

***SeeBeyond ICAN Suite***

# Lotus Notes/Domino eWay Intelligent Adapter User's Guide

*Release 5.0*



The information contained in this document is subject to change and is updated periodically to reflect changes to the applicable software. Although every effort has been made to ensure the accuracy of this document, SeeBeyond Technology Corporation (SeeBeyond) assumes no responsibility for any errors that may appear herein. The software described in this document is furnished under a License Agreement and may be used or copied only in accordance with the terms of such License Agreement. Printing, copying, or reproducing this document in any fashion is prohibited except in accordance with the License Agreement. The contents of this document are designated as being confidential and proprietary; are considered to be trade secrets of SeeBeyond; and may be used only in accordance with the License Agreement, as protected and enforceable by law. SeeBeyond assumes no responsibility for the use or reliability of its software on platforms that are not supported by SeeBeyond.

SeeBeyond, e\*Gate, e\*Way, and e\*Xchange are the registered trademarks of SeeBeyond Technology Corporation in the United States and/or select foreign countries. The SeeBeyond logo, SeeBeyond Integrated Composite Application Network Suite, eGate, eWay, eInsight, eVision, eXchange, eView, eIndex, eTL, ePortal, eBAM, and e\*Insight are trademarks of SeeBeyond Technology Corporation. The absence of a trademark from this list does not constitute a waiver of SeeBeyond Technology Corporation's intellectual property rights concerning that trademark. This document may contain references to other company, brand, and product names. These company, brand, and product names are used herein for identification purposes only and may be the trademarks of their respective owners.

© 2004 by SeeBeyond Technology Corporation. All Rights Reserved. This work is protected as an unpublished work under the copyright laws.

**This work is confidential and proprietary information of SeeBeyond and must be maintained in strict confidence.**

Version 20050608122946.

# Contents

---

## Chapter 1

<b>Introduction</b>	<b>6</b>
Lotus Notes/Domino eWay Overview	6
What's New in This Release	7
About This Document	7
Organization of Information	7
Lotus Notes/Domino Javadoc	7
Scope of the Document	7
Intended Audience	8
Document Conventions	8
SeeBeyond Web Site	8
SeeBeyond Documentation Feedback	8
Related Documents	9

---

## Chapter 2

<b>Installing the Lotus Notes/Domino eWay</b>	<b>10</b>
Supported Operating Systems	10
System Requirements	11
External System Requirements	11
Installing the Lotus Notes/Domino eWay	11
Installing the Notes/Domino eWay on an eGate Supported System	11
Adding the eWay to an Existing ICAN Suite Installation	12
After Installation	12
Java access to the Domino Objects	13
Adding JAR files to the eGate Integration Server	13

---

## Chapter 3

<b>Lotus Notes/Domino eWay Properties</b>	<b>14</b>
Configuring the Lotus Notes/Domino eWay Properties	14
Selecting Lotus Notes/Domino as the External Application	14
Modifying the Lotus Notes/Domino eWay Properties	15
Using the Properties Sheet	15

<b>Lotus Notes/Domino eWay Environment Properties</b>	<b>17</b>
<b>Connection Settings</b>	<b>17</b>
Database Type	17
Notes/Domino Database	17
Notes/Domino Server	17
Notes/Domino User	18
Number of Connection Retries	18
Password	18
Wait (in secs) Between Connection Attempts	18

---

## Chapter 4

<b>Implementing an Lotus Notes/Domino eWay Project</b>	<b>19</b>
<b>Lotus Notes/Domino eWay Components</b>	<b>19</b>
<b>Lotus Notes/Domino eWay Considerations</b>	<b>20</b>
Adding JAR files to the eGate Integration Server	20
<b>Importing a Sample Project</b>	<b>20</b>
<b>The NotesDomino_Sample Project Overview</b>	<b>21</b>
<b>Creating the Notes/Domino eWay Sample Project</b>	<b>21</b>
Creating a Project	21
<b>Creating the Connectivity Maps</b>	<b>22</b>
Selecting the External Applications	22
Populating the Connectivity Maps	23
<b>Creating OTDs from the DTD Files</b>	<b>24</b>
<b>Creating the Collaboration Definitions</b>	<b>24</b>
<b>Using the Collaboration Editor (Java)</b>	<b>26</b>
Creating the CreateDoc Collaboration Business Rules	27
Creating the DeleteDoc Collaboration Business Rules	32
Creating the RetrieveDoc Collaboration Business Rules	37
Creating the UpdateDoc Collaboration Business Rules	41
<b>Binding the eWay Components</b>	<b>41</b>
<b>Creating an Environment</b>	<b>44</b>
<b>Configuring the eWays</b>	<b>45</b>
Configuring the File eWay Properties	45
Configuring the Lotus Notes/Domino eWay Properties	47
<b>Creating and Activating the Deployment Profile</b>	<b>47</b>
<b>Adding JAR files to the eGate Integration Server</b>	<b>49</b>
Adding the Jar File to eGate	49
Adding the Jar File to the Logical Host	49
Enabling Java access to a Remote Domino Server	49
<b>Running the Project</b>	<b>50</b>
Running the sample	50
<b>Alerting and Logging</b>	<b>51</b>

---

## Chapter 5

### Java Methods for the

<b>Lotus Notes/Domino eWay</b>	<b>52</b>
The LotusNotesClient Class	52
Lotus Notes/Domino eWay Javadoc	52
<b>Index</b>	<b>53</b>
	53

# Introduction

Welcome to the Lotus Notes/Domino eWay Intelligent Adapter User's Guide. This document describes how to install, configure, and implement the Lotus Notes/Domino eWay Intelligent Adapter in a typical SeeBeyond® Integrated Composite Application Network Suite™ (ICAN) environment.

### What's in This Chapter

- [Lotus Notes/Domino eWay Overview](#) on page 6
- [What's New in This Release](#) on page 7
- [About This Document](#) on page 7

---

## 1.1 Lotus Notes/Domino eWay Overview

IBM's Lotus Notes/Domino integrated messaging and collaboration platform is designed to provide e-mail messaging, calendar (scheduling), and enterprise integration, using a company's existing technology resources.

SeeBeyond ICAN Suite, using the Lotus Notes/Domino eWay, enhances Lotus Notes/Domino by providing specialized application connectivity, robust data transformation, business logic execution, and management of intelligent message routing. The Lotus Notes/Domino eWay (referred to as the Notes/Domino eWay throughout this document) enables the ICAN Suite to access data from a Lotus Notes, database.

The eWay acts as an inbound or outbound eWay depending on its configuration. An inbound eWay transfers files into the eGate environment and queues messages. Similarly, an outbound eWay populates messages to a Lotus Notes/Domino database.

The Lotus Notes/Domino eWay supports

- Access of Remote or local databases.
- Sending e-mail messages.
- Direct access by View or UNID.
- Sequential access to documents according to View.
- Ability to create, update, or delete documents.
- Double-byte Character Sets (DBCS) are supported to enable Japanese character support.

---

## 1.2 What's New in This Release

The Lotus Notes/Domino eWay Intelligent Adapter for SeeBeyond's ICAN suite now includes added support for Japanese operating systems and Double-byte Character Sets (DBCS).

---

## 1.3 About This Document

This section provides a brief outline of this user's guide.

### 1.3.1 Organization of Information

This document provides information about installing, configuring, and using the Lotus Notes/Domino eWay Intelligent Adapter and includes the following chapters:

- **Chapter 1 "Introduction"** provides an overview of the Lotus Notes/Domino eWay.
- **Chapter 2 "Installing the Lotus Notes/Domino eWay"** describes how to install the Lotus Notes/Domino eWay and documentation, and lists the supported operating systems and system requirements.
- **Chapter 3 "Lotus Notes/Domino eWay Properties"** describes how to configure the Lotus Notes/Domino eWay to run in your environment.
- **Chapter 4 "Implementing an Lotus Notes/Domino eWay Project"** provides an introduction to the Lotus Notes/Domino eWay components and information on how these components are created and implemented in an eGate project.

### Lotus Notes/Domino Javadoc

The Lotus Notes/Domino eWay Javadoc documents the available Java methods provided with the Lotus Notes/Domino eWay. The Javadoc is uploaded with the eWay's documentation file, **LotusNoteseWayDocs.sar**, and downloaded from the Documentation tab of the Enterprise Manager. To access the full Javadoc, extract the Javadoc to an easily accessible folder, and double-click the **index.html** file.

### 1.3.2 Scope of the Document

This user's guide provides a description of the Lotus Notes/Domino eWay Intelligent Adapter. It includes directions for installing the eWay, configuring the eWay properties, and implementing the eWay's sample Projects. This document is also intended as a reference guide, listing available properties, functions, and considerations. For a reference of available Lotus Notes/Domino eWay Java methods, see the associated Javadoc.

### 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.

### 1.3.4 Document Conventions

The following conventions are observed throughout this document.

**Table 1** Document 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> .	bootstrap -p <b><i>password</i></b>
Hypertext links	<b>Blue</b> text	<a href="http://www.seebeyond.com">http://www.seebeyond.com</a>

---

## 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](mailto: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 Lotus Notes/Domino eWay

This chapter explains the procedures for installing the Lotus Notes/Domino eWay.

### What's in This Chapter

- [Supported Operating Systems](#) on page 10
- [System Requirements](#) on page 11
- [Installing the Notes/Domino eWay on an eGate Supported System](#) on page 11
- [Java access to the Domino Objects](#) on page 13
- [Adding JAR files to the eGate Integration Server](#) on page 13

---

## 2.1 Supported Operating Systems

The Notes/Domino eWay is available on the following operating system:

- Windows 2000 and Windows XP
- HP Tru64 5.1A
- HP/UX 11.0 and 11i (PA-RISC)
- IBM AIX 5.1L and 5.2
- Red Hat Linux 8 (Intel Version)
- Sun Solaris 8, and 9
- Japanese Windows 2000 and Windows XP
- Japanese HP/UX 11.0 and 11i (PA-RISC)
- Japanese IBM AIX 5.1L and 5.2
- Japanese Sun Solaris 8, and 9

---

## 2.2 System Requirements

To use the Notes/Domino eWay, you need the following:

- An eGate Logical Host
- A TCP/IP network connection
- The eWay requires one of two Lotus Notes/Domino Jar files:
  - ♦ **Notes.jar** must be copied to ICAN the for local Domino object access
  - ♦ **NSCO.jar** must be copied to ICAN the for remote Domino object access

For more information see [Adding JAR files to the eGate Integration Server](#) on page 49.

### Logical Host requirements

The eWay must be set up and administered using the Enterprise Designer. For complete information on the eGate Enterprise Designer system requirements, see the *ICAN Suite Installation Guide*.

### 2.2.1 External System Requirements

To enable the eWay to communicate properly with the Lotus Notes system, the following are required:

- Lotus Notes/Domino 5.0.8 and 6.5, with Lotus Notes Client installed on the same host as the eGate Participating Host.
- The special DLL used for password event handling must be placed in the Lotus Notes Client area.

---

## 2.3 Installing the Lotus Notes/Domino eWay

During the ICAN Suite installation process, the Enterprise Manager, a web-based application, is used to select and upload eWay and Add-on files (.sar files) from the ICAN installation CD-ROM to the Repository.

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

### Installing the Notes/Domino eWay on an eGate Supported System

The Lotus Notes/Domino eWay can be installed during or after the installation of the ICAN Suite. The ICAN Suite installation process includes the following operations:

- Install the eGate Repository
- Upload products to the Repository

- Download components (including the eGate Enterprise Designer and Logical Host)

Follow the directions for installing the ICAN Suite in the *SeeBeyond ICAN Suite Installation Guide*. After you have installed eGate and other purchased core products, do the following:

- 1 From the Enterprise Manager's **ADMIN** tab, browse to the **Add-ons** directory and select the **ProductsManifest.xml**, and click **Submit**. The available Add-on product list is now displayed.
- 2 Browse to and select the following files located in the **Add-ons** directory:
  - ♦ **NotesDominoeWay.sar** (to install the Lotus Notes/Domino eWay)
  - ♦ **FileeWay.sar** (to install the File eWay, used with the sample project)
- 3 Click on the Manifest File field's **Browse** option, browse to the Add-ons **Documentation** directory, select the **ProductsManifest.xml**, and click **Submit**. The available Add-on documentation list is now displayed.
- 4 From the **Documentation** directory, select and upload the following file:
  - ♦ **NotesDominoeWayDocs.sar** (to upload the Lotus Notes/Domino eWay User's Guide, Javadoc, Readme, and sample projects to the Enterprise Manager)
- 5 Continue installing the eGate Integrator as instructed in the *SeeBeyond ICAN Suite Installation Guide*.

## Adding the eWay to an Existing ICAN Suite Installation

If you are installing the eWay to an existing ICAN installation, do the following:

- 1 Complete steps 1 through 5 above.
- 2 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. 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. Click **Finish**.
- 7 When prompted, restart the IDE to complete the installation.

## 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.

### 2.3.1 Java access to the Domino Objects

To enable a Java application to access a remote Lotus Notes/Domino server, a DIIOP or HTTP server must be configured and running. Running the DIIOP or HTTP server creates the file `diiop_ior`, in the `domino/html` directory. The `diiop_ior.txt` file is queried by the remote application for a connection. If the DIIOP server has not run previously, there is no `diiop_ior.txt` file in the directory.

When using HTTP server, anonymous logging for HTTP must be turned on. If DIIOP is used, configure the port number in the Lotus Notes/Domino Environment properties.

In addition, to access a remote Lotus Notes/Domino server using anything other than the configured default port, you must set the Notes/Domino Server property as `server:port (server name:port number)`.

### 2.3.2 Adding JAR files to the eGate Integration Server

One of the following Lotus Jar files must be added to the ICAN Suite(<ICAN Home>\edesigner\usrdir\modules\ext\notesdominoadapter) prior to building a project, and also to the Logical Host (<ICAN Home>\logicalhost\stcis\lib) prior to running the project:

- **Notes.jar** is required for local Domino object access. The file is located in the Notes directory.
- **NSCO.jar** is required for remote Domino object access. The file is located in the Notes/Data/domino/java directory
- For more information see [Adding JAR files to the eGate Integration Server](#) on page 49.

# Lotus Notes/Domino eWay Properties

This chapter describes how to create and configure the Lotus Notes/Domino eWay.

## What's in This Chapter

- [Selecting Lotus Notes/Domino as the External Application](#) on page 14
- [Modifying the Lotus Notes/Domino eWay Properties](#) on page 15
- [Using the Properties Sheet](#) on page 15
- [Lotus Notes/Domino eWay Environment Properties](#) on page 17

---

## 3.1 Configuring the Lotus Notes/Domino eWay Properties

All eWays contain a set of configuration properties with parameters that are unique to that eWay type. After an eWay is created and an External System for that eWay type is created in the project's Environment, the eWay's properties can be modified for your specific system. The Lotus Notes/Domino eWay properties are modified from the **Environment Explorer tree**. These parameters are commonly global, applying to all eWays (of the same type) in the project.

