

SeeBeyond ICAN Suite

Siebel EAI eWay Intelligent Adapter User's Guide

Release 5.0.3



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Version 20041203130220.

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Introducing the Siebel EAI eWay

Welcome to the *Siebel EAI eWay Intelligent Adapter User's Guide*. This document includes information about installing, configuring, and using the SeeBeyond® Integrated Composite Application Network Suite™ (ICAN) Siebel EAI eWay Intelligent Adapter, referred to as the Siebel EAI eWay throughout this guide.

What's in This Chapter

- [“About the Siebel EAI eWay” on page 7](#)
- [“What's New in This Version” on page 10](#)
- [“What's in This Document” on page 10](#)
- [“SeeBeyond Web Site” on page 12](#)
- [“SeeBeyond Documentation Feedback” on page 12](#)
- [“Related Documents” on page 12](#)

1.1 About the Siebel EAI eWay

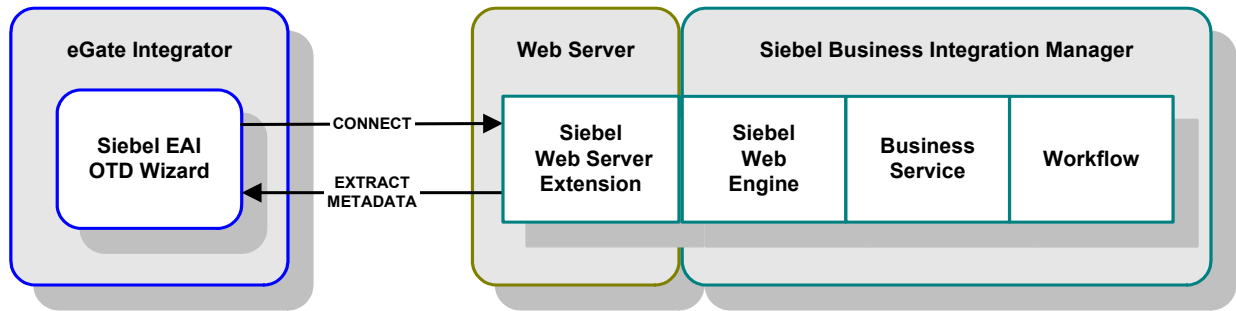
The Siebel EAI eWay Intelligent Adapter enables the SeeBeyond ICAN Suite to exchange messages with the Siebel EAI interface via a Web server using open standards such as HTTP and XML. There are two distinct processes involved in using the Siebel EAI eWay: a “design-time” process, in which you obtain information about the Siebel application, and a “run-time” process, in which you use the Project to control the processing of actual data.

1.1.1 Design-Time Process

The design-time process, which is an integral part of Project development is primarily concerned with extracting metadata from the Siebel application. This metadata is then used to help configure the eWay and format the messages propagated by the eWay.

This process uses the Siebel EAI OTD Wizard, which prompts the Project designer for information to find and connect to the desired Siebel instance. The Wizard then connects to Siebel (see Figure 1) and extracts the business services that are exposed through the Siebel Web Engine. These services are presented to the Project designer for selection of the appropriate service and operation.

Figure 1 Metadata Extraction



When the service and operation have been selected, an OTD representing the selections is generated and saved in the repository. This OTD also appears in the Enterprise Explorer for incorporation into a Project Connectivity Map. Once the Project design is finished, the action of the eWay in POSTing a message to Siebel is completely specified.

1.1.2 Run-Time Process

During run-time, the Siebel EAI eWay's inbound component functions as a HTTP server that relays the contents of web requests to Java Collaborations or Business Processes for further processing and subsequent hand-off to an outbound Siebel EAI eWay.

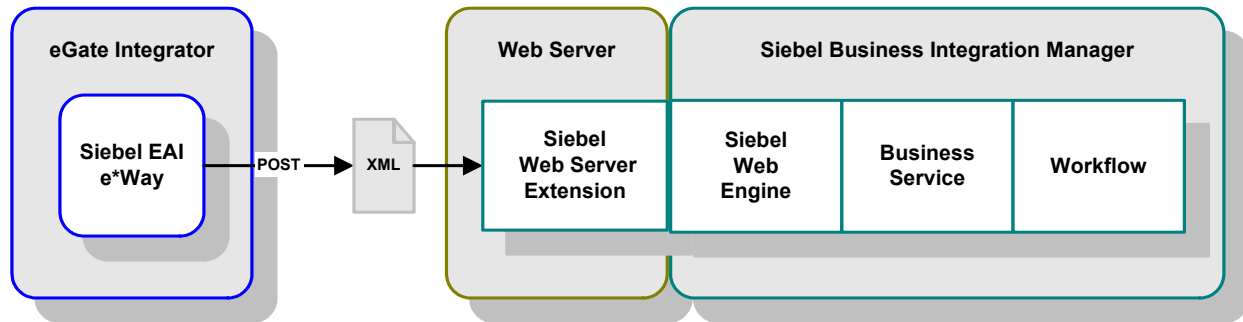
In routine operation, the Siebel EAI eWay acts as a Web browser and uses HTTP to forward a Siebel XML-formatted message to Siebel. It also specifies one of the following actions to be performed on the XML message:

- Delete
- Upsert (Insert/Update)
- Query

The result is that a corresponding Workflow is executed to process the message. A Siebel Workflow is a customized business application for managing and enforcing business processes.

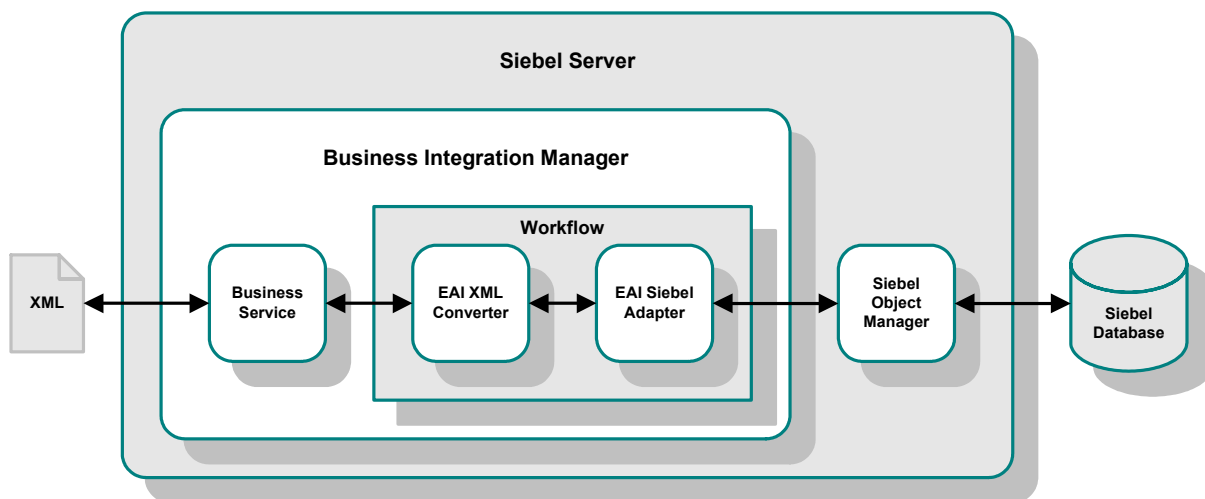
The Siebel EAI eWay POSTs the message to the Web server. The Siebel Web Server Extension invokes the specified Business Service which, in turn, starts an internal Workflow. [Figure 2 on page 9](#) illustrates the process.

Figure 2 eGate-to-Siebel Data Flow



The Workflow invokes the Siebel EAI XML Converter, which converts the information from XML into the Siebel internal format and presents it to the Siebel EAI Adapter. The information is then sent to the Siebel Server via the Siebel Object Manager (see Figure 3).

Figure 3 Siebel Internal Processing - POST



If any data is to be returned, the EAI Siebel Adapter can pass the result to the EAI XML Converter and send the data back to the eWay as a Siebel XML message.

1.1.3 Workflow Templates

A set of SeeBeyond Workflow Templates is included with the Siebel EAI eWay. These Workflow Templates invoke the necessary Workflow Processes to map the data directly to or from the Siebel database. See [Setting Up Siebel Workflows](#) on page 20.

1.1.4 Session vs. Sessionless Mode

You can run Siebel in either session or sessionless mode. When running in the default Sessionless mode, every message posted to Siebel is enveloped with the login method, negating the need for an explicit login. By contrast, when Siebel runs in Session mode,

the collaboration must include both a login method at beginning and a logout method at the end. Session mode allows you to post multiple messages to Siebel within a loop between a single login and logoff statement. Session mode is only supported using the Java Collaboration Editor (JCE) in eGate; you cannot use Session mode when creating business objects in eInsight.

1.1.5 Using the Siebel Message Header

Siebel supports both Siebel integration objects and Application Service Interfaces (ASIs). A Siebel message header is required for most integration objects or ASIs. In an eGate java collaboration, you can include the Siebel Message Header by adding the appropriate prefix and suffix methods at the front and at the end of the Object Type Definition (OTD). When creating business objects in eInsight, the Siebel Message Header is automatically included when the appropriate web service operation (Query, Update, Insert, Delete) is selected. Also, be sure to set the integrationObjectName.

1.2 What's New in This Version

This version of the Siebel EAI eWay includes the following new features:

- Support for Siebel 7.7.
- Support for the Automap feature with ICAN version 5.0.5 and greater. For more information on using the Automap feature, see the *eGate Integrator User's Guide*.

1.3 What's in This Document

1.3.1 Organization of Information in This Book

This document includes the following chapters:

- **Chapter 1 "Introducing the Siebel EAI eWay"**: Provides an overview description of the product as well as high-level information about this document.
- **Chapter 2 "Installing the Siebel EAI eWay"**: Describes the system requirements and provides instructions for installing the Siebel EAI eWay.
- **Chapter 3 "Setting Up the Web Server"**: Describes the procedures for configuring a Web Server to connect the Siebel application with the Siebel EAI eWay.
- **Chapter 4 "Setting Up Siebel Workflows"**: Describes the procedures for setting up the SeeBeyond Workflow Templates.
- **Chapter 5 "Setting Properties of the Siebel EAI eWay"**: Provides instructions for configuring the eWay to communicate with your Siebel system.
- **Chapter 6 "Using the Siebel EAI OTD Wizard"**: Provides instructions for creating Object Type Definitions to be used with the Siebel EAI eWay.

- **Chapter 7 “Reviewing the Sample eWay Projects”**: Provides instructions for installing and running the sample Projects.

1.3.2 Scope

This document describes the process of installing, configuring, and running the Siebel EAI eWay.

This document does not cover the Java methods exposed by this eWay. For information on the Java methods, download and view the Siebel EAI eWay Javadoc files from the Enterprise Manager.

1.3.3 Intended Audience

This guide is intended for experienced computer users who have the responsibility of helping to set up and maintain a fully functioning ICAN Suite system. This person must also understand any operating systems on which the ICAN Suite will be installed (Windows, UNIX, and/or HP NonStop Server), and must be thoroughly familiar with Windows-style GUI operations.

This guide also assumes that the reader has a strong working knowledge of the Siebel system, and is experienced in using and configuring the Siebel system and Siebel Workflows.

1.3.4 Document Conventions

The following conventions are observed throughout this document.

Table 1 Document Conventions

Text	Convention	Example
Names of buttons, files, icons, parameters, variables, methods, menus, and objects	Bold text	<ul style="list-style-type: none"> ▪ Click OK to save and close. ▪ From the File menu, select Exit. ▪ Select the logicalhost.exe file. ▪ Enter the timeout value. ▪ Use the getClassName() method. ▪ Configure the Inbound File eWay.
Command line arguments, code samples	Fixed font. Variables are shown in <i>bold italic</i> .	<code>bootstrap -p <i>password</i></code>
Hypertext links	Blue text	See “ Document Conventions ” on page 11
Hypertext links for Web addresses (URLs) or email addresses	Blue underlined text	http://www.seebeyond.com docfeedback@seebeyond.com

1.4 SeeBeyond Web Site

The SeeBeyond Web site is your best source for up-to-the-minute product news and technical support information. The site's URL is:

<http://www.seebeyond.com>

1.5 SeeBeyond Documentation Feedback

We appreciate your feedback. Please send any comments or suggestions regarding this document to:

docfeedback@seebeyond.com

1.6 Related Documents

The following SeeBeyond documents provide additional information about the ICAN product suite:

- *eGate Integrator User's Guide*
- *SeeBeyond ICAN Suite Installation Guide*

Installing the Siebel EAI eWay

What's in This Chapter

- “Supported Operating Systems” on page 13
- “System Requirements” on page 13
- “External System Requirements” on page 13
- “Installing the eWay Product Files” on page 14

2.1 Supported Operating Systems

The Siebel EAI eWay is available on the following operating systems:

- Windows 2000, Windows XP, Windows Server 2003
- HP-UX 11.0, 11i (PA-RISC), and 11i v2.0 (11.23)
- IBM AIX 5.1L
- Sun Solaris 8 and 9

2.2 System Requirements

The system requirements for the Siebel EAI eWay are the same as for eGate Integrator. Refer to the *SeeBeyond ICAN Suite Installation Guide* for a complete listing of system requirements. It is also helpful to review the **Readme.txt** file for additional requirements prior to installation.

Note: To enable Web services, you must also install and configure eInsight.

2.3 External System Requirements

The Siebel EAI eWay supports the following external systems:

- Siebel 7 and later

Note: *The Siebel EAI OTD Wizard requires Siebel 7.5 or 7.7.*

In the following, please use the appropriate version of Siebel eBusiness and operating system(s) for your installation. For full information on requirements for the Siebel Environment, see the *Siebel System Requirements and Supported Platforms* document for the version of Siebel you are using.

