SeeBeyond ICAN Suite

e*Way Intelligent Adapter for PeopleSoft HTTP User's Guide

Release 5.0.5 for Schema Run-time Environment (SRE)

Java Version



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Preface

This Preface contains information regarding the User's Guide itself.

P.1 Intended Reader

The reader of this guide is presumed to be a developer or system administrator with responsibility for maintaining the SeeBeyondTM e*GateTM Integrator system, and have a working knowledge of:

- Operation and administration of the appropriate operating systems (see Supported Operating Systems on page 13)
- Windows-style GUI operations
- PeopleSoft concepts and operations
- Integrating PeopleSoft applications with external systems

P.2 Organization

This User's Guide is organized into two parts. The first part, consisting of Chapters 1-5, introduces the e*Way and describes the procedures for installing and setting up the e*Way, and implementing a working system incorporating the e*Way. This part should be of particular interest to a System Administrator or other user charged with the task of getting the system up and running.

The second part, consisting of Chapters 6-8, describes the details of e*Way operation and configuration, including descriptions of the API functions. This part should be of particular interest to a Developer involved in customizing the e*Way for a specific purpose. Information contained in this part that is necessary for the initial setup of the e*Way is cross-referenced in the first part of the guide, at the appropriate points in the procedures.

P3 Nomenclature

Note that for purposes of brevity, the e*Way Intelligent Adapter for PeopleSoft HTTP is frequently referred to as the PeopleSoft HTTP e*Way, or simply the e*Way.

P.4 Online Use

This User's Guide is provided in Adobe Acrobat's Portable Document Format (PDF). As such, it can be printed out on any printer or viewed online. When viewing online, you can take advantage of the extensive hyperlinking imbedded in the document to navigate quickly throughout the Guide.

Hyperlinking is available in:

- The Table of Contents
- The Index
- Within the chapter text, indicated by blue print

Existence of a hyperlink *hotspot* is indicated when the hand cursor points to the text. Note that the hotspots in the Index are the *page numbers*, not the topics themselves. Returning to the spot you hyperlinked from is accomplished by right-clicking the mouse and selecting **Go To Previous View** on the resulting menu.

P.5 Writing Conventions

The writing conventions listed in this section are observed throughout this document.

Monospaced (Courier) Font

Computer code and text to be typed at the command line are set in Courier as shown below.

```
Configuration for BOB_Promotion java -jar ValidationBuilder.jar
```

Variables within a command line are set in Courier italic as shown below.

```
stcregutil -rh host-name -un user-name -up password -sf
```

Bold Sans-serif Font

- User Input: Click Apply to save, or OK to save and close.
- File Names and Paths: In the **Open** field, type **D:\setup\setup.exe**.
- Parameter, Function, and Command Names: The default parameter localhost is normally only used for testing; the Monk function iq-put places an Event into an IQ.

P.6 Additional Documentation

- Many of the procedures included in this User's Guide are described in greater detail in the e*Gate Integrator User's Guide
- For more information on the Java Collaboration Service, see the *e*Gate Integrator Collaboration Services Reference*
- For additional information on the Multi-Mode e*Way, see the *Standard e*Way Intelligent Adapter User's Guide*
- For additional information on the Multiplexer e*Way, see the *e*Gate API Kit User's Guide*
- For detailed information regarding the DTD Builder or other components of the XML Toolkit, see the *XML Toolkit User's Guide*
- For information on Application Messaging and PeopleSoft 8 Integration Technology, please refer to the *PeopleSoft 8 PeopleTools* documentation

Introduction

1.1 Overview

The PeopleSoft HTTP e*Way provides a means of sending data to PeopleSoft 8 by using PeopleSoft 8 Application Messaging technology. The Application Messaging model allows for publication and subscription of XML messages using HTTP. This clean and flexible solution allows for implementation to be accomplished at the business level by means of XML messages.

Figure 1 diagrams the PeopleSoft 8 Application Messaging architecture.

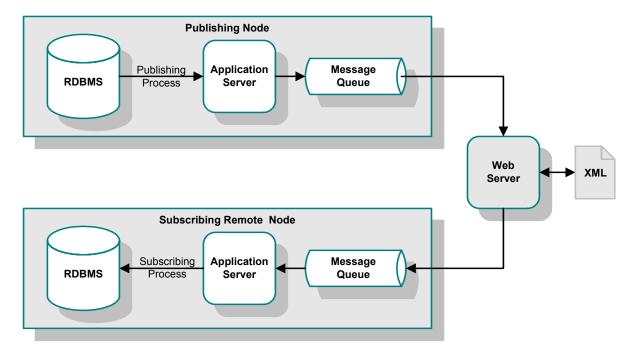


Figure 1 PeopleSoft 8 Application Messaging Architecture

1.1.1 PeopleSoft 8.1

Bidirectional data exchange with PeopleSoft 8.1 is provided by using the SeeBeyond Multi-Mode e*Way and SeeBeyond's customized PeopleSoft 8 MUX subscription handler classes. Figure 2 illustrates the integration architecture.

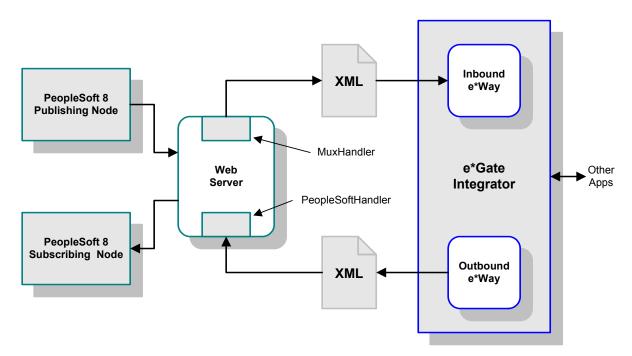


Figure 2 PeopleSoft 8.1 - e*Gate Integration

1.1.2 PeopleSoft 8.4

With PeopleSoft 8.4, the e*Way publishes to a PeopleSoft Listening Connector. For messages outbound from PeopleSoft 8.4, the MUX process is replaced by a JMS process.

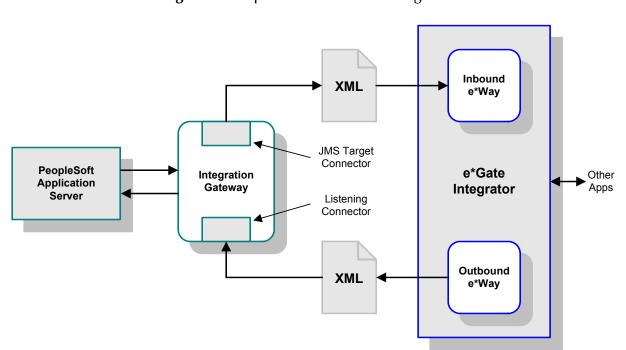


Figure 3 PeopleSoft 8.4 - e*Gate Integration

1.2 Supported Operating Systems

The Java e*Way Intelligent Adapter for PeopleSoft HTTP currently supports the following combinations of and PeopleSoft system components.

- Windows 2000 and Windows Server 2003
- IBM AIX 5.1L
- Sun Solaris 8
- Japanese Windows 2000 and Windows Server 2003
- Japanese Sun Solaris 8

Note: The e*Gate Schema Designer runs only on Windows.

Installation

This chapter describes the requirements and procedures for installing the e*Way software. Procedures for implementing a working system, incorporating instances of the e*Way, are described in Chapter 4.

Note: Please read the readme.txt file located in the addons\ewpsoft8 directory on the installation CD-ROM for important information regarding this installation.

2.1 System Requirements

To use the e*Way Intelligent Adapter for PeopleSoft HTTP, you need the following:

- 1 An e*Gate Participating Host.
- 2 A TCP/IP network connection.
- 3 Sufficient free disk space to accommodate e*Way files:
 - Approximately 4 MB on Windows systems
 - Approximately 34 MB on Solaris systems
 - Approximately 28 MB on AIX systems

Additional disk space is required to process and queue the data that this e*Way processes; the amount necessary varies, based on the type and size of the data being processed.

2.1.1 **Environment Configuration**

No changes are required to the Participating Host's operating environment to support this e*Way.

2.2 External System Requirements

The Java e*Way Intelligent Adapter for PeopleSoft HTTP requires the following external system components:

- PeopleSoft 8 with PeopleTools 8.13
- PeopleSoft 8.4 with PeopleTools 8.42
- For IBM AIX systems, a back-end Oracle 8.1.6 RDBMS

Note: PeopleSoft 8.4 is not supported on Solaris 2.6.

2.2.1 External Configuration Requirements

To publish XML messages to, or subscribe to XML messages from PeopleSoft 8, Message Nodes, Messages, Message Channels, and Subscription Handlers or JMS Target Connectors must be defined and configured within the PeopleSoft 8 environment. See Chapter 3 for procedural details.

2.3 Installing the e*Way

2.3.1 Windows Systems

Installation Procedure

Note: The installation utility detects and suggests the appropriate installation directory. Use this directory unless advised otherwise by SeeBeyond.

To Install the e*Way on a Microsoft Windows System

- 1 Log in as an Administrator on the workstation on which you want to install the e*Way (you must have Administrator privileges to install this e*Way).
- 2 Exit all Windows programs and disable any anti-virus applications before running the setup program.
- 3 Insert the e*Way installation CD-ROM into the CD-ROM drive.
- 4 Launch the setup program.
 - A If the CD-ROM drive's Autorun feature is enabled, the setup program should launch automatically. Follow the on-screen instructions until the **Choose Product** dialog box appears (see Figure 4). Check **Add-ons**, then click **Next**.

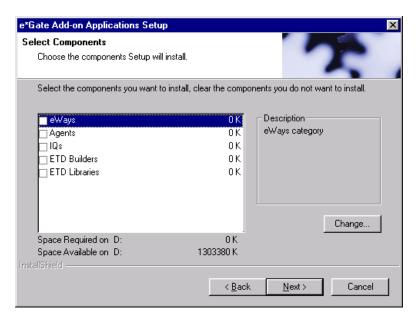
Figure 4 Choose Product Dialog

B If the setup program does not launch automatically, use the Windows Explorer or the Control Panel's **Add/Remove Applications** feature to launch the following file on the CD-ROM drive (bypassing the **Choose Product** dialog):

setup\addons\setup.exe

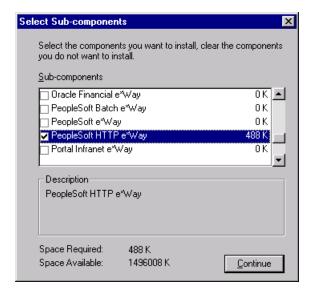
5 Follow the on-screen instructions until the **Select Components** dialog box appears (see Figure 5). Highlight—*but do not check*—**eWays** and then click **Change**.

Figure 5 Select Components Dialog



6 When the **Select Sub-components** dialog box appears (see Figure 6), check the **PeopleSoft HTTP e*Way**.

Figure 6 Select e*Way Dialog



- 7 Click **Continue**, and the **Select Components** dialog box reappears.
- 8 Click **Next** and continue with the installation.

- 9 Add the locations of the following files to your *classpath*:
 - jdom.jar

jcert.jar

stchttp.jar

xerces.jar

jsse.jar

gnu-getopt.jar

- jnet.jar
- 10 After the e*Way has been installed, you need to install the SeeBeyond MUX Subscription Handler. See **Windows Systems** on page 21.

Subdirectories and Files

Note: Installing the e*Way Intelligent Adapter for PeopleSoft HTTP installs both Java and Monk versions. Only the files used by the Java version are listed in this section.

By default, the InstallShield installer creates the following subdirectories and installs the following files within the \eGate\client tree on the Participating Host, and the \eGate\Server\registry\repository\default tree on the Registry Host.

Table 2 Participating Host & Registry Host

Subdirectories	Files
\classes\	stchttp.jar stcpsoft8appmsg.jar stcutil.jar
\configs\psoft8appmsg\	psoft8appmsg.def
\etd\	psoft8appmsg.ctl
\etd\psoft8appmsg\	psoft8appmsg.xsc
\pkicerts\client\	certmap.txt
\pkicerts\trustedcas\	GTECyberTrustGlobalRoot.cer MicrosoftRootAuthority.cer SecureServerCertificationAuthority.cer ThawtePremiumServerCA.cer ThawteServerCA.cer verisign_class3.cer
\ThirdParty\gnu-getopt\classes\	gnu-getopt.jar
\ThirdParty\jdom\jdom-b6\classes\	jdom.jar
\ThirdParty\jsse\jsse1.0.2\classes\	jcert.jar jnet.jar jsse.jar
\ThirdParty\xerces\classes\	xerces.jar

By default, the InstallShield installer also installs the following file within the \eGate\Server\registry\repository\default tree on the Registry Host.

Table 3 Registry Host Only

	Subdirectories	Files
Ī	\	stcewpsoft8.ctl

Note: Installing the e*Way Intelligent Adapter for PeopleSoft HTTP also installs the e*Gate API Kit. See the e*Gate API Kit User's Guide for information on installed components.

2.3.2 UNIX Systems

Installation Procedure

Note: You are not required to have root privileges to install this e*Way. Log on under the user name that you wish to own the e*Way files. Be sure that this user has sufficient privilege to create files in the e*Gate directory tree.

- 1 Log onto the workstation containing the CD-ROM drive and, if necessary, mount the drive.
- 2 Insert the e*Way installation CD-ROM into the CD-ROM drive.
- 3 At the shell prompt, type
 - cd /cdrom
- 4 Start the installation script by typing: setup.sh
- 5 A menu of options appears. Select the **Install e*Way** option and follow any additional on-screen instructions.

Note: The installation utility detects and suggests the appropriate installation directory. Use this directory unless advised otherwise by SeeBeyond. Note also that **no spaces** should appear in the installation path name.

- 6 Add the locations of the following files to your *classpath*:
 - jdom.jar

jcert.jar

stchttp.jar

xerces.jar

jsse.jar

gnu-getopt.jar

- jnet.jar
- 7 After the e*Way has been installed, you need to install the SeeBeyond MUX Subscription Handler. See **UNIX Systems** on page 24.

Subdirectories and Files

Note: Installing the e*Way Intelligent Adapter for PeopleSoft HTTP installs both Java and Monk versions. Only the files used by the Java version are listed in this section.

The preceding installation procedure creates the following subdirectories and installs the following files within the /eGate/client tree on the Participating Host, and the /eGate/Server/registry/repository/default tree on the Registry Host.

Table 4 Participating Host & Registry Host

Subdirectories	Files
/classes/	stchttp.jar stcpsoft8appmsg.jar stcutil.jar
/configs/psoft8appmsg/	psoft8appmsg.def
/etd\	psoft8appmsg.ctl
/etd/psoft8appmsg/	psoft8appmsg.xsc
/pkicerts/client/	certmap.txt
/pkicerts/trustedcas/	GTECyberTrustGlobalRoot.cer MicrosoftRootAuthority.cer SecureServerCertificationAuthority.cer ThawtePremiumServerCA.cer ThawteServerCA.cer verisign_class3.cer
/ThirdParty/gnu-getopt/classes/	gnu-getopt.jar
/ThirdParty/jdom/jdom-b6/classes/	jdom.jar
/ThirdParty/jsse/jsse1.0.2/classes/	jcert.jar jnet.jar jsse.jar
/ThirdParty/xerces/classes/	xerces.jar

The preceding installation procedure also installs the following file only within the /eGate/Server/registry/repository/default tree on the Registry Host.

Table 5 Registry Host Only

Subdirectories	Files
/	stcewpsoft8.ctl

Note: Installing the e*Way Intelligent Adapter for PeopleSoft HTTP also installs the e*Gate API Kit. See the e*Gate API Kit User's Guide for information on installed components.

2.4 Installing the MUX Subscription Handler

The SeeBeyond MUX Subscription Handler consists of ten java classes, which are contained in the **stcph.jar** file. This file is available when the e*Gate participating host is installed. The class descriptions are given in **Appendix A**.

2.4.1 Windows Systems

- 1 Stop the web server (Apache or WebLogic).
- 2 Stop the PeopleSoft 8 Application Server for the appropriate Domain.
- 3 Copy the **stcph.jar** file from the e*Gate Participating Host to the directory where servlets must reside. The location depends upon which Web server you are using.
 - A For Apache, copy the **stcph.jar** file to the **servlets** subdirectory under the servlet engine installation directory, as shown in Figure 7.

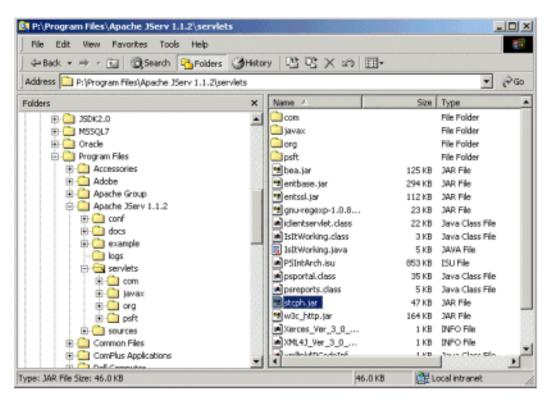
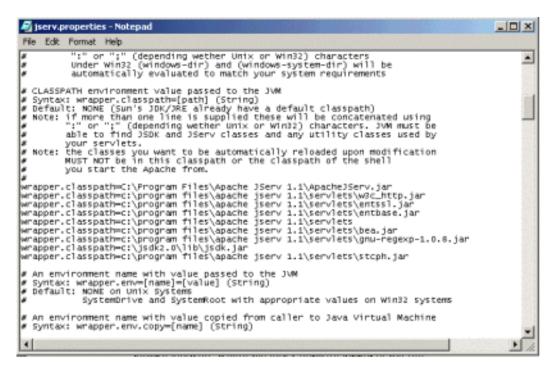


Figure 7 servlets Directory - Windows

Extract the contents of the **stcph.jar** file (see Figure 8).

Figure 8 jserv.properties File



B For WebLogic, copy the **stcph.jar** file to the **servletclasses** subdirectory under the **weblogic\myserver** directory in the PeopleSoft Domain installation; for example:

\weblogic\myserver\servletclasses (as shown in Figure 9).

J:\weblogic\myserver\servletclasses File Edit View Favorites Tools
 ← Back → → ← 🔄 | ② Search | ♣ Folders
 ③ History | ♣ ♀ ★ ♪ | ★ ♪ ★ ♪ | ★ ★ ♪ |
 Address 🗀 J:\weblogic\myserver\servletclasses € Go Folders Size Type Name om 🗀 File Folder i Temp test1 examples File Folder 🛅 javax File Folder 🗓 🦲 vbroker 🚞 META-INF File Folder 🗓 🦲 vplex ora 📄 File Folder 🖃 🦲 weblogic 🛅 psft File Folder 🗓 🛅 bigtel 🛂 bea.jar 125 KB JAR File 进 🦲 bin 🖪 entbase.jar 294 KB JAR File dasses 🗀 🖪 entssl.jar 112 KB JAR File 🗓 🦲 eval 🛂 gnu-regexp-1.0.8.jar 23 KB JAR File 🗓 🦲 examples iclientservlet.class 22 KB Java Class File images 🔊 PSIntArch.isu 786 KB ISLLEile <u>+</u> ire1_2 psportal.class 35 KB Java Class File 🛨 🧰 lib psreports.class 5 KB Java Class File icense 🗎 🖪 stcph.jar 47 KB JAR File igner in myserver 🗓 🧰 clientclasses 🖪 w3c_http.jar 164 KB JAR File 1 KB INFO File Xerces_Ver_3_0_1.info 🕀 🦲 psftdocs 1 KB IMEO File Type: JAR File Size: 46.0 KB 46.0 KB 赶 Local intranet

Figure 9 servletclasses Directory - Windows

Extract the contents of the **stcph.jar** file (see Figure 10).

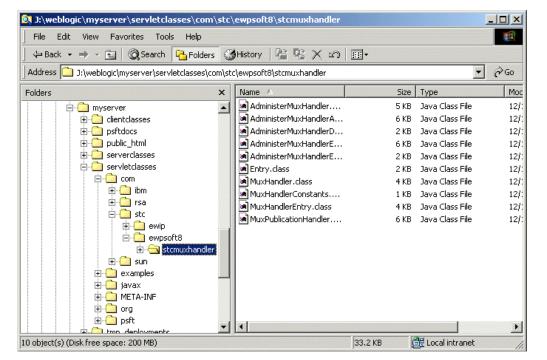


Figure 10 Extracted Files

- 4 Start (boot) the Application Server for the appropriate domain.
- 5 Start the web server.

2.4.2 UNIX Systems

Note: You must have jdk 1.2 or later installed on the host to run the jar command.

