SeeBeyond ICAN Suite

# PkMS eWay Intelligent Adapter User's Guide

Release 5.0.1



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### **Chapter 1**

## Introduction

This user's guide describes how to configure and operate the PkMS eWay Intelligent Adapter, referred to as the PkMS eWay throughout the rest of this document. This document provides information about PkMS eWay implementations in eGate deployments.

In This Chapter

- Contents of This Guide on page 5
- Writing Conventions on page 6
- Supporting Documents on page 7
- SeeBeyond Web Site on page 7

### **1.1** Contents of This Guide

This guide contains the following information:

- Chapter 2, "About the PkMS eWay" on page 8 provides an overview of the PkMS eWay.
- Chapter 3, "Installing the PkMS eWay" on page 9 provides an overview of the PkMS eWay.
- Chapter 4, "Building PkMS Projects" on page 11 describes how to build a PkMS eWay Project.

### **1.2 Writing Conventions**

The following writing conventions are observed throughout this document.

Table 1         Writing Conventions	
-------------------------------------	--

Text	Convention	Example
Button, file, icon, parameter, variable, method, menu, and object names.	Bold text	<ul> <li>Click OK to save and close.</li> <li>From the File menu, select Exit.</li> <li>Select the logicalhost.exe file.</li> <li>Enter the timeout value.</li> <li>Use the getClassName() method.</li> <li>Configure the Inbound File eWay.</li> </ul>
Command line arguments and code samples	Fixed font. Variables are shown in <i>bold</i> <i>italic</i> .	bootstrap -p <b>password</b>
Hypertext links	Blue text	For more information, see "Writing Conventions" on page 6.

#### **Additional Conventions**

#### Windows Systems

For the purposes of this guide, references to "Windows" will apply to Microsoft Windows Server 2003, Windows XP, and Windows 2000.

#### Path Name Separator

This guide uses the backslash ("") as the separator within path names. If you are working on a UNIX system, please make the appropriate substitutions.

### **1.3 Supporting Documents**

The following SeeBeyond documents provide additional information about the Integrated Composite Application Network (ICAN) Suite:

- SeeBeyond ICAN Suite Primer
- SeeBeyond ICAN Suite Installation Guide
- eGate Integrator User's Guide
- eGate Integrator Tutorial

### 1.4 SeeBeyond Web Site

The SeeBeyond Web site is a useful source for product news and technical support information at **www.seebeyond.com**.

### **Chapter 2**

## About the PkMS eWay

The PkMS eWay enables you to process data to and from PkMS systems. PkMS is a warehouse management system provided by Manhattan Associates.

This chapter provides a brief overview of the PkMs eWay, including platform and system requirement information.

In This Chapter

- Overview on page 8
- Supported Operating Systems on page 8
- System Requirements on page 8

#### 2.1 **Overview**

The PkMS eWay enables you to do the following:

- Retrieve PkMS XML data from FTP servers using the Batch eWay and convert it to a selected format such as Data Type Definitions (DTDs), using user-defined Object Type Definitions (OTDs) or any eWay OTD.
- Retrieve custom input data, convert it to PkMS XML data, and FTP it to external PkMS systems using the Batch eWay.

### 2.2 Supported Operating Systems

The PkMS eWay is available for the following operating systems:

- Windows 2000 SP3
- Sun Solaris 8

### 2.3 System Requirements

The system requirements for the PkMS eWay are the same as for eGate Integrator. For information, refer to the *SeeBeyond ICAN Suite Installation Guide*.

## Installing the PkMS eWay

This chapter describes how to install the PkMS eWay.

In This Chapter

- "Installing the PkMS eWay" on page 9
- "After Installation" on page 10

### 3.1 Installing the PkMS eWay

During the eGate Integrator installation process, the Enterprise Manager, a web-based application, is used to select and upload products as .sar files from the eGate installation CD-ROM to the Repository.

The installation process includes installing the following components:

- Installing the Repository
- Uploading products to the Repository
- Downloading components (such as Enterprise Designer and Logical Host)
- Viewing product information home pages

Follow the instructions for installing the eGate Integrator in the *SeeBeyond ICAN Installation Guide*, and include the following steps:

- 1 During the procedures for uploading files to the eGate Repository using the Enterprise Manager, after uploading the **eGate.sar** file, select and upload the following files:
  - **PkMSXMLSchemaLibrary.sar** (to install the PkMS eWay)
  - BatcheWay.sar (to install the Batch eWay)
  - FileeWay.sar (to install the File eWay, used in the sample Project)
- 2 Click **DOWNLOADS**.
- 3 Click PKMS XSD ZIP WM OpenSystem V1 SP1. The File Download dialog box appears.
- 4 Save the file in any directory. This zip file contains the XSD files used when you create Collaboration Definitions.
- 5 Unzip the file.

#### Figure 1 Download the PKMS XSD ZIP WM OpenSystem V1 SP1 .zip File

Enterprise Manager
HOME ADMIN DOWNLOADS DOCUMENTATION
:- products available to download from myrepo
Component
Enterprise Designer Logical Host - for win32
PKMS XSD ZIP WM OpenSystem V1 SP1

6 Continue installing the eGate Integrator as instructed in the *SeeBeyond ICAN Suite Installation Guide*.

### 3.2 After Installation

Once you have installed and configured the PkMS eWay, you must then incorporate it 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.

### Chapter 4

## **Building PkMS Projects**

This chapter describes how to build PkMS Projects to retrieve and send data to and from PkMS systems.

