

***SeeBeyond ICAN Suite***

# **Seagull Screen Access eWay Intelligent Adapter User's Guide**

***Release 5.0***



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# Introducing the Seagull Screen Access eWay

### What's in This Chapter

- [“About Seagull Software’s Transidiom” on page 5](#)
- [“About the Seagull Screen Access eWay” on page 5](#)
- [“What’s in This Document” on page 6](#)
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## 1.1 About Seagull Software’s Transidiom

Transidiom, a module of LegaSuite from Seagull Software, provides a software tool to integrate legacy systems into your service-oriented architecture. LegaSuite supports a full spectrum of legacy evolution, from emulation to GUI extension, integration, legacy Web services, and XML transformation.

Transidiom uses screen-based connectors to integrate with your legacy systems. Using Transidiom’s Connector Builder, your legacy application user navigates through the business function and relevant data entry fields just as they normally would. Throughout this process, Transidiom automatically maps a connector function containing application navigation and logic, and creates a screen-based connector for communicating with the host through terminals such as 3270, 5250, and VT100.

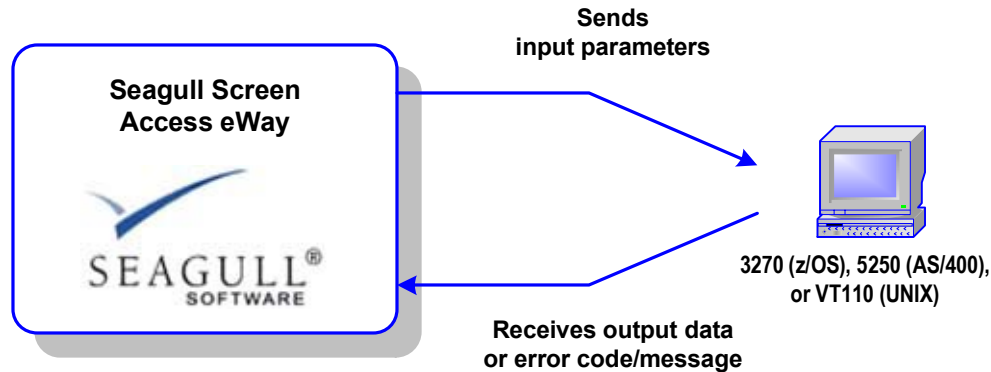
Once the connectors are mapped, developers use Transidiom to publish XML schemas that can be used by other applications to interact with the legacy systems.

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## 1.2 About the Seagull Screen Access eWay

While many of today’s applications display input and output data through a graphical user interface (GUI), yesterday’s legacy applications use a character-based display to show this same information. The Seagull Screen Access eWay enables the eGate system to access data from character-based legacy systems—for example 3270 terminals running on z/OS, 5250 terminals running on AS/400, and VT100 terminals running on UNIX—using the LegaSuite Transidiom application from Seagull Software.

**Figure 1** The Seagull Screen Access eWay



### Key features of the Seagull Screen Access eWay

- User login logic and screen navigation are captured in the Transidiom *screen-based connectors*. These connectors run as a JCA in the ICAN Integration Server.
- The ability to generate an OTD from the XML files generated by Transidiom via the OTD Wizard. The XML files contain the metadata for the business logic generated by Transidiom.
- The ability to pass input parameters to legacy systems and receive either normal output or error codes and messages.
- The ability to call Seagull CCI from a Java Collaboration.
- The ability to call Seagull CCI from a BPEL business process.

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## 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 Seagull Screen Access eWay"**: Provides an overview description of the product as well as high-level information about this document.
- **Chapter 2 "Installing the Seagull Screen Access eWay"**: Describes the system requirements and provides instructions for installing the Seagull Screen Access eWay.
- **Chapter 3 "Configuring the Seagull Screen Access eWay"**: Provides instructions for configuring the eWay to communicate with your legacy systems.
- **Chapter 5 "Working with the Sample 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 Seagull Screen Access eWay.

This document does cover the Java methods exposed by this eWay. For information on the Java methods, download and view the Seagull Screen Access 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 or UNIX) and must be thoroughly familiar with Windows-style GUI operations.

## 1.3.4 Writing Conventions

The following writing conventions are observed throughout this document.

