Avaya Solution & Interoperability Test Lab

Application Notes for InteractCRM ThinConnect 2.0 with Avaya Interaction Center 7.2 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for InteractCRM ThinConnect 2.0 to interoperate with Avaya Interaction Center (IC) 7.2. ThinConnect is an interaction management application for the Avaya IC platform developed using the Avaya IC Client Software Development Kit (SDK). ThinConnect supports the Avaya IC voice channel and performs CTI functions required by agents to handle voice calls.

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.

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1. Introduction

These Application Notes describe the configuration steps required for InteractCRM ThinConnect 2.0 to interoperate with Avaya Interaction Center (IC) 7.2. ThinConnect is an interaction management application for the Avaya IC platform developed using the Avaya IC Client Software Development Kit (SDK).

2. General Test Approach and Test Results

The feature test cases were performed manually. Incoming and outgoing calls were made on Communication Manager and the calls were handled by agents running InteractCRM ThinConnect Client. All operations were made using the ThinConnect Client without interacting with the telephone.

The serviceability test cases were performed manually by disconnecting the Ethernet cables on the ThinConnect client PC, ThinConnect server and Application Enablement Services server, and by rebooting of Communication Manager and ThinConnect server.

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying InteractCRM ThinConnect on the following:

- Agent log in, log out and change work modes.
- Handling incoming and outgoing calls.
- Holding and resuming calls.
- Blind and consult voice transfers and voice conference.
- Wrap up and aux work reason codes.

The serviceability testing focused on verifying the ability of InteractCRM ThinConnect to recover from adverse conditions, such as disconnecting the Ethernet cables on the ThinConnect client PC, ThinConnect server and Application Enablement Services server, and resetting Communication Manager and ThinConnect server.

2.2. Test Results

All test cases were executed and passed.

2.3. Support

Technical support on InteractCRM ThinConnect can be obtained through the following:

- Phone: +91-22-40553055
- Email: tcsupport@interactcrm.com

3. Reference Configuration

The compliance test configuration utilized two servers to host Avaya IC components, as shown in **Figure 1** below. InteractCRM ThinConnect server application is installed on a Windows 2003 Server, and networked to the Avaya IC Client SDK server via TCP/IP. The agent PCs are running the ThinConnect client application hosted on the InteractCRM ThinConnect server using the Microsoft Internet Explorer 7.0. Contact related actions such as answering calls and transferring calls are initiated via the desktop utilizing the ThinConnect client.

Avaya IC has a CallVisor LAN (CVLAN) Computer Telephony Integration (CTI) link to Avaya Aura® Application Enablement Services to enable call event reporting and third-party call control of contact center devices on Avaya Aura® Communication Manager. The administration of the contact center devices and CTI connectivity for Communication Manager, Application Enablement Services, and Avaya IC are assumed to be in place and will not be described in these application notes.

In addition, the network infrastructure includes a Microsoft SQL 2005 Server in the test configuration for database support. These Application Notes assume all network infrastructures are in place and configured, and the focus will be on the configuration of the Avaya IC Client SDK server and InteractCRM ThinConnect.

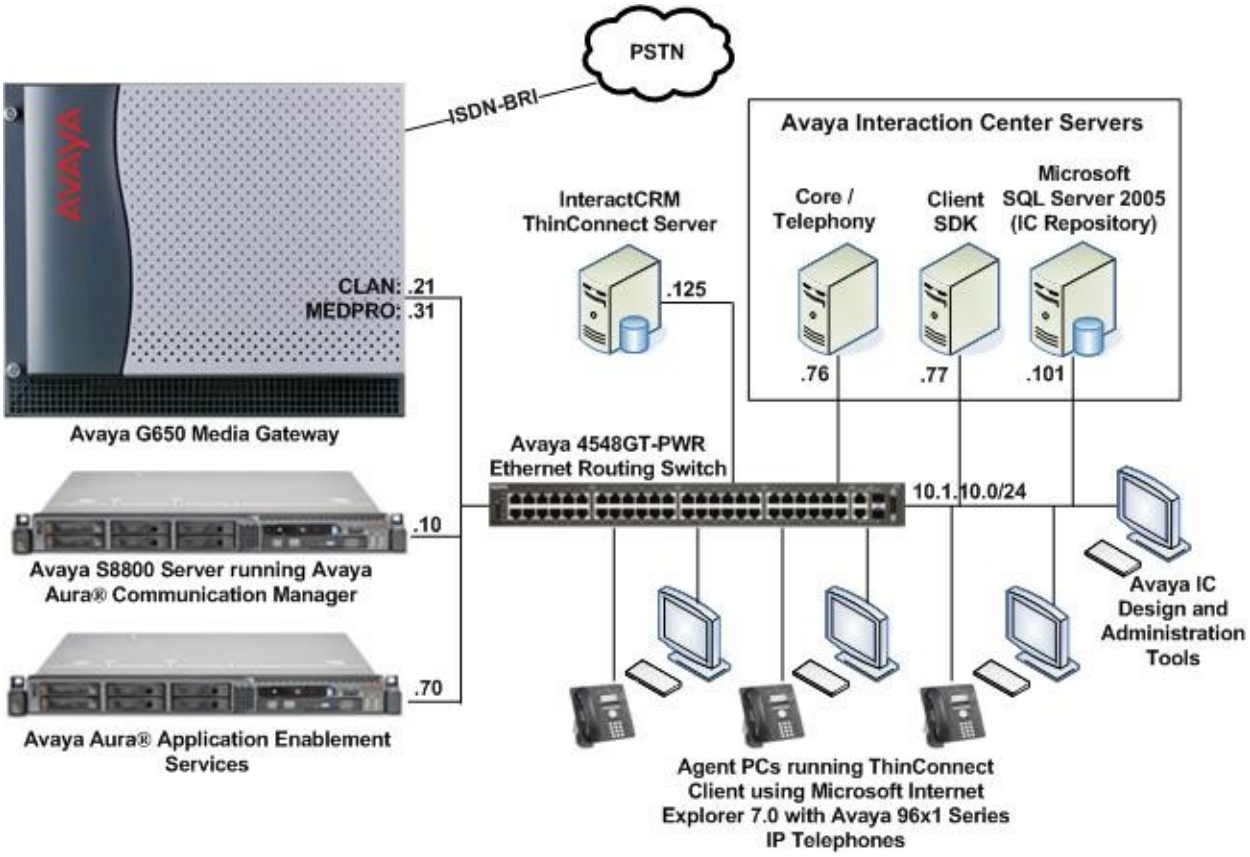


Figure 1: Test Configuration

4. Equipment and Software Validated

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

Equipment/Software	Version
Avaya S8800 Server	Avaya Aura® Communication Manager 6.0.1 (Service Pack 2 00.1.510.1-18860)
Avaya G650 Media Gateway • TN2312BP IP Server Interface • TN799DP C-LAN Interface • TN2602AP IP Media Processor • TN2185B BRI Trunk	- HW07, FW053 HW01, FW039 HW02, FW058 000004
Avaya Aura® Application Enablement Services	6.1 Patch 2 (r6-1-0-20-0)
Avaya Interaction Center servers on Dell PowerEdge 1950	7.2.3 Microsoft Windows Server 2003, SP2
Avaya 96x1 Series IP Telephones	6.0 SP3 (H.323)
Avaya 4548GT-PWR Ethernet Routing Switch	V5.4.0.008
InteractCRM ThinConnect clients using Microsoft Internet Explorer on Dell PCs	2.0 7.0 Microsoft Windows XP Professional, SP3
InteractCRM ThinConnect server on Dell PowerEdge 1950	2.0 Microsoft Windows Server 2003, SP2
Microsoft SQL Server on Dell PowerEdge 1950	Microsoft SQL Server 2005, SP4 Microsoft Windows Server 2003, SP2
Sun Java SE Development Kit (JDK)	Version 6 Update 25
Apache Tomcat	6.0.24

5. Configure Avaya Interaction Center

The detailed administration of the CTI connectivity between Avaya IC, Application Enablement Services, and Communication Manager is not the focus of these Application Notes and will not be described. For administration of the CTI connectivity, refer to the appropriate documentation listed in **Section 9**.

