Intelligent Search Siebel Integration Guide

Integrating Intelligent Search with Siebel 7 Applications

InQuira Version 8.1.2

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Contents

Preface About This Guide

This guide describes the integration of InQuira with Siebel 7 Enterprise Applications using the Siebel Adapter for InQuira. It provides detailed information about system requirements, integration architecture, and installation, deployment, and configuration processes.

The *Intelligent Search Siebel Integration Guide* is intended for application developers and systems administrators who need to plan for and perform the integration tasks. This guide assumes familiarity with Siebel 7 components and products.

Siebel Enterprise Applications that you can integrate with InQuira include Siebel Call Center 7, Siebel Sales 7, and Siebel Partner Manager 7.

NOTE: See *Siebel Resources* on page 12 for information on relevant Siebel documentation that you may need to consult during the integration process.

This preface includes information on:

- The general organization of this guide
- The support services available from InQuira Customer Support
- The available product documentation

In This Guide

The *Intelligent Search Siebel Integration Guide* is divided into the following sections:

Chapter 1, Integration Overview	This chapter provides an overview of the supported applications, integration scenarios, requirements, architecture, components, and the processes related to integrating InQuira with Siebel 7 applications.
Chapter 2, The Siebel Adapter for InQuira	This chapter describes the Siebel Adapter for InQuira components.
Chapter 3, Installing the Siebel Adapter for InQuira	This chapter provides step-by-step installation instructions for the Siebel Adapter for InQuira.
Chapter 4, Deploying the Content Converter Style Sheet	This chapter describes how to configure the style sheet to translate the Siebel XML output to the InQuira IQXML input format.
Chapter 5, Deploying the Siebel Adapter for InQuira	This chapter describes how to deploy Siebel Adapter components within the Siebel environment using Siebel Tools and by configuring the Siebel client application.
Chapter 6, Configuring InQuira Content Processing	This chapter describes how to configure InQuira to process content from Siebel 7applications by configuring and scheduling one or more Siebel crawlers.
Chapter 7, Configuring Access to Additional Siebel Objects	This chapter describes how to configure a new Siebel object type for access by a configured crawler.

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

InQuira Customer Support Hotline:	(888) 947-8324 NOTE: See *InQuira Customer Support* on page 4 for more information on reporting incidents to InQuira Customer Support.
Fax:	(650) 264-5036
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 Customer Support

InQuira Customer Support is available from 6:30 am to 4:30 pm PST, excluding InQuira holidays.

For Priority 1 incidents, such as when a production system hangs or crashes, or when continued use of the product is impossible, please use the support hotline: (888) 947-8324.

IMPORTANT: We accept Priority 1 requests only by telephone. We recommend that you send a follow-up email for Priority 1 requests after contacting InQuira Customer Support using the support hotline.

For Priority 2, 3, and 4 incidents, as described below, please contact InQuira Customer Support by email at: support@inquira.com.

Incident response times are determined by the following priority definitions:

Priority	Contact	Response Time	Definition
1	The InQuira Customer Support hotline: (888) 947-8324	1 business hour	A production system hangs or crashes, or continued use of the product is impossible.
2	support@inquira.com	8 business hours	The product is usable with major restrictions on functionality.
3	support@inquira.com	16 business hours	The product is usable with minor restrictions on functionality.
4	support@inquira.com	3 business days	You have a question or an enhancement request pertaining to the software or the documentation.

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. It is packaged in the `/docs` directory, within the `/inquira` directory, for example:

<InQuira_install_dir>/inquira/docs

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.

Detailed information about each product document set is available in:

- *Intelligent Search Documentation* on page 6
- *Intelligent Search Analytics Documentation* on page 7
- *Information Manager Documentation* on page 8
- *Contact Center Documentation* on page 9

If you encounter a problem, need help using the documentation, or want to report an error in the content, please contact InQuira Customer Support as described in *InQuira Customer Support* on page 4.

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.

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 Administrator's Guide and Reference	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 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.
Optimizing InQuira Intelligent Search	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 Developer’s 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.

Intelligent Search Analytics Documentation

Intelligent Search 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 Intelligent Search Analytics. It provides detailed information on installing and configuring the Intelligent Search 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.

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.

Contact Center Documentation

The InQuira 8.1 contact center products are distributed with the following documentation.

Document	Number	Description
Contact Center Advisor Integration Guide	CA80-IG-00	This guide is intended for application developers and systems administrators who need to plan for and integrate the InQuira Contact Center Advisor with an InQuira application and a supported CRM application.
Intelligent Search Siebel Integration Guide	CAS80-IG-00	This guide is intended for application developers and systems administrators who need to plan for and integrate InQuira 8.1 with Siebel 7 Enterprise Applications using the Siebel Adapter for InQuira 8.1.

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.

Chapter 1 Integration Overview

This section provides an overview of the supported applications, integration scenarios, requirements, architecture, components, and processes related to integrating InQuira with Siebel 7 applications.

InQuira applications can acquire content from many data sources, including various types of files on file systems, databases, and web content (via HTTP). The Siebel Adapter for InQuira extends the capability of InQuira by enabling:

- Content processing of data stored within Siebel 7 applications
- Access to indexed Siebel content from an InQuira application
- Access to InQuira question answering from within Siebel 7 applications

Integration Scenarios

You can integrate Siebel 7 with InQuira to provide the following functionality:

- InQuira question answering from within a Siebel application, which displays InQuira answers from Siebel content and from any additional configured content sources
- An InQuira application providing answers from Siebel 7 content within the standard InQuira dynamic portal user interface

You can also integrate InQuira and the InQuira Contact Center Advisor, which leverages any content sources configured within the InQuira application for use by the InQuira question-answering from within the Siebel application, and incorporates additional capabilities to:

- Publish information from the InQuira Session Manager to the Siebel repository
- Enable the InQuira application to use contextual information obtained from the Siebel application to deliver more refined search results

See the *Contact Center Advisor Integration Guide* for more information about the Contact Center Advisor.

Supported Siebel 7 Applications

The Siebel Adapter for InQuira supports integration with Siebel Call Center 7 applications.

Integration Requirements

Siebel 7 integration with InQuira requires a complete and configured InQuira installation, as well as the installed and deployed Siebel Adapter for InQuira software components.

You need access to Siebel Tools to import the Siebel Integration files (SIF) containing the InQuira-supplied Siebel components, including the Project and Workflow for content access integration, as well as integration Applets and associated Business Components used for application user interface integration.

Siebel Resources

For more information on Siebel 7 architecture and functionality, refer to the following documents:

- Siebel Bookshelf CD containing Siebel 7 product documentation
- Siebel Object Interfaces Reference
- Siebel Release Notes
- Siebel Tools Reference Guide
- Siebel VB Language Reference Guide
- Siebel eBusiness Application Integration Guide

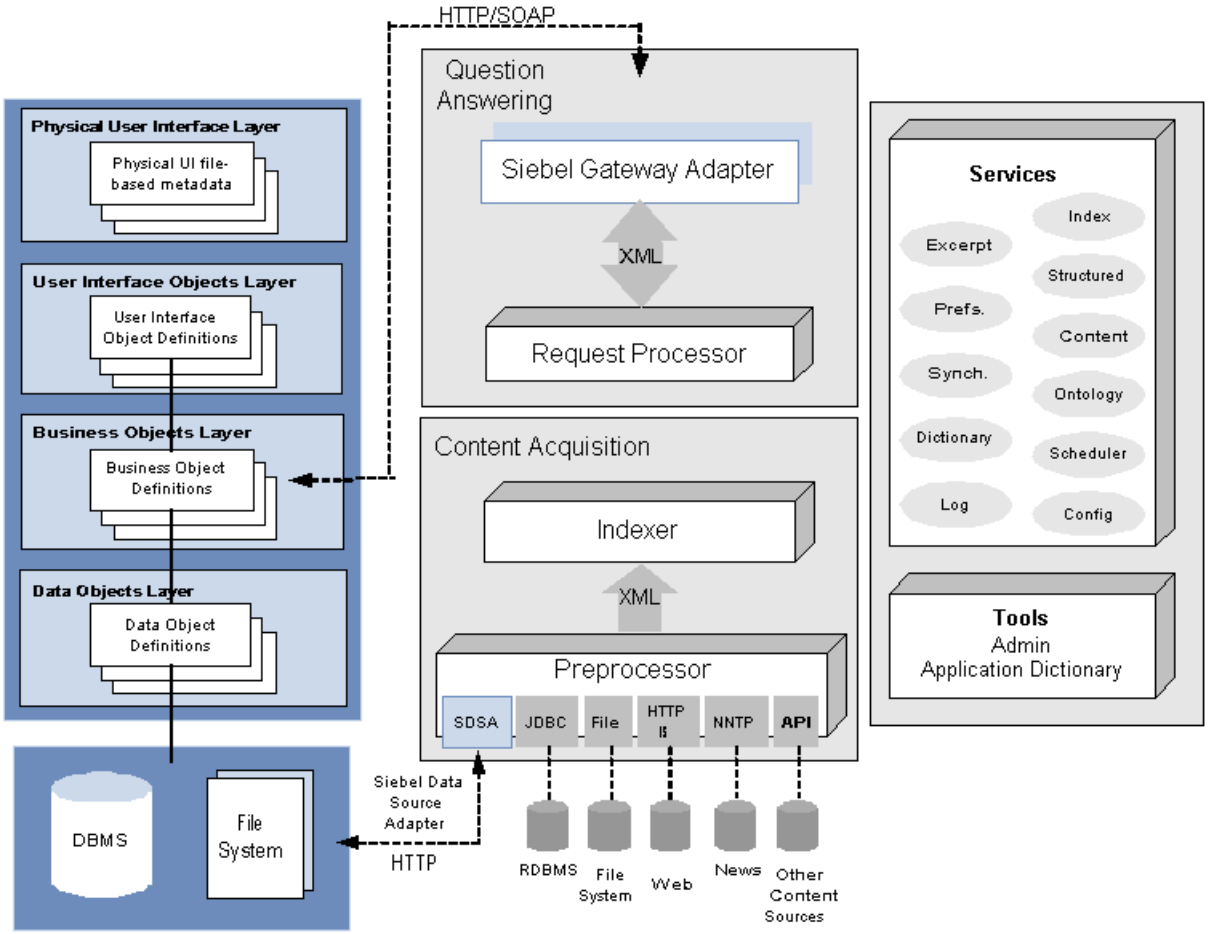
Integration Architecture

The Siebel 7 application integrates with InQuira at the Business Object layer. The InQuira Adapter for Siebel contains components that you deploy in the Siebel 7 environment to:

- Receive requests from InQuira for content associated with configured Integration Objects
- Export the requested data via HTTP as an XML file

Additional components installed within the InQuira environment include:

- The gateway adapter that handles requests to, and formatted answers from, the InQuira question answering process
- The content crawlers that you configure to access Siebel content
- The datasource adapter that reads the exported Siebel XML data
- The content converter that prepares the XML for content processing



The Integration Process

When the Siebel Adapter for InQuira is installed, configuration consists of steps to:

- Deploy the content converter style sheet, custom Workflow, Integration Objects, and Named Subsystem
- Configure content acquisition from the Siebel Application for the defined Integration Objects using the InQuira Advanced Configuration Facility
- Optionally add or modify important business terms within the Dictionary (see the *Intelligent Search Language Tuning Guide*)
- Import and process the configured Siebel application content and update the production content store databases using the Scheduler facility in the Advanced Configuration Facility (see the *Intelligent Search Administration Guide*)

Content Source Integration

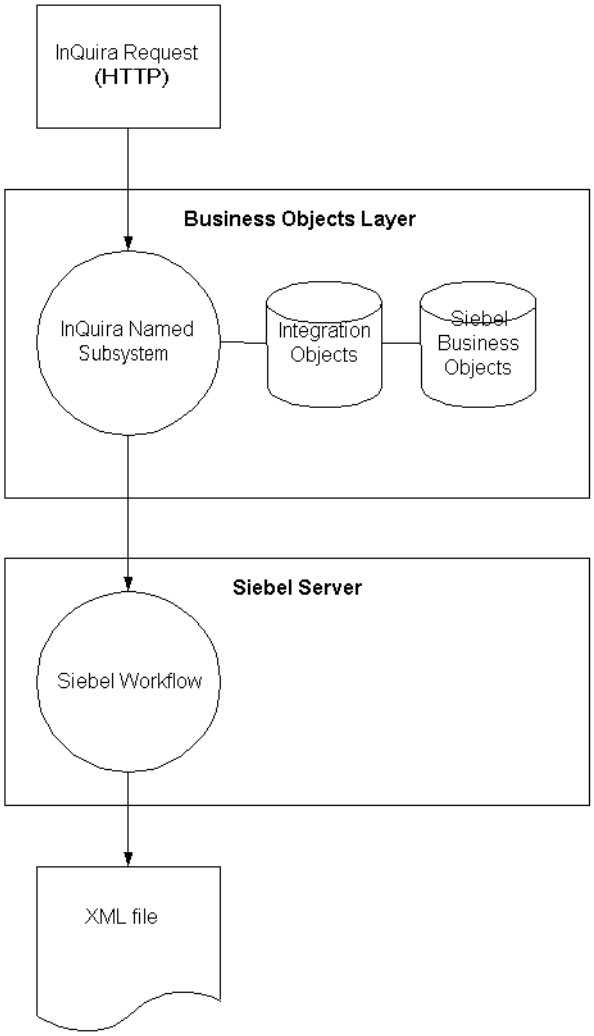
InQuira acquires Siebel content using custom Integration Objects and a custom Workflow and Named Subsystem that you deploy within the Siebel environment.

The Integration Objects define the data within the various Business Objects that will be available to the InQuira content processor. The Siebel Adapter for InQuira includes the packaged Integration Objects described in *The InQuira Integration Objects* on page 18.

You configure special Siebel crawlers within the InQuira application to access the content associated with the deployed integration objects.

InQuira integrates with the Siebel application at the Business Object Layer, so that RDBMS, Siebel DB and unstructured content stored on the Siebel File System are all accessible using the same integration process.

During content acquisition, the Siebel Adapter for InQuira sends requests to export the Siebel data to the InQuira Workflow via the InQuira Named Subsystem. The data is exported as an XML file, via HTTP. The Siebel crawler copies the exported data into the InQuira application and performs transformation using XSLT. The content processor indexes the resulting IQXML file, making it available to the question answering process.



Chapter 2 The Siebel Adapter for InQuira

The Siebel Adapter for InQuira consists of the following content integration components, which are deployed in the Siebel environment:

- A custom Workflow
- A Siebel Project containing custom Integration Objects

NOTE: The Siebel Adapter for InQuira also uses a Named Subsystem, which you define within the Siebel environment, and the InQuira Siebel content crawler, which you configure within the InQuira application.

The InQuira Workflow

The InQuira Workflow is a packaged process that is called by the Named Subsystem. It locates all instances of the specified Integration Objects and writes the associated data to XML files for access by the configured InQuira Siebel crawlers. The InQuira Workflow is named `InQuiraXMLResponse`.

The InQuira Project (SIF File)

The Siebel Adapter for InQuira contains a Project in the form of an SIF file (`EAINewObject.sif`), which you import into and deploy within the Siebel environment. The project contains the integration objects, as described in *The InQuira Integration Objects* on page 18.

The InQuira Integration Objects

The packaged integration objects define the data within the associated Business Objects that will be exported as content to the InQuira application. The Siebel Adapter for InQuira includes the following packaged Integration Objects:

- Accounts
- Contacts
- Service Request
- Solutions
- Products
- Opportunities
- Employees
- Orders
- SmartScripts

The InQuira Named Subsystem

Named Subsystems in Siebel environments are groupings of defined enterprise parameters that are stored in the Siebel Gateway Server. The InQuira Named Subsystem stores the name of the InQuira workflow and additional parameters.

The Siebel Adapter for InQuira data source adapter component calls the Named Subsystem with a URL that contains the Integration Object name as parameters. The Named Subsystem then calls the `InQuiraCrawlXMLResponse` workflow process to export the data associated with the integration object via HTTP.

You define the Named Subsystem as described in *Creating the Subsystem* on page 19.

Creating the Subsystem

Create a subsystem for the Workflow Process `InquiraCrawlXMLResponse` by following the steps below:

- Log onto the server using:

  srvrmgr /g <gateway> /e <enterprise_name> /s <siebel_server> /u sadmin /p sadmin

  For example: `C:\apps\sea78\siebsrvr\BIN\srvrmgr /g eng6 /e Sieb78 /s eng6 /u sadmin /p sadmin`

- Create the named subsystem InquiraCrawlWorkflow for subsystem EAITransportDataHandlingSubsys using the following settings:

  DispatchWorkflowProcess="InquiraCrawlXMLResponse"
  CharSetConversion="UTF-16"

- Set up the configuration file:

  - Open the file `...\siebsrvr\BIN\ENU\eai.cfg`
  - Add the following setting:

  [HTTP Services]
  wfInquiraCrawl = InquiraCrawlWorkflow

The Siebel Content Crawler

The Siebel content crawler is a specialized InQuira component that acquires content associated with configured Business Objects within a Siebel application. You configure a Siebel crawler instance for each type of Business Object that you want to access as a content source.

NOTE: Other types of InQuira crawlers are specialized to acquire content from web sites, news servers, file systems, and databases.

The InQuira Siebel crawler requests data using configured Integration Objects within the Siebel application.

The InQuira Siebel Data Source Adapter

The InQuira Siebel Data Source Adapter is a component within the InQuira application that requests content from a configured Siebel 7application, reads the exported Siebel data from a temporary file, and invokes the InQuira content converter and content processor.

Chapter 3 Installing the Siebel Adapter for InQuira

InQuira provides an automated installation program that copies the InQuira Adapter for Siebel files from the product distribution and configures them in the selected location within your environment.

The automated installation program is `install_siebel.exe`.

The installation process installs the InQuira Adapter for Siebel in the location:

<InQuira_home>/archive/siebel

The installation process installs the required components within the InQuira application, including the Siebel Integration files (SIFs) that you import into and deploy within the Siebel application.

IMPORTANT: Before installing InQuira, ensure that requirements and prerequisites are satisfied, and that appropriate personnel with access to the specified environments are available to perform the installation.

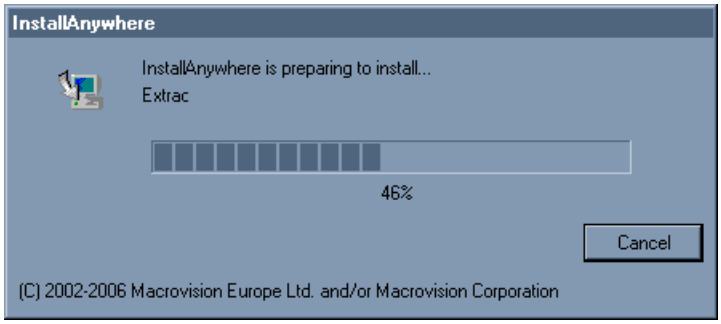
Starting the Siebel Adapter for InQuira Installation Program

Start the Siebel Adapter for InQuira installation program by locating and executing the appropriate installation file for your environment.