**Table 1** Writing Conventions

Text	Convention	Example
Button, file, icon, parameter, variable, method, menu, and object names.	<b>Bold</b> text	<ul style="list-style-type: none"><li>Click <b>OK</b> to save and close.</li><li>From the <b>File</b> menu, select <b>Exit</b>.</li><li>Select the <b>logicalhost.exe</b> file.</li><li>Enter the <b>timeout</b> value.</li><li>Use the <b>getClassName()</b> method.</li><li>Configure the <b>Inbound</b> File eWay.</li></ul>
Command line arguments and code samples	Fixed font. Variables are shown in <b><i>bold italic</i></b> .	<code>bootstrap -p <b><i>password</i></b></code>
Hypertext links	<b>Blue</b> text	<a href="http://www.seebeyond.com">http://www.seebeyond.com</a>

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## 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>

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## 1.5 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 Seagull Screen Access eWay

### What's in This Chapter

- “Supported Operating Systems” on page 9
- “System Requirements” on page 9
- “Supported External Applications” on page 10
- “Installing the eWay Product Files” on page 10

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## 2.1 Supported Operating Systems

The Seagull Screen Access eWay is available on the following operating systems:

- Windows 2000, Windows XP, Windows Server 2003
- HP Tru64 V5.1A
- HP-UX 11.0, 11i (PA-RISC), and 11i v2.0 (11.23)
- IBM AIX 5.1L and 5.2
- Red Hat Enterprise Linux AS 2.1 (Intel x86)
- Red Hat Linux 8 (Intel x86)
- Sun Solaris 8 and 9

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## 2.2 System Requirements

The system requirements for the Seagull Screen Access eWay 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.*

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## 2.3 Supported External Applications

The Seagull Screen Access eWay supports the following external systems:

- Seagull Software Transidiom 4.1

For full information on the requirements for Seagull's Transidiom product, see the Transidiom documentation.

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## 2.4 Installing the eWay Product Files

The installation process includes:

- Installing the ICAN Repository.
- Uploading products to the Repository (including the Seagull Screen Access eWay 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 Seagull Screen Access eWay 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:
  - ♦ **ScreenBasedIntegratiioneWay.sar** (to install the Seagull Screen Access eWay eWay)
  - ♦ **FileeWay.sar** (to install the File eWay, used in the sample Projects)
  - ♦ **ScreenBasedIntegratiioneWayDocs.sar** (to install the Seagull Screen Access eWay eWay documentation)

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

To install the Seagull Screen Access eWay eWay Samples and Javadocs

- 1 From the Documentation tab of the Enterprise Manager, click **Seagull Screen Access eWay** to view the list of files available for this product.
- 2 Click **Download Sample** to open the **ScreenBasedIntegratiioneWaySample.zip** file.
- 3 Use WinZip to extract the sample files to the desired location.
- 4 Click **Download Javadocs** to open the **ScreenBasedIntegratiioneWayJavadoc.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 5** for instructions on importing the sample project into your repository via the Enterprise Designer.

# Configuring the Seagull Screen Access eWay

### What's in This Chapter

- [“Configuration Overview” on page 12](#)
- [“Configuring the eWay” on page 12](#)
- [“Transidiom Files Used by the eWay” on page 13](#)
- [“Deploying the Files to the Logical Host” on page 13](#)

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## 3.1 Configuration Overview

If you have worked with other eWays in the ICAN Suite, you will quickly find that the configuration of the Seagull Screen Access eWay is not like other eWays. This eWay does not have any properties to configure in the Connectivity Map or the Environment. This configuration information for this eWay is contained in the configuration files that are generated by Transidiom's Connector Builder wizard.

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## 3.2 Configuring the eWay

To configure the Seagull Screen Access eWay, you must use the Transidiom Connector Builder wizard to create the configuration files used to manage the connection with your legacy system. Then you must deploy these files to your Logical Host so they can be used by the eWay at run time.

### 3.2.1 Transidiom Files Used by the eWay

The Seagull Screen Access eWay uses the following files generated by the Transidiom Connector Builder wizard:

**Table 2** Screen-based connector files

File Name	Notes
<b>ServerControlledXXXXConnector.cfg</b>	Depends on which gateway is being used. For example, <b>ServerControlled3270Connector.cfg</b> is used to connect to a 3270 system.
<b>.sfmd files</b>	These files are unique for each screen-based connector generated by the Transidiom wizard. These files contain the business logic to navigate through the fields in the legacy system.
<b>core.cfg</b> <b>management.cfg</b> <b>thread-pool.cfg</b> <b>ServerInstallationSettings.cfg</b>	These files exist for every screen-based connector; their names are constant.