- 1 Stop the Web server (Apache or WebLogic).
- 2 Stop the PeopleSoft 8 Application Server for the appropriate Domain.
- 3 Copy the **stcph.jar** file from the e*Gate Participating Host to the directory where servlets must reside. The location depends upon which Web server you are using.
 - A For Apache, copy the **stcph.jar** file to the **servlets** subdirectory under the **websrv** directory in the PeopleSoft Domain installation; for example:

```
/psoft/FDM80/websrv/servlets (as shown in Figure 11).
```

Figure 11 servlets Directory - Apache

```
∠ atlas
                                                                                                                  total 1976
 drwxr-sr-x
                 7 psoft
                                            1024 Jun 25 16:47
                              sys
 drwxr-sr-x
               15 psoft
                                            512 Jun 19 15:16
                                            1134 Oct 08 2000 Hello.class
 -rw-r--r--
                1 psoft
                              sys
                                           1303 Oct 08 2000 Hello.java
 -ru-r--r--
                   psoft
                             sys
                                           2119 Oct 08 2000 | IsItWorking.class
4542 Oct 08 2000 | IsItWorking.java
 -ru-r--r--
                1 psoft
                              sys
 -rw-r--r--
                1 psoft
                             sys
                                            4942 Uct 08 2000 ISITWUFKING.Java
512 Jun 25 16:47 META-INF
7 Feb 28 20:15 XML4J_Ver_3_0_1.info
7 Feb 28 20:15 Xerces_Ver_3_0_1.info
 druxr-sr-x
                2 psoft
                             sys
                1 psoft
 -rwxr-xr-x
                             sys
 -rwxr-xr-x
                1 psoft
                             sys
                                         127587 Feb 28 16:46 bea.jar
                1 psoft
 -rwxr-xr-x
                             sys
                6 psoft
                                            512 Jun 25 16:47 com
 drwxr-sr-x
                             sys
                                         300083 Feb 28 16:26 entbase.jar
 -rwxr-xr-x
                1 psoft
                             sys
                                         113748 Feb 28 16:26 entssl.jar
 -rwxr-xr-x
                1 psoft
                             sys
                                          23153 Feb 28 16:46 gnu-regexp-1.0.8.jar
22165 Feb 28 17:02 iclientservlet.class
 -rwxr-xr-x
                1 psoft
                             SUS
 -rwxr-xr-x
                1 psoft
                             Sys
 drwxr-sr-x
                   psoft
                                             512 Jun 19 15:18 javax
                             SUS
                                          76453 Oct 08 2000 jsdk.jar
                1 psoft
                             sys
                                             512 Feb 28 20:15 org
 drwxr-sr-x
                6 psoft
                             sys
                 3 psoft
                                            512 Feb 28 20:15 psft
 drwxr-sr-x
                             sys
  -rwxr-xr-x
                  psoft
                             sys
                                          35724 Feb 28 17:13 psportal.class
                                          5020 Feb 28 17:02 psreports.class
47191 Jun 25 16:41 stcph.jar
  -rwxr-xr-x
                   psoft
                             sys
  -rw-r----
                   psoft
                             sys
                1 psoft
  -rwxr-xr-x
                             sys
                                        167275 Feb 28 16:26 w3c_http.jar
  rwxr-xr-x
                   psoft
                                            539 Feb 28 17:03 xmllink$PCodeInfo.class
                              sys
  rwxr-xr-x
                1 psoft
                                          10037 Feb 28 17:03 xmllink.class
 $ pwd
  p<u>s</u>oft/FDM80/webserv/servlets
```

B For WebLogic, copy the **stcph.jar** file to the **servletclasses** subdirectory under the **weblogic/myserver** directory in the PeopleSoft Domain installation; for example:

```
/do1/psoft/fdm80/weblogic/myserver/servletclasses (as shown in Figure 12).
```

4 Extract the contents of the **stcph.jar** file.

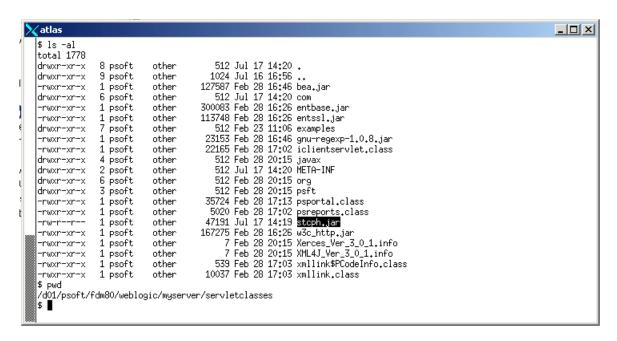
Use the command:

```
jar -tf stcph.jar to extract the classes.
```

5 Start (boot) the Application Server for the appropriate domain.

6 Start the Web server.

Figure 12 servlets Directory - WebLogic



2.5 Optional Example Files

The installation CD contains sample schemas, psoft8AppMsg.zip and JMSQueue.zip, located in the samples\ewpsoft8 directory. To use these schemas, you must load them onto your system using the following procedure. See Sample Schema on page 83 for descriptions of the sample schema and instructions regarding its use.

Note: The PeopleSoft HTTP e*Way must be properly installed on your system before you can run the sample schema.

2.5.1 Installation Procedure

To load a sample schema

1 Invoke the Open Schema dialog box and select New (see Figure 13).

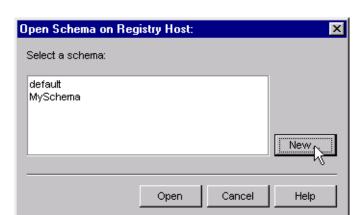
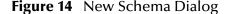
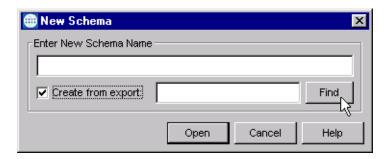


Figure 13 Open Schema Dialog

- 2 Type the name you want to give to the schema (for example, PS8.Sample)
- 3 Select Create from export and navigate to the directory containing the sample schema by clicking the Find button (see Figure 14).





4 Select psoft8AppMsg.zip and click Open.

Note: The schema installs with the host name localhost and control broker name localhost_cb. If you want to assign your own names, copy the file psoft8AppMsg.zip to a local directory and extract the files. Using a text editor, edit the file psoft8AppMsg.exp, replacing all instances of the name localhost with your desired name. Add the edited .exp file back into the .zip file.

2.5.2 Subdirectories and Files

The preceding procedure creates the following subdirectories and installs the following files within the \eGate\Server\registry\repository\<SchemaName> tree on the Registry Host, where <SchemaName> is the name you have assigned to the schema in step 2.

Table 6 Subdirectories and Files - psoft8AppMsg

Subdirectories	Files
\	psoft8AppMsg.ctl
\runtime\collaboration_rules\	colPostXML.class colPostXML.ctl colPostXML.java colPostXML.xpr colPostXML.xts colPostXML.xts
\runtime\configs\http\client\	conHttp.cfg conHttp.sc
\runtime\configs\psoft8AppMsg\	conPsoft8AppMsg.cfg conPsoft8AppMsg.sc
\runtime\configs\stcewfile\	ewEater.cfg ewEater.sc ewFeeder.cfg ewFeeder.sc ewMUXEater.cfg ewMUXEater.sc
\runtime\configs\stcewipmp\	ewMUX.cfg ewMUX.sc
\runtime\etd\	blob.jar blob.ssc blob.xsc
\sandbox\configs\psoft8appmsg\	conPsoft8AppMsg.cfg conPsoft8AppMsg.sc
\sandbox\etd\	common.ctl rtjar.ctl
\sandbox\etd\psoft8appmsg\	psoft8appmsg.xsc

 Table 7
 Subdirectories and Files - JMSQueue

Subdirectories	Files
1	jms_test.ctl
\jms_test\runtime\configs\messageservice\	localhost_iqmgr.cfg localhost_iqmgr.sc
\jms_test\sandbox\configs\messageservice\	test.cfg test.sc
\jms_test\sandbox\configs\stcewfile\	eater.cfg eater.sc feeder.cfg feeder.sc

PeopleSoft 8 Setup

This chapter describes procedures for configuring the PeopleSoft 8.1 Application to interact properly with the PeopleSoft HTTP e*Way.

3.1 Overview

To publish data to, or subscribe to data from, PeopleSoft 8, the following must be created and configured within the PeopleSoft 8 environment:

- Message Nodes
- Messages
- Message Channels
- Subscription Handlers (PeopleSoft 8.1 only)

PeopleSoft 8 comes with a set of predefined Message Definitions and Message Channels that can be used as-is. You can also create your own Message Definitions and Message Channels. You must know in advance which Message Definition(s) and which Message Channel(s) to use during the external configuring process.

For PeopleSoft 8.1, please refer to the *PeopleSoft 8 EIP Catalog* for more information. Also, the PeopleSoft 8 documentation on *Adding and Configuring Subscription Handlers* contains valuable information regarding Subscription Handlers.

In PeopleSoft 8.4, many of these procedures have been moved into the PeopleTools section of the main PeopleSoft user interface. Please refer to the PeopleSoft *Integration Broker PeopleBook* for more information.

For purposes of this User's Guide, *publishing* refers to sending outbound messages *to* PeopleSoft 8 and *subscribing* refers to receiving inbound messages *from* PeopleSoft 8.

3.2 Configuring for Publication

To enable the PeopleSoft HTTP e*Way to publish XML Messages to PeopleSoft 8, the following configuration steps must be performed.

Creating PeopleSoft 8 Message Node for the e*Way on page 30

Activating the Message Definition for Publication on page 34

Defining Message Channel Routing Rules on page 37

Defining Routing Directions for Message Nodes on page 41

Adding the PeopleSoft 8 Subscription Handler on page 43

3.2.1 Creating PeopleSoft 8 Message Node for the e*Way

Complete the following procedures to create a PeopleSoft 8 Message Node in order to configure the PeopleSoft HTTP e*Way to publish XML messages.

PeopleSoft 8.4/PeopleTools 8.42

You must define a source node in PeopleSoft (see "Administering Basic Integrations: Configuring Nodes: Defining a Node" in the PeopleTools *PeopleBooks*). In PeopleSoft 8.4, the Node Definition facility has been moved into the PeopleTools section of the main PeopleSoft user interface; otherwise, the procedure is analogous to that shown for PeopleSoft 8.1.

PeopleSoft 8.1/PeopleTools 8.13

To define the Message Node to publish XML messages

1 Sign on to PeopleTools, and start the Application Designer.



Figure 15 PeopleSoft Signon

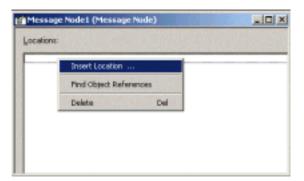
- 2 From the Application Designer File menu, select New.
- 3 In the New dialog box, select Message Node and click OK to display the Message Node dialog box for Node 1.

Figure 16 New Pop-Up Menu - Message Node



4 Right-click within the Locations pane, and a pop-up menu appears. Select Insert Location from the pop-up menu to enter the PeopleSoft 8 Application Messaging Gateway (servlet) URL.

Figure 17 Message Node Window - Insert Location



- 5 Type the following URL of the PeopleSoft 8 Gateway Servlet into the Location dialog box.
 - A For Apache:

http://PSFTHOST/servlets/psft.pt8.gateway.GatewayServlet

B For WebLogic:

http://PSFTHOST/servlets/gateway

Note: You must replace the name **PSFTHOST** in the above URL with the actual name of the host computer on which PeopleSoft 8 is installed.

Figure 18 Location Dialog Box



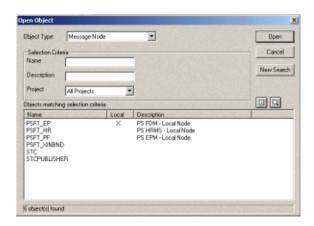
- 6 Click **OK** to save the URL. The URL name you have entered then appears in the Message Node dialog box.
- 7 Save the Message Node and commit it to the PeopleSoft 8 database as follows:
 - A Select Save As from the File drop-down menu.
 - B Type the name of the Message Node you are saving into the text box. (The example above uses STCPUBLISHER.) This name is needed for the e*Way configuration as the From Node parameter.

Figure 19 Save As Dialog Box



- 8 From the Application Designer File menu, select Open to invoke the Open Object window.
- 9 Verify that the Message Node you created is ready for use by PeopleSoft 8.
 - A In the Open Object window, select Message Node from the Object Type list and click the Open button.
 - B A list of all Message Nodes within the system appears. The name of the newly-created message node should appear in the Objects matching selection criteria pane. If so, you have successfully completed creating a Message Node for SeeBeyond to publish data to PeopleSoft 8.

Figure 20 Open Object Window - Message Node



Note: All Message Nodes with **PSFT** prefixes were created by the PeopleSoft 8 installation. **PSFT_EP** is the PeopleSoft Local Node for the Financials application. It is specified as a subscriber to messages sent from the HTTP e*Way, and a publisher of messages to the Multiplexer e*Way.

3.2.2 Activating the Message Definition for Publication

As mentioned previously, PeopleSoft 8 comes with a set of predefined Message Definitions. The desired Message Definition is configurable in the e*Way as the **Subject** parameter. The following instructions describe how to activate the Message Definition for subscription to the SeeBeyond Multiplexer e*Way.

Note: For purposes of this example, the **ADVANCED_SHIPPING_RECEIPT** Message Definition is activated for publish / subscribe.

PeopleSoft 8 Message Definitions List

Each message used for publication must be defined. This definition corresponds to the XML Message the e*Way publishes, and contains the elements of the data to be published. However, before the e*Way can publish any data, the Message Definition must be activated. A list of these definitions can be found within the Application Designer.

To activate the Message Definition for subscription to the e*Way

1 Sign on to PeopleTools Application Designer.



Figure 21 PeopleSoft 8 Signon

- 2 From the Application Designer File menu, select Open to invoke the Open Object window.
- 3 Select Message from the Object Type list, and you are presented with a list of all available PeopleSoft 8 Message Definitions.

Figure 22 Open Object Window

- 4 Select the Message Definition you want and double-click on that selection; for example, ADVANCED_SHIPPING_RECEIPT.
- 5 The Message window appears, displaying the complete record details of the chosen Message Structure.

Figure 23 ADVANCED_SHIPPING_RECEIPT Details



- 6 From the Application Designer File menu, select Object Properties to open the Message Properties dialog box.
- 7 In the Message Properties dialog box, click the Use tab to display the Status field.

Message Properties

Status

Status

P Active

Message Channet

Detail Version: VERSION 1

Message Viewing / Correction

Use Page

View Message Monitor Dialog

Use Page

Page

Page

Page Nerve:

Page Nerve:

Activn:

Gadd

OK Cancel

Figure 24 Message Properties Dialog Box - Use Tab

- 8 Check the Active button and click **OK** to save the settings.
- 9 From the File menu, select Save to save and commit the changes to the Message Definition. You have now activated the Message Definition for publishing or subscribing.

3.2.3 Defining Message Channel Routing Rules

Before proceeding with this process, you should determine which Message Channel to use. The Message Channel to use is configurable in the e*Way as the **Channel** parameter.

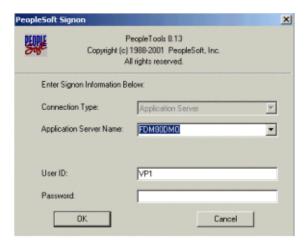
Configuring the Message Channel

Each Message Channel logically groups Messages together. For purposes of this documentation, ADVANCED_SHIPPING_RECEIPT Message is grouped into the ADVANCED_SHIPPING_NOTICE Message Channel.

To configure the Message Channel

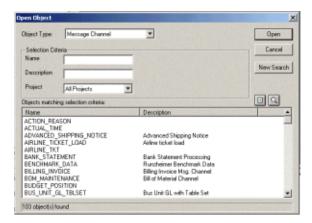
1 Sign on to PeopleTools Application Designer.

Figure 25 PeopleSoft Signon



2 From the Application Designer File menu, select Open to invoke the Open Object window.

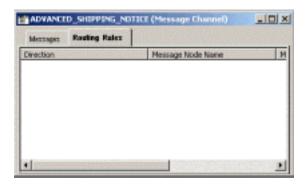
Figure 26 Open Object Window



3 Select Message Channel from the Object Type list.

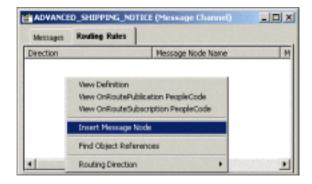
- 4 Click Open, and a list of all available Message Channels on the system appears.
- 5 Double-click on the name of the desired Message Channel. The Message Channel window appears for that channel.

Figure 27 Message Channel - ADVANCED_SHIPPING_NOTICE (1)



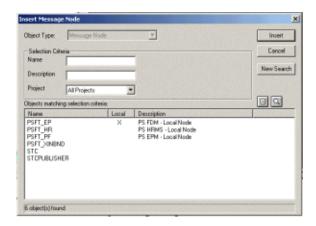
- 6 Left-click the **Routing Rules** tab, then right-click in the data pane. A pop-up menu appears with the following options:
 - View Definition
 - View OnRoutePublication PeopleCode
 - View OnRouteSubscription PeopleCode
 - Insert Message Node
 - Find Object References
 - Routing Direction

Figure 28 Message Channel - ADVANCED_SHIPPING_NOTICE (2)



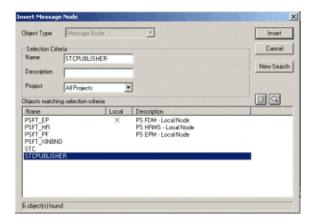
7 Left-click to select **Insert Message Node**. The Insert Message Node window appears, displaying the available Message Nodes.

Figure 29 Insert Message Node Window



- 8 Click on PSFT_EP, then click the Insert button. This inserts the message into the Routing Rules Table.
- 9 Click on STCPUBLISHER, then click Insert.

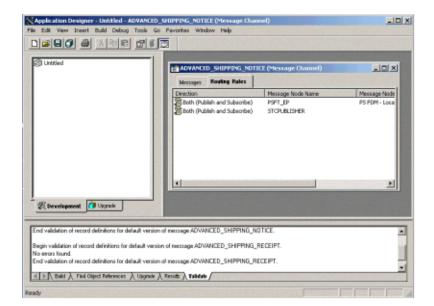
Figure 30 Insert Message Node Window - STCPUBLISHER



10 Click Cancel to exit the Insert Message Node window.

The Message Nodes are now defined on the Routing Rules tab of the Message Channel window.

Figure 31 Message Channel - ADVANCED_SHIPPING_NOTICE (3)



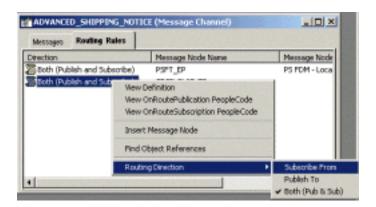
3.2.4 Defining Routing Directions for Message Nodes

Routing Directions provide you with the ability to assign destinations, either Publish To or Subscribe From, a Message Node. This section describes the procedure for defining the Routing Directions for the SeeBeyond Message Node, **Subscribe From**.

To define the Routing Directions

1 From the Direction column of the Routing Rules tab, right-click on Both (Publish and Subscribe) for the Message Node Name STCPUBLISHER. A pop-up menu appears with several options.

Figure 32 Subscribe From Selection



- 2 On the menu, left-click **Routing Direction**, then left-click **Subscribe From** on the secondary menu.
- 3 Within the Message Channel window, right-click on Both (Publish and Subscribe) for the Message Node Name PSFT_EP. Again, the pop-up menu appears.

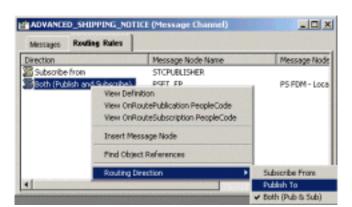
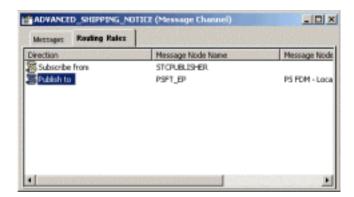


Figure 33 Publish To Selection

4 Left-click Routing Direction, then left-click Publish To on the secondary menu.

Figure 34 Routing Rules > Verify



- 5 Under the Routing Rules tab, you now see that the SeeBeyond Message Node is subscribing to messages from STCPUBLISHER and is publishing to PSFT_EP.
- 6 From the File menu, select Save to save and commit the changes to the Message Definition. You have now defined the Routing Rule that allows the appropriate Message to be published from the e*Way to PeopleSoft 8.

3.2.5 Adding the PeopleSoft 8 Subscription Handler

Note: In performing the procedures in this section you need to know the following PeopleSoft 8 parameters:

Jolt Listener Host Jolt Listener Port People Tools version Operator ID

Operator ID password

To Access the PeopleSoft 8 Handler Directory (ConfigServlet)

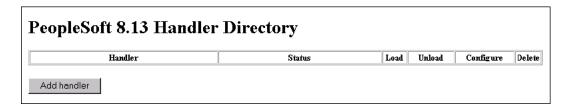
- 1 Start up any supported browser and open the Handler Directory by typing the following URL, where **PSFTHOST** represents the host on which PeopleSoft 8 Application Messaging Gateway is installed.
 - A For Apache:

http://PSFTHOST/servlets/psft.pt8config.ConfigServlet

B For WebLogic:

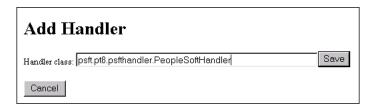
http://PSFTHOST/servlets/gateway.administration

Figure 35 PeopleSoft 8 Handler Directory Page (1)



2 On the initial page, click the **Add handler** button to add a new handler. The **Add Handler** page appears (see Figure 36).

Figure 36 Add Handler Page



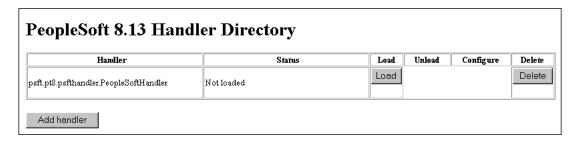
3 On the Add Handler page, type the PeopleSoft 8 Handler class into the Handler class text box:

psft.pt8.psfthandler.PeopleSoftHandler

4 Click the **Save** button to save the newly-added PeopleSoft 8 Handler.

After the Handler has been saved, the **Handler Directory** page reappears, showing the newly-added Handler. Also, two additional buttons appear: **Load** and **Delete** (see Figure 37).

Figure 37 PeopleSoft 8 Handler Directory Page (2)



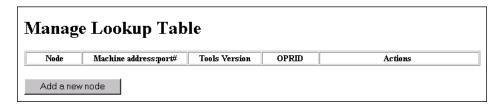
5 Click the Load button to load the PeopleSoft 8 Handler class just added. The Status changes from Not loaded to Loaded successfully and two new buttons appear: Unload and Configure (see Figure 38).

Figure 38 PeopleSoft 8 Handler Directory Page (3)



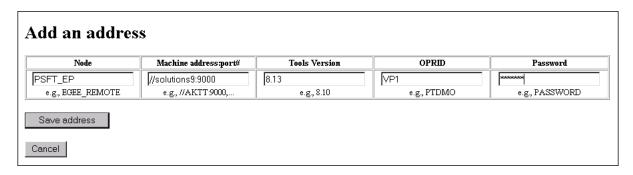
6 Click the Configure button to configure the handler. The Manage Lookup Table page for the PeopleSoft 8 Handler appears (see Figure 39).