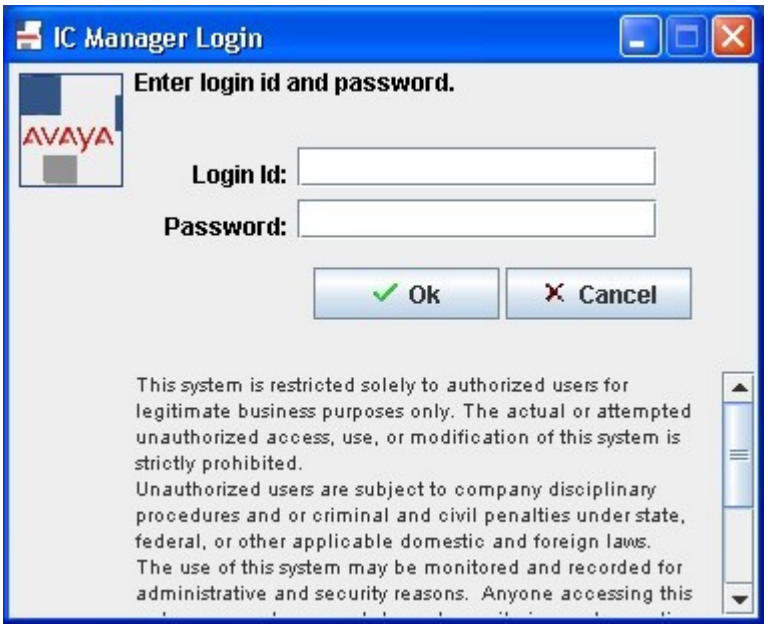
For the Avaya IC Client SDK server, it is assumed that the Avaya IC core server components have been installed with a secondary ORB server created as part of the installation. This section provides the procedures for configuring the Avaya IC Client SDK server, which includes the following areas:

- Launch IC Manager
- Administer SDK domain
- Administer agent account for Java Application Bridge
- Administer Java Application Bridge
- Administer client SDK service
- Start Avaya IC Client SDK Service

For the compliance testing, agents with login ID of "agent1, agent2 and agent3" were created on the Avaya IC server and configured to be able to handle contacts from the voice media channel. Domain "Voice1" was created with an Agent Data Unit (ADU) server.

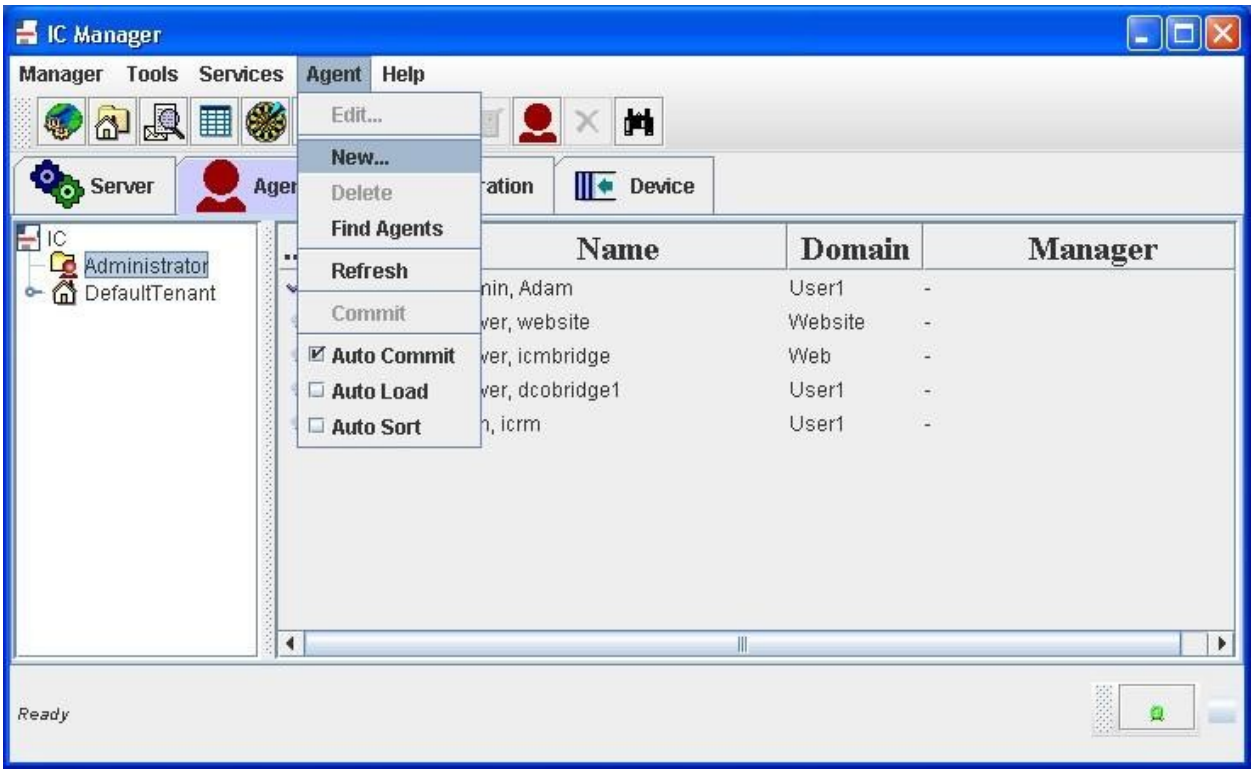
5.1. Launch IC Manager

From the PC where the Avaya IC Design and Administration Tools have been installed, select **Start > All Programs > Avaya Interaction Center 7.2 > IC Manager** to launch the IC Manager. The **IC Manager Login** dialog box is displayed. Enter the appropriate credentials and click **Ok**.



