SUN SEEBEYOND

# eWAY™ FILE ADAPTER USER'S GUIDE

**Release 5.1.3**

**Sun** microsystems

# Contents

Chapter 4

# Using the File eWay in a Project 26

# Introducing the File eWay

**What's in This Chapter**

## 1.1 About the File eWay

The File eWay Intelligent Adapter is a file-based eWay provided with the Sun Java™ Composite Application Platform Suite to support sample Projects and to test your Sun Java™ Composite Application Platform Suite configuration. For a more feature-rich solution to processing flat file records, we recommend that you use the Batch eWay Intelligent Adapter. The Batch eWay provides a number of pre- and post-processing features that the File eWay does not offer, including system rename, copy, and delete operations that you can configure before and after you run a Collaboration, as well as other features such as regular expression matching for filenames.

The File eWay exchanges data between an external file system and the Sun Java™ Composite Application Platform Suite. You can use this eWay for:

- Reading information from an external file to the Sun Java™ Composite Application Platform Suite.

- Writing information from the Sun Java™ Composite Application Platform Suite to an external file.

### 1.1.1 eWay Operation

The File eWay is provided as part of the Sun Java™ Composite Application Platform Suite and operates as follows:

- As an inbound eWay, the File eWay polls an input directory for files based on a file name matching a specified regular expression. When the eWay detects a matching file, it opens the file and publishes the data to a Collaboration or Business Process Service.

- As an outbound eWay, the eWay writes processed data to an output file.

## 1.1.2 Setting Properties

You can set configuration properties for the eWay, including names and locations of source and destination files, in the eWay Properties dialog box, which is part of the eGate™ Enterprise Designer. See **Chapter 3** for more information about using the eWay Properties dialog box.

For a description of a complete end-to-end scenario using the File eWay, inbound and outbound, see the *Sun SeeBeyond eGate™ Integrator Tutorial*.

## 1.2 What's New in This Release

The Sun SeeBeyond eWay File Adapter includes the following changes and new features:

**New for Version 5.1.3**

This is a maintenance release. No new features.

**New for Version 5.1.2**

- This is a maintenance release. No new features.

**New for Version 5.1.1**

- Supports automatic deployment of EAR files to WebLogic Application Server (version 9.1).

**New for Version 5.1.0**

- Version Control: An enhanced version control system allows you to effectively manage changes to the eWay components.

- Multiple Drag-and-Drop Component Mapping from the Deployment Editor: The Deployment Editor now allows you to select multiple components from the Editor's component pane, and drop them into your Environment component.

- Support for Runtime LDAP Configuration: eWay configuration properties now support LDAP URL values.

- MDB Pool Size Support: Provides greater flow control (throttling) by specifying the maximum and minimum MDB pool size.

- Connectivity Map Generator: Generates and links your Project's Connectivity Map components using a Collaboration or Business Process.

Many of these features are documented further in the *Sun SeeBeyond eGate™ Integrator User's Guide* or the *Sun SeeBeyond eGate™ Integrator System Administrator Guide*.

## 1.3 About This Document

This guide explains how to install, configure, and operate the Sun Java™ Composite Application Platform Suite File eWay Intelligent Adapter, referred to as the File eWay throughout this guide.

### 1.3.1 What's in this Document

This document includes the following chapters:

- **Chapter 1 "Introducing the File eWay"**: Provides an overview description of the product as well as high-level information about this document.

- **Chapter 2 "Installing the File eWay"**: Describes the system requirements and provides instructions for installing the File eWay.

- **Chapter 3 "Configuring the File eWay"**: Provides instructions for configuring the eWay to communicate with external file system.

- **Chapter 4 "Using the File eWay in a Project"**: Explains how to use the File eWay within a Project that uses eInsight Business Processes or File Java Collaboration Definitions.

### 1.3.2 File eWay Javadoc

The File eWay Javadoc defines the available Java methods provided with the File eWay. The Javadoc is uploaded with the eWay's documentation file, **FileeWayDocs.sar**, and is downloaded from the Documentation tab of the Sun Java™ Composite Application Platform Suite. To access the full Javadoc, extract the Javadoc to an easily accessible folder and double-click **index.html**.

### 1.3.3 Scope

This document describes the process of installing, configuring, and running the File eWay. For information on the File eWay's Java methods, download and view the File eWay Javadoc.

### 1.3.4 Intended Audience

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

### 1.3.5 Text Conventions

The following conventions are observed throughout this document.