Figure 39 Manage Lookup Table Page (1)



7 Click the Add a new node button to associate the node with this subscription handler. The Add an address window appears (see Figure 40).

Figure 40 Add an Address Page

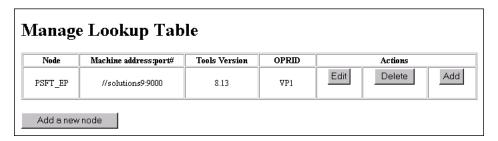


8 Type the values for the new node, **PSFT_EP**, associated with the subscription handler.

Note: These values are required, and must be entered.

9 Click **Save address** to save the values just entered. You automatically return to the Manage Lookup Table page, now showing the node just added and configured (see Figure 41).

Figure 41 Manage Lookup Table Page (2)



The Application Messaging Gateway is now ready to receive XML messages from the e*Way and publish the XML messages to PeopleSoft 8.

3.3 Configuring for Subscription

3.3.1 PeopleSoft 8/PeopleTools 8.13

To enable PeopleSoft 8 to publish XML Messages to the PeopleSoft HTTP e*Way, the following configuration steps must be performed.

Creating a MUX e*Way Message Node on page 46

Activating the Message Definition for Subscription on page 46

Defining the Message Channel Routing Rules on page 46

Adding the SeeBeyond MUX Subscription Handler on page 46

Configuring the SeeBeyond MUX Subscription Handler on page 49

Creating a MUX e*Way Message Node

Refer to the section"Creating PeopleSoft 8 Message Node for the e*Way" on page 30 to create a message node associated with the Multiplexer e*Way. A Message Node called STCMUX is used as an example.

Activating the Message Definition for Subscription

Refer to the section "Activating the Message Definition for Publication" on page 34 to activate the appropriate Message to be published to the Multiplexer e*Way. For this example, the message PO-EXPECTED_RECEIPT_SHIPTO is activated.

Defining the Message Channel Routing Rules

Refer to the section "Defining Message Channel Routing Rules" on page 37 to define the Routing rules for the Message Channel to be used.

- Insert the PSFT_EP Message Node and the MUX Message Node previously created.
- Define the Routing Direction. Select Subscribe From for PSFT_EP and Publish To for the MUX Message Node (STCMUX).

Adding the SeeBeyond MUX Subscription Handler

Obtain the MUX configuration values for the e*Way which is to receive the XML message(s) from PeopleSoft. These are required when configuring the Message Node corresponding to the Subscription Handler.

To Obtain the MUX Configuration Values

- 1 Access the PeopleSoft 8 Handler Directory (ConfigServlet).
- 2 Start up any supported browser.

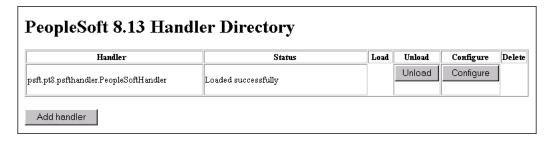
- 3 Open the Handler Directory page by typing the following URL, where **PSFTHOST** represents the host on which PeopleSoft 8 Application Messaging Gateway is installed (see Figure 42):
 - A For Apache:

http://PSFTHOST/servlets/psft.pt8config.ConfigServlet

B For WebLogic:

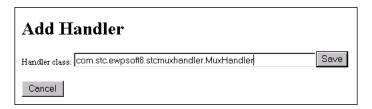
http://PSFTHOST/servlets/gateway.administration

Figure 42 PeopleSoft Handler Directory Page (1)



4 Click the Add handler button to add the MUX handler.

Figure 43 Add Handler Page

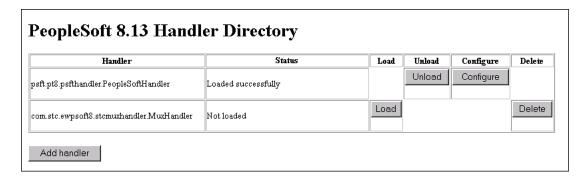


5 Add the SeeBeyond MUX Subscription Handler by typing the following into the Handler class box:

com.stc.ewpsoft8.stcmuxhandler.MuxHandler

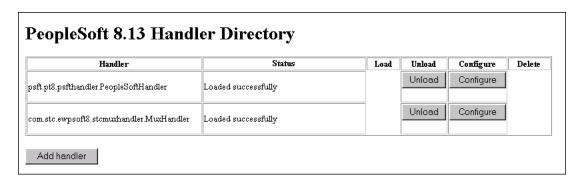
6 Click the **Save** button. The system returns you to the **Handler Directory** page, now showing the MUX Subscription Handler you just added (see Figure 44).

Figure 44 PeopleSoft Handler Directory Page (2)



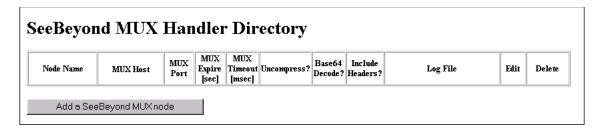
7 Click the Load button. The Status field changes to Loaded successfully and two additional buttons appear: Unload and Configure (see Figure 45).

Figure 45 PeopleSoft Handler Directory Page (3)



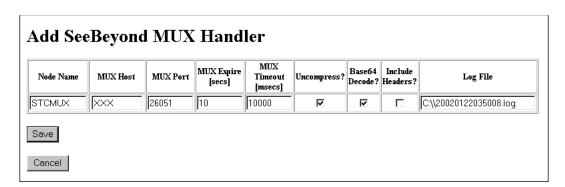
8 Click the Configure button for the SeeBeyond MUX Handler. The SeeBeyond MUX Handler Directory page for the MUX Handler opens (see Figure 46).

Figure 46 SeeBeyond MUX Handler Directory Page (1)



9 Click the Add a SeeBeyond MUX node button to associate a node with this Subscription Handler.

Figure 47 Add SeeBeyond MUX Handler Page



- 10 Enter the values for the new node associated with the subscription handler. Scroll to the right to access additional columns.
- 11 In the Include Headers? column, indicate whether or not you want header information to be retained in the received messages.
 - A Selecting the check box preserves the header information.

B Deselecting the check box strips the header information.

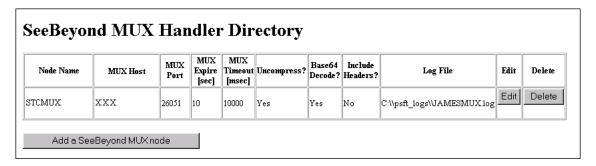
Note: All values are required.

12 Click the Save button to save the values entered.

Note: You should now be able to ping the MUX host from the machine where the **stcph.jar** file is installed. You may need to use the full machine host name (for example, **johndoe.seebeyond.com**).

Click the **Save** button to display the SeeBeyond MUX Handler Directory page with the **STCMUX** node entries added and configured (see Figure 48).

Figure 48 SeeBeyond MUX Handler Directory Page (2)



If the entries are correct, the Application Messaging Gateway now can receive XML messages from PeopleSoft 8 and publish the XML messages to the PeopleSoft HTTP e*Way (in MUX mode).

Configuring the SeeBeyond MUX Subscription Handler

The SeeBeyond MUX Subscription Handler itself may require configuration. See the discussion in **Subscribing to PeopleSoft 8.1** on page 81.

3.3.2 PeopleSoft 8.4/PeopleTools 8.42

Subscribing to PeopleSoft 8.4 makes use of the PeopleSoft JMS Target Connector, which can publish messages to a topic or insert a message into a queue. To enable PeopleSoft 8 to publish XML Messages to the PeopleSoft HTTP e*Way, the following steps need to be followed:

- 1 Import your schema.
- 2 Bind the e*Gate JMS objects for JNDI lookup using the File System Context on the e*Gate participating host (see "Binding Objects for JNDI Lookup" in the SeeBeyond JMS Intelligent Queue User's Guide for instructions).
- 3 Configure the PeopleSoft system for JMS:
 - C Copy the following files into the \c\$\bea\wlserver6.1\config\peoplesoft\applications\PSIGW\WEB-INF\lib directory on the PeopleSoft server:

- stcjms.jar (found in \eGate\client\classes\)
- The necessary **.jar** files for your JDNI service provider, as described in "Binding Objects for JNDI Lookup" in the *SeeBeyond JMS Intelligent Queue User's Guide* (see step 2, above).
- Define a target node (see "Administering Basic Integrations: Configuring Nodes: Defining a Node" in the PeopleTools *PeopleBooks*).
- E Modify the PeopleSoft gateway properties file (integrationGateway.properties) to publish to the JMS target connector. See the PeopleTools *PeopleBook* sections "Administering Basic Integrations: Specifying a Gateway and Connector" and "Managing the Integration Gateway: Using the PeopleSoft 8.1 Target Connector."

System Implementation

In this chapter we summarize the procedures required for implementing a working system incorporating the Java-enabled PeopleSoft HTTP e*Way. Please refer to the e*Gate Integrator User's Guide.

4.1 Overview

This e*Way provides a specialized transport component for incorporation into an operational Schema. The schema also contain Collaborations, linking different data or Event types, and Intelligent Queues. Typically, other e*Way types also are used as components of the Schema.

One or more sample schemas, included in the software package, are described at the end of this chapter. These can be used to test your system following installation and, if appropriate, as a template that you can modify to produce your own schema.

4.1.1 Pre-Implementation Tasks

Install the SeeBeyond Software

The first task is to install the SeeBeyond software as described in Chapter 2.

Import the Sample Schema

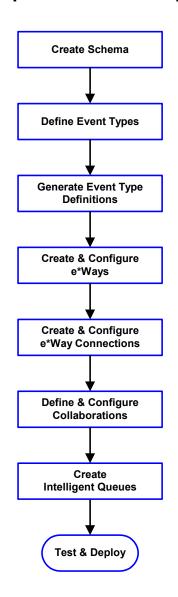
If you want to use the sample schema supplied with the e*Way, the schema files must be imported from the installation CD-ROM (see **Optional Example Files** on page 26).

Note: It is highly recommended that you make use of the sample schemas to familiarize yourself with e*Way operation, test your system, and use as templates for your working schemas.

Configure the PeopleSoft HTTP System

Follow the procedure described in **PeopleSoft 8 Setup** on page 29.

4.1.2 Implementation Sequence



- 1 The first step is to create a new Schema—the subsequent steps apply only to this Schema (see **Creating a Schema** on page 53).
- 2 The second step is to define the Event Types you are transporting and processing within the Schema (see **Creating Event Types** on page 54).
- 3 Third, you need to associate the Event Types created in the previous step with Event Type Definitions (ETDs) derived from the applicable Business Rules (see **Generating Event Type Definitions** on page 55).
- 4 The fourth step is to create and configure the required e*Ways (see **Setting Up the e*Way** on page 90).
- 5 The fifth step is to configure the e*Way Connections (see Creating e*Way Connections on page 98).
- 6 Next you need to define and configure the Collaborations between Event Types (see Defining Collaborations on page 77).
- 7 Now you need to create Intelligent Queues to hold published Events (see Creating Intelligent Queues on page 78
- 8 Finally, you must test your Schema. Once you have verified that it is working correctly, you may deploy it to your production environment.

4.1.3 Viewing e*Gate Components

Use the Navigator and Editor panes of the e*Gate Schema Designer to view the various e*Gate components. Note that you may only view components of a single schema at one time, and that all operations apply only to the current schema. All procedures in this chapter should be performed while displaying the **Components** Navigator pane. See the *e*Gate Integrator User's Guide* for a detailed description of the features and use of the Schema Designer.

4.2 Creating a Schema

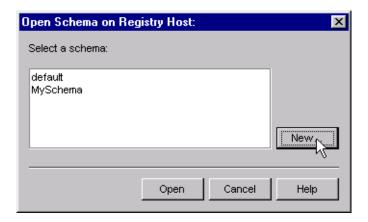
A schema is the structure that defines e*Gate system parameters and the relationships between components within the e*Gate system. Schemas can span multiple hosts.

Because all setup and configuration operations take place within an e*Gate schema, a new schema must be created, or an existing one must be started before using the system. Schemas store all their configuration parameters in the e*Gate Registry.

To select or create a schema

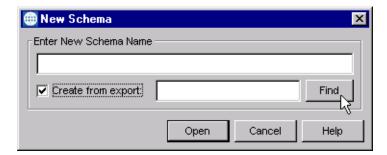
1 Invoke the Open Schema dialog box and Open an existing schema or click New to create a new schema.

Figure 49 Open Schema Dialog



2 Clicking New invokes the New Schema dialog box (Figure 50).





- 3 Enter a new schema name and click **Open**.
- 4 The e*Gate Schema Designer then opens under your new schema name.
- 5 From the **Options** menu, click on **Default Editor** and select **Monk**.
- 6 Select the **Components** tab, found at the bottom of the Navigator pane of the e*Gate Schema Designer window.
- 7 You are now ready to begin creating the necessary components for this new schema.

4.3 Creating Event Types

Within e*Gate, messages and/or packages of data are defined as Events. Each Event must be categorized into a specific Event Type within the schema.

To define the Event Types

- 1 In the e*Gate Schema Designer's Navigator pane, select the **Event Types** folder.
- 2 On the Palette, click the New Event Type button
- 3 In the New Event Type Component box, enter the name for the input Event Type and click Apply. Use this method to create all required Event Types, for example:
 - InboundEvent
 - ValidEvent
 - InvalidEvent
- 4 After you have created the final Event Type, click **OK**.

4.4 Generating Event Type Definitions

As the name implies, an Event Type Definition (ETD) defines the structure of the Event Types employed in your Schema. Any one ETD can be associated with more than one Event Type within the schema. In the PeopleSoft HTTP e*Way, ETDs are created semi-automatically using the DTD Builder, once a DTD has been generated.

4.4.1 Generating DTDs from PeopleSoft

PeopleTools 8.13 does not contain a DTD generation utility, nor does it include any sample DTDs; however, PeopleTools Application Designer can be extended to generate DTDs using third-party software. These DTDs can then be converted to ETDs using SeeBeyond's DTD Converter. This chapter describes a "workaround" procedure that "reverse-engineers" a DTD from a sample XML message generated within PeopleSoft.

Note: The procedure described may not work for all Message Definitions, and you need to know the data constraints for a particular Message Definition in order to correctly populate the message with sample data. You should also be familiar with XML messaging and working with DTDs.

The workaround procedure involves several sequential steps, which are described under the following headings:

- 1 Generating and Publishing an XML Test Message on page 56.
- 2 Extracting and Viewing the XML Test Message on page 62.
- 3 **Generating a DTD for the XML File** on page 67.

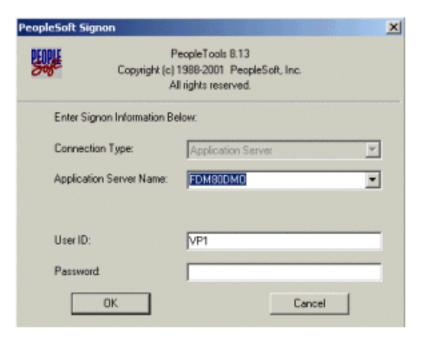
Generating and Publishing an XML Test Message

The first step is to use the PeopleSoft 8 Application Designer to generate a PeopleSoft 8 XML test message based on a particular Message Definition.

To Generate a PeopleSoft 8 XML Message

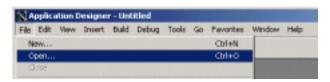
1 Sign onto People Tools.

Figure 51 People Tools Signon



2 Log into the Application Designer

Figure 52 File Menu - Open



3 In the Application Designer, select File from the Menu and Open from the drop-down menu. The Open Object window appears (see Figure 53).

Open Object × ٠ Object Type: Selection Diteria Cancel Name Channel All Channels New Search Shahus Description All Statuses ٠ Project All Projects Objects matching selection criteria: Name Description ACCOUNT_CHARTFIELD_FULLSYNC Account Chartfield Full Sync ACCOUNT_CHARTFIELD_SYNC Account Chartfield Sync ACTION_REASON_FULLSYNC Action Reason Setup Sync ACTUAL_TIME_ADD ACTUAL_TIME_BATCH_ADD Actual Payable Time Message Payable time subscription ADVANCED_SHIPPING_NOTICE ADVANCED_SHIPPING_RECEIPT Advanced Shipping Notice Advance Shipment Notice AIRLINE_TKT Airline Ticket Load AP_VENDOR_MSG Vendor Message Structure BANK STATEMENT LOAD Bank Statement Processing BENCHMARK RNZ LOAD Expense - Rungheimer Message 257 object(s) found

Figure 53 Open Object Window - Object Type Message

- 4 Select Message for the Object Type, and then click Open. A list of all available Message Definitions on the system appears in the bottom pane.
- 5 Find the desired Message Definition and double-click the selection; for example, ADVANCED_SHIPPING_RECEIPT. The Message window appears with Message Structure highlighted (see Figure 54).

Figure 54 ADVANCED_SHIPPING_RECEIPT Details

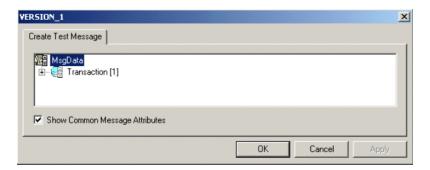


ADVANCED_SHIPPING_RECEIPT (Message) Message Structure Field Name Alia View PeopleCode Insert Version... Insert Child Record ... Insert Message Subscription ... Set As Default Message : 🧬 Advar Rename Create Test Message Delete Version Find Object References Message Properties

Figure 55 Message Window and Menu

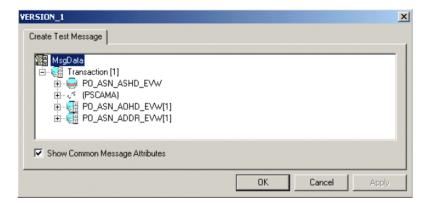
- 6 Highlight (left-click) the Version_1 entry within the Message window (partially hidden by overlapping menu).
- 7 Right-click the **Version_1** entry to invoke the pop-up menu.
- 8 Select Create Test Message from the menu. The Version_1 window appears showing the records contained in the message ADVANCED_SHIPPING_RECEIPT. (see Figure 56).

Figure 56 Version 1 - Create Test Message (1)



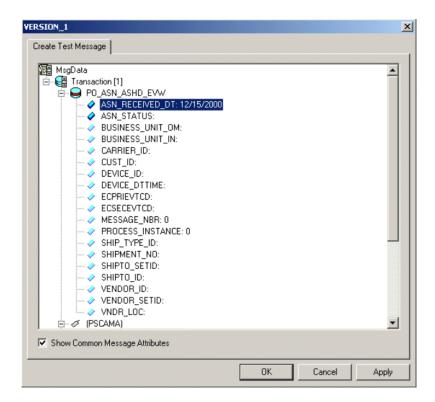
9 Expand the **Transaction** record by clicking on the (+) symbol. This reveals all subrecords within the transaction record (see Figure 57).

Figure 57 Version 1 - Create Test Message (2)



Records can nest to more than one level. Any record preceded by a (+) sign can be opened to verify the contents (see Figure 58).

Figure 58 Version 1 - Create Test Message (3)

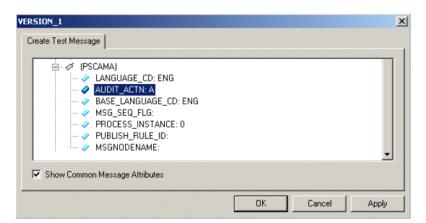


For purposes of this example, only the fields ASN_RECEIVED_DT: 12/15/2000 and ASN_STATUS: have data contained within them.

Note: You need to know the data constraints and types for each field before proceeding (the following information is specific to PeopleSoft 8).

- If there are no constraints requiring you to populate all fields in a record, then generate a well-formed XML message by populating only one field in each record and sub-record.
- If there are constraints, then all fields in each record and sub-record must be populated.
- For most (but not necessarily all) Message Definitions, only one field is required to be populated with data. Also, some have values by default.
- 10 Enter data for the **PSCAMA** records (see Figure 59) as follows:
 - A Double-click on a specific field. If the field displays empty, it is available for data input.
 - B Add the sample data.
 - C Continue populating all other records and sub-records.

Figure 59 Version 1 - Create Test Message (4)



- 11 Continue entering data until all other required records and sub-records are populated, using the same method as above.
- 12 Once all records and sub-records of the message have been populated with data, click **Apply** to have the updates published to the **PSFT_EP** Message Node. Now the message can be viewed (see Figure 60).

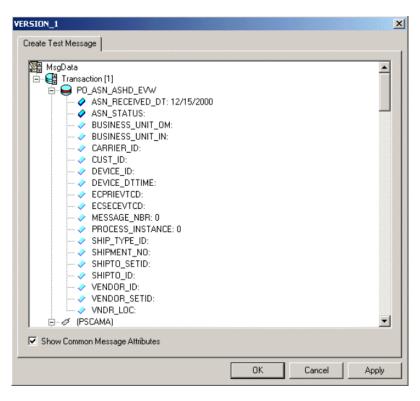


Figure 60 Version 1 - Create Test Message (5)

13 A pop-up dialog box indicates successful publication (see Figure 61).

Figure 61 Success Dialog Box



14 Click **OK** to close the dialog box.

Extracting and Viewing the XML Test Message

The XML test message that you generated and published in the prior section can now be viewed by using a supported Web browser.

Note: See PeopleSoft PeopleBooks for more information on using the PeopleSoft 8 Application.

