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iConnect Developers Guide

Using iConnect to Integrate CRM and InQuira Applications

InQuira Version 8.2.0

Document Number CA82-IG-00

March 16, 2010

InQuira
900 Cherry Ave.
6th Floor
San Bruno, CA 94066

Contents

About This Guide

This guide provides detailed instructions and supporting information for installing and configuring InQuira iConnect for CRM for use with an InQuira 8.1.3 application. This guide is intended for application developers and systems administrators who need to plan for and perform integration of iConnect for CRM with an InQuira 8.1.3 application and a supported CRM application.

This preface includes information on:

- The general organization of this guide
- The InQuira contact information
- The available product documentation

In This Guide

The *InQuira iConnect for CRM Integration Guide* is divided into the following sections:

Chapter 1, InQuira iConnect for CRM	This chapter describes InQuira iConnect for CRM installation, installed directories and files, product components, and the integration process.
Chapter 3, Deploying iConnect in a CRM Environment	This chapter describes how to import and deploy the iConnect for CRM components into the CRM environment.
Chapter 4, Launching iConnect	This chapter describes how to configure the iConnect for CRM components that make InQuira 8.1.3 application available to the CRM application.
Chapter 5, Configuring Link Capabilities	This chapter describes how to configure the data transfer between the InQuira 8.1.3 application and the CRM application.
Chapter 6, Configuring the iConnect Integrated User Interface	This chapter describes how to adjust the height of the search results frame within the CRM application.

Contacting InQuira

You can contact InQuira by mail, telephone, fax, and email.

Address:	851 Traeger Ave. Suite 125 San Bruno, CA 94066
Telephone:	(650) 246-5000
Fax:	(650) 246-5036
Email:	For sales information, send email to sales@inquira.com. For product support, send email to support@inquira.com.
World Wide Web:	Learn more about InQuira products, solutions, services, and support on the world wide web at: **www.inquira.com**.

InQuira Product Documentation

InQuira documentation is available only to licensed users of our software products and may not be redistributed in any form without express permission from InQuira, Inc.

The InQuira documentation is available in PDF format. Customers can download the PDF files from:

```
http://documentation.inquira.com/
```

Note: You need a PDF reader application installed on each processor on which you plan to view the InQuira product documentation. The Adobe Acrobat reader is available from Adobe Systems at: http://www.adobe.com.

If you encounter a problem, need help using the documentation, or want to report an error in the content, please contact InQuira Customer Support.

If you need help obtaining InQuira product documentation, or want to obtain permission to redistribute a portion of the contents, please contact your InQuira account representative.

Detailed information about each product document set is available in:

- "InQuira Analytics Documentation" on page 2
- "Intelligent Search Documentation" on page 3
- "Information Manager Documentation" on page 4
- "iConnect for CRM Integration Documentation" on page 4

Additional information about documentation conventions and standards can be found in:

- "Screen and Text Representations" on page 4
- "References to World Wide Web Resources" on page 4

InQuira Analytics Documentation

InQuira Analytics is distributed with the following documentation.

Document	Number	Description
InQuira Analytics Installation Guide	IA80-IG-00	This guide is intended for technical staff who are responsible for installing InQuira Analytics. It provides detailed information on installing and configuring the InQuira Analytics product for use with an InQuira 8.1 application.
Analytics User Guide	IA80-CA-00	This guide is intended for systems and application administrators who need to configure the Intelligent Search and Information Manager Analytics components to report on InQuira 8.1 application performance.

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Intelligent Search Documentation

Intelligent Search is distributed with the following documentation.

Document	Number	Description
Intelligent Search Installation Guide	IS80-IG-00	This guide is intended for technical staff who are responsible for installing InQuira 8.1. It provides detailed information on installing InQuira 8.1 and configuring the application on a single processor using the Installation Configuration Environment facility.
Intelligent Search Administration Guide	IS80-CA-00	This guide is intended for system and application administrators who need to configure an InQuira 8.1 application in an enterprise environment. It describes InQuira 8.1 integration, development, configuration, and maintenance processes and tasks.
Intelligent Search Language Administration Guide	IS80-LA-00	This guide is intended for business users and subject matter experts who need to create and maintain the language processing elements of a InQuira 8.1 application using the System Manager. This book provides usage information about the System Manager, conceptual information about the InQuira 8.1 language objects, and task information about the process of managing the user experience provided by the InQuira 8.1 application.
Intelligent Search Language Tuning Guide	IS80-LD-00	This guide is intended for application developers who need to create and maintain advanced InQuira 8.1 language-processing elements using the Dictionary and other InQuira Language Workbench applications.
Intelligent Search Optimization Guide	IS80-AG-00	This guide is intended for application developers who need to implement InQuira 8.1 advanced features, including Personalized Navigation and Process Wizards.
Intelligent Search Application Development Guide	IS80-API-00	This guide provides information about integrating and customizing the InQuira 8.1 Personalized Response User Interface.
Intelligent Search Language Reference	IS80-LRG-00	This guide is for language developers implementing InQuira 8.1 applications that utilize the intent libraries and advanced language processing functions. These guides are published as separate documents that provide reference information for each industry-specific intent library. Each reference also contains complete descriptions of InQuira Match Language and Variable Instantiation Language.
Intelligent Search User Interface Guide	IS80-UI-00	This guide is intended for application developers who need to customize the InQuira 8.1 Personalized Response User Interface, and integrate it with a production web application. It contains information about the elements and features of the User Interface, and provides guidelines for integrating it into an enterprise web architecture, customizing its appearance and functionality, and implementing various special features.