2.3.1 Client

The following software must be installed on all clients prior to installation of the eWay:

- Siebel Client
- Siebel Tools

2.3.2 Server

The following software must be installed on the server prior to installation of the eWay:

- Siebel Database Server
- Siebel Gateway Server
- Siebel Server
- Siebel Tools
- Siebel Web Server Extension

Windows Operating Systems

- Microsoft Internet Information Server 5.0
- Libraries `stdole2.tlb` and `stdole32.tlb`

AIX Operating Systems

- IBM HTTP Server 2.0 Limited Release

Solaris Operating Systems

- iPlanet Web Server 4.1 with SP8 or above

2.4 Installing the eWay Product Files

The installation process includes:

- Installing the ICAN Repository.
- Uploading products to the Repository (including the Siebel EAI eWay, documentation, sample files, and Javadocs).

- Downloading components (including the Enterprise Designer and Logical Host) from the Repository.
- Updating products in the Enterprise Designer using the Update Center Wizard.

To install the Siebel EAI eWay

- 1 Follow the instructions for installing ICAN in the *SeeBeyond ICAN Suite Installation Guide*.
- 2 After uploading **eGate.sar** to the Repository, upload the following additional product files:
 - ♦ **SiebelEAIeWay.sar** (to install the Siebel EAI eWay)
 - ♦ **FileeWay.sar** (to install the File eWay, used in the sample Projects)
 - ♦ **SiebelEAIeWayDocs.sar** (to install the Siebel EAI eWay documentation)

Note: *These files may not be located on the same installation disc as the **eGate.sar** file.*

To install the Siebel EAI eWay Samples and Javadocs

- 1 From the Documentation tab of the Enterprise Manager, click **Siebel EAI eWay** to view the list of files available for this product.
- 2 Click **Download Sample** to open the **SiebelEAIeWaySample.zip** file.
- 3 Use WinZip to extract the sample files to the desired location.
- 4 Click **Download Javadocs** to open the **SiebelEAIeWayJavadoc.zip** file.
- 5 Use WinZip to extract the Javadocs files to the desired location.

After you complete the process of installing the Repository, Logical Host, and Enterprise Designer (as described in the *SeeBeyond ICAN Suite Installation Guide*), refer to **Chapter 7** for instructions on importing the sample project into your repository via the Enterprise Designer.

Setting Up the Web Server

This chapter describes procedures for configuring a Web Server to connect the Siebel application with the Siebel EAI eWay.

What's in This Chapter

- [“Overview” on page 16](#)
- [“Installing the Siebel Web Server Extension” on page 17](#)

3.1 Overview

Communication with the Siebel 7 EAI application involves one of the following Web servers:

- Microsoft Internet Information Server (IIS) for Windows
- iPlanet Web Server for Solaris
- IBM HTTP Server (Limited Release) for AIX

***Note:** This is a special release of IBM HTTP Server 2.0. See the Siebel Systems Requirements and Supported Platforms documentation for information.*

Certain components from Siebel must be installed into the Web server to complete the communications link. See [Installing the Siebel Web Server Extension](#) on page 17

3.1.1 Preliminary Installations

The following software must be in place and operating correctly:

- Siebel 7
- Siebel Tools
- Siebel Server
- Microsoft IIS, iPlanet Web Server, or IBM HTTP Server (see above)

3.2 Installing the Siebel Web Server Extension

The Siebel Web Server Extension (SWSE) is a shared library that runs inside the Web server to direct user requests to the appropriate Application Object Manager service via the Siebel Web Engine (SWE).

To Install Siebel Web Server Extension (SWSE)

- 1 From the Siebel installation media, run `\eappweb\setup.exe`, which invokes the installation wizard.
- 2 Follow the instructions presented by the wizard. Use the naming conventions for your Siebel EAI Application Server.
- 3 For **Connection Protocol**, specify the default port for an HTTP server, which is **80**.
- 4 Do *not* use any encryption or compression methods.
- 5 For **Anonymous Employee** and **Anonymous Contact** login and password, use **SADMIN**.
- 6 For **Error Level for Logging**, enter **All Errors and Warnings**. You can change this once correct system operation has been verified.
- 7 In the `\bin` directory where you have installed the Siebel Web Server Extension, open the `eapps.cfg` file and note the following (typical values are shown):

```
[defaults]
AnonUserName = SADMIN
AnonPassword = SADMIN
AnonUserPool = 10
StatsPage = _stats.swe

[/eai]
ConnetString = siebel.TCPIP.none.none://MyGatewayServer:2320/
MyEnterpriseServer/eaiObjMgr/MyAppServer
EnableExtServiceOnly = TRUE
```

- 8 After modifying these files, stop and then restart the following services:
 - ◆ Siebel Server
 - ◆ World Wide Web Publishing Service
- 9 Log in to Siebel 7 and follow the Screens menu path:

**Ctrl+Shift+A > Server Administration > Enterprise Configuration
> Enterprise Component Groups**

Figure 4 Enterprise Component Groups

Component Group	Component Group	Number of Comp	Enable state	Description
Field Service	FieldSvc	10	Enabled	Field Service Components
Workflow Management	Workflow	5	Enabled	Workflow Management Components
Assignment Management	AsgnMgmt	2	Disabled	Assignment Management Components
Data Quality	DataQual	1	Disabled	Data Quality Components
Siebel Sales	Sales	2	Enabled	Siebel Sales Components
Siebel eDocuments	eDocuments	1	Disabled	Siebel eDocuments Components
Siebel Call Center	CallCenter	2	Enabled	Siebel Center Components

- 10 Select the following items, and click **Enable**:
 - ♦ Enterprise Application Integration
 - ♦ Workflow Management
 - ♦ Communication Management
- 11 Open the browser and type:
`<yourservename>/<module>` (for example, `10.1.3.135/eai`)
and then click **Enter**.

Make sure that your Siebel Server ODBC data source is configured. You can verify which one you are using by examining the Siebel Server log directory—it contains a file listing all the parameters.

To Verify SWSE Operation for Siebel 7

- 1 Verify that the **Server Request Processor** is running correctly. You may need to synchronize the Server Request Components with the Gateway Server—follow the menu/command path:
Enterprise Configuration > Batch Components Admin > Synchronize
- 2 Verify that the **EAI Object Manager** is running correctly.
 - A Follow the path:
Server Admin > Servers > Server Components
 - B Under **Assignment Components**, select **EAI Object Manager**.
- 3 *For Windows installations only*, verify that the `.swe` file is associated with `sweiis.dll` in the web site. Use the following procedure to set the association:
 - A Run the IIS 4.0 **Management Console** application.
 - B Right-click on your Web site entry in the tree display, and select **Properties**.
 - C Select the **Home Directory** tab.
 - D In the **Application Settings** box, select **Configuration**.
 - E On the **App Mappings** tab, select **Add**.
 - F Type `swe`, select `sweiis.dll`, and click **OK** to save the association.
- 4 Verify that the configuration files are set up properly. If LDAP is not used, comment out all LDAP-related parameters in the configuration files (for example, `eai.cfg` and `siebel.cfg`):

```
[SecurityAdapters]
;LDAP = LDAP

[LDAP]
;DllName = sscfldap.dll
;ServerName =
;Port = 389
;BaseDN =
;UsernameAttributeType = uid
;PasswordAttributeType = userPassword
;CredentialsAttributeType = credentials
;RolesAttributeType = roles
```

```
;SslDatabase =
```

Note: *The LDAP configuration may differ in your Siebel system depending on your version of Siebel and your installed options. For more information on disabling LDAP in your Siebel system, consult your Siebel user documentation.*

- 5 After modifying these files, stop and then restart the following services:
 - ◆ Siebel Server
 - ◆ World Wide Web Publishing Service

Setting Up Siebel Workflows

This chapter describes procedures for setting up the SeeBeyond Workflow Templates.

What's in This Chapter

- [“Overview” on page 20](#)
- [“Viewing the Workflow Templates” on page 22](#)
- [“Importing SeeBeyond Workflow Templates” on page 26](#)
- [“Modifying SeeBeyond Workflow Templates” on page 29](#)
- [“Setting Up SeeBeyond Workflow Processes” on page 30](#)
- [“Siebel XML Messages” on page 35](#)

4.1 Overview

Included with the Siebel EAI eWay are several SeeBeyond Workflow Templates, which furnish pre-defined workflows within the Siebel application. These workflow templates invoke the following workflow processes to map the data directly to or from the Siebel database.

- SeeBeyond HTTP Delete (see [Figure 6 on page 22](#))
- SeeBeyond HTTP Query (see [Figure 7 on page 23](#))
- SeeBeyond HTTP Update (see [Figure 8 on page 23](#))
Inserts or Updates according to the provided input values.
- SeeBeyond HTTP Execute (see [Figure 9 on page 24](#))
The preferred Workflow for receiving Siebel XML messages from eGate; combines **Delete**, **Query** and **Update** functionality into a single Workflow.
- SeeBeyond HTTP Send (see [Figure 10 on page 24](#))
- SeeBeyond HTTP Send Receive (see [Figure 11 on page 25](#))
- SeeBeyond HTTP Post (see [Figure 12 on page 25](#))
The preferred Workflow for sending Siebel XML messages to eGate; combines **Send** and **Send/Receive** functionality into a single Workflow.

The names entered above are used to set up the Business Service for the sample program supplied with the eWay. You should use them as templates to create new processes corresponding to the Workflows you create for your own system.

Examples of XML messages used with different Workflow templates are given in [Siebel XML Messages](#) on page 35.

Restarting the Gateway and Siebel Server

Most of the configuration steps described in this chapter require you to stop the Gateway and the Siebel Server, copy the newly compiled `.swf` file(s) to the Siebel Server, and restart the Gateway and Siebel Server.

Any time you modify and compile an `.swf` file, you *must* restart the Gateway and the Siebel Server. Restarting the Gateway and Siebel Server is intentionally omitted from many of the procedures in this chapter, because it is assumed that you will only want to restart the server one time—after you have completed all of the steps in this chapter.

4.2 Viewing the Workflow Templates

Following the Screens menu path shown below displays the installed Workflow templates, as shown in Figure 5.

Siebel Workflow Administration > Workflow Processes > All Processes

Figure 5 SeeBeyond Workflow Processes

Name	Business Objec	Status	Group	Activation Date	Expiration Date	Version
SeeBeyond HTTP Delete	Account	In Progress	Sample			0
SeeBeyond HTTP Execute	Account	In Progress	Sample			0
SeeBeyond HTTP Post	Account	In Progress	Sample			0
SeeBeyond HTTP Query	Account	In Progress	Sample			0
SeeBeyond HTTP Send	Account	In Progress	Sample			0
SeeBeyond HTTP Send Receive	Account	In Progress	Sample			0
SeeBeyond HTTP Update	Account	In Progress	Sample			0

Clicking the process name to invoke a Workflow Process Designer display for that process, such as shown in Figures 7-13.