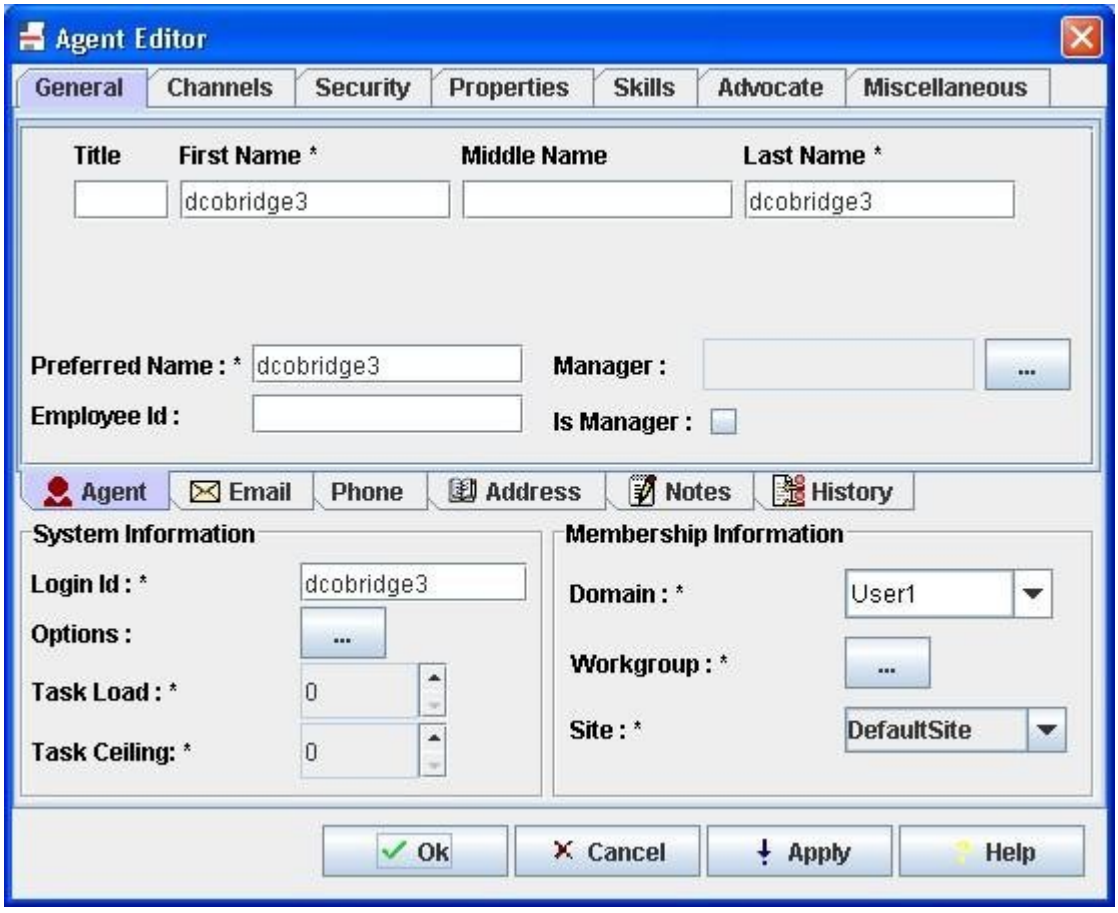
5.2. Administer Agent Account for Java Application Bridge

On the **IC Manager** screen, click the **Agent** tab. The **IC Manager** screen is updated with agent account information. In the left pane, navigate to the place where a non-human agent account will be created. For the compliance testing, the agent account was created under **IC > Administrator**, as shown below. Select **Agent > New** from the menu bar to create an agent account.

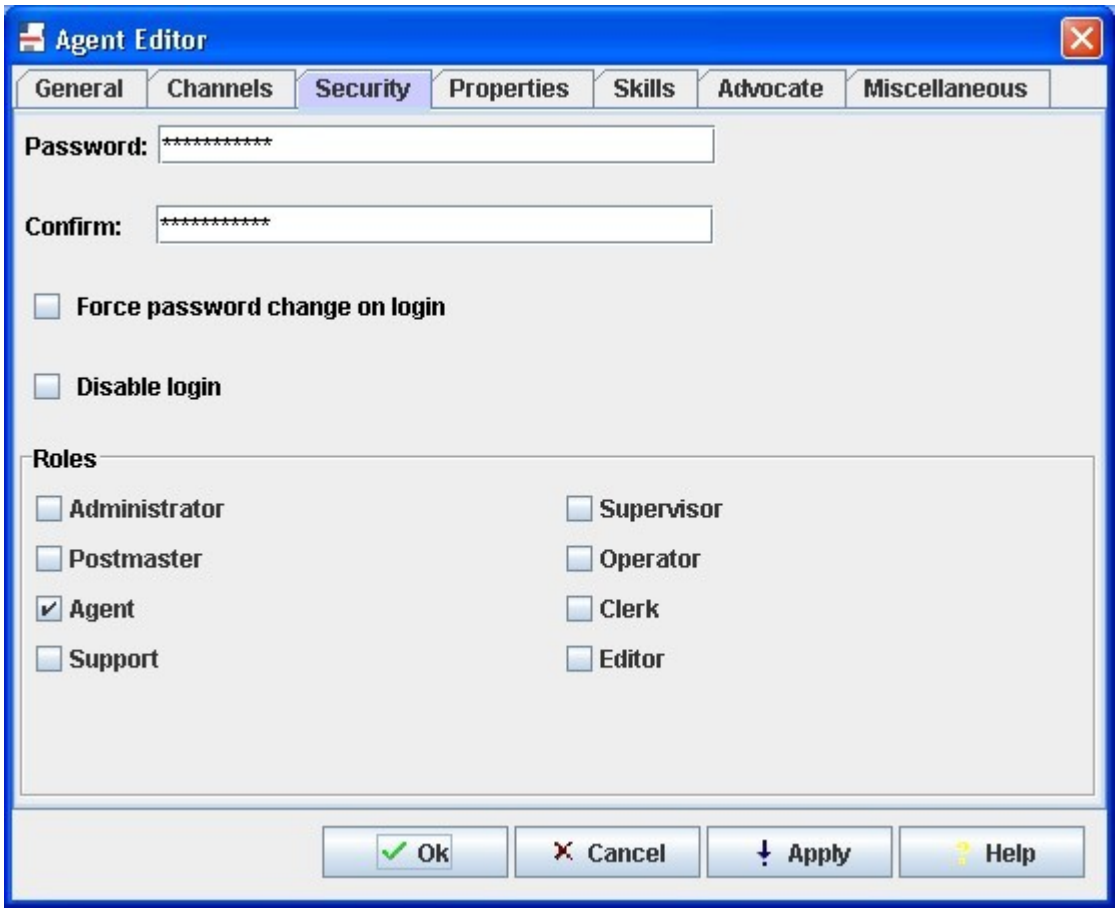


The **Agent Editor** screen is displayed. Select the **General** tab. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **First Name:** A descriptive first name, in this case "dcobridge3".
- **Last Name:** A descriptive last name, in this case "dcobridge3".
- **Preferred Name:** A descriptive preferred name, in this case "dcobridge3".
- **Login Id:** A descriptive login id, in this case "dcobridge3".
- **Domain:** Select the **"**User1" domain.
- **Task Load:** Use the down arrow to decrease the load to "0".
- **Task Ceiling:** Use the down arrow to decrease the ceiling to "0".