**Table 1**   Text Conventions

| Text Convention | Used For | Examples |
|---|---|---|
| **Bold** | Names of buttons, files, icons, parameters, variables, methods, menus, and objects | ▪ Click **OK**.<br>▪ On the **File** menu, click **Exit**.<br>▪ Select the **eGate.sar** file. |
| Monospaced | Command line arguments, code samples; variables are shown in **bold italic** | `java -jar` **`filename`**`.jar` |
| **Blue bold** | Hypertext links within document | See **Text Conventions** on page 7 |
| Blue underlined | Hypertext links for Web addresses (URLs) or email addresses | http://www.sun.com |

## 1.4   Sun Microsystems, Inc. Web Site

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

http://www.sun.com

## 1.5   Documentation Feedback

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

CAPS_docsfeedback@sun.com

# Installing the File eWay

This chapter contains installation information for the File eWay.

**What's in This Chapter**

- **File eWay System Requirements** on page 9
- **Installing the File eWay** on page 9
- **ICAN 5.0 Project Migration Procedures** on page 13
- **Deploying an EAR File** on page 15

## 2.1 File eWay System Requirements

The File eWay Readme contains the latest information on:

- Supported Operating Systems
- System Requirements
- External System Requirements
- The File eWay Readme is uploaded with the eWay's documentation file (FileeWayDocs.sar) and can be accessed from the Documentation tab of the Sun Java™ Integrator Suite Installer. Refer to the File eWay Readme for the latest requirements before installing the File eWay.

## 2.2 Installing the File eWay

The Sun Java™ Composite Application Platform Suite Installer, a web-based application, is used to select and upload eWays and add-on files during the installation process. The following section describes how to install the components required for this eWay.

**Note:** *When the Repository is running on a UNIX operating system, the eWays are loaded from the Enterprise Manager running on a Windows platform connected to the Repository server using Internet Explorer.*

## 2.2.1 Installing the eWay on a JavaCAPS Supported System

Follow the directions for installing the Sun Java™ Composite Application Platform Suite in the *Sun Java™ Composite Application Platform Suite Installation Guide. After you have installed eGate or eInsight, do the following:*

1 From the Sun Java™ Composite Application Platform Suite Installer's **Select Sun Java™ Composite Application Platform Suite Products to Install** table (Administration tab), expand the **eWay** option.

2 Select the products for your Sun Java™ Composite Application Platform Suite and include the following:

  ◆ **FileeWay**

  To upload the File eWay User's Guide, Help file, Javadoc, and Readme, select the following:

  ◆ **FileeWayDocs**

3 Once you have selected all of your products, click **Next** in the top-right or bottom-right corner of the **Select Sun Java™ Composite Application Platform Suite Products to Install** box.

4 From the **Selecting Files to Install** box, locate and select your first product's SAR file. Once you have selected the SAR file, click **Next**. Your next selected product appears. Follow this procedure for each of your selected products. The **Installation Status** window appears and installation begins after the last SAR file has been selected.

5 Once your product's installation is finished, continue installing the Sun Java™ Composite Application Platform Suite as instructed in the *Sun Java™ Composite Application Platform Suite Installation Guide.*

### Adding the eWay to an Existing Suite Installation

If you are adding the eWay to an existing Sun Java™ Composite Application Platform Suite installation, do the following:

1 Complete steps 1 through 4 above.

2 Once your product's installation is finished, open the Enterprise Designer and select **Update Center** from the Tools menu. The **Update Center Wizard** appears.

3 For Step 1 of the wizard, simply click **Next**.

4 For Step 2 of the wizard, click the **Add All** button to move all installable files to the **Include in Install** field, then click **Next**.

5 For Step 3 of the wizard, wait for the modules to download, then click **Next**.

6 The wizard's Step 4 window displays the installed modules. Review the installed modules and click **Finish.**

7 When prompted, restart the IDE (Integrated Development Environment) to complete the installation.

## 2.2.2 Installing eWay Enterprise Manager plug-ins

The **Sun SeeBeyond Enterprise Manager** is a Web-based interface that allows you to monitor and manage your Java Integration Suite applications. The Enterprise Manager requires an eWay specific "plug-in" for each of your installed eWays. These plug-ins enable the Enterprise Manager to target specific alert codes for each eWay type, as well as to start and stop the inbound eWays.