Unlike many other eWays, none of the Lotus Notes/Domino eWay properties are accessed from the Connectivity Map.

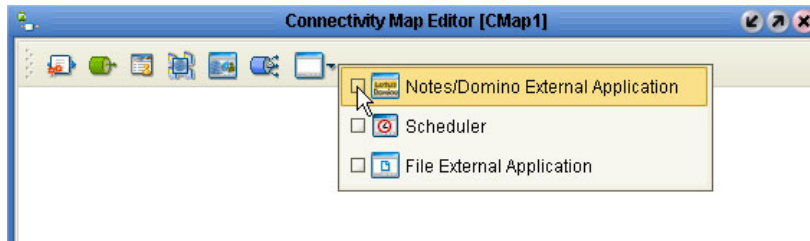
### 3.1.1 Selecting Lotus Notes/Domino as the External Application

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

#### To create the Lotus Notes/Domino External Application

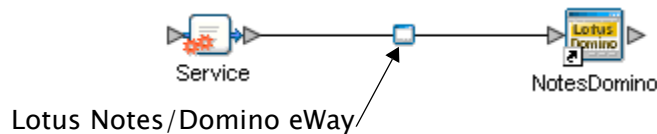
- 1 From the Connectivity Map toolbar, click the External Applications icon.
- 2 Select the **Lotus Notes/Domino External Application** from the menu (see [Figure 1 on page 15](#)). The selected Lotus Notes/Domino External Application icon appears on the Connectivity Map toolbar.

Figure 1 External Applications Selection Menu



- 3 Drag the new **Lotus Notes/Domino External Application** from the toolbar onto the Connectivity Map canvas. This represents an external Lotus Notes/Domino system. From the Connectivity Map, you can associate (bind) the External Application with the Service to establish an eWay (see Figure 2).

Figure 2 eWay Location.



When **Lotus Notes/Domino** is selected as the External Application, it automatically applies the default Lotus Notes/Domino eWay properties, provided by the OTD, to the eWay that connects it to the Service. These properties can then be or modified for your specific system using the **Properties Sheet**.

### 3.1.2 Modifying the Lotus Notes/Domino eWay Properties

A project's eWay properties can be modified after the eWays have been established in the Connectivity Map and the Environment has been created.

- 1 From the Environment Explorer tree, right-click the Lotus Notes/Domino External System. Select **Properties** from the shortcut menu. The **Properties Sheet** opens with the Lotus Notes/Domino eWay Environment properties.
- 2 Make any necessary modifications to the Environment parameters of the Lotus Notes/Domino eWays, and click **OK** to save the settings.

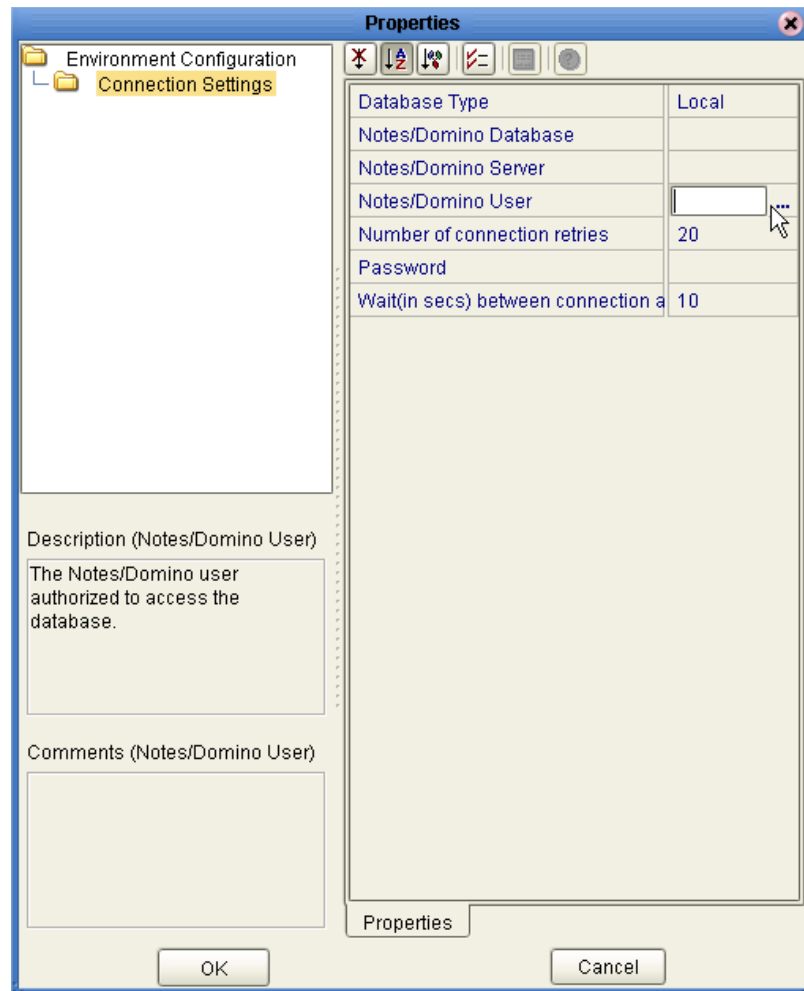
### 3.1.3 Using the Properties Sheet

Modifications to the eWay properties are made using the Lotus Notes/Domino eWay Properties Sheet.

#### Modifying the Default eWay Properties

- 1 From the upper-right pane of the Properties Sheet, select the Connection Settings subdirectory of the Environment Configuration directory. The editable parameters contained in that subdirectory are now displayed in the right pane, as shown in Figure 3.

Figure 3 Properties Sheet -- Lotus Notes/Domino eWay Environment Settings



- 2 Click on any property field to make it editable. For example, click on the **Notes/Domino Server** property to edit the server name. If a parameter's value is true/false or multiple choice, the field reveals a submenu of property options.  
Click on the ellipsis (. . .) in the properties field (displayed during modification of the value) to open a separate configuration dialog box. 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 is now displayed in the parameter's 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 regarding the currently selected parameter. This is saved for future referral.
- 5 After modifying the configuration properties, click **OK** to close the Properties Sheet and save the changes.



---

## 3.2 Lotus Notes/Domino eWay Environment Properties

The Lotus Notes/Domino eWay configuration parameters, accessed by right-clicking the Lotus Notes/Domino eWay External System in the Environment Explorer tree, are organized into the following sections:

- [Connection Settings](#) on page 17

### 3.2.1 Connection Settings

This section contains the following set of top-level parameters

- [Database Type](#) on page 17
- [Notes/Domino Database](#) on page 17
- [Notes/Domino Server](#) on page 17
- [Notes/Domino User](#) on page 18
- [Number of Connection Retries](#) on page 18
- [Password](#) on page 18
- [Wait \(in secs\) Between Connection Attempts](#) on page 18

#### Database Type

##### Description

Specifies whether the Notes/Domino database is on a local or remote server.

##### Required Value

Select **Local** or **Remote**.

*Note:* See [Adding JAR files to the eGate Integration Server](#) on page 49 for additional requirements.

#### Notes/Domino Database

##### Description

Specifies the name of the Notes/Domino database. The value cannot be **empty**, **String**, or **null**.

##### Required Value

The host name of the server used to receive messages. The value cannot be **empty**, **String**, or **null**.

#### Notes/Domino Server

##### Description

Specifies the name of the Notes/Domino server.

##### Required Value

The name and port number of the Notes/Domino server in the following format: *servername:port*. If the database is located on a local computer leave this field blank.

## Notes/Domino User

### Description

Specifies a user name with authorization to access the Notes/Domino database.

### Required Value

The valid user login name used to access the database.

## Number of Connection Retries

### Description

Specifies the number of attempts eGate allows to establish a connection with the Notes/Domino server.

### Required Value

A number indicating the number of attempts allowed to establish a connection. The configured default is 20.

## Password

### Description

Specifies the password for the Notes/Domino user.

### Required Value

The valid user login name used when receiving email messages.

## Wait (in secs) Between Connection Attempts

### Description

Specifies the configured waiting period in seconds, between attempts to establish a connection with the Notes Domino server.

### Required Value

A number indicating the number of seconds eGate waits between attempts to establish a connection. The configured default is 10.

# Implementing an Lotus Notes/Domino eWay Project

This chapter provides an introduction to the Lotus Notes/Domino eWay components and information on how these components are created and implemented in an eGate project. It is assumed that the reader understands the basics of creating a project using the SeeBeyond Enterprise Designer. For more information on creating an eGate project see the *eGate Integrator Tutorial* and the *eGate Integrator User's Guide*.

## What's in This Chapter

- [Lotus Notes/Domino eWay Components](#) on page 19
- [Lotus Notes/Domino eWay Considerations](#) on page 20
- [Importing a Sample Project](#) on page 20
- [The NotesDomino\\_Sample Project Overview](#) on page 21
- [Creating the Notes/Domino eWay Sample Project](#) on page 21
- [Alerting and Logging](#) on page 51

---

## 4.1 Lotus Notes/Domino eWay Components

This chapter presents a sample Lotus Notes/Domino eWay project created using the same procedures as the sample end-to-end project provided in the *eGate Integrator Tutorial*. The eWay components that are unique to the Lotus Notes/Domino eWay include the following:

### NotesDomino OTD

The NotesDomino OTD contains methods and attributes used to create the Business Rules that invoke the Notes/Domino program.

### Lotus Notes/Domino eWay Properties File

The properties file for the Lotus Notes/Domino eWay contains parameters used to connecting with specific external systems. These parameters are configured using the Properties Sheet. For more information about the Lotus Notes/Domino eWay properties file and the Properties Sheet see [Configuring the Lotus Notes/Domino eWay Properties](#) on page 14.

---

## 4.2 Lotus Notes/Domino eWay Considerations

Note the following considerations before proceeding with the sample:

### Adding JAR files to the eGate Integration Server

One of the following Lotus Jar files must be added to the ICAN Suite(<ICAN Home>\edesigner\usrdir\modules\ext\notesdominoadapter) prior to building a project, and also to the Logical Host (<ICAN Home>\logicalhost\stcis\lib) prior to running the project:

- **Notes.jar** is required for local Domino object access. The file is located in the Notes directory.
- **NSCO.jar** is required for remote Domino object access. The file is located in the Notes/Data/domino/java directory

For more information see [Adding JAR files to the eGate Integration Server](#) on page 49.

---

## 4.3 Importing a Sample Project

Sample eWay projects are included as part of the installation CD-ROM package. To import a sample eWay projects to the Enterprise Designer do the following:

- 1 The sample files are uploaded with the eWay's documentation .sar file and downloaded from the Enterprise Manager's Documentation tab. Extract the samples from the Enterprise Manager to a local file.
- 2 Save any unsaved work before importing a project.
- 3 From the Enterprise Designer's Project Explorer pane, right-click the Repository and select **Import** from the shortcut menu. The **Import Manager** appears.
- 4 Browse to the directory that contains the sample project zip file. Select the sample file (for this sample, **NotesDomino\_Sample.zip**) and click **Import**. After the sample project is successfully imported, click **Close**.
- 5 Before an imported sample project can be run you must do the following:
  - ♦ Create an **Environment**
  - ♦ Configure the eWays for your specific system
  - ♦ Create a **Deployment Profile**
  - ♦ Copy the sample database file, **SAMPLE.nsf**, that was downloaded with the sample zip file, to your Lotus/Notes/Data file.

---

## 4.4 The NotesDomino\_Sample Project Overview

The Lotus Notes/Domino eWay sample demonstrates the following:

### NotesDomino\_Sample Project

The NotesDomino\_Sample project contains four sample processes: RetrieveAllDocs, CreateDoc, UpdateDoc, and DeleteDoc, based on the Collaboration of the same name. Each of these processes are run by the sample project, depending on the input data file name.

**RetrieveAllDocs:** Retrieves all document and items in the Lotus Notes/Domino database. These are written to the output file.

**CreateDoc:** Creates a single document with one or more items, in the Lotus Notes/Domino database. The output file presents the message "Document Added" if the process succeeds or "Document Not Created" if the process fails.

**UpdateDoc:** Updates a specific document and/or the items, and saves it to the original document. The output file presents the message "Item Updated" if the process succeeds or "Item Failed to Update" if the process fails.

**DeleteDoc:** Deletes the specified document in the Lotus Notes/Domino database. The output file presents the message "Document Deleted" if the process succeeds or "Document Failed to Delete" if the process fails.

---

## 4.5 Creating the Notes/Domino eWay Sample Project

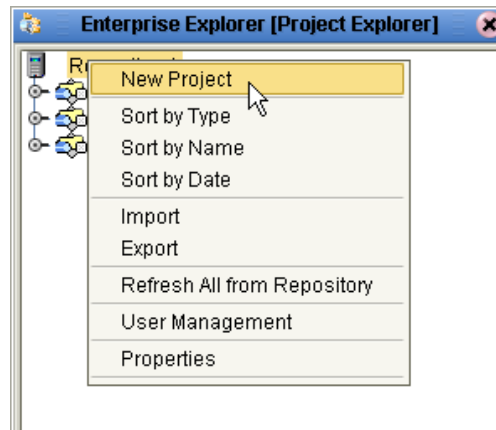
The following pages provide step by step directions to demonstrate how the sample projects and their components are created manually.

### 4.5.1 Creating a Project

The first step is to create a new project in the SeeBeyond Enterprise Designer.

- 1 Start the Enterprise Designer.
- 2 From the Project Explorer tree, right-click the Repository and select **New Project** (see Figure 4). A new project (**Project1**) appears on the Project Explorer tree.

**Figure 4** Enterprise Explorer - New Project



- 3 Click twice on **Project1** and rename the project (for this sample, **NotesDomino\_Sample**).

## 4.5.2 Creating the Connectivity Maps

A Connectivity Map provides a canvas for assembling and configuring a project's components. This sample utilizes four Connectivity Maps.

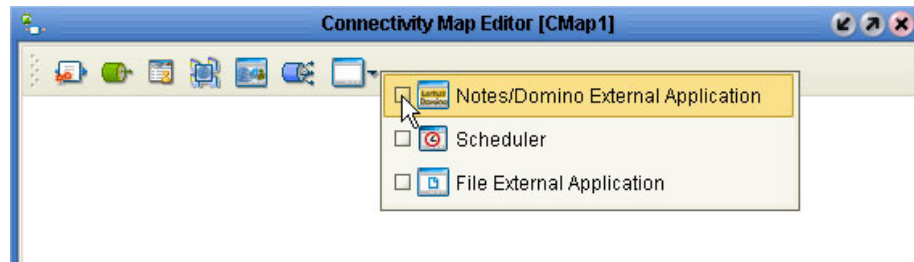
- 1 From the Project Explorer tree, right-click the new **NotesDomino\_Sample** project and select **New > Connectivity Map** from the shortcut menu.
- 2 The New Connectivity Map appears and a node for the Connectivity Map is added under the project on the Project Explorer tree labeled **CMap1**. Rename the Connectivity Map to **CreateDoc\_CM**.
- 3 Repeat this process to create the following three additional Connectivity Maps.
  - ♦ **DeleteDoc\_CM**
  - ♦ **RetrieveAll\_CM**
  - ♦ **UpdateDoc\_CM**

## Selecting the External Applications

From the tabs below the Connectivity Map canvas, select the **CreateDoc\_CM** tab to display the **CreateDoc\_CM** Connectivity Map. The icons in the Connectivity Map toolbar represent the available components used to populate the Connectivity Map canvas.