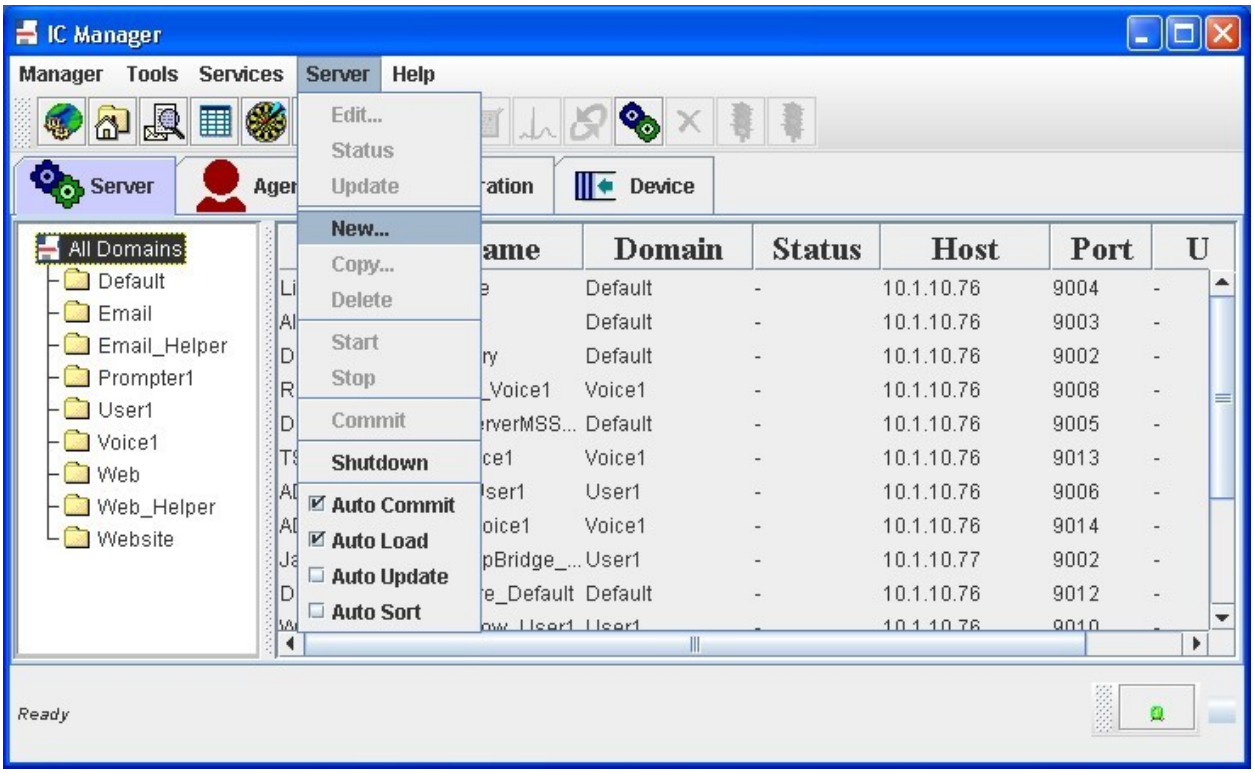


Select the **Security** tab and enter the desired password into the **Password** and **Confirm** fields. Uncheck the **Force password change on login** field, and check the **Agent** field. Click **Ok**.

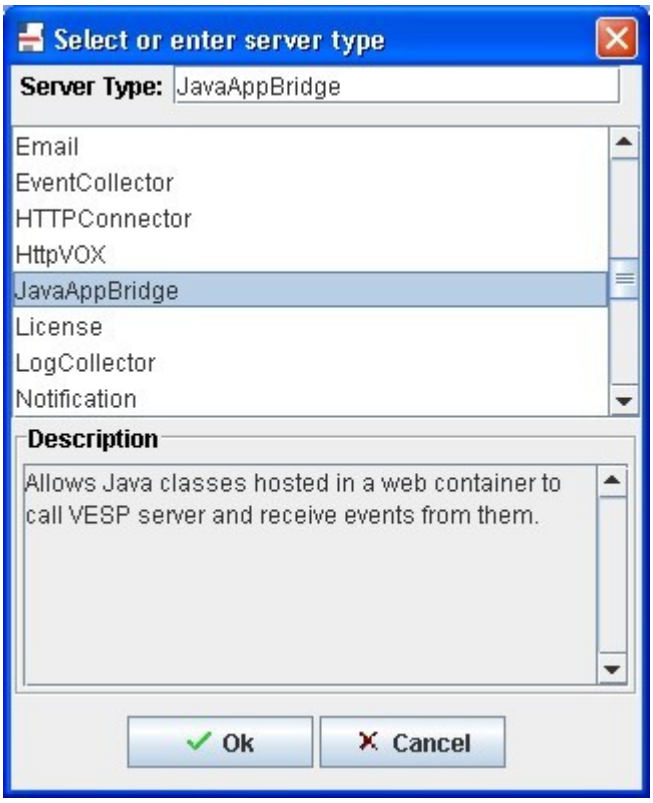


5.3. Administer Java Application Bridge

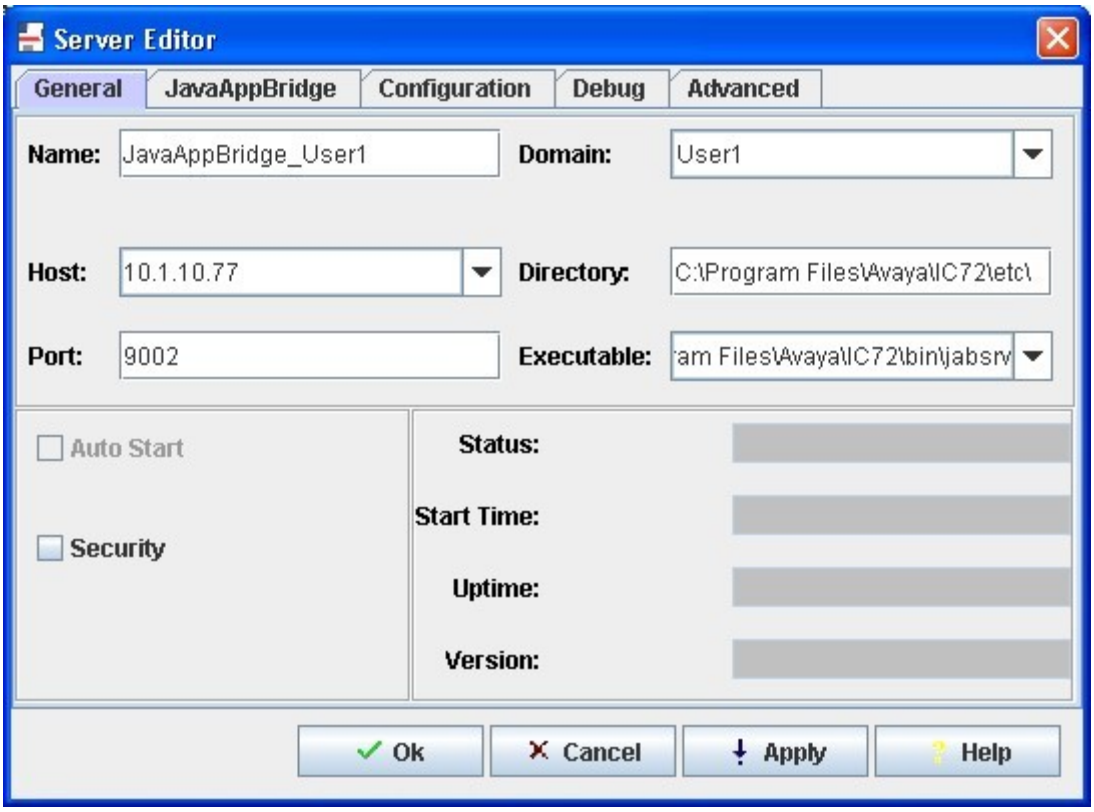
Click the **Server** tab. The **IC Manager** screen is updated with server information. Select **Server > New** from the main menu, as shown below.