In This Chapter

- Quick Overview: Creating PkMS Projects on page 13
- Building an Inbound PkMS Collaboration on page 13
- Building an Outbound PkMS Collaboration on page 24
- Working with The PkMS eWay Sample on page 35

### 4.1 About PkMS Projects

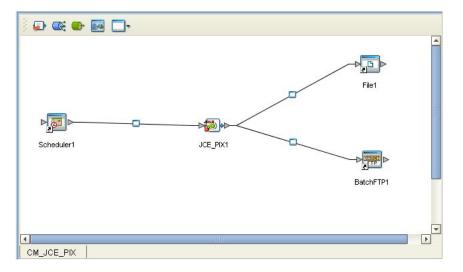
A PkMS eWay implementation consists of one eGate Project with two Collaborations:

- Inbound PkMS Collaboration
- Outbound PkMS Collaboration

### 4.1.1. Inbound PkMS Collaborations

The inbound PkMS Collaboration uses the Batch eWay to poll an FTP server to retrieve PkMS XML files. The Collaboration unmarshals the PkMS XML data from String, maps the data to custom DTDs, and forwards the data to an external system, such as a database, SAP, or file.

The figure below shows an example of a Connectivity Map for an inbound PkMS Collaboration.



#### Figure 2 Inbound PkMS Collaboration

### 4.1.2. Outbound PkMS Collaborations

The outbound PkMS Collaboration retrieves input data in any format from an external system such as a database or SAP system. The Collaboration unmarshals the input data to custom DTDs, and maps the data to PkMS XML format. It then uses the Batch eWay to FTP the output data to an FTP server.

The figure below shows an example of a Connectivity Map for an outbound PkMS Collaboration.

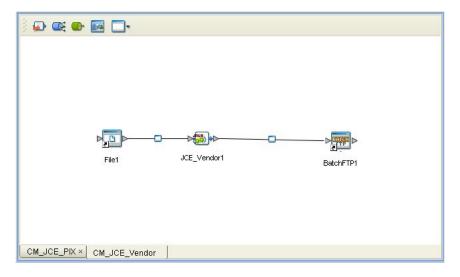


Figure 3 Outbound PkMS Collaboration

### 4.2 Quick Overview: Creating PkMS Projects

The procedure below provides the steps to create PkMS Projects in broad outline.

- 1 Create custom data type definitions (DTDs).
- 2 Create an eGate Project if necessary.
- 3 Create a Connectivity Map with an inbound eWay, a Collaboration, and an outbound eWay.
- 4 Create an Object Type Definition (OTD).
- 5 Creating the Java Collaboration Definition and its business logic.
- 6 Bind the newly created Collaboration Definition to the service and connect the Collaboration to the eWays.
- 7 Configure the eWays if necessary.
- 8 Create an eGate Environment and Deployment Profile.
- 9 Deploy and run the Project.

### 4.3 Building an Inbound PkMS Collaboration

This section describes how to create an inbound PkMS Collaboration. The procedures below describe an example where the Collaboration uses a scheduler and the Batch eWay to poll an FTP server for PkMS XML files, converts the data using a DTD, and forwards the output to a File eWay.

### 4.3.1. Creating the Inbound Connectivity Map

The procedure below describes how to create the Connectivity Map for an inbound PkMS Collaboration.

#### To create the inbound Connectivity Map

- 1 If necessary, in the Project Explorer tab of the Enterprise Designer, right-click the Repository and click **New Project**.
- 2 Right-click the Project, click **New**, and click **Connectivity Map**. A blank Connectivity Map appears.
- 3 Click the **eWay** icon and click **Scheduler**.
- 4 Drag the **Scheduler** icon to the Connectivity Map to create the inbound eWay.
- 5 Drag the **Service** icon to the Connectivity Map.
- 6 Click the **eWay** icon and click the **File External Application**.
- 7 Drag the File eWay icon to the Connectivity Map to create the outbound eWay.
- 8 Click the eWay icon and click Batch FTP External Application.

9 Drag the Batch eWay icon to the Connectivity Map to create a second outbound eWay. The Connectivity Map looks similar to the figure below.

 Image: Image:

Figure 4 Inbound PkMS Connectivity Map

### 4.3.2. Creating the Inbound PkMS OTDs

For the inbound PkMS Collaboration, you create the following two OTDs:

- XSD OTD which uses an XSD to define the objects in the PkMS data
- DTD OTD which uses a DTD to define the output data

#### Creating the Inbound XSD OTD

#### To create the inbound XSD OTD

- 1 If necessary, in the Project Explorer tab of the Enterprise Designer, right-click the Repository and click **New Project**.
- 2 Right-click the new Project, click **New**, and click **Object Type Definition**. The **New Object Type Definition** wizard appears as shown below.