The *Sun Java™ Composite Application Platform Suite Installation Guide* describes how to install the Sun SeeBeyond Enterprise Manager. The *Sun SeeBeyond eGate™ Integrator System Administration Guide* describes how to monitor servers, Services, logs, and alerts using the Sun SeeBeyond Enterprise Manager and the command-line client.

The **eWay Enterprise Manager plug-ins** are available from the **List of Components to Download** under the Sun Java™ Composite Application Platform Suite Installer's **DOWNLOADS** tab.

There are two ways to add the eWay Enterprise Manager plug-ins:

1  From the Enterprise Manager:

   A  From the **Enterprise Manager**'s Explorer toolbar, click the **Configuration** icon.

   B  Click the **Web Applications Manager** tab, go to the **Auto-Install from Repository** tab, and connect to your Repository.

   C  Select the application plug-ins you require, and click **Install**. The application plug-ins are installed and deployed.

2  From the **Sun Java™ Composite Application Platform Suite Installer:**

   A  From the **Sun Java™ Composite Application Platform Suite Installer's Download tab**, select the Plug-Ins you require and save them to a temporary directory.

   B  Log onto the **Sun SeeBeyond Enterprise Manager**. From the **Enterprise Manager**'s Explorer toolbar, click the **Configuration** icon.

   C  Click the **Web Applications Manager** tab and the **Manage Applications** tab.

   D  Browse for and select the EMR file for the application plug-in that you downloaded, and click **Deploy**. The plug-in is installed and deployed.

### File eWay Alert Codes

You can view and delete alerts using the Enterprise Manager. An alert is triggered when a specified condition occurs in a Project component. The purpose of the alert is to warn the administrator or user that a condition has occurred.

**To View the eWay Alert Codes**

1  Add the eWay Enterprise Manager plug-in for this eWay.

2  From the Enterprise Manager's **Explorer** toolbar, click the **Configuration** icon.

3  Click the **Web Applications Manager** tab and go to the **Manage Alert Codes** tab. Your installed alert codes are displayed under the **Results** section. If your eWay alert codes are not available displayed under **Results**, do the following

A   From the **Install New Alert Codes** section, browse to and select the eWay alert properties file for the application plug-in that you added. The alert properties files are located in the **alertcodes** folder of your Sun Java Composite Application Platform Suite installation directory.

B   Click **Deploy**. The available alert codes for your application are displayed under **Results**. A listing of available this eWay's alert codes is displayed in Table 2.

**Table 2**   File eWay Alert Codes

| Alert Code | Description | User Action |
|---|---|---|
| FILE-ASCANTCREATEINPUTDIR000004 | Unable to create input directory {0} | Make sure that the user has permissions to create the directory. |
| FILE-ASINPUTDIRNONEXISTENT000002 | Input directory {0} does not exist. Creating the directory. This is a warning. | Verify that the input directory is named correctly. The directory may not have the expected name. Check for spelling mistakes. |
| FILE-ASINPUTDIRNOTDIR000003 | Input directory {0} is not a directory | The directory name may be an existing filename. Verify that the directory name is not the same as an existing file name. |
| FILE-ASRENAMEFAILED000001 | Failed attempting to rename input file {0} | ▪ Verify that the file permissions for your input file are not read-only.<br>▪ If this occurs when renaming a file to text the eWay, make sure that a file with this name does not already exist. For example, if you are renaming the input1.txt file to input1.txt.~in, and an ~in file already exists, the rename will fail. |
| FILE-CANTWRITEOUTPUTDIR000005 | Error writing to output directory {0} | ▪ Verify that the output directory exists.<br>▪ Verify that the output directory has write permissions.<br>▪ Make sure that there is enough disk space to write to the disk. |
| FILE-CANTWRITEOUTPUTFILE000006 | Error writing to output file {0} | ▪ Verify that the output directory exists.<br>▪ Verify that the output directory has write permissions.<br>▪ Make sure that there is enough disk space to write to the disk. |

An alert code is a warning that an error has occurred. It is not a diagnostic. The user actions noted above are possible corrective measures you may take. Refer to your log files for more information. For information on Managing and Monitoring alert codes and logs, see the *Sun SeeBeyond eGate Integrator System Administration Guide.*

### 2.2.3 After Installation

Once the eWay is installed and configured it must then be incorporated into a Project before it can perform its intended functions. See the *eGate Integrator User's Guide* for more information on incorporating the eWay into an eGate Project.