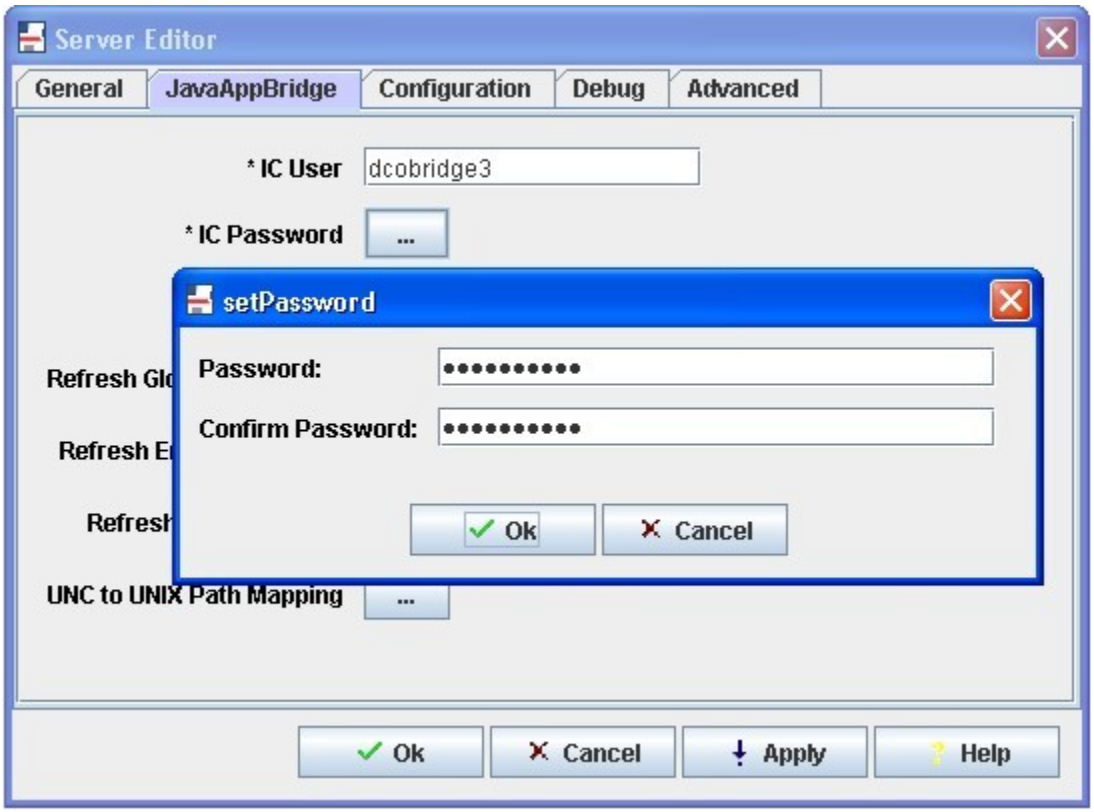
The **Select or enter server type** dialog box is displayed. Scroll down the top pane and select "JavaAppBridge". Click **Ok**.



The **Server Editor** screen is displayed next. Select the **General** tab. For the **Name** field, enter a descriptive name. Select the **User1** domain from the **Domain** field drop-down list and select the IP address of the server that will run the IC Client SDK from the **Host** field drop-down list. Maintain the automatically populated default values in the remaining fields.

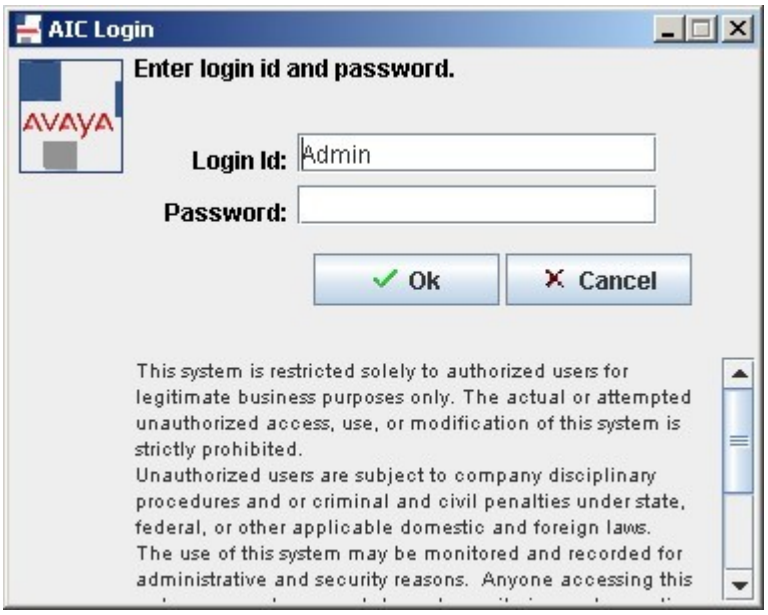


Select the **JavaAppBridge** tab. For the **IC User** field, enter the agent account from **Section 5.2**. Select the **IC Password** field to display the **setPassword** dialog box. Enter the agent account password from **Section 5.2** into the **Password** and **Confirm Password** fields in the dialog box, and click **Ok**. Maintain the default values in the remaining fields on the **Server Editor** screen, and click **Ok**.

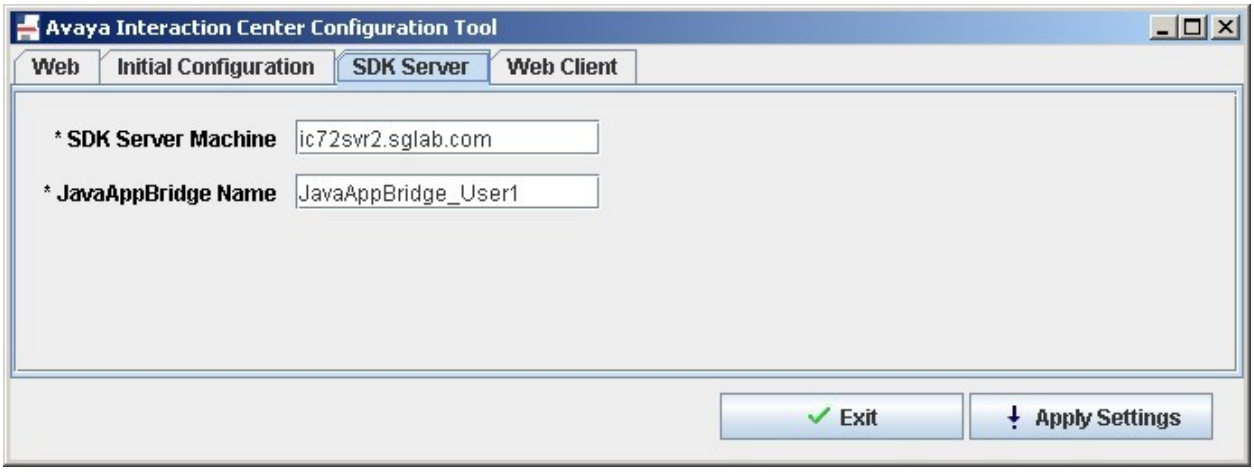


5.4. Administer Avaya IC Client SDK Service

From the IC Client SDK server, select **Start > Programs > Avaya Interaction Center 7.2 > Config Tool**. The **AIC Login** dialog box is displayed. Enter the appropriate administrator credentials and click **Ok**.