Figure 6 DELETE Workflow Template

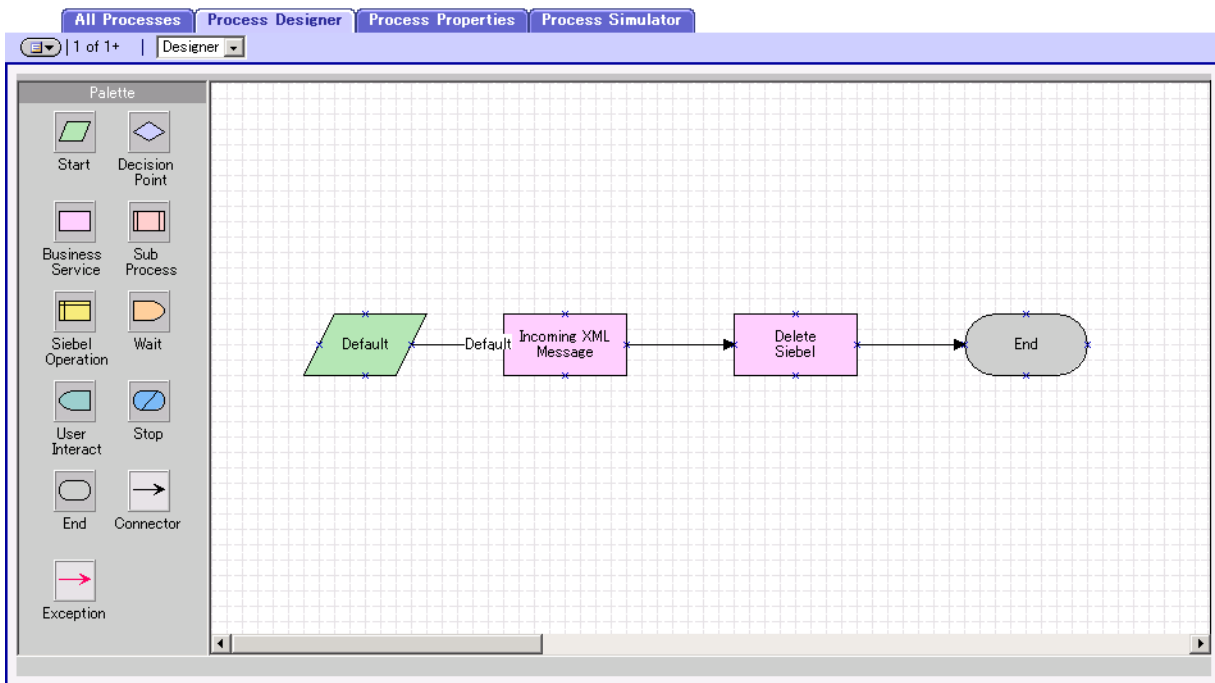


Figure 7 QUERY Workflow Template

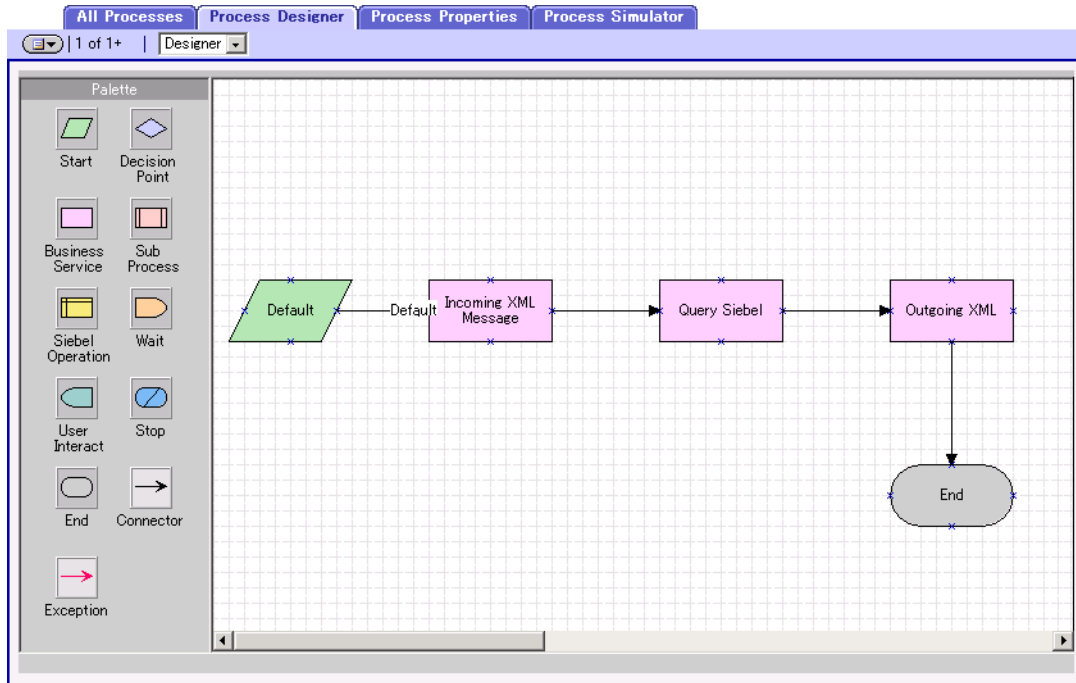


Figure 8 INSERT/UPDATE Workflow Template

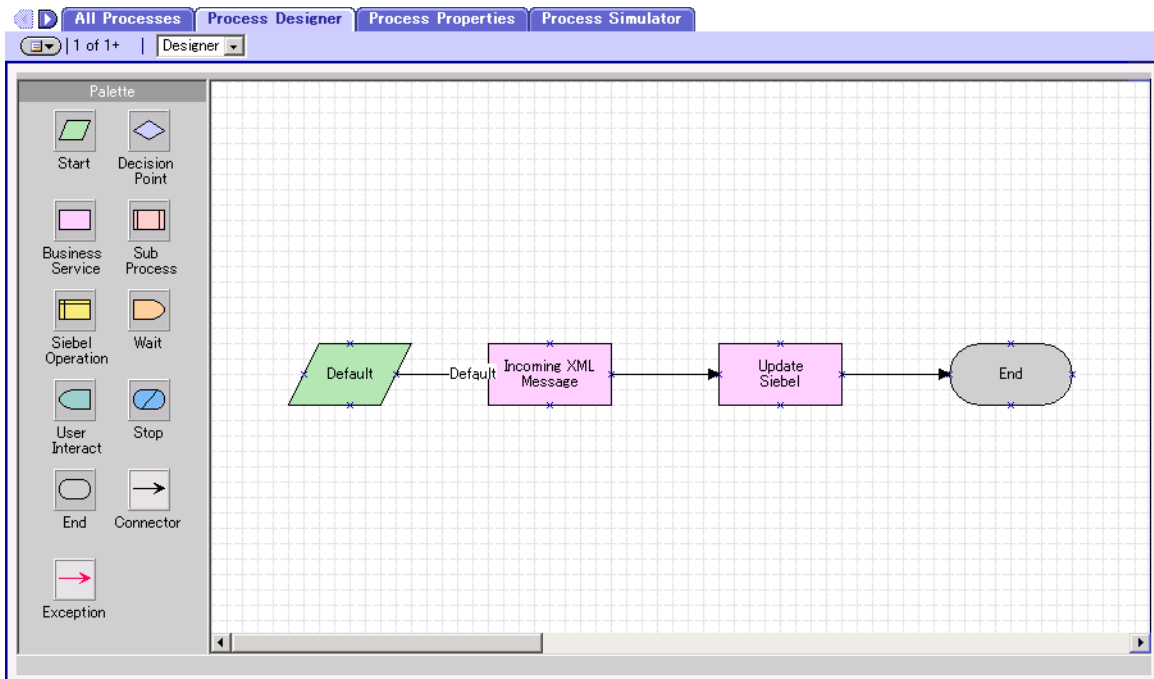


Figure 9 EXECUTE Workflow Template

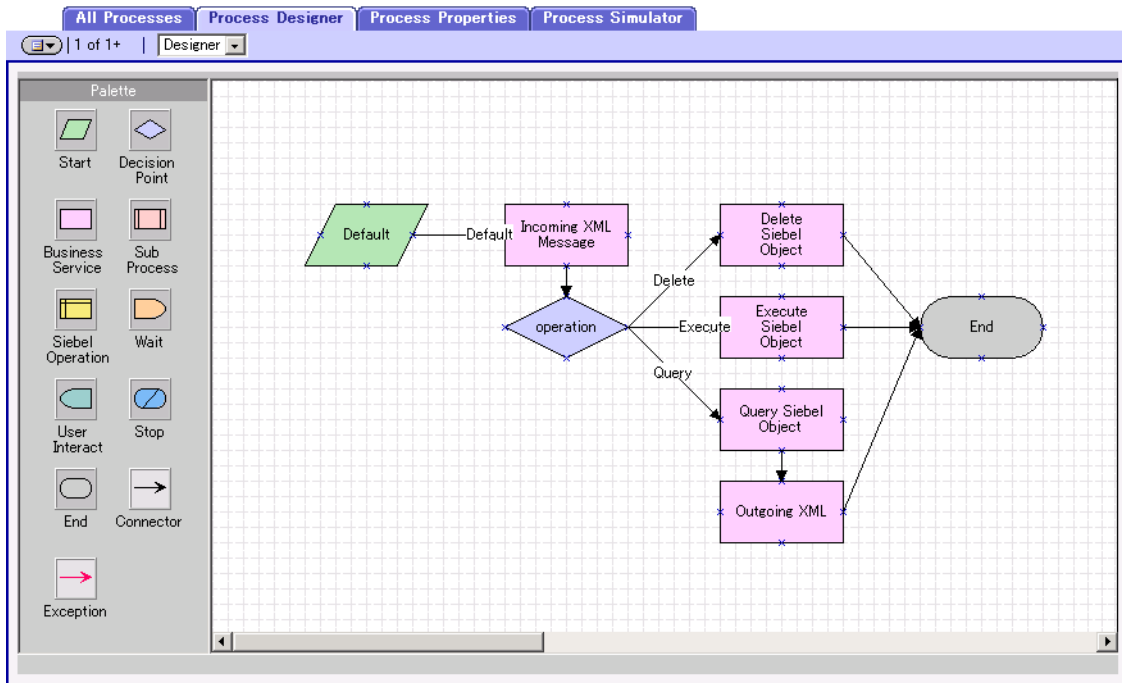


Figure 10 SEND Workflow Template

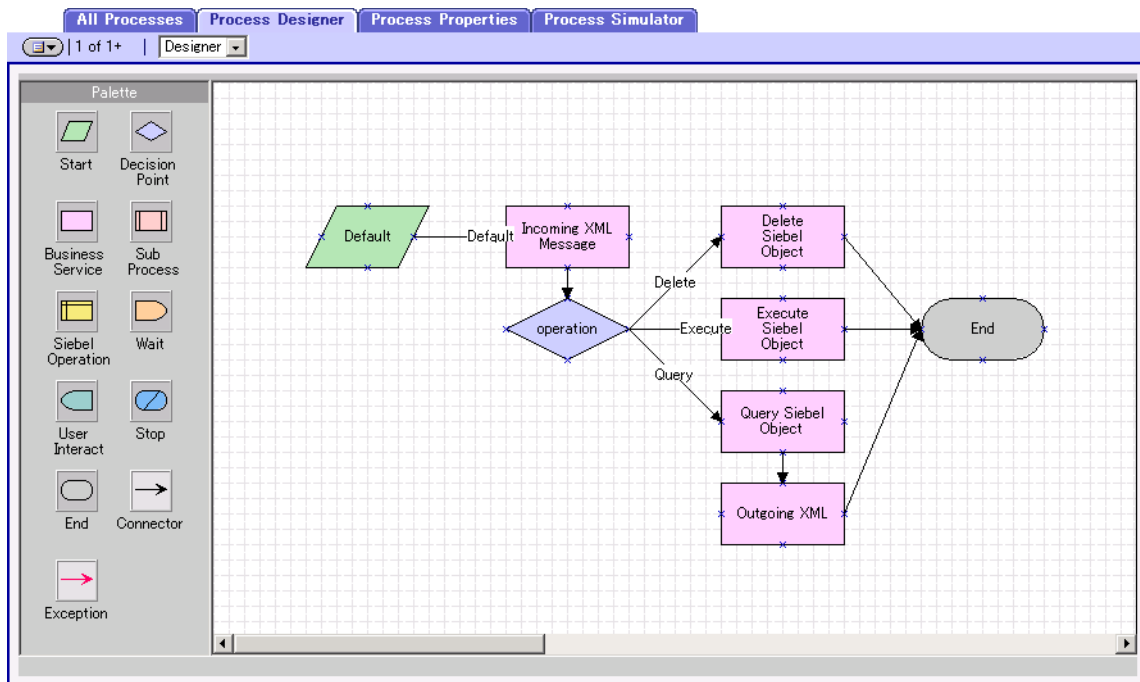


Figure 11 SEND/RECEIVE Workflow Template

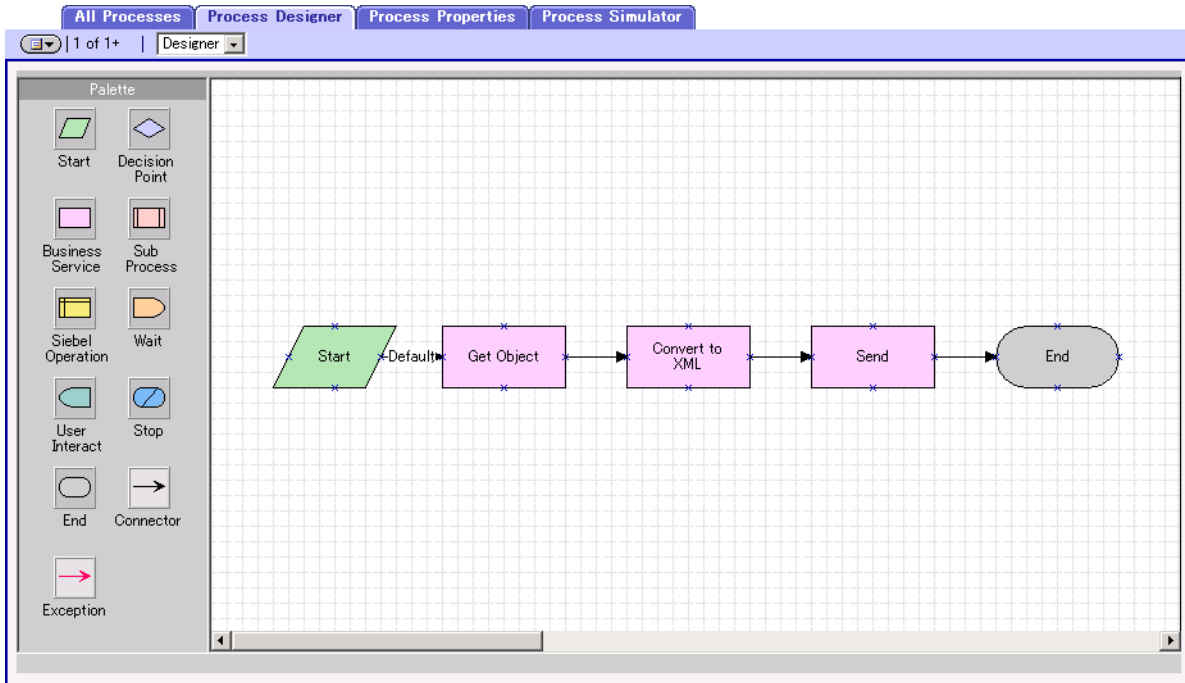
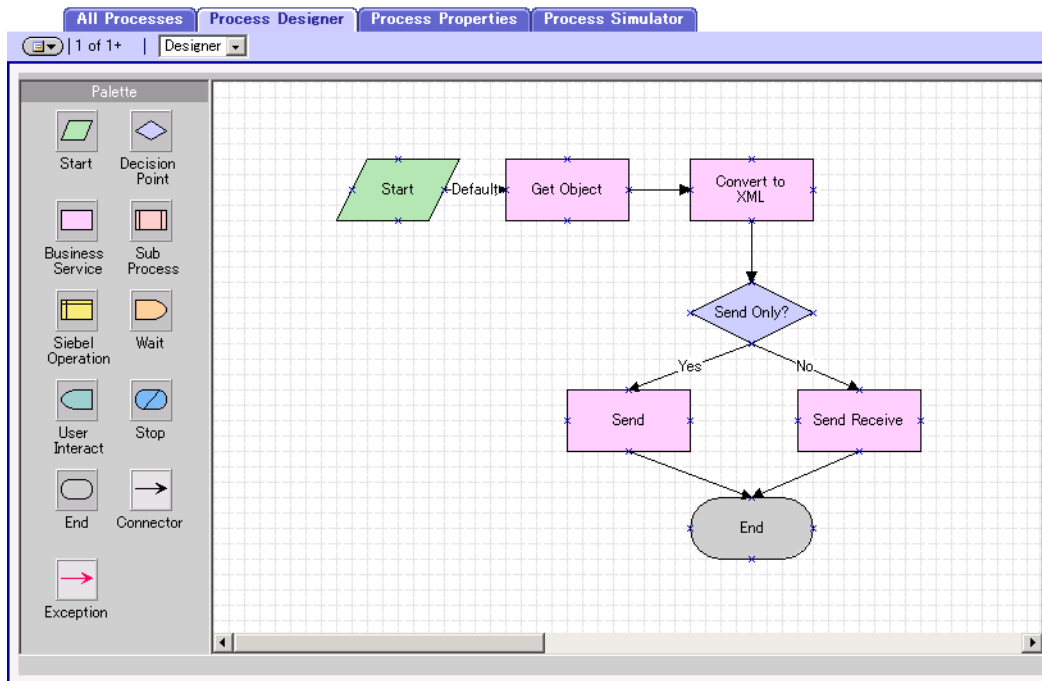


Figure 12 POST Workflow Template



4.3 Importing SeeBeyond Workflow Templates

To Import the SeeBeyond Workflow Templates with Siebel 7.5

- 1 Start Siebel EAI Client and select Siebel Sales.
- 2 Follow the menu path:
Ctrl+Shift+A > Siebel Workflow Administration > Workflow Processes
- 3 Click **Import** and browse to the directory that contains **SeeBeyondHTTPWorkflow.xml**.