Select Wizard Type	
OTD Wizard	Description
DB2 Database	Uses a UDB database to create an OTD
TD DTD	Uses a DTD to create an OTD
📲 Oracle Database	Uses an Oracle database to create an OTD
SAP BAPI	Uses a SAP Business Object or a RFC to cr
SAP IDOC	Uses SAP IDOC metadata to create an OTD
User-Defined OTD	Allows the user to create a custom OTD
Contraction Contraction	Wizard for creating WSDL OTD
T XSD	Uses an XSD to create an OTD
1	
< Back Nevt >	Finish Cancel Help
	CB2 Database DTD Cracle Database SAP BAPI SAP IDOC Cser-Defined OTD

#### Figure 5 New Object Type Definition Wizard

3 Click XSD and click Next. The Select XSD Files page appears.

Figure 6 Selecting XSD Files

	New Wizard - XSD 🛛 🕺 😽
Steps	Select XSD File(s)
<ol> <li>Select Wizard Type</li> <li>Select XSD File(s)</li> <li>Select Document Elements</li> <li>Select OTD Options</li> </ol>	Browse XSD Files Look In: xsd Sd ItemMaster_1_4.xsd SkuSub_1_0.xsd StoreDistro_1_4.xsd StoreDistro_1_4.xsd StoreMaster_1_3.xsd d OutbdLoad_1_1.xsd StoreMaster_1_3.xsd d OutbdStop_1_0.xsd VendorMaster_1_2.xsd UvendorMaster_1_2.xsd VendorMaster_1_2.xsd SerialNumber_1_0.xsd SerialNumber_1_0.xsd SerialNumber_1_0.xsd StoreMaster_1_2.xsd File Name: PIX_1_2.xsd File Name: PIX_1_2.xsd Select
	Selected XSD Files
SEEBEYOND	Remove
	< <u>Back</u> Next> <u>Finish</u> Cancel <u>H</u> elp

4 In the Look In box, browse to the location where you unzipped the PKMS XSD ZIP WM OpenSystem V1 SP1 zip file. For more information about this zip file, refer to "Installing the PkMS eWay" on page 9.

- 5 Double-click the XSD file to be used and click **Next**. The **Select Document Elements** page appears.
- 6 Click the elements and click Next. The Select OTD Options page appears.
- 7 Click **Finish**. The **OTD Editor** window displays the newly created OTD similar to the one below.

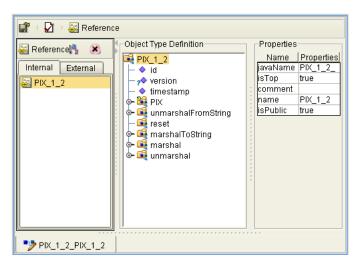


Figure 7 Inbound XSD OTD

#### Creating the Inbound DTD OTD

To create the inbound DTD OTD

1 Right-click the Project, click **New**, and click **Object Type Definition**. The **New Object Type Definition** wizard appears as shown below.

	New Object Type Definiti Select Wizard Type	on Wizard 🗙
	OTD Wizard DB2 Database DTD Cracle Database SAP BAPI SAP IDOC User-Defined OTD WSDL SSD	Description Uses a UDB database to create an OTD Uses a DTD to create an OTD Uses an Oracle database to create an OTD Uses a SAP Business Object or a RFC to cr Uses SAP IDOC metadata to create an OTD Allows the user to create a custom OTD Wizard for creating WSDL OTD Uses an XSD to create an OTD
SEEBEYOND	< Back Next >	Einish Cancel <u>H</u> elp

Figure 8 New Object Type Definition Wizard

2 Click **DTD** and click **Next**. The **Select DTD Files** page appears.

	New Wizard - DTD 🛛 😵
Steps	Select DTD File(s)
<ol> <li>Select Wizard Type</li> <li>Select DTD File(s)</li> <li>Select Document Elements</li> <li>Select OTD Options</li> </ol>	Browse DTD Files
	File Name: Vendor.dtd Files of Type: DTD File Type
	Selected DTD Files
SEEBEYOND	Vendor.dtd Remove
	< <u>Back</u> Next > <u>Finish</u> Cancel <u>H</u> elp

#### Figure 9 Selecting DTD Files

- 3 In the Look In box, browse to the location where the custom DTDs reside.
- 4 Double-click the DTDs to be used and click **Next**. The **Select Document Elements** page appears.
- 5 Click the elements (use CTRL+click to select multiple elements) and click **Next**. The **Select OTD Options** page appears.
- 6 Click Finish. The OTD Editor window displays the DTD OTD.

#### 4.3.3. Creating the Collaboration Definition

#### To create the Collaboration Definition

- 1 In the Project Explorer of the Enterprise Designer, right-click the Project, click **New** and click **Java Collaboration Definition**. The **Java Collaboration Definition** wizard appears.
- 2 In the **Collaboration Name** box, enter the name for the Collaboration and click **Next**. The **Select Operation** page appears as shown below.

	Java Collaboration Definition Wizard
Steps         1. Enter Name and Type         2. Select Web Service Operation to implement         3. Select OTDs	Select Operation this Java Collaboration will implement Look In: myRepository
SEEBEYOND	Name: receive Type: Web Service Operation
	< <u>Back</u> Next > <u>Finish</u> Cancel <u>H</u> elp

#### Figure 10 Selecting Collaboration Operations

3 Double-click **SeeBeyond**, **eGate**, **Scheduler**, and click **start** as shown below.

Figure 11 Selecting the Scheduler

	Java Collaboration Definition Wizard	8
Steps	Select Operation this Java Collaboration will implement	
<ol> <li>Enter Name and Type</li> <li>Select Web Service Operation to implement</li> <li>Select OTDs</li> </ol>	Look In: 📲 Scheduler 💽 🙆 📾 😫 🖾	
SEEBEYOND	Name: start Type: Web Service Operation	
	< <u>Back</u> Next > <u>Finish</u> Cancel <u>Help</u>	

- 4 Click Next.
- 5 Browse to and double-click the following files:
  - SeeBeyond > eWays > File > FileClient
  - SeeBeyond > eWays > File > BatcheWay > BatchFTP
  - Projectname > ProjectOTDs

