

Avaya Solution & Interoperability Test Lab

Application Notes for InteractCRM SMSConnect 1.0 with Avaya Interaction Center Release 7.0 - Issue 1.0

Abstract

These Application Notes describe the procedures for configuring InteractCRM SMSConnect 1.0 to interoperate with Avaya Interaction Center (IC) Release 7.0.

SMSConnect provides Short Message Service (SMS) based self service and intelligent communication between customers and organizations. It links up customers' mobile phones with organizations' human and information resources to provide customers quick and easy access to information within the organization, and extends the functionalities of Avaya IC in a seamless manner.

Information in these Application Notes has been obtained through compliance testing and additional technical discussions. Testing was conducted via the Developer *Connection* Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

These Application Notes describe the compliance-tested configuration used to validate InteractCRM SMSConnect 1.0 with Avaya Interaction Center Release 7.0.

SMSConnect enables two way interactions between customers and Avaya IC contact center agents via SMS messaging. Customers can send SMS messages to the contact center and have their queries responded to by agents using Avaya IC. Such SMS messages are correctly classified by Avaya IC, thus providing a seamless integration into any Avaya IC environment. SMSConnect also provides the ability to collect feedback from customers that have contacted the contact center. An SMS message can be automatically sent to the customer at the end of a call to collect feedback, thus allowing the performance of the agents to be rated. The Interaction Manager and Feedback Manager components of SMSConnect are utilized for integration of SMS messaging and SMS-based feedback survey with Avaya IC respectively.

Figure 1 illustrates the configuration used to verify InteractCRM SMSConnect interoperability with Avaya Interaction Center. Avaya Interaction Center was installed on three servers running Microsoft Windows Server 2000 Service Pack 4. InteractCRM SMSConnect ran on another server running Microsoft Windows Server 2000 Service Pack 4 with a GSM / GPRS modem installed to send and receive SMS messages. A generic POP3 / SMTP Email server was installed on another server with mailboxes configured for use by SMSConnect and Interaction Center. Another server running Microsoft SQL Server 2000 stored the IC Repository database. Avaya IC Design and Administration Tools were installed on the Administrator PC to configure the Avaya Interaction Center environment. On the agent PC, Avaya IC Agent client was installed and configured for the IC Email and Voice Channel. The Chat channel was not configured and tested in this configuration. All the systems are connected on the customer LAN using the Avaya C364T-PWR Converged Stackable Switch for network connectivity. SMS messages from customers are simulated using three mobile phones capable of sending and receiving SMS messages. The detailed configurations of Avaya S8300B Media Server, Avaya G350 Media Gateway, Avaya Application Enablement Services (AES) server and Avaya 4600 Series IP Telephone are not discussed in these Application Notes.

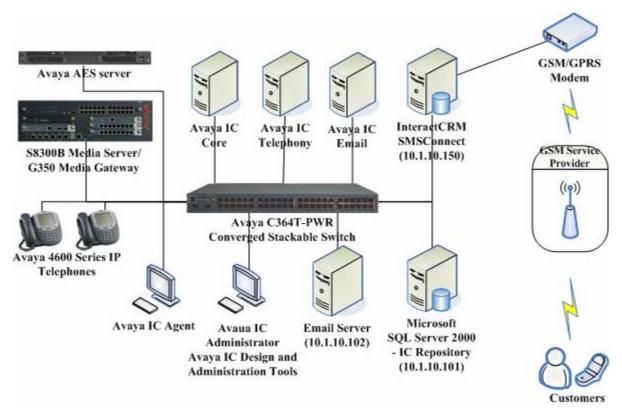


Figure 1: InteractCRM SMSConnect with Avaya Interaction Center

Figure 2 shows the sample SMS messaging flow for a customer who sends an SMS message to the call center and the agent replies using Avaya IC Agent.

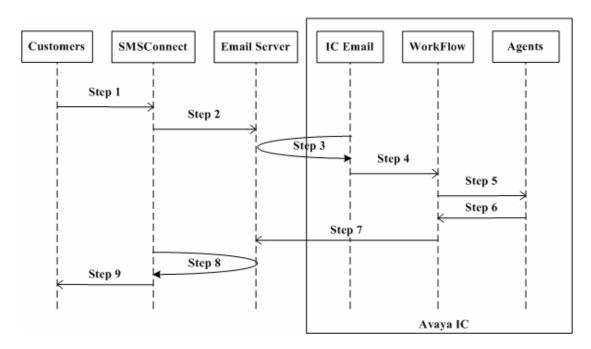


Figure 2: Sample SMS Flow from InteractCRM SMSConnect to Avaya Interaction Center

Step	Description
1	Customer sends a SMS message to the Contact Center. This message is routed via the
	Mobile Service Provider to the GSM/GPRS modem. SMSConnect polls the GSM/GPRS
	Modem to receive the SMS message.
2	SMSConnect converts the SMS message into an email, sets the subject of the email in a
	predefined manner with the SMS Contact details (e.g. customer's mobile number) and
	sends the email to the <i>IC email account</i> (e.g. 'icuser@avaya.com') on the Email server.
	An example of the subject of the email is "SMS-6598646345-6598639738" where the
	number 6598646345 is the number of the GSM/GPRS modem and 6598639738 is the
	customer's mobile number.
3	IC Email polls the <i>IC email account</i> on a regular interval and retrieves the email.
4	IC Email triggers the customized <i>qualifyemail</i> workflow to qualify the email. The
	workflow parses the subject of the email and sets the Electronic Data Unit (EDU) values
	with the SMS Contact details.
5	The workflow routes the email to the call center agent.
6	The agent uses Avaya IC Agent to read and respond to the email.
7	The outbound email workflow sends the email to the <i>SMSConnect email account</i> (e.g.
	'smsuser@avaya.com') on the Email server.
8	SMSConnect polls the <i>SMSConnect email account</i> on a regular interval and retrieves
	the email.
9	SMSConnect converts the email back to an SMS message and sends it to the customer
	via the GSM/GPRS modem.

Figure 3 shows the sample SMS-based feedback survey. After a customer hangs up on the call with an agent, SMSConnect sends an SMS message to the customer to collect their feedback.

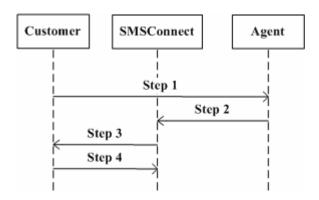


Figure 3: Sample SMS flow to collect feedback

Step	Description
1	The customer is connected to the call center agent. This can be a voice call or a web
	chat.
2	When the customer hangs up, the agent wraps up the call using Avaya IC Agent. The
	wrap up event triggers an IC Script, which sends a request to SMSConnect to collect
	feedback from the customer.
3	SMSConnect composes an SMS message based on a Feedback Template and sends to
	the customer's mobile phone.
4	The customer replies to the SMS message. SMSConnect analyzes the SMS message
	received from the customer.

2. Equipment and Software Validated

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

Equipment	Software
Avaya Interaction Center	Release 7.0 Service Pack 2
Avaya S8300B Media Server	3.1.2 (R013x.01.2.632.1)
Avaya G350 Media Gateway	Firmware V25.28.0
Avaya 4600 series IP telephones	4621SW (R2.4)
Avaya Application Enablement Services	3.1.1 (r3-1-1-build-43-2-0)
Avaya C364T-PWR Converged Stackable Switch	4.3.12
InteractCRM SMSConnect	1.0

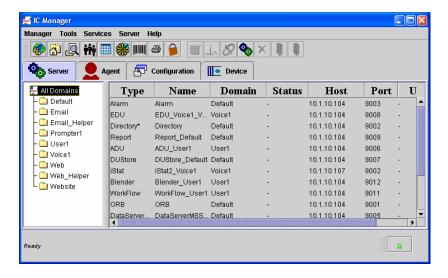
3. Configure Avaya Interaction Center

This section describes the configuration of Avaya Interaction Center to interoperate with InteractCRM SMSConnect. It is assumed that Avaya Interaction Center core servers and IC Agent required to handle the IC Email and Voice Channels are installed and running properly.

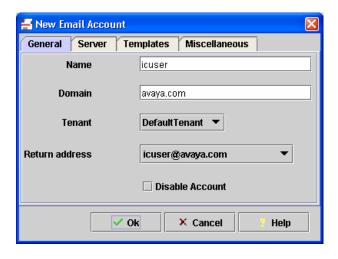
3.1. Configure IC Email Account

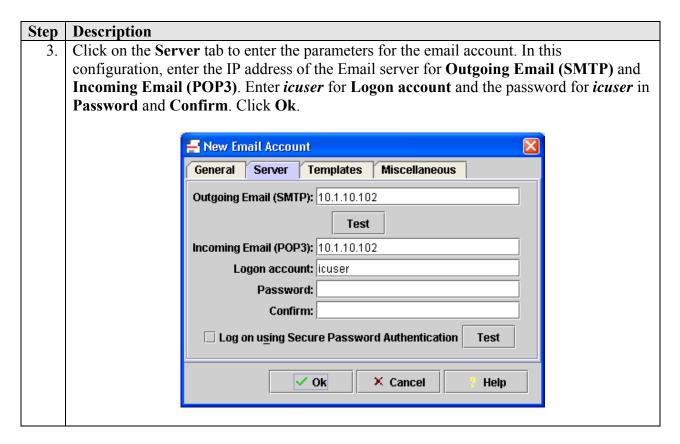
When SMSConnect needs to send SMS messages to the agents in Interaction Center, it does so by converting the SMS messages to emails and sending them to a predetermined POP3 email account. Interaction Center polls this email account for new messages and routes them to the agents using the customized email workflow as described in **Section 4.2**. In this configuration, the email account is *icuser@avaya.com* created on the Email server.