To start the installation program:

- execute `install_siebel.exe` in Microsoft Windows environments

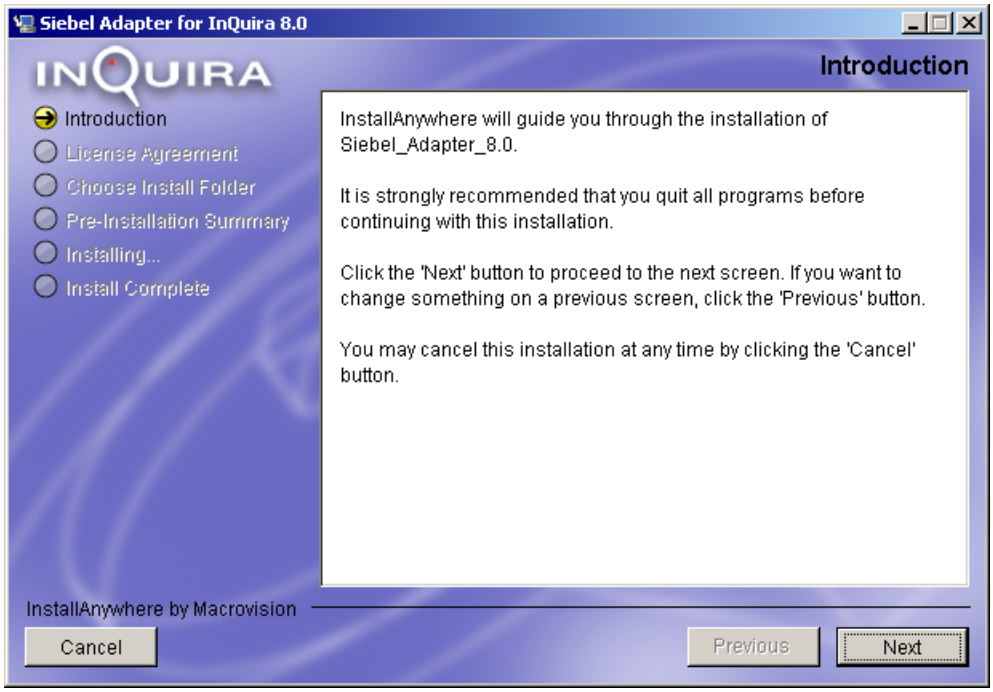
The installation program starts:



The installation program displays the introduction screen.

The Siebel Adapter for InQuira Installation Program Introduction

The installation program's introduction screen provides general information about the installation process and recommends that you close any other programs that are currently running.

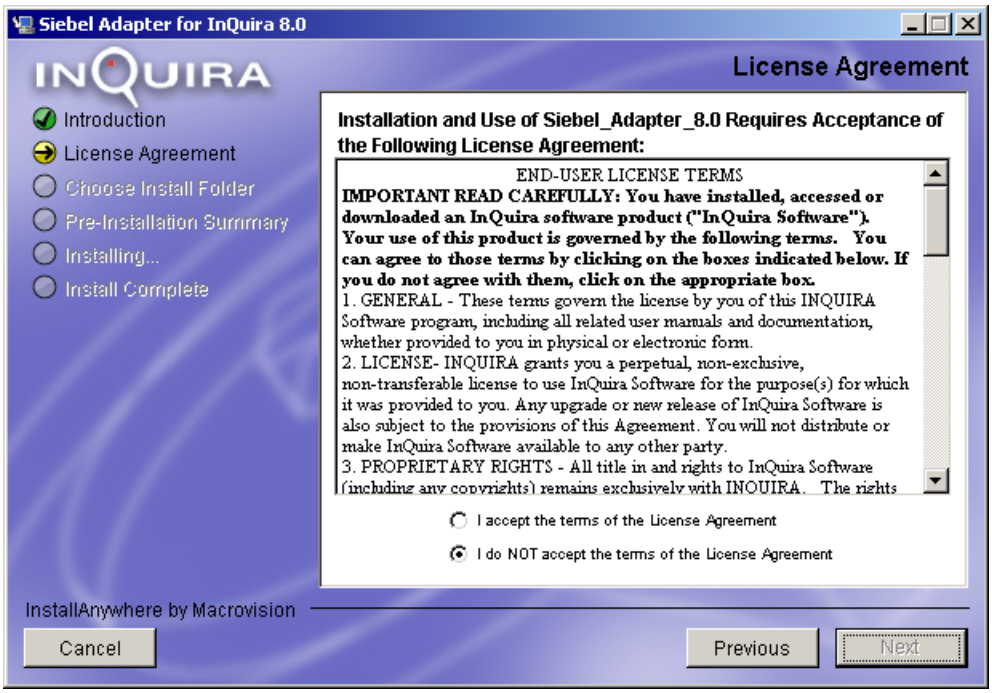


- Select **Next** to continue

The installation program displays the Siebel Adapter for InQuira license agreement.

The Siebel Adapter for InQuira License Agreement

The Siebel Adapter for InQuira license agreement specifies the legal terms of use. You must agree to these terms to install and use the Siebel Adapter for InQuira. Please read the agreement carefully; by agreeing, you are legally bound to its terms and conditions.



The installation program sets the license agreement to non-acceptance by default. To accept the license agreement and continue the installation:

- Select the accept option

The **Next** button is now available.

- Select **Next** to continue

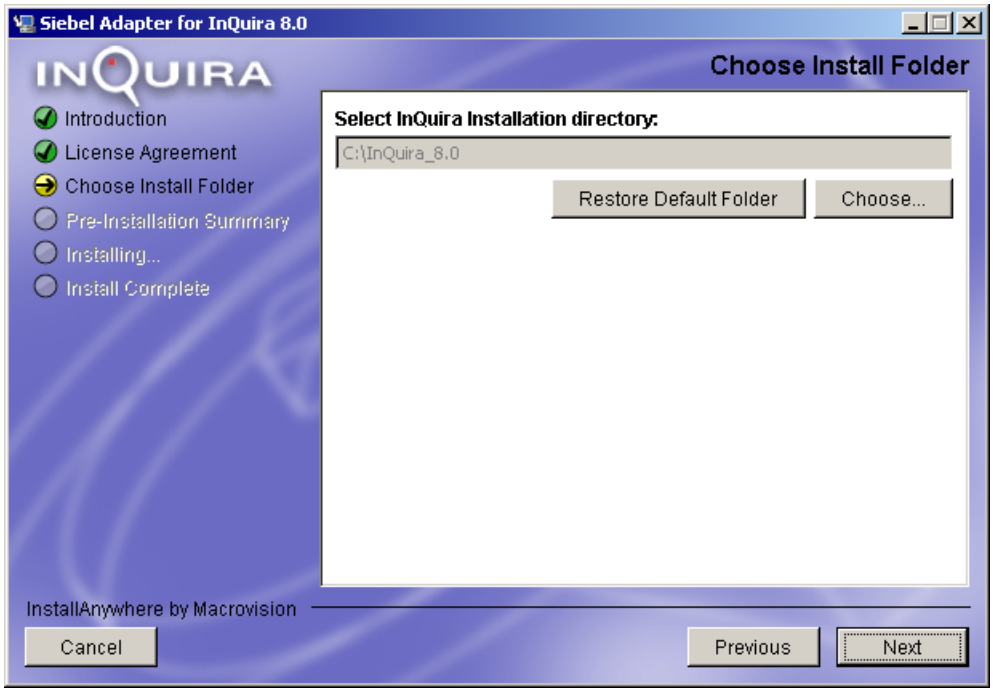
The installation program displays the installation location selection screen.

Selecting the Siebel Adapter for InQuira Installation Location

Select the location of the InQuira application in which you want to install the Siebel Adapter for InQuira. The installation program selects the directory `C:\Program Files\InQuira` by default.

You can use the **Choose...** button to open a file browser and locate your InQuira product home directory if necessary.

You can use the **Restore Default Folder** button to reset the default installation directory.

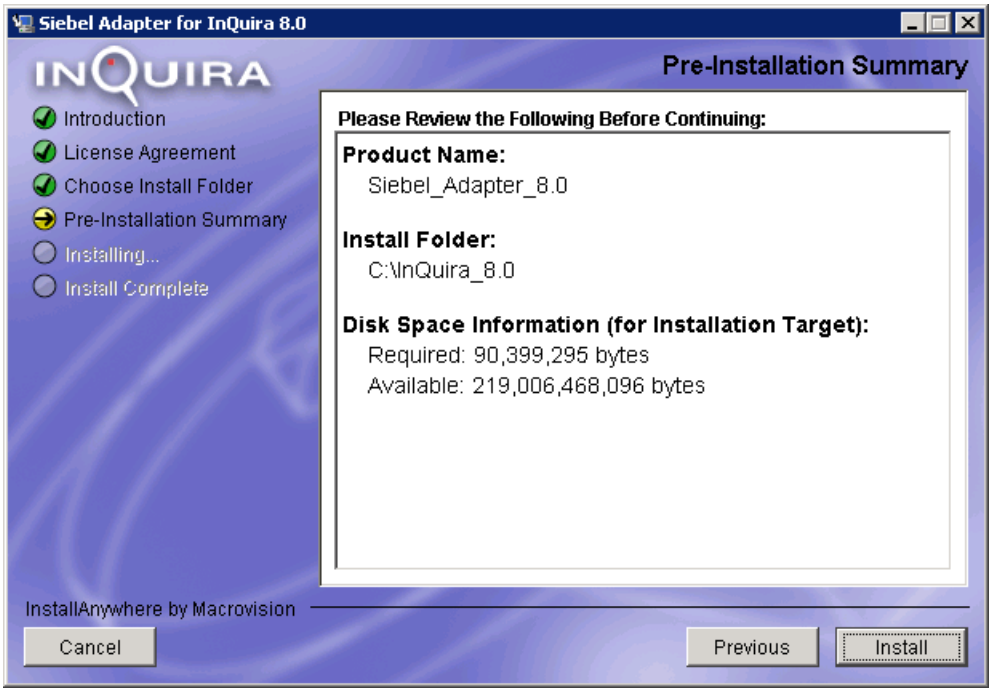


- Specify the desired location
- Select **Next** to continue

The installation program displays the pre-installation summary.

The Siebel Adapter for InQuira Pre-Installation Summary

The pre-installation summary screen displays a summary of your installation selections and disk space information prior to actual installation.