### 3.2.2 Deploying the Files to the Logical Host

Each of the files listed in the previous table must be copied to the appropriate directories in your Logical Host. Note that these directories are not present in the initial installation of the Logical Host files; these directories are created after you run the bootstrap for the logical host the first time. You will also have to manually create some of the directories required for the configuration files.

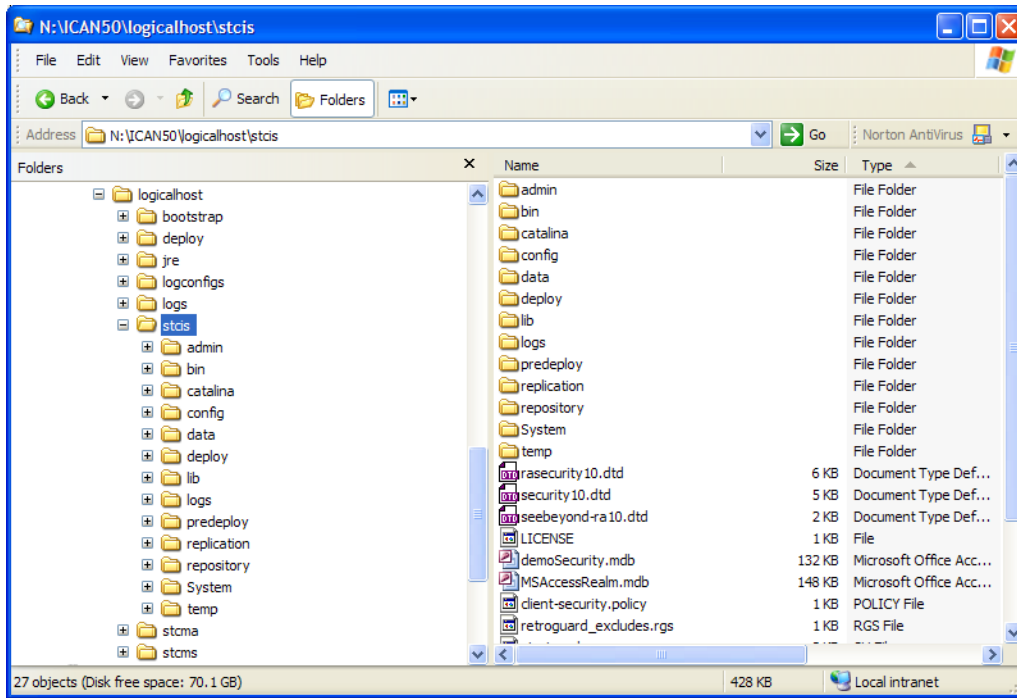
**Note:** *The following steps show how to deploy the Transidiom screen-based connector files to a Windows Logical Host. These steps may vary slightly if your Logical Host is on a UNIX system.*

#### To deploy the files to the Logical Host

- 1 In Windows explorer, navigate to the root directory of your Logical Host; for example, **C:\ICAN50\logicalhost**.
- 2 Navigate to the **stcis** directory; for example, **C:\ICAN50\logicalhost\stcis**. This directory contains the files used by the SeeBeyond Integration Server at run time.