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Information Manager Documentation

InQuira Information Manager is distributed with the following documentation.

Document	Number	Description
Information Manager Installation Guide	IM80-IG-00	This guide is intended for technical staff who are responsible for installing InQuira Information Manager. It provides detailed information on installing and configuring the Information Manager product.
Information Manager Administration Guide	IM80-CA-00	This guide is intended for systems and application administrators who need to configure and administer an InQuira Information Manager application, and integrate it with an InQuira 8.1 application. It also contains information for general business users who need to use the Information Manager to create and manage content.
Information Manager Content Authoring Guide	IM80-AG-00	This guide is intended for technical staff who are responsible for authoring content in InQuira Information Manager. It provides detailed information on creating content and managing workflow tasks in the Information Manager console.
Information Manager Developer's Guide	IM80-WSR-00	This guide is intended for application developers who need to integrate Information Manager content, content category, and user and security functions with external applications. It contains reference information and examples for all packages, classes, methods, and interfaces of the Information Manager Web Services API.

iConnect for CRM Integration Documentation

The InQuira 8.1.3 iConnect for CRM products are distributed with the following documentation.

Document	Number	Description
iConnect Developers Guide	CA80-IG-01	This guide is intended for application developers and systems administrators who need to plan for and integrate the InQuira iConnect with an InQuira application and a supported CRM application.
iConnect for Siebel Contact Center Integration Guide	CA80-IG-00	This guide is intended for application developers and systems administrators who need to plan for and integrate the InQuira iConnect with an InQuira application and a supported Siebel application.

Screen and Text Representations

The product screens, screen text, and file contents depicted in the documentation are examples. We attempt to convey the product's appearance and functionality as accurately as possible; however, the actual product contents and displays may differ from the published examples.

References to World Wide Web Resources

For your convenience, we refer to Uniform Resource Locators (URLs) for resources published on the World Wide Web when appropriate. We attempt to provide accurate information; however, these resources are controlled by their respective owners and are therefore subject to change at any time.

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InQuira iConnect for CRM

iConnect for CRM for InQuira 8.1.3 provides a complete intelligent search interface that enables contact center agents to quickly and easily find accurate answers to customer inquiries from within the CRM dashboard.

iConnect for CRM leverages InQuira's patented Intelligent Search technology to find exact answers to inquiries based on their meaning, and to search unstructured content, structured data sources and transactional business applications in parallel. The InQuira technology can automatically incorporate customer context, call context, and CRM contextual information in the search for answers to customer inquiries.

iConnect for CRM user interface is embedded within the CRM desktop, designed to maximize agent productivity and minimize keystrokes, improving call resolution rates. The answers are more than just mere links to source content; they also include relevant excerpts that have a high probability of answering the inquiry based on their intent.

iConnect for CRM significantly streamlines the call wrap-up process by automatically providing embedded links to associate the right enterprise knowledge with each service request resolution task.

Integration Requirements and Supported Applications

The InQuira iConnect requires a complete and configured InQuira 8.1.3 installation, including the iConnect for CRM 8.1.3, and a supported CRM application.

iConnect for CRM Installation

Access the InQuira release download site. Under the **Platform: All** heading, click <u>CRM Files</u>.

Open the CRM-X.x.zip file and extract the contents to:

```
<InQuira_home>\archive\crm
```
  * You may need to create the `crm` directory when extracting the files.

The iConnect for CRM file extraction creates the following directory structure in Windows:

```
\CCA
    \DataMaps
    \WebService
    \WebTemplate
\CRAWLER
    \DataMaps
    \RunTimeEvents
    \WebService
\xsl
```

iConnect for CRM Installation Directories

The following tables describe the installation directories and files for iConnect for CRM.

The `crm` directory contains the following sub-directories and files:

Directory	Description
CCA	This directory contains the iConnect for CRM components.
CRAWLER	This directory contains the iConnect for CRM components.

xsl	This directory contains the standard content converter stylesheets which you copy to the InQuira 8.1.3 application and the web server.
	`main.xsl`
	`sr_transformation.xsl`

The `CCA` directory contains the following iConnect for CRM directories and files:

Directory	Description

DataMaps	This directory contains two files which are used in the data integration process.
	`InQuiraLinkUnlinkSRDM.xml`
	`InQuiraSRLinkedAnswersDM.xml`

WebService	This directory contains the webservices file: `InQuiraSRLinkedAnswers.xml`
WebTemplate	This directory contains the InQuira 8.1.3 search applet for deployment in the CRM environment. `InQuiraSearchApplet.swt`

The `CRAWLER` directory contains the following iConnect for CRM files:

File	Description
DataMaps	This directory contains the datamap file: `InQuiraSRDetails.xml`
RunTimeEvents	This directory contains the runtime event file: `RTE.xml`
WebService	This directory contains the webservices file: `InQuiraCrawler.xml`

iConnect for CRM Components

iConnect for CRM consists of the following components that you deploy within the CRM environment:

- Custom CRM Projects packaged as CRM Integration Files that you import and deploy as described in *Chapter 3, Deploying iConnect for CRM in a CRM Environment*
- Custom user interface templates (`InQuiraSearchApplet.swt`) as described in "Deploying the InQuira Search Applet Template" on page 27

The Integration Process

The iConnect for CRM deployment process consists of the following steps:

- Deploy the iConnect for CRM components in the CRM environment as described in *Chapter 3, Deploying iConnect in a CRM Environment*

- Configure content and data integration as described in *Chapter 5, Configuring Link Capabilities*

- Edit the CRM user interface as described in *Chapter 6, Configuring the iConnect Integrated User Interface*

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Configuration Scenarios

This chapter describes configuration options to integrate a CCA system and InQuira iConnect for each of the following scenarios:

- **Search in Context**
- **Single Sign-on**
- **Localizing InQuira and Multi-Lingual Content**
- **Linking a Document to a Case**
- **Unlinking a Document**
- **Creating New Content and Providing Feedback**
- **Supporting Multiple CRM Systems**

The function provided for individual documents from Information Manager are available when viewing search results from the web pages. These functions include document editing, recommending changes to documents, viewing change recommendations, rating, subscribing, and other useful functions for users.

Search in Context

Search in context is the ability to allow a user to find an answer based upon the content of the case that they are currently working. With the click of a button, information is pulled from the case and presented to InQuira to identify the best answer. The user can then interact with InQuira to further refine their search, click to view content, provide feedback, or perform one of other many functions provided through the InQuira UI.

CCA Implementation

Configure the URL to point to the InQuira instance. See "Launching iConnect in Context" on page 19.

Configure application.properties file and infocenter.properties file. See "Configuration Options for the iConnect Application " on page 20.

iConnect Application Configuration

Configure iConnect parameters.

Configure to point to InQuira search runtime.

Single Sign-on

InQuira accepts the user credentials (user id and password) that are passed and automatically logon the user when the user initiates the first search request for a case. If the user is unknown, then the user appears as an anonymous user. If the user is known, the user is automatically logged into InQuira.

The user is mapped to a user Role, which dictates the privileges for that user that are displayed within the InQuira application.

This password encryption/decryption only affects the autologin for system integration. It does not affect the normal login process, being native InQuira implementation, LDAP, or any custom made implementation through IAuthenticate.

Using HTTPS communication between CCA and InfoCenter/iConnect further improves the security for sensitive data.

If using Single Sign-on products, such as Site Minder, a customized SSO can replace the AUTOLOGIN delivered.

CCA Implementation

Define InQuira User Name and Password in SSO configuration. The password should be encrypted (entered in encrypted format). The default password is encrypted as it is in Information Manager when a user/password is created. See "InQuira InfoCenter Password" on page 21.

iConnect Application Configuration

Configure the encryption algorithm for entry CRYTO_CLASS_NAME in config.properties for each iConnect application. This can be done though IM console, System Config Expert mode. By default, it is preconfigured as com.inquira.foundation.utilities.CVEncryption.

The encryption algorithm can be custom implemented and plugin to the iConnect system as long as it implements the following interface.

```
package com.inquira.foundation.utilities;
public interface ICVCrypto {

   public String encryptPassword(String str)throws CVSecurityException ;
   public String decryptPassword(String str)throws CVSecurityException ;
}
```

The encryption algorithm should apply on both CCA and on iConnect.

Localizing InQuira and Multi-Lingual Content

The InQuira iConnect Application accepts the user locale to dynamically determine the localized version of iConnect to display for the user. The locale for the user is also used to determine the locale of the answers returned. In addition, the user can select additional languages for which they would like to see results returned. InQuira provides cross-lingual search where results may be returned in all languages, while the user enters the question in the native language. Automatic spell checking occurs for their native language and concepts are identified that may match other languages and in-turn match on other content for those languages.

For example, when entering "funcionnes" in Spanish, Information Manager uses spell check to correct this as "funciones" and matches on the concept "features" in English. Often all content is not translated into all languages. Cross-lingual search allows users who can read multiple languages, but have trouble writing in another, to enter a question in the native language and see results in other languages that they can read.

CCA Implementation

Locale is passed for the user in the Symbolic URL (param "locale") or embedded in iConnect customized implementation.

iConnect Application Configuration

Multiple Languages can be configured within InQuira to provide a checkbox to the end user for the language of results.

Linking a Document to a Case

InQuira iConnect provides the feature to link an answer to a case. When a user finds a solution, the user can link that solution to the case and Information Manager records the following details:

- URL
- Excerpt
- Title

- Document ID
- Solution ID
- Version

- User Name*
- Linked Date
- InQuira Status

*This is the user who linked the solution.

For the case, this is an audit trail of what was used as a solution for the case. Within InQuira, the activity of linking a document to a case results in the document reuse count and document value being incremented, identifying the author for the usefulness or value of the contribution in reports and in the author's reputation.

An optional parameter, incident value for the case, can be applied to influence the document value by passing in a value for the case when the document is linked (e.g. Severity 1 passes in 10, while Severity 4 passes in 1). The document value is the sum of all incident values for the cases to which the document was linked.