- Review your selections
- Use the **Previous** button to make any corrections
- Select **Install** to continue

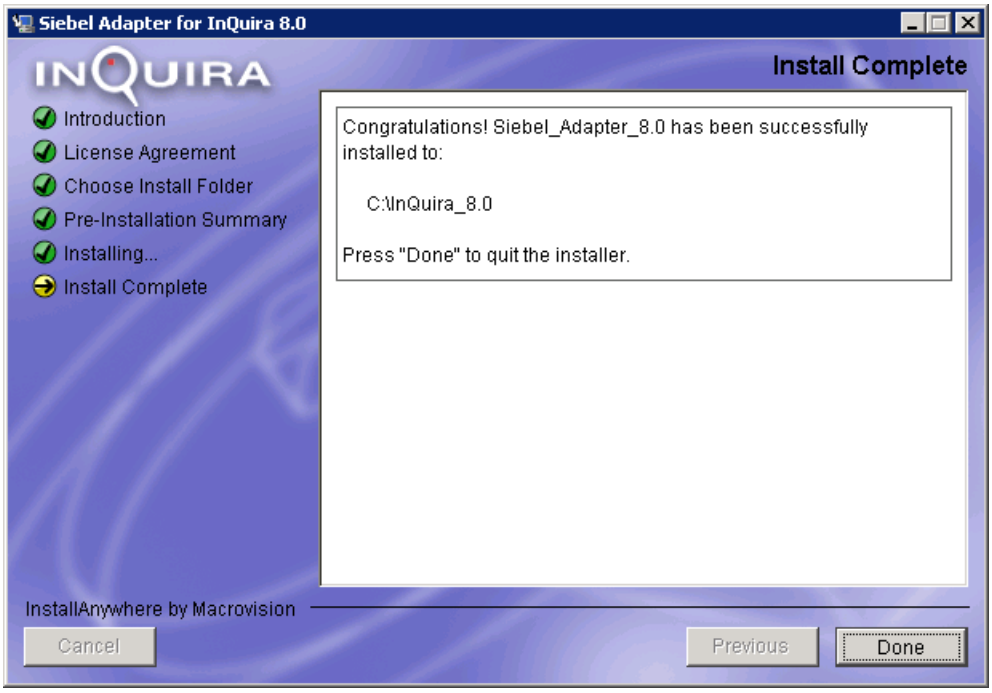
The installation program begins installing Siebel Adapter for InQuira in the specified location.

The installation program displays a progress screen during installation:

When installation is complete, the installation program displays the completion screen.

Completing the Siebel Adapter for InQuira Installation

The completion screen summarizes the installation process.



The Siebel Adapter for InQuira directories and files are now installed in the specified location, as described in *Siebel Adapter for InQuira Installed Directories and Files* on page 28.

- Select **Done** to exit the installation program

The installation program executes its cleanup routines and terminates.

You can continue the integration process by following the steps described in *Chapter 4, Deploying the Content Converter Style Sheet*.

Siebel Adapter for InQuira Installed Directories and Files

The Siebel Adapter for InQuira installation process creates the following directory in `<InQuira home>\archive`:

<InQuira_home>\archive\siebel

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

Directory	Description
crawler	This directory contains the Siebel Adapter for InQuira components.
cca	This directory contains the Contact Center Advisor components. See the *Contact Center Advisor Integration Guide* for more information on the Contact Center Advisor.
common	This directory contains the components shared by both Siebel Adapter for InQuira and Contact Center Advisor

The `crawler` directory contains the following Siebel Adapter for InQuira files:

File	Description
sif	Contains the Siebel Integration Files, which are imported into the Siebel environment during the deployment process: Inquira Siebel Crawl.sif Solution SR-PD.sif Solution.sif
xsl	Contains the standard content converter stylesheets, which you copy into the InQuira application and the web server. main.xsl sr_transformation.xsl
workflow	Contains the packaged workflow processes that you deploy within the Siebel environment that locate the Integration Objects and write the associated data to XML files for access by the configured InQuira Siebel crawlers: Inquira Submit Full Index Request.xml Inquira Submit Incremental Index Request.xml InquiraCrawlXMLResponse.xml

The `cca` directory contains the following Contact Center Advisor directories and files:

Directory	Description
sif	Contains the following Siebel Integration Files (SIF) for the Contact Center Advisor, which are imported into the Siebel environment during the deployment process: S_SRV_REQ_XM.sif Service Request BO.sif Service Request Detail Applet.sif Service Request Screen.sif Siebel Universal Agent.sif
xsl	Contains the standard content converter stylesheet, `main.xsl`, which you copy into the InQuira application and the web server.
datamapper	Contains the file, `InQuiraServiceRequest.XML`, which is used in the data integration process.
template	Contains the InQuira search applet, `InquiraSearchApplet.swt` for deployment into the Siebel environment.
workflow	Contains the InQuira workflow `Inquira HTTP Inbound.xml` for deployment in the Siebel environment.

The `common` directory contains the following shared Contact Center Advisor and Siebel Adapter for InQuira sub-directories and files:

File	Description
sif	Contains shared Siebel Integration Files, which are imported into the Siebel environment during the deployment process: S_SRV_REQ.sif Service Request.sif Inquira Project.sif

Chapter 4 Deploying the Content Converter Style Sheet

The Siebel Adapter for InQuira content converter uses a pair of style sheets `main.xsl` and `sr_transformation.xsl` (called by `main.xsl`) to translate the Siebel XML output to the InQuira IQXML input format.

To deploy the converter style sheets:

- Copy the files `main.xsl` and `sr_transformation.xsl` from the installation directory:

  <InQuira_home>\archive\siebel\crawler\xsl\

  - to the webserver directory; for example, if using an Apache Tomcat webserver:

  <Apache_home>\tomcat\common\classes

  - and to the InQuira directory:

  <InQuira-home>\inquira\int\xsl

Chapter 5 Deploying the Siebel Adapter for InQuira

You deploy Siebel Adapter for InQuira components within both the Siebel server environment using the Siebel Tools application, and within the Siebel client application.

You deploy the Siebel Adapter for InQuira using the following process:

- Import, deploy, and activate the InQuira Workflow
- Import and configure the InQuira project (SIF) file
- Edit the Enterprise Application Integration (EAI) configuration file
- Create the Named Subsystem

The integration process supplies and configures components, such as the InQuira Workflow, within the Siebel environment to enable InQuira to access content associated with various Siebel objects.

It also configures a drop-down listbox and question field within the client application to enable InQuira question and answer processing and display.

IMPORTANT: We strongly recommend that you stop the Siebel server before deploying the Siebel Adapter for InQuira.

Configuring the InQuira Workflow

You configure the InQuira Workflow by:

- Using the Siebel Tools application to import the workflow from the InQuira installation location into the Siebel environment
- Deploying the workflow from the Siebel Tools application
- Activating the workflow within the client application, for example Siebel Call Center 7

Accessing the Siebel Tools Application

To access the Siebel Tools application:

- Log onto the Siebel Tools application as a user with administrator privileges, and specify server connection, as in the following example:

Login Parameter	Value
User ID:	`<siebel_admin_ID>`
Password:	`<siebel_password>`
Connect:	Server

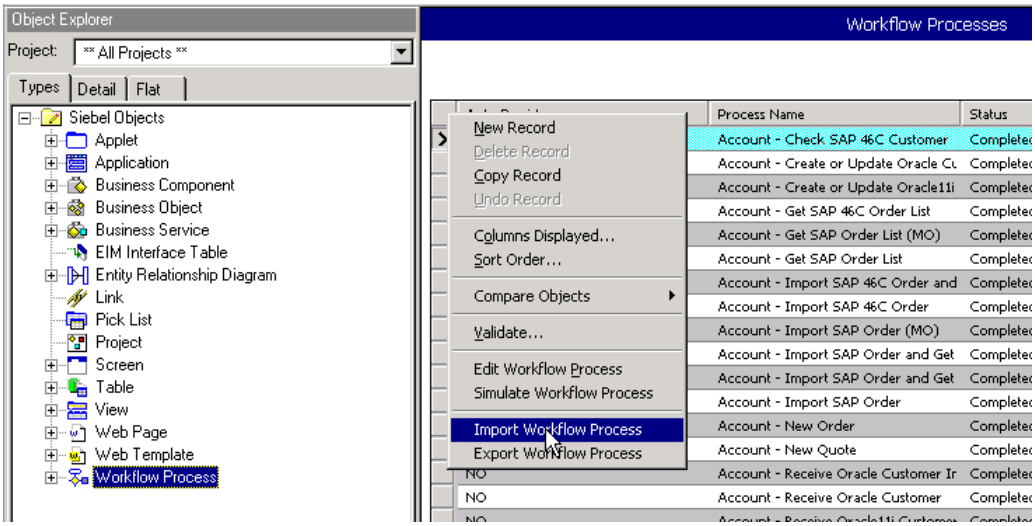
Selecting the Project for the Imported Workflow

The import process will prompt you to specify the project into which you will import the InQuira Workflow. You can import the InQuira Workflow into an existing project, or create a new project. In the examples that follow, we will use an example project named InQuira Workflow.

- Select the **Workflow Processes** node in the Siebel Objects hierarchy

  The Workflow Processes screen displays.

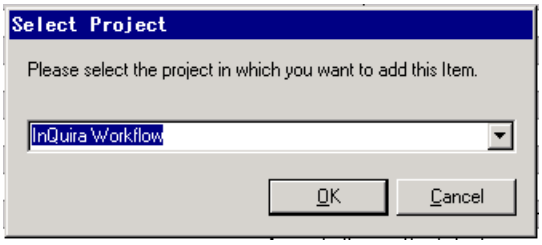
- Right-click in the Workflow Processes area and select **Import Workflow Process**s from the drop-down menu:



The Siebel Tools application prompts you for the location of the workflow.

- Locate and select the InQuira workflow, **InQuiraCrawlXMLResponse**, in the `<InQuira_home>/archive/siebel/crawler/workflow` directory

The Siebel Tools application prompts you to specify the project into which you will import the workflow:



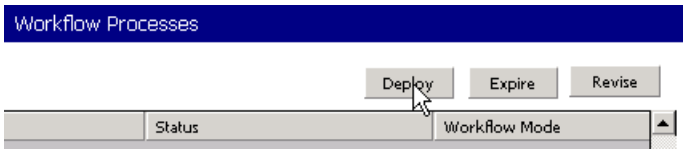
The Siebel Tools application imports the workflow into the specified project. You can now deploy the workflow, as described in *Deploying the InQuira Workflow* on page 36.

Deploying the InQuira Workflow

You deploy the workflow using the Workflow Processes screen within the Siebel Tools application. The deployment process will change the status of the workflow from In Progress to Completed.

To deploy the InQuira workflow:

- Locate and select the workflow, **InQuiraCrawlXMLResponse**, within the list of Workflow Processes:
- Select **Deploy**:



The Siebel Tools application updates the status of the workflow to **Completed**:

You can now log onto the Siebel client application and activate the workflow as described in *Activating the InQuira Workflow* on page 36.