To View the XML Message

1 Within a supported web browser, log onto the PeopleSoft 8 Application.

Figure 62 PeopleSoft 8 Application Initial Page



2 Once in PeopleSoft 8, scroll down to **PeopleTools** (see Figure 63).

Figure 63 PeopleSoft 8 Application Contents Page



3 Click on PeopleTools to open the PeopleTools application.

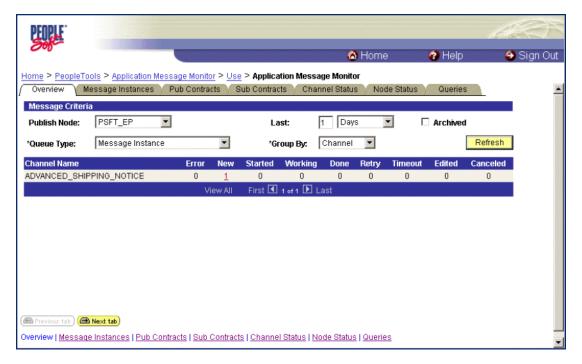
Figure 64 PeopleTools Directory Tree



4 Follow the directory path

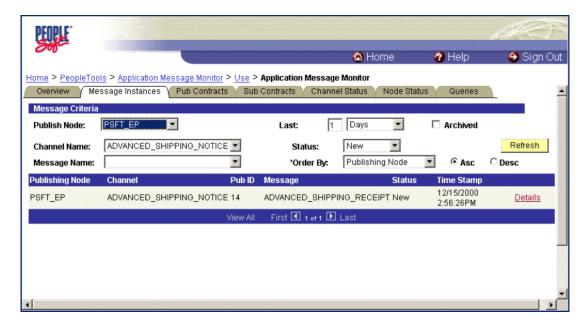
Application Message Monitor > Use > Application Message Monitor and click the hyperlink. The Application Message Monitor page opens to the Overview tab.

Figure 65 Application Message Monitor - Overview Tab



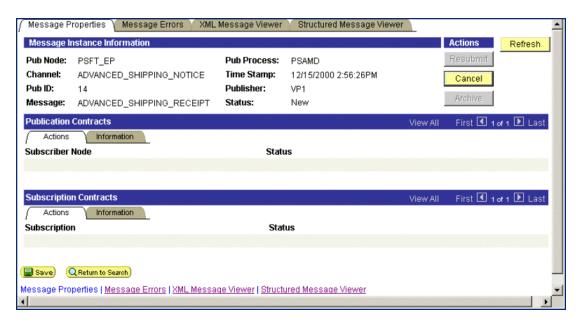
- 5 On the Overview tab, retrieve the list of published messages for the PSFT_EP Message Node.
 - A Within the Publish Node box, select PSFT_EP.
 - B Click the Refresh button, and the number of messages published for the selected grouping using the Create Test Message tool is indicated (in Figure 65, the Channel grouping was selected).
 - C Click the link indicated by the number of messages in the New, Done, or Working column (in Figure 65, the number 1 in the New column was selected). The Message Instances tab appears, showing a summary of the published messages (see Figure 66).

Figure 66 Application Message Monitor - Message Instances Tab



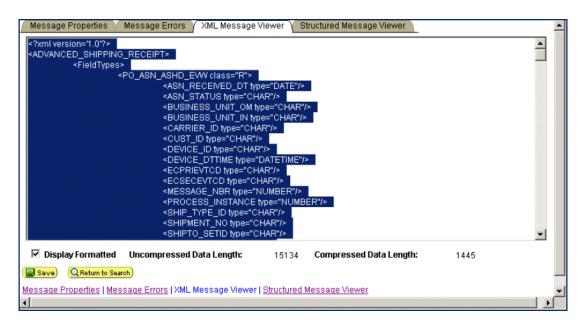
6 Click on the **Details** link (far right side, beneath **Refresh** button) to view properties of the XML message that was published (see Figure 67).

Figure 67 Message Properties Tab



7 Click the **XML Message Viewer** tab to review the message itself.

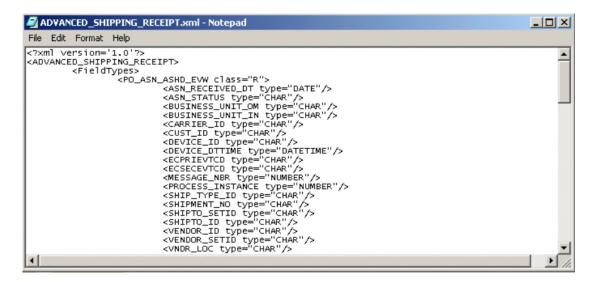
Figure 68 XML Message Viewer Tab



- 8 Save the message as an XML file.
 - A Select the entire XML message.
 - B Copy it to the clipboard.
 - C Paste the XML message into a text editor such as **Notepad** (Windows) and save it, with a .xml extension, to a temporary location (see Figure 69).

Note: Use the same naming convention used to name the Message Definition. This example shows that the XML Message ADVANCED_SHIPPING_RECEIPT was saved.

Figure 69 ADVANCED_SHIPPING_RECEIPT.xml



Generating a DTD for the XML File

The structure of the XML message now must be described in a Document Type Definition (DTD), from which a SeeBeyond Event Type Definition (ETD) is subsequently generated. PeopleSoft does not provide a DTD generation facility, but third-party utilities are available to accomplish this task.

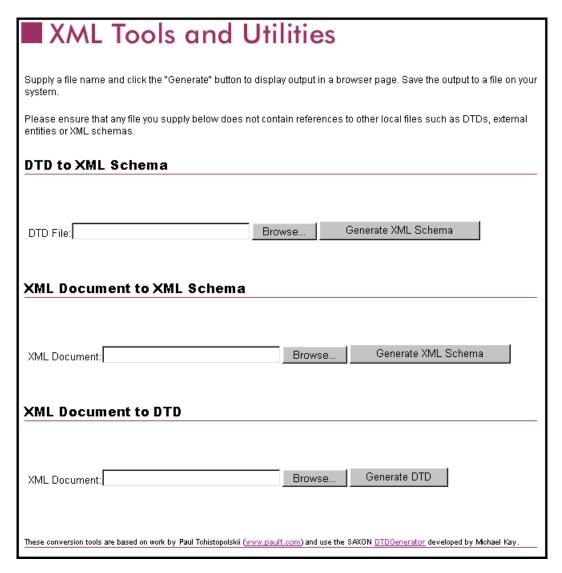
A free, online DTD Generator utility is available at the following URL:

http://www.hitsw.com/Xmltools/

This utility is shown to illustrate the general procedure of DTD generation for the purposes of this User's Guide (see Figure 70 - Figure 71).

Note: SeeBeyond has no connection with, and does not support, this product.

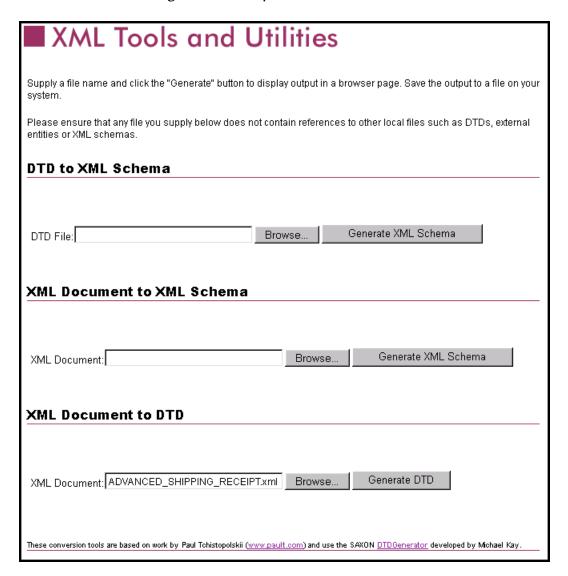
Figure 70 Example DTD Generator (1)



1 In the **XML Document to DTD** section, click the **Browse** button to open a navigator window.

- 2 Locate the .xml file where you saved the XML Message, in this example, c:\temp\ADVANCED SHIPPING RECEIPT.xml
- 3 Click **Open**, and the DTD Generator page reappears with the path and file displayed in the **XML Document** box (see Figure 71).

Figure 71 Example DTD Generator (2)



- 4 Click the **Generate DTD** button to generate the DTD.
- 5 The DTD appears as shown in Figure 72.

Figure 72 Resulting DTD

```
Processing: C:\temp\ADVANCED_SHIPPING_RECEIPT.xml
<!ELEMENT ADDRESS1 EMPTY >
<!ELEMENT ADDRESS1 type NMTOKEN #IMPLIED >

<!ELEMENT ADDRESS2 EMPTY >
<!ATTLIST ADDRESS2 EMPTY >
<!ELEMENT ADDRESS3 EMPTY >
<!ATTLIST ADDRESS3 type NMTOKEN #IMPLIED >

<!ELEMENT ADDRESS3 type NMTOKEN #IMPLIED >

<!ELEMENT ADDRESS4 EMPTY >
<!ATTLIST ADDRESS4 type NMTOKEN #IMPLIED >

<!ELEMENT ADVANCED_SHIPPING_RECEIPT ( FieldTypes, MsgData ) >

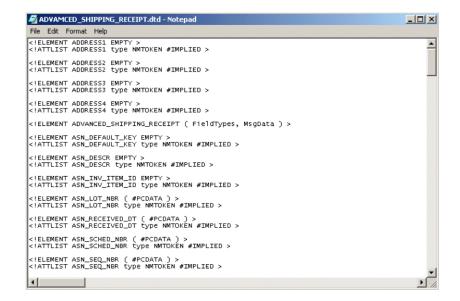
<!ELEMENT ASN_DEFAULT_KEY EMPTY >
<!ATTLIST ASN_DEFAULT_KEY type NMTOKEN #IMPLIED >

<!ELEMENT ASN_DESCR EMPTY >
<!ATTLIST ASN_DESCR EMPTY >
<!ATTLIST ASN_DESCR EMPTY >
```

- 6 Save the message as an XML DTD file.
 - A Select only the DTD-related information (usually all information except the first line), as shown in Figure 72.
 - B Copy it to the clipboard.
 - C Paste the text into a text editor such as **Notepad** (Windows) and save it, with a .dtd extension, to a temporary location (see Figure 73).

Note: Use the same naming convention used to name the Message Definition (in the example, ADVANCED_SHIPPING_RECEIPT).

Figure 73 DTD File



4.4.2 Generating an ETD from the DTD

Use the SeeBeyond DTD Builder to produce an Event Type Definition for the DTD that you have generated. See the SeeBeyond *XML Toolkit* documentation for detailed information on the DTD Builder.

Using the DTD Builder

The ETD Editor contains a DTD Builder, which takes an XML DTD and converts it to a .xsc file.

XML
DTD Files
(*.dtd)

Back-end
Converter

ETD Files
(*.xsc)

DTD
Builder

Figure 74 DTD Builder

To access the DTD Builder's front-end Wizard, select the **New** option in the ETD Editor's **File** menu. The New Event Type Definitions window appears, displaying all installed ETD Wizards (see Figure 75).

Figure 75 New Event Type Definitions Window

To run the DTD Builder

1 Invoke the DTD Wizard by clicking its icon.

Figure 76 DTD Wizard — Introduction



2 Read the instructions carefully, and click Next. Step 1 of the DTD Wizard dialog appears (see Figure 77).

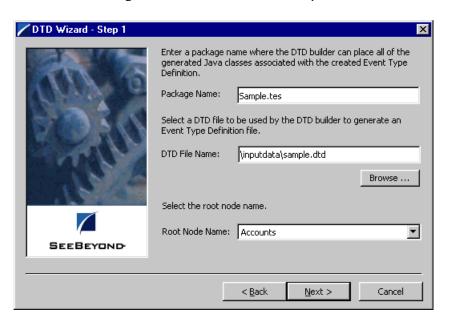


Figure 77 DTD Wizard — Step 1

- 3 Enter the following information:
 - Java Package Name

Type in the name you want to give the Java package, for example, **Sample.tes**. This name must conform to Java package name requirements. See the appropriate Java documentation for details.

DTD File Name

Type in the name of the DTD file you want to convert. Click **Browse** to access an Open (file selection) dialog box, allowing you to choose the desired file.

Root Node Name

This text box is a pull-down menu. Select the desired root node name from the menu. For more information on root nodes and ETDs, see the e^*Gate Integrator User's Guide.

4 When you are finished, click **Next**. Step 2 of the DTD Wizard dialog appears (see Figure 78).



Figure 78 DTD Wizard — Step 2

- 5 Specify the options you want used by the DTD Builder.
 - Allow whitespace in EMPTY elements
 - Ignore #FIXED attributes
 - Ignore all attributes
 - Include XML declarations
 - Include DOC Type Reference (if selected, specify DTR name)
- 6 When you are finished, click **Next**. Step 3 of the DTD Wizard dialog appears (see Figure 79).

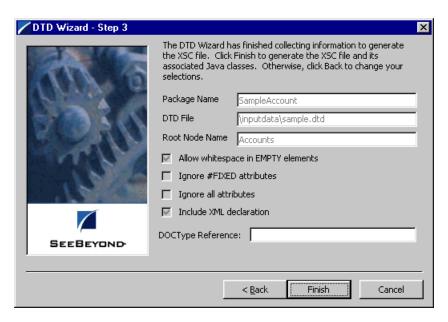


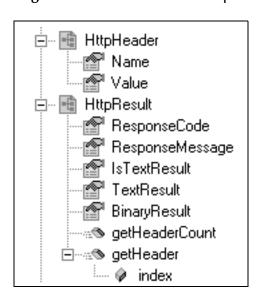
Figure 79 DTD Wizard — Step 3

- 7 Review the information you have entered in the Wizard. If it is correct, click **Finish** to generate a Java ETD (.xsc file) from the original DTD file.
 - The Wizard closes, and the new ETD appears in the ETD Editor Main window. See the *e***Gate Integrator User's Guide* for details on how to use this editor, including an explanation of the information it shows.
- 8 To save the new ETD, click the **Save** button on the Toolbar or select the **Save** command from the **File** menu. A Save dialog box appears.
- 9 Select the desired directory location, give the new ETD your desired name, and click **Save**. The ETD Editor saves the new Java ETD.
- 10 You can continue to use the ETD Editor or select the Close command from the File menu to exit the GUI.

Note: The ETD nodes created using the DTD Builder appear shaded in the ETD Editor, indicating that you cannot edit an ETD created by the Builder.

After converting the DTD to an ETD, return to the e*Gate Schema Designer to verify the process (see Figure 80).

Figure 80 ETD Structure Example



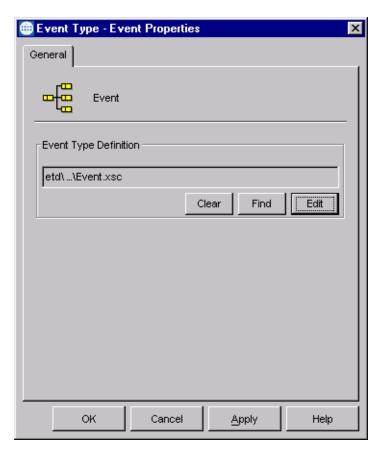
4.5 Assigning ETDs to Event Types

After you have created the e*Gate system's ETD files, you can assign them to Event Types you have already created.

To assign ETDs to Event Types

- 1 In the Schema Designer window, select the **Event Types** folder in the Navigator/Components pane.
- 2 In the Editor pane, select one of the Event Types you created.
- 3 Right-click on the Event Type and select **Properties** (or click in the toolbar). The Event Type Properties dialog box appears. See Figure 81.

Figure 81 Event Type Properties Dialog Box



4 Under Event Type Definition, click Find.

The Event Type Definition Selection dialog box appears; it is similar to the Windows Open dialog box.

Note: Clicking **New** in the Event Type Properties dialog box opens the ETD Editor window, allowing you to create a new ETD.

- 5 Open the **etd** folder, then select the desired file name (.xsc).
- 6 Click **Select**. The file populates the Event Type Definition field.
- 7 To save any work in the properties dialog box, click **Apply** to enter it into the system.
- 8 When finished assigning ETDs to Event Types, click **OK** to close the properties dialog box and apply all the properties.

Each Event Type is associated with the specified Event Type Definition.

4.6 Defining Collaborations

After you have created the required Event Type Definitions, you must define a Collaboration to transform the incoming Event into the desired outgoing Event.

Collaborations are e*Way components that receive and process Event Types, then forward the output to other e*Gate components. Collaborations consist of the Subscriber, which "listens" for Events of a known type or from a given source, and the Publisher, which distributes the transformed Event to a specified recipient. The same Collaboration cannot be assigned to more than one e*Gate component.

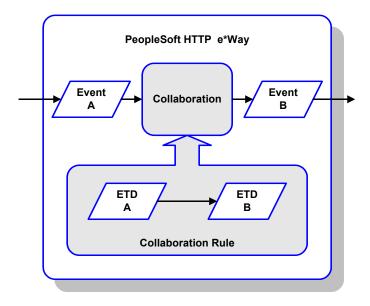


Figure 82 Collaborations

4.6.1 The Java Collaboration Rules Editor

Java Collaborations are defined using the e*Gate Java Collaboration Rules Editor. Note that the Java Collaboration environment supports multiple source and destination ETDs. The file extension for Java Collaboration Rules is .xpr. See the e*Gate Integrator User's Guide for descriptions of the Java Collaboration Rules Editor and its use.

4.7 Creating Intelligent Queues

IQs are components that provide nonvolatile storage for Events within the e*Gate system as they pass from one component to another. IQs are *intelligent* in that they are more than just a "holding tank" for Events. They actively record information about the current state of Events.

Each schema must have an IQ Manager before you can add any IQs to it. You must create at least one IQ per schema for published Events within the e*Gate system. Note that e*Ways that publish Events externally do not need IQs.

For more information on how to add and configure IQs and IQ Managers, see the *e*Gate Integrator System Administration and Operations Guide*. See the *e*Gate Integrator Intelligent Queue Services Reference Guide* and the *SeeBeyond JMS Intelligent Queue User's Guide* for complete information on working with IQs.

4.8 Using the e*Way

4.8.1 Publishing to PeopleSoft

Publishing data to PeopleSoft 8 using the PeopleSoft HTTP e*Way consists of four primary steps:

- 1 Compress the "business data" and base-64 encode it (optional).
- 2 Wrap the "business data" with PeopleSoft 8 XML "container" information.
- 3 Publish the wrapped XML data by using http-post.
- 4 Obtain the PeopleSoft 8 XML response by using http-get-result-data and check for successful publication.

The PeopleSoft HTTP e*Way does *not* contain any logic to create PeopleSoft 8 XML messages, nor does it contain any logic to map external data to PeopleSoft 8 XML messages. The e*Way merely accepts and publishes the raw PeopleSoft 8 XML message, irrespective of how the data may appear. The only difference between publishing to PeopleSoft 8.1 or 8.4 is the value for the **DefaultURL** configuration parameter.

XML Messages

The following is a description of the XML message, as described in the PeopleSoft 8 PeopleTools documentation, that is created by the e*Way prior to publishing to PeopleSoft 8:

```
<?xml version="1.0"?>
<request version="peopletools-version">
<to node="destination-node-name"/>
<from node="source-node-name" password="source-node-group-password"/>
<operations namespace="PublishSubscribe"</pre>
interface="PublishSubscribeSystem">
<invoke member="Publish">
<variable type="object" interface="Publication">
<publication>
<publishingnode>source-node-name/publishingnode>
<channel>channel-name/channel>
<publicationid>publication-id/publicationid>
<subchannel>subchannel
<subject>message-name</subject>
<subjectdetail>message-detail</subjectdetail>
<originatingnode>originating-node-name</originatingnode>
<publisher>publishing-operator-id/publisher>
<publicationprocess>publication-process/publicationprocess>
<publishtimestamp>publish-timestamp/publishtimestamp>
<status>publication-status/status>
<defaultdataversion>default-message-version-name</defaultdataversion>
<dataversions>
<publicationdataversion>
<version>VERSION_1
<data length="identity-length" encoding="base64(deflate)"</pre>
encodedlength="base64-encoded-length(deflated-length)">deflated,
base-64 encoded XML data</data>
</publicationdataversion>
```

```
</dataversions>
</publication>
</variable>
</invoke>
</operations>
</request>
```

Compressed ("deflated"), base-64 encoded XML data is the data that is to be published. The e*Way can be configured to compress and/or base-64 encode the data. The remainder of the XML data is PeopleSoft 8 "container" information, and most of these parameters are configurable in the e*Way. By default, the e*Way compresses and base-64 encodes the XML data. See PeopleSoft 8 PeopleTools documentation for detailed information on each of the elements of the XML message.

In response to a published message, PeopleSoft 8 Application Messaging Gateway returns a reply XML message with the following format:

```
<?xml version="1.0" ?>
<reply>
<operations namespace="PublishSubscribe"</pre>
interface="PublishSubscribeSystem">
<invoke opnum="1" member="Publish">
<return type="number">0</return>
<variable type="object" interface="Publication">
<publication>
<publishingnode>publisher node</publishingnode>
<channel>published_channel</channel>
<publicationid>published_id</publicationid>
<publishtimestamp>date_time_of_publish/publishtimestamp>
</publication>
</variable>
</invoke>
</operations>
</reply>
```

The e*Way checks the value of <return>, which can be:

- 0, which means the message was delivered to PeopleSoft 8 successfully
- 6, which means the message was already delivered successfully
- 8, which means the message was *not* delivered successfully—in which case the e*Way marks the message for re-sending.

Compressing the XML Message

The PeopleSoft subscribing node can accept XML data in either a compressed and encoded, or an uncompressed and unencoded format.

• The compression algorithm that PeopleSoft accepts is base64(deflate). See *Uncompressing Messages* for more information.

- When compressed:
 - The encoding attribute of the <data> element contains information about how many bytes each of the compressed routines produced.
 - The length attribute of the <data> element is the number of Unicode characters when uncompressed.

Because PeopleTools 8 uses Unicode, two bytes represent a character that was previously represented by a single byte. One way to derive the Unicode byte length is to multiply the character length of the inflated contents of the <data> tags by 2 to get the correct length that PeopleTools can use to inflate to Unicode.

For example, the following code describes data that contains 4126 Unicode characters when uncompressed. When deflated, the size of the data is 532 bytes and when base64 encoded, becomes 712 bytes in size:

```
<data encoding="base64(deflate)" encodedlength="712(532)"
length="4126">
```

If you do not deflate and base64-encode the <data> element contents, then you must remove the <-xml version="1.0" -> processing instruction tag. Otherwise, the PeopleSoft application server fails (because XML does not support nested documents).