Using an incident value allows the recognition of users who author documents that are reused to solve critical cases. It also influences the user's reputation points. Often the best support people work on the fewest, but most critical cases, and write the fewest documents, but they are valuable documents to the company. Incident value helps to recognize these individuals for their contributions.

Important! A closed case cannot link any additional answers.

CCA Implementation

Configure web services.

InQuira Search Configuration

Create a **Linked Answers** tab, as described in "Configuring Service Request Screen" on page 49.

Unlinking a Document

InQuira iConnect provides the feature to unlink an answer from a case. When a user determines that the answer linked to the case did not resolve the case, the user can unlink the answer from the case. This process will also decrement the reuse count and the document value for the document that is unlinked.

CCA Implementation

Configure web services.

InQuira Search Configuration

The linking configuration described above also creates the ability to unlink.

Creating New Content and Providing Feedback

If the issue is not known, the user can create a document which frames the problem and the resolution to the issue. The information from the case can be used to create a new document. The draft document can be automatically linked to the case as what was used to resolve the case, and the document will be available for other users to view and possibly publish to the web site for external users.

A knowledge management platform is a content manufacturing engine as users create content to resolve new issues, systematically filling content gaps and publishing new, relevant content to the web site.

If granted the privileges to do, users may edit existing content as they use it in the case that they find a problem with a document that needs to be fixed.

Users may also recommend new content if they are not provided the privilege to create new content directly. Users may recommend changes to an existing document and see recommended changes from other users when viewing a document.

Users may provide other feedback specifically for their search experience to flag sessions that are problematic for offline analysis, as well as provided ratings and feedback on content.

Users may also post topics for discussion using InQuira forums, from which new documents can be sourced.

CCA Implementation

Use the Link Web Service defined for linking a document to a case.

Use the Symbolic URL to pass information about the case and prefill draft documents or recommendations.

Supporting Multiple CRM Systems

A single instance of InQuira can be used for multiple CRM systems. Different groups within a company may use different CRM systems, but still need to find and share answers. Each CRM system can be configured and passed to iConnect for iConnect to know which CRM system is linking answers to their cases. iConnect would then invoke the corresponding set of link or unlink web services.

CCA Implementation

The Symbolic URL passes a system parameter ("cca_system" value has to match the Call Center Advisor name of Call Center Advisor config in Advanced config).

InQuira iConnect Configuration (Search instances)

The iConnect is configured in System Manager, see Chapter 4, "Configuring Content Integration". The CC Advisor name must match the "cca_system" value in the Symbolic URL defined in CCA. A different CCA with a unique name can be created for each CRM system.

Deploying iConnect in a CRM Environment

This chapter discusses:

- **Configuring iConnect Parameters**
- **Deploying iConnect**

Configuring iConnect Parameters

When you add a web application to a repository and define it, InQuira Information Manager deploys the iConnect files and the InfoCenter files. This represents the web pages and the properties file for the web application. Use the Contact Center Advisor setup in the Advanced Configuration Facility to set and modify the integration parameters for the iConnect and Siebel.

Edit Call Center Advisor Settings

In Advanced Configuration:

1   In the InQuira System Manager, navigate to **Tools > Advanced Config > System > Contact Center Advisor**.

2   Click **Edit**.

The **Editing: Call Center Advisor** screen displays:

3 Enter the following parameters:

Property	Description
cca-default-handler	Refers to how InQuira communicates with Siebel installations. See "Add a Call Center Advisor" below.
Call Center Advisor	The default is Siebel. This is the "cca-handler-impl". This must match what is defined for the "cca_system*" on page 19 in the URL Parameters list.
Base URL	Refers to the URL associated with the configured CRM system.
Username	Enter the login name associated with the CRM server.
Password	Enter to the password associated with the above User Name.
cca-handler-impl	Defines the code used by InQuira to invoke communication with a CRM system. See "Add a cca-handler-impl" on page 16 for more information.

Add a Call Center Advisor

From the **Editing: Call Center Advisor** screen:

1 Click **Add New Item** in the Call Center Advisor section.

The **Editing: Call Center Advisor > Call Center Advisor** screen displays.

2 Review the "Possible Configurations" section and enter the following properties for your configuration:

Property	Description
Item Name	Enter a name for the CCA configuration. This used to register this CRM handler and help to locate this handleImp by the InQuira CCA framework.
Call Center Advisor	The default is Siebel. This is the "cca-handler-impl". This must match what is defined for the "cca_system*" on page 19 in the URL Parameters list.
Base URL	Enter to the URL associated with the configured CRM system. This is used to access web services.
User Name	Enter to the login name associated with the CRM server.
Password	Enter to the password associated with the above User Name.
Properties	Add any additional configurable properties, if necessary. To modify select **Add New Item**.

Add a cca-handler-impl

From the **Editing: Call Center Advisor** screen:

1 Click **Add New Item** in the cca-handler-impl section.

The **Editing: Call Center Advisor > cca-handler-impl** screen displays.