This file is installed with the Enterprise Designer. If you installed the Enterprise Designer in the **C:\Ican50\edesigner** directory, then the file is located in

```
C:\Ican50\edesigner\usrdir\modules\ext\siebeleaieway
```

- 4 Click **Open** to begin importing the Workflow template.
- 5 Check or set up the following configuration files:
 - ♦ In the file **SWEApp\eapps.cfg**, verify that the following section is specified correctly:

```
[/eai_enu]  
ConnectString = siebel.TCPIP.none.none://<Your Gateway  
Server>:2320/<Your_Enterprise_Server>/EAIObjMgr_enu/<Your_App  
Server>  
EnableExtServiceOnly = TRUE  
WebPublicRootDir=c:\<Your_Siebel_Dir>\SWEApp\public\enu  
WebUpdatePassword=<Your_Password>
```

- ♦ For the **eGate-to-Siebel** sample, add the following sections in the file **siebsrvr\bin\ENU\eai.cfg**:

```
[HTTP Services]  
...  
SEEBEYOND_HTTP_DELETE = SB_HTTP_DELETE  
SEEBEYOND_HTTP_QUERY = SB_HTTP_QUERY  
SEEBEYOND_HTTP_UPDATE = SB_HTTP_UPDATE  
SEEBEYOND_HTTP_EXECUTE = SB_HTTP_EXECUTE  
  
[SB_HTTP_DELETE]  
Mode = Document  
Service = SeeBeyond HTTP Delete  
Method = RunProcess  
  
[SB_HTTP_QUERY]  
Mode = Document  
Service = SeeBeyond HTTP Query  
Method = RunProcess  
  
[SB_HTTP_UPDATE]  
Mode = Document  
Service = SeeBeyond HTTP Update  
Method = RunProcess
```

```
[SB_HTTP_EXECUTE]
Mode = Document
Service = SeeBeyond HTTP Execute
Method = RunProcess
```

- 6 The imported Workflow must be in *active* mode before it can be used; this is accomplished by clicking the **active** button.

To Import the SeeBeyond Workflow Templates with Siebel 7.7

- 1 Open the **Siebel Tools** utility.
- 2 In the Object Explorer, click the Workflow Process.
- 3 Right-click the item in the Object list, and then click **Import Workflow Process**.
- 4 Browse to the directory that contains the workflow files shown in Table 2.

These files are installed with the Enterprise Designer. If you installed the Enterprise Designer in the **C:\Ican50\edesigner** directory, then the files are located in

C:\Ican50\edesigner\usrdir\modules\ext\siebeleaieway

Table 2 Siebel 7.7 Workflow Files

File Name
SeeBeyond HTTP Delete.xml
SeeBeyond HTTP Execute.xml
SeeBeyond HTTP Post.xml
SeeBeyond HTTP Query.xml
SeeBeyond HTTP Send Receive.xml
SeeBeyond HTTP Send.xml
SeeBeyond HTTP Update.xml
Sync Account ASI Inbound.xml

- 5 Click **Open** to begin importing the Workflow template. Repeat this step for each of the workflow files you plan to install.
- 6 Check or set up the following configuration files:

- ◆ In the file **SWEApp\apps.cfg**, verify that the following section is specified correctly:

```
[/eai_enu]
ConnectString = siebel.TCPIP.none.none://<Your Gateway
Server>:2320/<Your_Enterprise_Server>/EAIObjMgr_enu/<Your_App
Server>
EnableExtServiceOnly = TRUE
WebPublicRootDir=c:\<Your_Siebel_Dir>\SWEApp\public\enu
WebUpdatePassword=<Your_Password>
```

- ◆ For the **eGate-to-Siebel** sample, add the following sections in the file **siebsrvr\bin\ENU\ei.cfg**:

```
[HTTP Services]
...
SEEBEYOND_HTTP_DELETE = SB_HTTP_DELETE
SEEBEYOND_HTTP_QUERY = SB_HTTP_QUERY
```

```
SEEBEYOND_HTTP_UPDATE = SB_HTTP_UPDATE  
SEEBEYOND_HTTP_EXECUTE = SB_HTTP_EXECUTE  
  
[SB_HTTP_DELETE]  
Mode = Document  
Service = SeeBeyond HTTP Delete  
Method = RunProcess  
  
[SB_HTTP_QUERY]  
Mode = Document  
Service = SeeBeyond HTTP Query  
Method = RunProcess  
  
[SB_HTTP_UPDATE]  
Mode = Document  
Service = SeeBeyond HTTP Update  
Method = RunProcess
```

```
[SB_HTTP_EXECUTE]
Mode = Document
Service = SeeBeyond HTTP Execute
Method = RunProcess
```

- 7 The imported Workflow must be in *active* mode before it can be used; this is accomplished by clicking the **active** button.

4.4 Modifying SeeBeyond Workflow Templates

Note: The SeeBeyond Workflow templates provided with the eWay use **Account** as the Business Object—you must modify them for use with a different Business Object.

To Modify a SeeBeyond Workflow Template

- 1 Log in to Siebel Client 7.0, designating the appropriate Siebel server.
- 2 Follow the menu path:
Ctrl+Shift+A > Siebel Workflow Administration > Workflow Processes
- 3 Highlight the SeeBeyond Workflow Process template you want to modify.
- 4 Right-click and select **Copy Record**.
- 5 Rename the copied Process.
- 6 Specify the Business Object to which you want to apply the template, and any other fields that may be necessary (for example, Description).
- 7 After modifying a Workflow template you must create the Business Service to execute it, using the supplied Workflow processes as templates. This procedure is described in the following section.
- 8 A new Services section should be added to your `siebsrvr\bin\ENU\ei.cfg` file, as shown in the preceding section.

For example, if you have a Business Service named Employee Execute, you should add the following lines to the `ei.cfg` file:

```
[HTTP Services]
...
EMPLOYEE_EXECUTE = EE

[EE]
Mode = Document
Service = Employee Execute
Method = RunProcess
```

4.5 Setting Up SeeBeyond Workflow Processes

The Workflow processes invoked by the SeeBeyond Workflow Templates must be set up in Siebel Business Services.

Note: The names entered in step 8 are used to set up the Business Service for the sample program supplied with the eWay. You should use them as templates to create new processes corresponding to the Workflows you create for your own system.

To set up the Business Service to execute the Workflow

- 1 Make sure the following services are running:
 - ♦ Siebel Gateway Server
 - ♦ Siebel Server
 - ♦ World Wide Web Publishing Service
- 2 Log in to Siebel Sales 7.0.
- 3 Follow the Screens menu path:
Server Administration > Servers

Figure 13 Server Component Groups

The figure shows two screenshots from the Siebel administration interface. The top screenshot is the 'Siebel Servers' window, showing a table with one server entry. The bottom screenshot is the 'Server Component Groups' window, showing a table of various components and their states.

Siebel Server	Server State	Host Name	SiebSrvr PID	Start Time	End Time
siebel	Running	gaea	18726	5/20/2002 5:37:48 P	

Component	Component State	Running Tasks	Max Tasks	Running MTS Pro	Max MTS Procs	Start Time	End Time
Appointment Booking	Online	0	2	1	1	5/20/2002 5:37:48 P	
Business Integration	Online	0	20	1	1	5/20/2002 5:37:48 P	
Business Integration	Online	0	20	1	1	5/20/2002 5:37:48 P	
Call Center Object M	Online	0	20	1	1	5/20/2002 5:37:48 P	
Communications Cor	Online	0	20	1	1	5/20/2002 5:37:48 P	
Communications Inb	Online	0	20	1	1	5/20/2002 5:37:48 P	
Communications Out	Online	0	50	1	1	5/20/2002 5:37:48 P	

- 4 Make sure that Workflow Management is Online and Enabled.
- 5 Log in to Siebel Tools 7.0 and designate the server as the database by entering `sadmin`, `sadmin`, `server`.
- 6 In Object Explorer, go to Siebel Objects > Project and lock the Project (see Figure 14).

Figure 14 Lock Project

Name	Changed	Inactive	Locked	Locked By Name	Locked Date	Language Locked
EAI						
EAI Account						
EAI Business Services						ENU
EAI Converter Services						ENU
EAI CreditCard						ENU
EAI DTE						ENU
EAI Demo						
EAI Design						
EAI Dispatch Service						ENU
EAI Envelope Services						
EAI Product						
EAI Queue						
EAI Sample Perf Test						ENU
EAI Tax						ENU
▶ EAI Test						ENU
EIM						ENU
EIM Accounts and Quotes						ENU
EIM Activity						ENU
EIM Administrative						ENU
EIM Agreement						ENU
EIM Asset Management						ENU
EIM Auction Item						ENU
EIM Audit Trail						ENU
EIM Bussiness Unit						ENU
EIM CHAMP						ENU
EIM CTI						ENU
EIM Call Script						ENU
EIM Class Systems						ENU
EIM Contact						
EIM Correspondence and Fulfillment						ENU
EIM DNB						ENU
EIM ERM						ENU

- 7 In Object Explorer, go to **Business Service**, make a copy of **Workflow Process Manager** (menu path Edit > Copy Record).

Figure 15 Business Services View - Workflow Process Manager

W	Name	Changed	Project	Cache	Class	Display Name
	WI Web Proxy Service		WI - Web Integration		CSSWIService	Web Proxy
	Web Collab Service		Web Collaboration	✓	CSSWebCollabService	Web Collab
	Web Engine HTTP TXN		SWE		CSSServiceSweHttpTxn	Web Engin
	Web Engine Interface		SWE	✓	CSSServiceSWEIface	Web Engin
	Web Engine Mobile Device		SWE		CSSMobileDeviceService	Mobile Dev
	Web Engine State Properties		SWE		CSSWEStateService	Web Engin
	Web Engine UI Preferences		SWE		CSSServiceSWEUIPrefs	Web Engin
	Web Engine User Agent		SWE		CSSServiceSweUserAgent	Web Engin
	WebPhone Push Test		eAuction Test		CSSWAPPushService	Webphone
	Webphone Push		SWLS Push		CSSWAPPushService	Webphone
	Workflow FlowChart UI		Workflow Process	✓	CSSSvcWfFlowCht	Workflow F
	Workflow Process Manager		Workflow Process	✓	CSSWfEngine	Workflow P
	Workflow Process Manager (Server R		Workflow Process	✓	CSSSrmService	Workflow P
	Workflow Process Manager (Server R		Workflow Process	✓	CSSSrvrReqSyncService	Workflow P
	Workflow Siebel Operation		Workflow Process		CSSBCOperService	Workflow P
	Workflow UI Utilities		Workflow Process		CSSWfUIUtilService	Workflow U
	Workflow Utilities		Workflow Process		CSSWfUtilService	Workflow U

8 Type the Process Name into the Name and Display Names fields, as shown in Figure 16 (this name is specified in the eai.cfg file).