The Java Collaboration Definition wizard displays similar to the following:

	Java Collaboration Definition Wizard 🛛 😵
Steps	Select OTDs to be used in this Java Collaboration
<ol> <li>Enter Name and Type</li> <li>Select Web Service Operation to implement</li> <li>Select OTDs</li> </ol>	Look In: 🗐 Project1 💽 🙆 📖 🖺 🔛
	Name: PIX_1_2_PIX_1_2 Type: Object Type Definition
1 33	Selected OTDs OTD Instance Name SeeBeyond.eWays.File.FileClient_1
IT AT	SeeBeyond.eWays.BatcheWay         BatchFTP_1           Project1.PIX_1_2_PIX_1_2         PIX_1_2_PIX_1_2_1
SEEBEYOND	Remove
	< Back Next > Finish Cancel Help

Figure 12 Selecting DTDs

6 Click Finish. The Java Collaboration Editor window appears.

You can now create the business logic for the Collaboration as described below.

### 4.3.4. Creating the Business Logic for The Collaboration Definition

Once you have created the Collaboration Definition as described in the section above, you can create the business logic for the Collaboration. The business logic for this inbound PkMS Collaboration consist of the following components;

- 1 Retrieving the PkMS XML Input Data on page 19
- 2 Unmarshaling the PkMS XML Data on page 20
- 3 Mapping the Data on page 21
- 4 Marshaling Data as String to a File on page 22

#### Retrieving the PkMS XML Input Data

The first step in the business logic is to handle the data when it comes into the Project. In this case, you unmarshal the data to String as described below.

#### To retrieve the PkMS XML input data

- 1 Expand **BatchFTP\_1**, right-click **Client**, and click **Select a method to call**. A list of methods appears.
- 2 Click **get()**. The **get** box appears as shown below.

#### Figure 13 Getting Input Data

Business Rules Designer	
JCE_PIX inventory_with_top_INVENTOF input FileClient_1 PIX_1_2_with_top_PIX_1_2_1 BatchFTP_1 Payload Payload ResolvedNamesForPut VuserProperties Configuration Connector Connector Connector ResolvedNamager State VuserProvider Prov	JCE_PIX T inventory_with_top_INVENTORY_1 input FileClient_1 PIX_1_2_with_top_PIX_1_2_1 BatchFTP_1
Mapper PIXCollab × JCE_PIX	

#### Unmarshaling the PkMS XML Data

To unmarshal the PkMS XML data

- 1 Right-click the inbound XSD OTD, click **Select a method to call**, and click **unmarshalFromString()**. The **unmarshalFromString** box appears.
- 2 Click the **Call New Constructor** button. The **Call New Constructor** dialog box appears.
- 3 Enter **string** and press **ENTER**. The list of string constructs appears as shown below.



Figure 14 Calling a New Constructor

- 4 Click java.lang.string(byte[] bytes) and click OK.
- 5 Drag **Payload** under **Client** to **byte**[] **bytes** in the **java.lang.string** box.

6 Drag **result (String)** to **in (String)** as shown below.

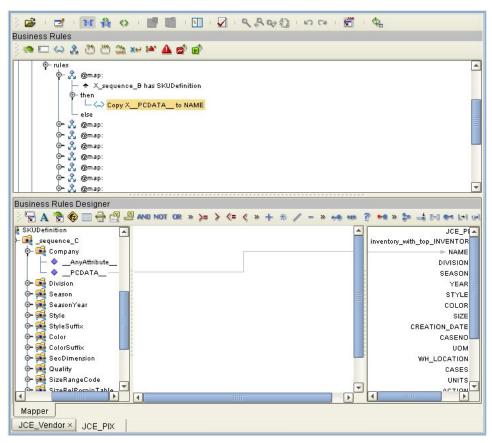
Figure 15 Unmarshaling the Input Data

Business Rules Designer		
🖇 😼 🗛 📚 🌚 🖶 🚝 🖴 and no	IOR » >= > <= < » + ∞ / - » ↔ ∞ ? •• » >= ⇒ ⊟ ↔ ы	uell » 🔲 😫 🔯 » I I+
PIXCollab		PIXCollab 🖾 📲
尾 input		input 尾
尾 FileClient_1	👌 unmarshal From String 🔼	FileClient_1 🛋
■ PIX_1_2_PIX_1_2_1	👌 unmarshal From String 🗠	PIX_1_2_PIX_1_2_1 🛋
BatchFTP_1	PIX_1_2_	BatchFTP_1 🚅
🖗 ঝ \$Configuration	🏀 java.lang.String 🔼 🔰 in (String)	-
👳 🖬 Client		
Payload	bytes (byte])	
💁 📑 ResolvedNamesForGet		
💿 📑 ResolvedNamesForPut	result (String)	
UserProperties		
🛛 🗢 🛋 Configuration		
🗢 🚅 Connector		
O− G CurrentXaTransaction		
💿 🛋 Provider		
💿 🚅 ResourceManager		
🗢 🚅 State		
📴 🚅 StateManager		
Mapper		
PIXCollab JCE_PIX ×		

### Mapping the Data

Map the input data to the output data. The figure below shows a sample mapping.

Figure 16 Mapping the Data



#### Marshaling Data as String to a File

The procedure below marshals the converted data to String and forwards it to a file using the File eWay.

To marshal data as strings to a file

- 1 Right-click the custom OTD to be marshaled, click **Select a method to call**, and click **marshalToString()**. The **marshalToString** box appears.
- 2 Drag **Result (String)** to **Text** under **FileClient\_1** as shown below.