Activating the InQuira Workflow

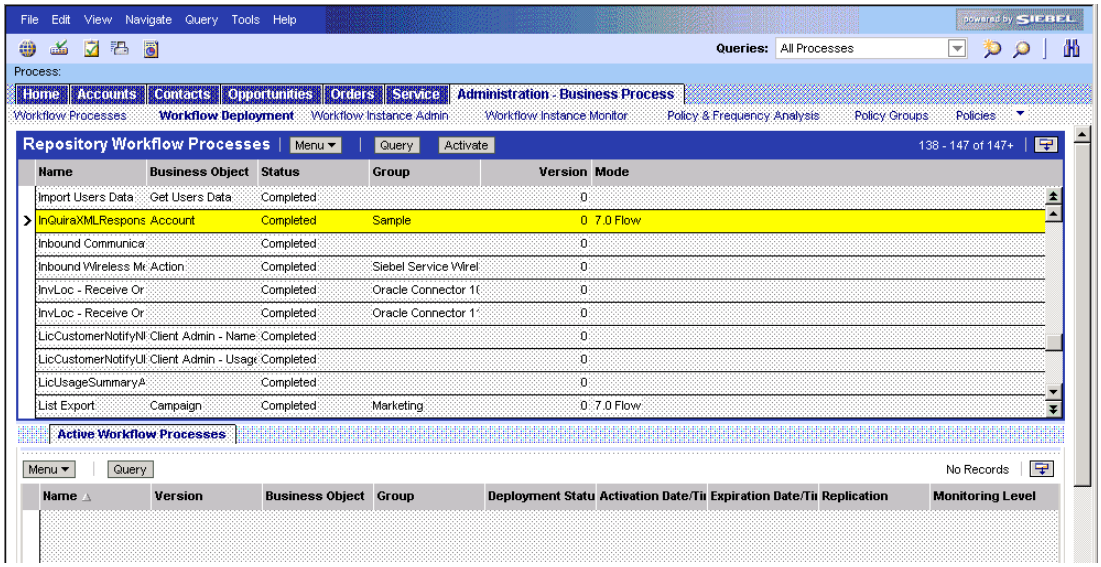
You must activate the InQuira Workflow within the client application.

To activate the InQuira Workflow:

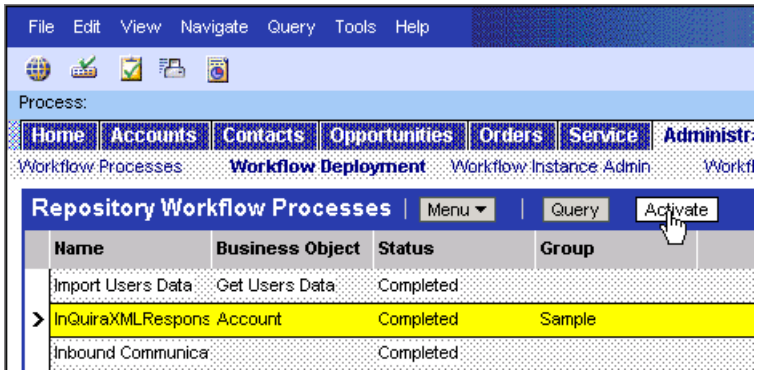
- Log onto the client application
- Use the Site Map to navigate to the Business Process Administration Workflow Deployment tab:
  - select **Site Map >> Business Process Administration >> Workflow Deployment**

The client application displays the Workflow Deployment screen.

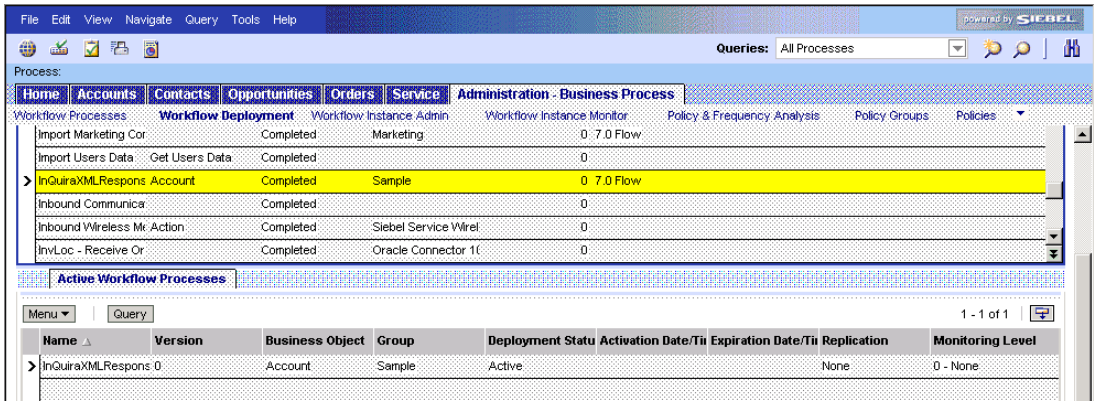
- Locate and select the **InQuiraCrawlXMLResponse** workflow:



  - select **Activate**:



The **InQuiraCrawlXMLResponse** workflow displays in the Active Workflow Processes list in the lower portion of the Workflow Deployment screen.



You can continue the Siebel Adapter for InQuira deployment process by configuring the InQuira project and integration objects, as described in *Configuring the InQuira Project (SIF File)* on page 38.

Configuring the InQuira Project (SIF File)

You configure the InQuira project (Inquira Project), by:

- Preparing for the import process
- Using the Siebel Tools application to import the project (SIF) file from the InQuira installation location to the Siebel environment
- Compiling the Siebel repository

Preparing for the Import Process

To prepare for the import process, ensure that the following prerequisites are met in your environment:

- The browser script compilation must specify the correct location for your Siebel application

NOTE: For more information on browser scripting, consult the Siebel product documentation, as described in *Siebel Resources* on page 12.

- There are no existing projects having the names of the SIF files that you will import in this process
- The appropriate Siebel repository is set as the current repository

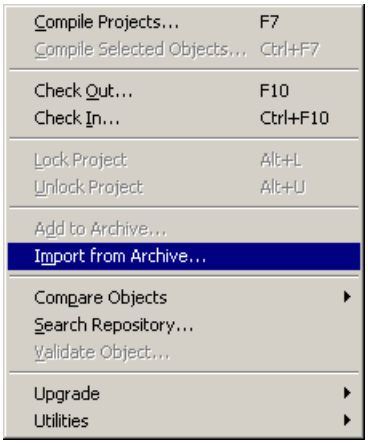
IMPORTANT: If a project of the same name as one of the Contact Center Advisor integration files currently exists, you must lock it to ensure that the import process can resolve any object definition conflicts.

Importing the InQuira Project

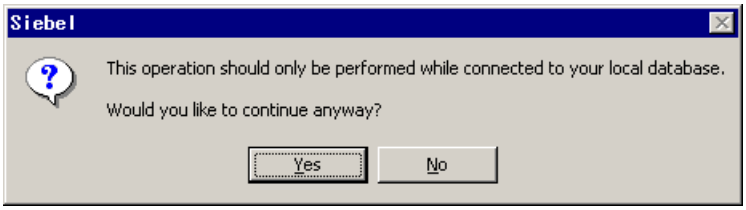
You import the InQuira project (SIF) file (`Inquira Project.sif`) into the Siebel environment using the Siebel Tools application.

To import the InQuira project:

- In the Siebel Tools application, select **Import from Archive** from the **Tools** menu

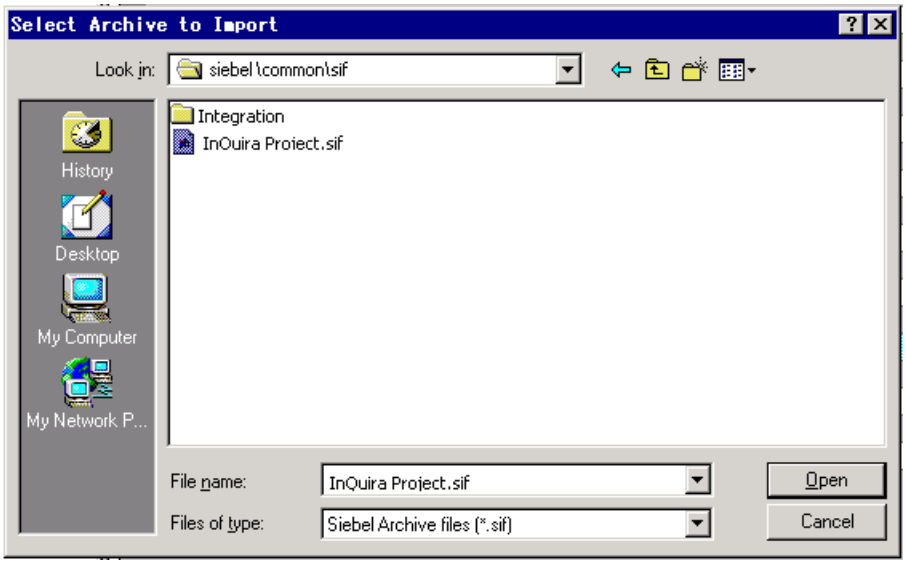


You may see the following message:



- Select **Yes** to continue

Siebel Tools displays the **Select Archive to Import** dialog:



- Use the file browser to navigate to the directory

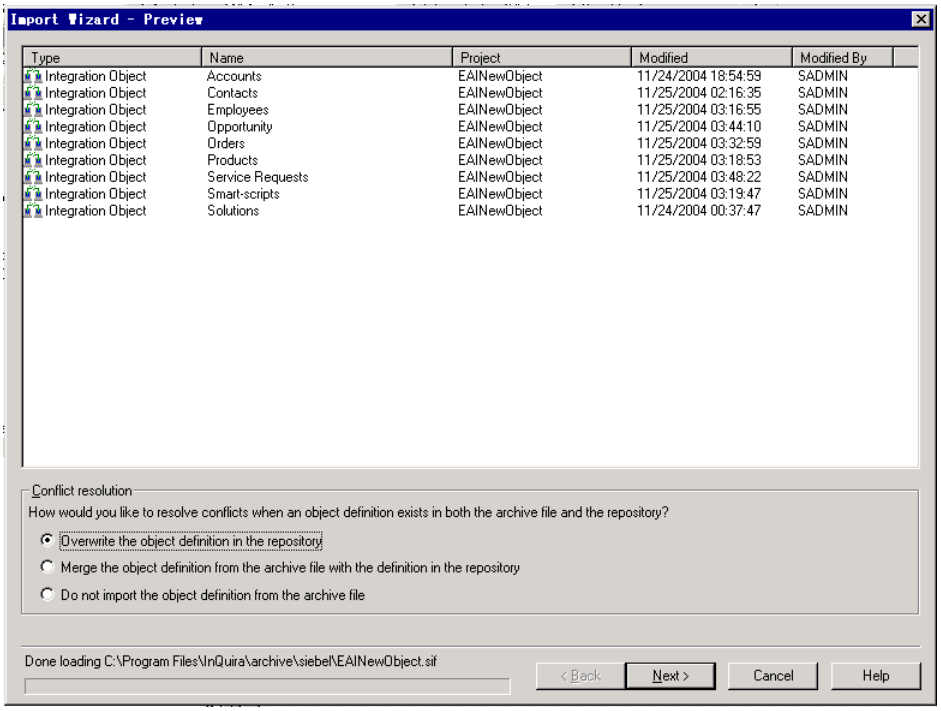
  `<InQuira_home>\archive\siebel\common\sif`

- Select **InQuira Project.sif**

Siebel Tools displays the Import Wizard.

The Siebel Tools Import Wizard displays a preview screen that:

- Lists the objects in the selected archive
- Prompts you to specify conflict resolution method for any objects that currently exist in the repository



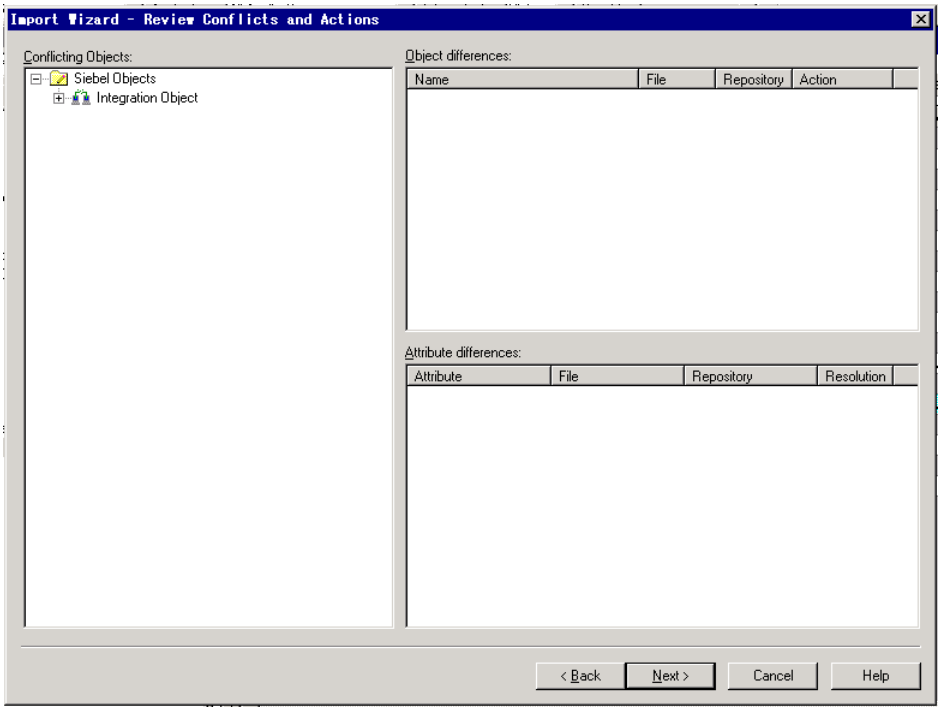
- Select the option to overwrite object definitions that exist in the repository
- Select **Next >** to continue

You may see a message similar to the following:

- Lock any projects listed, and continue the import process

Reviewing Conflicts Before Importing

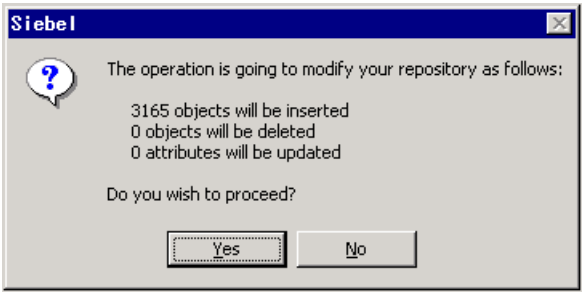
The Import Wizard lists any object definition conflicts between the project to be imported and an existing project of the same name if it exists.



- Select **Next >** to continue

Confirming the Import Process

The Import Wizard displays a summary message that details the updates to the repository that will occur in the import process.

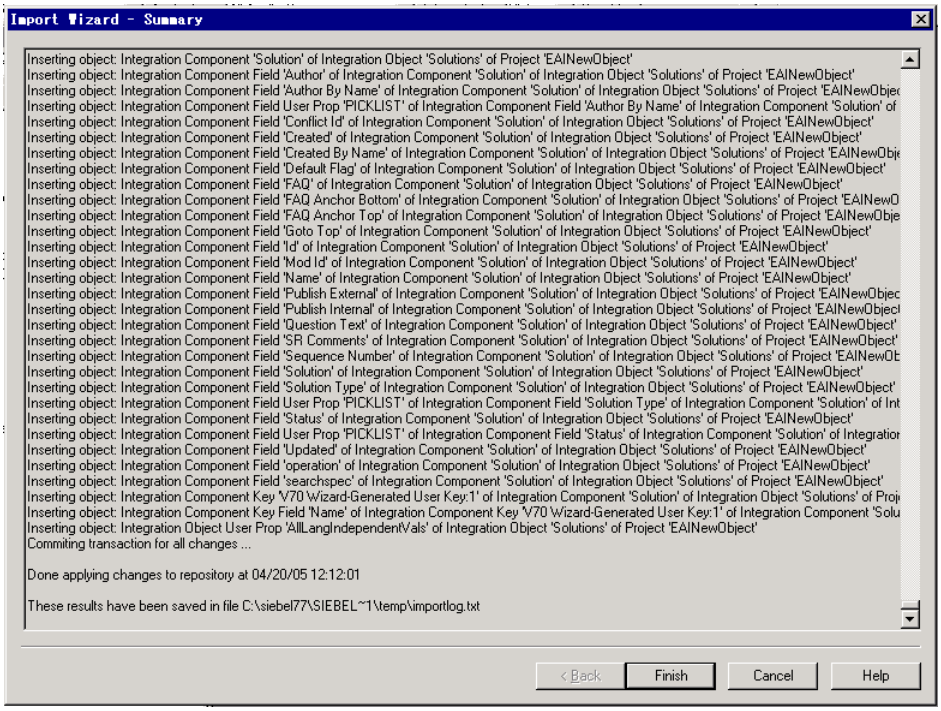


- Select **Yes** to continue

The Import Wizard displays the Summary screen.

The Import Summary

The Summary screen displays messages that detail the import process, concluding with a completion message.



- Select **Finish**, and verify the import process results

Verifying the EAINewObject Project

To verify that the InQuira project was imported correctly, check that the objects listed in the table are present in the Siebel object hierarchy.

You can locate objects in the Siebel repository using the Object Explorer within Siebel Tools. The Siebel Tools Object Explorer Types tab displays a hierarchy of the objects defined in the repository. To locate specific objects within the hierarchy:

- Select the project of interest
- Expand the object type of interest
- Navigate by alphabetical selection or by searching

To verify that EAINewObject was imported correctly, check that the following objects are present in the Siebel object hierarchy:

Project	Object Type	Object Name
EAINewObject	**Integration Object**	Accounts Contacts Employees Opportunity Orders Products Service Requests Smart-scripts Solutions

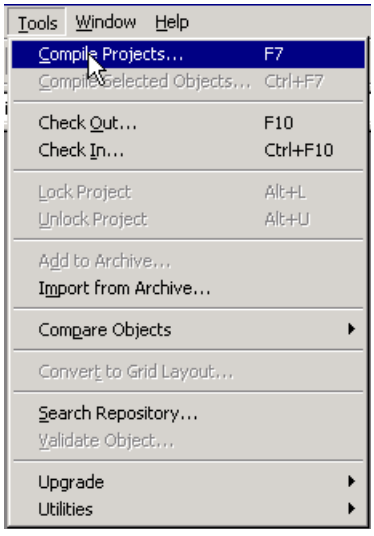
Compiling the Siebel Repository

You must compile the Siebel repository (SRF) to make the configuration available to the Siebel client application. We suggest that you select the option to compile all projects.

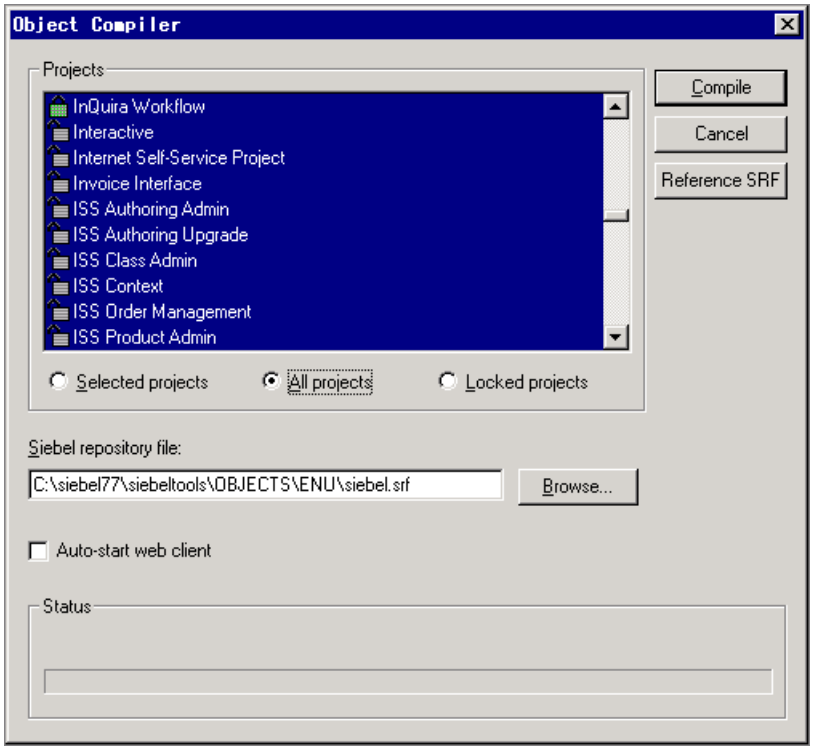
IMPORTANT: Stop the Siebel server service and the Siebel gateway service prior to compiling the repository.