In a Connectivity Map, the eWays are associated with External Systems. For example, to establish a connection to Notes/Domino, you must first select Notes/Domino as an External System to use in your Connectivity Map (see Figure 5).

**Figure 5** Connectivity Map - External Applications



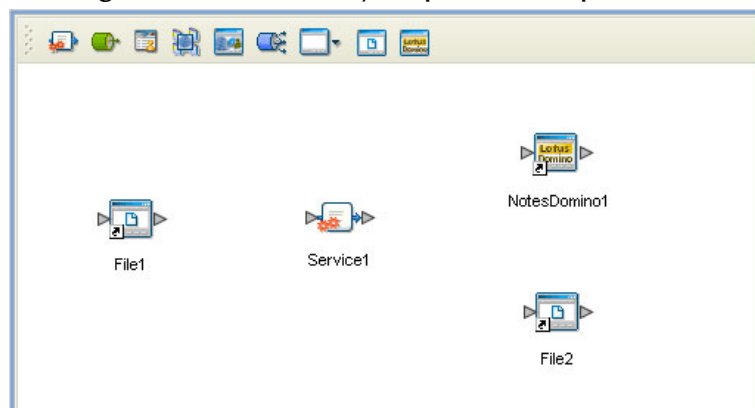
- 1 Click the **External Application** icon on the Connectivity Map toolbar,
- 2 Select the external systems needed for your project (for this sample, the **Notes/Domino** and **File** External Applications). Icons representing the selected external systems are added to the Connectivity Map toolbar.

## Populating the Connectivity Maps

Add the project components to the Connectivity Maps by dragging the icons from the toolbar or the Project Explorer tree to the canvas.

- 1 To populate the CreateDoc\_CM Connectivity Map with the necessary components, drag the following objects onto the Connectivity Map canvas, as displayed in Figure 6.
  - ♦ **File External System** (2 for this sample)
  - ♦ **Service** (1 for this sample) A service is a container for Java Collaborations, Business Processes, eTL processes, and so forth.
  - ♦ **Notes/Domino External System** (1 for this sample)

**Figure 6** Connectivity Map with Components



- 2 Rename the Service in the Connectivity Map by right-clicking **Service1**, selecting **Rename** from the shortcut menu, and typing **CreateDoc1** as the new name.

### DeleteDoc\_CM, RetrieveAll\_CM, UpdateDoc\_CM

To populate the **DeleteDoc\_CM** Connectivity Map, click on the **DeleteDoc\_CM** tab, located below the Connectivity Map Canvas, or double-click **DeleteDoc\_CM** on the Enterprise Explorer tree. Once the Connectivity Map is displayed, do the following

- 1 From the Enterprise Explorer tree, drag and drop the **File1**, **File2**, and **NotesDomino1** External Applications onto the Connectivity Map canvas, using the same pattern displayed in [Figure 6 on page 23](#).
- 2 From the Connectivity Map toolbar, drag a **Service** onto the Connectivity Map.
- 3 Rename the Service in the Connectivity Map by right-clicking **Service1**, selecting **Rename** from the shortcut menu, and typing **DeleteDoc1** as the new name.
- 4 Follow these same steps to populate the **RetrieveAll\_CM** and **UpdateDoc\_CM** Creativity Maps, renaming the service in **RetrieveAll\_CM** to **RetrieveAllDocs1**, and renaming the service in **UpdateDoc\_CM** to **UpdateDoc1**.
- 5 Save your current changes to the Repository.

### 4.5.3 Creating OTDs from the DTD Files

The next step in the sample is to create OTDs from the **NOTES.dtd** (Document Type Definition) and the **NotesUpdate.dtd** files provided with the sample. This is done using the **New Object Type Definition Wizard**.

- 1 From the Project Explorer, right-click the sample project and select **New > Object Type Definition** from the shortcut menu. The **New Object Type Definition Wizard** appears.
- 2 From the **Select Wizard Type** box select **DTD** and click **Next**.
- 3 From the **Browse DTD Files** pane browse to and select the **Notes.dtd** file that was downloaded with the sample project. Click **Select**. The **Notes.dtd** file appears in the **Selected DTD Files** box. Repeat this process to select the **NotesUpdate.dtd** file also. Click **Next**.
- 4 For step three of the wizard, **Select Document Elements**, select both **NOTES\_DOCUMENT** and **UPDATE\_ITEM**, and click **Next**.
- 5 For step four of the wizard, **Select OTD Options**, leave the default settings (do not select any options) and click **Finish**.
- 6 Both new OTDs now appear under the project in the Enterprise Explorer tree, and can be used in your Collaborations.

### 4.5.4 Creating the Collaboration Definitions

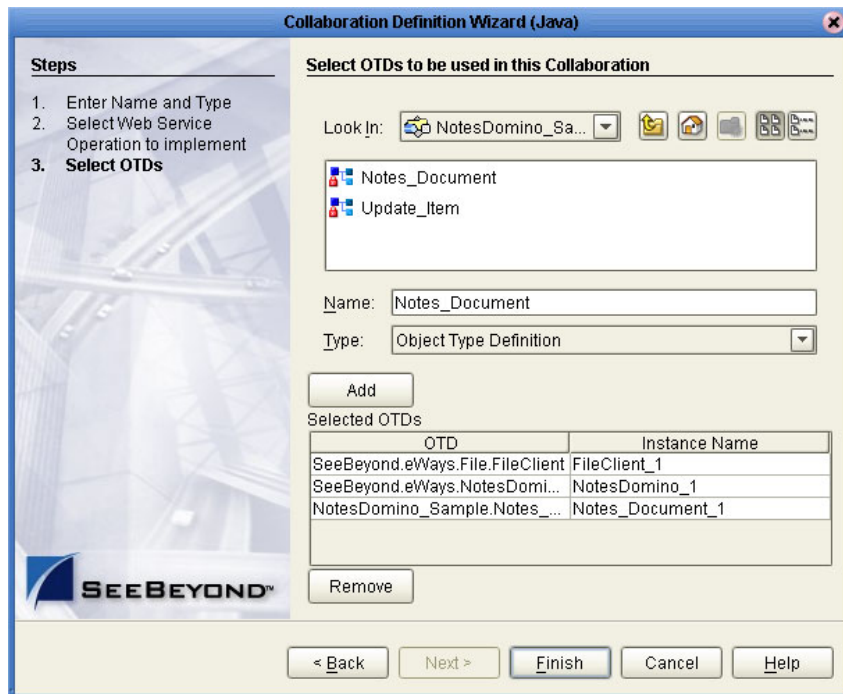
The next step in the **NotesDomino\_Sample** project is to create four Java Collaborations using the **Collaboration Definition Wizard (Java)**. Once the Collaboration Definitions have been created, the Business Rules of the Collaboration are written using the **Collaboration Editor (Java)**.



### Creating the CreateDoc Collaboration Definition

- 1 From the Project Explorer, right-click the sample project and select **New > Collaboration Editor (Java)** from the shortcut menu. The **Collaboration Definition Wizard (Java)** appears.
- 2 Enter a Collaboration Definition name (for this sample, **CreateDoc**) and click **Next**.
- 3 For Step 2 of the wizard, from the Web Services Interfaces selection window, double-click **SeeBeyond > eWays > File > FileClient > receive**. The File Name field now displays **receive**. Click **Next**.
- 4 For Step 3 of the wizard, from the Select OTDs selection window, double-click **SeeBeyond > eWays > File > FileClient**. The **FileClient\_1** OTD is added to the Selected OTDs field.
- 5 Click the **Up One Level** button to return to the Repository. Double-click **SeeBeyond > eWays > NotesDomino > NotesDomino**. The Selected OTDs field now lists the **NotesDomino\_1** OTD (see Figure 7).
- 6 Click the **Up One Level** button to return to the Repository. Double-click **NotesDomino\_Sample > Notes\_Document**. The Selected OTDs field now lists the **Notes\_Document\_1** OTD (see Figure 7).

**Figure 7** Collaboration Definition Wizard (Java) - Select OTDs



- 7 Click **Finish**. The Collaboration Editor (Java) with the new Collaboration, **CreateDoc** appears, and the Collaboration is added to the Project Explorer tree.

### Creating the DeleteDoc, RetrieveAllDocs, and UpdateDoc Collaboration Definition

The three additional Collaborations used by the NotesDomino\_Sample project are created following the same steps as those used to create the CreateDoc Collaboration. Follow these steps using the files in Table 2 to create these three Collaborations.

**Table 2** NotesDomino\_Sample Collaboration Files

<b>Collaboration Name and type</b>	<b>Web Service Operation to Implement</b>	<b>Select OTDs</b>
<b>DeleteDoc</b>	SeeBeyond\eWays\ File\FileClient\receive	<ul style="list-style-type: none"> <li>▪ SeeBeyond\eWays\File\FileClient</li> <li>▪ SeeBeyond\eWays\NotesDomino\NotesDomino</li> <li>▪ NotesDomino_Sample\Update_Item</li> </ul>
<b>RetrieveAllDocs</b>	SeeBeyond\eWays\ File\FileClient\receive	<ul style="list-style-type: none"> <li>▪ SeeBeyond\eWays\File\FileClient</li> <li>▪ SeeBeyond\eWays\NotesDomino\NotesDomino</li> <li>▪ NotesDomino_Sample\Notes_Document</li> </ul>
<b>UpdateDoc</b>	SeeBeyond\eWays\ File\FileClient\receive	<ul style="list-style-type: none"> <li>▪ SeeBeyond\eWays\File\FileClient</li> <li>▪ SeeBeyond\eWays\NotesDomino\NotesDomino</li> <li>▪ NotesDomino_Sample\Update_Item</li> </ul>

Upon completion there will be four Collaborations listed in the Enterprise Explorer tree, and the Collaboration Editor is displayed with four tabs, one for each of the new Collaborations.

#### 4.5.5 Using the Collaboration Editor (Java)

The next step in the sample is to create the Business Rules for each of the four Collaborations using the Collaboration Editor (Java). Step by step directions for creating the Business Rules for each Collaboration are located as follows:

- [Creating the CreateDoc Collaboration Business Rules](#) on page 27
- [Creating the DeleteDoc Collaboration Business Rules](#) on page 32
- [Creating the RetrieveDoc Collaboration Business Rules](#) on page 37
- [Creating the UpdateDoc Collaboration Business Rules](#) on page 41

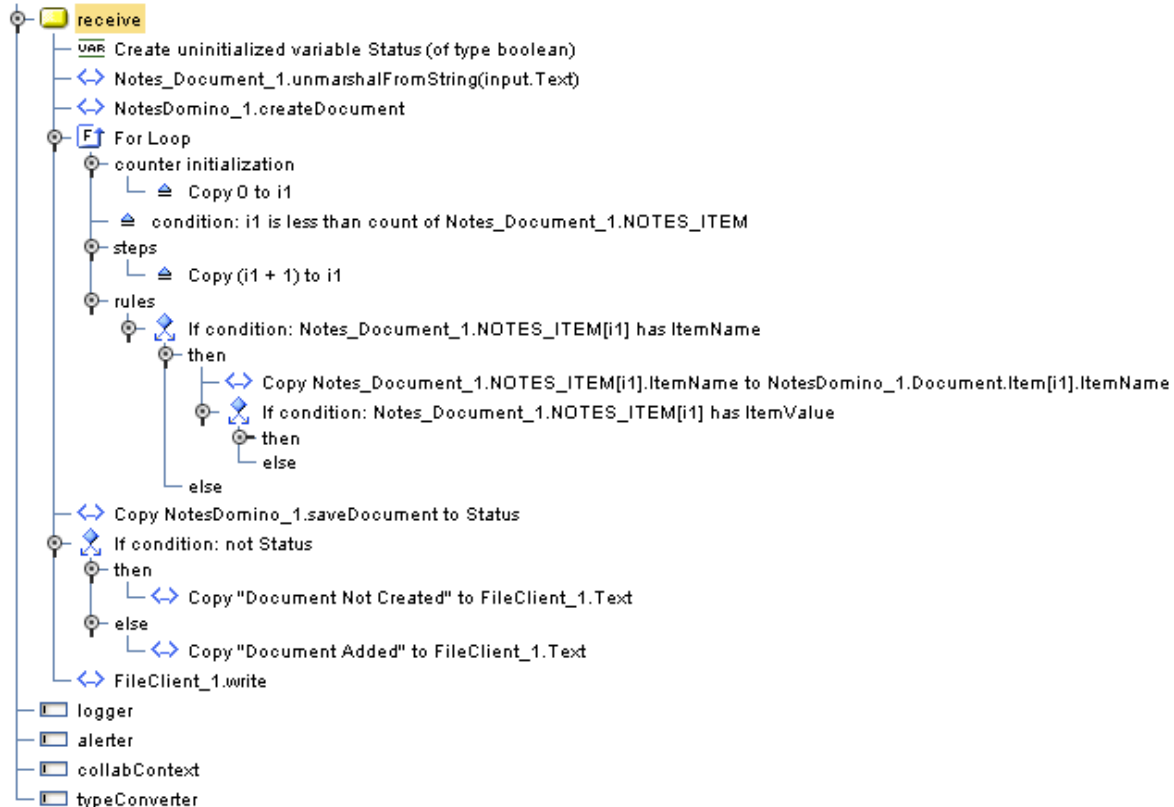
While creating the Business Rules using the Business Rules Designer, you may add a rule or other object to the Business Rules tree by accident. These can be easily deleted by right-clicking the extra object and clicking Delete from the shortcut menu.

When all the Business Rules have been added to the Collaboration, click the Validate icon on the Collaboration Editor's toolbar to "precompile" the Java Collaboration Definition. If any errors are found, they are displayed in a validation panel that appears at the bottom of the Collaboration Editor. To locate a noted error in the Collaboration, double-click on the error message and the Java Source Editor is appears, displaying the erroneous line of code.

## Creating the CreateDoc Collaboration Business Rules

Be careful to open all nodes specified in the directions to connect to the correct items. The **CreateDoc** Collaboration contains the Business Rule displayed in Figure 8.