2 Review the "Possible Configurations" section and enter the following properties for your configuration:

Property	Description
Item Name	Enter a name for the cca-handler-imp. The Item Name must match what is defined for the "cca_system*" on page 19 in the URL Parameters list. The default is Siebel
cca-handler-impl	This must be the java class name and full path for the CRM system handler. For example, for Siebel, the delivered class name is: `com.inquira.request.cca.CCASiebelHandler`

For more information about the cca-handler-impl configuration, see "Configuring the CCA Request Handler" on page 23.

Possible Configurations

PRIMARY CCA CONFIGURATION

To configure one CRM system using iConnect 8.1.3:

1 Create a CCA configuration. See "Add a Call Center Advisor" on page 15.

2 Create a cca_handler_imp. See "Add a cca-handler-impl" on page 16.

3 Pass the URL with a cca_system matching the Item Name for the cca_handler_imp, as defined in "Launching iConnect in Context" on page 19.

SECONDARY CCA CONFIGURATION

To configure an additional CRM system, using iConnect with 8.1.3:

1 Create a second CCA configuration. See "Add a Call Center Advisor" on page 15.

2 Create a second cca_handler_imp. See "Add a cca-handler-impl" on page 16.

3 Pass the symbolic URL with a cca_system matching the Item Name for the second cca_handler_imp, as defined in "Launching iConnect in Context" on page 19.

ADDITIONAL THIRD-PARTY CCA CONFIGURATION

To configure a third-party CRM system (e.g. Clarify or PeopleSoft), using iConnect with 8.1.3:

1 Create a CCA configuration. See "Add a Call Center Advisor" on page 15.

2 Create a cca_handler_imp. See "Add a cca-handler-impl" on page 16.

3 Pass the symbolic URL with a cca_system matching the Item Name for the cca_handler_imp.

Deploying iConnect

InQuira provides the ability to deploy defined applications to an Information Manager repository. The Information Manager repository points to an existing Search runtime. The InfoCenter application is deployed using this method, and iConnect, based upon InfoCenter, is also deployed with InfoCenter.

When deploying an application, a directory is provided that us used as part of the URL to access the application. For example, the web application deployed named "demo" would be used in the URL to access the demo web application for InfoCenter and iConnect. A separate properties file is provided with the demo web application to configure it specifically.

The `<InQuira Install>\instances\813Demo\appserverim\webapps` directory structure would be:

```
\demo\
   apps\
      infocenter\
         custom
         resources
         system\
            components
            methods
            pages
            templates
      mobile
   resources
   system_files
   WEB-INF\
      infocenter.properties
```

The InfoCenter design consists of system folders and custom folders. As pages are customized they move to the custom folder, which is used ahead of the system folder.

The properties files under WEB-INF provide configuration options for the web application. The infocenter.properties file contains specific configuration options for iConnect.

The web application demo is accessed based upon the InfoCenter properties file defined home page. The default setting is: homePageURL=index?page=home

The default URL for the demo application is then:

```
http://<machine_name>:8226/demo/index?page=home
```

This URL is used to access InfoCenter. The web application for iConnect is also retrieved using a similar URL:

```
http://<machine_name>:8226/demo/index?page=cca
```

Launching iConnect

iConnect for CRM uses the CRM Portal Framework to perform content integration for the iConnect for CRM. You enable the CRM application to display InQuira 8.1.3 content by creating and configuring a CRM Portal Agent.

Launching iConnect in Context

The web application for iConnect can be launched via URL parameters as defined below:

Parameter	Definition
page [*]	The iConnect home page name.
sr_key	SRequest Number (Case Number).
question_box*	SR summary (Constant value: question) (Changes if a user asks other questions on the iConnect home page)
cca_types	CCA types (Constant value: solution_id, resolution_id)
solution_id	Not used.
ext_sol	Not used.
resolution_id	Not used.
ui_mode*	Identify this as question mode (Constant value: question)
cca_connected*	Identify this request is from CRM side (Constant value: true).
cca_system*	The CCA system name. (Default: siebel)
cca_case_desc	SR summary (Never change in the iConnect)
user	IC user name which will bind with the CRM user.
pswd	IC user password. (Use the text or encrypted password depends on the configuration. Can be customized with different encryption algorithm.
locale*	Set the iConnect locale. (Default: en_US)
casestatus	SR status.

*. Minimal requirements.

For example, launching iConnect from a Service Request and passing the summary information as the question would produce the following:

```
http://<machine_name>:8226/demo/index?page=cca&sr_key=<case_number>&question_box=
<case_summary>&cca_types=%22solution_id,+resolution_id&ui_mode=question&cca_connected=
true&cca_system=Siebel&cca_case_desc=<case_summary>&user=<user_name>&pswd=
<password>&casestatus=<case_status>&locale=<locale>
```

Note: If the user and password is configured correctly. Then the iConnect will auto log the user into system. User can do the case link/unlink, post content/topic and recommendation.

If the user and password is not configured correctly. Then the iConnect can not log this user into the system. User is considered an anonymous user and can access the page as any not-log-in user, and doesn't have the privilege to do any user role based actions like the case link/unlink, post content/topic and recommendation. For more information, see "InQuira InfoCenter Password" on page 21.

Configuration Options for the iConnect Application

Configuration options for iConnect are defined in the `application.properties` file and the `infocenter.properties` file.