For eGate-to-Siebel operation, perform this step for:

- ◆ SeeBeyond HTTP Delete
- ◆ SeeBeyond HTTP Execute
- ◆ SeeBeyond HTTP Query
- ◆ SeeBeyond HTTP Update

Figure 16 Business Services View - Renamed Fields

Business Services						
W	Name	Changed	Project	Cache	Class	Display Name
	S2S Inbound Dispatch Service		EAI Business Services		CSSEAIUtilService	S2S Inbound
	S2S Inbound Receive Processor		EAI Business Services		CSSWFEngine	S2S Inbound
	SAP 4x Account - SAP Maps (MO)		SAP Account 4x	✓	CSSEAITEScriptService	SAP 4x Map
	SME Filter Expression		Filters (DBM)	✓	CSSFilterExpressionService	SME Java E
	SME Java Expression		Segment (DBM)	✓	CSSExpressionService	SME Java E
	SSE Command Service		Siebel Sales Enterprise		CSSSrcvSSECmd	SSE Comm
	SWE Command Manager		System		CSSCommandMgrService	SWE Comm
	SWE Locale Service		System		CSSLocaleService	SWE Local
	SWE Query Exporter		SWE Import Export		CSSSWEQueryExporter	SWE Query
	Search Admin Service		Search Administration	✓	CSSSearchAdminService	Search Adm
	Search Client Service		Search Execution	✓	CSSSearchClientService	Search Clie
	Search Execution Service		Search Execution	✓	CSSSearchExecService	Search Exe
	Search Routing Service		Search Execution	✓	CSSSearchRouteService	Search Rou
	SeeBeyond HTTP Delete		Account	✓	CSSWFEngine	SeeBeyond
	SeeBeyond HTTP Execute		Account	✓	CSSWFEngine	SeeBeyond
	SeeBeyond HTTP Query		Account	✓	CSSWFEngine	SeeBeyond
	SeeBeyond HTTP Update		Account	✓	CSSWFEngine	SeeBeyond
	Server Requests		Business Service	✓	CSSSrmService	Server Req
	Service Provider Search Engine		Service Locator	✓	CSSSearchServiceService	Service Pro
	Shipping Cost Service (eScript)		EAI CreditCard	✓	CSSEAITEScriptService	Shipping C
	Shopping Service		eSales	✓	CSSShoppingService	Shopping S
	Siebel Anywhere Upgrade		Software Upgrade		CSSSvcAnyUpg	Siebel Any
	Siebel Code Generator		Repdtd		CSSEAITEScriptService	Siebel Code
	Siebel Tools Actuate Report Generator		Siebel Tools		CSSActuateReportGenerator	Siebel Tool
	Siebel Tools Applet Designer		Siebel Tools		CSSAppletDesigner	Siebel Tool
	Siebel Tools Application Converter		Siebel Tools		CSSAppConvSvc	Siebel Tool
	Siebel Tools Application Upgrader		Siebel Tools		CSSMerge	Siebel Tool
	Siebel Tools Assemble		Siebel Tools		CSSAssembleService	Siebel Tool
	Siebel Tools Batch Archive Export		Siebel Tools		CSSRepositoryBatchExport	Siebel Tool
	Siebel Tools Batch Archive Import		Siebel Tools		CSSRepositoryBatchImport	Siebel Tool

9 In Object Explorer, go to **Business Service > Business Service Method:**

A Type **ProcessName** into the **Name** field.

B Type the actual Process Name into the **Value** field (see Figure 17).

For eGate-to-Siebel operation, perform this step for:

- ◆ SeeBeyond HTTP Delete
- ◆ SeeBeyond HTTP Execute
- ◆ SeeBeyond HTTP Query
- ◆ SeeBeyond HTTP Update

Figure 17 Business Services User Properties

The screenshot displays the Siebel Business Services User Properties interface. It is divided into two main sections: 'Business Services' and 'Business Service User Props'.

Business Services Table:

W	Name	Changed	Project	Cache	Class	Display Name
>	SeeBeyond HTTP Update		Account	✓	CSSWFEngine	SeeBeyond
	Server Requests		Business Service	✓	CSSSrmService	Server Req
	Service Provider Search Engine		Service Locator	✓	CSSSearchServiceService	Service Proc

Business Service User Props Table:

W	Name	Changed	Value	Inactive	Comments
>	ProcessName		SeeBeyond HTTP Update		

Below the tables is an alphabetical index: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z *

The Workflow Processes you create in the Business Services are similar to those shown in Figure 16.

4.6 Siebel XML Messages

4.6.1 Format

A Siebel XML Message used by Siebel EAI eWay has the following format:

Header/Prefix
Integration Object (in XML format)
Footer/Suffix

where:

Header =

```
<SiebelMessage MessageId="" MessageType="Integration Object"
  IntObjectName="(Name of Integration Object)"
  operation=(action)>
```

Footer =

```
</SiebelMessage>
```

and (action) can be any of the following values:

- ♦ delete
- ♦ query
- ♦ upsert

Note: operation=(action) is used only with the EXECUTE workflow template.

4.6.2 Examples

Example 1

The following Siebel XML message specifies that the Integration Object that we are dealing with is **Sample Account**. If we send this message to Siebel EAI using the INSERT/UPDATE workflow template, either a new record is generated or an existing record is updated.

```
<SiebelMessage MessageId="" MessageType="Integration Object"
  IntObjectName="Sample Account">
<ListOfSampleAccount>
<Account>
<Name>A. K. Parker Distribution</Name>
<Location>HQ-Distribution</Location>
<Organization>North American Organization</Organization>
<Division></Division>
<CurrencyCode>USD</CurrencyCode>
<Description>This is THE key account in the AK Parker Family</
  Description>
<HomePage>www.parker.com</HomePage>
```

```
<LineofBusiness>Manufacturing</LineofBusiness>
</Account>
</ListofSampleAccount>
</SiebelMessage>
```

Example 2

The following Siebel XML message specifies that the Integration Object that we are dealing with is **Sample Account**. If we send this message to Siebel EAI using the **QUERY** workflow template, it returns the object that matches the Name **A. K***

```
<SiebelMessage MessageId="" MessageType="Integration Object"
  IntObjectName="Sample Account">
  <ListofSampleAccount>
  <Account>
  <Name>A. K*</Name>
  </Account>
  </ListofSampleAccount>
  </SiebelMessage>
```

Example 3

The following Siebel XML message provides an example of how to use the **operation** attribute with the **Execute** workflow. Here we send the message to Siebel EAI using the **EXECUTE** workflow template to perform a **query** operation. The result is the same as in Example 2.

```
<SiebelMessage MessageId="" MessageType="Integration Object"
  IntObjectName="Sample Account" operation=query>
  <ListofSampleAccount>
  <Account>
  <Name>A. K*</Name>
  </Account>
  </ListofSampleAccount>
  </SiebelMessage>
```

Setting Properties of the Siebel EAI eWay

This chapter explains how to create and configure the Siebel EAI eWay.

What's in This Chapter

- [“Configuring the Siebel EAI eWay” on page 37](#)
- [“Configuring the eWay Connectivity Map Properties” on page 38](#)
- [“Configuring the Environment Properties” on page 44](#)

5.1 Configuring the Siebel EAI eWay

All eWays contain a unique set of default configuration parameters. After the eWays are established and a Siebel EAI External System is created in the Project's Environment, the eWay parameters are modified for your specific system. The Siebel EAI eWay configuration parameters are modified from two locations:

- From the **Connectivity Map**—which contains parameters specific to the Siebel EAI eWay, and may vary from other eWays (of the same type) in the Project.
- From the **Environment Explorer tree**—which contains global parameters that commonly apply to all eWays (of the same type) in the Project. Saved parameters are shared by all eWays in the Siebel EAI External System window.

The configuration parameters for the Siebel EAI eWay must be set in both locations.

5.2 Configuring the eWay Connectivity Map Properties

When you link an external application with a Collaboration, Enterprise Designer automatically assigns an appropriate eWay to the link. Each eWay is supplied with a template containing the default configuration properties for the eWay.

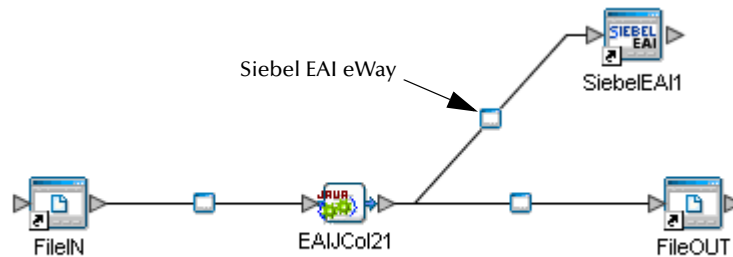
5.2.1 Siebel EAI Outbound eWay Properties

The Siebel EAI DB eWay contains outbound parameters accessible via the Configuration Editor.

To configure the eWay properties:

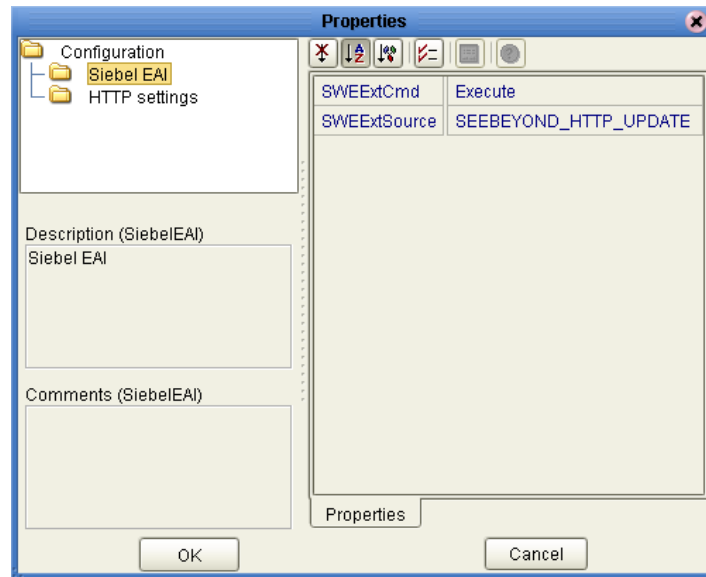
- 1 On the Enterprise Designer's Connectivity Map (see Figure 18), double-click the Siebel EAI eWay icon.

Figure 18 Connectivity Map With Components



- 2 The Templates window appears, asking you to choose if the eWay is inbound or outbound. Select the Siebel EAI Outbound eWay and click the **OK** button.
- 3 The Configuration properties window opens, displaying the default properties for the outbound eWay (see Figure 19).

Figure 19 Configuration Editor: Siebel EAI outbound eWay



- 4 Click on any folder to display the default configuration properties for that section.
- 5 Click on any property field to make it editable.
- 6 After modifying the configuration properties, click **OK** to save the changes.
- 7 The modifications you have made are now applied to this specific eWay instance only.

5.2.2 Outbound eWay Property Settings

The eWay property settings define how the properties are used to interact with the Siebel application.

Settings under the Siebel EAI folder include:

- **SWEEExtCmd**
- **SWEEExtSource**

Settings under the HTTP folder include:

- **Accept type**
- **Allow cookies**
- **Content type**
- **Encoding**

SWEEExtCmd

Description

Specifies the external command

Required Values

The default value is Execute

SWExtSource

Description

Specifies the service the Siebel Web Engine calls

Required Values

The default is: SEEBEYOND_HTTP_UPDATE

Other values may include:

- SEEBEYOND_HTTP_DELETE
- SEEBEYOND_HTTP_EXECUTE
- SEEBEYOND_HTTP_QUERY
- SEEBEYOND_HTTP_UPDATE

Accept type

Description

Specifies the parameters for the Accept Type request header.

Required Values

A string; for example: text/html, text/plain, text/xml

Allow cookies

Description

Specifies whether or not cookies sent from servers is stored and sent on subsequent requests. If cookies are not allowed, then sessions are not supported.

Required Values

True or false; the default is **true**.

Content type

Description

The default Content-Type header value to include when sending a request to the server

Required Values

Encoding

Description

The default encoding used when reading or writing textual data.

Required Values

ASCII

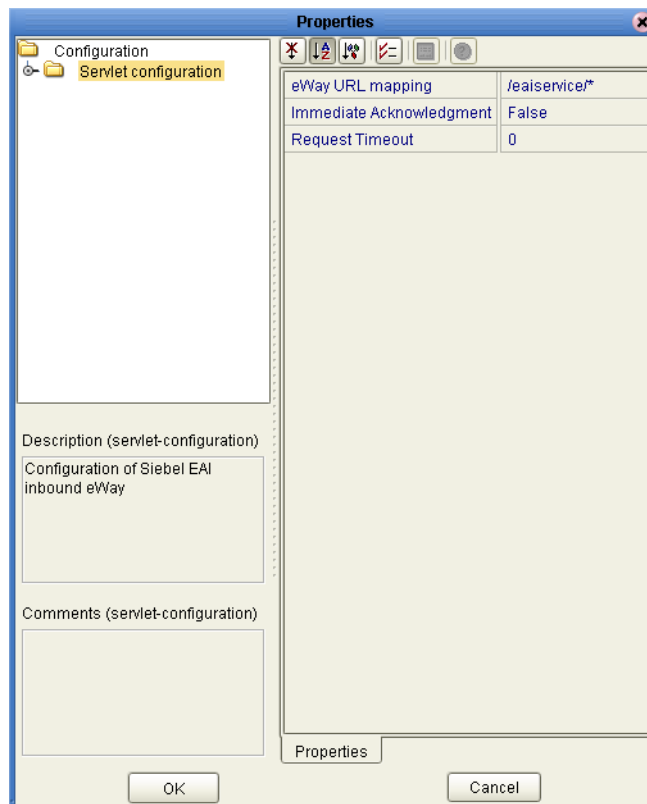
5.2.3 Siebel EAI Inbound eWay Properties

The Siebel EAI DB eWay contains inbound parameters accessible via the Configuration Editor.

To configure the eWay properties:

- 1 On the Enterprise Designer's Connectivity Map (see [Figure 18 on page 38](#)), double-click the inbound Siebel EAI eWay icon.
- 2 The Templates window appears, asking you to choose if the eWay is inbound or outbound. Select the Siebel EAI Inbound eWay and click the **OK** button.
- 3 The Configuration properties window opens, displaying the default properties for the inbound eWay (see [Figure 19](#)).

Figure 20 Configuration Editor: Siebel EAI inbound eWay



5.2.4 Inbound eWay Property Settings

The eWay property settings define how the properties are used to interact with the Siebel application.

Settings in the Servlet Configuration folder include:

- **eWay URL mapping**
- **Immediate Acknowledgment**
- **Request Timeout**

eWay URL mapping

Description

Determines the set of URIs (Universal Resource Identifier) that the servlet handles. This parameter value is supplied to the eGate Integration Server's web container as this eWay's url-pattern specification, and must follow the rules specified in Section 10 of the Servlet API specification.