4.8.2 Subscribing to PeopleSoft 8.1

Subscribing to PeopleSoft 8.1 requires the use of the e*Gate API Kit and SeeBeyond's customized PeopleSoft 8 MUX subscription handler classes. The API Kit (Multiplexer) is used in conjunction with the subscription handler classes, written by SeeBeyond, to receive data from PeopleSoft 8 and publish the data to e*Gate.

To send data from PeopleSoft 8 to e*Gate, a servlet subscription handler called the MuxHandler is loaded into PeopleSoft's Application Messaging Gateway servlet. The MuxHandler implements the IPS Handler interface allowing it to intercept messages published from PeopleSoft 8 and directing them to e*Gate API Kit (Multiplexer e*Way). Publishing data to e*Gate consists of four steps:

- 1 Decompress and/or base-64 decode the "business data" (optional).
- 2 Instantiate an **IPMPReqReply** object and connect to the appropriate Multiplexer e*Way.
- 3 Send the "business data" to the Multiplexer e*Way by using sendMessage.
- 4 Ensure **sendMessage** completes successfully and send successful reply to PeopleSoft 8.

The MuxHandler subscription handler has eight configuration parameters:

- Node Name (Message Node that was created with the PeopleSoft 8 Application Designer, and is associated with the configured MUX Handler)
- MUX Host
- MUX Port
- MUX Expire (default is 10 sec.)
- MUX Timeout (default is 10000 msec.)

- Uncompress (default is YES)
- Base64 Decode (default is YES)
- Log File (the default value is C:\\yyyymmddhhmmss on Windows and /tmp/ yyyymmddhhmmss on UNIX).

The Uncompress and Base64 Decode configurations can be used to decompress and/or decode the XML data before publishing to the Multiplexer e*Way. By default these are set to YES. Publishing encoded and compressed data is highly recommended since it reduces both the network bandwidth required and the processing load for the Multiplexer e*Way.

Note: Base64 Decode must be selected if Uncompress is selected.

If **Base64 Decode** and **Uncompress** are *not* selected, then the XML message, along with its "container" information, is sent to the Multiplexer e*Way as-is. In this case, you must configure the Multiplexer e*Way to decode and decompress the data when the data is received. See the *e*Gate API Kit User's Guide* for details on the Multiplexer configurations.

The Publication ID and the Subject (Message Definition) of every message published is written to the log file as well as any errors that may have occurred. Note that the log file should be cleared out periodically to prevent it from growing too large. By default, the log file is named using the creation date and time of the subscription handler. You have the option of renaming the log file to something more meaningful to you. See **Installing the MUX Subscription Handler** on page 21 for more details.

4.8.3 Subscribing to PeopleSoft 8.4

Subscribing to PeopleSoft 8.4 makes use of the SeeBeyond JMS e*Way Connection. See the SeeBeyond JMS Intelligent Queue User's Guide for information.

4.9 Sample Schema

A sample implementation, psoft8AppMsg, is available in the \samples \ewpsoft8 directory of the e*Gate CD-ROM. The sample schema contains examples of both Publishing and Subscribing to PeopleSoft 8. It can be used to test your system following installation and, if appropriate, as a template that you can modify to produce your own schema. See Optional Example Files on page 26 for installation instructions.

Also in the **\samples\ewpsoft8** directory is a sample XML message, INTERUNIT_EXPECTED_RECEIPT_16.xml.

4.9.1 Publishing to PeopleSoft

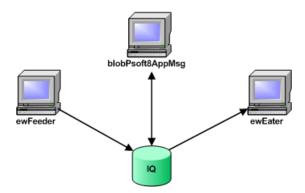
Before running this schema, set up PeopleSoft 8 for publishing to the PSFT_EP message node from the SEEBEYOND message node. See Generating and Publishing an XML Test Message on page 56, or the PeopleSoft 8 PeopleTools documentation, for details on how to create message nodes, activate a message, and set up the routing rules on a message channel using PeopleSoft Application Designer.

Components

The sample schema sets up one instance of the Multi-Mode e*Way and two instances of the File e*Way, with logical names as shown in the following table. It also sets up a standard SeeBeyond IQ. The component relationships are shown in Figure 83.

e*Way Type	Logical Name
Multi-Mode e*Way	blobPsoft8AppMsg
File e*Way	ewEater
	ewFeeder

Figure 83 Components - Publishing Example



Operation

The schema is set up to send an INTERUNIT_EXPECTED_RECEIPT message using the INTERUNIT_EXPECTED_RECEIPT message channel. Included with this sample schema is a sample XML message, INTERUNIT_EXPECTED_RECEIPT_16.xml.

e*Gate Integrator ewFeeder **XML** colFeeder Message IQ blobPsoft8AppMsg **PeopleSoft** colPostXML (PSFT_EP) colPsoft8AppMsgPost IQ ewEater

Figure 84 Operation - Publishing Example

Publnfo

colEater

As shown in Figure 84, the e*Way ewFeeder reads a file containing the PeopleSoft 8 data to send. A feeder Collaboration, colFeeder, subscribes to an external source and publishes to the IQ. A PeopleSoft Collaboration, colPsoft8AppMsgPost, subscribes to the feeder Collaboration via the IQ for the BLOB Event and then publishes the Event to the PeopleSoft 8 HTTP e*Way Connection. The Java collaboration colPostXML is then triggered, which:

- 1 Sets the XML message to send.
- 2 Sends the XML message by calling **sendMessage**.
- 3 Retrieves the publication information returned by PeopleSoft.

The Collaboration also publishes the publication information to a standard IQ. An eater Collaboration, **colEater**, subscribes to the PeopleSoft Collaboration for the publication information as a BLOB Event and publishes it to a file. An example of this publication information is shown in the following table.

Parameter	Value
Publication ID	11
Publishing Node	SEEBEYOND
PublishTimeStamp	2001-12-06T17:52:49.827000-0800

The PeopleSoft 8 e*Way Connection is configured to have the following publication information under the **ApplicationMessaging** section:

Parameter	Value
RequestVersion	8.13
ToNode	PSFT_EP
FromNode	SEEBEYOND
Channel	INTERUNIT_EXPECTED_RECEIPT
Subject	INTERUNIT_EXPECTED_RECEIPT

4.9.2 Subscribing to PeopleSoft 8.1

Before running this schema, set up PeopleSoft 8 for publishing to the MUX message node from the PSFT_EP message node. See Generating and Publishing an XML Test Message on page 56, or the PeopleSoft 8.13 PeopleTools documentation, for details on how to create message nodes, activate a message, and set up the routing rules on a message channel using PeopleSoft Application Designer.

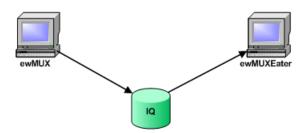
Also, see **Installing the MUX Subscription Handler** on page 21 for information on installing the MUX Subscription Handler and adding a MUX Subscription Handler using the PeopleSoft 8 Configuration Servlet.

Components

The sample schema sets up one instance of the Multiplexer e*Way (e*Gate API Kit) and one of the File e*Way, with logical names as shown in the following table. It also sets up a standard SeeBeyond IQ. The component relationships are shown in Figure 85.

e*Way Type	Logical Name
Multiplexer e*Way	ewMUX
File e*Way	ewMUXEater

Figure 85 Components - Subscribing Example



Operation

The e*Way ewMUX, in combination with the MUX Subscription Handler, is used to subscribe to messages inbound to e*Gate. The MUX Subscription Handler intercepts messages published from PeopleSoft and routes the messages to the e*Way. A MUX collaboration, colMUX, subscribes to PeopleSoft and publishes the PeopleSoft 8 XML message into the IQ.

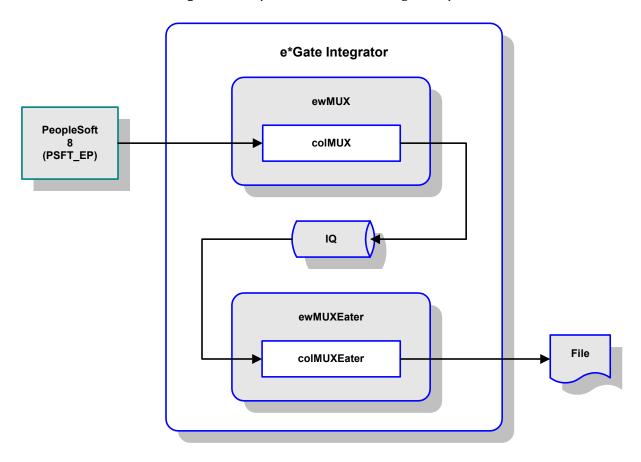


Figure 86 Operation - Subscribing Example

Another collaboration, **colMUXEater**, subscribes to that Event from the IQ and publishes it as a file. Since the Eater collaboration is **PassThru**, the data written to the file by **ewMUXEater** will also contain the MUX header information (which will be seen as binary). The publication information, such as the publication ID for the Event, is written to a log file by the MUX Subscription Handler. An example of an entry in the MUX Subscription Handler log is as follows:

2001.December.07 11:32:00.468 Pacific Standard Time:Publishing publicationid [67] subject [AIRLINE_TKT].

This example log entry contains the following information.

Parameter	Value
Publication Name	AIRLINE_TKT
Publication ID	67
PublishTimeStamp	2001.December.07 11:32:00.468 PST

4.9.3 Subscribing to PeopleSoft 8.4

Before running this schema, JMSQueue, set up PeopleSoft 8.4 for publishing to the SeeBeyond JMS connector from the PeopleSoft JMS Target Connector. See **PeopleSoft 8.4/PeopleTools 8.42** on page 49.

Components

The sample schema sets up two instances of the File e*Way, with logical names **feeder** and **eater** (see Figure 87).

localhost_iqmgr
localhost_iqmgr
localhost (inactive)

Figure 87 JMS Test Schema

Operation

The e*Way feeder is used to send an inbound message to e*Gate. A test collaboration, jms_test, subscribes to the message and publishes it to the JMS IQ. The e*Way eater subscribes to the IQ and saves the message as a file.

To test the PeopleSoft JMS Target Connector

- 1 Run the JMS test schema, JMSQueue.
- 2 Stop both e*Ways.
- 3 Use the PeopleSoft StartSendMaster.bat program under \peoplesoft\c\$\bea\wlserver6.1\config\peoplesoft\applications\PSIGW to generate a test message to be sent to the JMS Server.
- 4 Click the **POST** button, which should post the message to the SeeBeyond JMS Server.
- 5 View the message using the e*Gate JMS Administrator.

e*Way Setup

This chapter describes the procedures required to customize the SeeBeyond e*Way Intelligent Adapter for PeopleSoft HTTP to operate within your production system.

5.1 Overview

After creating a schema, you must instantiate and configure the e*Way Intelligent Adapter for PeopleSoft HTTP to operate within the schema. A wide range of setup options allow the e*Way to conform to your system's operational characteristics and your facility's operating procedures.

The topics discussed in this chapter include the following:

Setting Up the e*Way on page 90

Creating e*Way Connections on page 98

Using the e*Way Editor on page 101

Troubleshooting the e*Way on page 104

5.2 Setting Up the e*Way

Note: The e*Gate Schema Designer GUI runs only on the Windows operating system.

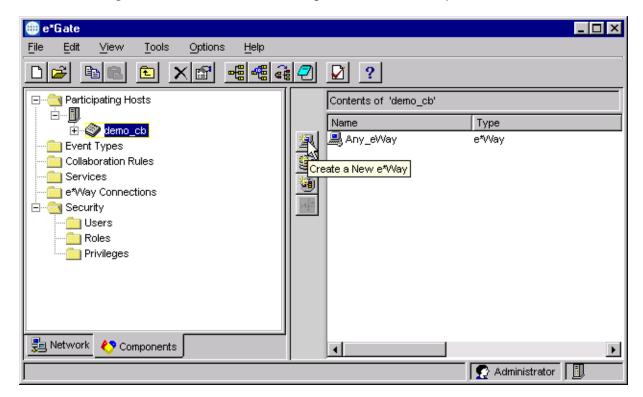
5.2.1 Creating the e*Way

The first step in implementing an e*Way is to define the e*Way component using the e*Gate Schema Designer.

To create an e*Way

- 1 Open the schema in which the e*Way is to operate.
- 2 Select the e*Gate Schema Designer Navigator's **Components** tab.
- 3 Open the host on which you want to create the e*Way.
- 4 Select the Control Broker you want to manage the new e*Way.

Figure 88 e*Gate Schema Designer Window (Components View)



- 5 On the Palette, click Create a New e*Way.
- 6 Enter the name of the new e*Way, then click **OK**.
- 7 All further actions are performed in the e*Gate Schema Designer Navigator's **Components** tab.

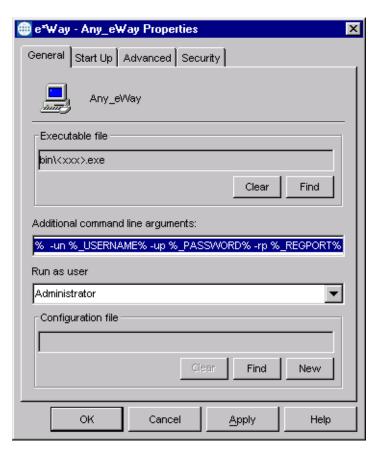
5.2.2 Modifying e*Way Properties

To modify any e*Way properties

1 Right-click on the desired e*Way and select **Properties** to edit the e*Way's properties. The properties dialog opens to the **General** tab (shown in Figure 89).

Note: The executable files used by this e*Way are stceway.exe and stcewipmp.exe.

Figure 89 e*Way Properties (General Tab)



2 Make the desired modifications, then click **OK**.

5.2.3 Configuring the Inbound e*Way

Note: This section applies only to an Inbound (PeopleSoft-to-e*Gate) e*Way. See Configuring the Outbound e*Way on page 93 and Creating e*Way Connections on page 98 for configuring an Outbound (e*Gate-to-PeopleSoft) e*Way.

The e*Way's default configuration parameters are stored in an ASCII text file, stcewipmp.def. The e*Way Editor provides a simple graphical interface for viewing and changing those parameters to create a working configuration (.cfg) file.

To change the Inbound e*Way's configuration parameters

1 In the e*Gate Schema Designer's Component editor, select the desired e*Way.

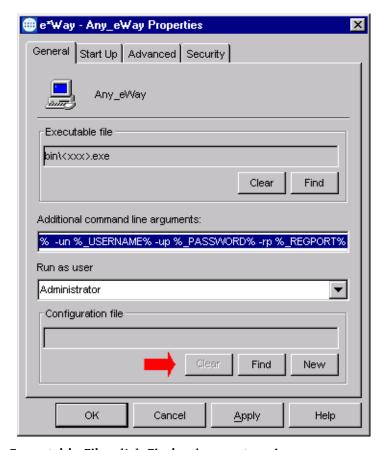


Figure 90 e*Way Properties - General Tab

- 2 Under Executable File, click Find to locate stcewipmp.exe.
- 3 Under Configuration File, click New to create a new file or Find to select an existing configuration file. If you select an existing file, an Edit button appears, which you can click to edit the currently selected file.
- 4 You are now in the e*Way Configuration Editor (see **Using the e*Way Editor** on page 101 for more information).
- 5 See e*Gate API Kit on page 114 for the appropriate configuration parameters.

5.2.4 Configuring the Outbound e*Way

Note: This section applies only to an Outbound (e*Gate-to-PeopleSoft) e*Way; also see Creating e*Way Connections on page 98. See Configuring the Inbound e*Way on page 92 for configuring an Inbound (PeopleSoft-to-e*Gate) e*Way.

The e*Way's default configuration parameters are stored in an ASCII text file, psoft8appmsg.def. The e*Way Editor provides a simple graphical interface for viewing and changing those parameters to create a working configuration (.cfg) file.

To change the Outbound e*Way's configuration parameters

1 In the e*Gate Schema Designer's Component editor, select the desired e*Way.

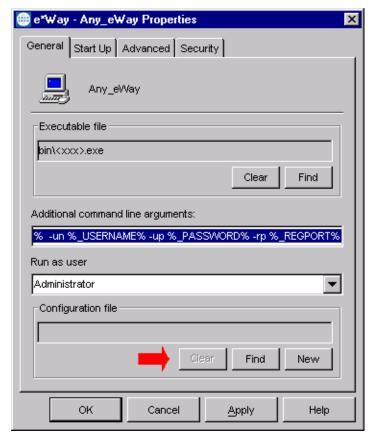


Figure 91 e*Way Properties - General Tab

- 2 Under Executable File, click Find to locate stceway.exe.
- 3 Under Configuration File, click New to create a new file or Find to select an existing configuration file. If you select an existing file, an Edit button appears, which you can click to edit the currently selected file.
- 4 You are now in the e*Way Configuration Editor (see **Using the e*Way Editor** on page 101 for more information).
- 5 See Multi-Mode e*Way on page 113 for the appropriate configuration parameters.

5.2.5 Changing the User Name

Like all e*Gate executable components, e*Ways run under an e*Gate user name. By default, all e*Ways run under the **Administrator** user name. You can change this if your site's security procedures so require.

To change the user name

- 1 Display the e*Way's properties dialog.
- 2 On the **General** tab, use the **Run as user** list to select the e*Gate user under whose name you want this component to run.

See the *e***Gate Integrator System Administration and Operations Guide* for more information on the *e***Gate security system*.

5.2.6 Setting Startup Options or Schedules

SeeBeyond e*Ways can be started or stopped by any of the following methods:

- The Control Broker can start the e*Way automatically whenever the Control Broker starts.
- The Control Broker can start the e*Way automatically whenever it detects that the e*Way terminated execution abnormally.
- The Control Broker can start or stop the e*Way on a schedule that you specify.
- Users can start or stop the e*Way manually using an interactive monitor.

You determine how the Control Broker starts or shuts down an e*Way using options on the e*Way properties **Start Up** tab (see Figure 92). See the *e*Gate Integrator System Administration and Operations Guide* for more information about how interactive monitors can start or shut down components.

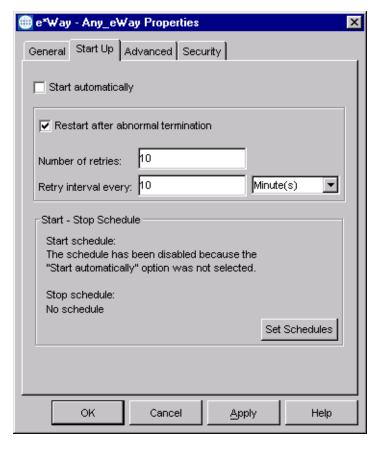


Figure 92 e*Way Properties (Start-Up Tab)

To set the e*Way's startup properties

- 1 Display the e*Way's properties dialog.
- 2 Select the Start Up tab.
- 3 To have the e*Way start automatically when the Control Broker starts, select the **Start automatically** check box.
- 4 To have the e*Way start manually, clear the **Start automatically** check box.
- 5 To have the e*Way restart automatically after an abnormal termination:
 - A Select Restart after abnormal termination.
 - B Set the desired number of retries and retry interval.
- 6 To prevent the e*Way from restarting automatically after an abnormal termination, clear the **Restart after abnormal termination** check box.
- 7 Click OK.

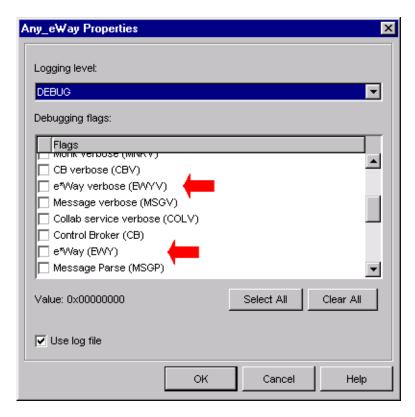
5.2.7 Activating or Modifying Logging Options

Logging options enable you to troubleshoot problems with the e*Way and other e*Gate components.

To set the e*Way debug level and flag

- 1 Display the e*Way's Properties dialog.
- 2 Select the Advanced tab.
- 3 Click Log, and the dialog window appears (see Figure 93).

Figure 93 e*Way Properties (Advanced Tab - Log Option)



- 4 Select **DEBUG** for the **Logging level**.
- 5 Select either e*Way (EWY) or e*Way Verbose (EWYV) for the Debugging flag. Note that the latter has a significant negative impact on system performance.
- 6 Click OK.

The other options apply to other e*Gate components and are activated in the same manner. See the *e*Gate Integrator Alert and Log File Reference* for additional information concerning log files, logging options, logging levels, and debug flags.

5.2.8 Activating or Modifying Monitoring Thresholds

Monitoring thresholds enable you to monitor the throughput of the e*Way. When the monitoring thresholds are exceeded, the e*Way sends a Monitoring Event to the Control Broker, which routes it to the Schema Manager and any other configured destinations.

- 1 Display the e*Way's properties dialog.
- 2 Select the Advanced tab.
- 3 Click Thresholds.
- 4 Set the desired threshold options and click **OK**.

See the *e*Gate Integrator Alert and Log File Reference* for more information concerning threshold monitoring, routing specific notifications to specific recipients, or for general information about *e*Gate's* monitoring and notification system.

5.3 Creating e*Way Connections

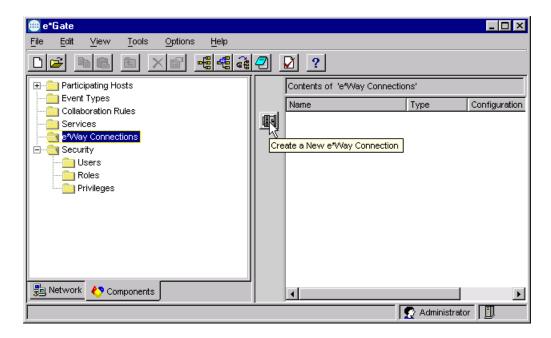
Note: This section applies only to an Outgoing (e*Gate-to-PeopleSoft) e*Way. See **Configuring the Inbound e*Way** on page 92 for configuring an Incoming (PeopleSoft-to-e*Gate) e*Way.

The e*Way Connections are created and configured in the Schema Designer.