Business Rules Designer		
🖇 🗟 A 🔁 🌚 🔤 🖶 🖉 🖉 AND NOT	IOR » >= > <= < » + ∞ / - » +∞ +∞ ? +∞ >≥ -4 [	는] 🕶 L+1 (H) » 📕 🕅 🔯 » I I+
JCE_PIX inventory_with_top_INVENTORY_1 input FileClient_1 PIX_1_2_with_top_PIX_1_2_1 BatchFTP_1 Gate Sconfiguration Client Payload Gate ResolvedNamesForGet Gate Res	Image: Second	JCE_PIX © * + JCE_PIX © * inventory_with_top_INVENTORY_1 & input & FileClient_1 & PIX_1_2_with_top_PIX_1_2_1 & BatchFTP_1 &
📴 🖼 StateManager		
Mapper		
PIXCollab × JCE_PIX		

Figure 17 Marshaling Data to String

### 4.3.5. Binding the Collaboration Definition and eWays

Once you have created the Collaboration and its business logic as described in the section above, you can bind the new Collaboration Definition to the Service, and then connect the Service to the eWays.

#### To bind the Collaboration Definition and eWays

1 From the Project Explorer of the Enterprise Designer, drag the newly created Collaboration Definition to the Service in the Connectivity Map as shown below.

Figure 18 Binding the Collaboration Definition and Service



- 2 Double-click the **Service** icon. The **Service1** window appears.
- 3 Drag the Scheduler service to the Scheduler icon.
- 4 Drag the BatchFTP service to the Batch eWay.
- 5 Drag the FileClient service to the File eWay. The binding windows looks similar to the figure below.

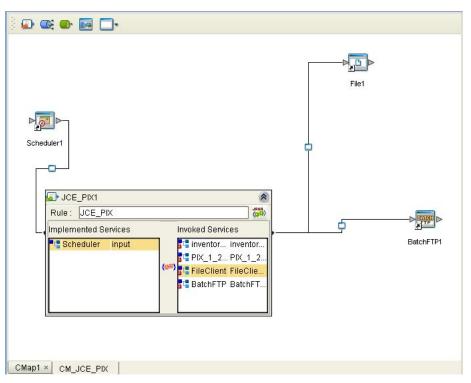


Figure 19 Connecting the Collaboration to the eWays

6 Close the **Service1** window and click **Save**.

### 4.3.6. Completing the Inbound Collaboration

Once you have completed the Connectivity Map binding, do the following to complete the inbound Collaboration:

• Configure the eWays as described in the eWay documentation.

### 4.4 Building an Outbound PkMS Collaboration

The procedure below builds the outbound PkMS Collaboration which retrieves data in user-defined DTD format, converts it to PkMS XML format, and forwards the output to an FTP server using the Batch eWay to be retrieved by an external PkMS system.

### 4.4.1. Creating the Outbound Connectivity Map

The procedure below describes how to create the Connectivity Map for the PkMS Collaboration.

#### To create the outbound Connectivity Map

 In the Project Explorer tab of the Enterprise Designer, right-click the Project, click New, and click Connectivity Map. A blank Connectivity Map appears.

- 2 Click the eWay icon and click the File External Application.
- 3 Drag the File eWay icon to the Connectivity Map to create the outbound eWay.
- 4 Drag the **Service** icon to the Connectivity Map.
- 5 Click the eWay icon and click Batch FTP External Application.
- 6 Drag the Batch eWay icon to the Connectivity Map to create the outbound eWay. The Connectivity Map looks similar to the figure below.

Figure 20 Outbound PkMS Connectivity Map

) 🗗 😅 🖝 🔜 🗔-		
File1	Service1	BatchFTP1
CMap1 CM_JCE_PIX ×	CM_JCE_Vendor ×	

### 4.4.2. Creating the Outbound OTDs

For the outbound PkMS Collaboration, you create the following two OTDs:

- DTD OTD which uses DTDs to define the input data
- XSD OTD which uses an XSD to define the PkMS objects

#### Creating the Outbound DTD OTD

To create the outbound DTD OTD

1 Right-click the PkMS Project, click **New**, and click **Object Type Definition**. The **New Object Type Definition** wizard appears as shown below.

	New Object Type Definiti	on Wizard 🛛 🛞
	Select Wizard Type	
	OTD Wizard T DB2 Database DDD	Description Uses a UDB database to create an OTD Uses a DTD to create an OTD
	Coracle Database SAP BAPI SAP IDOC User-Defined OTD WSDL XSD	Uses an Oracle database to create an OTD Uses a SAP Business Object or a RFC to cr Uses SAP IDOC metadata to create an OTD
SEEBEYOND	4	
(	< <u>B</u> ack Next >	<u>Finish</u> Cancel <u>H</u> elp

Figure 21 New Object Type Definition Wizard

2 Click DTD and click Next. The Select DTD Files page appears.

Figure 22 Selecting DTD Files

	New Wizard - DTD	×
Steps	Select DTD File(s)	_
<ol> <li>Select Wizard Type</li> <li>Select DTD File(s)</li> <li>Select Document Elements</li> <li>Select OTD Options</li> </ol>	Browse DTD Files Look In: Test Inventory.dtd Vendor.dtd File Name: Inventory.dtd Files of Type: DTD File Type I	
	Select	
SEEBEYOND	inventory.dtd Remove	
	< <u>Back</u> Next > <u>Finish</u> Cancel <u>H</u> elp	

- 3 In the Look In box, browse to the location where the custom DTDs reside.
- 4 Double-click the DTDs to be used and click **Next**. The **Select Document Elements** page appears.