Required Values

The default value that the servlet responds to is `/eaiservice/*`

Note: *In order for the SeeBeyond Workflow Templates to connect to an inbound Siebel EAI eWay, they must be configured*

`http://<hostname>:<port number>/<Siebel EAI Inbound eWay Name>_<EAI Service Name>/<eaiService>`

- **hostname**—the machine name or IP address where the eGate repository is running.
- **port number**—the web container Connector Port in the Environment, located in the Environment properties under:
Integration Server > Configuration > Sections > Web Container Configuration > Web Server Configurations > Default Web Server
- **Siebel EAI Inbound eWay Name**—as listed on the connectivity map.
- **EAI Service Name**—as listed on the connectivity map.

Immediate Acknowledgment

Description

Determines the responsibility of composing responses to each request. When set to True, the eWay responds to each request itself, instead of waiting for the outcome of the service invocation. The return generated by the service call (if any) is discarded in this case. When set to False, the responsibility of composing an appropriate response is left to the service.

Required Values

True or False; the default is **False**.

Request Timeout

Description

Measured in units of milliseconds, this parameter determines how long the eWay waits for a service invocation to complete, before abandoning the request. A value equal to or less than zero (0) causes the eWay to wait indefinitely.

If the Immediate Acknowledgement parameter is set to False, then this parameter is disregarded.

Required Values

A number that is equal to or greater than zero.

5.3 Configuring the Environment Properties

The eWay Environment Configuration properties contain the parameters that define how the eWay connects to and interacts with other eGate components within the Environment.

5.3.1 Siebel EAI External System Outbound Properties

The Siebel Environment contains outbound properties which are accessible via the Environment Explorer.

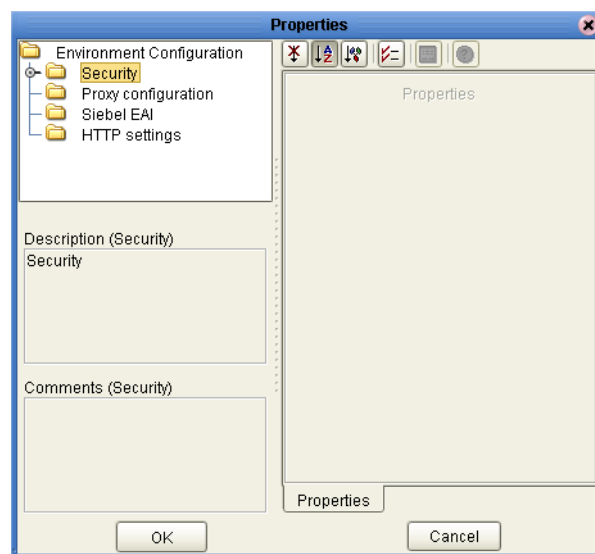
To Configure the Environment Properties:

- 1 In Enterprise Explorer, click the Environment Explorer tab.
- 2 Expand the Environment created for the Siebel EAI Project and locate the SiebelEAI External System.

Note: For more information on creating an Environment, see the eGate Tutorial.

- 3 Right-click the SiebelEAI External System and select Properties from the list box. The Environment Configuration Properties window appears.

Figure 21 Environment Configuration Properties window



- 4 Click on any folder to display the default configuration properties for that section.
- 5 Click on any property field to make it editable.
- 6 After modifying the configuration properties, click **OK** to save the changes.

5.3.2 Environment Property Properties

Configure your Environment properties to match the properties listed below.

Settings Include:

- **Keystore**
- **Keystore Password**
- **Keystore Type**
- **Keystore Username**
- **Protocol SSL**
- **TrustStore**
- **TrustStore Password**
- **TrustStore Type**
- **Use SSL**
- **Verify Hostname**

Settings under the Security - Authentication folder include:

- **HTTP Password**
- **HTTP Username**

Settings under the Proxy Configuration folder include:

- **Proxy Host**
- **Proxy Password**
- **Proxy Port**
- **Proxy Username**

Settings under the Siebel EAI folder include:

- **Password**
- **User Name**

Settings under the HTTP folder include:

- **URL**

Keystore

Description

Specifies the keystore used for key/certificate management when establishing SSL connections.

Required Values

No default value.

Keystore Password

Description

Specifies the password for accessing the keystore used for key/certificate management when establishing SSL connections.

Required Values

No default value.

Keystore Type

Description

Specifies the keystore type of the keystore used for key/certificate management when establishing SSL connections.

Required Values

JKS

Keystore Username

Description

Specifies the username for accessing the keystore used for key/certificate management when establishing SSL connections.

Required Values

No default value.

Protocol SSL

Description

Specifies the SSL protocol to use when establishing an SSL connection with the server.

Required Values

TLS

TrustStore

Description

Specifies the truststore used for CA certificate management when establishing SSL connections.

Required Values

c:\temp\https.jks

TrustStore Password

Description

Specifies the password for accessing the truststore used for CA certificate management when establishing SSL connections.

Required Values

seebeyond

TrustStore Type

Description

Specifies the type of truststore used for CA certificate management when establishing SSL connections.

Required Values

JSK

Use SSL

Description

Determines whether HTTPS connections are used.

Required Values

False or True; the default is False

Verify Hostname

Description

Determines whether HTTPS connections are used.

Required Values

False or True; the default is False

HTTP Password

Description

Specifies the password for authenticating to the web site specified by the URL.

Required Values

No default value

HTTP Username

Description

Specifies the username for authenticating to the web site specified by the URL.

Required Values

No default value

Proxy Host

Description

Specifies the hostname of the HTTP proxy.

Required Values

No default value

Proxy Password

Description

Specifies the password required to access the HTTP proxy.

Required Values

No default value

Proxy Port

Description

Specifies the HTTP proxy port.

Required Values

8080

Proxy Username

Description

Specifies the username used to access the HTTP proxy. Enter the URL user name that requires HTTP authentication to access the site.

Required Values

No default value

Password

Description

Specifies the user password.

Required Values

No default value

User Name

Description

Specifies the user name.

Required Values

No default value

URL

Description

Specifies the default URL used to establish a HTTP or HTTPS connection. If HTTPs protocol is specified, SSL must be configured.

Required Values

`http://siebel/eai_enu/start.swe`

Using the Siebel EAI OTD Wizard

This section describes how to create Object Type Definitions (OTDs) using the Siebel EAI Wizard.

OTDs contain the data structure and rules that define an object. They are generated by extracting the business services that have been exposed through the Siebel Web Engine, and the Integration Objects available in the Siebel instance. For the Siebel EAI eWay, this operation is performed by the Siebel EAI Wizard.

What's in This Chapter

- [“Before Creating the OTD” on page 50](#)
- [“Before Running the Enterprise Designer” on page 52](#)
- [“Creating the OTD” on page 53](#)

6.1 Before Creating the OTD

6.1.1 Installing “seebeyond.sif” for Siebel 7.5

If you are using Siebel 7.5, before you create an OTD using the OTD Wizard, you must install the **seebeyond.sif** file into your Siebel Tools system. This file is installed in the Enterprise Designer's user directory during the Enterprise Designer installation.

To install the seebeyond.sif file

- 1 Use the Siebel Tools utility to import the **seebeyond.sif** file into your Siebel Server
This file is installed with the Enterprise Designer. If you installed the Enterprise Designer in the **C:\Ican50\edesigner** directory, then the file is located in
`C:\Ican50\edesigner\usrdir\modules\ext\siebeleaieway`
- 2 After importing the file, use the Siebel Tools utility to compile your **.SRF** file.
- 3 Stop the Gateway Server and the Siebel Server.
- 4 Replace the file on the Siebel Server with the one you created in step 2.
- 5 Restart the Gateway Server and the Siebel Server.

6.1.2 Installing “SiebelMessage XSD Generation Process.xml” for Siebel 7.7

If you are using Siebel 7.7, before you can create an OTD using the OTD Wizard, you must install the **SiebelMessage XSD Generation Process.xml** file.

To install the “SiebelMessage XSD Generation Process.xml” file

- 1 Open the Siebel Tools utility.
- 2 In the Object Explorer, click the Workflow Process.
- 3 Right-click the item in the Object list, and then click **Import Workflow Process**.
- 4 Browse to the directory that contains **SiebelMessage XSD Generation Process.xml**.

This file is installed with the Enterprise Designer. If you installed the Enterprise Designer in the **C:\Ican50\edesigner** directory, then the file is located in

`C:\Ican50\edesigner\usrdir\modules\ext\siebeleaieway`

- 5 Click **Open** to begin importing the Workflow template.
- 6 Select your project.
- 7 Stop the Gateway Server and the Siebel Server.
- 8 Use the Siebel Tools utility to compile your **.SRF** file.
- 9 Copy the **.SRF** file to the **objects** folder in your Siebel Server.
- 10 Restart the Gateway Server and the Siebel Server.

6.2 Before Running the Enterprise Designer

The Enterprise Designer needs to be configured to use the appropriate **.jar** files to correspond with the version of your Siebel Server. Before you use the Enterprise Designer to create your Siebel EAI Project, you must make sure that your local Enterprise Designer installation is using the proper **.jar** files for your Siebel Server.

To run the Enterprise Designer with Siebel 7.5

- 1 Using Windows Explorer, navigate to the Siebel eWay directory for your Enterprise Designer.

If you installed the Enterprise Designer in the **C:\Ican50\edesigner** directory, then navigate to

```
C:\Ican50\edesigner\usrdir\modules\ext\siebeleaieaway
```

- 2 If you have previously used Siebel 7.7 with this installation of the Enterprise Designer, then remove the following files from this directory:

- ♦ **Siebel.jar**
- ♦ **SiebelJI_enu.jar**

- 3 Copy the following files from your Siebel 7.5 system (SiebelTools/Classes) to this location:

- ♦ **SiebelJI.jar**
- ♦ **SiebelJI_Common.jar**
- ♦ **SiebelJI_enu.jar**

- 4 Restart the Enterprise Designer

To run the Enterprise Designer with Siebel 7.7

- 1 Using Windows Explorer, navigate to the Siebel eWay directory for your Enterprise Designer.

If you installed the Enterprise Designer in the **C:\Ican50\edesigner** directory, then navigate to

```
C:\Ican50\edesigner\usrdir\modules\ext\siebeleaieaway
```

- 2 If you have previously used Siebel 7.5 with this installation of the Enterprise Designer, then remove the following files from this directory:

- ♦ **SiebelJI.jar**
- ♦ **SiebelJI_Common.jar**
- ♦ **SiebelJI_enu.jar**

- 3 Copy the following files from your Siebel 7.7 system (SiebelTools/Classes) to this location:

- ♦ **Siebel.jar**
- ♦ **SiebelJI_enu.jar**

- 4 Restart the Enterprise Designer

6.3 Creating the OTD

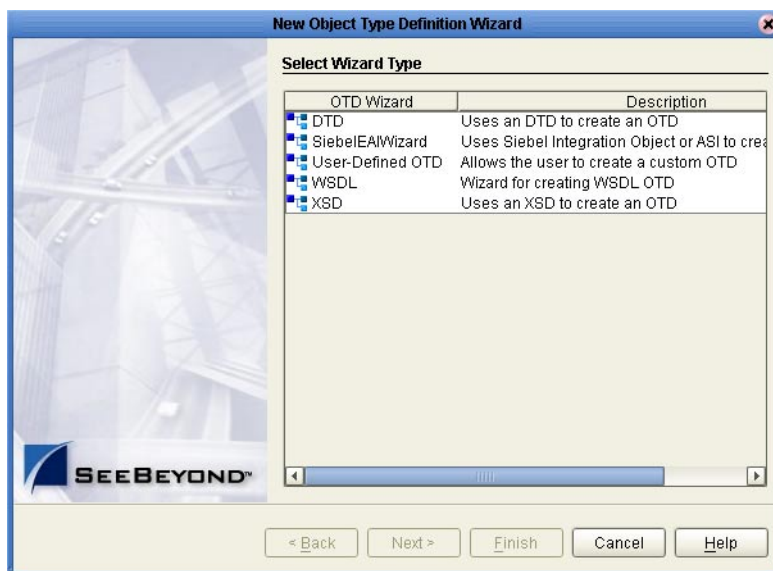
Steps required to create an OTD include:

- **Select Wizard Type**
- **Specify Connection Information**
- **Select Integration Objects**
- **Specify OTD Names**

Select Wizard Type

- 1 On the Enterprise Explorer, right-click on the Project folder, and choose **New > Object Type Definition** from the selection menu.
- 2 The **Select Wizard Type** appears, displaying the available OTD wizards. See [Figure 22](#) on page 53.

Figure 22 Select Wizard Type window



Specify Connection Information

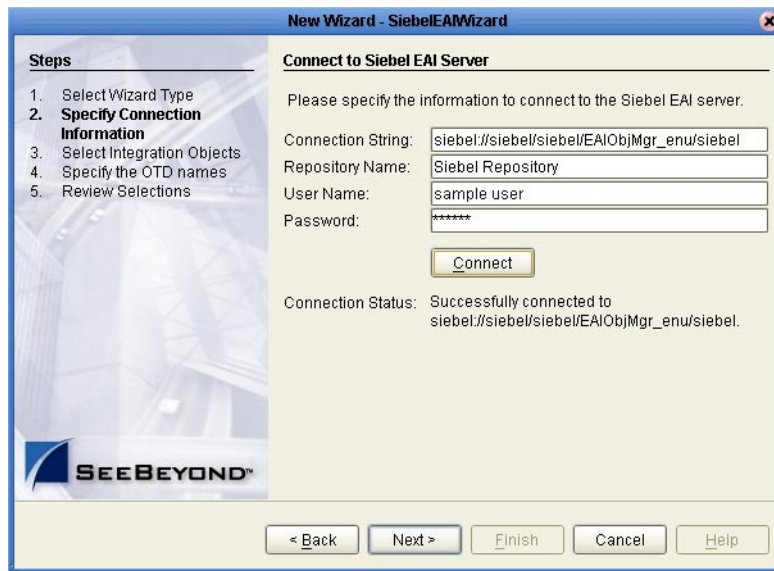
- 1 From the list of available OTD wizards, select the **SiebelEAIWizard** and click the **Next** button. The **Connect to Siebel EAI Server** window appears.