To create and configure the Outgoing e*Way Connections

1 In the Schema Designer's Component editor, select the **e*Way Connections** folder.

Figure 94 Schema Designer - e*Way Connections Folder (1)



2 On the Palette, click the **Create a New e*Way Connection** button which opens the **New e*Way Connection Component** dialog box.

Figure 95 New e*Way Connection Component Dialog Box



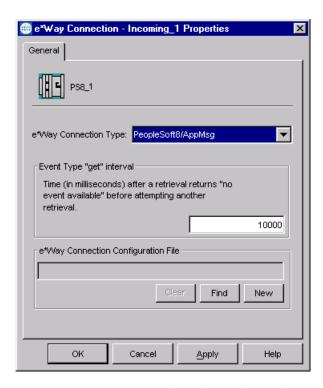
3 Enter a name for the e*Way Connection and click **OK**. The new e*Way Connection appears in the Schema Designer Contents pane.

e*Gate _ 🗆 × Edit <u>V</u>iew Tools Options File ⊞... i Participating Hosts Contents of 'e*VVay Connections' Event Types Туре Configuration 🚞 Collaboration Rules • Services 🚞 e*Way Connections 🖃 🛅 Security 🧰 Users 🛅 Roles 🚞 Privileges 월 Network ♦ Components 🤦 Administrator 📗

Figure 96 Schema Designer - e*Way Connections Folder (2)

4 Double-click the new e*Way Connection icon to open the **e*Way Connection Properties** dialog box.





5 From the **e*Way Connection Type** drop-down box, select **PeopleSoft8/AppMsg** for an Outgoing (e*Gate-to-PeopleSoft) e*Way Connection.

- 6 Enter the **Event Type "get" interval** in the dialog box provided (optional).
- 7 Click New to invoke the e*Way Connection Configuration File Editor, where you can create a new e*Way Connection Configuration File.

To modify the Outgoing e*Way Connections

1 In the e*Gate Schema Designer's Component editor, select the e*Way you want to reconfigure and display its properties.

Note: The executable and default configuration files used by this e*Way are stceway.exe (e*Gate to PeopleSoft), stcewipmp.exe (PeopleSoft to e*Gate), and psoft8appmsg.def.

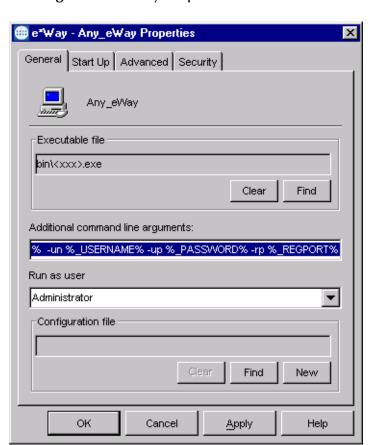


Figure 98 e*Way Properties - General Tab

- 2 Under Configuration File, click Find to select an existing configuration file. An Edit button appears; click the button to edit the currently selected file.
- 3 You are now in the e*Way Configuration Editor (see **Using the e*Way Editor** on page 101 for more information).
- 4 See e*Way Connections on page 113 for the appropriate configuration parameters.

Note: You must restart the e*Way after modifying the e*Way connection.

5.4 Using the e*Way Editor

The e*Way's default configuration parameters are stored in an ASCII text file with a .def extension. The e*Way Editor provides a simple graphical interface for viewing and changing those parameters to create a working configuration (.cfg) file.

Edit Settings for d:/egate/client/configs/.. _ 🗆 × File View Options Help Menu **→** | 00 | 20 | Goto Section: General Settings Section -Bar selector Goto Parameter: Journal File Name Section controls 다 목 🗬 Journal File Name Parameter selector Parameter controls Parameter configuration area

Figure 99 The e*Way Configuration Editor

The e*Way Editor controls fall into one of six categories:

- The Menu bar allows access to basic operations (e.g., saving the configuration file, viewing a summary of all parameter settings, and launching the Help system)
- The **Section selector** at the top of the Editor window enables you to select the category of the parameters you wish to edit
- Section controls enable you to restore the default settings, restore the last saved settings, display tips, or enter comments for the currently selected section
- The Parameter selector allows you to jump to a specific parameter within the section, rather than scrolling
- Parameter controls enable you to restore the default settings, restore the last saved settings, display tips, or enter comments for the currently selected parameter
- Parameter configuration controls enable you to set the e*Way's various operating parameters

5.4.1 Section and Parameter Controls

The section and parameter controls are shown in Table 8 below.

 Table 8
 Parameter and Section Controls

Button	Name	Function
	Restore Default	Restores default values
*	Restore Value	Restores saved values
P	Tips	Displays tips
TOTAL	User Notes	Enters user notes

Note: The **section controls** affect **all** parameters in the selected section, whereas the **parameter controls** affect only the **selected** parameter.

5.4.2 Parameter Configuration Controls

Parameter configuration controls fall into one of two categories:

- Option buttons
- Selection lists, which have controls as described in Table 9

 Table 9
 Selection List Controls

Button	Name	Function
	Add to List	Adds the value in the text box to the list of available values.
×	Delete Items	Displays a "delete items" dialog box, used to delete items from the list.

5.4.3 Command-line Configuration

In the Additional Command Line Arguments box, type any additional command line arguments that the e*Way may require, taking care to insert them at the end of the existing command-line string. Be careful not to change any of the default arguments unless you have a specific need to do so.

5.4.4 Getting Help

To launch the e*Way Editor's Help system

From the Help menu, select Help topics.

To display tips regarding the general operation of the e*Way

From the File menu, select Tips.

To display tips regarding the selected Configuration Section

In the **Section** Control group, click



To display tips regarding the selected Configuration Parameter

In the **Parameter** Control group, click 🖳



Note: "Tips" are displayed and managed separately from the Help system that launches from the Toolbar's Help menu. You cannot search for Tips within the Help system, or view Help system topics by requesting Tips.

For detailed descriptions and procedures for using the e*Way Configuration Editor, see the *e***Gate Integrator User's Guide*.

5.5 Troubleshooting the e*Way

In the initial stages of developing your e*Gate Integrator system administration system, most problems with e*Ways can be traced to configuration.

5.5.1 Configuration Problems

In the Schema Designer

- Does the e*Way have the correct Collaborations assigned?
- Do those Collaborations use the correct Collaboration Services?
- Is the logic correct within any Collaboration Rules script employed by this e*Way's Collaborations?
- Do those Collaborations subscribe to and publish Events appropriately?
- Are all the components that *feed* this e*Way properly configured, and are they sending the appropriate Events correctly?
- Are all the components that this e*Way *feeds* properly configured, and are they subscribing to the appropriate Events correctly?

In the e*Way Editor

- Check that all configuration options are set appropriately.
- Check that all settings you changed are set correctly.
- Check all required changes to ensure they have not been overlooked.
- Check the defaults to ensure they are acceptable for your installation.

On the e*Way's Participating Host

- Check that the Participating Host is operating properly, and that it has sufficient disk space to hold the IQ data that this e*Way's Collaborations publish.
- Check that your *path* environmental variable includes the location of the PeopleSoft HTTP dynamically-loaded libraries. The name of this variable on the different operating systems is:
 - PATH (Windows)
 - LD_LIBRARY_PATH (Solaris/Compaq)
 - LIBPATH (AIX)
- Check that your classpath environmental variable includes the location of the PeopleSoft HTTP e*Way Connection Java classes. The name of this variable can vary.

In the PeopleSoft Application

• Check that the application is configured correctly, is operating properly, and is sending or receiving the correct data appropriately.

5.5.2 System-related Problems

- Check that the connection between the external application and the e*Way is functioning appropriately.
- Once the e*Way is up and running properly, operational problems can be due to:
 - External influences (network or other connectivity problems).
 - Problems in the operating environment (low disk space or system errors)
 - Problems or changes in the data the e*Way is processing.
 - Corrections required to Collaboration Rules scripts that become evident in the course of normal operations.

One of the most important tools in the troubleshooter's arsenal is the e*Way log file. See the e*Gate Integrator Alert and Log File Reference Guide for an extensive explanation of log files, debugging options, and using the e*Gate monitoring system to monitor operations and performance.

Operational Overview

This chapter contains an overview of the architecture and basic internal processes of the Java e*Way Intelligent Adapter for PeopleSoft (HTTP).

6.1 Introduction

The outbound e*Way uses Java methods to exchange data with the external system, package data as e*Gate *Events*, send those Events to Collaborations, and manage the connection between the e*Way and the external system. The inbound e*Way uses MUX components from the e*Gate API Kit for data exchange. These topics are covered in detail in the *e*Gate Integrator User's Guide*.

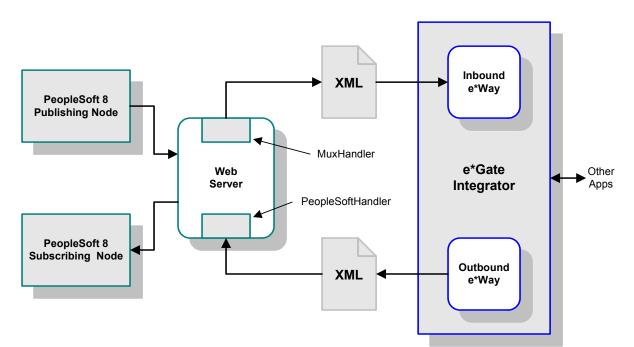


Figure 100 PeopleSoft 8 - e*Gate Integration

6.2 Multi-Mode e*Way

The PeopleSoft HTTP e*Way is based on the SeeBeyond Multi-Mode e*Way, which is a multi-threaded component forming an Intelligent Adapter for e*Gate Integrator to exchange information with multiple external systems. The e*Way connects to one or more external systems by means of e^*Way Connections, each of which must be configured for the specific external system to which it connects (see Figure 101).

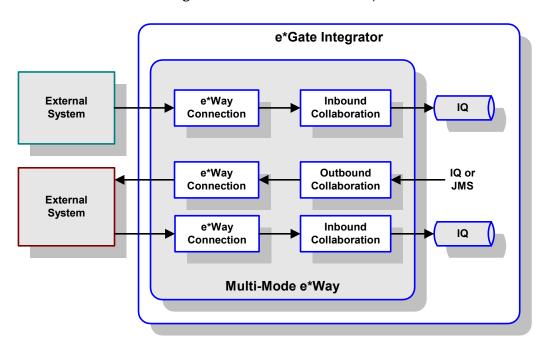


Figure 101 Multi-Mode e*Way

Each e*Way performs one or more *Collaborations* (see **Collaborations and Event Type Definitions** on page 108). Bidirectional data flow requires at least two Collaborations, one *Inbound* and one *Outbound*, as shown in Figure 101. Each Collaboration processes a stream of messages, or *Events*, containing data or other information.

Each Collaboration that publishes its processed Events internally (within e*Gate Integrator) requires one or more *Intelligent Queues* (IQs) to receive the Events. Any Collaboration that publishes its processed Events only to an external system, which is the case with the PeopleSoft HTTP e*Way, *does not* require an IQ to receive Events.

6.3 Collaborations and Event Type Definitions

Collaborations execute the business logic that enable the e*Way to perform its intended task. Each Collaboration executes a specified *Collaboration Rule*, which contains the actual instructions to execute the business logic and specifies the applicable *Event Type Definitions* (ETDs). Events Types represent *instances* of their corresponding ETDs.

A look inside a typical outbound Collaboration is shown in Figure 102. In this diagram, two e*Way Connections are shown, feeding two external systems. More than two e*Way Connections can be accommodated in each e*Way and, as stated previously, multiple Collaborations as well.

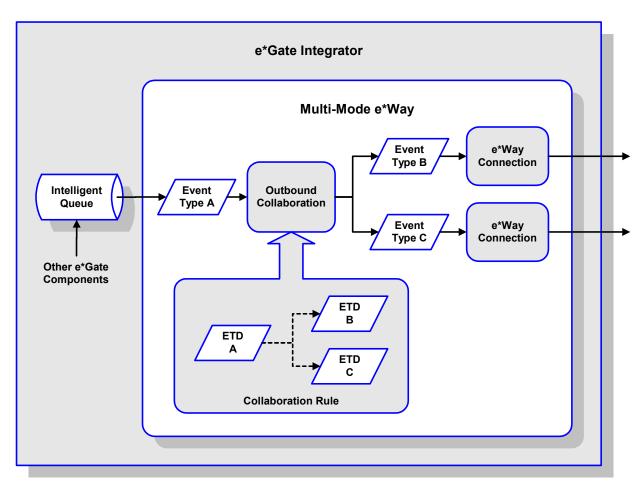


Figure 102 Outbound Collaboration

ETDs are representations of the data structure required by specific external systems, and transforming data from one format to another is a major part of the processing performed by the e*Way. Building an ETD obviously requires knowledge of the internal data structure of the specific application. This information often can be obtained by extracting metadata from the external application, which can be automated by using an ETD Builder. In the case of the PeopleSoft HTTP e*Way, these ETDs are built automatically by means of the Wizard-based XML DTD Builder (see Figure 103).

Front-end
Wizard

Back-end
Converter

DTD Files
(*.dtd)

DTD
Builder

Figure 103 DTD Builder

Once compiled, an ETD has two components, an .xsc file and a .jar file, both having the same file name. The .jar file contains .class files whose names correspond to the root node names in the ETD. Ultimately, the ETD is used within a Collaboration Rule to define the structure of the corresponding Event. At run time, the Collaboration Rule is initiated according to information contained in a .ctl file contained in the e*Gate Registry (see Figure 104).

Registry

Collaboration Rule

ETD

.ctl

Initiate

root node

Figure 104 Event Type Definitions

6.4 Java Collaboration Service

The Java Collaboration Service (JCS) provides an environment that allows you to use a Java class to implement the business logic that transforms Events as they move through e*Gate. When data passes through e*Gate using a Java Collaboration, a Java Virtual Machine (JVM) is instantiated and uses the associated Java Collaboration Rules class to accomplish the data transformation.

The relationships between the various Java e*Way components can be depicted as a nested structure, as shown in Figure 105.

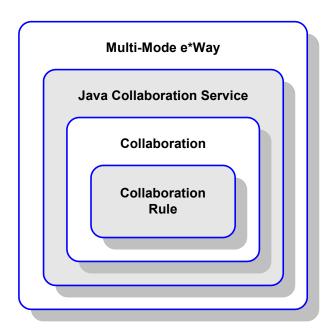


Figure 105 Java Component Relationships

The Java Collaboration Service makes it possible to develop Collaboration Rules that execute e*Gate business logic using Java code. Using the Java Collaboration Editor, you create Java classes that utilize the executeBusinessRules(), userInitialize(), and userTerminate() methods.

To use the Java Collaboration Service, you create a Collaboration Rule and select Java as the service. Using Event Type instances of previously defined Event Type Definitions (ETDs), you then use the Java Collaboration Rules Editor to add the rules and logic between the Event Type instances. Compiling the Collaboration Rule creates a Java Collaboration Rules class and all required supporting files. This Java class implements the data transformation logic.

For more information on the Java Collaboration Service, see the *e*Gate Integrator Collaboration Services Reference Guide*.

6.5 e*Way Connections

The e*Way Connections provide portals to external systems, allowing a single e*Way to adopt several configuration profiles simultaneously. Individual e*Way Connections can be configured using the e*Way Connection Editor to establish a particular kind of interaction with the external system.

6.5.1 Establishing Connections

An e*Way Connection to an external application is set up as depicted in Figure 106. The .def file supplied with the e*Way is configured for the specific application using the e*Way Connection Editor, and instantiated as a .cfg file for each e*Way Connection.

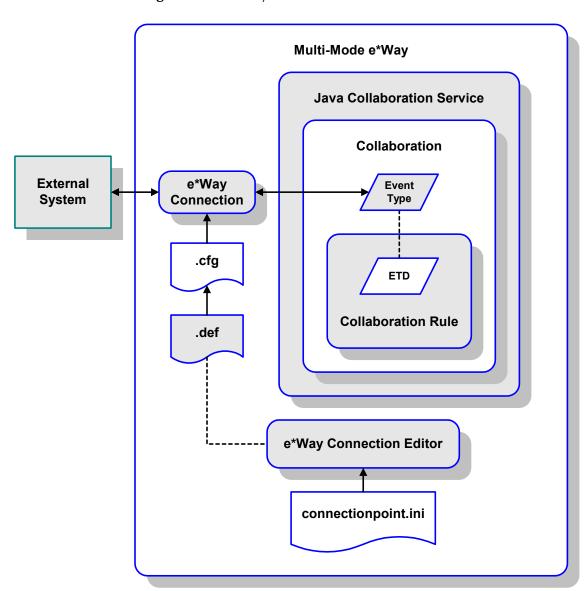


Figure 106 e*Way Connection Establishment

The e*Way Connection Editor enables you to modify all parameters of a Multi-Mode e*Way that control the way the e*Way communicates with an external application. Because each e*Way functions in a specific way to provide an interface to a specific external application or communications protocol, each e*Way Connection has a unique set of configuration parameters.

For more information on the Java ETD Editor and the Java Collaboration Editor, see the *e***Gate Integrator User's Guide*.

Configuration Parameters

This chapter describes the configuration parameters for the Java PeopleSoft HTTP e*Way.

7.1 Overview

7.1.1 e*Gate to PeopleSoft

Multi-Mode e*Way

The Outbound e*Way's inherent configuration parameters are set using the e*Way Configuration Editor; see Configuring the Outbound e*Way on page 93 for procedural information. The default configuration is provided in sapeway.def. The PeopleSoft HTTP e*Way's configuration parameters are organized into the following sections:

JVM Settings on page 115
General Settings on page 120

e*Way Connections

The Outbound e*Way Connection's configuration parameters also are set using the e*Way Configuration Editor; see **Creating e*Way Connections** on page 98 for procedural information. The default configuration is provided in **psoft8appmsg.def**. The PeopleSoft HTTP e*Way's configuration parameters are organized into the following sections:

Connector on page 121
HTTP on page 122
Proxies on page 124

HTTP Authentication on page 126

SSL on page 127

ApplicationMessaging on page 132

7.1.2 PeopleSoft to e*Gate

e*Gate API Kit

The Inbound e*Way's inherent configuration parameters are set using the e*Way Configuration Editor; see **Configuring the Inbound e*Way** on page 92 for procedural information. The default configuration is provided in **stcewipmp.def**. The Java PeopleSoft HTTP e*Way's configuration parameters are organized into the following sections:

General Settings on page 137

7.2 Multi-Mode e*Way

7.2.1 JVM Settings

The JVM Settings control basic Java Virtual Machine settings.

JNI DLL Absolute Pathname

Description

Specifies the absolute pathname to where the JNI DLL installed by the *Java SDK* is located on the Participating Host.

Required Values

A valid pathname.

Note: This parameter is **required**, and must **not** be left blank.

Additional Information

The JNI DLL name varies for different operating systems:

Operating System	Java 2 JNI DLL Name
NT 4.0/ Windows 2000	jvm.dll
Solaris 2.6, 2.7, 2.8	libjvm.so
Linux 6	libjvm.so
HP-UX	libjvm.sl
AIX 4.3	libjvm.a

The value assigned can contain a reference to an environment variable, by enclosing the variable name within a pair of % symbols. For example:

%MY JNIDLL%

Such variables can be used when multiple Participating Hosts are used on different platforms.

To ensure that the JNI .dll file loads successfully, the Dynamic Load Library search path environment variable must be set appropriately to include all the directories under the Java SDK (or JDK) installation directory that contain shared libraries (UNIX) or .dll files (Windows).

CLASSPATH Prepend

Description

Specifies the paths to be prefixed to the CLASSPATH environment variable for the Java VM.

Required Values

An absolute path or an environmental variable.

Note: This parameter is optional and may be left blank.

Additional Information

If left un-set, no paths will be prefixed to the CLASSPATH environment variable.

Existing environment variables may be referenced in this parameter by enclosing the variable name in a pair of % signs. For example:

%MY PRECLASSPATH%

CLASSPATH Override

Description

Specifies the complete CLASSPATH variable to be used by the Java VM. This parameter is optional. If left un-set, an appropriate CLASSPATH environment variable (consisting of required e*Gate components concatenated with the system version of CLASSPATH) will be set.

Note: All necessary JAR and ZIP files needed by both e*Gate and the Java VM must be included. It is advised that the **CLASSPATH Prepend** parameter should be used.

Required Values

An absolute path or an environment variable.

Note: This parameter is optional and may be left blank.

Additional Information

Existing environment variables may be referenced in this parameter by enclosing the variable name in a pair of % signs. For example:

%MY CLASSPATH%

CLASSPATH Append From Environment Variable

Description

Specifies whether to attach the environment variable to the end of CLASSPATH.

Required Values

YES or NO. The default value is NO.

Initial Heap Size

Description

Specifies the value for the initial heap size in bytes. If set to 0 (zero), the preferred value for the initial heap size of the Java VM will be used.

Required Values

An integer between 0 and 2147483647.

Note: This parameter is optional and may be left blank.

Maximum Heap Size

Description

Specifies the value of the maximum heap size in bytes. If set to 0 (zero), the preferred value for the maximum heap size of the Java VM will be used.

Required Values

An integer between 0 and 2147483647.

Note: This parameter is optional and may be left blank.

Maximum Stack Size for Native Threads

Description

Specifies the value of the maximum stack size in bytes for native threads. If set to 0 (zero), the default value will be used.

Required Values

An integer between 0 and 2147483647.

Note: This parameter is optional and may be left blank.

Maximum Stack Size for JVM Threads

Description

Specifies the value of the maximum stack size in bytes for JVM threads. If set to 0 (zero), the preferred value for the maximum heap size of the Java VM will be used.

Required Values

An integer between 0 and 2147483647.

Note: This parameter is optional and may be left blank.

Class Garbage Collection

Description

Specifies whether the Class Garbage Collection will be done automatically by the Java VM. The selection affects performance issues.

Required Values

YES or NO.

Garbage Collection Activity Reporting

Description

Specifies whether garbage collection activity will be reported for debugging purposes.

Required Values

YES or NO.

Asynchronous Garbage Collection

Description

Specifies whether asynchronous garbage collection activity will be reported for debugging purposes.