To start IC Manager, click Start→All Programs→Avaya Interaction Center 7.0→IC Manager. Login with an account with administrator privileges to display the main IC Manager screen. From the menu, select Services→Email Accounts and click New.



2. In the **General** tab of the **New Email Account** window, enter the email account to be polled by IC Email. In this configuration, to specify the email account *icuser@avaya.com*, enter *icuser* for **Name** and *avaya.com* for **Domain**. Select *DefaultTenant* for **Tenant** and uncheck **Disable Account**.





3.2. Configure Interaction Center for SMS Messaging

The following files are provided by InteractCRM for the integration of SMS messaging with its Interaction Manager component. The first four files contain the required modifications to the *qualifyemail* workflow to extend its functionality to qualify SMS messages from SMSConnect that have been converted to emails. The remaining four files modify the Contact History Browser and Electronic Data Unit (EDU) Viewer in IC Agent to display the additional parameters related to the SMS messages. These files are located on the SMSConnect server and need to be transferred to the Avaya IC Administrator PC.

Note: It is assumed that Avaya IC uses the out-of-the-box workflows, EDU layout and IC scripts. If the Avaya IC installation has been customized, consult InteractCRM for the required customization to be done.

	File Name	Folder Location
1.	wacd.prj	<smsconnect dir="" install="">\InteractCRM\</smsconnect>
		SMSConnect\IC Connector for Interaction
		Manager\IC Flows\wacd\
2.	qualifyemail.qfd	Same as above
3.	qualifysms.qfd	Same as above
4.	SymDictionary.txt	Same as above
5.	eduviewer_en_US.xsl	<smsconnect dir="" install="">\InteractCRM\</smsconnect>
		SMSConnect\IC Connector for Interaction
		Manager\Agent Files\QConsole\
6.	Qconsole_AddContact.qsc	Same as above
7.	QConsole_BuildActiveContactCriteria.qsc	Same as above
8.	QConsole_BuildCHBrowserInfo.qsc	Same as above

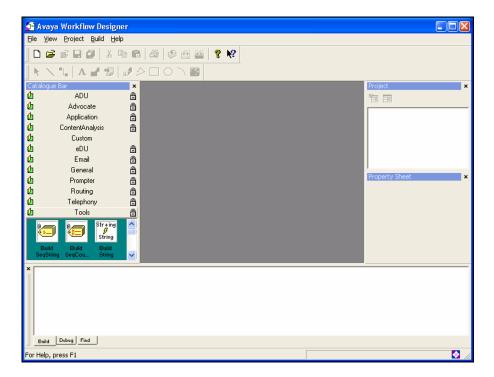
3.2.1. Deploy the Workflows

The new workflows need to be re-built using Avaya Workflow Designer. The following 3 custom EDU fields will be populated for every incoming contact identified as an SMS within Interaction Center:

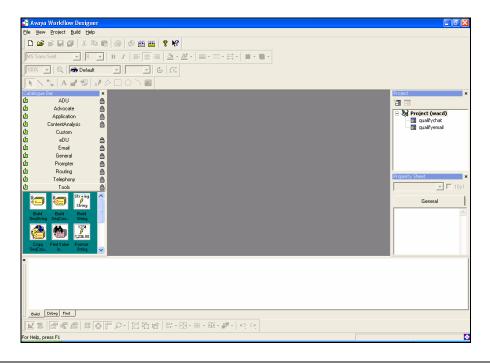
- primarymedia
- gatewayno
- custmobile

Step	Description
1.	On the Avaya IC Administrator PC, backup the files that will be replaced. Copy the files
	wacd.prj, qualifyemail.qfd, qualifysms.qfd and SymDictionary.txt from the SMSConnect server to the <avaya_ic70_home>\design\IC\Flows\Avaya\wacd\ folder on the Avaya IC Administrator PC.</avaya_ic70_home>

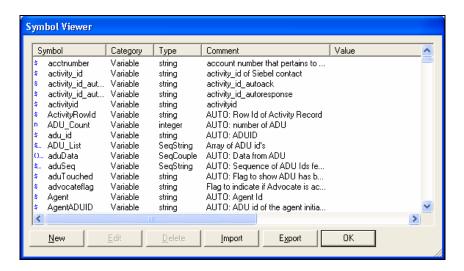
2. To start Avaya Workflow Designer, click Start→All Programs→Avaya Interaction Center 7.0→Workflow Designer.



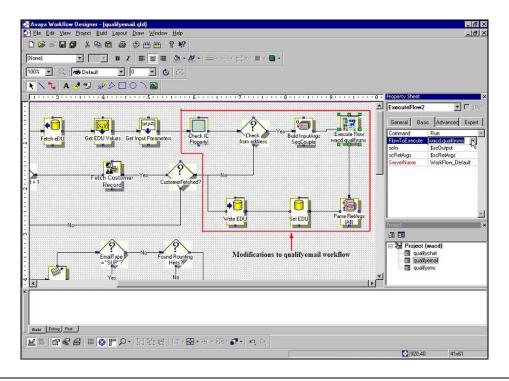
3. Click **File→Open Project** from the menu and open the project <*AVAYA_IC70_HOME*>*design\IC\Flows\Avaya\wacd\wacd.prj* for editing.



4. To import the *SymDictionary.txt* file, click **Project→Symbols→All Symbols** from the menu to open the Symbol Viewer window. Click **Import** and select *SymDictionary.txt* in the folder *<AVAYA_IC70_HOME>\design\IC\Flows\Avaya\wacd*. Click **Open**. The Symbol Viewer window will be updated with the symbols from the new *SymDictionary.txt* file. Click **OK**.



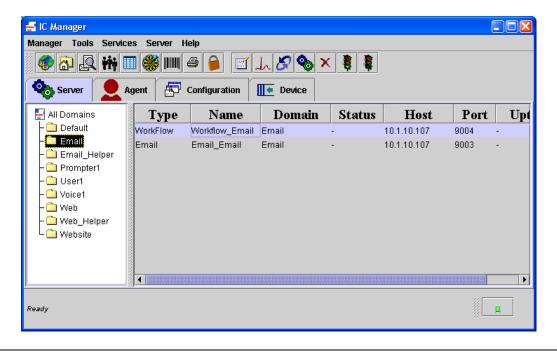
5. Open the *qualifyemail* flow and verify that it is modified to run the flow *qualifysms* for emails converted from SMS messages, as highlighted in the screen below. Click **Build→Build Flow Set** from the menu.

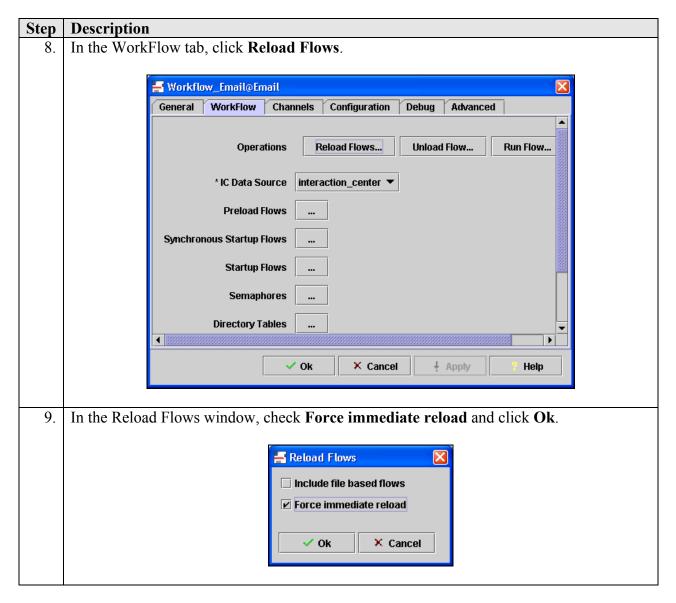


6. In the Project Settings window, specify an IC account with administrative privileges to upload the new workflows to the database. Click **OK**.



7. Start **Avaya IC Manager** as described in **Section 3.1 Step 1**. Double-click the Workflow server used for handling emails.



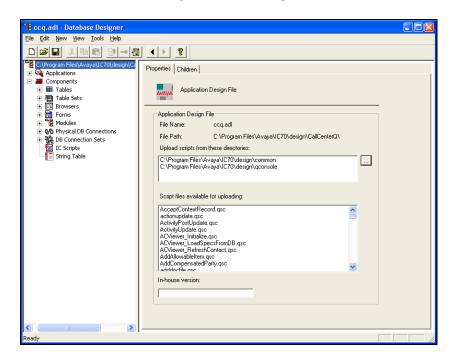


3.2.2. Deploy the EDU Layout

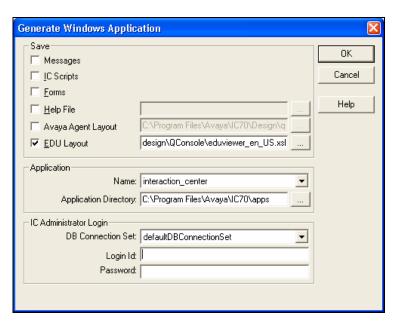
The EDU layout file provided by SMSConnect needs to be deployed using Avaya Database Designer. This will display the 3 custom EDU fields in the EDU Viewer in IC Agent.