Figure 23 Siebel Server Connection window



- 2 Enter the following information into the text fields:
 - **Version:** the Siebel Server version
 - **Connection String:**
 - ♦ **For Siebel 7.5:** `siebel://<GatewayServer>/<EnterpriseServerName>/<ApplicationObjectManager>/<SiebelServerName>`
 - ♦ **For Siebel 7.7:** `siebel://<SiebelServerName>:<port>/<EnterpriseServerName>/<ApplicationObjectManager>`
 - **Repository Name:** Siebel Repository
 - **User Name:** a valid user name
 - **Password:** a valid password
- 3 Click the **Connect** button. A message appears confirming a successful connection.

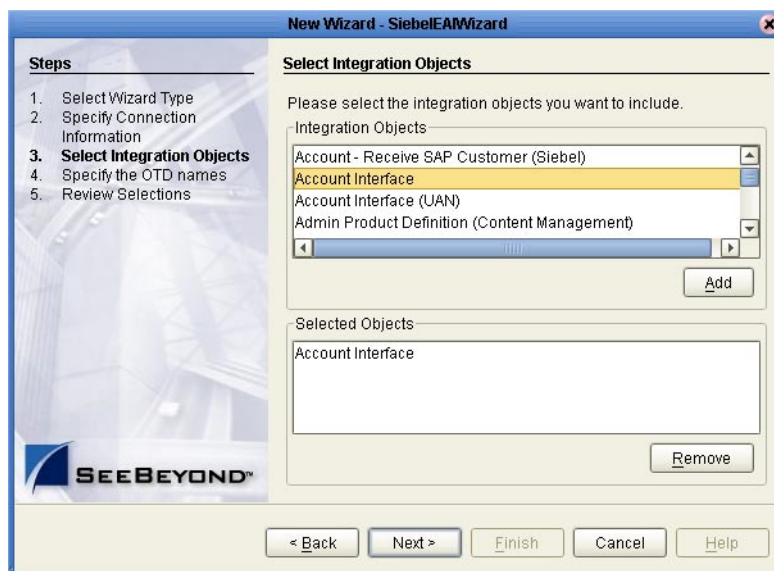
Figure 24 Successful Server Connection window



Select Integration Objects

- 1 Click the **Next** button. The **Select Integration Objects** window appears. Scroll down the Integration Objects selection table and select **Account Interface**.
- 2 Click the **Add** button. Account Interface appears in the Selected Objects window.

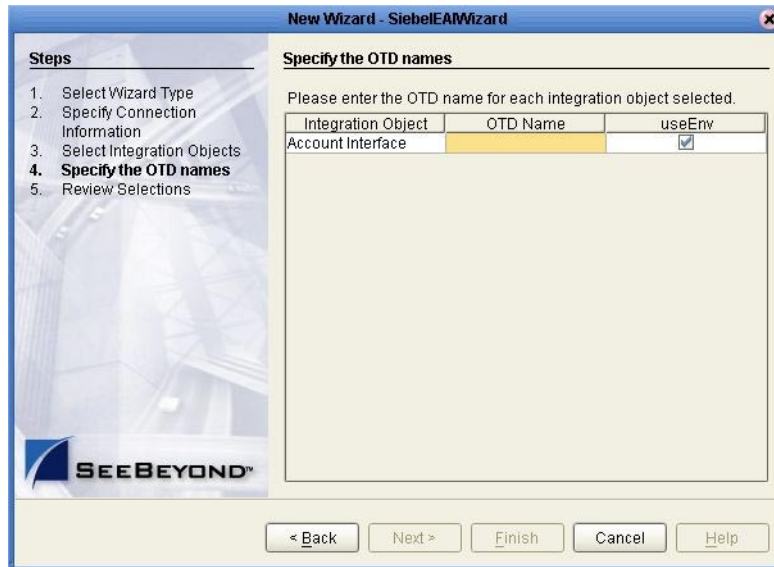
Figure 25 Select Integration Objects window



Specify OTD Names

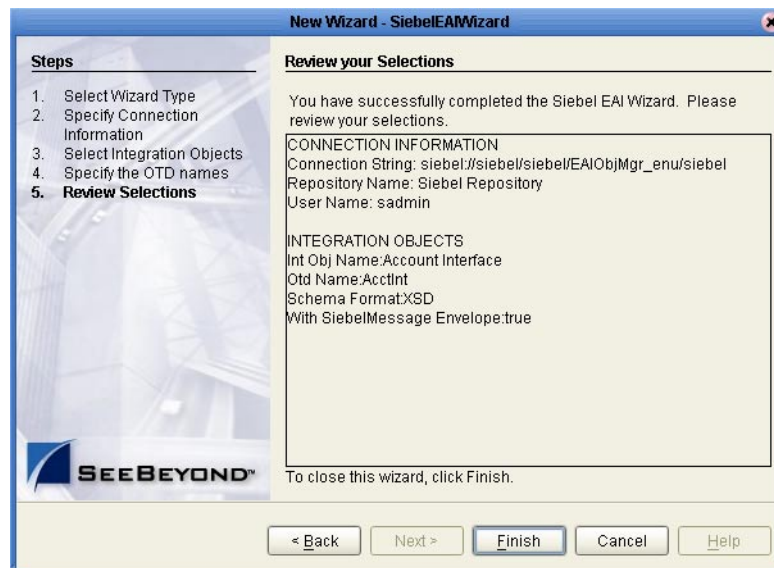
- 1 Click the **Next** button. The **Specify the OTD names** window appears.

Figure 26 Specify the OTD names window



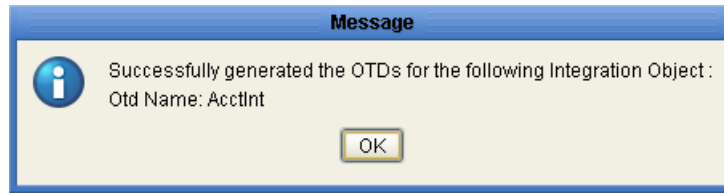
- 2 In the OTD Name column, enter the name for the new OTD and then select **useEnv** to include the envelope information from the Siebel messages (Siebel 7.7 only).
- 3 Click the **Next** button. The Review your Selections window appears.

Figure 27 Review your Selections window



- 4 Click the **Finish** button. A message appears confirming the successfully generated OTD. See [Figure 28 on page 57](#).

Figure 28 Completed OTD Message window



Reviewing the Sample eWay Projects

This chapter describes how to use the sample Projects included in the installation CD-ROM package. Sample Projects are designed to provide an overview of the basic functionality found in the Siebel EAI eWay. In this chapter, the sample Projects are divided into two categories: Projects that include a business process created with the eInsight module, and Projects that are created only using the core eGate product.

What's in This Chapter

- [“The eInsight Engine and Components” on page 58](#)
- [“Using the Sample Project with eInsight” on page 59](#)
- [“Using the Sample Project in eGate” on page 66](#)

Note: While several key steps are required to create, activate, and deploy a Project, only the steps that contain information relevant to the Siebel EAI eWay are included in this chapter. For more detailed information on how to complete a sample Project, see the *eGate Tutorial*.

7.1 The eInsight Engine and Components

You can deploy an eGate component as an Activity in an eInsight Business Process. Once you have associated the desired component with an Activity, the eInsight engine can invoke it using a Web Services interface. Examples of eGate components that can interface with eInsight in this way are:

- Java Messaging Service (JMS)
- Object Type Definitions (OTDs)
- An eWay
- Collaborations

Using the eGate Enterprise Designer and eInsight, you can add an Activity to a Business Process, then associate that Activity with an eGate component, for example, an eWay. When eInsight runs the Business Process, it automatically invokes that component via its Web Services interface.

7.2 Using the Sample Project with eInsight

This section describes how to use the Siebel EAI eWay with the SeeBeyond ICAN Suite's eInsight Business Process Manager and its Web Services interface.

Section Topics Include:

- [Project Overview](#) on page 59
- [Locating the Sample Projects](#) on page 60
- [Importing the Sample Project](#) on page 60
- [Sample Project Business Process](#) on page 61
- [Configuring the Modeling Elements](#) on page 63

7.2.1 Project Overview

Before running a sample Project, you must:

- Import the sample Project
- Create an Environment for the sample Project
- Configure the eWay properties for your specific system (see [Setting Properties of the Siebel EAI eWay](#) on page 37)
- Create a Deployment Profile

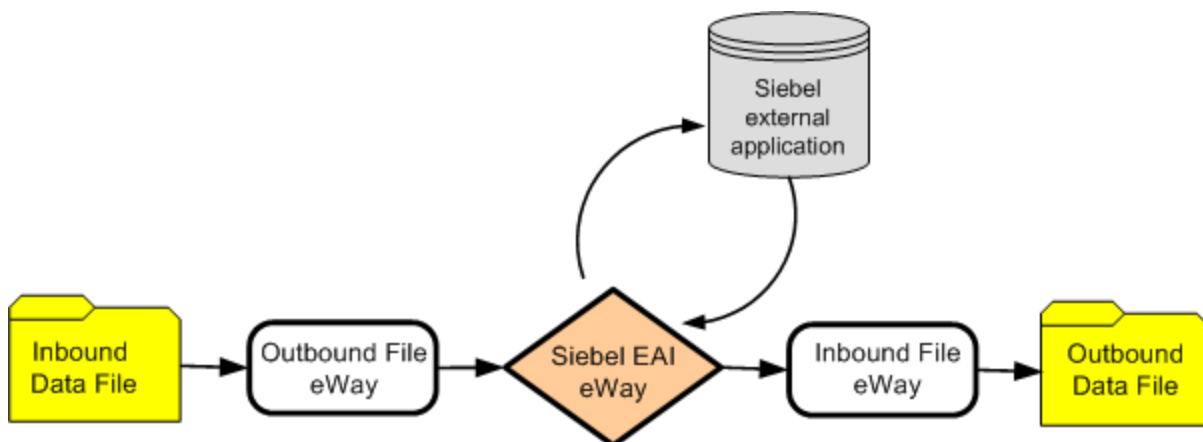
Two sample Projects using the eInsight business process are included on the installation CD-ROM.

- **EAI_BPEL_ai_Upsert**—uses the UANSyncAccount Siebel workflow.
- **EAI_BPEL_sa_Upsert**—uses the SEEBEYOND_HTTP_UPDATE siebel workflow.

Both sample Projects contain an input file that accepts sample data, and creates an output that writes the response code to a log file.

The figure below shows the business process used by the sample Projects.

Figure 29 Siebel EAI Sample Project Data Flow



7.2.2 Locating the Sample Projects

The eWay sample Projects are included in the **SiebelEAIeWayDocs.sar**. This file is uploaded separately from the Siebel EAI .sar file during installation. For information, refer to [Chapter 2](#).

Once you have uploaded the **SiebelEAIeWay.sar** to the Repository and you have downloaded the sample Projects using the **DOCUMENTATION** tab in the Enterprise Manager, the sample resides in the folder specified during the download.

7.2.3 Importing the Sample Project

Before you can use the sample eInsight Business Process Project, you must first import the Project into the SeeBeyond Enterprise Designer using the Enterprise Designer Project Import utility.

***Note:** eInsight is a Business Process modeling tool. If you have not purchased eInsight, contact your sales representative or information on how to do so.*

To import the sample Project

- 1 From the Enterprise Designer's Project Explorer pane, right-click the Repository and select **Import**.
- 2 In the **Import Manager** window, browse to the directory that contains the sample Project zip file.
- 3 Select the sample file and then click **Open**.
- 4 Click the **Import** button. If the import was successful, then click the **OK** button on the **Import Status** window.
- 5 Close the Import Manager window and select **Refresh All from Repository** from the shortcut menu.

7.2.4 Sample Project Business Process

The data used for the sample Projects are contained within an input file called **siebelEAI.txt**, which displays data in XML like tags.

Figure 30 Input Data File

```
<ListOfAccountInterface>
<Account>
<AccountId>8-88A18</AccountId>
<AccountStatus>Active</AccountStatus>
<MainPhoneNumber>626-123-4567</MainPhoneNuber>
<Name>Smith</Name>
<Type/>
<ListOfBusinessAddress>
<BusinessAddress>
<AddressId>9-28FAB</AddressId>
<AddressIntegrationId>CCF87EB651B5D111D70A12532DA6D7</
AddressIntegrationId>
<City>Monrovia</City>
<Country>USA</Country>
<County>Los Angeles</County>
<PostalCode>91016</PostalCode>
<State>CA</State>
<StreetAddress>800 Royal Oaks Ave</StreetAddress>
</BusinessAddress>
</ListOfBusinessAddress>
<ListOfRelatedContact/>
<ListOfRelatedOrganization>
<RelatedOrganization IsPrimaryMVG="Y">
<OrganizationId>0-R9NH
</OrganizationId>
</RelatedOrganization>
</ListOfRelatedOrganization>
</Account>
</ListOfAccountInterface>
```

Creation of a business process includes:

- Dragging and dropping business process activities from the Project explorer tree to the eInsight Business Process Designer’s modeling canvas.
- Connecting logical business activities together.
- Adding business rules between activities.

Figure 31 provides an example of a completed business process.

Figure 31 Example Business Process



Adding Business Process Activities

An eInsight Business Process Activity can be associated with the Siebel EAI eWay during system design phase. To make this association, select the desired operators under eWay in the Enterprise Explorer and drag it onto the eInsight Business Process Designer canvas.

The Siebel EAI eWay has the following operators available:

- receive
- unmarshal
- marshal
- eaiPost
- write

The operation is automatically changed to an Activity with an icon identifying component that is the basis for the Activity. At run time, eInsight invokes each the order defined in the Business Process. Using eInsight's Web Services interface, Activity in turn invokes the Siebel EAI eWay.