## 2.3 ICAN 5.0 Project Migration Procedures

This section describes how to transfer your current ICAN 5.0 Projects to Sun Java Composite Application Platform Suite, version 5.1.3. Only Projects developed on ICAN version 5.0.2 and above can be migrated successfully to the Sun Java Composite Application Platform Suite. To migrate your ICAN 5.0 Projects, do the following:

**Export the Project**

1   Before you export your Projects, save your current ICAN 5.0 Projects to your Repository.

2   From the Project Explorer, right-click your Project and select **Export** from the shortcut menu. The Export Manager appears.

3   Select the Project that you want to export in the left pane of the Export Manager and move it to the Selected Projects field by clicking the **Add to Select Items** (arrow) button, or click **All** to include all of your Projects.

4   In the same manner, select the Environment that you want to export in the left pane of the Export Manager and move it to the Selected Environments field by clicking the **Add to Select Items** (arrow) button, or click **All** to include all of your Environments.

5   Browse to select a destination for your Project ZIP file and enter a name for your Project in the **ZIP file** field.

6   Click **Export** to create the Project ZIP file in the selected destination.

**Install Sun Java Composite Application Platform Suite**

7   Install the Sun Java Composite Application Platform Suite, including all eWays, libraries, and other components used by your ICAN 5.0 Projects.

8   Start the Sun SeeBeyond Enterprise Designer.

**Import the Project**

9   From the Enterprise Designer's Project Explorer tree, right-click the Repository and select **Import Project** from the shortcut menu. The Import Manager appears.

10   Browse to and select your exported Project file.

11   Click **Import**. A warning message, **"Missing APIs from Target Repository**," may appear at this time. This occurs because various product APIs were installed on the ICAN 5.0 Repository when the Project was created, that are not installed on the Sun Java Composite Application Platform Suite Repository. These APIs may or may not apply to your Projects. You can ignore this message if you have already installed all

of the components that correspond to your Projects. Click **Continue** to resume the Project import.

12 Close the Import Manager after the Project is successfully imported.

**Deploy the Project**

13 A new Deployment Profile must be created for each of your imported Projects. When a Project is exported, the Project's components are automatically *"checked in"* to Version Control to write-protected each component. These protected components appear in the Explorer tree with a red padlock in the bottom-left corner of each icon. Before you can deploy the imported Project, the Project's components must first be *"checked out"* of Version Control from both the Project Explorer and the Environment Explorer. To *"check out"* all of the Project's components, do the following:

   A From the Project Explorer, right-click the Project and select **Version Control > Check Out** from the shortcut menu. The Version Control - Check Out dialog box appears.

   B Select **Recurse Project** to specify all components, and click **OK**.

   C Select the Environment Explorer tab, and from the Environment Explorer, right-click the Project's Environment and select **Version Control > Check Out** from the shortcut menu.

   D Select **Recurse Environment** to specify all components, and click **OK**.

14 If your imported Project includes File eWays, these must be reconfigured in your Environment prior to deploying the Project. To reconfigure your File eWays, do the following:

   A The Environment File External System properties can now accommodate both inbound and outbound eWays. If your previous Environment includes both inbound and outbound File External Systems, delete one of these (for example, the outbound File External System).

   B From the Environment Explorer tree, right-click your remaining File External System, and select **Properties** from the shortcut menu. The Properties Editor appears.

   C The Directory property has been relocated from the Connectivity Map Properties to the Environment Properties. Set the inbound and outbound Directory values, and click **OK**.

15 Deploy your Projects.

**Note:** *Only projects developed on ICAN 5.0.2 and above can be imported and migrated successfully into the Java Integration Suite.*

## 2.4    Deploying an EAR File

The Sun Java CAPS Enterprise Designer can be configured to automatically deploy an EAR file to the Sun Java System Application Server. To configure the Enterprise Designer for deployment, follow the directions for deploying applications to the Sun Java System Application Server, provided in the *Sun SeeBeyond eGate Integrator System Administration Guide*. Because automatic deployment is not supported directly from Enterprise Designer for the Weblogic Application Server, additional instructions are provided below.

### 2.4.1    WebLogic Application Servers

1   Build the EAR file, which is generated in the Enterprise Designer.

2   Use your WebLogic Admin console to deploy the EAR file.

Refer to your application server's documentation for requirements regarding working directories.

# Configuring the File eWay

This chapter explains how to set the properties for the File eWay.