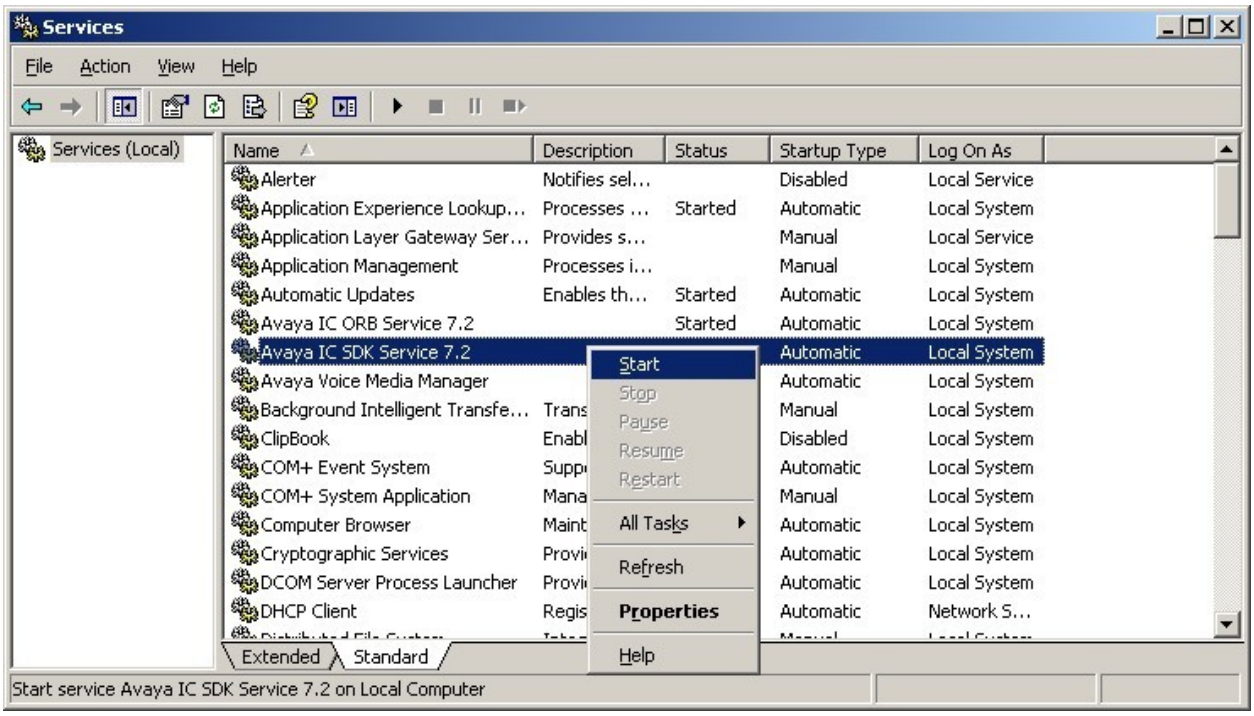


The **Avaya Interaction Center Configuration Tool** screen is displayed next. Select the **SDK Server** tab. For the **SDK Server Machine** field, enter the fully-qualified domain name of the IC Client SDK server. For the **JavaAppBridge Name** field, enter the name of the Java Application Bridge from **Section 5.3**. Click **Apply Settings** followed by **Exit**.



5.5. Start Avaya IC Client SDK Service

From the IC Client SDK server, select **Start > Administrative Tools > Services** (not shown) to bring up the **Services** screen below. Right click on **Avaya IC SDK Service 7.2**, and select **Start** to start the service.



6. Configure InteractCRM ThinConnect

This section provides the procedures for configuring InteractCRM ThinConnect, which includes the following areas:

- Configure InteractCRM ThinConnect Server
- Configure InteractCRM ThinConnect Client PC

6.1. Configure InteractCRM ThinConnect Server

InteractCRM ThinConnect Server is deployed on a Windows 2003 Server running Apache Tomcat 6.0.24. InteractCRM ThinConnect Server consists of two components:

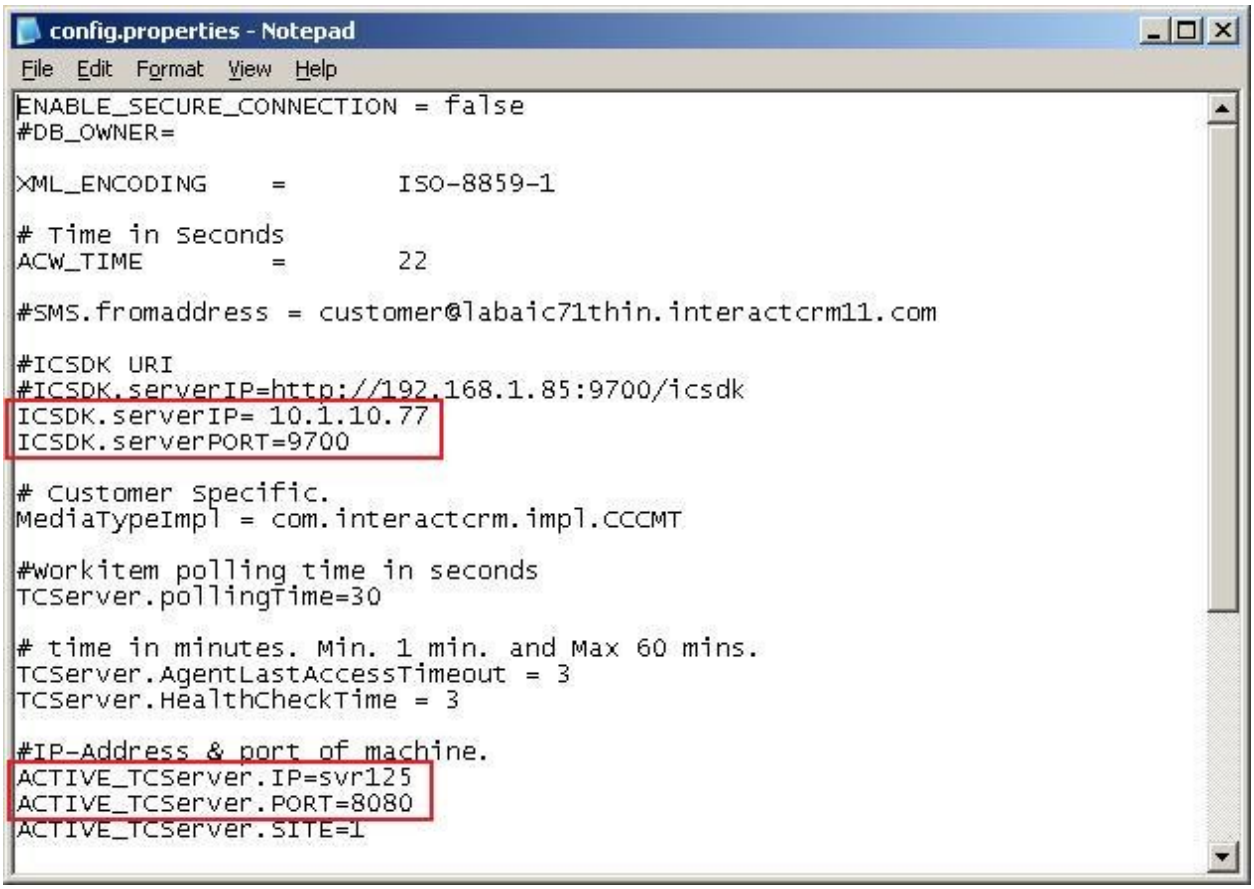
- LoadBalancer - Dynamically distributes agents across available ThinConnect Server(s).
- ThinConnect Server - Avaya IC SDK compliant call control server and Agent Interaction Manager.