Step	Description
1.	On the Avaya IC Administrator PC, backup the file <i>eduviewer_en_US.xsl</i> . Copy the new
	file <i>eduviewer_en_US.xsl</i> from the SMSConnect server to the

2. To start Avaya Database Designer, click Start→All Programs→Avaya Interaction Center 7.0→Database Designer. Click File→Open and open the file *ccq.adl* from the folder <*AVAYA_IC70_HOME*>\design\ CallCenterQ\ as shown below.

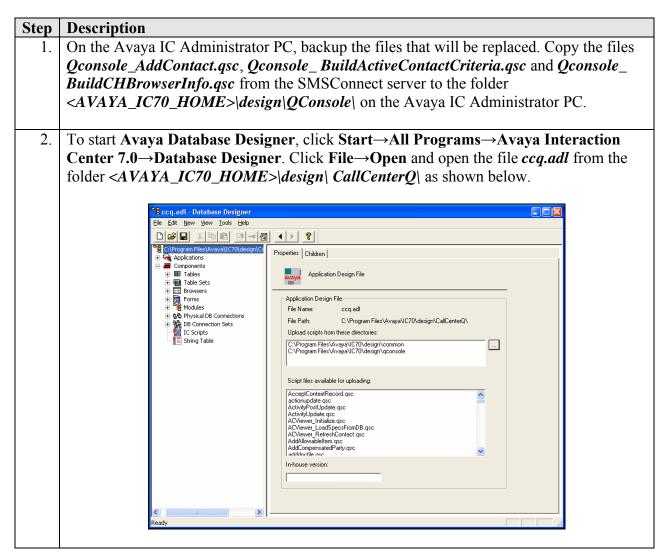


3. Click File→Generate Windows Application. Check *EDU Layout* browse to the file <*AVAYA_IC70_HOME*>*design\QConsole\eduviewer_en_US.xsl*. For the Application Name field, select the application used by the agent (e.g. interaction_center). Specify the IC administrative account for **Login Id** and **Password**. Click **OK**.

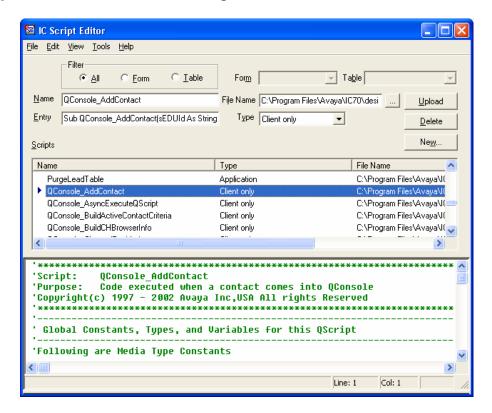


3.2.3. Deploy the IC Scripts

The new IC Scripts provided by SMSConnect need to be deployed using Avaya Database Designer. These scripts will read the new custom EDU fields and classify SMS messages as type SMS instead of email on the Contact History Browser window in IC Agent.



3. Click **Edit→IC Scripts** to open the IC Script Editor. In the Scripts section, select the script **Qconsole_AddContact** and click **Upload**.



4. In the Database Login window, select **defaultDBConnectSet** for **DB Connection Set** and specify an IC account with administrative privileges to upload the new IC Scripts to the database.



5. Repeat **Steps 3** and **4** to upload the scripts **Qconsole_BuildActiveContactCriteria** and **Qconsole_BuildCHBrowserInfo** to the database.

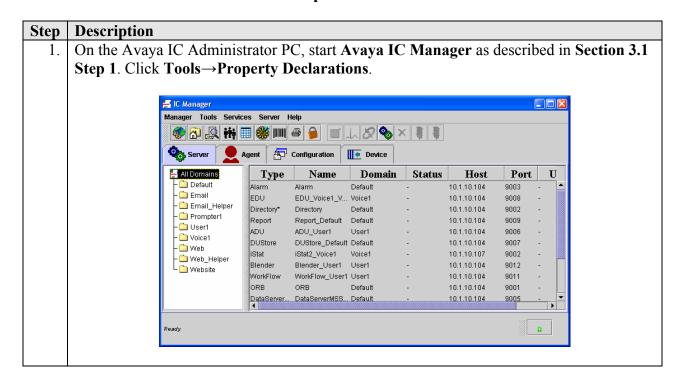
3.2.4. Define IC Properties

SMSConnect uses 5 new IC Properties. These properties are used by the new *wacd.qualifyemail* and *wacd.qualifysms* workflows provided by SMSConnect. As these are custom IC Properties, they have to be first created using IC Manager. Consult [1] for further guidance. The description of the properties is shown in **Table 1**.

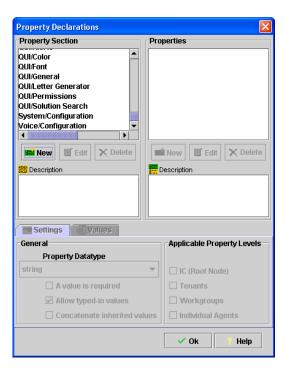
Note: Settings in this section have to be ratified with the format of the information sent from SMSConnect as defined in **Section 4 Step 9**.

Property	Value	Description
param1	mediatype	Set this field to <i>mediatype</i> if the first word in the email subject set
		by SMSConnect is the media type (e.g. SMS).
param2	mobileno	Setting this property to <i>mobileno</i> indicates that the second
		parameter set by SMSConnect is the mobile number of the
		customer.
param3 gatewayno Setting this property to <i>gatewayno</i> inc		Setting this property to <i>gatewayno</i> indicates that the third
		parameter set by SMSConnect is the number to which the SMS
		was sent (e.g. the GSM modem number).
separator - This is the separator in the subject of an email bet		This is the separator in the subject of an email between the
		parameters.
fromaddress SMSConnect This is the email address wh		This is the email address which SMSConnect uses to send
	Email	messages to IC Email account. The connector will monitor all
	Address	emails coming from this account and execute message processing
		rule for them.

Table 1: IC Properties for SMSConnect



2. A new section called *System/SMSConfiguration* needs to be created to store the 5 new properties used by SMSConnect. On the **Property Declarations** window, click **New** to create a new section.



3. Enter *System/SMSConfiguration* for **Name** and a descriptive name for **Description**. Click **Ok**.

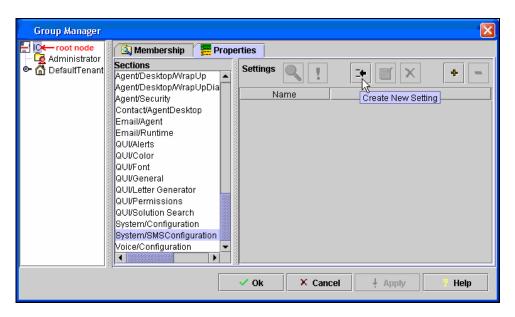


Description Step On the **Property Declarations** window, click **New** on the right-hand side to create a new 4. type. **Property Declarations** Property Section Props for System/SMSConfigu... QUI/Font OH/General QUI/Letter Generator QUI/Permissions QUI/Solution Search System/Configuration System/SMSConfiguration Voice/Configuration X Delete X Delete **Bew** New ■ Edit **■** Edit 🗮 Description Create new type SMS Configuration Settings Values General Applicable Property Levels Property Datatype string ☐ IC (Root Node) ☐ A value is required ☐ Tenants ☑ Allow typed-in values ■ Workgroups □ Concatenate inherited values ☐ Individual Agents Ok Help Create the new IC Properties as shown in **Table 1**. Enter *param1* for **Name** and a descriptive name for **Description**. Select string for **Property Datatype**. Click **Ok**. 🚟 Declare Property Name param1 Description Parameter 1 Property Datatype string

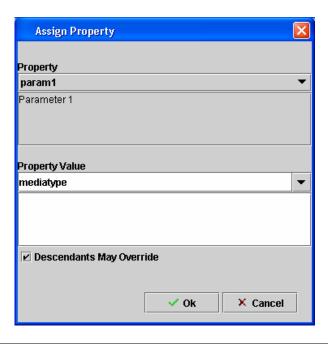
Ok

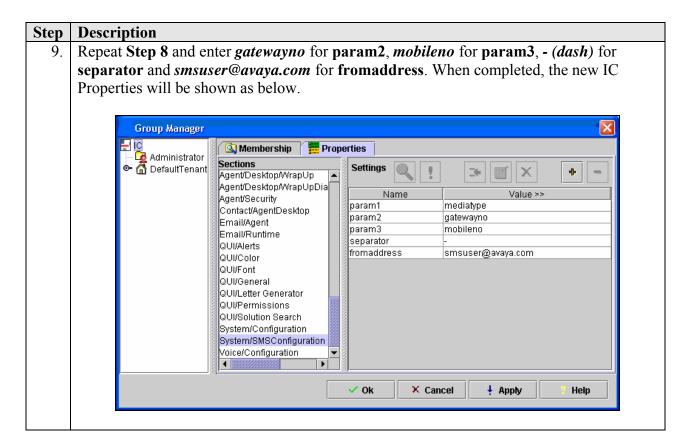
Cancel

- 6. Repeat **Steps 3** and **4** to create the remaining IC properties as shown in **Table 1**. After creating the last IC property, click **Ok** to close the **Property Declaration** window.
- 7. From the IC Manager window, click Tools→Groups. Click on the root node IC, then select the Properties tab and System/SMSConfiguration for Sections. Click on the button Create New Setting.