**Chapter Topics**

## 3.1   Configuring the File eWay Properties

The File eWay includes a unique set of configuration parameters. After creating the eWays and the File External System in the Project's Environment, the property parameters can be modified for your specific system.

### 3.1.1   Selecting File as the External Application

To create a File eWay you must first create a File External Application in your Connectivity Map. File eWays are located between a File External Application and a Service. Services are containers for Java Collaborations, Business Processes, eTL processes, and so forth.

**To create a File External Application**

1   From the Connectivity Map toolbar, click the External Applications icon.

2   Select the **File External Application** from the menu (see Figure 1). The selected File External Application icon appears on the Connectivity Map toolbar.

**Figure 1**   External Applications Selection Menu
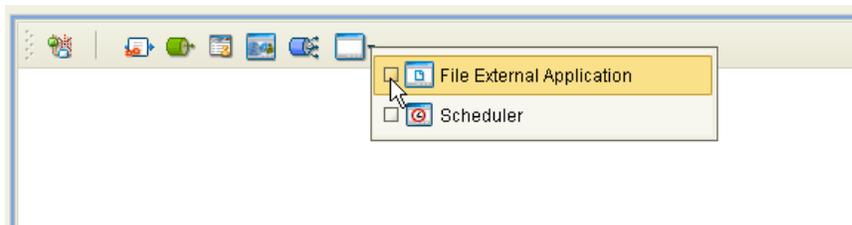


The new External System can now be dragged and dropped onto the Connectivity Map canvas and incorporated into a Project.

## 3.1.2 Accessing the eWay Properties

When you connect (bind) an External Application to a Service/Collaboration/Business Process, the Enterprise Designer automatically assigns the appropriate eWay to the link (see Figure 2). In the case of the File eWay, the direction of the data, to or from the service, determines whether the eWay is **inbound** or **outbound**, and the appropriate properties template is assigned to the eWay. Each eWay retains a properties template containing its default configuration properties that are accessible from the Connectivity Map and Environment Explorer.

**Figure 2** Connectivity Map - File eWay



## 3.1.3 Modifying the eWay Properties

The eWay properties can be modified after the eWays have been created in the Connectivity Map and the Project's Environment has been created. The File eWay properties are modified from two locations: the Connectivity Map and the Environment Explorer.
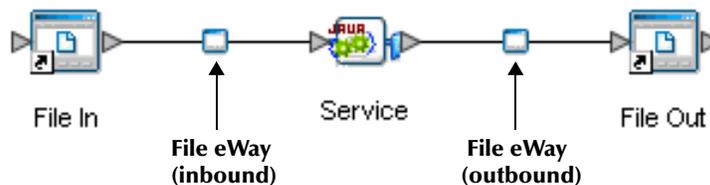
### Modifying the eWay Connectivity Map Properties

The Connectivity Map properties most commonly apply to a specific component eWay, and may vary from other eWays (of the same type) in the Project.

1   From the Connectivity Map, double click the eWay icon, located in the link between the associated External Application and the Service.

2   The eWay **Properties Editor** opens with the eWay's Connectivity Map properties (either **inbound** or **outbound**). Make any necessary modifications and click **OK** to save the settings.

### Modifying the eWay Environment Properties

These parameters are commonly global, applying to all eWays (of the same type) in the Project. The saved properties are shared by all eWays for the specified External System.

1   From the Environment Explorer tree, right-click the File External System. Select **Properties** from the shortcut menu. The **Properties Editor** opens with the eWay Environment properties.

2   Make any necessary modifications to the Environment properties, and click **OK** to save the settings.

3.1.4 **Using the Properties Editor**

You can modify your eWay properties using the eWay Properties Editor.

**Modifying the Default eWay Properties**

1 From the upper-left pane of the Properties Editor, select a subdirectory of the Properties tree. The parameters contained in that subdirectory are now displayed in the right pane of the Properties Editor. For example, clicking on the **Parameter Settings** subdirectory displays the editable parameters in the right pane, as shown in **Figure 3 on page 18**.

