

iWay

iWay Application Adapter for J.D.
Edwards World User's Guide

Version 7.0.x and Higher

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Preface

This document is written for system integrators with programming backgrounds and an understanding of the J.D. Edwards World product in an application space. Some knowledge of J.D. Edwards World is expected.

This document provides details on working with the adapter tools to develop online interconnections to J.D. Edwards World. For system integrators concerned with the development of a client/server interface between J.D. Edwards World and other applications, this guide addresses the World integration aspects. It does not cover other applications or application wrappers.

Note: This Release 7.0.x content is currently being updated to support iWay Release 8.0.x software. In the meantime, it can serve as a reference for your use of iWay Release 8. If you have any questions, please contact Customer_Success@ibi.com.

How This Manual Is Organized

This manual includes the following chapters:

Chapter/Appendix		Contents
1	Introducing the iWay Application Adapter for J.D. Edwards World	Introduces the iWay Application Adapter for J.D. Edwards World.
2	Application Adapter for J.D. Edwards World Supported Platforms Matrix	Specifies version, platform, and database support information for iWay Application Adapter for J.D. Edwards World.
3	Application Adapter for J.D. Edwards World Quick Start Guide	Provides a quick start guide for the iWay Application Adapter for J.D. Edwards World.
4	Creating XML Schemas for J.D. Edwards World	Describes how to configure services for the iWay Application Adapter for J.D. Edwards World.
5	Configuring Events for the iWay Application Adapter for J.D. Edwards World	Describes how to configure events for the iWay Application Adapter for J.D. Edwards World.
A	Configuring the Application Adapter for J.D. Edwards World in an iWay Environment	Describes how to configure the adapter in the Service Manager console.

Chapter/Appendix		Contents
B	Configuring the Application Adapter for J. D. Edwards World in iWay Integration Tools Designer	Describes how to configure the adapter in iWay Integration Tools (iIT) Designer.
C	Sample File for the Application Adapter for J. D. Edwards World	Contains a sample XML file for the iWay Application Adapter for J.D. Edwards World.

Documentation Conventions

The following table describes the documentation conventions that are used in this manual.

Convention	Description
THIS TYPEFACE or this typeface	Denotes syntax that you must enter exactly as shown.
<i>this typeface</i>	Represents a placeholder (or variable) in syntax for a value that you or the system must supply.
<u>this typeface</u>	Indicates a default setting.
<i>this typeface</i>	Represents a placeholder (or variable), a cross-reference, or an important term. It may also indicate a button, menu item, or dialog box option that you can click or select.
Key + Key	Indicates keys that you must press simultaneously.
{ }	Indicates two or three choices. Type one of them, not the braces.
[]	Indicates a group of optional parameters. None are required, but you may select one of them. Type only the parameter in the brackets, not the brackets.
	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.

Convention	Description
...	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis (...).
. . .	Indicates that there are (or could be) intervening or additional commands.

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To learn about the full range of available support services, ask your Information Builders representative about InfoResponse Online, or call (800) 969-INFO.

Help Us to Serve You Better

To help our consultants answer your questions effectively, be prepared to provide specifications and sample files and to answer questions about errors and problems.

The following table lists the environment information our consultants require.

Platform	
Operating System	
OS Version	
JVM Vendor	
JVM Version	

The following table lists the deployment information our consultants require.

Adapter Deployment	For example, iWay Business Services Provider, iWay Service Manager
Container	For example, WebSphere
Version	
Enterprise Information System (EIS) - if any	
EIS Release Level	
EIS Service Pack	
EIS Platform	

The following table lists iWay-related information needed by our consultants.

iWay Adapter	
iWay Release Level	
iWay Patch	

The following table lists additional questions to help us serve you better.

Request/Question	Error/Problem Details or Information
Did the problem arise through a service or event?	
Provide usage scenarios or summarize the application that produces the problem.	
When did the problem start?	
Can you reproduce this problem consistently?	
Describe the problem.	
Describe the steps to reproduce the problem.	
Specify the error message(s).	
Any change in the application environment: software configuration, EIS/database configuration, application, and so forth?	
Under what circumstance does the problem <i>not</i> occur?	

Following is a list of error/problem files that might be applicable.

- ☐ Input documents (XML instance, XML schema, non-XML documents)
- ☐ Transformation files
- ☐ Error screen shots
- ☐ Error output files
- ☐ Trace files

- ☐ Service Manager package to reproduce problem
- ☐ Custom functions and agents in use
- ☐ Diagnostic Zip
- ☐ Transaction log

For information on tracing, see the *iWay Service Manager User's Guide*.