Required Values

YES or NO.

Report JVM Info and all Class Loads

Description

Specifies whether the JVM information and all class loads will be reported for debugging purposes.

Required Values

YES or NO.

Disable JIT

Description

Specifies whether the Just-In-Time (JIT) compiler will be disabled.

Required Values

YES or NO.

Note: This parameter is not supported for Java Release 1.

Remote debugging port number

Description

Specifies whether to allow remote debugging of the JVM.

Required Values

YES or NO.

Suspend option for debugging

Description

Specifies whether to suspend option for debugging on JVM startup.

Required Values

YES or NO.

7.2.2 General Settings

Rollback Wait Interval

Description

Specifies the time interval to wait before rolling back the transaction.

Required Values

A number within the range of 0 to 99999999, representing the time interval in milliseconds.

7.3 e*Way Connection

7.3.1 Connector

The parameters in this section furnish the basic e*Way Connection variables.

type

Description

Specifies the type of connection.

Required Values

The value always defaults to **PeopleSoft8 Application Messaging** for a PeopleSoft8 Application Messaging connection.

class

Description

Specifies the class name of the PeopleSoft8 Application Messaging connector object.

Required Values

The default value is com.stc.eways.psoft8appmsg.PeopleSoft8AppMsgConnector.

Property.Tag

Description

Specifies the data source.

Required Values

A valid data source package name.

7.3.2 **HTTP**

The parameters in this section furnish the required HTTP variables.

DefaultURL

Description

Specifies the destination URL (the PeopleSoft 8 Application Messaging Gateway). If HTTPS protocol is to be used, SSL also must be configured (see **SSL** on page 127).

Required Values

A full URL, for example:

For PeopleSoft 8.1 with BEA WebLogic,

http://gatewayserver/servlets/gateway

For PeopleSoft 8.4 with BEA WebLogic,

http://gatewayserver/PSIGW/PS81ListeningConnector

Where *gatewayserver* is the designation (computer name and port, host name, or IP address) of the Web server hosting the gateway.

AllowCookies

Description

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

Required Values

Yes or No; the default is Yes.

ContentType

Description

Specifies the parameters for the Content Type request header.

Required Values

A string. The default value is text/xml; charset=iso_8859-1.

For publishing to PeopleSoft, the value is **xml**,**latin-1**.

AcceptType

Description

Specifies the parameters for the Accept Type request header.

Required Values

A string. The default value is text/xml.

7.3.3 Proxies

The parameters in this section furnish the required HTTP Proxy variables.

UseProxy

Description

Specifies whether or not a proxy is used, and whether it is HTTP or HTTPS.

Required Values

One of the following values; the default is NO.

- HTTP
- HTTPS
- NO

If **HTTP** is selected, then an HTTP proxy for non-secured connection is used and the HTTP-related parameters in this section applies.

If HTTPS is selected, then an HTTPS proxy for secured connection is used and the HTTPS-related parameters in this section applies, as do the parameters in the SSL section (see SSL on page 127).

If **NO** is selected, then no proxy is used.

HttpProxyHost

Description

Specifies the proxy host for non-secured HTTP connections.

Required Values

A valid host name. There is no default value.

HttpProxyPort

Description

Specifies the proxy port for non-secured HTTP connections.

Required Values

A valid port name. There is no default value.

HttpsProxyHost

Description

Specifies the proxy host for secured HTTPS connections.

Required Values

A valid host name. There is no default value.

HttpsProxyPort

Description

Specifies the proxy port for secured HTTPS connections.

Required Values

A valid port name. There is no default value.

UserName

Description

Specifies the user name for Proxy Authentication.

Required Values

A valid user name. There is no default value.

PassWord

Description

Specifies the user password for Proxy Authentication.

Required Values

A valid user password. There is no default value.

7.3.4 HTTP Authentication

The parameters in this section furnish the required HTTP Authentication variables.

UseHttpAuthentication

Description

Specifies whether or not standard HTTP Authentication is to be used (if required by the Web site).

Required Values

Yes or No; the default is No.

Additional Information

If this parameter is set to **Yes**, the parameters **UserName** and **PassWord** *must* be specified.

UserName

Description

Specifies the user name for standard HTTP Authentication.

Required Values

A valid user name. There is no default value.

PassWord

Description

Specifies the user password for standard HTTP Authentication.

Required Values

A valid user password. There is no default value.

7.3.5 **SSL**

The parameters in this section furnish the required Secure Sockets Layer (SSL) variables.

UseSSL

Description

Specifies whether or not to use SSL.

Required Values

Yes or No; the default is No.

If this parameter is set to **Yes**, the e*Way uses the parameter values in this section to configure to use the **HTTPS** protocol.

If this parameter is set to No, the e*Way ignores any certificate information.

Additional Information

If this parameter is set to **Yes**, the parameters **HttpsProtocolImpl** and **Provider** *must* be specified.

HttpsProtocolImpl

Description

Specifies the package that contains the HTTPS protocol implementation

Required Values

The default value is **com.sun.net.ssl.internal.www.protocol**.

Note: This parameter **must** be specified if UseSSL is set to Yes.

Additional Information

Specifying this parameter adds the HTTPS URLStreamHandler implementation by including the handler's implementation package name to the list of packages that are searched by the Java URL class. The default value specified is the package containing the Sun reference implementation of the HTTPS URLStreamHandler.

Provider

Description

Specifies the Cryptographic Service Provider.

Required Values

The default value is com.sun.net.ssl.internal.ssl.Provider.

Note: This parameter **must** be specified if UseSSL is set to Yes.

Additional Information

Specifying this parameter adds a JSSE provider implementation to the list of provider implementations. The default value specified is the Sun reference implementation of the Cryptographic Service Provider, **SunJSSE**.

X509CertificateImpl

Description

Specifies the implementation class of X509Certificate.

Required Values

This field should contain the concatenated values that represent the implementation class and package. For example, if the implementation class is called

Note: Specification of this parameter is optional.

SSLSocketFactoryImpl

Description

Specifies the implementation class of SSL Socket Factory.

Required Values

This field should contain the concatenated values that represent the implementation class and package. For example, if the implementation class is called

```
MySSLSocketFactoryImpl

and it appears in the package

com.radcrypto

then you should specify.

com.radcrypto.MySSLSocketFactoryImpl.
```

Note: Specification of this parameter is optional.

SSLServerSocketFactoryImpl

Description

Specifies the implementation class of SSL Server Socket Factory.

Required Values

This field should contain the concatenated values that represent the implementation class and package. For example, if the implementation class is called

MySSLServerSocketFactoryImpl

and it appears in the package

com.radcrypto

then you should specify.

com.radcrypto.MySSLServerSocketFactoryImpl.

Note: Specification of this parameter is optional.

KeyStore

Description

Specifies the default key store file for use by the Key Manager. If this parameter is not specified, then the key store managed by Key Manager is empty.

Required Values

A valid key store file name. There is no default value.

Note: Specification of this parameter is optional.

KeyStoreType

Description

Specifies the default key store type. If this parameter is not specified, then the system sets the default key store type to **jks**.

Required Values

A valid key store type. There is no default value.

Note: Specification of this parameter is optional.

KeyStorePassword

Description

Specifies the default key store password. If this parameter is not specified, then the default key store password is assumed to be a null string.

Required Values

A valid key store password. There is no default value.

Note: Specification of this parameter is optional.

TrustStore

Description

Specifies the default trust store name.

Required Values

A valid trust store name. There is no default value.

Note: Specification of this parameter is optional.

Additional Information

If this parameter is not specified, then the system searches for a default trust store. If a trust store named <java-home>/lib/security/jssecacerts is found, it is used. If not, then the system searches for a trust store named <java-home>/lib/security/cacerts. If it is found, it is used. If neither is found, then the trust store managed by the Trust Manager is a new, empty trust store.

TrustStoreType

Description

Specifies the default trust store type.

Required Values

A valid trust store type. There is no default value.

Note: Specification of this parameter is optional.

TrustStorePassword

Description

Specifies the default trust store password. If this parameter is not specified, then the default trust store password is assumed to be a null string.

Required Values

A valid trust store name. There is no default value.

Note: Specification of this parameter is optional.

KeyManagerAlgorithm

Description

Specifies the default Key Manager Algorithm name.

Required Values

The name of the key manager algorithm to use. For example, the default key manager algorithm used in the Sun reference implementation of JSSE is **SunX509**.

Note: Specification of this parameter is optional.

TrustManagerAlgorithm

Description

Specifies the default Trust Manager Algorithm name.

Required Values

The name of the trust manager algorithm to use. For example, the default trust manager algorithm used in the Sun reference implementation of JSSE is **SunX509**.

Note: Specification of this parameter is optional.

7.3.6 ApplicationMessaging

The parameters in this section help you set up the required information for Publishing XML messages to PeopleSoft's Application Messaging Gateway using the PeopleSoft Application Messaging protocol.

RequestVersion

Description

Specifies the version of PeopleTools for which the XML messages are valid.

Required Values

Installed version of PeopleTools; the default value is **8.13**.

ToNode

Description

Specifies the name of the local node on the receiving PeopleSoft system (the intended receiving node for messages sent to PeopleSoft 8).

Required Values

A valid node name; the default value is PSFT_EP.

Additional Information

This parameter is also referred to as the *node definition*, and corresponds to an entry in the node lookup table on the gateway servlet.

FromNode

Description

Specifies the node from which messages are sent to PeopleSoft 8. The node name must match the node definition for the third party system, as defined in the receiving PeopleSoft system

Required Values

The node name for the sending system; the default is **SeeBeyond**.

Additional Information

The parameters **FromNode**, **Channel**, and **PublicationID** uniquely identify the publication.

PassWord

Description

Specifies the user password for Application Messaging.

Required Values

A valid user password. There is no default value.

Channel

Description

Specifies the name of the message channel containing the message.

Required Value

A valid message channel name; for example: **ITEM_MAINTENANCE**. There is no default value.

Additional Information

The parameters **FromNode**, **Channel**, and **PublicationID** uniquely identify the publication.

Subject

Description

Specifies the name of the message, as defined in the PeopleSoft system.

Required Values

A valid message name; for example: ITEM_SYNC. There is no default value.

MessageVersion

Description

Specifies the message version. In publications containing multiple data versions, there is multiple occurrences of the data.

Required Values

A valid message version name; the default value is **VERSION_1**, which must be replaced with the actual value.

SubjectDetail

Description

Specifies a subtype of a message name, when this information is required by the receiving application.

Required Values

A valid message-name subtype.

Note: This parameter is not generally required.

PublicationID

Description

Specifies the identifier for the publication.

Required Values

A valid ID string. There is no default value.

Note: Specification of this parameter is optional, since it can be system-generated (see below).

Additional Information

The parameters **FromNode**, **Channel**, and **PublicationID** uniquely identify the publication. If the **FromNode** value is specified, but this parameter is not, the publication ID is set automatically to the next available publication ID on the specified channel within the subscribing PeopleSoft 8 database.

SubChannel

Description

Specifies the name of the subchannel containing the message.

Required Values

This field should contain the concatenated values that represent the subchannel. For example, if the subchannel is:

Business Unit\Journal ID

then the value of this field is:

M04123456789

where Business Unit = M04 and Journal ID = 123456789.

Note: This parameter is conditional—see below.

Additional Information

This parameter should be specified if a subchannel is defined in the subscribing PeopleSoft system; otherwise, it may be omitted.

Messages in the same channel but in different subchannels are assumed to refer to distinct objects—for example, different purchase orders or different employees. They is processed in parallel whenever possible.

OriginatingNode

Description

Specifies the name of the node that originally published the message. If not included in the XML file, the system sets it to the publishing node name.

Required Values

Name of the node from which the message originated. There is no default value.

Note: Specification of this parameter is optional.

Additional Information

The purpose of this parameter is to prevent circular publishing.

Publisher

Description

Specifies the operator ID (or class) that generated the message, if required by the receiving application.

Required Values

An application-defined operator ID or class. There is no default value.

Note: This parameter is conditional, and not required by the e*Way.

PublicationProcess

Description

Specifies the name of the program that generated the message, if required by the receiving application.

Required Values

An application-defined name of the program that generated the message. There is no default value.

Note: This parameter is conditional, and not required by the e*Way.

DefaultDataVersion

Description

Identifies the default message version for the sending system, if required by the receiving application.

Required Values

A string representing the default message version. There is no default value.

Note: This parameter is conditional, and not required by the e*Way.

Base64Deflate

Description

Enables or disables base64-encoded compression of XML messages. This compression is recommended to increase network throughput.

Required Values

Yes or No. The default is Yes.

Yes enables base64-encoded compression the **<data>** portion of the XML message sent from PeopleSoft 8. **No** disables compression, and the message is published as-is.

7.4 e*Gate API Kit (Multiplexer)

7.4.1 General Settings

The parameters in this section specify the name of the external client system and the IP port through which e*Gate and the client system communicates.

Request Reply IP Port

Description

Specifies the IP port that the e*Way will listen (bind) for client connections. This parameter is used for Request/Reply behavior.

Required Values

A valid TCP/IP port number between 1 and 65536. The default is 26051. Normally, you only need to change the default number if the specified TCP/IP port is in use, or you have other requirements for a specific port number.

Push IP Port

Description

Specifies the IP port through which this e*Way allows an external system to connect and receive unsolicited (without submitting a request) Events.

Required Values

A valid TCP/IP port number between 0 and 65536. The default is 0.

Additional Information

Any Event that this e*Way receives that has zero values for all fields in the 24 byte MUX header is sent to all callers of the **WaitForUnsolicited**. This parameter is optional. If set to zero, the e*Way will follow the Request/Reply scenario and not accept unsolicited Events.

Rollback if no Clients on Push Port

Description

Specifies whether the Event will continually roll back if there are no push clients connected.

Required Values

Yes or **No**. If set to **Yes**, the Event will continually roll back if there are no push clients connected.

Wait For IQ Ack

Description

Specifies whether the send client function does *not* return until the Event is committed to the IQ.

Required Values

Yes or **No**. If set to **Yes**, the send client function does *not* return until the Event is committed to the IQ.

Note: This parameter should be set if the data must be committed to the IQ on every transaction before the API returns to the client. Setting this parameter to Yes will significantly impact performance. If normal request/reply type transactions are being sent/received, and the data can be recreated at the client, this parameter should not be set.

Send Empty MSG When External Disconnect

Description

Specifies whether the e*Way sends an empty incoming message (containing only the multiplexer header) when an external client disconnects.

Required Values

Yes or **No**. If set to **Yes**, the e*Way sends an empty incoming message when an external client disconnects.

MUX Instance ID

Description

Specifies whether the specified 8 (eight) bytes is prefixed to the 24 (twenty-four) byte session ID of the request received from the external connection before sending to e*Gate.

Required Values

A string; the default is **0**. If this value is other than "0", the 8 bytes are prefixed to the 24 byte session ID.

Note: This is a string where "00" and "00000000" are valid MUX Instance IDs, while "0" is to turn this option off. Only the first 8 bytes are used.

MUX Recovery ID

Description

Specifies whether the 8 bytes are prefixed to the reply and republish back to e*Gate provided the value is other than "0" and the multiplexer finds that the session related to the MUX ID in the return message has been dropped.

Required Values

A string; the default is **0**. If this value is other than "0", the 8 bytes are prefixed to the 24 byte session ID.

Note: This is a string where "00" and "00000000" are valid MUX Recovery IDs, while "0" is to turn this option off. Only the first 8 bytes are used.

Java Classes and Methods

The PeopleSoft HTTP e*Way contains Java methods that are used to extend the functionality of the basic e*Way core.

8.1 Overview

This chapter contains descriptions of methods that are exposed in the user interface. Additional methods contained in the e*Way should only be accessed or modified by qualified SeeBeyond personnel. Unless otherwise noted, all classes and methods described in this chapter are **public**. Methods inherited from classes other than those described in this chapter are listed, but not described.

For ease of use, this chapter is organized into the following sections:

Object Classes on page 141

Constructors on page 149

Methods on page 154

8.2 Object Classes

The PeopleSoft HTTP e*Way makes use of the following object classes:

PeopleSoft8AppMsg Class on page 142

PeopleSoft8AppMsgAPI Class on page 143

PeopleSoft8AppMsgConnector Class on page 144

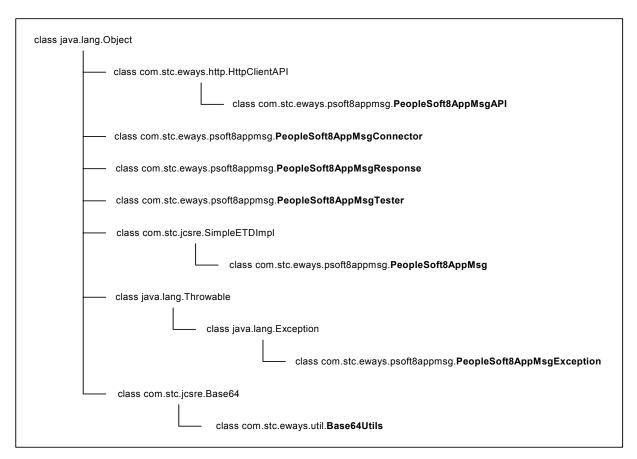
PeopleSoft8AppMsgException on page 151

PeopleSoft8AppMsgResponse Class on page 146

PeopleSoft8AppMsgTester Class on page 147

Base64Utils Class on page 148

Figure 107 Class Hierarchy



8.2.1 PeopleSoft8AppMsg Class

Description

This class extends the SeeBeyond **SimpleETDImpl** class.

Definition

PeopleSoft8AppMsg

Constructors

PeopleSoft8AppMsg on page 149

Methods

initialize on page 154	setPeopleSoft8AppMsgResponse on page 177
reset on page 157	getPeopleSoft8AppMsgResponse on page 178
setToNode on page 161	setDefaultDataVersion on page 158
getToNode on page 161	getDefaultDataVersion on page 158
setFromNode on page 162	setMessageVersion on page 159
getFromNode on page 163	getMessageVersion on page 159
setOriginatingNode on page 163	setRequestVersion on page 160
getOriginatingNode on page 164	getRequestVersion on page 160
setPassWord on page 164	setPublicationID on page 170
getPassWord on page 165	getPublicationID on page 171
setChannel on page 166	setPublicationProcess on page 171
getChannel on page 166	getPublicationProcess on page 172
setSubChannel on page 167	setPublisher on page 174
getSubChannel on page 167	getPublisher on page 174
setSubject on page 168	setXMLMessage on page 176
getSubject on page 169	getXMLMessage on page 176
setSubjectDetail on page 169	setBase64Deflate on page 180
getSubjectDetail on page 170	getBase64Deflate on page 180
sendMessage on page 177	

Methods Inherited from java.lang.Object Class

equals	notify	wait
getClass	notifyAll	wait
hashCode	toString	wait

8.2.2 PeopleSoft8AppMsgAPI Class

Description

This class extends the SeeBeyond **HttpClientAPI** class. Please refer to the *HTTP e*Way Intelligent Adapter User's Guide* for information on the **HttpClientAPI** class.

Definition

PeopleSoft8AppMsgAPI

Constructors

PeopleSoft8AppMsgAPI on page 149 PeopleSoft8AppMsgAPI on page 149

Methods

reset on page 157	setDefaultDataVersion on page 158
setToNode on page 161	getDefaultDataVersion on page 158
getToNode on page 161	setMessageVersion on page 159
setFromNode on page 162	getMessageVersion on page 159
getFromNode on page 163	setRequestVersion on page 160
setOriginatingNode on page 163	getRequestVersion on page 160
getOriginatingNode on page 164	setPublicationID on page 170
setPassWord on page 164	getPublicationID on page 171
getPassWord on page 165	setPublicationProcess on page 171
setChannel on page 166	getPublicationProcess on page 172
getChannel on page 166	setPublisher on page 174
setSubChannel on page 167	getPublisher on page 174
getSubChannel on page 167	setXMLMessage on page 176
setSubject on page 168	getXMLMessage on page 176
getSubject on page 169	setBase64Deflate on page 180
setSubjectDetail on page 169	getBase64Deflate on page 180
getSubjectDetail on page 170	

Methods Inherited from java.lang.Object Class

equals	notify	wait
getClass	notifyAll	wait
hashCode	toString	wait

8.2.3 PeopleSoft8AppMsgConnector Class

Description

This class extends the **java.lang.Object** class and implements the **com.stc.jcsre.EBobConnector** class.

Definition

PeopleSoft8AppMsgConnector

Constructors

PeopleSoft8AppMsgConnector on page 150

Methods

```
open on page 154close on page 156isOpen on page 155getProperties on page 156
```

Methods Inherited from java.lang.Object Class

equals	notify	wait
getClass	notifyAll	wait
hashCode	toString	wait

8.2.4 PeopleSoft8AppMsgException Class

Description

This class extends the **java.lang.Exception** class.

Definition

PeopleSoft8AppMsgException

Constructors

PeopleSoft8AppMsgException on page 150

PeopleSoft8AppMsgException on page 151

PeopleSoft8AppMsgException on page 151

Methods

Methods Inherited from java.lang.Object Class

equals	notify	wait
getClass	notifyAll	wait
hashCode		wait

Methods Inherited from java.lang.Throwable Class

fillInStackTrace getMessage

printStackTrace getLocalizedMessage

printStackTrace toString

printStackTrace

8.2.5 PeopleSoft8AppMsgResponse Class

Description

This class extends the **java.lang.Object** class.

Definition

PeopleSoft8AppMsgResponse

Constructors

PeopleSoft8AppMsgResponse on page 151

Methods

101 1 100	4.77
setChannel on page 166	setExc
getChannel on page 166	getExc
setPublicationID on page 170	setExc
getPublicationID on page 171	getExc
setPublishingNode on page 175	setExc
getPublishingNode on page 175	getExc
setPublishTimeStamp on page 173	setExc
getPublishTimeStamp on page 173	getExc
setResponseCode on page 179	setIsE
getResponseCode on page 179	getIsE

getExceptionDefaultMsg on page 183
getExceptionMsgID on page 183
getExceptionMsgID on page 184
getExceptionMsgSet on page 184
getExceptionMsgSet on page 185
getExceptionTitle on page 185
getExceptionTitle on page 186
getIsExceptionResponse on page 186
getIsExceptionResponse on page 187

Methods Inherited from java.lang.Object Class

equals	notify	wait
getClass	notifyAll	wait
hashCode	toString	wait

${\bf 8.2.6}\ \ \textbf{PeopleSoft8AppMsgTester}\ \ \textbf{Class}$

Description

This class extends the java.lang.Object class.