**Figure 3** Properties Editor - File eWay
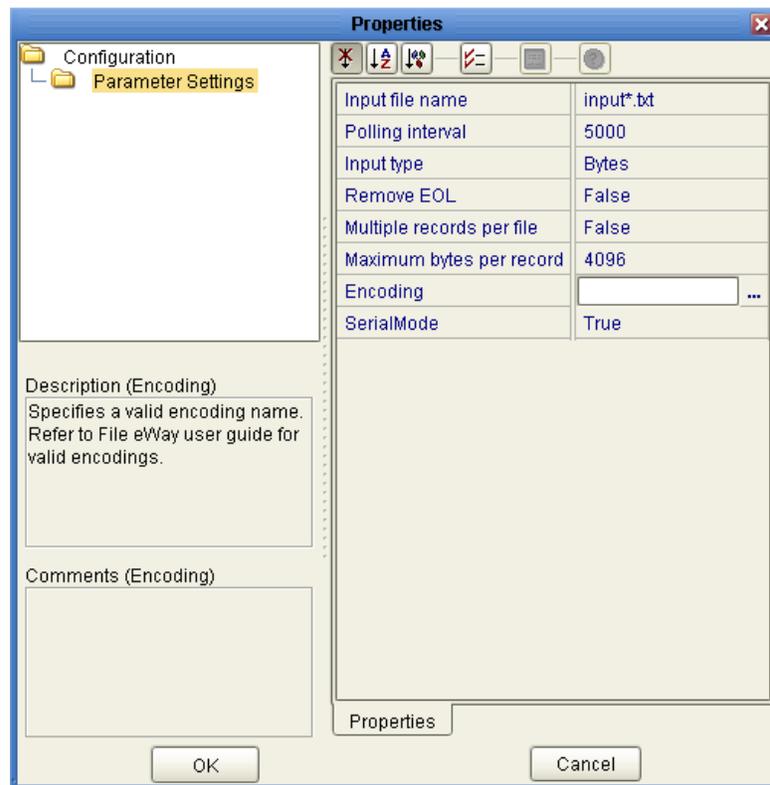


2 Click on any property field to make it editable. For example, click on the **Encoding** property to edit the properties settings. For properties that have a value of true/ false or multiple choice, the field reveals a submenu of property options.

Click on the ellipsis (. . .) in the properties field (displayed when you click on the field). A separate configuration dialog box appears. This is helpful for large values that cannot be fully displayed in the parameter's property field. Enter the property value in the dialog box and click **OK**. The value now appears in the property field.

3 A description of each parameter is displayed in the **Description** pane when that parameter is selected, providing an explanation of any required settings or options.

4 The **Comments** pane provides an area for recording notes and information about the currently selected parameter. This is saved automatically for future referral.

5 Click **OK** to close the Properties Editor and save the changes.

## 3.2   Inbound File eWay Connectivity Map Properties

The inbound File eWay configuration parameters, accessed from the Connectivity Map, are organized into the following sections:

- **Parameter Settings** on page 19

### 3.2.1  Parameter Settings

The **Parameter Settings** section of the inbound File eWay Connectivity Map properties contains the top level parameters displayed in Table 3.

**Table 3**   Inbound File eWay Connectivity Map Properties - Parameter Settings

| Name | Description | Required Value |
|---|---|---|
| **Input file name** | Specifies the file mask for input data files. | A file mask. The default is **input\*.txt**. You can provide only an extension with an asterisk (), for example, **\*.txt**, to allow all files with that extension. An input file's extension is renamed to **.~in** after it is picked up.<br><br>*Note:* If a file with the same name as the rename name exists, for example, **input1.txt.~in**, picking up the input file fails. You must ensure no files with the rename names exist before the files are processed by the inbound file poller. |
| **Polling interval** | The number of milliseconds the eWay waits between poll attempts of the input directory.<br><br>The polling interval and the MDB pool size can be "tuned" based on the expected volume and frequency of incoming messages. See **"Max Pool Size" on page 24** for more information. | An integer; the acceptable range is an integer from **2** to **99999**, inclusive, and the default is **5000** (5000 milliseconds or 5 seconds). It is not advised to enter a value less than 5 seconds.<br><br>*Caution:* There is no error message if you enter an incorrect value. |
| **Input type** | Specifies the type of input file, for example, bytes. | A file type. The default is **Bytes**, the only valid value. |
| **Remove EOL** | Specifies whether the eWay excludes the terminating end-of-line (EOL) characters from records (messages) sent to a subscriber. This property only applies if the **Multiple records per file** property is set to **True**. | **True** or **False**<br><br>- **True** enables the feature.<br>- **False** disables the feature.<br><br>The default is **False**. |