To compile the Siebel repository:

- Select **Compile Projects** from the **Tools** menu



- Select **All projects** from the **Object Compiler** project selection screen



- Select **Compile**

NOTE: You can copy the compiled SRF from the server to the client application.

Editing the EAI Configuration File

You must edit the Enterprise Application Integration (EAI) configuration file for the Siebel server.

NOTE: There is an additional Enterprise Application Integration (EAI) configuration file for the Siebel client application. Do not edit the client application EAI configuration.

To edit the EAI configuration file:

- Locate the configuration file, eai.cfg, in the Siebel server directory, for example:

  <Siebel_server_home>/siebsrvr/BIN/ENU/eai.cfg

- Edit the `[HTTP Services]` section of the configuration file by adding the following statement:

  wf=InQuiraWorkflow

IMPORTANT: Ensure that there is no `[Workflow]` sub-section in the `[HTTP Services]` section.

Creating the Named Subsystem

You create the named subsystem by:

- Logging onto the Siebel server manager from a command prompt
- Executing a command to create the named subsystem with the appropriate parameters

To log onto the server manager from a command prompt:

- Enter:

```
<server_manager_location> /g <gateway> /e <enterprise_name> /s <siebel_server> /u
<authorized_user_name> /p <password>
```

where:

`<server_manager_location>`	Specifies the server manager location; for example: `C:\sea7\seibsrvr\BIN\srvrmgr`
`<gateway>`	Specifies the gateway; for example, `siebgw`.
`<enterprise_name>`	Specifies the enterprise name; for example, `inquira`
`<siebel_server>`	Specifies the server name; for example, `siebserv`
`<authorized_user_name>`	Specifies an authorized user name; for example, `siebadmin`
`<password>`	Specifies the password for the user

For Example:

```
C:\sea7\seibsrvr\BIN\srvrmgr /g siebgw /e inquira /s siebserv /u siebadmin /p sieb77pwd
```

To create the named subsystem:

- enter the following command:

```
create named subsystem InQuiraWorkflow for subsystem EAITransportDataHandlingSubsys
with DispatchWorkflowProcess="InQuiraXMLResponse", CharSetConversion="UTF16"
```

where:

```
InQuiraXMLResponse
```

is the name of the InQuira workflow.

Verifying the Named Subsystem

You can verify that the named subsystem was created successfully on the client application's Profile Configuration screen.

To verify the named subsystem:

- Log onto the client application and use the Site Map to navigate to **Site Map >> Administration - Server Configuration >> Enterprises >> Profile Configuration**

The **Profile Configuration** tab lists the current profile configurations.

- Verify that the item InQuiraWorkflow is present. The example subsystem creation command will populate the Alias and Subsystem columns. Consult the Siebel documentation for information on specifying command parameters to populate the Profile and Description columns if required for your application.

Profile	Alias	Subsystem	Description
InQuiraWorkflow	InQuiraWorkflow	EAITransportDataHandlingSubsys	optional

Chapter 6 Configuring InQuira Content Processing

You can configure InQuira to process content from Siebel 7applications by configuring and scheduling one or more Siebel crawlers.

Each configured crawler can access a single type of Business Object within Siebel. You can configure multiple Siebel crawlers to access multiple Business Objects.

Siebel Content Acquisition and Presentation

The Siebel crawler runs as a scheduled job that you can administer using the Advanced Configuration Facility Scheduler, as described in the *Intelligent Search Administration Guide*.

The InQuira Siebel crawler requests content from the configured Siebel application, and accesses that content from XML files that the Siebel application writes in response to the request for content.

NOTE: Siebel applications store content within various types of objects. See *Supported Business Objects* on page 50 for more information.

Supported Business Objects

Siebel applications store unstructured content within various types of Business Objects. The InQuira Adapter for Siebel includes the following packaged Integration Objects that provide access to content within corresponding Business Objects:

- Accounts
- Contacts
- Service Request
- Solutions
- Products
- Opportunities
- Employees
- Orders
- Smart-Scripts

You can configure InQuira to access additional Siebel Business Objects using the process described in *Chapter 7, Configuring Access to Additional Siebel Objects*.

Configuring a Siebel Crawler

You configure Siebel crawlers using the Crawler Settings page of the Advanced Configuration Facility. The *Intelligent Search Administration Guide* provides details on accessing and using the Advanced Configuration Facility.

Each crawler configuration defines a document collection. You specify various crawler parameters, as described in *Specifying Siebel Crawler Parameters*.

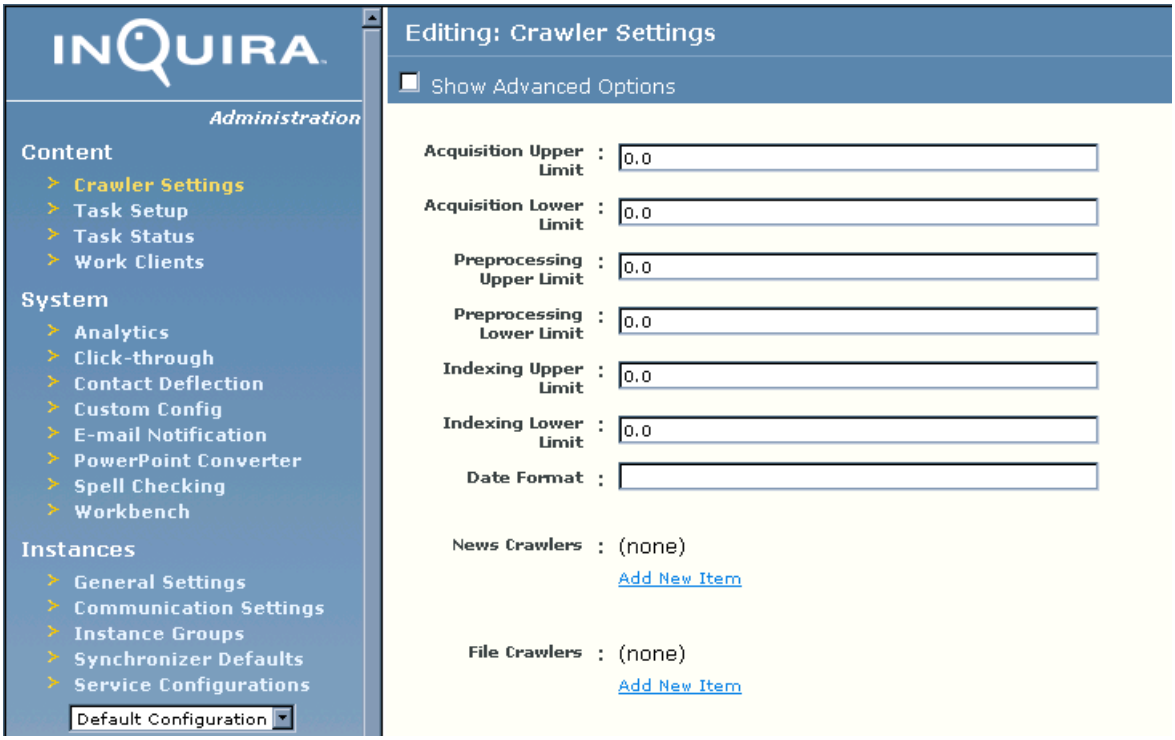
NOTE: A Siebel collection can access only one Business Object type. You must configure a unique Siebel crawler for each object type that you want to access.

You can also tailor the presentation of answers from Siebel content. Displaying Answers from Siebel Application Content describes the default answer presentation.

Specifying Siebel Crawler Parameters

You configure the crawler's connection to the Siebel application on the **Crawler Settings > Siebel Crawlers** page of the Advanced Configuration Facility.

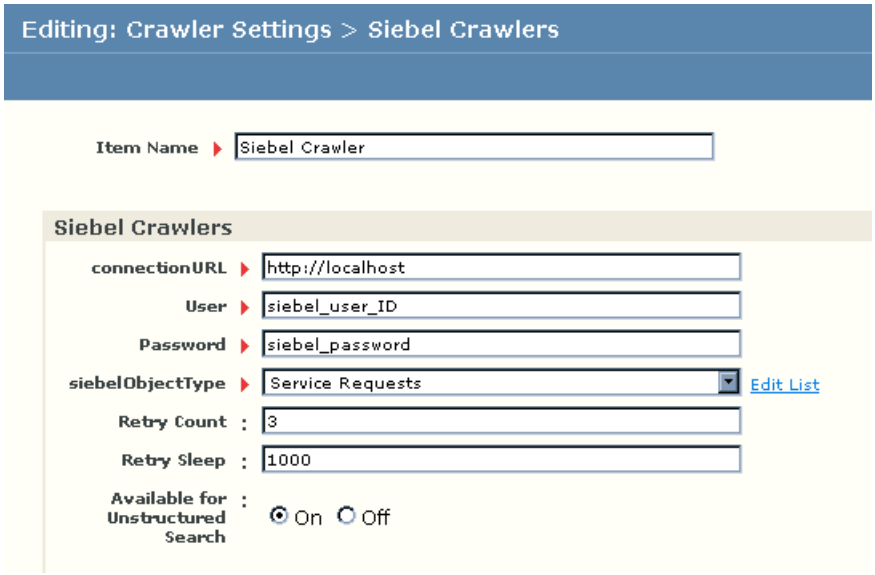
- Select **Crawler Settings** from the **Content** section of the Advanced Configuration Facility main menu, then select **Edit** on the **Crawler Settings** page



The **Crawler Settings** page lists the available crawlers.