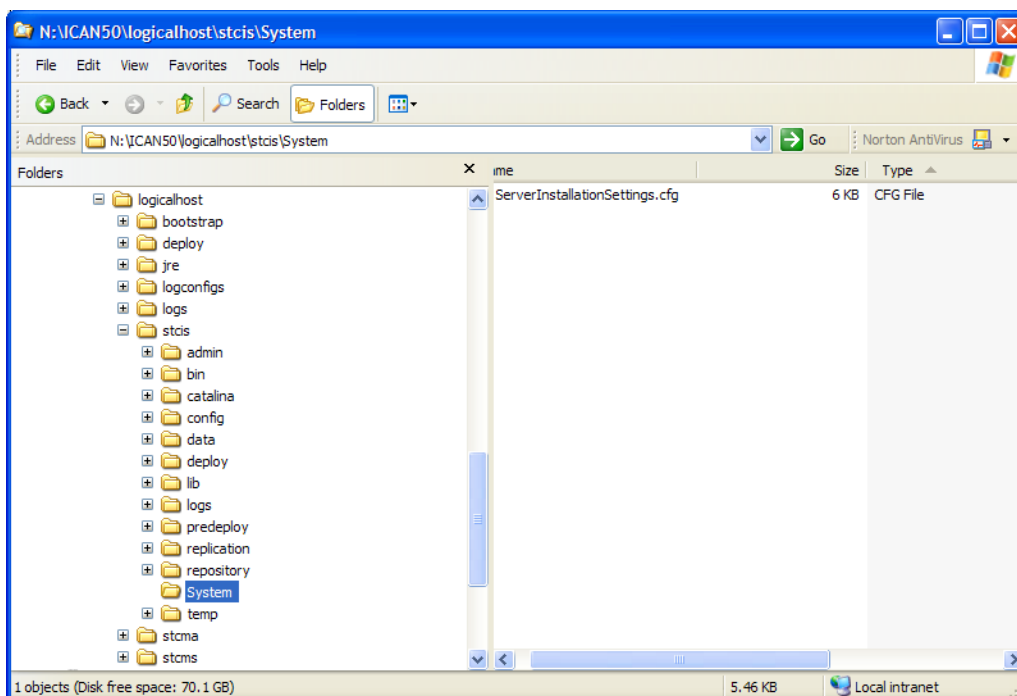
**Important:** *You must run the bootstrap process at least once before you can copy the files to the Logical Host. Otherwise, the SeeBeyond Integration Server directory structure will not have been created yet. See the **eGate Integrator User's Guide** for instructions on running the bootstrap process.*

Figure 2 stcis directory



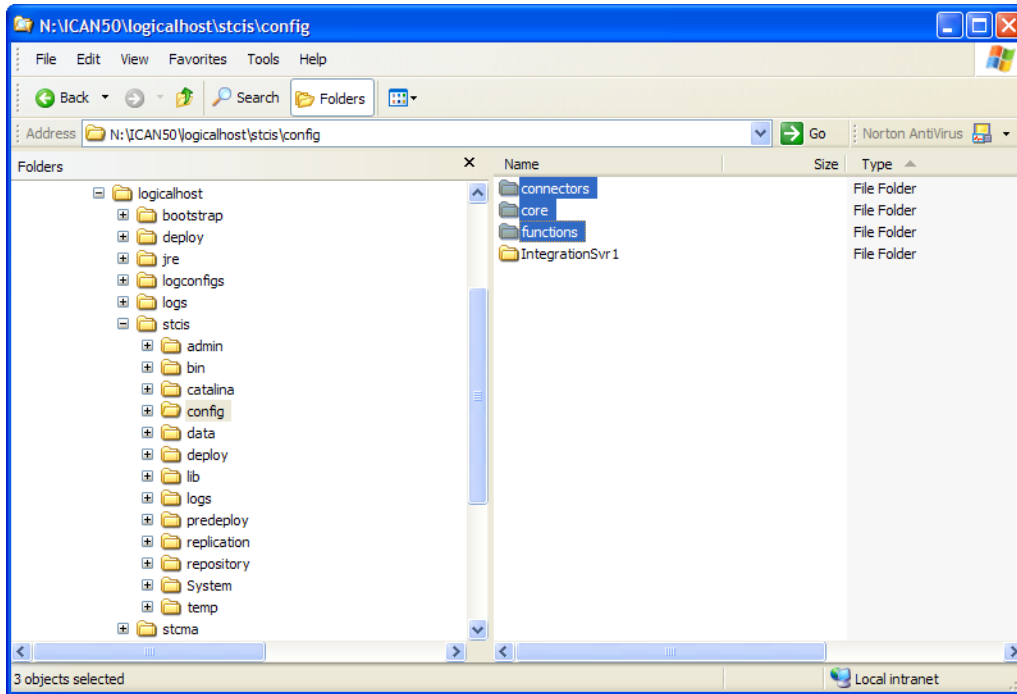
- 3 In the stcis directory, create a new directory called **System**.
- 4 Copy your **ServerInstallationSettings.cfg** file into the newly created **System** directory.