**Table 3**  Inbound File eWay Connectivity Map Properties - Parameter Settings (Continued)

| Name | Description | Required Value |
|---|---|---|
| **Multiple records per file** | Specifies whether multiple records (messages) are obtained per file. If this property is set to **True**, multiple records (messages) are generated per line, up to the number specified in the **Maximum bytes per record** property. Any data exceeding the maximum bytes per record size is sent in subsequent messages. | **True** or **False**.<br><br>▪ **True** enables the feature.<br>▪ **False** disables the feature.<br><br>The default is **False**. |
| **Maximum bytes per record** | Specifies the maximum number of bytes per record (message) sent to a subscriber. This property only applies if the **Multiple records per file** property is set to **True**. | An integer; the acceptable range is an integer from **2** to **99999**, inclusive, and the default is **4096**.<br><br>*Caution:* There is no error message if you enter an incorrect value. |
| **Encoding** | Specifies the valid encoding names. For more information on Java encoding, refer to the following site:<br>**http://java.sun.com/j2se/1.3/docs/api/java/lang/package-summary.html** | The encoding names. |
| **SerialMode** | Specifies whether messages will be handled in serial mode (one after the other) or concurrently. | **True** or **False**.<br><br>▪ **True**: indicates that messages are handled in serial mode.<br>▪ **False**: indicates that messages handled concurrently.<br><br>The configured default is **True.** |

## 3.3    Outbound File eWay Connectivity Map Properties

The inbound File eWay configuration parameters, accessed from the Connectivity Map, are organized into the following sections:

- **Parameter Settings** on page 21

### 3.3.1 Parameter Settings

The **Parameter Settings** section of the outbound File eWay Connectivity Map properties contains the top level parameters displayed in Table 4.

**Table 4**   Outbound File eWay Connectivity Map Properties - Parameter Settings

| Name | Description | Required Value |
|---|---|---|
| **Output file name** | Specifies the file mask for output data files. | An appropriate file name. The default is **output%d.dat**. The **%d** in the file name is a counter and increments for each new file.<br><br>Instead of **%d**, you can use any other printf style that takes an integer or long value. For example, you can specify **1%d** or **%012d**.<br><br>In cases where the **Multiple records per file** property is set to False:<br><br>- If no output file exists at the time of the first execution, a new output file is created for each record.<br><br>- If an output file already exists at the time of the first execution, messages are appended to it.<br><br>*Note:* For more information regarding the printf feature, see the appropriate C language documentation. |
| **Add EOL** | Specifies whether the system adds an end-of-line character to each record the eWay sends to the output file. | **True** or **False**.<br><br>- **True** indicates that the system will add an EOL to each record.<br>- **False** indicates otherwise.<br><br>The configured default is **False**. |

**Table 4** Outbound File eWay Connectivity Map Properties - Parameter Settings (Continued)

| Name | Description | Required Value |
|---|---|---|
| **Multiple records per file** | Specifies whether multiple records (messages) can be written to the output file. New messages are appended to the output file. | **True** or **False**.<br><br>▪ **True** indicates that the output file will contain multiple records (messages).<br>▪ **False** indicates that each output file contains a single record (message).<br><br>The configured default is **True**. |
| **Encoding** | Specifies the valid encoding names. For all valid encodings, please refer to the following site: **http://java.sun.com/j2se/1.3/ docs/api/java/lang/package- summary.html** | The encoding names. |

## 3.4   File eWay Environment Properties

The File eWay configuration parameters, accessed from the Environment Explorer, are organized into the following sections:

- **Inbound File eWay - Parameter Settings** on page 23
- **Inbound File eWay - MDB Settings** on page 24
- **Outbound File eWay - Parameter Settings** on page 25

### 3.4.1  Inbound File eWay - Parameter Settings

The **Inbound File eWay - Parameter Settings** section of the File eWay Environment properties contains the top level parameters displayed in Table 5.

**Table 5**  File eWay Environment Properties - Inbound File eWay - Parameter Settings

| Name | Description | Required Value |
|------|-------------|----------------|
| **Directory** | Specifies the folder or directory that the eWay polls for input files. | A folder or directory name. You must use the absolute path; specify paths using the (forward) / slash mark.<br><br>The configured default is **C:/temp**. |

## 3.4.2 Inbound File eWay - MDB Settings

The **Inbound File eWay - MDB Settings** section of the File eWay Environment properties contains the top level parameters displayed in Table 6.