**Figure 8** CreateDoc Collaboration Business Rules

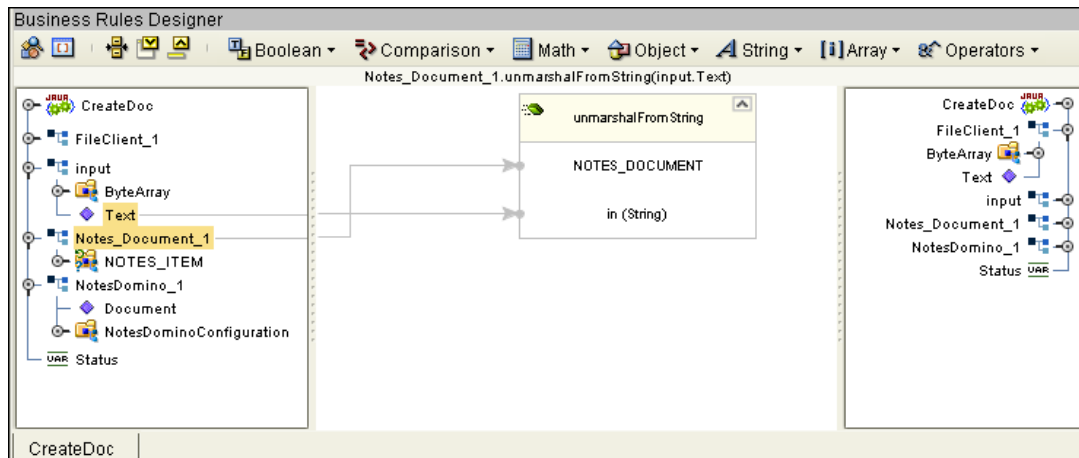


To create the **CreateDoc** Collaboration Business Rules do the following:

- 1 Open the Collaboration Editor to the **CreateDoc** Collaboration by clicking the **CreateDoc** tab if available, or if necessary, by double-clicking the **CreateDoc** Collaboration from the Project Explorer tree.
- 2 Create comments for the Business Rules, from the Business Rules toolbar, click the **comment** icon. The **Enter a Comment** dialog box appears. Enter the comment and click **OK**. The comment is placed on the Business Rules tree under the last selected item. Once the Comment is created, it can be moved by clicking the comment and dragging it up or down the Business Rules tree to a new location.
- 3 Double-click the nodes in the Business Rules Designer panes to expand as needed.
- 4 Create the **Create uninitialized variable Status (of type boolean)** variable rule.
  - A From the Business Rule tree, select the **receive**.
  - B From the Business Rules toolbar, click the **local variable** icon. The **Create a Variable** dialog box appears.

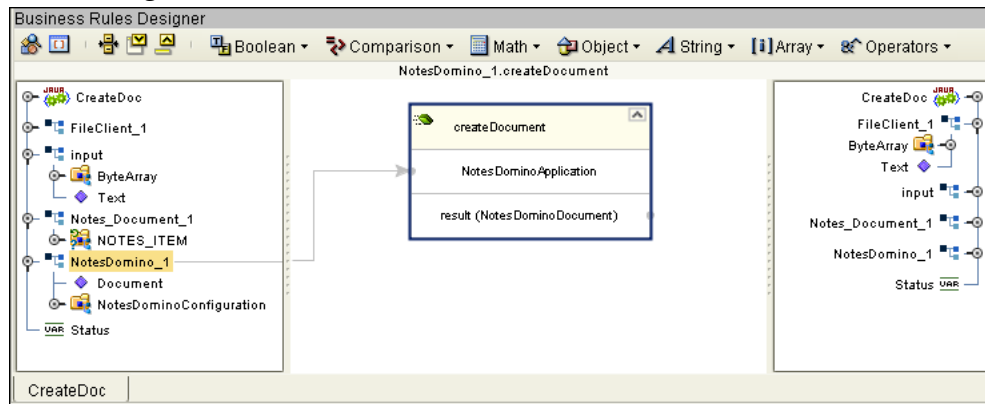
- C Enter **Status** as the Variable Name, select **Primitive** and **boolean** as the Type, and click **OK**. The boolean Status variable is added to the Business Rule tree.
- 5 Create the **Notes\_Document\_1.unmarshalFromString(input.Text)** rule.
  - A From the Business Rules tree, select the **Empty Rule**.
  - B Right-click **Notes\_Document\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
  - C Select **unmarshalFromString()**. The **unmarshalFromString** method box appears.
  - D Map **Text** under **input** in the left pane of the Business Rules Designer to the **in (String)** input node of the **unmarshalFromString** method box. To do this, click on **Text** under **input** in the left pane of the Business Rules Designer and drag the cursor to the **in (String)** input node of the **unmarshalFromString** method box (see Figure 10).

**Figure 9** Notes\_Document\_1.unmarshalFromString(input.Text) Rule



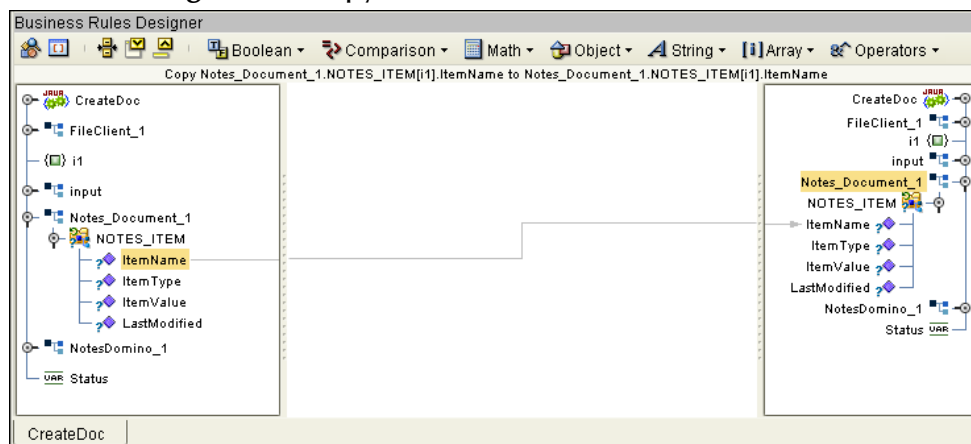
- 6 Create the **NotesDomino\_1.createDocument** rule.
  - A From the Business Rules toolbar, click the **rule** icon to add a new rule.
  - B Right-click **NotesDomino\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
  - C Select **createDocument()**. The **createDocument** method box appears (see [Figure 10 on page 29](#)).

**Figure 10** NotesDomino\_1.createDocument Rule



- 7 Create the **For** loop and **Copy Notes\_Document\_1.NOTES\_ITEM[i1].ItemName to NotesDomino\_1.Document.Item[i1].ItemName** rule.
  - A Map **ItemName** under **Notes\_Document\_1 > Notes\_Item** in the left pane of the Business Rules Designer, to **ItemName** under **Notes\_Document\_1 > Notes\_Item** in the right pane of the Business rules Designer. To do this, click **ItemName** in the left pane of the Business Rules Designer, and drag your cursor to **ItemName** in the right pane. A new **If** loop appears in the Business Rules window and the **Copy Notes\_Document\_1.NOTES\_ITEM[i1].ItemName to Notes\_Document\_1.NOTES\_ITEM[i1].ItemName** rule is added under the **For** loop (see Figure 11).

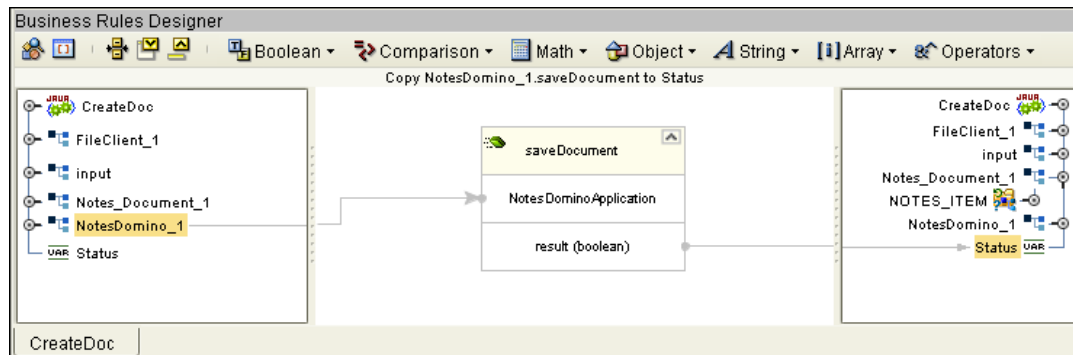
**Figure 11** Copy ItemName to ItemName



- 8 Create the second **If** loop and **Copy Notes\_Document\_1.NOTES\_ITEM[i1].ItemValue to NotesDomino\_1.Document.Item[i1].ItemValue** rule.
  - A Make sure that the **Copy ItemType to ItemType** Rule is selected in the Business Rules window.
  - B From the Business Rules Designer, map **ItemValue** under **Notes\_Document\_1 > Notes\_Item** in the left pane, to **ItemValue** under **Notes\_Document\_1 > Notes\_Item** in the right pane. When prompted by the **Create New Rule** dialog box, select **Child** to create this Rule as a child of the **If** statement.

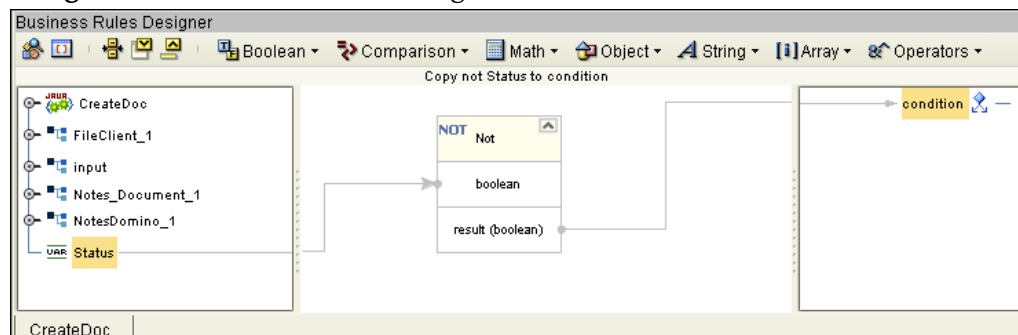
- 9 Create the **Copy NotesDomino\_1.saveDocument to Status** Business Rule.
  - A From the Business Rules window, close the **For** loop. Select the **For** loop in the Business Rules tree.
  - B Right-click **NotesDomino\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
  - C Select **saveDocument()**. The **saveDocument** method box appears.
  - D Map the **results (boolean)** output node of the **saveDocument** dialog box, to the **Status** variable in the right pane of the Business Rules Designer (see Figure 12).

**Figure 12** Copy NotesDomino\_1.saveDocument to Status Business Rule



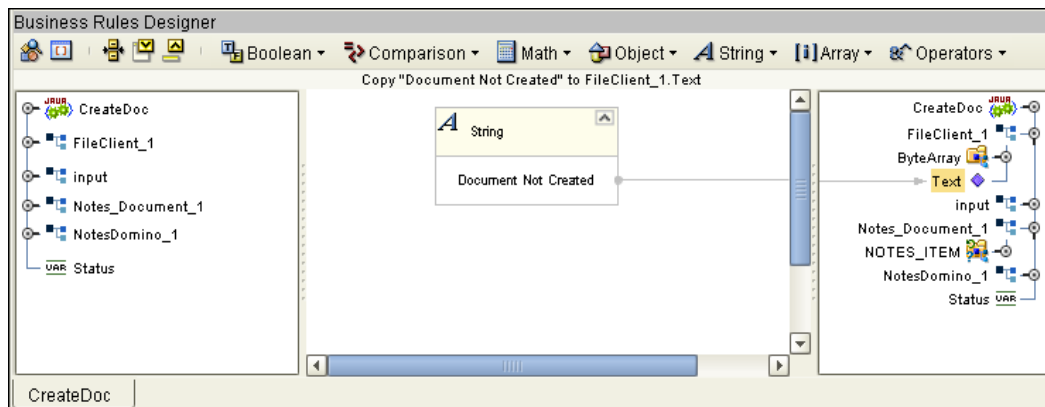
- 10 Create the **If** statement and the **Status** rule.
  - A Select the **If** icon in the Business Rules window. An If statement is added to the Business Rules tree.
  - B Expand the **If** statement and select the **condition**.
  - C From the Business Rules Designer's Boolean menu, select **NOT**. The **Not** Boolean operator dialog box appears.
  - D Map the **Status** variable, in the left pane of the Business Rules Designer, to the **boolean** input node of the **Not** operator box.
  - E Map the **result (boolean)** output node of the **Not** operator box to **condition**, in the right pane of the Business Rules Designer (see Figure 13).

**Figure 13** Business Rules Designer - If statement and Status



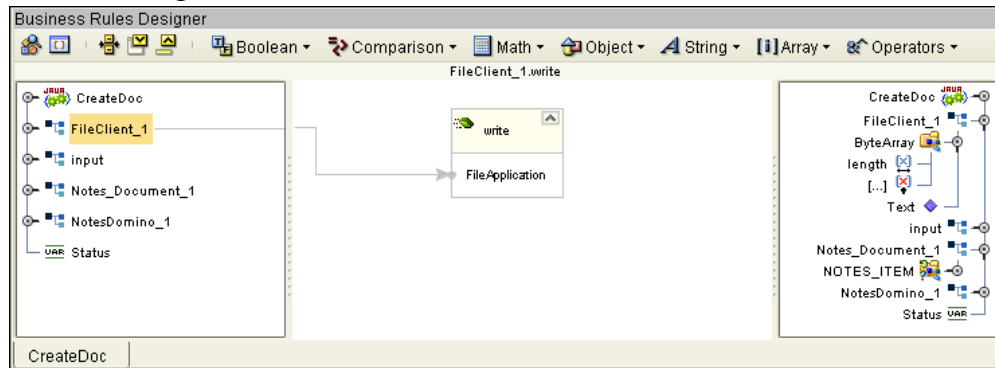
- 11 Create the **then** statement **Copy "Document Not Created" to FileClient\_1.Text** rule.
  - A Select **then** under the **If** statement.
  - B From the Business Rules toolbar, click the **rule** icon to add a new rule.
  - C From the Business Rules Designer's String menu, select Literal String. The **String** literal box appears.
  - D From the **String** literal box, enter **Document Not Created** as the value.
  - E Map the **Document Not Created** output node of the **String** literal box to **Text** under **FileClient\_1** in the right pane of the Business Rules Designer (see Figure 14).

**Figure 14** Copy "Document Not Created" to FileClient\_1.Tex Rule



- 12 Create the **else** statement **Copy "Document Added" to FileClient\_1.Text** rule.
  - A Select **else** under the **If** statement.
  - B From the Business Rules toolbar, click the **rule** icon to add a new rule.
  - C From the Business Rules Designer's String menu, select Literal String. The **String** literal box appears.
  - D From the **String** literal box, enter **Document Added** as the value.
  - E Map the **Document Added** output node of the String literal box to **Text** under **FileClient\_1** in the right pane of the Business Rules Designer.
- 13 Create the **FileClient\_1.write** Business Rule.
  - A Select the last **If** statement in the Business Rules tree.
  - B From the Business Rules toolbar, click the **rule** icon to add a new rule.
  - C Right-click **FileClient\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
  - D Select **write()**. The **write** method box appears.
  - E Map **FileClient\_1**, in the right pane to the **FileApplication** output node of the **write** method box (see [Figure 15 on page 32](#)).