InteractCRM ThinConnect supports multiple ThinConnect Server machines for redundancy and uses the LoadBalancer to distribute the agents. In this test configuration, the deployment consists of one ThinConnect Server with both the LoadBalancer and ThinConnect Server co-resident on the same machine. The configuration of the LoadBalancer will not be covered as it does not interface with the Avaya IC.

6.1.1. Configure ThinConnect Server

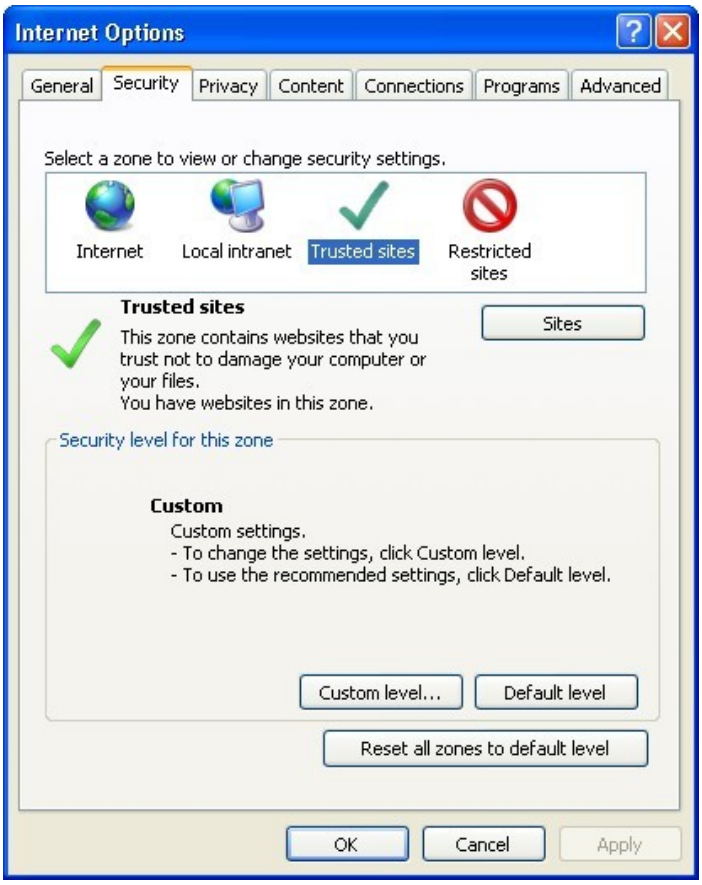
From the InteractCRM ThinConnect server, edit the file **config.properties** located in the folder **C:\InteractCRM\ HOME\THINCONNECT_HOME\config** using Notepad. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **ICSDK.serverIP**: IP Address of IC SDK Server, in this case "10.1.10.77".
- **ICSDK.serverPORT**: Port of IC SDK Server. Use the default "9700".
- **ACTIVE_TCServer.IP**: IP address or hostname of ThinConnect Server, in this case "svr125".
- **ACTIVE_TCServer.PORT**: Port of ThinConnect Server. Use the default "8080".

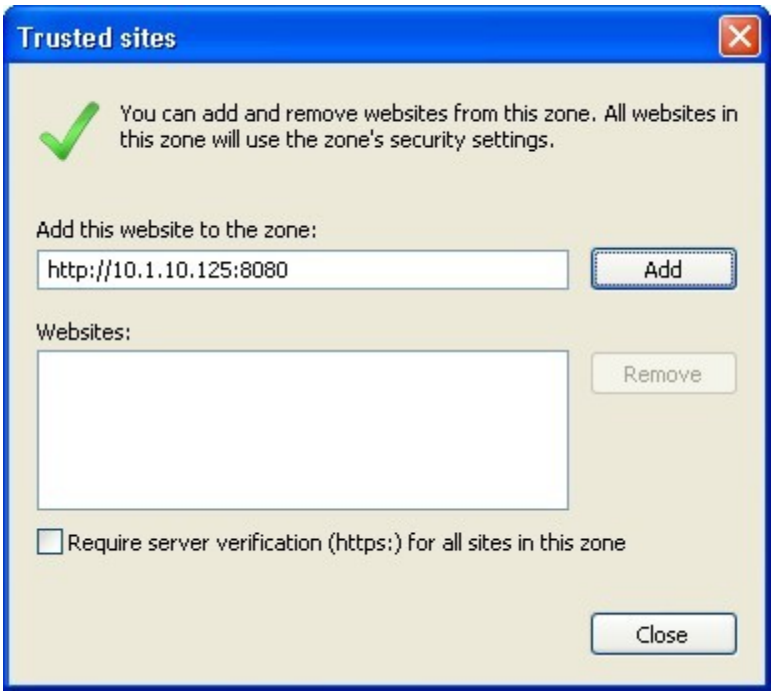


6.2. Configure InteractCRM ThinConnect Client PC

From the InteractCRM ThinConnect Client PCs, launch Microsoft Internet Explorer. Select **Tools > Internet Options** and click the **Security** tab. Click **Trusted sites** and then click **Sites**.



In the Trusted sites window, enter the URL to launch the ThinConnect Client in **Add this Web site to the zone** and click **Add**. Uncheck **Require server verification (https:) for all sites in this zone**. Click **Close**.