- Scroll to the **Siebel Crawlers** item and select the **Add New Item** link

The **Siebel Crawlers** page displays the crawler configuration fields.



- Specify the following crawler parameters:

Parameter	Description
connection URL	specifies the URL of the Siebel application. This parameter is required. There is no default value.
User	specifies the user name for access to the Siebel application content. This parameter is required. There is no default value.
Password	specifies the user name for access to the Siebel application content. This parameter is required. There is no default value.
siebelObjectType	specifies the type of content that the crawler will access. Valid values are any valid and configured Siebel object types. NOTE: A Siebel collection can access only one object type. You must configure a unique Siebel crawler for each object type that you want to access. You can select a configured object type from the drop-down menu or select Edit List to configure an additional object type, as described in *Chapter 7, Configuring Access to Additional Siebel Objects*. *Supported Business Objects* on page 50 lists the default supported Siebel object types.

Retry Count	Specifies the number of times that the application will try to reconnect if the connection is disrupted during content acquisition. Any integer is valid. The default is `0`, specifying no re-connection attempts.
Retry Sleep	Specify the length of the interval in seconds that the will wait between attempts to reconnect to the host if the connection is disrupted during content acquisition. Any integer is valid, and specifies a number of milliseconds.
Available for Unstructured Search	Specifies that the collection will be available to the Unstructured retrieval module. On is the default.
unstructuredAttribute	Specifies whether the documents in this collection will be available to the unstructured information retrieval module. This parameter is required. Valid values are `On` and `Off`. `On` is the default.
documentFilter	Specifies one or more optional filters to limit the documents that will be included in the collection. Valid values are defined document filters, as described in Configuring Document Filters in the *Intelligent Search Administration Guide*.
Document Attribute Selector	Specifies one or more optional document attribute selectors for the crawler. Valid values are defined document attribute selectors, as described in Configuring Document Attributes in the *Intelligent Search Administration Guide*.
Document Supertitle Selector	Specifies one or more optional document supertitle selectors for the crawler. Valid values are defined document supertitle selectors, as described in Configuring Document Supertitles in the *Intelligent Search Administration Guide*.
SiebelBuildURL	Specifies a default class name and method to use the presentation JSP to display answers from Siebel content within the InQuira User Interface. The default is class name is `com.inquira.content.SampleBuildURL`. The default is method is `contentStoreURL`.

- Select **OK** to save the specified values in your configuration

Specifying the URL for Displaying Siebel Answers within InQuira

InQuira uses a Java server page (JSP) to create an ad hoc answer source document for presentation within the User Interface. The default Java server page is named `cs.jsp`.

InQuira uses a pre-defined class and method to create the URLs for the ad hoc answer documents derived from Siebel content for the specified collection. The Siebel Build URL parameters are specified on the Advanced Configuration Facility **Crawler Settings > Siebel Crawlers** page:

Parameter	Description
Class Name	Specifies the Build URL class. The default is `com.inquira.content.SampleBuildURL.`
Method	Specifies the Build URL method. The default is `contentStoreURL.`
Properties	Specifies a required property to enable answer highlighting within constructed Siebel answer documents. Specify the URL of the `cs.jsp` page in your application server. The following example shows a typical Apache Tomcat implementation: `http://<tomcat_home>/webapps/htmlagent/cs.jsp`

Optionally Updating the Dictionary

To optimize the accuracy of the InQuira search functionality, you may want to add terminology that is specific to the content stored in your Siebel application to the Dictionary, as described in the *Intelligent Search Administration Guide*.

Updating the InQuira Content Store

You must perform content processing to add the Siebel content to the InQuira application content store. You process Siebel content by scheduling tasks to execute the configured Siebel crawlers.

The *Intelligent Search Administration Guide* provides detailed information about scheduling and performing content processing.

Chapter 7 Configuring Access to Additional Siebel Objects

The default InQuira application is configured to access content from the Siebel object types described in *Supported Business Objects* on page 50. You can configure InQuira to access additional types of Siebel content objects. You configure access to additional Siebel content objects by:

- Defining and compiling custom integration objects within the Siebel environment

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NOTE: See *Siebel Resources* on page 12 for more information on creating objects within the Siebel environment.

- Adding the object type to the InQuira application, as described in *Adding Siebel Object Types to the InQuira Application* on page 56.
- Configuring a collection for that object type, as described in *Configuring a Siebel Crawler* on page 50.
- Configuring presentation characteristics for the object type, as described in *Configuring Content Conversion for Siebel Objects* on page 57.

Adding Siebel Object Types to the InQuira Application

You can add Siebel object types for content acquisition using the Siebel Object Type page of the Advanced Configuration Facility.

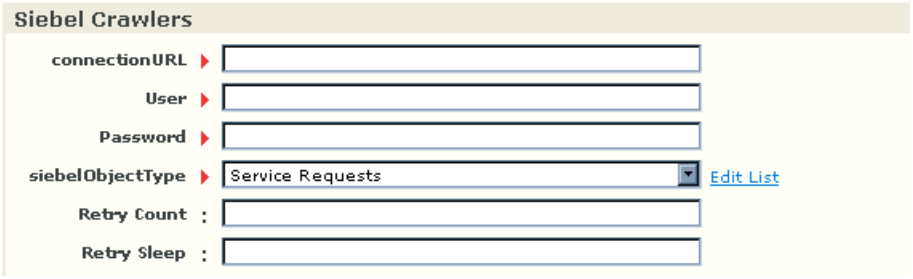
To add a Siebel object type:

- Select **Crawler Settings** from the Advanced Configuration Facility main menu

The **Crawler Settings** page displays the **Siebel Crawlers** field.

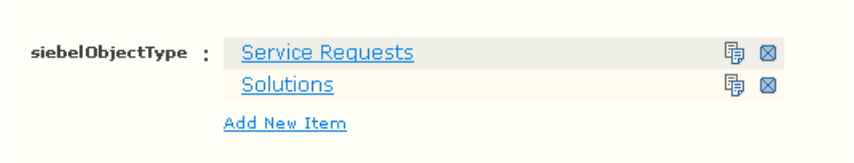
- Select an existing Siebel crawler, or select **Add New Item**

The **Siebel Crawlers** page displays the **Siebel Object Type** field.



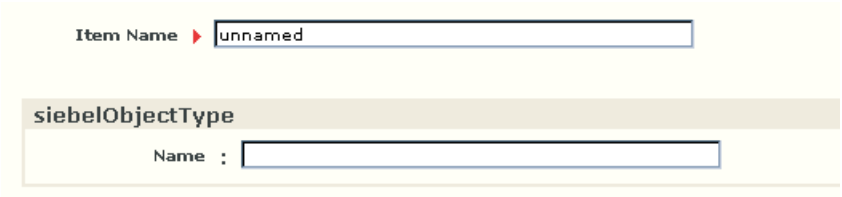
- Select the **Edit List** link

The **Siebel Object Type** page lists the currently defined Siebel objects.



- Select **Add New Item**

The **Siebel Object Type** page displays the **Item Name** and **siebelObjectType - Name** fields.



- Enter values for the following parameters:

Parameter	Description
Item Name	Specifies the name of the object type that will appear as a selection within the Advanced Configuration Facility. This parameter is required. There is no default value.
siebelObjectType Name	Specifies the exact identifier of the object type within the Siebel application. This parameter is required. There is no default value.

Configuring Content Conversion for Siebel Objects

You may need to alter the transformation process to properly convert additional Siebel content object types by editing the `standard.xsl` file.

InQuira uses an Extensible Stylesheet Language Transformation (XSLT) process to convert the XML Siebel content format into HTML for preprocessing. The Preprocessor then uses the general text document converter to translate the files to InQuira Input XML.

The XSLT document that supports the default object types is called `standard.xsl`. It is located in the Siebel Adapter for InQuira archive in the InQuira installation directory, for example:

<InQuira_home>\archive\siebel\standard.xsl

Copies of this file are deployed to the webserver directory, for example, if using an Apache Tomcat webserver:

<Apache_home>\tomcat\common\classes

and to the InQuira directory:

<InQuira_home>\inquira\int\xsl

NOTE: XSLT is World Wide Web Consortium standard. Consult the World Wide Web Consortium site, http://www.w3c.org for XSLT resources.

Modifying the Siebel Content Converter

You can edit the `standard.xsl` file to process Siebel XML output associated with custom integration objects. The Integration Object definition specifies which fields will be included in the exported XML file. You can specify conversion for all of the fields defined in the Integration Object, or optionally restrict the fields that will be processed as content by omitting them from the translation process.

- Modify the tag `SeibelObject` to match the name of the Integration Object, for example:

  ```
  <SiebelObject name="ListOfServiceRequestErmAgent">
  ```

- Modify the `apply-templates` entry to specify the template section to use to extract the information from the integration object XML file. For example:

  ```
  <xsl:apply-templates select="ServiceRequest"/>
  ```

- Select all the fields you need to be included as content

Conversion Example

```
<xsl:template match="/SiebelMessage/ListOfServiceRequestErmAgent">
<SiebelObject name="ListOfServiceRequestErmAgent">
<xsl:apply-templates select="ServiceRequest"/>
</SiebelObject>
</xsl:template> <!-- Match a ServiceRequest node -->
<xsl:template match="ServiceRequest">
<iq-siebel-doc id="{SRNumber}" url="http://something/else?id={SRNumber}"
modification_date="{UpdatedDate}">
<html>
<head>
<title><xsl:value-of select="SRNumber"/>: <xsl:value-of select="Title"/></title>
</head>
<body>
<!--
<H1><xsl:value-of select="SRNumber"/>: <xsl:value-of select="Title"/></H1>
<xsl:apply-templates select="*"/>
-->
<xsl:apply-templates select="*"/>
Area: <xsl:value-of select="Area"/> Sub-Area: <xsl:value-of select="Sub-Area"/><br/>
<font face="Arial, Helvetica, sans-serif" size="4"><b>Description</b></font><br/>
<xsl:value-of select="Description"/> </body>
</html>
</iq-siebel-doc>
</xsl:template>
```