- 5 Click the elements (use CTRL+click to select multiple elements) and click **Next**. The **Select OTD Options** page appears.
- 6 Click Finish. The OTD Editor window displays the newly created OTD.

#### Creating the Outbound XSD OTD

#### To create the outbound XSD OTD

1 Right-click the PkMS Project, click **New**, and click **Object Type Definition**. The **New Object Type Definition** wizard appears as shown below.

	New Object Type Definiti	on Wizard	×
100	Select Wizard Type		
1 - 0//	OTD Wizard	Description	
	<ul> <li>DB2 Database</li> <li>DTD</li> </ul>	Uses a UDB database to create an OTD Uses a DTD to create an OTD	
	Oracle Database	Uses an Oracle database to create an OTE	)
And the second second	SAP BAPI	Uses a SAP Business Object or a RFC to c	
115	SAP IDOC	Uses SAP IDOC metadata to create an OTI Allows the user to create a custom OTD	1
NE/ B SA	T WSDL	Wizard for creating WSDL OTD	
MAG AN	T XSD	Uses an XSD to create an OTD	
SEEBEYOND	•		
			-
ſ	< Back Next >	Finish Cancel Help	ר
L			

Figure 23 New Object Type Definition Wizard

2 Click **XSD** and click **Next**. The **Select XSD Files** page appears.

New Wizard - XSD 🛛 🛛 🛛		
Steps	Select XSD File(s)	
<ol> <li>Select Wizard Type</li> <li>Select XSD File(s)</li> <li>Select Document Elements</li> <li>Select OTD Options</li> </ol>	Browse XSD Files Look In: xsd      xsd      kmmaster_1_4.xsd      SkuSub_1_0.xsd sd ItemPackQty_1_0.xsd      StoreDistro_1_4.xsd sd OutbdLoad_1_1.xsd      StoreMaster_1_3.xsd OutbdStop_1_0.xsd      VendorMaster_1_2.xsd 1.xsd Pickticket_1_5.xsd      WhseTfr_1_0.xsd SerialNumber_1_0.xsd SerialNumber_1_0.xsd SerialNumber_1_0.xsd File Name: VendorMaster_1_2.xsd Files of Type: XSD File Type Select	
A	Selected XSD Files VendorMaster_1_2.xsd Remove	
SEEBEYOND	< Back Next > Finish Cancel Help	

#### Figure 24 Selecting XSD Files

- 3 In the Look In box, browse to the location where you unzipped the PKMS XSD ZIP WM OpenSystem V1 SP1 zip file. For more information about this zip file, refer to "Installing the PkMS eWay" on page 9.
- 4 Double-click the XSD file to be used and click **Next**. The **Select Document Elements** page appears.
- 5 Click the elements and click **Next**. The **Select OTD Options** page appears.
- 6 Click **Finish**. The **OTD Editor** window displays the XSD OTD similar to the one below.

Reference Reference Internal External PIX_1_2 Object Type Definition id PIX_1_2 Version Vimestamp PIX PIX Internal FromString The set Th	Properties Name Properties JavaName PIX_1_2_ isTop true comment name PIX_1_2 isPublic true
•> PIX_1_2_PIX_1_2	

Figure 25 Outbound XSD OTD

### 4.4.3. Creating the Collaboration Definition

#### To create the Collaboration Definition

- 1 In the Project Explorer of the Enterprise Designer, right-click the Project, click **New** and click **Java Collaboration Definition**. The **Java Collaboration Definition** wizard appears.
- 2 In the **Collaboration Name** box, enter the name for the Collaboration and click **Next**. The **Select Operation** page appears as shown below.

	Java Collaboration Definition Wizard	×
<ol> <li>Steps</li> <li>Enter Name and Type</li> <li>Select Web Service Operation to implement</li> <li>Select OTDs</li> </ol>	Select Operation this Java Collaboration will implement Look In: myRepository   myRepository  myRepo	
SEEBEYOND	Name: receive Type: Web Service Operation	

3 Double-click **SeeBeyond**, **eWays**, **File**, **FileClient**, and click **receive** as shown below.

	Java Collaboration Definition Wizard
Steps         1. Enter Name and Type         2. Select Web Service Operation to implement         3. Select OTDs	Select Operation this Java Collaboration will implement
SEEBEYOND	Name:     receive       Type:     Web Service Operation       ✓        Back     Next >         Finish     Cancel

#### Figure 27 Selecting File Receive

- 4 Click Next.
- 5 Browse to the following OTDs and double-click them to add them to the outbound Collaboration Definition:
  - SeeBeyond > eWays > File > BatcheWay > BatchFTP
  - Projectname > ProjectOTDs

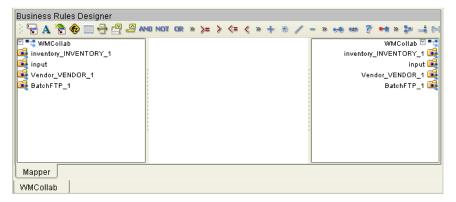
The Java Collaboration Definition wizard displays similar to the following:

Steps	Select OTDs to be used in this Java Collaboration
I. Enter Name and Type     Select Web Service     Operation to implement     Select OTDs	Look In: 🐼 WMProject 🔽 😰 🐼 🛋 🗟 📰
	Name: Vendor_VENDOR Type: Object Type Definition
	Selected OTDs OTD Instance Name
	SeeBeyond.eWays.BatcheWay BatchFTP_1
	WMProject.inventory_INVENTORY inventory_INVENTORY_1
	WMProject.Vendor_VENDOR Vendor_VENDOR_1
SEEBEYOND	Remove

#### Figure 28 Outbound Collaboration Definition

- 6 Click Next.
- 7 Browse to and double-click the following files:
  - SeeBeyond > eWays > File > BatcheWay > BatchFTP
  - Projectname > ProjectOTDs
- 8 Click Finish. The Java Collaboration Editor window appears.