Figure 3 ServerInstallationSettings.cfg



- 5 Navigate to the **config** directory for your Logical Host; for example, **C:\ICAN50\logicalhost\stcis\config**.
- 6 In the **config** directory, create the following three directories:
  - ◆ **connectors**
  - ◆ **core**
  - ◆ **functions**

**Figure 4** config directory



- 7 Copy the following files to the appropriate directories:

**Table 3** File locations

File Name	Directory
<b>ServerControlledXXXXConnector.cfg</b>	<b>connectors</b>
<b>core.cfg</b> <b>management.cfg</b> <b>thread-pool.cfg</b>	<b>core</b>
<b>*.sfmd</b>	<b>functions</b>

# Using the Seagull Screen Access eWay OTD Wizard

## What's in This Chapter

- “OTD Wizard Overview” on page 16
- “Creating an OTD” on page 17

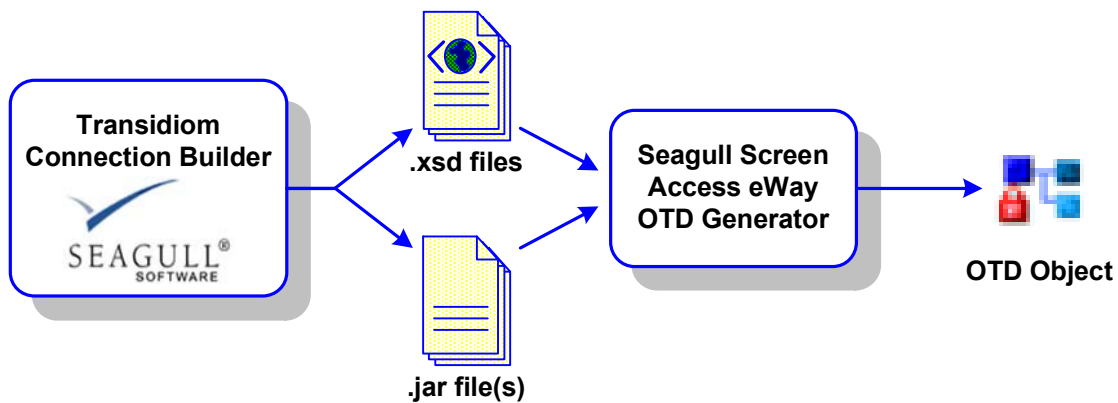
## 4.1 OTD Wizard Overview

The Seagull Screen Access eWay OTD Wizard creates Object Type Definitions (OTDs) based on the **.xsd** and **.jar** files output by the Transidiom connection builder. The result is an OTD that is tailored to the business rules required by your legacy system.

### Files required by the OTD Wizard

For each activity in the business rule, the Transidiom connection builder creates a pair of XML Schema Definition (**.xsd**) files: a request and a response. The request **.xsd** file is used in the OTD wizard as the input message. The reply **.xsd** file is used as the output message. The wizard also uses the **.jar** file(s) generated by the Transidiom connection builder.

**Figure 5** Seagull Screen Access eWay OTD Wizard





## 4.2 Creating an OTD

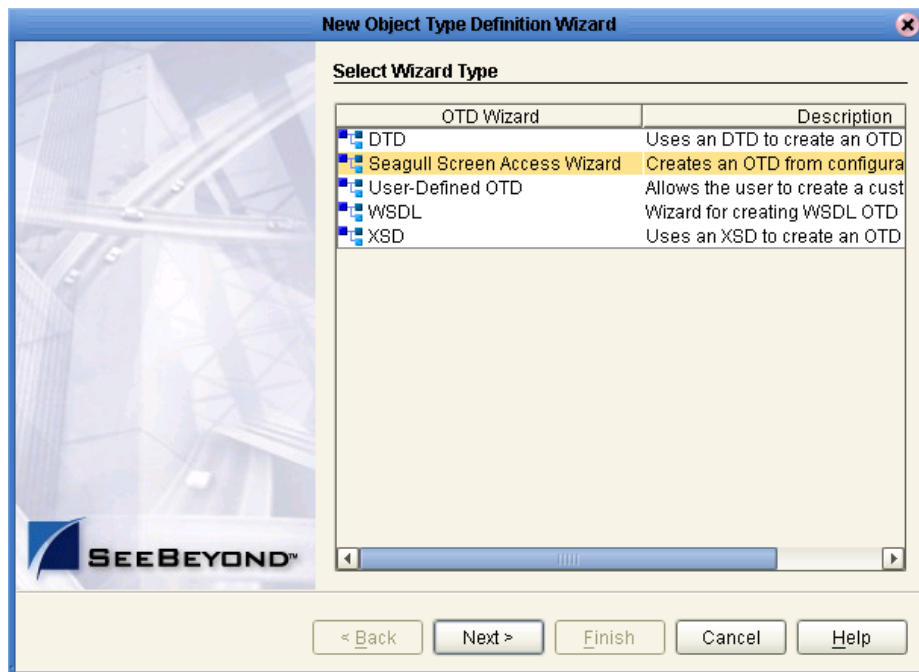
Use the Seagull Screen Access eWay OTD Wizard to create the Object Type Definition files you will use in your ICAN Project. These files contain the data structure corresponding to your Transidiom connector business logic and ultimately to your legacy system.