In the **Security level for this zone** area, click **Custom Level** (not shown). Configure the following:

Under **ActiveX Controls and plug-ins**:

- Download signed ActiveX controls: **Enable**
- Download unsigned ActiveX controls: **Enable**
- Initialize and script ActiveX controls not marked as safe for scripting: **Enable**
- Run ActiveX controls and plug-ins: **Enable**
- Script ActiveX controls marked safe for scripting*: **Enable**

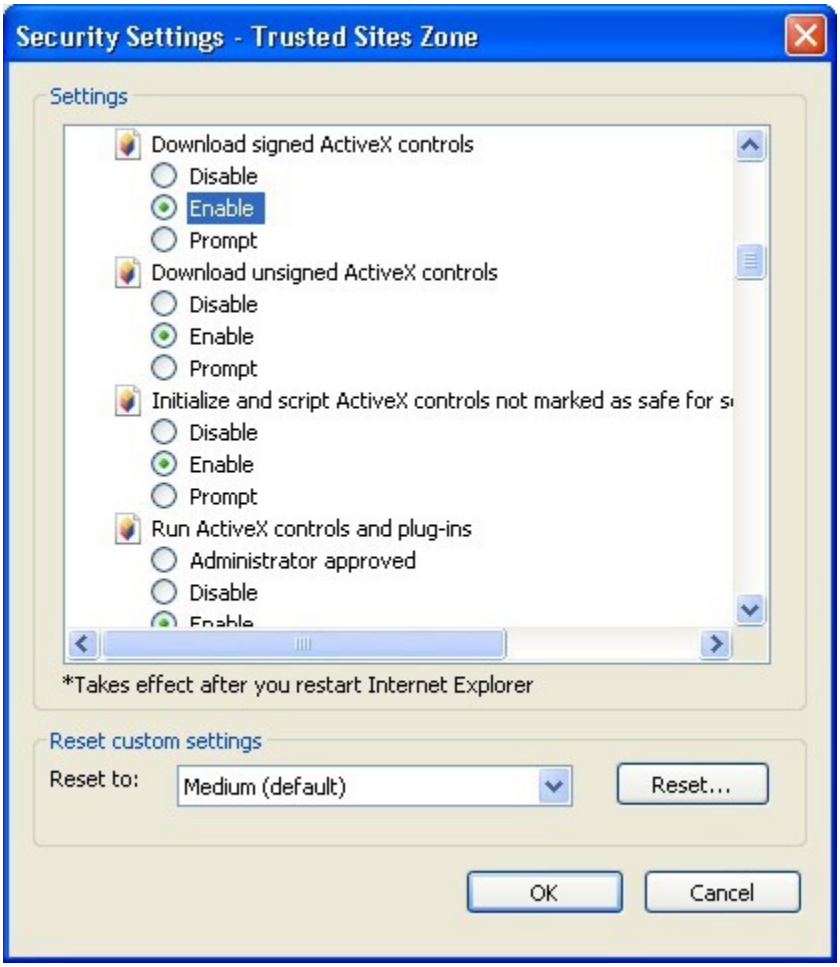
Under **Downloads**:

- File download: **Enable**

Under **Miscellaneous**:

- Access data sources across domains: **Enable**

Click **OK**. At the next screen, click **Yes** to confirm the changes. This completes the configuration required for the ThinConnect Client PC.

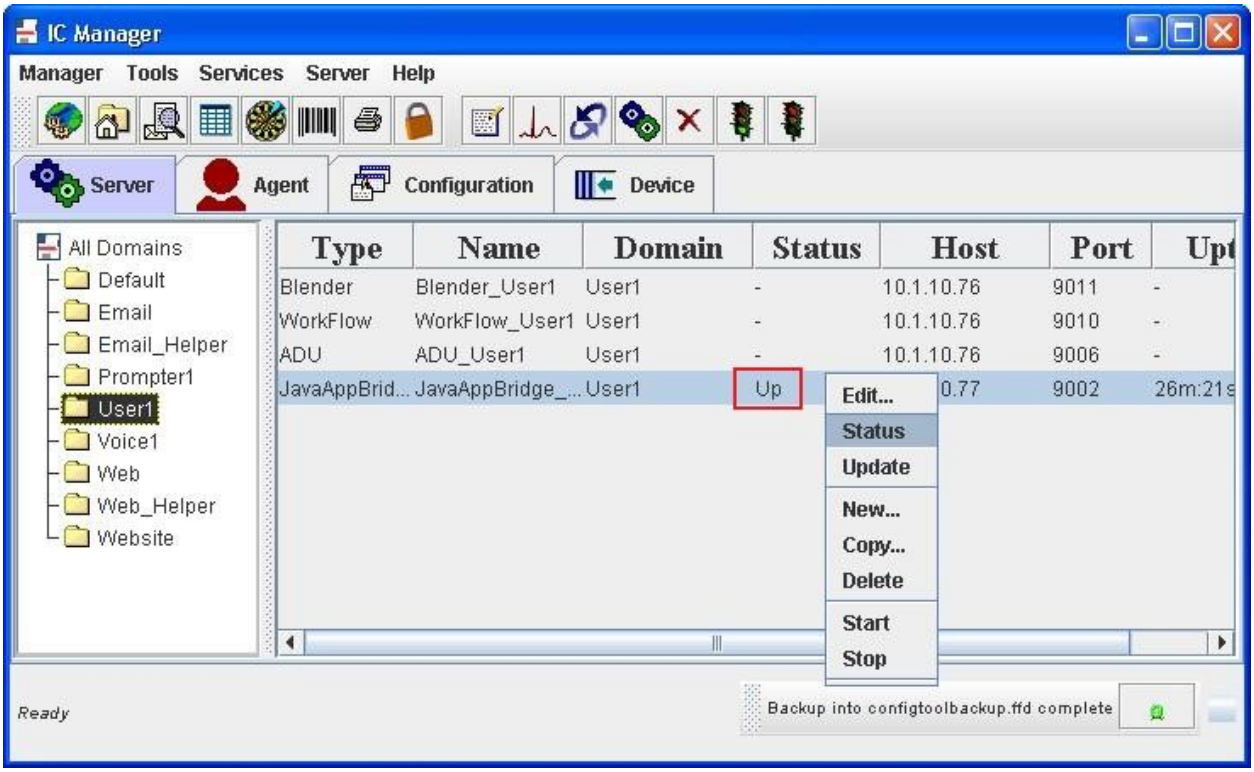


7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya Interaction Center and InteractCRM ThinConnect.

7.1. Verify Avaya Interaction Center

From the **IC Manager** screen, select the **Server** tab and then select the **User1** domain. Right-click on the Java Application Bridge created in **Section 5.3** and click **Status**. Verify that the **Status** is "Up" as shown below.



7.2. Verify InteractCRM ThinConnect

Make an incoming call to the agent. Verify that the agent desktop is populated with an alerting call entry with the **State** "New". Click on **Answer** to answer the call. Verify that the agent is connected to the caller, and that the **State** for the call changes to "In Progress". Verify also that the other buttons such as "Hold", "Transfer", "Conf" and "Consult" are now enabled.

8. Conclusion

These Application Notes describe the configuration steps required for InteractCRM ThinConnect 2.0 to interoperate with Avaya Interaction Center 7.2 using the Avaya IC Client SDK interface. All feature and serviceability test cases were completed successfully.

9. Additional References

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

The following documents are available at http://support.avaya.com.

[1] *Administering Avaya Aura® Communication Manager*, Release 6.0, Document No. 03-300509, August 2010.
[2] *Avaya Aura® Application Enablement Services Administration and Maintenance Guide*, Release 5.2, Document ID 02-300357, Issue 11, November 2009.
[3] *Avaya Interaction Center Release 7.2 Installation & Configuration*, May 2009.
[4] *Avaya Interaction Center Release 7.2 Client SDK Programmer Guide*, May 2009.

The following documents are provided by InteractCRM upon request.

[5] *InteractCRM ThinConnect Installation Guide*, Version 2.0.
[6] *InteractCRM ThinConnect User Manual*, Version 2.0.

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.