**Figure 29** Collaboration Definition—XSD to DTD



You can now create the business logic for the Collaboration as described below.

### 4.4.4. Creating the Business Logic for The Collaboration Definition

Once you have created the Collaboration Definition as described in the section above, you can create the business logic for the Collaboration. The business logic for this outbound PkMS Collaboration consist of the following components:

- 1 Unmarshaling the Input Data From String on page 32
- 2 Mapping the Input Data to Output Data on page 32
- 3 Marshaling to String and Converting to Bytes on page 33

#### Unmarshaling the Input Data From String

To unmarshal the input data

- 1 Right-click the DTD OTD, click **Select a method to call**, and click **unmarshalFromString().** The **unmarshalFromString** box appears.
- 2 Expand **input** in the input column and drag **Text** to **in (String)** as shown below.

#### Business Rules Designer 🖫 A 🖹 🏟 🚃 🖶 🚝 🖨 and not or » >= > <= < » 🕂 \* // - » 🧀 🐲 💡 🏍 » 🐉 🛁 (티 🚧 Lei (네 » WMCollab 🗹 🎫 📲 WMCollab 🙀 input 🚦 unmarshal From String 🗠 input 📑 - 🔷 ByteArray - 🔷 Text —— Vendor\_with\_top\_VENDOR\_1 📑 VENDOR VendorMaster\_1\_2\_with\_top\_VendorMaster\_1\_2\_1 🞑 in (String) 💐 Vendor\_with\_top\_VENDOR\_1 BatchFTP\_1 📑 🙀 VendorMaster\_1\_2\_with\_top\_VendorMa 尾 BatchFTP\_1 -• Mapper WMCollab × JCE\_Vendor

#### Figure 30 Unmarshaling the Input Data

#### Mapping the Input Data to Output Data

You can map input and output data in several ways. The section below gives an example of mapping data, such as:

- Assigning literal values to output data
- Dragging input data to output data

#### To assign literal values to output data

- 1 Click **Create Literal** A. The **Create Literal** dialog box appears.
- 2 In the **Type** box, click **String**.
- 3 In the **Value** box, enter the value to be assigned to this output data, and click **OK**. This adds the literal to the Business Rules Designer.
- 4 Drag the value to the output data as shown below.

Business Rules Designer					
) 🔓 🗛 🖹 🏟 🚃 🖶 🚝 🗳 AND NOT DR » >= > <= < » + % // - » 🐋 🐲 ? •* * \$? 🛋 🖂 🚧 🖃 🕬					
🗹 🃲 📬 WMCollab	W/MCollab 🖾 🍡				
尾 input	🗛 Literal 🔼 input 🙀				
📙 🔶 ByteArray	Vendor_with_top_VENDOR_1 🙀				
🖵 🔷 Text	US00000001 VendorMaster_1_2_with_top_VendorMaster_1_2_1				
Rendor_with_top_VENDOR_1	id 🔷 —				
VendorMaster_1_2_with_top_VendorMas	version 📌 —				
BatchFTP_1	timestamp 🔶 —				
	VendorMaster 尾 – 👳				
	_choice_B 🕰 – 👳				
1	VendorNumber 🕰 – 👳				
	AnyAttribute 🔷 —				
	PCDATA_				
	VendorName 👼 🗝				
	BatchCtrlNbr 👼 🗝				
	Error 👼 🗝				
	VendorMasterFields 🙀 🗝				
	BatchFTP_1 📑				
Mapper					
WMCollab × JCE_Vendor					

Figure 31 Assigning Literal Values to Output Data

#### To assign input data to output data

• Drag the input data to the output data as shown below.

Figure 32 Connecting Input and Output Data

Business Rules Designer				
🕴 🗟 A 🖹 🏟 🥅 🖶 🚰 🖉 and not or 🔹 >= > <= < > 🕂 🚸 🥓	' - » 64 68 중 64 × \$2 -\$ [-] 64 [-] 64 ×			
🖾 📲 🦉 WMCollab	WMCollab 🗹 🔼			
🙀 input	input 💶			
📙 🔶 ByteArray	Vendor_with_top_VENDOR_1 🕻			
🖵 🔷 Text	VendorMaster_1_2_with_top_VendorMaster_1_2_1			
Vendor_with_top_VENDOR_1	, id 🔷 –			
NAME	version 📌 –			
ADDRESS	timestamp 🔷 –			
	VendorMaster 尾 🚽			
STATE	_choice_B 🛋 – 🔶 📒			
	VendorNumber 📴 – 🍳			
VendorMaster_1_2_with_top_VendorMas	AnyAttribute 🔷 —			
BatchFTP_1	PCDATA 🔷 🚽			
	VendorName 🙀 – 🍳			
r	'AnyAttribute 🔷 —			
	BatchCtrINbr 🔂 🗝			
	Error 👼 🗝 🖵			
Mapper				
WMCollab × JCE_Vendor				

#### Marshaling to String and Converting to Bytes

Once the data is mapped, marshal the data to String and then convert the String data to bytes.