Definition

PeopleSoft8AppMsgTester

Constructors

PeopleSoft8AppMsgTester on page 152

Methods

main on page 157

Methods Inherited from java.lang.Object Class

equals	notify	wait
getClass	notifyAll	wait
hashCode	toString	wait

8.2.7 Base64Utils Class

Description

This class extends the **com.stc.jcsre.Base64** class.

Definition

Base64Utils

Constructors

Base64Utils on page 152
Base64Utils on page 153

Methods

byteToBase64String on page 181 base64DecodeToByte on page 181

Methods Inherited from com.stc.jcsre.Base64 Class

ENCODING

EOF

LINELIN

8.3 Constructors

PeopleSoft8AppMsg

Description

This constructor constructs a new **PeopleSoft8AppMsg**.

Signature

PeopleSoft8AppMsg()

Parameters

None.

Throws

None.

Used by

PeopleSoft8AppMsg Class on page 142

PeopleSoft8AppMsgAPI

Description

This constructor constructs a new **PeopleSoft8AppMsgAPI**.

Signature

PeopleSoft8AppMsgAPI()

Parameters

None.

Throws

None.

Used by

PeopleSoft8AppMsgAPI Class on page 143

PeopleSoft8AppMsgAPI

Description

This constructor constructs a new **PeopleSoft8AppMsgAPI**. It throws an exception when an exception is returned to it following an attempt to construct a **java.net.URL** object with the supplied URL string.

Signature

PeopleSoft8AppMsgAPI(psoft8GWServletURL)

Parameters

Name	Туре	Description
psoft8GWServletURL	urlString	URL of the PeopleSoft 8 Gateway Servlet.

Throws

java.net.MalformedURLException

Used by

PeopleSoft8AppMsgAPI Class on page 143

PeopleSoft8AppMsgConnector

Description

This constructor constructs a new **HttpClientConnector**.

Signature

PeopleSoft8AppMsgConnector()

Parameters

None.

Throws

None.

Used by

PeopleSoft8AppMsgConnector Class on page 144

People Soft 8 App Msg Exception

Description

This constructor creates a new **PeopleSoft8AppMsgException** without a detail message.

Signature

PeopleSoft8AppMsgException()

Parameters

None.

Throws

None.

Used by

PeopleSoft8AppMsgException Class on page 145

PeopleSoft8AppMsgException

Description

This constructor constructs a new **PeopleSoft8AppMsgException** with the specified detail message.

Signature

PeopleSoft8AppMsgException(msg)

Parameters

Name	Туре	Description
msg	java.lang.String	Detail message.

Throws

None.

Used by

PeopleSoft8AppMsgException Class on page 145

PeopleSoft8AppMsgException

Description

This constructor constructs a new **PeopleSoft8AppMsgExceptio**n with the error code and specified detail message.

Signature

PeopleSoft8AppMsgException(errorCode, msg)

Parameters

Name	Туре	Description
errorCode	integer	Error code.
msg	java.lang.String	Detail message.

Throws

None.

Used by

PeopleSoft8AppMsgException Class on page 145

PeopleSoft8AppMsgResponse

Description

This constructor constructs a new **PeopleSoft8HttpAPI**.

Signature

PeopleSoft8AppMsgResponse()

Parameters

None.

Throws

None.

Used by

PeopleSoft8AppMsgResponse Class on page 146

PeopleSoft8AppMsgTester

Description

This constructor constructs a new **PeopleSoft8AppMsgTester**.

Signature

```
PeopleSoft8AppMsgTester()
```

Parameters

None.

Throws

None.

Used by

PeopleSoft8AppMsgTester Class on page 147

Base64Utils

Description

This constructor constructs new Base64Utils.

Signature

Base64Utils()

Parameters

None.

Throws

None.

Used by

Base64Utils Class on page 148

Base64Utils

Description

This constructor constructs new Base64Utils.

Signature

Base64Utils(fi, fo)

Parameters

Name	Туре	Description
fi	java.io.InputStream	Input data.
fo	java.io.OutputStream	Output data.

Throws

None.

Used by

Base64Utils Class on page 148

8.4 Methods

initialize

Description

This method is called by external (collaboration service) to initialize object.

Signature

initialize(cntrCollab, key, mode)

Parameters

Name	Туре	Description
cntrCollab	com.stc.common.collabService. JCollabController	The Java Collaboration Controller object.
key	java.lang.String	Key to one of the JMsgObjects.
mode	integer	Mode for ETD (IN_MODE, OUT_MODE, or IN_OUT_MODE)

Return Type

void

Overrides

initialize in class com.stc.jcsre.SimpleETDImpl

Throws

- com.stc.common.collabService.CollabConnException,
- com.stc.common.collabService.CollabDataException

Contained in

PeopleSoft8AppMsg Class on page 142

open

Description

This method opens the connector for accessing the external system. It throws an exception when connection problems occur.

Signature

open(intoEgate)

Parameters

Name	Туре	Description
intoEgate	boolean	Specify true if connector is to subscribe for events initially from an external and inbound to e*Gate, false if connector is to publish events outbound from e*Gate and to an external system.

Return Type

void

Overrides

None.

Throws

com.stc.jcsre.EBobConnectionException

Contained in

PeopleSoft8AppMsgConnector Class on page 144

isOpen

Description

This method verifies that the connector to the external system is still available. It returns true if the connector is still open and available, otherwise false. It throws an exception when connection problems occur.

Signature

isOpen()

Parameters

None.

Return Type

boolean

Overrides

None.

Throws

com.stc.jcsre.EBobConnectionException

Contained in

PeopleSoft8AppMsgConnector Class on page 144

getProperties

Description

This method retrieves the connection properties (as stored by the constructor) used by the connector to access the external.

Signature

```
getProperties()
```

Parameters

None.

Return Type

java.util.Properties

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgConnector Class on page 144

close

Description

This method closes the connector to the external system and releases resources. It throws an exception when connection problems occur.

Signature

close()

Parameters

None.

Return Type

void

Overrides

None.

Throws

com.stc.jcsre.EBobConnectionException

Contained in

PeopleSoft8AppMsgConnector Class on page 144

main

Description

This method provides an entry point for a stand-alone test program.

Signature

main(args)

Parameters

Name	Туре	Description
args	java.lang.String	Required arguments.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgTester Class on page 147

reset

Description

This method clears all headers and request data from memory.

Signature

reset()

Parameters

None.

Return Type

boolean

Overrides

reset in class com.stc.jcsre.SimpleETDImpl

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setDefaultDataVersion

Description

This method sets the default message version for the sending system.

Signature

setDefaultDataVersion(defaultDataVersion)

Parameters

Name	Туре	Description
defaultDataVersion	java.lang.String	The default message version.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getDefaultDataVersion

Description

This method gets the default message version that was previously set with the method **setDefaultDataVersion**, or null if the default message version was not previously set.

Signature

getDefaultDataVersion()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142

setMessageVersion

Description

This method sets the name of the message version. For publications with multiple data versions, there are multiple occurrences of the data.

Signature

setMessageVersion(messageVersion)

Parameters

Name	Туре	Description
messageVersion	java.lang.String	The message version of the messages sent.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getMessageVersion

Description

This method gets the name of the message version. It returns the message version previously set with the **setMessageVersion** method, or null if the message version was not previously set.

Signature

getMessageVersion()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setRequestVersion

Description

This method sets the PeopleTools version for which the XML message is valid.

Signature

setRequestVersion(psoft8Version)

Parameters

Name	Туре	Description
psoft8Version	java.lang.String	The PeopleTools version.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getRequestVersion

Description

This method gets the PeopleTools version that was previously set with **setRequestVersion**, or null if the PeopleTools version was not previously set.

Signature

getRequestVersion()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setToNode

Description

This method sets the name of the node for which the messages is intended. This must correspond to an entry in the node lookup table on the gateway servlet, and the name of the local node (node definition) on the receiving PeopleSoft system.

Signature

setToNode (toNode)

Parameters

Name	Туре	Description
toNode	java.lang.String	The node to which the message is published.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getToNode

Description

This method gets the name of the node for which the messages is intended. It returns the node name set with the **setToNode** method.

Signature

getToNode()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setFromNode

Description

This method sets the name of the node from which the messages originate. The node name must match the node definition for the third party system as defined in the receiving PeopleSoft system.

Signature

setFromNode(fromNode)

Parameters

Name	Туре	Description
fromNode	java.lang.String	The node from which the messages originate.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getFromNode

Description

This method gets the name of the node from which messages originate. It returns the source node name that was previously set with **setFromNode**, or null if the node was not previously set.

Signature

getFromNode()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setOriginatingNode

Description

This method sets the name of the node that originally published the message, and is used to prevent circular publishing. If not an XML file, the system sets it to the publishing node name.

Signature

setOriginatingNode(originatingNode)

Parameters

Name	Туре	Description
originatingNode	java.lang.String	The name of the originating node.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getOriginatingNode

Description

This method gets the name of the originating node that was previously set with the method **setOriginatingNode**, or null if the originating node was not previously set.

Signature

getOriginatingNode()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setPassWord

Description

This method sets the password associated with the source node. This value is stored in the PeopleSoft database and must be communicated to the system administrators for the publishing system. If the node definition on the sending system has a node group defined, the password is present. If the node definition on the receiving system has a node group defined, the password must be present and must match the node group password.

Signature

setPassWord(passWord)

Parameters

Name	Туре	Description
passWord	java.lang.String	The password associated with the source node.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getPassWord

Description

This method gets the password associated with the source node. Returns the password that was previously set with **setPassWord**, or null if the password was not previously set.

Signature

getPassWord()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setChannel

Description

This method sets the name of the message channel containing the message.

Signature

setChannel(channel)

Parameters

Name	Туре	Description
channel	java.lang.String	The message channel to publish.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143 PeopleSoft8AppMsgResponse Class on page 146

getChannel

Description

This method gets the name of the message channel containing the message. Returns the channel that was previously set with **setChannel**, or null if the channel was not previously set.

Signature

getChannel()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgAPI Class on page 142 PeopleSoft8AppMsgAPI Class on page 143 PeopleSoft8AppMsgResponse Class on page 146

setSubChannel

Description

This method sets the name of subchannel which contains the message. Messages in the same channel but in different subchannels are assumed to refer to distinct objects—for example, different purchase orders or different employees. They are processed in parallel where possible.

This field should contain the concatenated values that represent the subchannel. For example, if the subchannel is **Business Unit\Journal ID**, then the value of this field is **M04123456789** (where Business Unit = M04 and Journal ID = 123456789).

This field should be included if the subscribing PeopleSoft system has a subchannel defined. Otherwise, it may be omitted.

Signature

setSubChannel(subChannel)

Parameters

Name	Туре	Description
subChannel	java.lang.String	The name of the sub-channel.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getSubChannel

Description

This method gets the name of subchannel that was previously set with **setSubChannel**, or null if the sub-channel was not previously set.

Signature

getSubChannel()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setSubject

Description

This method sets the name of the message as defined in the PeopleSoft system. This is the Message Definition.

Signature

setSubject(subject)

Parameters

Name	Туре	Description
subject	java.lang.String	The name of the message being sent.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getSubject

Description

This method gets the name of the message that was previously set with the **setSubject** method, or null if the name was not previously set.

Signature

getSubject()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setSubjectDetail

Description

This method sets the Application-defined subtype of message name.

Signature

setSubjectDetail(subjectDetail)

Parameters

Name	Туре	Description
subjectDetail	java.lang.String	The message subtype defined.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getSubjectDetail

Description

This method gets the name of the message version message subtype that was previously set with **setSubjectDetail**, or null if the message subtype was not previously set.

Signature

getSubjectDetail()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setPublicationID

Description

This method sets the System-generated identifier for the publication. The fields, publishing node, channel, and publication ID uniquely identify the publication. If the From Node is specified and the Publication ID is omitted, the publication ID is set to the next available publication ID on that channel within the subscribing PeopleSoft database.

Signature

setPublicationID(publicationID)

Parameters

Name	Туре	Description
publicationID	java.lang.String	The publication id for the message to be sent.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143 PeopleSoft8AppMsgResponse Class on page 146

getPublicationID

Description

This method gets the System-generated identifier for the publication that was previously set with **setPublicationID**, or null if the publication ID was not previously set.

Signature

getPublicationID()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgAPI Class on page 142 PeopleSoft8AppMsgAPI Class on page 143 PeopleSoft8AppMsgResponse Class on page 146

setPublicationProcess

Description

This method sets the Application-defined name of the program that generated the message (if required by the application).

Signature

setPublicationProcess(publicationProcess)

Parameters

Name	Туре	Description
publicationProcess	java.lang.String	The operator ID/class that published the message.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getPublicationProcess

Description

This method gets the name of the program that was previously set with the method **setPublicationProcess**, or null if the originating node was not previously set.

Signature

getPublicationProcess()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setPublishTimeStamp

Description

This method sets the publication timestamp received from the PeopleSoft 8 Application Messaging response.

Signature

setPublishTimeStamp(publishTimeStamp)

Parameters

Name	Туре	Description
publishTimeStamp	java.lang.String	The publication timestamp received from the PeopleSoft 8 Application Messaging response.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

getPublishTimeStamp

Description

This method gets the publication timestamp received from the PeopleSoft 8 Application Messaging response, or null if no timestamp information was received.

Signature

getPublishTimeStamp()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

setPublisher

Description

This method sets the Application-defined operator ID/class that published the message (if required by the application).

Signature

setPublisher(publisher)

Parameters

Name	Туре	Description
publisher	java.lang.String	The operator ID/class that published the message.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getPublisher

Description

This method gets the operator ID/class that was previously set with the method **setPublisher**, or null if the originating node was not previously set.

Signature

getPublisher()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

setPublishingNode

Description

This method sets the publishing node received from the PeopleSoft 8 Application Messaging response.

Signature

setPublishingNode()

Parameters

Name	Туре	Description
publishingNode	java.lang.String	The node from which the XML message was published.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

getPublishingNode

Description

This method gets the publishing node received from the PeopleSoft 8 Application Messaging response, or null if no publishing node information was received.

Signature

getPublishingNode()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

setXMLMessage

Description

This method sets the PeopleSoft 8 XML message to post.

Signature

setXMLMessage(psoft8XML)

Parameters

Name	Туре	Description
psoft8XML	java.lang.String	The PeopleSoft 8 XML message to post.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getXMLMessage

Description

This method gets the PeopleSoft 8 XML message previously set with **setXMLMessage**, or null if the XML message was not previously set.

Signature

getXMLMessage()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

sendMessage

Description

This method POSTs the PeopleSoft 8 XML message that was previously set with **setXMLMessage**.

Signature

sendMessage()

Parameters

None.

Return Type

void

Overrides

None.

Throws

PeopleSoft8AppMsgException

Contained in

PeopleSoft8AppMsg Class on page 142

setPeopleSoft8AppMsgResponse

Description

This method sets the **PeopleSoft8AppMsgResponse** object as the response from PeopleSoft 8 Application Messaging.

Signature

setPeopleSoft8AppMsgResponse(response)

Parameters

Name	Туре	Description
response	PeopleSoft8AppMsgResponse	The PeopleSoft8AppMsgResponse object.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142

getPeopleSoft8AppMsgResponse

Description

This method gets the **PeopleSoft8AppMsgResponse** object holding the PeopleSoft 8 Application Messaging published response.

Signature

getPeopleSoft8AppMsgResponse()

Parameters

None.

Return Type

object

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142

setResponseCode

Description

This method sets the PeopleSoft 8 Application Messaging response code.

Signature

setResponseCode (responseCode)

Parameters

Name	Туре	Description
responseCode	integer	The PeopleSoft 8 Application Messaging response code.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

get Response Code

Description

If the response from PeopleSoft 8 is not an exception, then this method gets the PeopleSoft 8 Application Messaging response code for the publication.

Signature

getResponseCode()

Parameters

None.

Return Type

integer

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

setBase64Deflate

Description

This method enables or disables base64-encoded compression (deflation) of XML messages. The default is to enable base64-encoding.

Signature

setBase64Deflate(base64Deflate)

Parameters

Name	Туре	Description
base64Deflate	boolean	Set to true if desired to compress XML messages using base64 encoding; otherwise set to false.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

getBase64Deflate

Description

This method determine whether or not base64 encoding of compressed XML messages is used. This method returns what was set with setBase64Deflate. If setBase64Deflate was never called, the default is that base64 encoding of compressed messages is used.

Signature

getBase64Deflate()

Parameters

None.

Return Type

boolean

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsg Class on page 142 PeopleSoft8AppMsgAPI Class on page 143

byteToBase64String

Description

This method converts byte-format data to base64-encoded data.

Signature

byteToBase64String(data)

Parameters

Name	Туре	Description
data	byte[]	Data in byte format.

Return Type

java.lang.String

Overrides

None.

Throws

java.io.IOException

Contained in

Base64Utils Class on page 148

base64DecodeToByte

Description

This method converts base64-encoded data to byte-format data.

Signature

base64DecodeToByte(data)

Parameters

Name	Туре	Description
data	java.lang.String	Data in base64 string format.

Return Type

byte[]

Overrides

None.

Throws

java.io.IOException

Contained in

Base64Utils Class on page 148

setExceptionDefaultMsg

Description

This method sets the default message for the exception message as received from the PeopleSoft 8 Application Messaging exception XML response message.

Signature

setExceptionDefaultMsg(msg)

Parameters

Name	Туре	Description
msg	java.lang.String	The default error message for the exception.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

getExceptionDefaultMsg

Description

This method gets the default message for the exception message as received from the PeopleSoft 8 Application Messaging exception XML response message.

Signature

getExceptionDefaultMsg()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

setExceptionMsgID

Description

This method sets the message ID number of the exception message as received from the PeopleSoft 8 Application Messaging exception XML response message.

Signature

setExceptionMsgID(msgID)

Parameters

Name	Туре	Description
msgID	java.lang.String	The message ID number of the exception.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

getExceptionMsgID

Description

This method gets the message ID number for the exception message as received from the PeopleSoft 8 Application Messaging exception XML response message, or null if no message ID number was returned.

Signature

getExceptionMsgID()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

set Exception Msg Set

Description

This method sets the message set number for the exception message as received from the PeopleSoft 8 Application Messaging exception XML response message.

Signature

setExceptionMsgSet(msgSet)

Parameters

Name	Туре	Description
msgSet	java.lang.String	The message set number of the exception.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

getExceptionMsgSet

Description

This method gets the message set number for the exception message as received from the PeopleSoft 8 Application Messaging exception XML response message, or null if no message set number was returned.

Signature

getExceptionMsgSet()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

set Exception Title

Description

This method sets the title of the exception message as received from the PeopleSoft 8 Application Messaging exception XML response message.

Signature

setExceptionTitle(title)

Parameters

Name	Туре	Description
title	java.lang.String	The title of the exception.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

getExceptionTitle

Description

This method gets the title of the exception message as received from the PeopleSoft 8 Application Messaging exception XML response message, or null if no exception title information was returned.

Signature

getExceptionTitle()

Parameters

None.

Return Type

java.lang.String

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

set Is Exception Response

Description

This method sets the exception flag to indicate a PeopleSoft 8 Application Messaging exception response was received.

Signature

setIsExceptionResponse(isExceptionResponse)

Parameters

Name	Туре	Description
isExceptionResponse	boolean	The flag to indicate an exception message was received. Set to true if an exception message was received; otherwise, set to false.

Return Type

void

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

getIsExceptionResponse

Description

This method gets the exception flag to see if a PeopleSoft 8 Application Messaging exception response was received. Returns true if an exception message was received or false if the message received was not an exception.

Signature

getIsExceptionResponse()

Parameters

None.

Return Type

boolean

Overrides

None.

Throws

None.

Contained in

PeopleSoft8AppMsgResponse Class on page 146

MUX Subscription Handler

A.1 Object Classes

The MUX subscription handler consists of ten java classes, which are contained in the **stcph.jar** file. This file is available when the e*Gate participating host is installed.

Note: The MuxPublicationHandler class depends on the MUX Java Client classes, which also are contained in the stcph.jar file.

A.1.1 Entry Class

Description

Holds the following information for an instance of a MUX subscription handler:

- Node Name
- MUX Host
- MUX Port
- MUX Expire
- MUX Timeout
- Uncompress?
- Base64-Decode?
- Include Headers?
- Log File

A.1.2 MuxHandlerConstants Class

Description

Contains constant values for the MUX handler package such as the name of the configuration file to store the parameters persistently.

A.1.3 MuxHandlerEntry Class

Description

Maintains a collection of Entry classes. This class Loads and parses the configuration file in order to load the data into memory. It also saves changes to the values for the Entry classes to the configuration file.

A.1.4 AdministerMuxHandler Class

Description

Displays the MUX administration root page for administering the MUX subscription handler.

A.1.5 AdministerMuxHandlerAddMode Class

Description

Displays the MUX administration page for adding a MUX subscription handler.

A.1.6 AdministerMuxHandlerDeleteMode Class

Description

Displays the MUX administration page for deleting a MUX subscription handler.

A.1.7 AdministerMuxHandlerEditMode Class

Description

Displays the MUX administration Page for editing the configuration values of a MUX subscription handler.

A.1.8 AdministerMuxHandlerError Class

Description

Displays the error page when an error occurs while administering the MUX subscription handler.

A.1.9 MuxPublicationHandler Class

Description

Handles the publishing of XML messages from PeopleSoft to the MUX e*Way using the MUX Java Client APIs.

A.1.10 Mux Handler Class

Description

Loaded by the Application Messaging Gateway and serves as an entry point to the MUX subscription handler. It loads any pre-existing MUX subscription handlers.

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