User Feedback

In an effort to produce effective documentation, the Technical Content Management staff welcomes your opinions regarding this document. Please use the Reader Comments form at the end of this document to communicate your feedback to us or to suggest changes that will support improvements to our documentation. You can also contact us through our website, <http://documentation.informationbuilders.com/connections.asp>.

Thank you, in advance, for your comments.

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Introducing the iWay Application Adapter for J.D. Edwards World

The iWay Application Adapter for J.D. Edwards World provides a means to exchange real-time business data between J.D. Edwards World systems and other applications, databases, or external business partner systems. The adapter enables inbound and outbound processing with J.D. Edwards World.

This section provides information about how the iWay Application Adapter for J.D. Edwards World helps you accomplish your integration projects.

In this chapter:

- ☐ [Introducing J.D. Edwards World](#)
 - ☐ [Supported J.D. Edwards World Versions](#)
 - ☐ [Accessing Data Stored in J.D. Edwards World](#)
 - ☐ [J.D. Edwards World Interoperability Framework](#)
 - ☐ [Deployment Information for Your iWay Application Adapter for J.D. Edwards World](#)
 - ☐ [Application Adapter for J.D. Edwards World Information Roadmap](#)
-

Introducing J.D. Edwards World

J.D. Edwards offers a broad suite of business systems (financial, distribution, manufacturing, human resource management, and so on) called the Common Foundation. J.D. Edwards refers to each group of software products as a system. Each system contains forms, reports, data files, and programs that are designed for a specific business need. For more information on integrating J.D. Edwards systems for your business needs, see the J.D. Edwards *Common Foundation Guide*.

All J.D. Edwards World is available in two different presentations:

- ☐ Character-based
- ☐ Graphical user interface (GUI), or WorldVision

The presentation you see depends on which one your company has chosen to install. The system processes all the applications in the same way, regardless of the presentation. WorldVision presents all the forms in a graphical format for a Windows environment on a workstation. It reads the 5250 data stream from AS/400 and formats the information for the workstation, while retaining the functions of the applications, data integrity, and security on the AS/400 server.

J.D. Edwards World supports DB2/400.

For more information, see your J.D. Edwards World documentation.

Supported J.D. Edwards World Versions

The iWay Application Adapter for J.D. Edwards World supports the following versions of J.D. Edwards World:

❑ A7.1

❑ A7.3

❑ A8.3

❑ A9.0

❑ A9.2

Note: Make sure that you copy the *jt400.jar* file to the iWay lib directory, which is required by the iWay Application Adapter for J.D. Edwards World. For example:

`C:\Program Files\iWay7\lib`

Accessing Data Stored in J.D. Edwards World

J.D. Edwards World provides interoperability by means of database tables. Triggers placed on tables place key information on the iWay JDE custom table.

A channel retrieves this key information based on the *iway_transaction* key file, which invokes the transform file to generate an SQL statement. The adapter then makes the appropriate SQL call(s) to retrieve data from the J.D. Edwards World system.

J.D. Edwards World Interoperability Framework

J.D. Edwards World provides integration with systems through its interoperability framework. The adapter uses the World framework and leverages various integration access methods to provide the greatest amount of flexibility and functionality.

Inbound Processing

You configure an iWay Business Service for the adapter to send requests to J.D. Edwards World. The business service processes requests for J.D. Edwards World, embedded in XML documents and forwards them to a back-end J.D. Edwards World system. An iWay Service Manager-based table listener retrieves this key information and passes the data in XML format to an associated iWay transform.