To create an OTD using the Seagull Screen Access eWay OTD Wizard

- 1 In the Enterprise Designer Project Explorer, right-click your Project, click **New** and then click **Object Type Definition**.

The Object Type Definition Wizard appears.

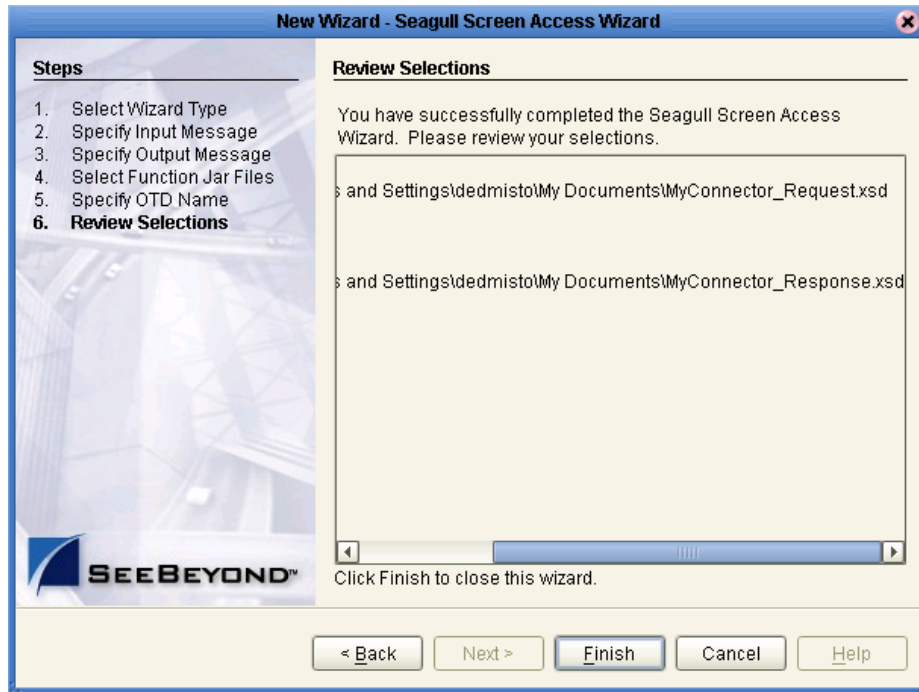
**Figure 6** Select Wizard Type



- 2 Click **Seagull Screen Access Wizard**, and then click **Next**.
- 3 Navigate to the location where your **.xsd** files are stored, select the appropriate Request **.xsd** file, and then click **Next**.  
The **Specify Output Message** step appears.
- 4 Similarly select the appropriate Response **.xsd** file, and then click **Next**.  
The **Select Function Jar Files** step appears.
- 5 Click **Add** to add the first **.jar** file.
- 6 Navigate to the location where your **.jar** files are stored, select the appropriate **.jar** file, and then click **Open**.
- 7 Click **Next** to continue to the next step in the wizard.

- 8 Type the **Name** for the OTD and then click **Next**.  
The **Review Selections** step appears.

**Figure 7** Review selections



- 9 Review your selections for the OTD and click **Finish** to generate the OTD.  
The new OTD appears in the OTD Editor. Take this opportunity to use the OTD Tester to test the new OTD against your sample XML input data. See the *eGate Integrator User's Guide* for information on using the OTD Tester.