**Figure 15** FileClient\_1.write Business Rule



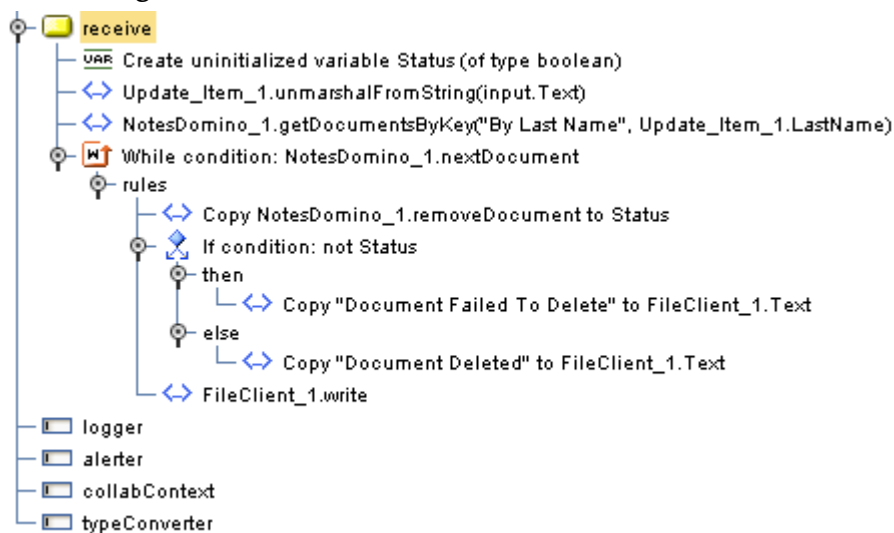
- 14 From the editor's toolbar, click **Validate** to check the Collaboration for errors.
- 15 Save your current changes to the Repository.

*Note:* See the *eGate Integrator User's Guide* for more information on editing Collaborations.

## Creating the DeleteDoc Collaboration Business Rules

Be careful to open all nodes specified in the directions to connect to the correct items. The **DeleteDoc** Collaboration contains the Business Rule displayed in Figure 16.

**Figure 16** DeleteDoc Collaboration Business Rules



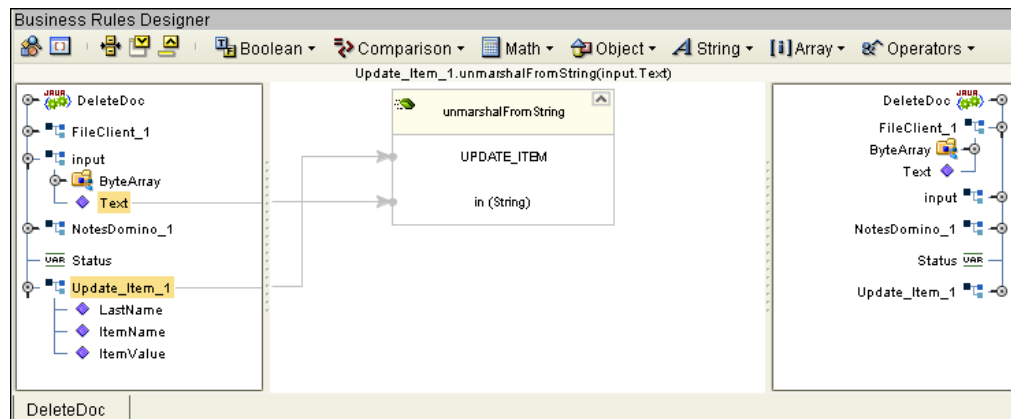
To create the **DeleteDoc** Collaboration Business Rules do the following:

- 1 Open the Collaboration Editor to the **DeleteDoc** Collaboration by clicking the **DeleteDoc** tab if available, or if necessary, by double-clicking the **DeleteDoc** Collaboration from the Enterprise Explorer tree.
- 2 Double-click the nodes in the Business Rules Designer panes to expand as needed.
- 3 Create the variable **Create uninitialized variable Status (of type boolean)** rule.



- A Select the **receive** method in the Business Rule pane.
  - B From the Business Rules toolbar, click the **local variable** icon. The **Create a Variable** dialog box appears.
  - C Enter **Status** as the Variable Name, select **Primitive** and **boolean** as the Type, and click **OK**. The boolean Status variable is added to the Business Rule tree.
- 4 Create the **Update\_Item\_1.unmarshalFromString(Text)** Business Rule.
- A From the Business Rules tree select the **Empty Rule** icon.
  - B Right-click **Update\_Item\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
  - C Select **unmarshalFromString(java.lang.String in)**. The **unmarshalFromString** method box appears.
  - D Map **Text** under **input** in the left pane of the Business Rules Designer to the **in (String)** input node of the **unmarshalFromString** method box. To do this, click on **Text** under **input** in the left pane of the Business Rules Designer and drag the cursor to the **in (String)** input node of the **unmarshalFromString** method box (see Figure 17).

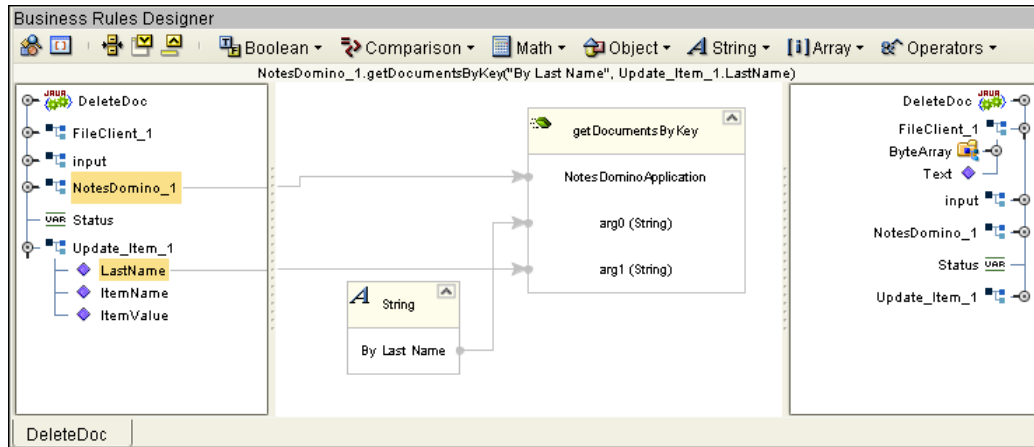
**Figure 17** Update\_Item\_1.unmarshalFromString(Text) Business Rule



- 5 Create the **NotesDomino\_1.getDocumentsByKey("By Last Name", Update\_Item\_1.LastName)** rule.
- A From the Business Rules toolbar, click the **rule** icon to add a new rule.
- B Right-click **NotesDomino\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
- C Select **getDocumentsByKey(java.lang.String arg0, java.lang.String arg1)**. The **DocumentsByKey** method box appears.
- D Map **in LastName** under **Update\_Item\_1** the left pane of the Business Rules Designer, to the **arg1 (String)** input node of the **DocumentsByKey** method box.
- E From the Business Rules Designer's String menu, select **Literal String**. The **String** literal box appears.

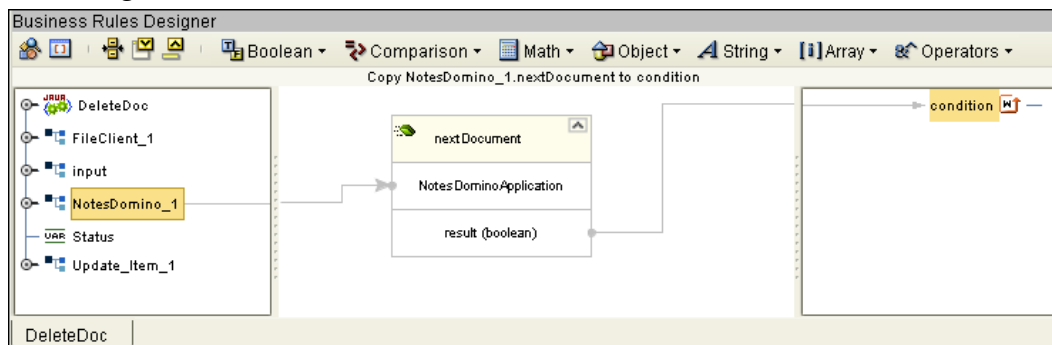
- F From the **String** literal box, enter **By Last Name** as the Value.
- G Map the **By Last Name** output node of the **String** literal box to the **arg0 (String)** input node of the **DocumentsByKey** method box. (see Figure 18).

**Figure 18** DocumentsByKey("By Last Name",LastName) Business Rule



- 6 Create the **While** statement and **NotesDomino\_1.nextDocument** rule.
  - A From the Business Rules toolbar, click the **While** icon to add a new **While** statement. Select the **condition** under the **While** statement.
  - B Right-click **NotesDomino\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
  - C Select **nextDocument()**. The **nextDocument** method box appears.
  - D Map the **result (boolean)** output node, of the **nextDocument** method box, to **condition** in right pane of the Business Rules Designer (see Figure 19).

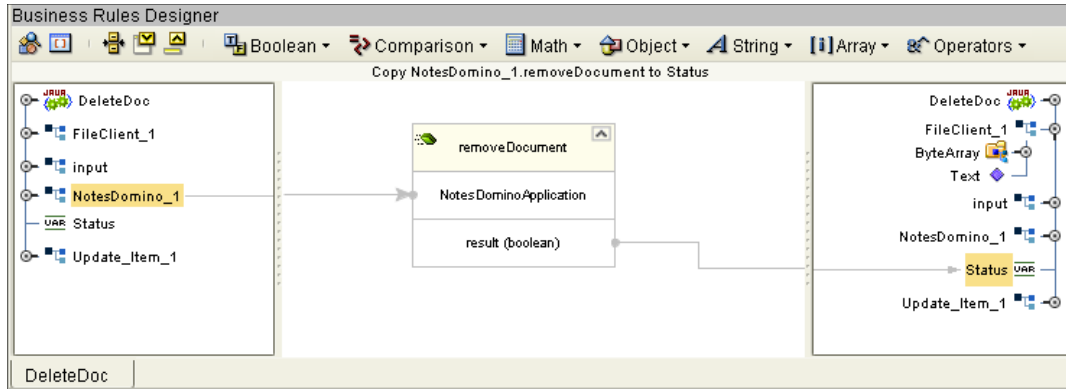
**Figure 19** NotesDomino\_1.nextDocument Business Rule



- 7 Create the **Copy NotesDomino\_1.removeDocument to Status** Business Rule.
  - A Select **New Rule** under the **While** statement in the Business Rules widow's Business Rules tree.
  - B Right-click **NotesDomino\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.

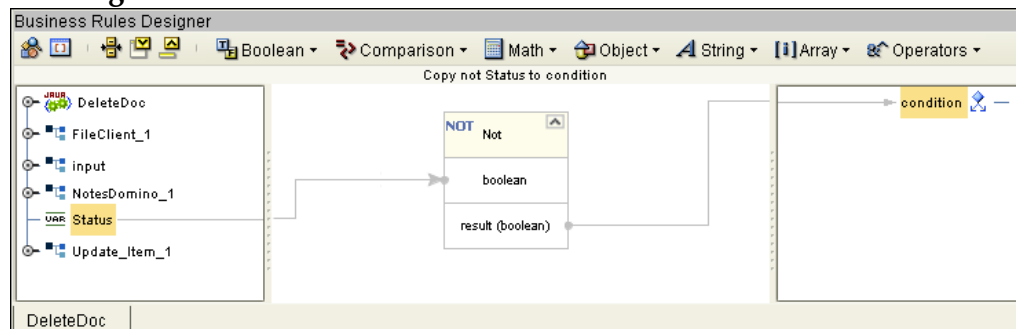
- C Select **removeDocument()**. The **removeDocument** method box appears.
- D Map the **result (boolean)** output node of the **removeDocument** method box to **Status** in the right pane (see Figure 20).

**Figure 20** Copy NotesDomino\_1.removeDocument Business Rule



- 8 Create the **If-then** statement.
  - A From the Business Rules toolbar click the **if-then** statement icon. An **if-then** statement is added as a child to the **While** statement on the Business Rules tree.
  - B From the Business Rules window's Business Rules tree, expand the **If-then** statement and select the **condition** under the if-then statement.
  - C From the Business Rules Designer's Boolean menu, select **NOT**. The **Not** Boolean operator box appears.
  - D Map **Status** in the left pane of the Business Rules Designer to the **boolean** input node of the **Not** operator box.
  - E Map the **result (boolean)** output node of the **Not** operator box to **condition**, in the right pane (see Figure 21).

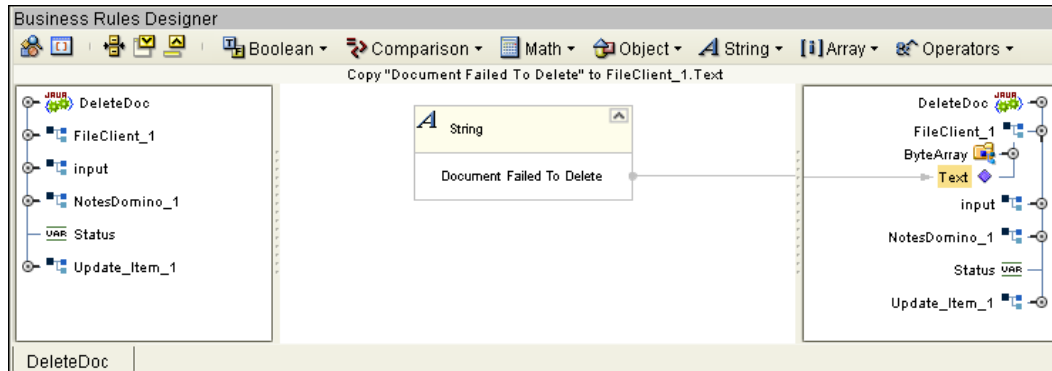
**Figure 21** If-then statement and !Status Business Rule



- 9 Create the **Copy "Document Failed To Delete" to FileClient\_1.Text** Business Rule.
  - A Expand and select the **then** under the **if-then** statement.
  - B From the Business Rules toolbar, click the **rule** icon to add a new rule.
  - C From the Business Rules Designer's String menu, select **Literal String**. The **String** literal box appears.

- D From the String literal box, enter **Document Failed To Delete** as the Value.
- E Map the **Document Failed To Delete** output node of the **String** literal box to **Text** under **FileClient\_1** in the right pane (see Figure 22).