8. In the Assign Property window, select *param1* for **Property** and enter *mediatype* for **Property Value**. Leave the field **Descendants May Override** as checked. Click **Ok**.





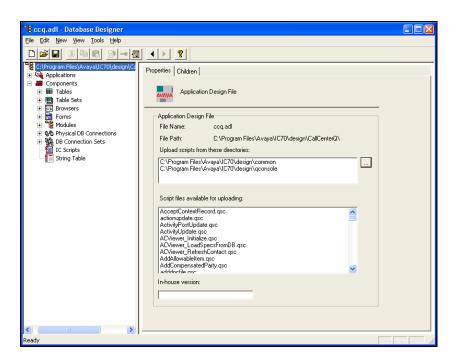
3.3. Configure Interaction Center for SMS-based Feedback Survey

This section describes various configurations required on Avaya Interaction Center for the proper integration with the Interaction Manager component on InteractCRM for SMS-based feedback survey.

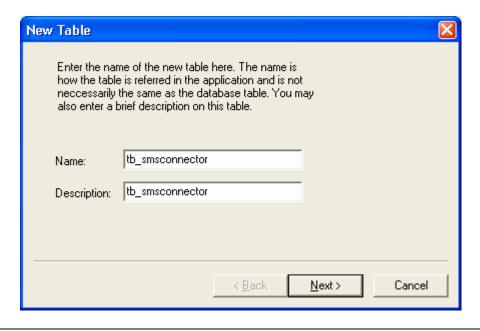
3.3.1. Configure IC Application Design Language (ADL) File

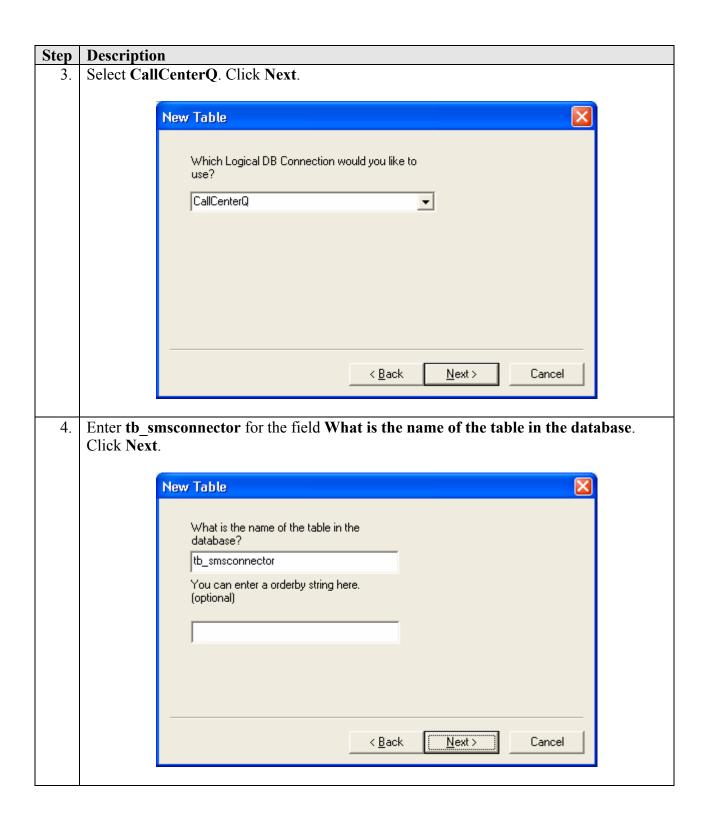
The out-of-the-box (OOTB) Application Design Language (ADL) file *ccq.adl* has been modified to add various components required by the SMSConnect Feedback Manager component. This file can be located in the folder *<AVAYA_IC70_HOME>\design\CallCenterQ*.

1. To start Avaya Database Designer, click Start→All Programs→Avaya Interaction Center 7.0→Database Designer. Click File→Open and open the file *ccq.adl* from the folder <*AVAYA_IC70_HOME*>\design\ CallCenterQ\ as shown below. Right-click on Tables and click New Table.

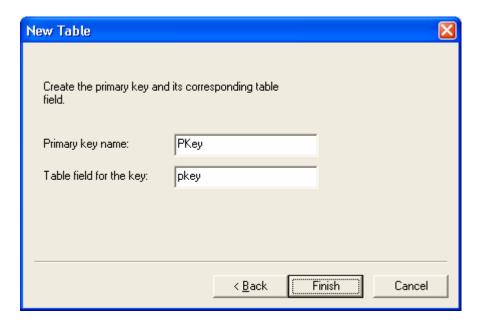


2. Create the custom table **tb_smsconnector** to store the survey details for every contact. In the New Table window, enter **tb_smsconnector** for **Name** and **Description**. Click **Next**.

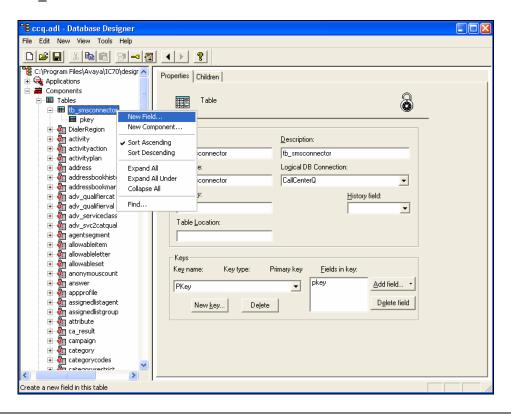




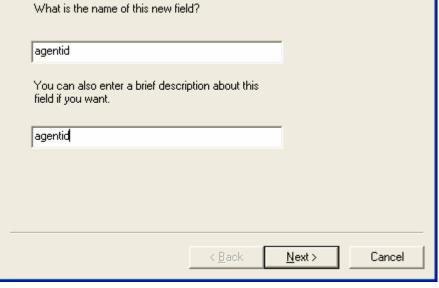
5. Accept the default entries for **Primary key name** and **Table field for the key**. Click **Finish**.



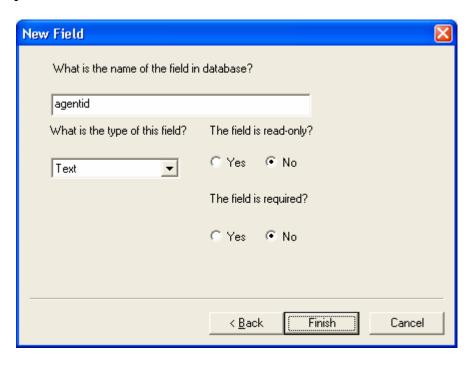
6. In the main Database Designer window, expand **Components→Tables**. Right-click on the table **tb_smsconnector** and select **New Field**.



7. In the New Field window, enter *agentid* for the name and a brief description of the new field. Click **Next**.



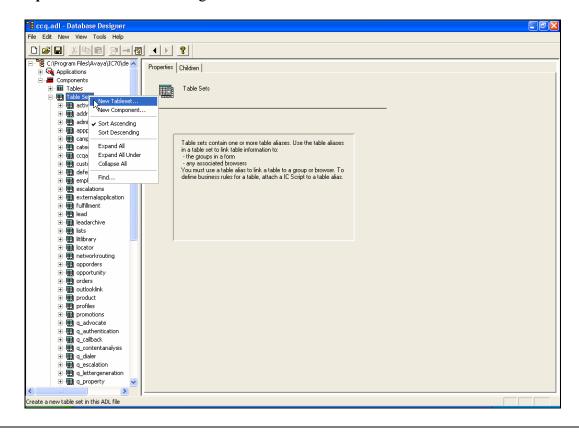
8. Enter *agentid* for the field **What is the name of the field in database** to match **Step 7**. Select **Text** for **What is type of this field**, **No** for **The field is read-only** and **No** for **The field is required**. Click **Finish**.



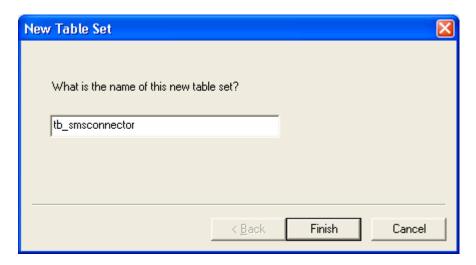
9. Repeat **Steps 7** and **8** to create the following required fields. These fields are used to store the relevant customer contact information to be used by Feedback Manager.