#### To marshal the input data to String and convert the String data to bytes

- 1 Right-click the XSD OTD to be marshaled, click **Select a method to call**, and click **marshalToString()**. The **marshalToString** box appears.
- 2 Right-click **Result (String)**, click **Select a method to call**, and click **getBytes()**. The **getBytes** box appears.

- 3 Expand **BatchFTP\_1** in the output column.
- 4 Drag result (Bytes[]) to Payload under BatchFTP\_1 as shown below.

Figure 33 Marshaling Data to String and Forwarding Bytes to Payload

Business Rules Designer					
》 🖫 A 🖄 🏟 🗐 🖶 🖉 🤐 AND NOT OR » >= > <= < > + ※ // - » 🦗 🚥 ? 🏎 » >= 4 🖂 🕬 🖬 » 📗 🖗 🔛 »					
Table WMCollab		WMCollab 🖾 🏊			
📴 input		input 💶			
Vendor_with_top_VENDOR_1	🗄 marshalToString 🗠 👍 getBytes 🗠	Vendor_with_top_VENDOR_1			
NAME	🔊 Vendorfvfaster_1_2_ 🎮 String	VendorMaster_1_2_with_top_VendorMaster_1_2_1			
- 🔶 ADDRESS	result (String) result (byte])	BatchFTP_1			
		\$Configuration 尾 🚽			
- 🔶 STATE		Client 🚅 🚽			
COUNTRYCODE		InputStreamAdapter 🔷 —			
VendorMaster_1_2_with_top_VendorM.		OutputStreamAdapter 🔷 —			
BatchFTP_1		Payload 🔷			
		ResolvedNamesForGet 🔀 🗝			
		ResolvedNamesForPut 🚅 🗝			
		UserProperties 🔀 🗝			
		Configuration 🚅 🚽			
		Connector 🚅 🚽			
		CurrentXaTransaction 🔀 🗝			
		JCollabController 🚅 🛶			
Mapper					
WMCollab × JCE_Vendor					

#### FTPing The PkMS Data to an FTP Server

After converting the data to bytes and forwarding it to the Batch eWay payload, FTP the PkMS data to an FTP server as described below.

To FTP the PkMS data to an FTP server

- 1 Expand **BatchFTP\_1** in the input column.
- 2 Right-click **Client**, click **Select a method to call**, and click **put()**. The **put** box appears as shown below.

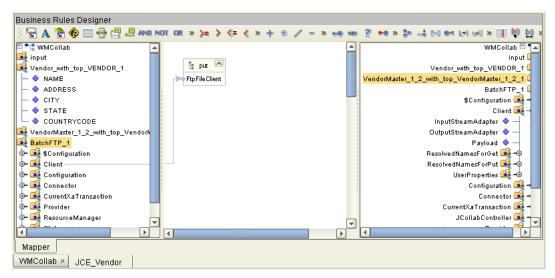


Figure 34 FTPing Output to an FTP Server

3 Click Save.

### 4.4.5. Binding the Collaboration Definition and eWays

Once you have created the Collaboration and its business logic as described in the section above, you can bind the new Collaboration Definition to the Service, and then connect the Service to the eWays.

#### To bind the Collaboration Definition and eWays

- 1 From the Project Explorer of the Enterprise Designer, drag the newly created Collaboration Definition to the Service in the Connectivity Map.
- 2 Double-click the **Service** icon. The **Service1** window appears.
- 3 Drag the BatchFTP service to the Batch eWay.
- 4 Drag the FileClient service to the File eWay.
- 5 Close the **Service1** window and click **Save**.

### 4.4.6. **Deploying the Project**

Once you have completed the Connectivity Map binding, you must do the following to finish the Project:

- 1 Configure the eWays as described in the eWay documentation.
- 2 Create an Environment and Deployment Profile and run the Project as described in the *eGate Integrator User's Guide*.

### 4.5 Working with The PkMS eWay Sample

PkMS eWay includes a sample that you can import to see how a PkMS conversion can be set up. The sample is provided as a zip file, **PkMS\_eWay\_Sample.zip**, on the installation CD-ROM. This zip file contains:

- A zip file with an exported Project that you can import (WM\_Sample.zip)
- An input file

### 4.5.1. Importing the Sample Project

The installation CD-ROM includes a sample Project for the PkMS eWay. To import the Project into Enterprise Designer, follow the steps below.

#### To import the sample

- 1 Copy **PkMS\_eWay\_Sample.zip** from the samples directory on the installation CD-ROM to a temporary directory.
- 2 Unzip the file to the temporary directory.

- 3 In the Project Explorer tab of the Enterprise Designer, right-click the Repository and click **Import Project**. The **Select File to Import** dialog box appears.
- 4 Browse to the temporary directory.
- 5 Double-click **WM\_Sample.zip.** The **File Destination** dialog box appears.
- 6 Click **Import to a new Project**, enter the name of the Project, and click **OK**.
- 7 When the import has successfully completed, right-click the Repository and click **Refresh All from Repository**.

The Project is now imported. Before you deploy and run the Project, do the following:

- Configure the eWays for the correct input and output directories. Refer to the eWay documentation for more information.
- Create an Environment and Deployment Profile, and run the Project. Refer to the *eGate Integrator User's Guide* for more information.

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