**Figure 22 Copy "Document Failed To Delete" to Text Business Rule**

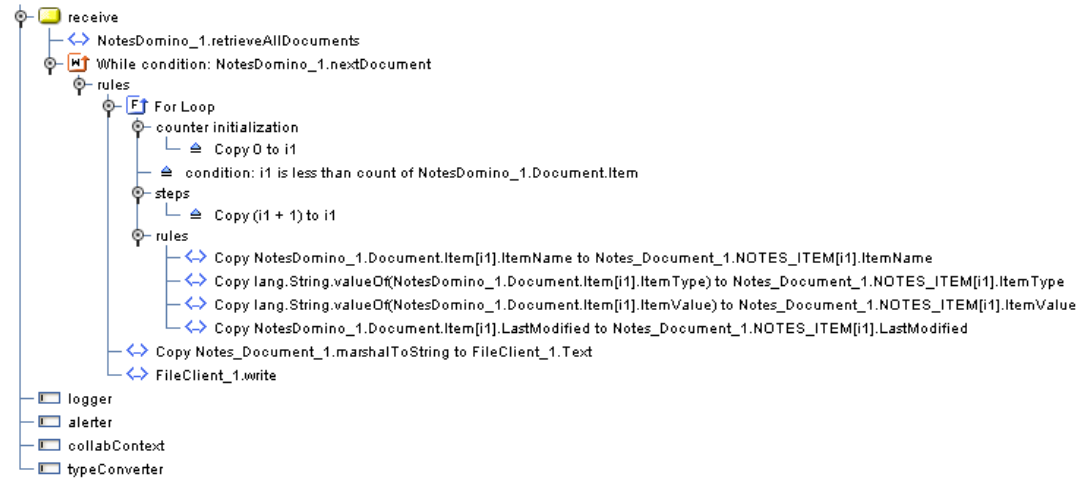


- 10 Create the **Copy "Document Deleted" to FileClient\_1.Text** Business Rule.
  - A Select the **else** under the **if-then** statement.
  - B From the Business Rules toolbar, click the **rule** icon to add a new rule.
  - C From the Business Rules Designer's String menu, select **Literal String**. The **String** literal box appears.
  - D From the String literal box, enter **Document Deleted** as the Value.
  - E Map the **Document Deleted** output node of the **String** literal box to **Text** under **FileClient\_1** in the right pane
- 11 Create the **FileClient\_1.write** Business Rule.
  - A Select the last **If** statement in the Business Rules tree.
  - B From the Business Rules toolbar, click the **rule** icon to add a new rule.
  - C Right-click **FileClient\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
  - D Select **write()**. The **write** method box appears.
- 12 From the editor's toolbar, click **Validate** to check the Collaboration for errors.
- 13 Save your current changes to the Repository.

## Creating the RetrieveDoc Collaboration Business Rules

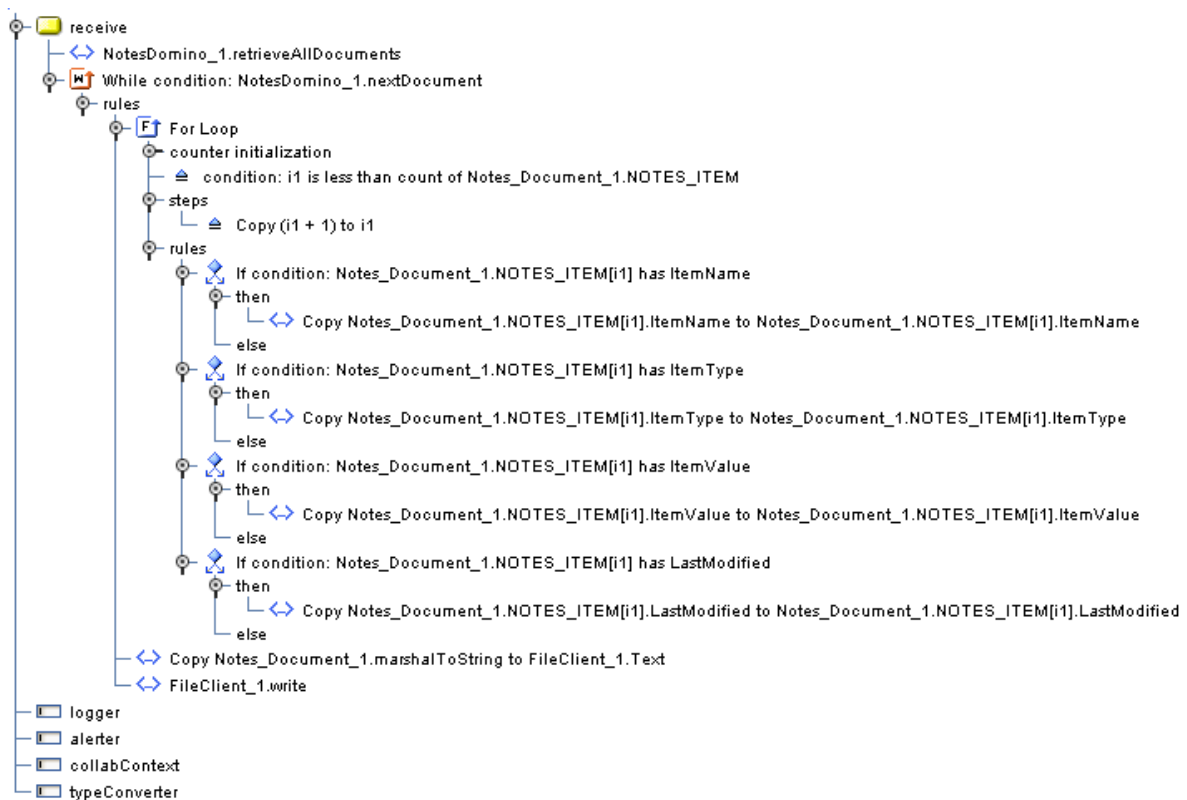
The RetrieveDoc Collaboration contains the Business Rule displayed in Figure 23 for the imported sample.

**Figure 23** RetrieveAllDocs Collaboration Business Rules



The manually built sample, built with Enterprise Designer contains additional If statements added during the creation of the Business Rules as displayed in Figure 24.

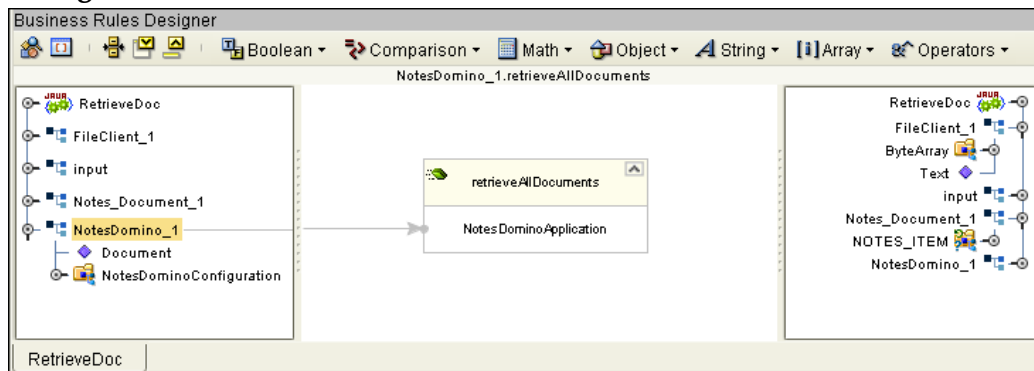
**Figure 24** .RetrieveAllDocs Manually Built Collaboration Business Rules



To create the **RetrieveDoc** Collaboration Business Rules do the following:

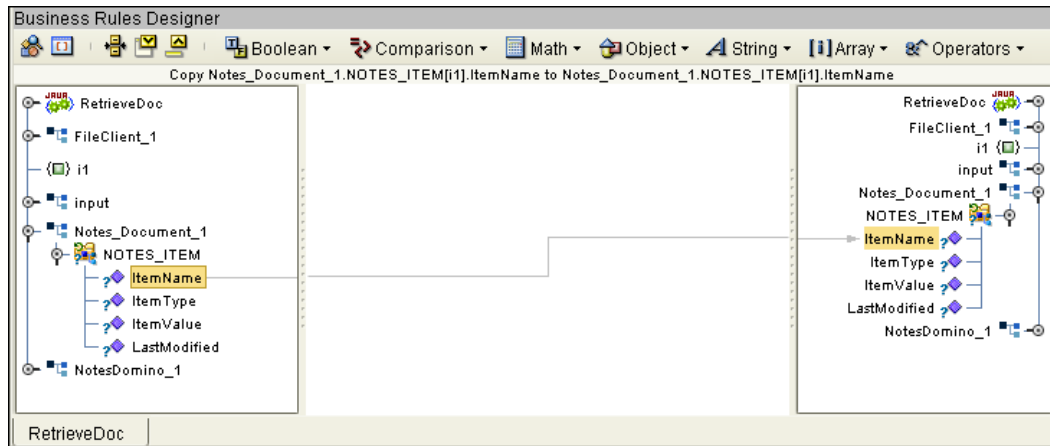
- 1 Open the Collaboration Editor to the **RetrieveDoc** Collaboration by clicking the **RetrieveDoc** tab if available, or if necessary, by double-clicking the **RetrieveDoc** Collaboration from the Enterprise Explorer tree.
- 2 Double-click the nodes in the Business Rules Designer panes to expand as needed.
- 3 Create the **NotesDomino\_1.retrieveAllDocuments** Business Rule.
  - A Right-click **NotesDomino\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
  - B Select **retrieveAllDocuments()**. The **retrieveAllDocuments** method box appears (see Figure 25).

**Figure 25** NotesDomino\_1.retrieveAllDocuments Business Rule



- 4 Create the **While** loop and the **NotesDomino\_1.nextDocument** Business Rule.
  - A From the Business Rules toolbar, click the **While** icon to add a new **While** loop.
  - B Right-click **NotesDomino\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
  - C Select **nextDocument()**. The **nextDocument** method box appears.
  - D Map the **result (boolean)** output node of the **nextDocument** method box to **condition**, in the right pane.
- 5 Create the first **For Loop** and the **If condition: Notes\_Document\_1.NOTES\_ITEM[i1] has ItemName** rule.
  - A Select the **Empty rule** under **rules** in the **While** loop.
  - B From the Business Rules Designer, map **ItemName** under **Notes\_Document\_1 > Notes\_Item** in the left pane, to **ItemName** under **Notes\_Document\_1 > Notes\_Item** in the right pane. The **If condition: Notes\_Document\_1.NOTES\_ITEM[i1] has ItemName** Business Rule is added to the Business Tree (see [Figure 26 on page 39](#)).

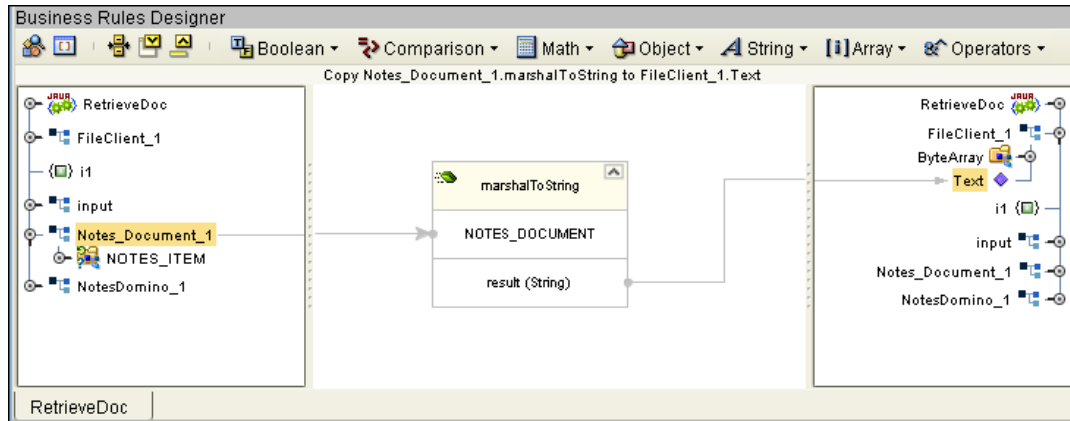
**Figure 26** If loop and the Copy ItemName to ItemName Business Rule



- 6 Create the second **If condition: Notes\_Document\_1.NOTES\_ITEM[i1] has ItemType**.
  - A Select the last **If condition** in the Business Rules tree.
  - B From the Business Rules toolbar, click the **rule** icon to add a new rule to the Business Rules tree, under the **If condition**.
  - C From the Business Rules Designer, map **ItemType** under **Notes\_Document\_1 > Notes\_Item** in the left pane, to **ItemType** under **Notes\_Document\_1 > Notes\_Item** in the right pane.
- 7 Create the third **If condition: Notes\_Document\_1.NOTES\_ITEM[i1] has ItemValue**.
  - A Select the last **If condition** you just created, on the Business Rules tree.
  - B From the Business Rules toolbar, click the **rule** icon to add a new rule to the Business Rules tree, under the last **If condition**.
  - C From the Business Rules Designer, map **ItemValue** under **Notes\_Document\_1 > Notes\_Item** in the left pane, to **ItemValue** under **Notes\_Document\_1 > Notes\_Item** in the right pane.
- 8 Create the fourth **If condition: Notes\_Document\_1.NOTES\_ITEM[i1] has LastModified**.
  - A Select the last **If condition** you just created, on the Business Rules tree.
  - B From the Business Rules toolbar, click the **rule** icon to add a new rule to the Business Rules tree, under the last **If condition**.
  - C From the Business Rules Designer, map **LastModified** under **Notes\_Document\_1 > Notes\_Item** in the left pane, to **LastModified** under **Notes\_Document\_1 > Notes\_Item** in the right pane.
- 9 Create the **Copy Notes\_Document\_1.marshallToString to Text** Business Rule.
  - A Select the **For Loop** on the Business Rules tree.
  - B From the Business Rules toolbar, click the **rule** icon to add a new rule to the Business Rules tree, under the **For Loop**.

- C Right-click **Notes\_Document\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
- D Select **marshalToString()**. The **marshalToString** method box appears.
- E Map the **result (String)** output node of the **marshalToString** dialog box, to **Text** under **FileClient\_1** in the right pane of the Business Rules Designer (see Figure 27).