Name/ Database field name	Type	Read Only?	Required?
customercontact	Text	No	No
domainname	Text	No	No
groupname	Text	No	No
mediatype	Text	No	No
mobileno	Text	No	No
stopsurvey	Text	No	No
surveyed	Text	No	No
urlreceipt	Text	No	No
urlsenttime	Text	No	No
wrapuptime	Text	No	No

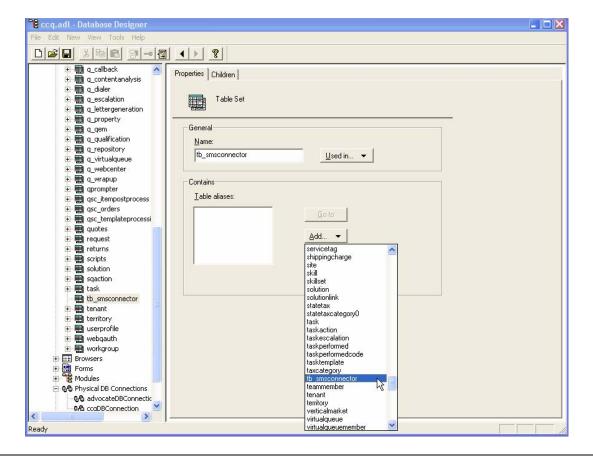
- 10. In the main Database Designer window, click **File→Save** to save the changes.
- 11. A table set is a group of table aliases that constrains the tables that can be displayed and updated in a form or browser. In the main Database Designer window, expand Components→Table Sets. Right-click on Table Sets and click New Tableset.

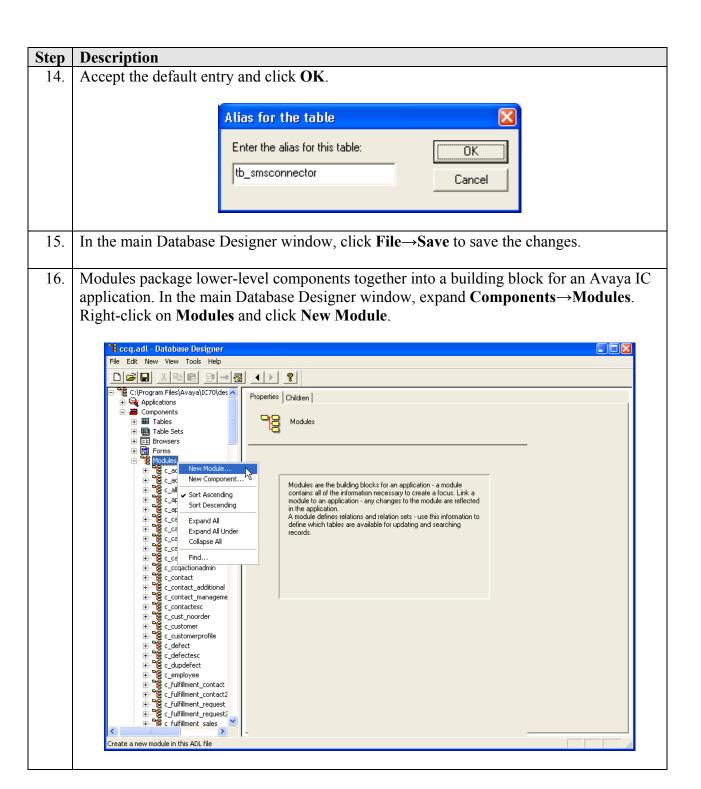


12. Enter **tb_smsconnector** for the name of the new table set so that it matches the name of the table in **Step 2**. Click **Finish**.

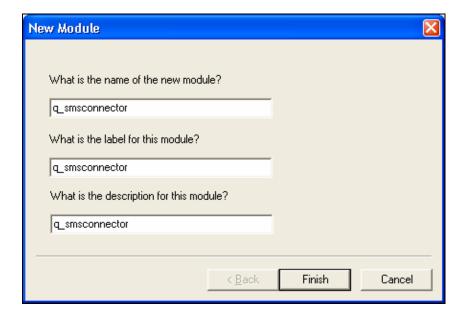


13. To add a table alias for the table **tb_smsconnector**, click **Add** and select **tb_smsconnector**.

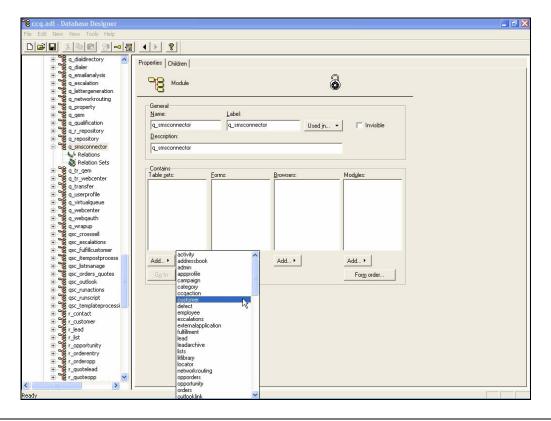


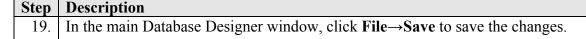


17. Enter **q_smsconnector** for name and label and enter a description of this module. Click **Finish**.

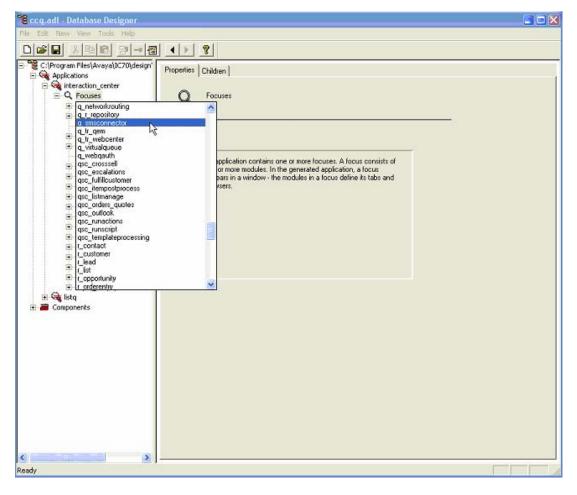


18. Click **Add** for **Table sets** and select **customer**. Repeat and select **tb_smsconnector**.



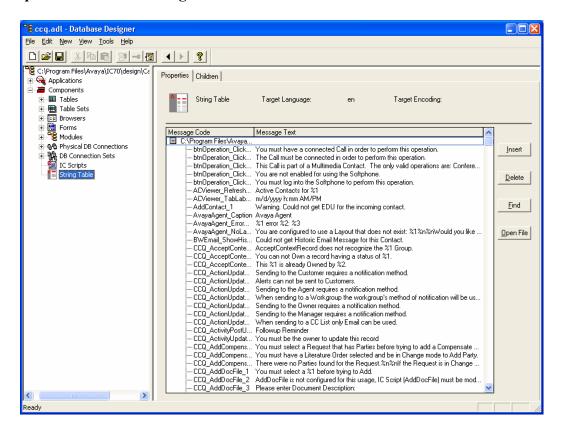


A focus combines one or more forms and modules to create a workflow. Each workflow is a related sequence of activities that an application user is expected to perform. In an Avaya IC application, a focus appears in a window with one or more buttons that let the user access the forms in the focus. In the main Database Designer window, expand Applications→interaction_center→Focuses. Right-click on Focuses and click Add Focus. Select q_smsconnector from the list of modules.

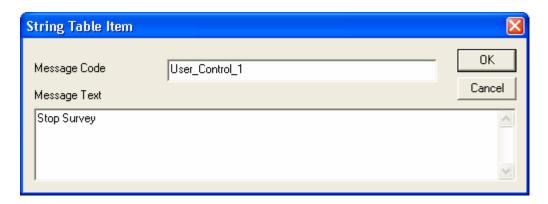


21. In the main Database Designer window, click **File→Save** to save the changes.

22. The String Table is used to add an entry which is used as a name for a custom button placed onto the IC Agent's console. In the main Database Designer window, expand **Components** and click **String Table**. Click **Insert**.

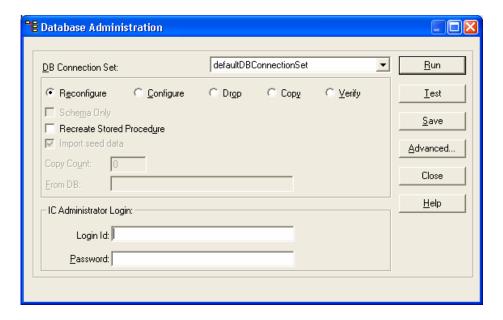


23. Enter User_Control_1 for Message Code and Stop Survey for Message Text. Click OK.

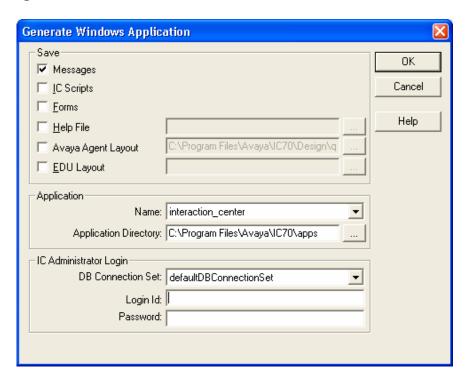


24. In the main Database Designer window, click **File→Save** to save the changes.

25. In the main Database Designer window, click File→Database Administration. Select Reconfigure and specify an IC administrator login for Login Id and Password. Click Run to reconfigure the database. Click Close when complete.