**Table 6**   File eWay Environment Properties - Inbound File eWay - MDB Settings

| Name | Description | Required Value |
|---|---|---|
| **Max Pool Size** | Specifies the maximum number of Message Driven Beans instantiated at any one point for message handling.<br><br>The polling interval and the MDB pool size (Max Pool Size) can be "tuned" based on the expected volume and frequency of incoming messages.  A more frequent polling interval, due to a large number of new messages, will trigger the creation of new threads.  The number of threads that can be processed, however, is limited by the MDB pool size. When the maximum MDB pool limit is reached, incoming threads are blocked. Increasing the MDB pool size allows more resource adapter threads to send data to the Collaboration.  In most cases, the default MDB pool size of 1000 is sufficient. | An integer indicating the maximum MDB pool size.<br><br>The default configuration is **1000**. |

### 3.4.3 Outbound File eWay - Parameter Settings

The **Outbound File eWay - Parameter Settings** section of the File eWay Environment properties contains the top level parameters displayed in Table 7.

**Table 7**   File eWay Environment Properties - Outbound File eWay - Parameter Settings

| Name | Description | Required Value |
|---|---|---|
| **Directory** | Specifies the directory to which output files are written. | The absolute path and directory name. |

# Using the File eWay in a Project

This chapter provides an introduction to the File eWay components, and information on how these components are created and implemented in a Sun Java Composite Application Platform Suite Project.

**Chapter Topics**

- **File eWay Components** on page 26
- **Using the File eWay with eInsight** on page 27
- **Using the File eWay with Java-based Collaborations** on page 27

## 4.1 File eWay Components

The File eWay is used in most of the sample Projects provided with the Sun Java™ Composite Application Platform Suite and the eWay Intelligent Adapters. The File eWay includes the following components that are unique to this eWay:

- **File eWay Configuration Properties File**: The properties files for the File eWay defines how the eWay connects with external systems as well as how data (messages) are handled. These properties are configured using the Properties Editor. For more information about the Batch eWay properties files and the Properties Editor see **"Configuring the File eWay" on page 16**.

- **FileClient OTD**: The File OTD provides functionality for receiving or sending files and triggering a Business Process or Collaboration. Object Type Definitions (OTDs) map input and output message segments at the field level.

### 4.1.1 File OTD Operations

The following File eWay OTD attributes or operations are used in both BPEL and JCD Projects:

- **receive** (inbound File eWay)
- **write** (outbound File eWay)

The **write** (output) Business Process operation has an additional input function provided to receive and handle incoming error exception messages. For more information on this feature, see the *Sun SeeBeyond eInsight Business Process Manager User's Guide*.

## 4.2    Using the File eWay with eInsight

eGate components can be deployed as Activities in eInsight Business Processes. Once a component is associated with an Activity, eInsight invokes it using a Web Services interface. eGate components that can interface with eInsight in this way include the following:

- Object Type Definitions (OTDs)
- eWays
- Collaborations

Using the 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. Then, when eInsight runs the Business Process, it automatically invokes that component via its Web Services interface.

You can add File eWay objects to an eInsight Business Process during the system design phase. To make this association, select the desired **receive** or **write** operation from the Project Explorer under **Sun SeeBeyond > eWays > File > FileClient** and drag it into the eInsight Business Process canvas (GUI). Once you have associated the desired component with a Business Process, the eInsight engine can automatically invoke that component during run time, using a Business Process Execution Language (BPEL) interface.

See the *eInsight Business Process Manager User's Guide* for details.

## 4.3    Using the File eWay with Java-based Collaborations

Java-based Collaboration Definitions contain a set of Business Rules that define the processing and transport of data (messages) through the Sun Java™ Composite Application Platform Suite Projects.

You create Java Collaboration Definitions using the Collaboration Definition Wizard (Java) to assign the appropriate Object Type Definitions (OTDs) and Web Service operations to your Collaboration.

Once you have created the Collaboration Definition, you use the Collaboration Editor (Java) to create the business logic of the Collaboration, assigning input and output data relationships using the Collaboration Editor's Business Rules Designer.

The File eWay Intelligent Adapter OTD provides a number of Java Methods that allow you to add file (input/output) business logic to your Collaboration Business Rules. For more information on the Java methods provided with the File OTD, see the File eWay Javadoc (see **"File eWay Javadoc" on page 7**).

For more information on how to use the File eWay with Java-based Collaboration Definitions, see the *Sun SeeBeyond eGate™ Integrator User's Guide*.

# Index