**Figure 27** Copy Notes\_Document\_1.marshallToString to Text Business Rule



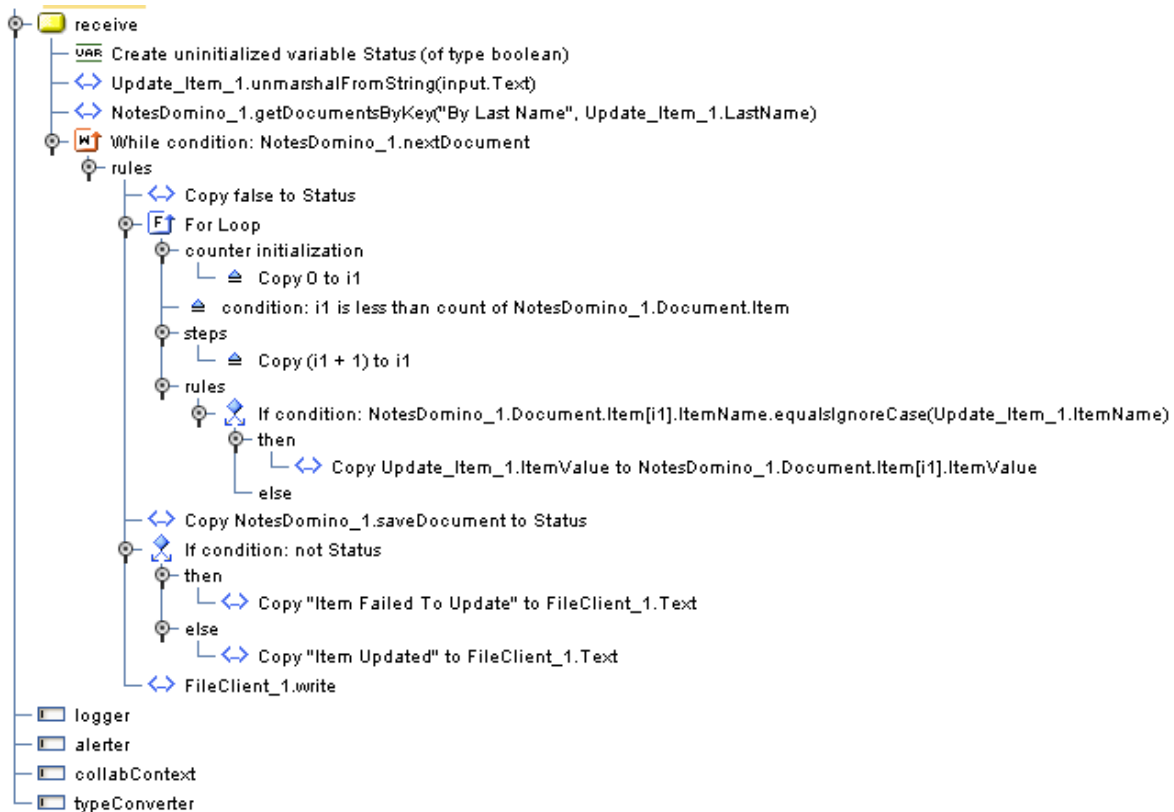
- 10 Create the **FileClient\_1.write** Business Rule.
  - F From the Business Rules toolbar, click the **rule** icon to add a new rule.
  - G Right-click **FileClient\_1** in the left pane of the Business Rules Designer, and click **Select a method to call** from the shortcut menu. The method selection menu appears.
  - H Select **write()**. The **write** method box appears.
- 11 From the editor's toolbar, click **Validate** to check the Collaboration for errors.
- 12 Save your current changes to the Repository.



## Creating the UpdateDoc Collaboration Business Rules

The UpdateDoc Collaboration contains the Business Rule displayed in [Figure 28 on page 41](#). The UpdateDoc Collaboration Business Rules are created in the same manner as the samples other Collaborations.

**Figure 28** UpdateDoc Collaboration Business Rules



Once all of the Collaborations have been created and verified, save your changes to the Repository.

For more information on how to create Business Rules using the Collaboration Editor see the *eGate Integrator User's Guide*.

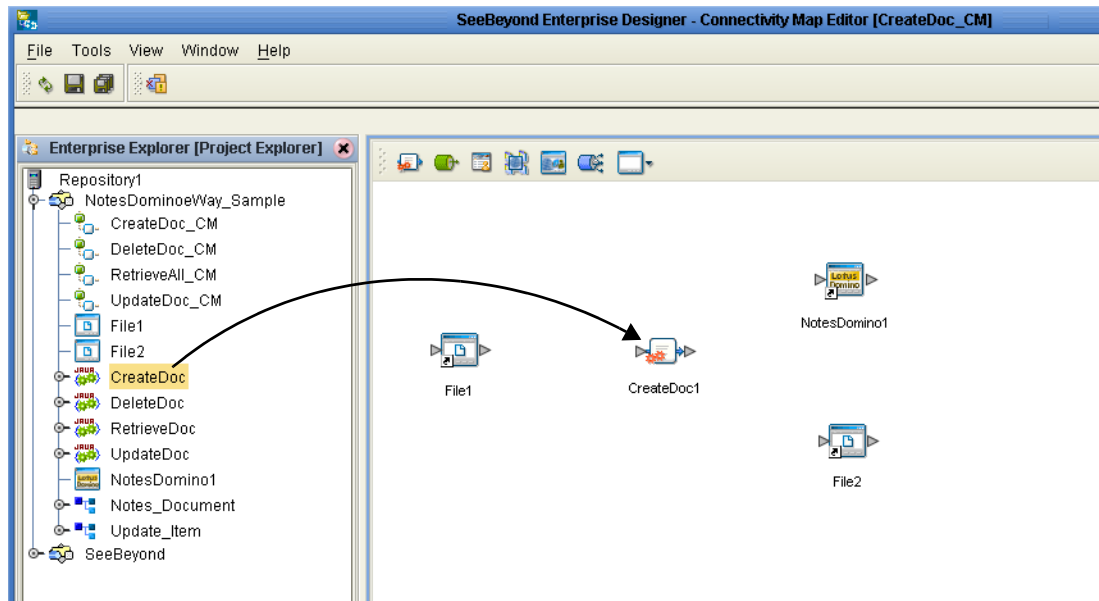
### 4.5.6 Binding the eWay Components

After the Collaborations have been written, the components are associated and Bindings are created in the Connectivity Map.

#### Binding the CreateDoc\_CM Components

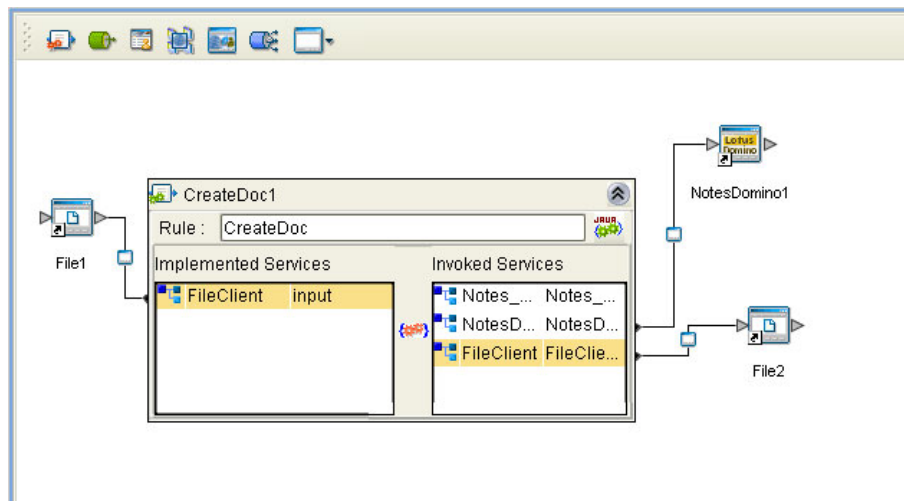
- 1 From the Project Explorer, double-click **CreateDoc\_CM** to display the Connectivity Map.
- 2 Drag and drop the **CreateDoc** Collaboration from the Project Explorer to the **CreateDoc1** Service. The Service's "gears" icon changes from red to green, confirming that the association is successful (see Figure 29).

**Figure 29** CreateDoc\_CM Connectivity Map - Binding the Components



- 3 From the Connectivity Map canvas, double-click **CreateDoc1**. The **CreateDoc1** binding dialog box appears using the **CreateDoc** Rule.
- 4 From the **CreateDoc1** binding dialog box, map **FileClient Input** (under Implemented Services) to the inbound **File1** External Application.
- 5 From the **CreateDoc1** binding dialog box, map **NotesDomino** (under Invoked Services) to the **NotesDomino1** External Application.
- 6 Map **FileClient** (under Invoked Services) to the **File2** External Application (see Figure 30).

**Figure 30** Connectivity Map - Associating (Binding) the Project's Components



- 7 Minimize the **CreateDoc1** binding dialog box by clicking the chevrons in the upper-right corner, and save your current changes.

### Binding the DeleteDoc\_CM Components

- 1 From the Project Explorer, double-click **DeleteDoc\_CM** to display the Connectivity Map.
- 2 Drag and drop the **DeleteDoc** Collaboration from the Project Explorer to the **DeleteDoc1** Service.
- 3 From the Connectivity Map, double-click the **DeleteDoc1** Service. The **DeleteDoc1** binding dialog box appears using the **DeleteDoc** Rule.
- 4 From the **DeleteDoc1** binding dialog box, map **FileClient input** (under Implemented Services) to the **File1** External Application.
- 5 Map **NotesDomino** (under Invoked Services) to the **NotesDomino1** External Application.
- 6 Map **FileClient** (under Invoked Services) to the **File2** External Application.
- 7 Minimize the **DeleteDoc1** binding dialog box, and save your current changes.

### Binding the RetrieveAll\_CM Components

- 1 From the Project Explorer, double-click **RetrieveAll\_CM** to display the Connectivity Map.
- 2 Drag and drop the **RetrieveDoc** Collaboration from the Project Explorer to the **RetrieveAllDocs1** Service.
- 3 From the Connectivity Map, double-click the **RetrieveAllDocs1** Service. The **RetrieveAllDocs1** binding dialog box appears using the **RetrieveDoc** Rule.
- 4 From the **RetrieveAllDocs1** binding dialog box, map **FileClient input** (under Implemented Services) to the **File1** External Application.
- 5 Map **NotesDomino** (under Invoked Services) to the **NotesDomino1** External Application.
- 6 Map **FileClient** (under Invoked Services) to the **File2** External Application.
- 7 Minimize the **RetrieveAllDocs1** binding dialog box, and save your current changes.

### Binding the UpdateDoc\_CM Components

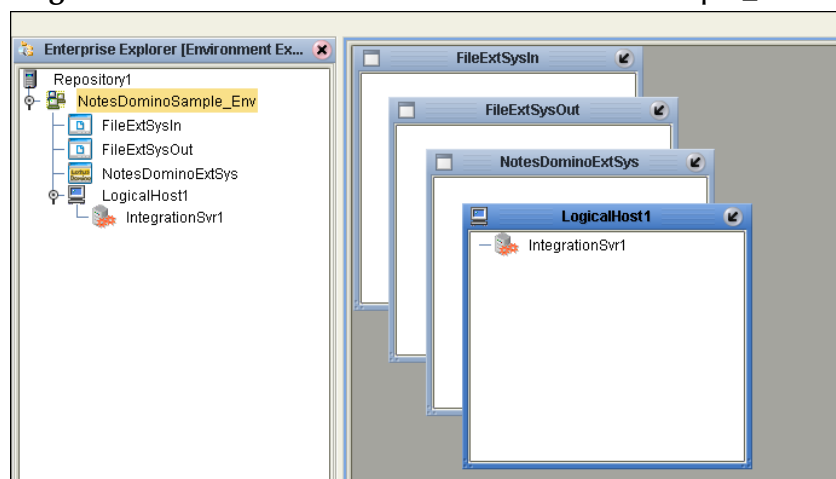
- 1 From the Project Explorer, double-click **UpdateDoc\_CM** to display the Connectivity Map.
- 2 Drag and drop the **UpdateDoc** Collaboration from the Project Explorer to the **UpdateDoc1** Service.
- 3 From the Connectivity Map, double-click the **UpdateDoc1** Service. The **UpdateDoc1** binding dialog box appears using the **UpdateDoc** Rule.
- 4 From the **UpdateDoc1** binding dialog box, map **UpdateDoc input** (under Implemented Services) to the **File1** External Application.
- 5 Map **NotesDomino** (under Invoked Services) to the **NotesDomino1** External Application.
- 6 Map **FileClient** (under Invoked Services) to the **File2** External Application.
- 7 Minimize the **UpdateDoc1** binding dialog box, and save your current changes.

## 4.5.7 Creating an Environment

Environments include the external systems, Logical Hosts, integration servers and message servers used by a project and contain the configuration information for these components. Environments are created using the Enterprise Designer's Environment Explorer and Environment Editor.

- 1 From the Enterprise Designer's Enterprise Explorer, click the **Environment Explorer** tab.
- 2 Right-click the Repository and select **New Environment**. A new Environment is added to the Environment Explorer tree.
- 3 Rename the new Environment to **NotesDominoSample\_Env**.
- 4 Right-click **NotesDominoSample\_Env** and select **New File External System**. Name the External System **FileExtSysIn** and select **Inbound File eWay** as the External System Type. Click **OK**. **FileExtSysIn** is added to the Environment Editor.
- 5 Right-click **NotesDominoSample\_Env** and select **New File External System**. Name the External System **FileExtSysOut** and select **Outbound File eWay** as the External System Type. Click **OK**. **FileExtSysOut** is added to the Environment Editor.
- 6 Right-click **NotesDominoSample\_Env** and select **New NotesDomino External System**. Name the External System **NotesDominoExtSys**. Click **OK**. **NotesDominoExtSys** is added to the Environment Editor.
- 7 Right-click **NotesDominoSample\_Env** and select **New Logical Host**. **LogicalHost1** is added to the Environment Editor.
- 8 From the Environment Explorer tree, right-click **LogicalHost1** and select **New SeeBeyond Integration Server**. A new Integration Server (**IntegrationSvr1**) is added to the Environment Explorer tree under **LogicalHost1**.
- 9 Save changes to the repository. The Environment Explorer and Environment Editor now appear as displayed in Figure 31.

**Figure 31** Environment Editor - NotesDominoSample\_Env.



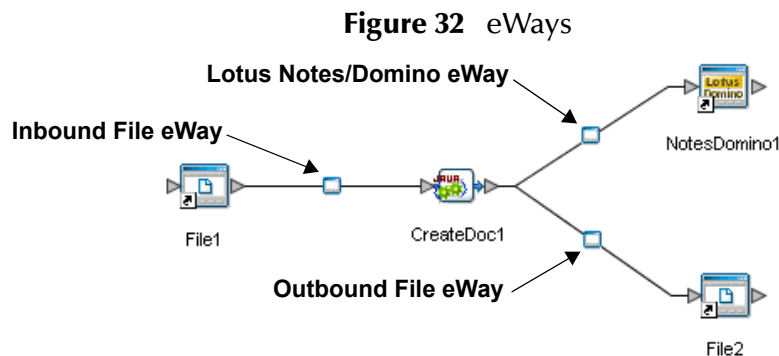
## 4.5.8 Configuring the eWays

The NotesDomino project uses three eWays, each represented in the Connectivity Map as a node between an External Application and a Service. eWays facilitate communication and movement of data between the external applications and the eGate system.

The File eWay properties are configured from the Connectivity Map. The Lotus Notes/Domino eWay properties are set from the Environment Explorer tree (the Notes/Domino eWay contains no Connectivity Map properties).

### Configuring the File eWay Properties

- 1 Double-click the inbound File eWay (see [Figure 32 on page 45](#)). The Templates dialog box appears. Select **Inbound File eWay** in the Templates dialog box and click **OK**.



- 2 The **Properties Sheet** opens to the inbound File eWay properties. Modify the properties for your system, including the settings for the inbound File eWay in Table 3, and click **OK**.

**Table 3** File1 -> CreateDoc1 Inbound File eWay Settings

File1 -> CreateDoc1 Inbound eWay Connection Parameters	
Directory	C:/temp/LotusNotes
Input file name	NotesCreate.txt
Input type	Bytes

- 3 Repeat this process for each of the Inbound File eWay in each of the Connectivity Maps as displayed in Table 4, Table 5, and Table 6.

