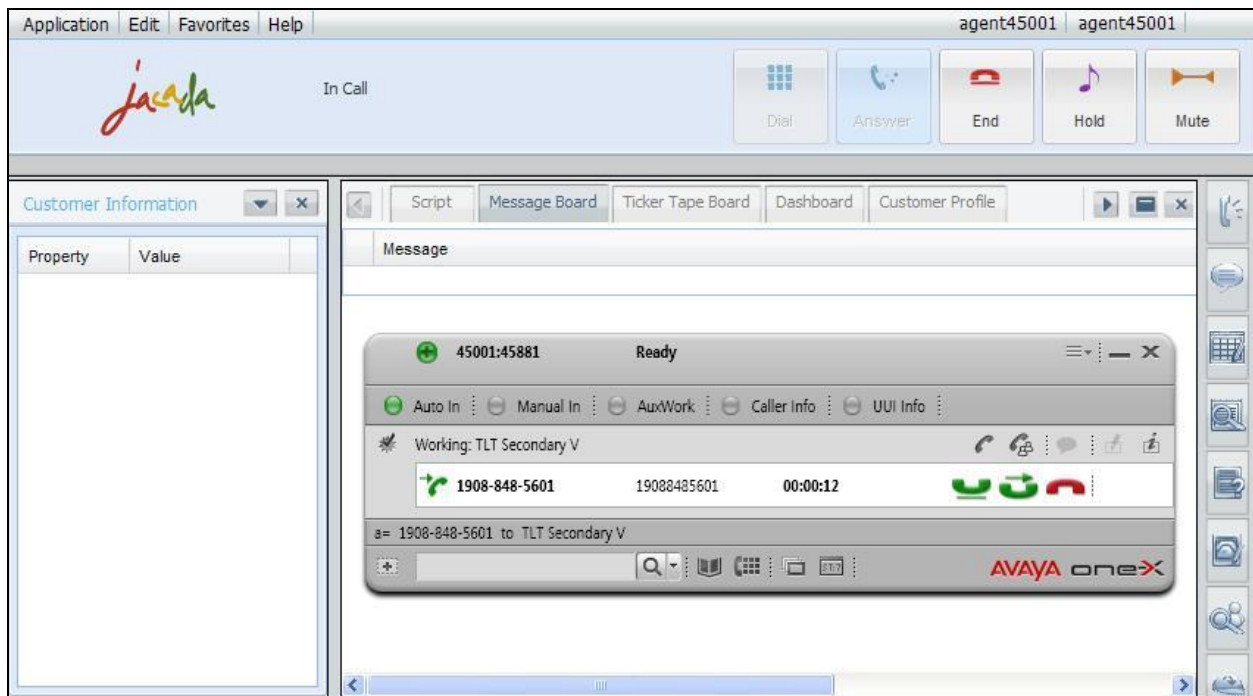
Verify the screen below is displayed, with similar user state as in one-X Agent above. Note that the area in the upper right with call related icons are referred to as the CTI bar.



Make an incoming call from the PSTN to the contact center VDN. Verify that the call is delivered to the available agent and appears on the agent's one-X Agent and Workspace Agent interfaces, as shown below. Click **Answer** from the CTI bar on Workspace Agent.



Verify that the agent is connected to the PSTN with two-way talk paths, and that both the one-X Agent and Workspace Agent interfaces are updated to reflect the connected call.



## 8. Conclusion

These Application Notes describe the configuration steps required for Jacada Workspace Agent to successfully interoperate with Avaya one-X® Agent. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

## 9. Additional References

This section references the product documentation relevant to these Application Notes.

1. *Administering Avaya Aura® Communication Manager*, Document 03-300509, Issue 8, Release 6.3, May 2013, available at <http://support.avaya.com>.
2. *Using Avaya one-X® Agent*, Release 2.5, March 31, 2011, available at <http://support.avaya.com>.
3. *Jacada Workspace Administrator Guide*, Version 6.2.3, available at <http://www.jacada.com/help/jws/v-6-2-3/html>.

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