# Working with the Sample Projects

## What's in This Chapter

- “Working with the Seagull Screen Access eWay Samples” on page 19
- “Using the “Seagull Screen Access 3270” Sample” on page 20
- “Using the “Seagull Screen Access 5250” Sample” on page 22

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## 5.1 Working with the Seagull Screen Access eWay Samples

The Seagull Screen Access eWay includes two samples. These samples demonstrate the request/response nature of the Seagull Screen Access eWay—sending requests to the legacy systems and receiving return data or error messages in response.

These samples are provided for demonstration purposes. Because of the unique nature of your Transidiom configuration and your legacy systems, you will not be able to run these samples as shown.

Both of the sample scenarios illustrate the process of preparing a message and using the Seagull Screen Access eWay **execute** method to invoke the request/response process—sending the request to the legacy system and waiting for the response message or error.

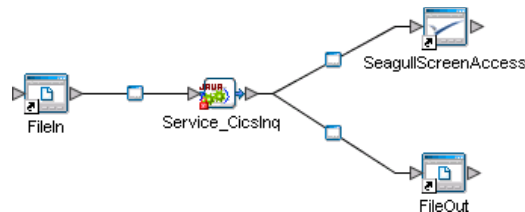
The first sample demonstrates the use of a 3270 terminal to exchange data with a z/OS system; the second sample uses a 5250 terminal to communicate with an AS/400 system.

**Important:** *These samples were created with ICAN version 5.0.4 and can only be imported with ICAN 5.0.4 or greater.*

## 5.2 Using the “Seagull Screen Access 3270” Sample

The *Seagull Screen Access 3270* sample demonstrates the process of preparing a simple message and using the **execute** method to invoke the request/response process.

**Figure 8** The Seagull 3270 Sample



The sample uses a File eWay as a trigger. Then the **Collab\_CicsInq** Java Collaboration prepares the outbound message. The **execute** method invokes the request/response process by sending the request to an external CICS application. The Collaboration then tests the response. If the status of the response shows that the transaction was successful and that the response contains output data, then the results are compiled into a response message. These results are then written to a file by the outbound File eWay.

**Important:** This sample was created with ICAN version 5.0.4 and can only be imported with ICAN 5.0.4 or greater.

### To import the Seagull Screen Access 3270 Sample

- 1 From the **Documentation** page of your Enterprise Manager, click the link for the **Seagull Screen Access eWay**.

The Seagull Screen Access eWay documentation page appears.

- 2 Click **Download Sample**.
- 3 When you are prompted to open or save the file, click **Open**.

The sample .zip file opens in WinZip.

- 4 Use WinZip to extract the **Seagull\_Screen\_Access\_eWay\_Sample.zip** files to a location on your local file system, such as **C:\ICAN\_Samples\Seagull**. Make a note of where you extracted the files.

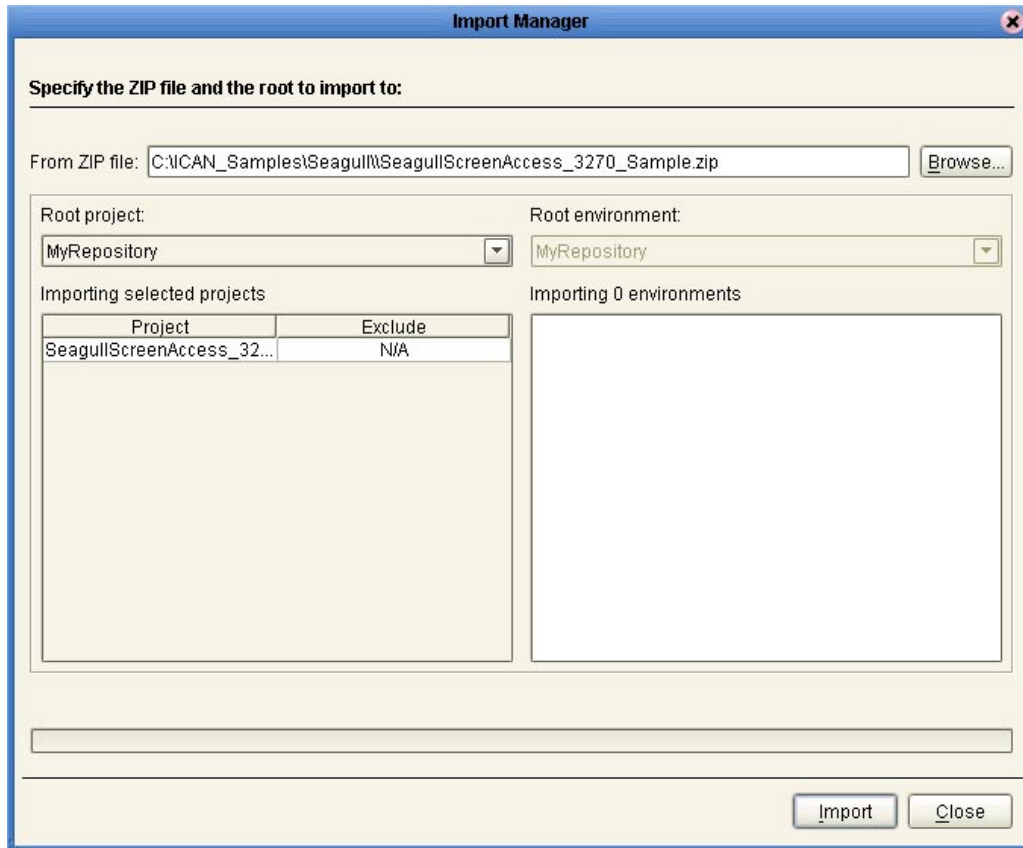
### To import the sample in the Enterprise Designer