**Table 4** File1 -> DeleteDoc1 Inbound File eWay Settings

File1 -> DeleteDoc1 Inbound eWay Connection Parameters	
Directory	C:/temp/LotusNotes
Input file name	NotesDelete.txt
Input type	Bytes

**Table 5** File1 -> RetrieveAllDocs1 Inbound File eWay Settings

<b>File1 -&gt; RetrieveAllDocs1 Inbound eWay Connection Parameters</b>	
Directory	C:/temp/LotusNotes
Input file name	NotesRetrieve.txt
Input type	Bytes

**Table 6** File1 -> UpdateDoc1 Inbound File eWay Settings

<b>File1 -&gt; UpdateDoc1 Inbound eWay Connection Parameters</b>	
Directory	C:/temp/LotusNotes
Input file name	NotesUpdate.txt
Input type	Bytes

- 4 In the same way, modify the outbound File eWay properties for your system, including the settings in Table 7, Table 8, Table 9, and Table 10.

**Table 7** CreateDoc1 -. File2 Outbound File eWay Settings

<b>CreateDoc1 -. File2 Outbound eWay Connection Parameters</b>	
Directory	C:/temp/LotusNotes
Output file name	Createoutput%d.dat

**Table 8** DeleteDoc1 -. File2 Outbound File eWay Settings

<b>DeleteDoc1 -. File2 Outbound eWay Connection Parameters</b>	
Directory	C:/temp/LotusNotes
Output file name	Deleteoutput%d.dat

**Table 9** RetrieveAllDocs1 -. File2 Outbound File eWay Settings

<b>RetrieveAllDocs1 -. File2 Outbound eWay Connection Parameters</b>	
Directory	C:/temp/LotusNotes
Output file name	Retrieveoutput%d.dat

**Table 10** UpdateDoc1 -. File2 Outbound File eWay Settings

<b>UpdateDoc1 -. File2 Outbound eWay Connection Parameters</b>	
Directory	C:/temp/LotusNotes
Output file name	Updateoutput%d.dat

## Configuring the Lotus Notes/Domino eWay Properties

The Lotus Notes/Domino eWay properties must be set from the Environment Explorer. For more information on the Lotus Notes/Domino eWay properties and the Properties Sheet, see [Lotus Notes/Domino eWay Properties](#) on page 14.

- 1 From the **Environment Explorer** tree, right-click the Lotus Notes/Domino eWay External System (**NotesDominoExtSys** in this sample), and select **Properties** from the shortcut menu. The Properties Sheet appears.
- 2 Modify the Lotus Notes/Domino eWay environment properties for your system, including the settings in Table 11, and click **OK**.

**Table 11** Notes/Domino Environment Explorer eWay Properties

Lotus Notes/Domino eWay Environment Properties	
<b>Environment Configuration Settings</b> Set as directed, otherwise use the default settings	
Database Type	Specify <b>Remote</b> or <b>Local</b> , according to your system
Notes/Domino Database	Specify a database
Notes/Domino Server	Specify a NotesDomino server
Notes/Domino User	Specify a NotesDomino server authorized user login
Password	Specify a NotesDomino server password for the specified user

Environment settings automatically apply to all eWays of the specified type, so these settings (NotesDomino eWay Environment properties) need only be set once.

### 4.5.9 Creating and Activating the Deployment Profile

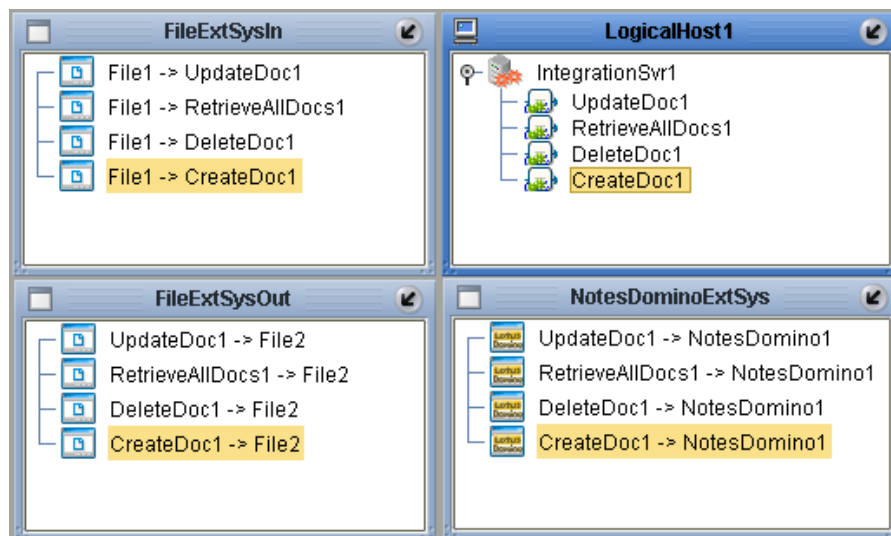
Deployment Profiles are specific instances of a project in a particular Environment. A Deployment Profile contains information about the assignment of Services and message destinations to integration and message servers (JMS IQ Managers). It also contains version information for all versionable objects in the project. Deployment profiles are created using the Deployment Editor.

To create the **NotesDominoSample\_DP** Deployment Profile (see [Figure 33 on page 48](#)) do the following:

- 1 From the Enterprise Explorer's Project Explorer, right-click the project (**NotesDomino\_Sample**) and select **New > Deployment Profile** from the shortcut menu.
- 2 Enter a name for the Deployment Profile (for this sample **NotesDominoSample\_DP**). Make sure that the selected Environment is **NotesDominoSample\_Env**. Click **OK**. The Deployment Profile Editor appears.
- 3 From the left pane of the Deployment Editor, drag the following objects to the **FileExtSysIn** window:

- ◆ File1 -> CreateDoc1
  - ◆ File1 -> DeleteDoc1
  - ◆ File1 -> RetrieveAllDocs1
  - ◆ File1 -> UpdateDoc1
- 4 From the left pane of the Deployment Editor, drag the following objects to the **FileExtSysOut** window:
- ◆ CreateDoc1 -> File2
  - ◆ DeleteDoc1 -> File2
  - ◆ RetrieveAllDocs1 -> File2
  - ◆ UpdateDoc1 -> File2
- 5 From the left pane of the Deployment Editor, drag the following objects to the **NotesDominoExtSys** window:
- ◆ CreateDoc1 -> NotesDomino1
  - ◆ DeleteDoc1 -> NotesDomino1
  - ◆ RetrieveAllDocs1 -> NotesDomino1
  - ◆ UpdateDoc1 -> NotesDomino1
- 6 From the left pane of the Deployment Editor, drag the following services to the **LogicalHost1** window:
- ◆ CreateDoc1
  - ◆ DeleteDoc1
  - ◆ RetrieveAllDocs1
  - ◆ UpdateDoc1

**Figure 33** NotesDominoSample\_DP Deployment Profile



- 7 Click **Activate**. When activation succeeds, save the changes to the Repository.



## 4.5.10 Adding JAR files to the eGate Integration Server

One of the following Lotus Jar files must be added to the ICAN Suite (<ICAN Home>\edesigner\usrdir\modules\ext\notesdominoadapter) prior to building a project, and also to the Logical Host (<ICAN Home>\logicalhost\stcis\lib) before the project is run:

- **Notes.jar** is required for local Domino object access. The file is located in the Notes directory.
- **NSCO.jar** is required for remote Domino object access. The file is located in the Notes/Data/domino/java directory

### Adding the Jar File to eGate

Prior to building a Lotus Notes/Domino eWay project, copy the appropriate Jar file to the ICAN Suite in the following location:

```
<ICAN Home>\edesigner\usrdir\modules\ext\notesdominoadapter
```

where <ICAN Home> is the directory in which ICAN is installed.

This file must be copied manually.

### Adding the Jar File to the Logical Host

Prior to running a Lotus Notes/Domino eWay project, copy the appropriate Jar file to the Logical Host in the following location:

```
<ICAN Home>\logicalhost\stcis\lib
```

where <ICAN Home> is the directory in which ICAN is installed.

The files can be copied manually or by using the **Upload Files** option. To copy the files to the Logical Host using the Upload Files option, do the following:

- 1 From the Environment Explorer tree, right click the Logical Host (for this sample, **LogicalHost1**) and select **Upload File** from the shortcut menu. The **Upload Third Party Files** dialog box appears.
- 2 From the **Upload Third Party Files** dialog box, click **Add**, then browse to and select the appropriate Jar files. Click **Open**.
- 3 Click **OK** to close the dialog box.

*If the Logical Host is running, it must be recycled to pickup the new Jar files.*

### Enabling Java access to a Remote Domino Server

For remote access (when using **NSCO.jar**) the following is also necessary:

- To enable Java access to a remote Domino server, a DIIOP or HTTP server must be configured and run. Running the DIIOP or HTTP server creates the file **diiop\_ior** in the domino/html directory. The diiop\_ior.txt file is queried by the remote application for a connection. If the DIIOP server has not been run previously, there is no diiop\_ior.txt file in the directory.

- Anonymous logging for HTTP must be turned on when using HTTP. If DIIOP is used, configure the port number in the environment.
- In addition, to access a remote Lotus Notes/Domino server using anything other than the configured default port, you must set the Notes/Domino Server property as *server:port* (*server name:port number*).

For more information, see **Java Access to the Domino Objects** at <http://lotus.com/>.

---

## 4.6 Running the Project

The following directions assume that the Enterprise Designer was downloaded to C:\ican50. If this is not the case, replace that location in the following directions with the appropriate location.

- 1 From the Enterprise Manager Downloads tab, download **Logical Host - for win32**.
  - 2 Extract the file to the **ican50\logicalhost1** directory. You must specify the **logicalhost1** directory for it to be created.
  - 3 Navigate to **C:\ican50\logicalhost1\logicalhost\bootstrap\config** directory and open the **logical-host.properties** file using Notepad™.
  - 4 Enter the following information in the appropriate fields:
    - ♦ Logical Host root directory: **ican50\logicalhost1\logicalhost**
    - ♦ Repository URL: **http://localhost:port number/repository name**
    - ♦ Repository user name and password: **Your user name and password**
    - ♦ Logical Host Environment name: **NotesDominoSample\_Env**
    - ♦ Logical Host name: **logicalhost1**
- Save your changes to **logical-host.properties** and close the file.
- 5 Run the **bootstrap.bat** file in the **ican50\logicalhost1\logicalhost\bootstrap\bin** directory.

### Running the sample

Run the sample in the following order:

- 1 **RetrieveAllDocs**
  - A Copy the **NotesRetrieve.~in** sample data file into the input directory.
  - B Change the file extension to match the file name set by the Inbound File eWay **Input file name** parameter for the **File1 -> RetrieveAllDocs** eWay.
  - C The trigger file is picked up by the eWay. The output file containing the retrieved file data appears in the output directory.
- 2 **CreateDoc**
  - A Copy the **NotesCreate.~in** sample data file into the input directory.

- B Change the file extension to match the file name set by the Inbound File eWay **Input file name** parameter for the **File1 -> CreateDoc** eWay.
  - C The input file is picked up by the eWay. The new document is created and added to the Lotus Notes/Domino database. The output file, containing the message "Document Added" is sent to the output directory.
- 3 **UpdateDoc**
- A Copy the **NotesDelete.~in** sample data file into the input directory.
  - B Change the file extension to match the file name set by the Inbound File eWay **Input file name** parameter for the **File1 -> UpdateDoc** eWay.
  - C The input file is picked up by the eWay. The document created by CreateDoc is updated. The output file, containing the message "Item Updated" is sent to the output directory.
- 4 **DeleteDoc**
- A Copy the **NotesDelete.~in** sample data file into the input directory.
  - B Change the file extension to match the file name set by the Inbound File eWay **Input file name** parameter for the **File1 -> DeleteDoc** eWay.
  - C The file is picked up by the eWay. The Created/Updated document is deleted. The output file, containing the message "Document Deleted" is sent to the output directory.

---

## 4.7 Alerting and Logging

eGate provides an alerting and logging feature. This allows monitoring of messages, and captures any adverse messages in order of severity based on configured severity level and higher. To enable Logging, please see the *eGate Integrator User's Guide*.

**Note:** *The alerts/status notifications for the Lotus Notes/Domino eWay are currently limited to Started, Running, Stopping, and Stopped.*

# Java Methods for the Lotus Notes/Domino eWay

A number of Java methods have been exposed to make it easier to set and get information in the eWay's OTD Editor. These methods are contained in the LotusNotesClient Class.

### Chapter Topics

- [The LotusNotesClient Class](#) on page 52
- [Lotus Notes/Domino eWay Javadoc](#) on page 52

---

## 5.1 The LotusNotesClient Class

The LotusNotesClient class represents an OTD through which a Collaboration can invoke transaction programs on a Lotus Notes server. Nodes and methods are exposed so that the Collaboration can conveniently prepare a request for a Lotus Notes/Domino program, invoke the program, and get result from the program.

---

## 5.2 Lotus Notes/Domino eWay Javadoc

The Lotus Notes/Domino Javadoc is an API document in HTML format that provides information on the various available methods provided with the Notes/Domino eWay. The Javadoc is accessed, along with the Lotus Notes/Domino User's Guide and the Lotus Notes Sample, by selecting and uploading **LotusNoteseWayDocs.sar** from the **ADMIN** tab of the Enterprise Manager. The Javadoc can then be downloaded from the **Documentation** tab of the Enterprise Manager.

To access the full Javadoc, extract the Javadoc to an easily accessible folder, then double click the **index.html** file.

# Index

6.2.1

## A

alerting 51

## B

binding  
     eWay components 41  
 Business Rule  
     comments  
     creating 27

## C

Collaboration  
     editor  
         Java 24  
 Collaboration definitions  
     Java 24  
 Collaboration editor  
     Java 26  
 Collaboration editor (Java)  
     Business Rules 26  
 comments  
     creating 27  
 configuration properties 14  
 Connectivity Map 22, 23

## D

Deployment Profile 47  
 document  
     conventions 8

## E

e-mail 6  
 e-Mail eWay  
     modifying properties 15  
     properties  
         Environment Explorer tree 14  
 Environment

    creating 44  
     Logical Host 44  
     SeeBeyond Integration Server 44  
 eWays  
     creating 15  
 External Applications 22  
 external systems requirements 11

## I

implementation 19

## J

Javadoc 52

## L

logging 51  
 Logical Host requirements 11

## M

methods, Lotus Notes eWay 52

## N

Notes/Domino eWay  
     considerations 20

## O

Object Type Definition Wizard 24  
     DTD Wizard 24  
 organization of information 7

## P

Project  
     creating 21  
 properties  
     configuring the eWays 45

## R

running a project 50

## S

sample project  
     importing 20  
     properties 45  
     requirements to complete 20

## Index

supported operating systems 10, 11

## W

writing conventions 8