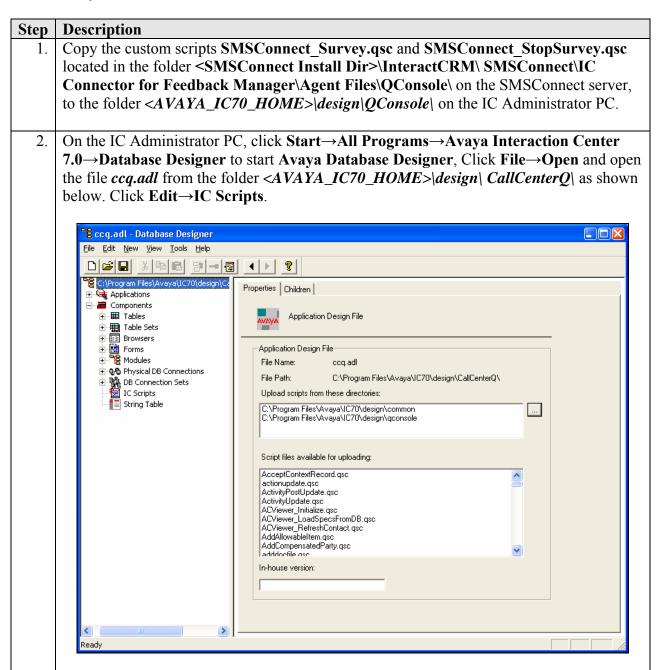


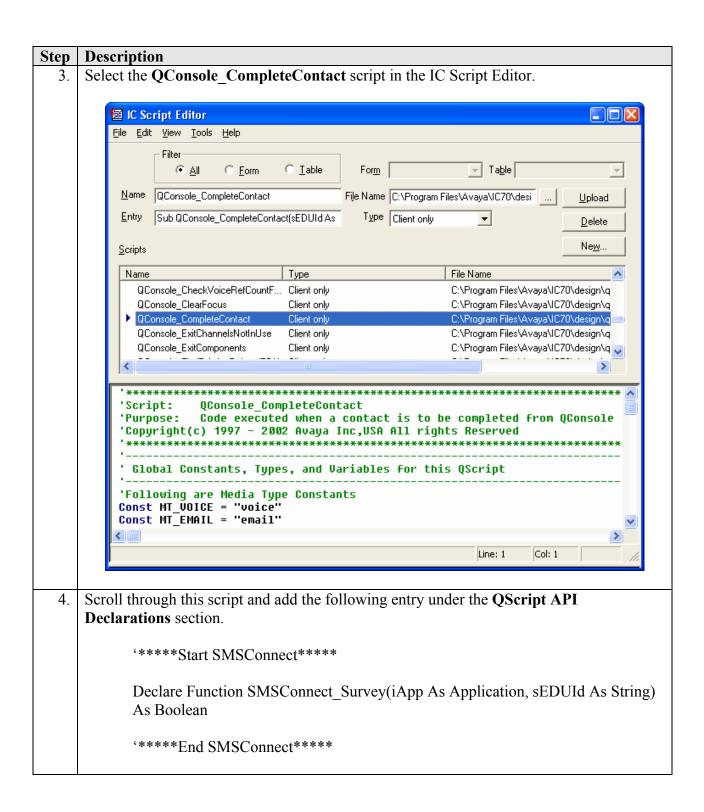
26. In the main Database Designer window, click File→Generate Windows Application. Check Messages and select interaction_center for Name. Specify an IC administrator login for Login Id and Password and click OK.



3.3.2. Configure IC Scripts

The out-of-the-box IC Scripts **QConsole_CompleteContact** has been modified to call the custom IC Script **SMSConnect_Survey**. Another custom script **SMSConnect_StopSurvey** is called when the agent clicks on the **Stop Survey** button on the IC Agent console to indicate that SMS survey should not be sent for the current contact.





Step	Description		
5.	Scroll the script further down and locate the following text:		
	QConsole_SetInteractionState sEDUId, STATE_TERMINATED		
	Add the following entries just before this text:		
	'****Start SMSConnect****		
	Dim bSurveyResult As Boolean		
	bSurveyResult = SMSConnect_Survey(iApp, sEDUId)		
	'****End SMSConnect****		
6.	Click File→Save to save the script and click Upload. Select defaultDBConnectionSet for DB Connection Set and specify an IC administrator login for Login Id and Password and click OK. This will upload the script to the database.		
	Database Login		
	DB Connection Set: defaultDBConnectionSet		
	Login Id:		
	Password:		
	✓ Prompt for details everytime		
	Cancel		
7.	In the IC Script Editor window, click File View Script File to open file SMSConnect Survey.qsc in the Edit mode. Click File Save to save the script and click		
	Upload. Select defaultDBConnectionSet for DB Connection Set and specify an IC		
	administrator login for Login Id and Password and click OK.		
8.	Repeat Step 7 to upload the SMSConnect_StopSurvey.qsc script file into the database.		

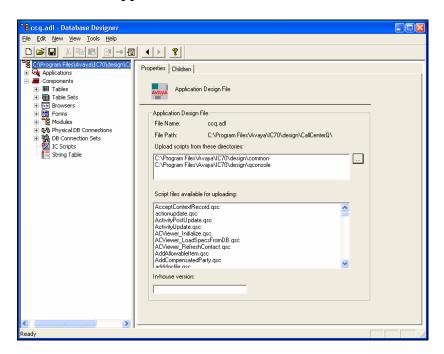
3.3.3. Configure IC Agent Layout Changes

The OOTB agent layout file avaya_agent_en.cdl has been modified to place the button Stop Survey on the IC Agent console. When the agent clicks this button, the SMSConnect StopSurvey script is called.

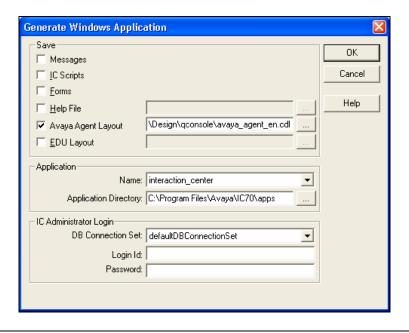
Step	Description
1.	On the Avaya IC Administrator PC, open the file avaya agent en.cdl located in the
	<a <="" bottom_frame"="" height="150" href="https://www.nc.nc.nc.nc.nc.nc.nc.nc.nc.nc.nc.nc.nc.</th></tr><tr><th></th><th></th></tr><tr><th>2.</th><th>Locate the following entries related to the bottom frame:</th></tr><tr><th>2.</th><th>Locate the following chartes related to the bottom frame.</th></tr><tr><th></th><th>OF N</th></tr><tr><th></th><th><pre><QFrame Name=" orientation="BOTTOM" pre="">
	Visible="TRUE">
	Navigate to the Contact Pane Definition , between the XML tags
	<qcontroldictionary> </qcontroldictionary> .
	Insert the following entries just above the definition for CHBrowser :
	<qcontrol <="" label="Stop Survey" name="btnStopSurvey" th=""></qcontrol>
	ProgID="Avaya.AvayaButtonCtrl.61" Left="797" Top="10" Width="120"
	Height="35" Visible="TRUE">
	<qscriptdictionary></qscriptdictionary>
	<pre><qscript event="Click" name="SMSConnect_StopSurvey"></qscript></pre>

3. The **avaya_agent_en.cdl** file should look as follows after inserting the entries. Save this file and close the text editor.

4. Click Start→All Programs→Avaya Interaction Center 7.0→Database Designer to start Avaya Database Designer. Click File→Open and open the file *ccq.adl* from the folder <*AVAYA_IC70_HOME*>\design\ CallCenterQ\ as shown below. Click File→Generate Windows Application.



5. Check **Avaya Agent Layout** and select the modified **avaya_agent_en.cdl** file. Specify an IC administrator login for **Login Id** and **Password** and click **OK**. This will upload the changes to the database.



3.3.4. Define IC Properties

SMSConnect Feedback Manager uses 13 custom IC Properties in the IC Property Section System/SMSConnect. To create the new IC Property Section System/SMSConnect and the 13 new IC Properties, refer to Chapter 8: Properties of reference [1] for detail instructions. The descriptions of the properties are shown in Table 2.

Property	Description	Property Datatype	Settings	Applicable Property Levels	Values
action	Action to be taken about the survey.	string	Allow typed- in values	IC (Root Node)	sendsms saverecord
activatesurvey	Determines whether SMS survey has been activated.	string	A value is required	IC (Root Node)	yes no
agenteligibility	Determines whether SMS survey to be run for all agents, or for selective agents only.	string	A value is required	IC (Root Node)	all selective
gatewayno	SMS Gateway number for sending out SMS survey.	string	Allow typed- in values	IC (Root Node)	NA
host	IP address of the SMSConnect server to connect.	string	Allow typed- in values	IC (Root Node)	NA
port	Port number of the SMSConnect server to connect.	string	Allow typed- in values	IC (Root Node)	NA
runsmssurvey	Determines if SMS survey is activated for the agent when agenteligibility is set to selective.	string	A value is required	Individual Agents	yes no
smssurveyid	SMS survey Template ID to use as defined in the Feedback Manager on SMSConnect server.	string	Allow typed- in values	IC (Root Node)	NA
surveychatchannel	Determines whether SMS survey for chat channel is activated.	string	A value is required	IC (Root Node)	yes no
surveyemailchannel	Determines whether survey for email channel is activated.	string	A value is required	IC (Root Node)	yes no
surveytimeinterval	Sets the time interval in minutes where SMS survey will not be send to the same customer.	string	Allow typed- in values	IC (Root Node)	NA
surveyvoicechannel	Determines whether survey for voice channel is activated.	string	A value is required	IC (Root Node)	yes no
timebasedsurvey	Determines whether time based survey is activated.	string	A value is required	IC (Root Node)	yes no

Table 2: IC Properties for SMSConnect Feedback Manager

The columns **Property Datatype**, **Settings**, **Applicable Property Levels** and **Values** correspond to the fields in the Property Declarations window as shown below.