File	Location
`application.properties`	{InQuira HOME}\InfoManager\config\{web application}\application.properties
`infocenter.properties`	{InQuira HOME}\InfoManager\install\taglib\WEB-INF\infocenter.properties

application.properties File

Configuration options for iConnect defined in the `application.properties` file include the following:

Configuration Option	Definition
# Set to true to default case link info to be added in content xml formatters. Setting to false will increase performance if case links are not necessary in a content tag. Case link info can be added as feature set in the get.channel.data and get.channel.record	default.content.formatter.case.link = true

infocenter.properties File

Configuration options for iConnect defined in the `infocenter.properties` file include the following:

Configuration Option	Definition
# Choose whether show the feedback/rating portlet in IC/CCA answer page.	showFeedbackRating=true
# Component to display right hand column on InfoCenter CCA content pages	ccaContentRightColumn=/apps/infocenter/system/pages/content/c_ccaRightcolumn.jsp
# Format the date when do the IC CCA case link. This date format must be the same as that used by the CRM user that does the web service call.	ccaLinkedDateMask=MM/dd/yyyy hh:mm:ss
# Channels to display on IC CCA draft content page in the order to display (The first one is the default channel, all the channels are connected by "+").	ccaDraftContentChannels=
# Channels to display on IC CCA recommendation page in the order to display (The first one is the default channel, all the channels are connected by "+").	ccaRecommendationChannels=
# DiscussionBoards to display on IC CCA post new topic page in the order to display (The first one is the default discussionboard, all the discussionboards are connected by "+").	ccaDiscussionBoards=

The following example illustrates the configuration in a Siebel application:
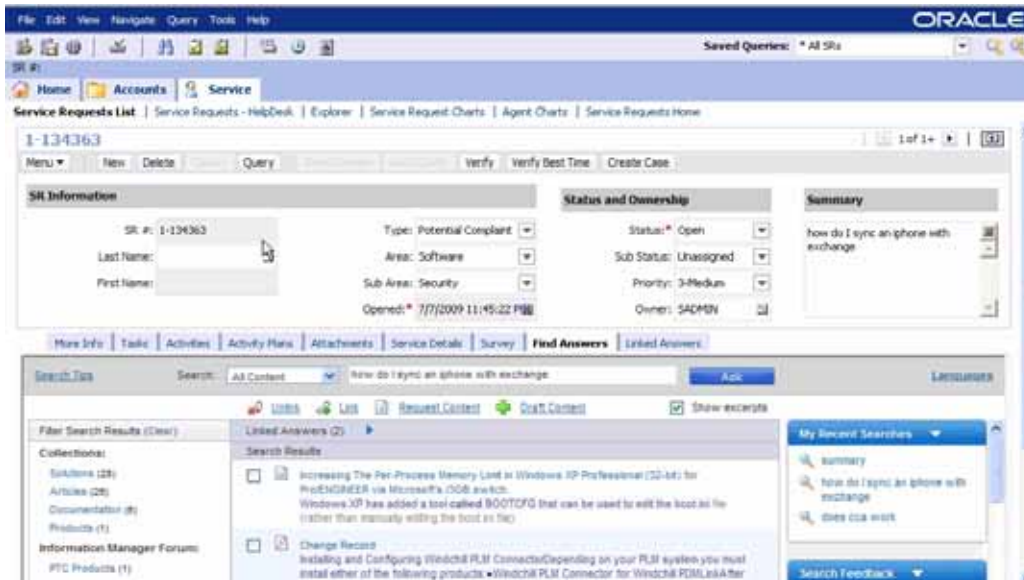
InQuira InfoCenter Password

The integration from CRM user to auto login to InfoCenter/iConnect requires full InQuira authorization and the password must encrypted for the SSO mapping on the CRM side. InfoCenter decrypts this password when the CRM request is intercepted. If the auto login fails, InfoCenter considers the user an anonymous user into InfoCenter.

The encryption algorithm is configurable through the CRYTO_CLASS_NAME property in config.properties for each InfoCenter/iConnect web application. You manage the encryption through the IM console. Navigate to Tools > System > Configure Go to Expert Mode. The default InQuira user password encrypt/decrypt class name configuration is:

```
CRYTO_CLASS_NAME=com.inquira.foundation.utilities.CVEncryption
```

The InQuira user's password entered in the CRM system has to be encrypted by the same implementation entered here so it can be properly decrypted. You can choose the encrypted password from the IM database to enter into the CRM system.

You can customize the encryption and decryption algorithm implementation by filling the entry of "CRYTO_CLASS_NAME". Again, the same algorithm implementation must apply to the InQuira user's password on the CRM side for encryption and the InQuira side for decryption.

To disable this password decryption, you can choose to make the "CRYTO_CLASS_NAME" entry empty in the configuration. In this case, InfoCenter considers the password to be sent over in clear text format with no encryption on it at all.

Important! Sending a password in clear text raises security concerns so it is not recommended.

Using HTTPs communication between CMR and InfoCenter/iConnect further improves the security for sensitive data.

Note: This password encryption/decryption only affects the autologin for system integration. It does not affect the normal login process, being native InQuira implementation, or LDAP or any custom made implementation through IAuthenticate.