- 1 In the Enterprise Designer, right-click your Repository and click **Import**.
- 2 Click **Yes** to save any changes to your Repository.

The Import Manager appears.

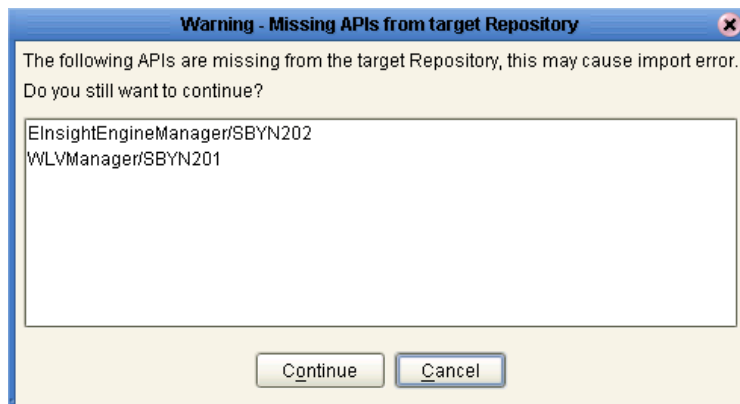
- 3 Click **Browse** and navigate to the location where you downloaded the sample files in step 4 of the previous procedure. Select the **Seagull\_Screen\_Access\_eWay\_Sample.zip** and click **Open**.

**Figure 9** Import Manager



- 4 In the Import Manager, click **Import**.
- 5 If you do not have eInsight installed, a warning will appear. This warning is not serious for this sample. Click **Continue**.

**Figure 10** Missing API Warning



- 6 An import status message appears when the import completes successfully. Click **OK** to continue.
- 7 Click **Close** to close the Import Manager and refresh the repository.

- 8 The **SeagullScreenAccess\_3270\_Sample** Project appears in the Enterprise Explorer pane of the Enterprise Designer.

#### After importing the sample

After importing the 3270 sample, you should open the Java Collaboration (**Collab\_CicsInq**) and view the business rules to see how the sample Collaboration sends the request to the legacy CICS system and how it processes the response.

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### 5.3 Using the “Seagull Screen Access 3270 BPEL” Sample

The 3270 BPEL sample is very similar 3270 sample, except that it uses an eInsight Business Process rather than a Java Collaboration. You can import this sample the same way you imported the 3270 sample. After importing the sample, open the Business Process to view the logic.

**Note:** *To import the 3270 BPEL sample, you must have eInsight installed in your ICAN Repository.*

---

### 5.4 Using the “Seagull Screen Access 5250” Sample

The 5250 sample is very similar to the other samples. You can import this sample the same way you imported the previous samples. After importing the sample, open the Java Collaboration (**Collab\_NavigateWhy**) to view the business rules for this Collaboration. Notice how the Collaboration uses the **execute** method to send the request to the legacy system and how it processes the response.

**Note:** *For more information on the **execute** method, download and view the Javadoc for the Seagull Screen Access eWay from the Documentation page of the Enterprise Manager.*

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