Figure 4 shows the values of the IC Properties used in this configuration.

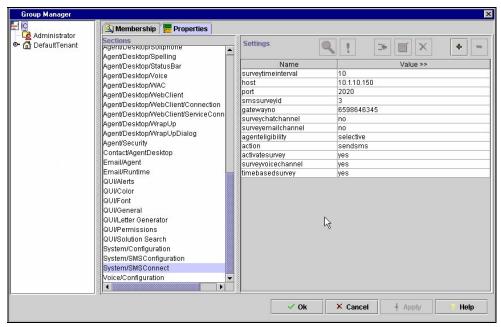
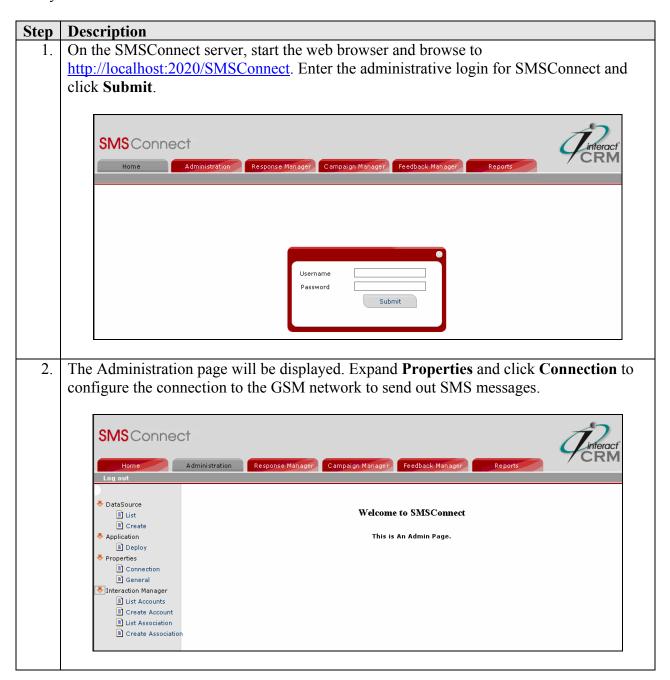


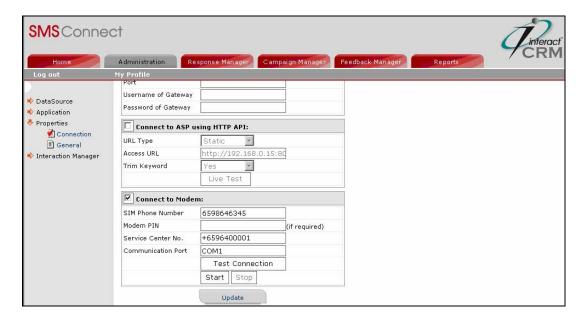
Figure 4: IC Properties for SMSConnect Feedback Manager

4. Configure InteractCRM SMSConnect

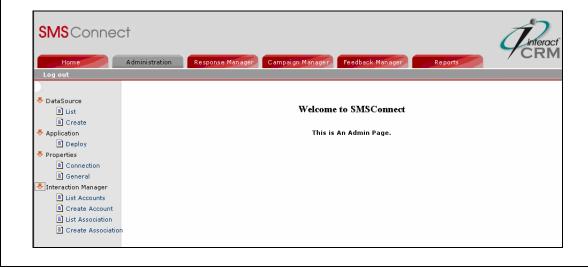
This section describes the configuration of InteractCRM SMSConnect to interoperate with Avaya Interaction Center.



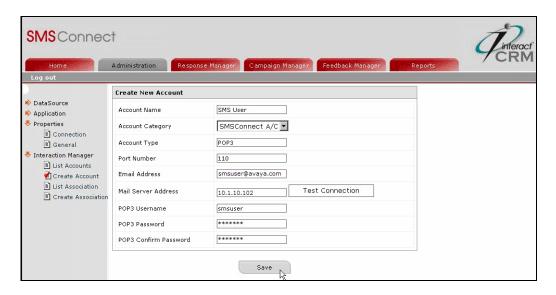
3. In this configuration, a GSM/GPRS modem is used. The GSM/GPRS modem operates like a mobile phone subscriber. A GSM Subscriber Identity Module (SIM) card is inserted into the modem for it to register with the GSM network. Enter the phone number of the SIM card for **SIM Phone Number** and *COM1* for **Communication Port** where the GSM modem is installed. For **Service Center No**, enter the SMS Service Center Number provided by the mobile service provider. Click **Start** and then click **Update** to save the changes.



4. SMSConnect polls the SMSConnect email account for new emails sent from Avaya Interaction Center, converts them back to SMS messages and sends them to the customers. From the Administration page, expand Interaction Manager and click Create Account.



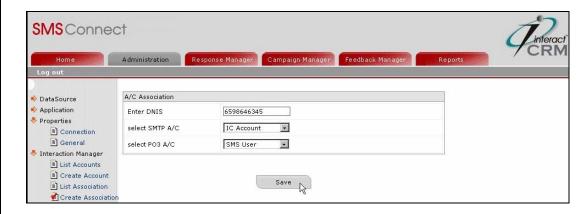
5. In the Create New Account page, specify a name for **Account Name** and select **SMSConnect A/C** for **Account Category**. We need to specify the email account information for SMSConnect to log in to the Email server and retrieve the emails. In this configuration, the SMSConnect email account is **smsuser@avaya.com**. Enter **POP3** for **Account Type**, the default POP3 port number of **110** for **Port Number** and enter the SMSConnect email account for **Email Address**. For **Mail Server Address**, enter the IP address of the Email server. Specify the login details for **POP3 Username**, **POP3 Password** and **POP3 Confirm Password**. Click **Save**.



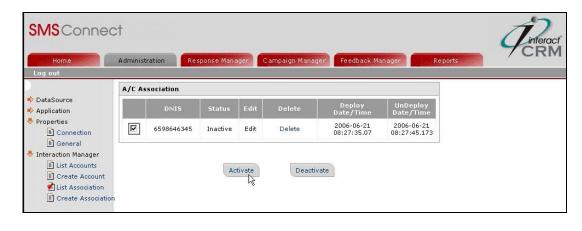
6. Click **Create Account** again to create an outgoing SMTP account for SMSConnect to send emails to the IC Email Account. In this configuration, the IC email account is *icuser@avaya.com*. In the Create New Account page, specify a name for **Account Name** and select *User A/C* for **Account Category**. Enter *SMTP* for **Account Type**, the default SMTP port number of **25** for **Port Number**, the IC email account for **Email Address** and the IP address of the Email server for **Mail Server Address**. Click **Save**.



7. Click Create Association. In the A/C Association page, associate the incoming SMS messages from the GSM/GPRS modem with the two accounts created in Steps 5 and 6. Enter the SIM Phone Number defined in Step 3 for Enter DNIS. Select the account created in Step 6 for SMTP A/C and the account created in Step 5 for POP3 A/C. Click Save.



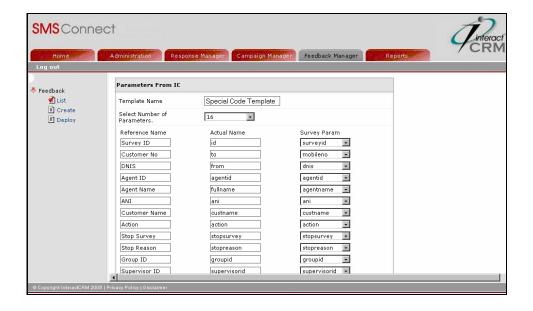
8. Click **List Association**. Check on the association created in Step 7 and click **Activate**.



9. Expand **Properties** and click **General**. In the section **Email Polling Properties**, set the Data Items to be included in the Subject header of the email sent to Avaya Interaction Center. The Data Items must match the IC Properties *param1*, *param2* and *param3* in **Section 3.2.4**. In this configuration, select 3 for **No of Data Items** and enter - (*dash*) for **Data Item Separator**, 2 for **No of Delimitors** and *Space* for **Last Separator**. Select *SMS* for **Data Item 1**, *gatewayno* for **Data Item 2** and *mobileno* for **Data Item 3**. Click **OK**.



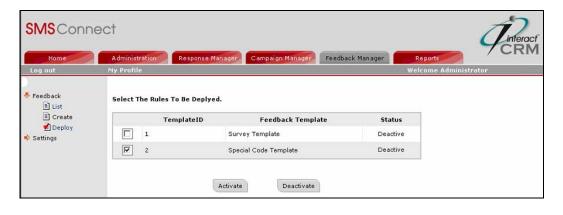
10. A Feedback Template has to be created in SMSConnect to correctly interpret survey requests from Interaction Center. Click on Feedback Manager, expand Feedback and click Create. Enter a name for Template Name such as *Special Code Template*. Accept the default value of *16* for Select Number of Parameters, and the default values for list of parameters. By default, Avaya IC is configured to sends 16 parameters to SMSConnect. Scroll to the bottom of the page and click Update.