Configuring Link Capabilities

The iConnect for CRM uses the CRM EAI Framework for data integration between the InQuira 8.1.3 and CRM applications. This HTTP request-response based integration uses CRM as a service. The inbound EAI request invokes a workflow in CRM to insert and update data, and uses the CRM Data Mapping Service to transform data between the InQuira XML format and the CRM internal format.

Configuring Linking

The iConnect web application includes the ability to displayed linked answers, and link or unlink selected answers or documents.

Required CRM APIs

The following tables identify the types of APIs that are required.

Web service and java function to query the links to a service request or case.

Handler	com.inquira.response.cca.CCALinkedAnswersResponseHandler
Method	buildResponseNode(RequestContext rc)
Webservice	com.inquira.siebel.common.webservice.SiebelLinkedAnswerWSClient
Method	getLinkedAnswers(srKey)

Web service, java and JavaScript function to link a document to a service request or case.

Handler	com.inquira.request.cca.CCASiebelHandler
Method	handleAddSolution(RequestContext rc)
Webservice	com.inquira.siebel.common.webservice.SiebelLinkedAnswerWSClient
Method	linkUnlinkACase(requestXML)
JS file	WebResources/JSP/apps/infocenter/system/templates/i_ccaJScript.jsp
JS case link method	`fnLink(strCRC32, uniqueID, IMID, binDetail)`

Web service or java function to unlink a document from a service request or case.

Handler	com.inquira.request.cca.CCASiebelHandler
Method	handleRemoveSolutionExt(RequestContext rc)
Webservice	com.inquira.siebel.common.webservice.SiebelLinkedAnswerWSClient
Method	linkUnlinkACase(requestXML)
JS file	WebResources/JSP/apps/infocenter/system/templates/i_ccaJScript.jsp
JS case link method	`fnUnlink(strCRC32, uniqueID, IMID, binDetail, frmObj)`

Web service or java function to link a document from an IM document.

Handler	com.inquira.response.cca.CCASiebelHandler
Method	addCaseLink(RequestContext rc)
Webservice	com.inquira.imwsclient
Method	addCaseLink (String inputXml)

Web service or java function to unlink a document from an IM document.

|	
Handler	com.inquira.response.cca.CCASiebelHandler
Method	removeCaseLink(RequestContext rc)
Webservice	com.inquira.imwsclient
Method	removeCaseLink(String inputXml)

# Configuring the CCA Request Handler

InQuira maintains a forward and backward pointer between a case or service request and the document used to solve the case or service request. Each document linked to a case contains some case information stored with InQuira as part of the case link for the document and a count, named reuse count, increments for each link to a case.

Requests are handled through iConnect by a request handler, which is configured in System Manager. Below is an example of the configuration in System Manager:
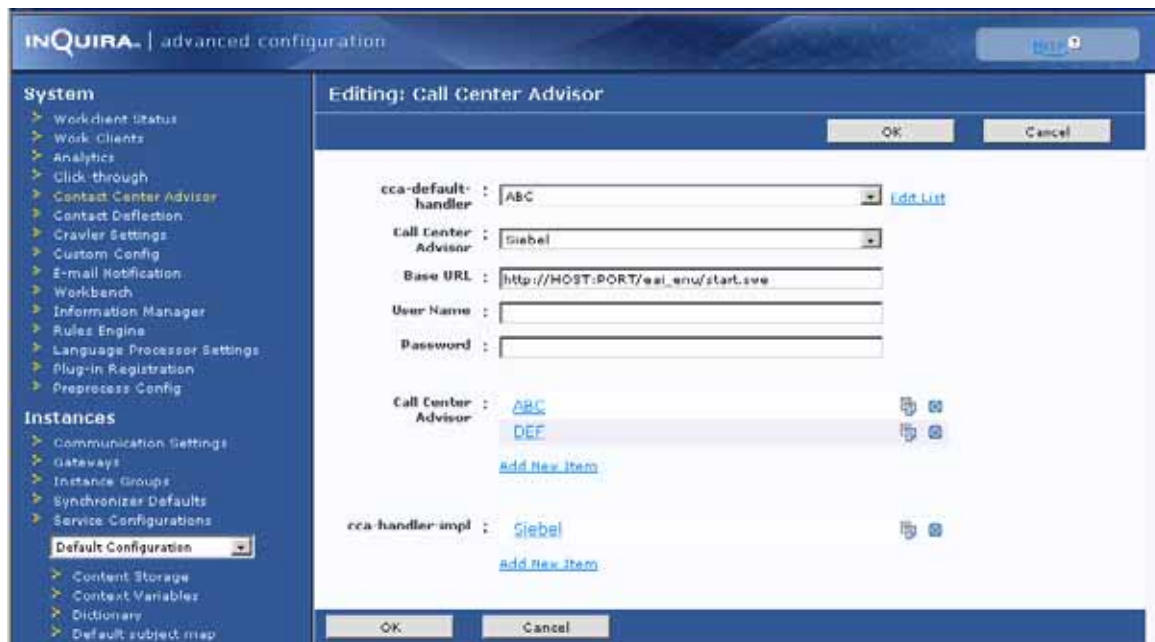
These settings are used to access the CRM application web services defined.