7.2.5 Using OTD Integration Objects

Each sample Project uses a different integration object within the OTD. For more information on the steps required to create OTDs using the SiebelEAI Wizard, see [“Using the Siebel EAI OTD Wizard” on page 50](#)

- **EAI_BPEL_ai_Upsert**—uses the Account Interface Integration Object
- **EAI_BPEL_sa_Upsert**—uses the Sample Account Integration Object

7.2.6 Available Web Service Operations

Siebel EAI contains several web service operations, located at SeeBeyond > eWays > SiebelEAIeWay > Siebel EAI.

Web service operations include:

- **eaiPost**—uses the *Account Interface* integration object with the **UANSyncAccount** workflow.
- **eaiQueryPost**—uses the *Sample Account* integration object with the **SeeBeyond HTTP Query** workflow.
- **eaiUpsertPost**—uses *Sample Account* integration object with the **SeeBeyond HTTP Update** workflow.
- **eaiDeletePost**—uses *Sample Account* integration object with the **SeeBeyond HTTP Delete** workflow.
- **eaiwebportalReceive**—a web service operation that supports the inbound functionality in the business process.

7.2.7 Configuring the Modeling Elements

Business rules are defined and configured between the business process activities located on the modeling canvas. The sample Projects contain business rules between each of the activities listed in the business process flow.

Note: A detailed description of the steps required to configure modeling elements are found in the *eGate Integrator's User's Guide*.

Sample eInsight Projects included on the installation CD-ROM contain similar business rules. The business process described below uses the **EAI_BPEL_ai_Upsert** sample as illustration.

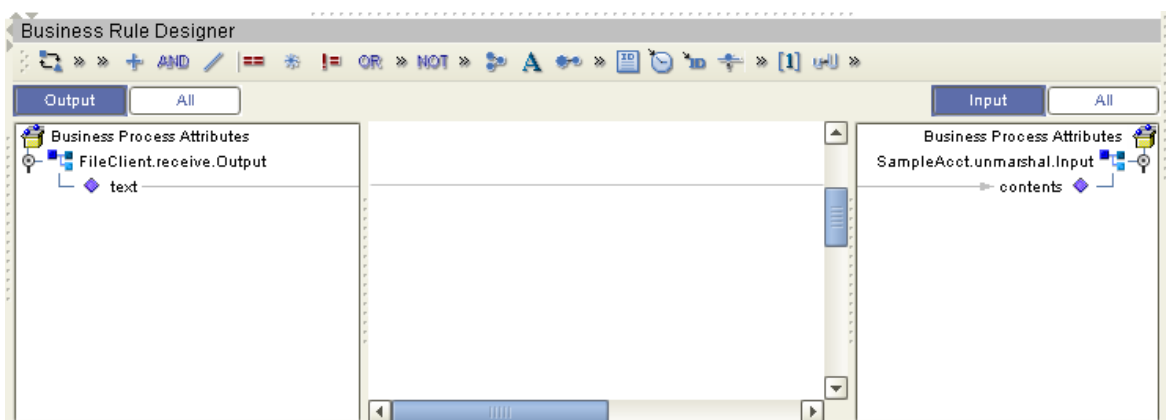
During the business process, the sample Project:

- Unmarshalls data into an OTD
- Marshalls data from the Siebel workflow
- Calls the PostSiebelform
- Verifies the Response Code from Siebel
- Writes the output log file

Unmarshall Data

Data is first read as a long string from the input file, then broken up into recognizable fields and placed into the account interface table (AcctInterface.unmarshal.Output OTD).

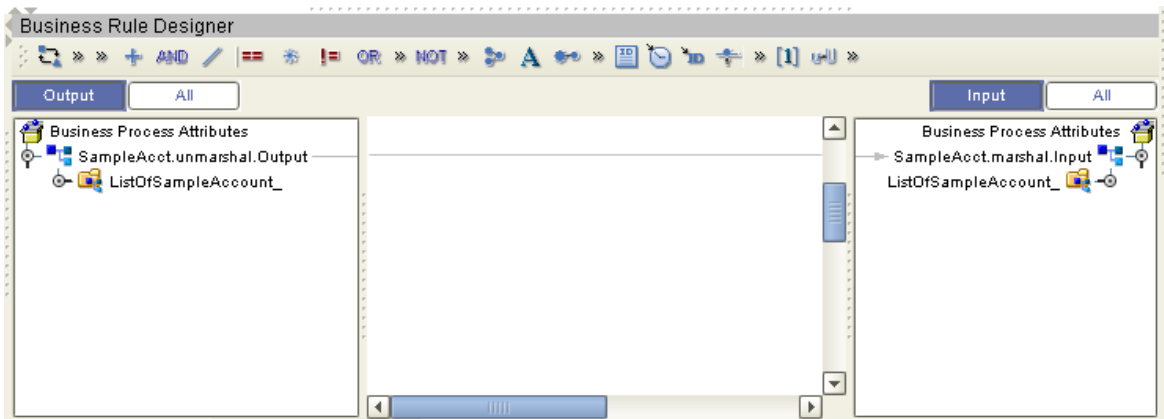
Figure 32 Unmarshalling Data into the OTD



Marshall Data into the Siebel Workflow

The OTD data is grabbed, marshalled to string format, and then assigned to the account interface table (AcctInterface.marshal.Input OTD).

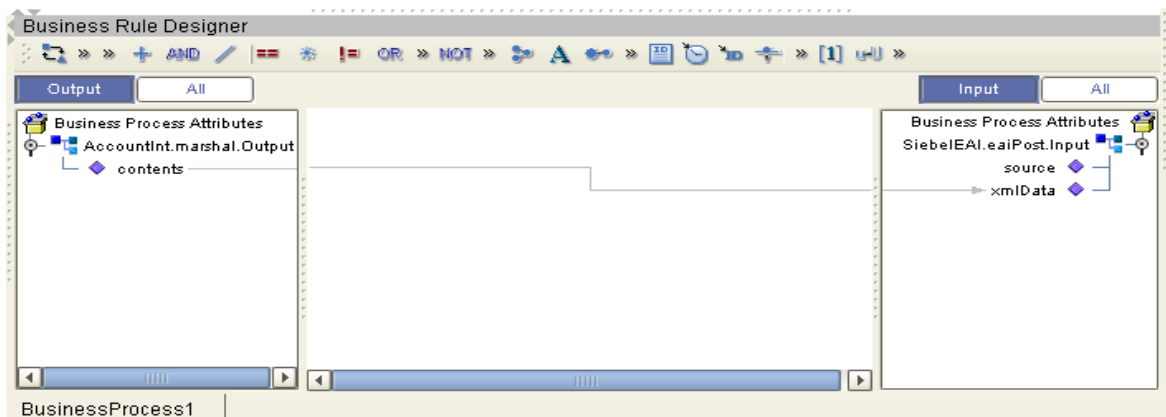
Figure 33 Marshaling Data from the Siebel Workflow



Call the PostSiebelform

The PostSiebelform is a method that invokes the UANSyncAccount workflow. Data from the xmlData field is forwarded in an XML-formatted message to the Siebel Workflow that manages and enforces the Business Process.

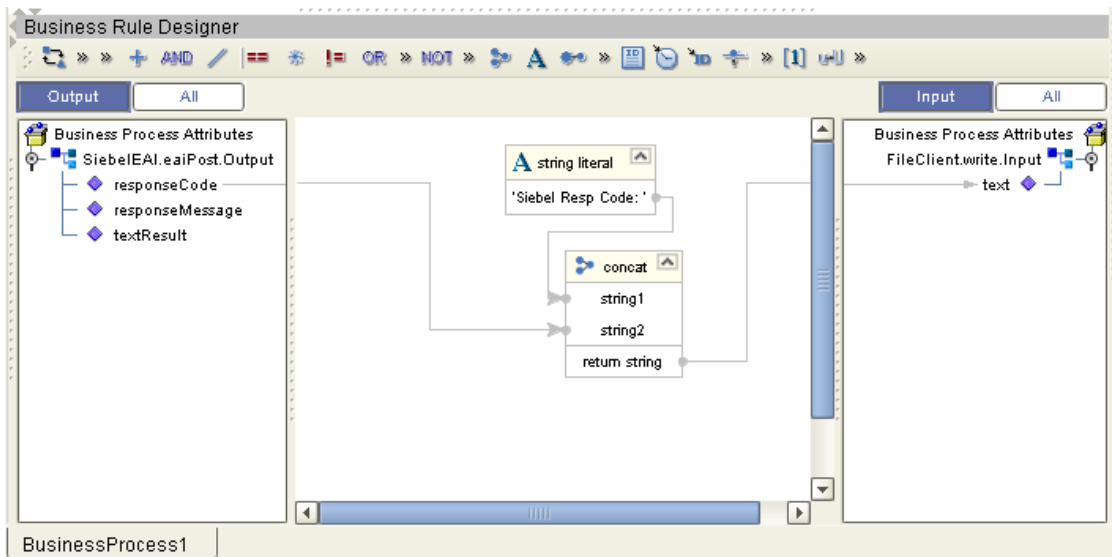
Figure 34 Calling the PostSiebelform



Verify the Response Code

During run-time, the Workflow invokes the Siebel EAI XML Converter, which converts the information from XML into the Siebel internal format. The responseCode responseMessage and textResult are concatenated into a single response back to the user.

Figure 35 Verifying the Response Code



Write the Response Code

The final step is to write the response code log file, which verifies the operational status of the Workflow

7.3 Using the Sample Project in eGate

This section describes how to use the Siebel EAI eWay with the eGate Integrator.

Section Topics Include:

[Working with the Sample Projects in eGate](#) on page 66

[Configuring the eWays](#) on page 66

[Creating the Environment Profile](#) on page 67

[Deploying a Project](#) on page 67

[Running the Sample](#) on page 68

7.3.1 Working with the Sample Projects in eGate

Two sample Projects created using eGate Integrator are included on the installation CD-ROM.

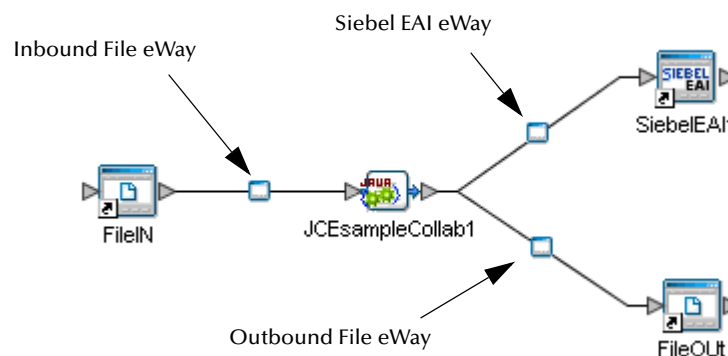
- **EAI_JCE_ai_Upsert**—uses the UANSyncAccount Siebel workflow.
- **EAI_JCE_sa_Upsert**—uses the SEEBEYOND_HTTP_UPDATE siebel workflow.

Both sample Projects contain an input file that accepts sample data, and creates an output that writes the response code to a log file. Along the way, Siebel Business process validates data and enforces the necessary business rules. An example of the business process used by the sample Projects is found in [Figure 29 on page 59](#).

7.3.2 Configuring the eWays

The sample uses three eWays: Inbound File eWay, Outbound File eWay, and Siebel EAI eWay. To configure the sample Projects eWays, use the following information.

Figure 36 Connectivity Map



Note: For additional information on the eWay properties, see [Setting the eWay Properties in the Connectivity Map](#) on page 12.

To configure the Inbound File eWay:

- 1 On the Connectivity Map canvas, double click the eWay icon located between the **FileIn** and the **JavaCollaboration** Service.
- 2 On the resulting **Templates** window, select **Inbound File eWay** and click **OK**.
- 3 On the **Properties** window, enter the appropriate configurations for the Inbound File eWay. See the *File eWay User's Guide* for information on how to specifically configure the File eWay. For this sample, the default settings are used.
- 4 When you have completed your selections, click **OK**.

To configure the Outbound SiebelEAI eWay:

- 1 On the Connectivity Map canvas, double click the eWay icon located between the **JavaCollaboration** Service and **SiebelEAI** database.
- 2 On the Properties window, enter the appropriate configurations for the Outbound Sybase eWay and click **OK**. See [Setting the Properties in the Outbound eWay](#) on page 12. For this sample, the default settings are used.
- 3 When you have completed your selections, click **OK**.

To configure the Outbound File eWay:

- 1 On the Connectivity Map canvas, double click the eWay icon located between **JavaCollaboration** Service and **FileOut** eWay.
- 2 On the resulting **Templates** window, select **Outbound File eWay** and click **OK**.
- 3 On the **Properties** window, enter the appropriate configurations for the Outbound File eWay. See the *File eWay User's Guide* for information on how to specifically configure the File eWay. For this sample, change the Directory field to **<valid path to the directory where the output file will be stored>**. The Output File Name to **Output1.dat**. For the remaining parameters, the default settings are used.
- 4 When you have completed your selections, click **OK**.

7.3.3 Creating the Environment Profile

To review the components of the Sample Project, there is an Inbound and an Outbound File eWay, an eWay, and a Service.

To create the external Environment for the Sample Project:

- 1 On the Environment Explorer, highlight and right-click the eWay profile.
- 2 Select **Properties**, and enter the configuration information required for your Outbound eWay. For more information, see [Environment Property Properties](#) on page 45.

7.3.4 Deploying a Project

To deploy a Project, please see the *eGate Integrators User's Guide*.

7.3.5 Running the Sample

For instruction on how to run the Sample Project, see the *eGate Tutorial*.

Once the process has completed, the Output file in the target directory configured in the Outbound File eWay will contain all records retrieved from the database in an .xml format.

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