11. Customize the SMS message to be sent to the customers to collect their feedback. In this configuration, two variables are used to personalize the message based on the *Customer Name* and *Agent Name*. The third variable is a *Special Code* assigned to this Feedback Template to distinguish it from other concurrent surveys running on SMSConnect. Click **Update** to complete the Feedback Template.



12. To deploy the new Feedback Template, click **Deploy**. Check the new Feedback Template created in **Step 10** and click **Activate**.



5. Interoperability Compliance Testing

The Interoperability Compliance Testing included feature testing. The feature testing focused on verifying the ability of InteractCRM SMSConnect to interoperate with Avaya Interaction Center.

5.1. General Test Approach

The feature test cases were performed manually. SMS messages were sent from 3 GSM mobile phones with SMS capability to SMSConnect via the GSM modem. The SMS messages were delivered to the agents in Avaya Interaction Center. The agents used Avaya IC Agent to read and reply the messages. Replies were verified to be received on the respective GSM mobile phones initiating the SMS messages. To test the Feedback feature, voice calls were made via incoming

trunks to the agents. When the calls ended, SMS messages were sent to the callers' mobile phones as defined in the customer database to collect their feedback. The callers replied using SMS and the responses were verified to be received by SMSConnect.

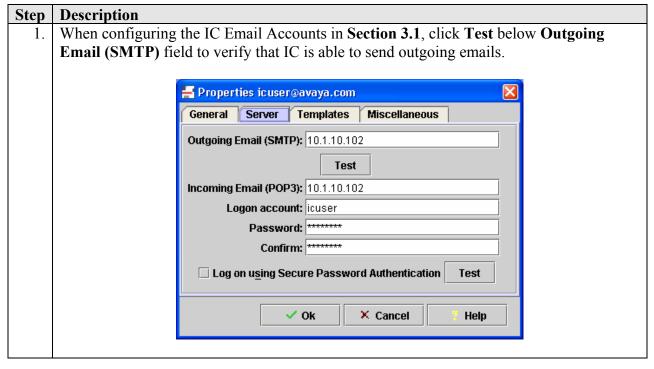
5.2. Test Results

All test cases passed successfully. InteractCRM SMSConnect successfully interoperates with Avaya Interaction Center.

6. Verification Steps

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

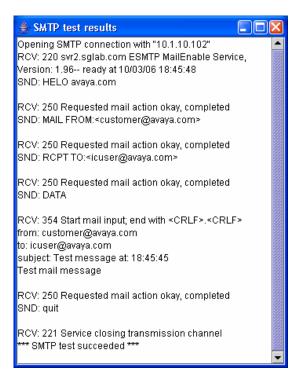
6.1. Verify Avaya Interaction Center

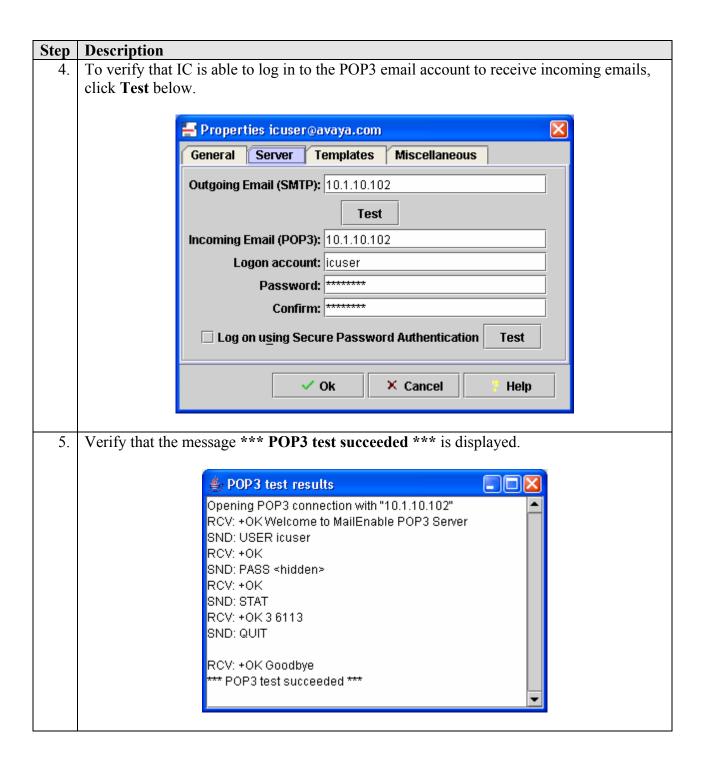


2. Check **Send a test message using this account**. Set the **From** field to the email address of the IC email account as shown in the **Return address** field in **Step 3**, and the **To** field to the SMSConnect email account configured in **Section 4 Step 5**. Click **Test**.



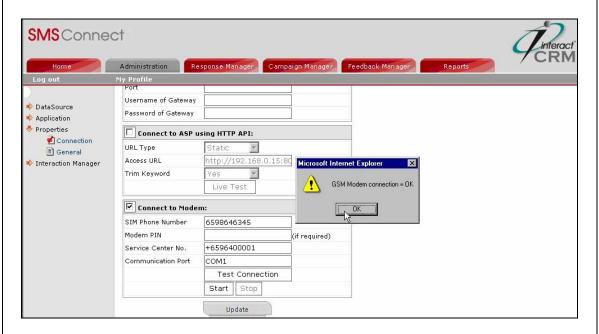
3. Verify that the message *** **SMTP test succeeded** *** is displayed.



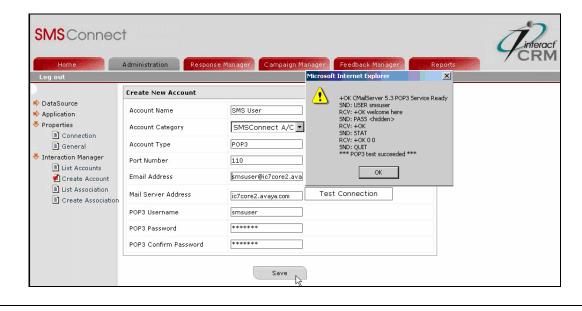


6.2. Verify InteractCRM SMSConnect

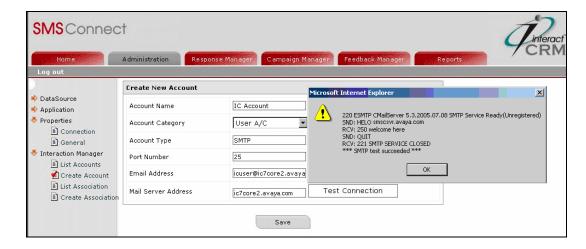
Step Description When configuring the GSM modem connection, click Test Connection. Verify that the message box is displayed with the message GSM Modem Connection = OK.



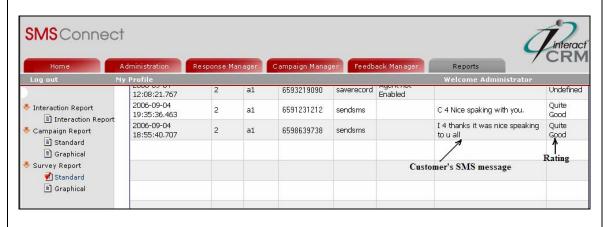
2. When configuring the **SMSConnect A/C**, click **Test Connection** to test the configuration. Verify that the message windows shows *** **POP3 test succeeded** ***.



3. When configuring the User A/C, click Test Connection to test the configuration. Verify that the message windows shows *** SMTP test succeeded ***.



4. To verify SMS-based customer feedback, make a voice call to the agent. After the call, verify that an SMS message is received by the caller to request for feedback. Verify also that the caller's feedback is received correctly by SMSConnect by clicking on **Survey Report** under the **Reports** tab.



7. Support

For technical support on InteractCRM SMSConnect, contact the InteractCRM Support Team at:

Phone: +91 22 6695 9190
Fax: +91 22 6602 1850

• Email: smscsupport@interactcrm.com

8. Conclusion

These Application Notes describe the configuration steps required for InteractCRM SMSConnect 1.0 to successfully interoperate with Avaya Interaction Center Release 7.0. All feature functionality test cases were completed successfully.

9. Additional References

The following documents can be found at http://support.avaya.com:

- [1] Avaya Interaction Center Release 7.0 IC Administration Volume 2: Agents, Customers, & Queues, 07-300108, Issue 3, July 2005
- [2] Avaya Interaction Center Release 7.0 Installation and Configuration, 07-300100, Issue 3, July 2005

The following documents are available in the InteractCRM SMSConnect installation CDROM:

- SMSConnect Installation and Administration Guide, Version 1.0
- SMSConnect Rule Design Guide, Version 1.0
- IC Connector for Feedback Manager Configuration Guide, Version 1.0
- IC Connector for Interaction Manager Configuration Guide, Version 1.0

©2006 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 Developer *Connection* Program at devconnect@avaya.com.