Clicking on the cca-handler-impl identifies the class used as the handler for querying links to service requests, linking to service requests, or unlinking from service requests.
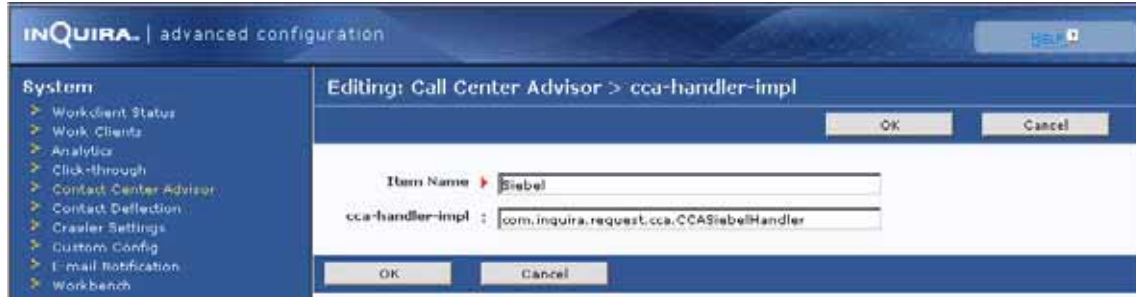
Read the handler from #.xml node <cca> which is specified to process the CRM case link/unlink.

The handler looks like the following:

```
    try {
        ccaHandlerImpl = CCAController.getSoutionHandler(system);
    }
    catch ( Exception ex ) {
        Execution.context ().log ().event ( ERROR_MSG, "CCA_HANDLER_CONFIG_ERROR", ex );
    }
```

CCASiebelHandler Call CRM webservice to process case link/unlink.

```
String targetPoint = siebelServerLocation + "?SWEExtSource=WebService&SWEExtCmd=
Execute&UserName=" + siebelUserName + "&Password=" + siebelPassword;
SiebelLinkedAnswerWSClient client = new SiebelLinkedAnswerWSClient(targetPoint);
try {
output = client.linkUnlinkACase(requestXML);
if(output.equalsIgnoreCase("success")) {
rc.setParam(LINK_UNLINK_RESULT, SUCCESS);
Execution.context().log().event(INFO_MSG, DEBUG_MESSAGE, "Succeed to remove case link from
Siebel.");
}
else {
isUnlinkedFailed = true;
Execution.context().log().event(ERROR_MSG, DEBUG_MESSAGE, "Fail to remove case link from Siebel,
and return unlinked status [" + output + "] from Siebel.");
}
}
catch(WSClientException e) {
isUnlinkedFailed = true;
Execution.context().log().event(ERROR_MSG, DEBUG_MESSAGE, "[WSClientException] Fail to remove
case link from Siebel.");
Execution.context().log().event(ERROR_MSG, DEBUG_MESSAGE, e);
}
```

Configuring the iConnect Integrated User Interface

You can configure the search results frame within the CRM application as described in this chapter.

## Configuration Options for the iConnect Application

Configuration options for iConnect are defined in the `infocenter.properties` file. These include the following:

Configuration Option	Definition
# Choose whether show the feedback/rating portlet in IC/CCA answer page.	showFeedbackRating=true
# Component to display right hand column on InfoCenter iConnect content pages	ccaContentRightColumn=/apps/infocenter/system/pages/content/c_ccaRightcolumn.jsp
# Format the date when do the IC CCA case link. This date format must be the same as that used by the CRM user that does the web service call.	ccaLinkedDateMask=MM/dd/yyyy hh:mm:ss
# Channels to display on IC CCA draft content page in the order to display (The first one is the default channel, all the channels are connected by "+").	ccaDraftContentChannels=
# Channels to display on IC CCA recommendation page in the order to display (The first one is the default channel, all the channels are connected by "+").	ccaRecommendationChannels=
# DiscussionBoards to display on IC CCA post new topic page in the order to display (The first one is the default discussionboard, all the discussionboards are connected by "+").	ccaDiscussionBoards=

Interacting with the InQuira Application

The InQuira iConnect application can be embedded into the CRM interface or be launched as a new pop-up window. The user interacts with InQuira through the iConnect application, with options to refine their search, navigate through content, provide feedback, or recommend changes to content or create or edit content. The user has a direct link into the InQuira authoring environment from iConnect.

In addition, the InQuira iConnect application has browser requirements.
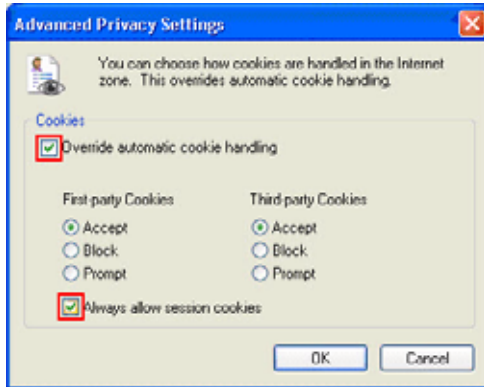
To set the browser requirements:

1   In Internet Explorer select Tools > Internet Options.

2   Select the Privacy tab.

3   Click the Advanced button.

4   Select **Override automatic cookie handling.**

5   Select **Always allow session cookies**.

6   Click OK.