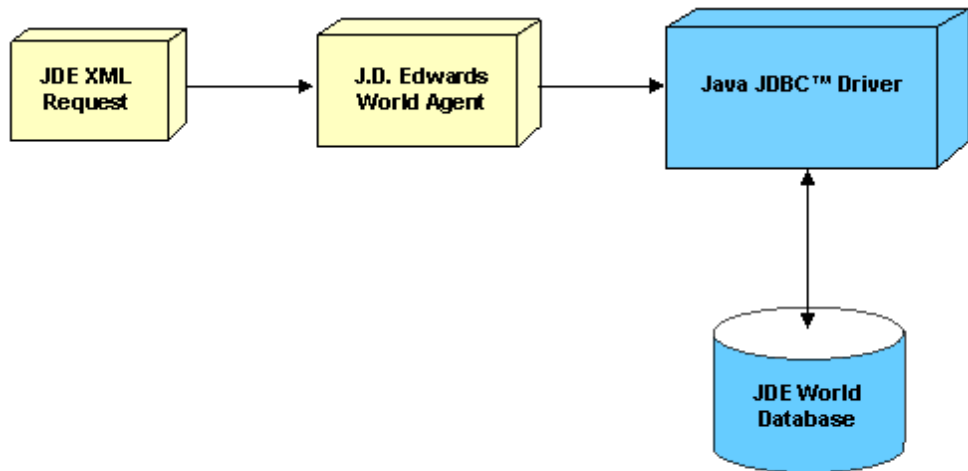
iWay Business Services Provider (iBSP) receive an XML request document from a client and call a specific function in the target Enterprise Information System (EIS). A business service performs the following functions:

- ❑ Receives requests from a legacy system, another EIS, or a non-EIS client.
- ❑ Transforms the XML request document into the EIS-specific format.

The request document conforms to a request XML schema. The schema is based on metadata in the EIS.

- ❑ Calls the underlying function in the EIS and waits for its response.

The following image illustrates the inbound processing framework.

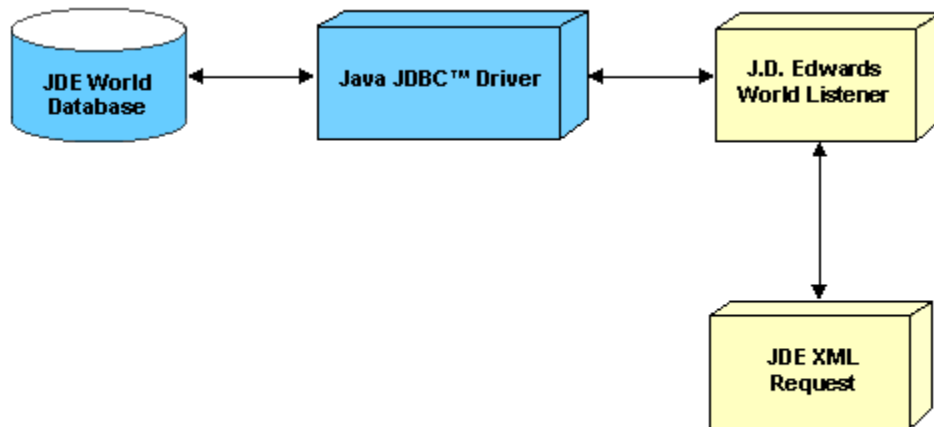


J.D. Edwards World Inbound Processing Framework

Outbound Processing

You can configure an event for the adapter, which consists of a port and channel to receive messages from J.D. Edwards World. The information the event receives is used to build an XML record and forwarded to any specified service for further processing.

The following image illustrates the outbound processing framework.



J.D. Edwards World Outbound Processing Framework

Deployment Information for Your iWay Application Adapter for J.D. Edwards World

Your iWay adapter works in conjunction with one of the following components:

- ☐ iWay Service Manager
- ☐ iWay Business Services Provider (iBSP)

When hosted in an iWay environment, the adapter is configured through iWay Service Manager and iWay Explorer. iWay Explorer is used to configure system connections, create web services, and configure event capabilities. Service Manager can access this configuration information through the iWay7 repository to create a robust integration solution.

iWay Service Manager

iWay Service Manager is the heart of the Universal Adapter Framework and is an open transport service bus. Service Manager uses graphical tools to create sophisticated integration services without writing custom integration code by:

- ☐ Creating metadata from target applications.

- ❑ Transforming and mapping interfaces.
- ❑ Managing stateless processes.

Its capability to manage complex adapter interactions makes it ideally suited to be the foundation of a service-oriented architecture.

iWay Explorer

iWay Explorer uses a tree metaphor to introspect a system for metadata. The explorer enables you to create XML schemas and web services for the associated object. In addition, you can create ports and channels to listen for events in a system. External applications that access a system through the adapter use either XML schemas or web services to pass data between the external application and the adapter.

iWay Business Services Provider (iBSP)

The iWay Business Services Provider (iBSP) exposes, as web services, enterprise assets that are accessible from adapters regardless of the programming language or the particular operating system.

iBSP simplifies the creation and execution of web services when running:

- ❑ Custom and legacy applications.
- ❑ Database queries and stored procedures.
- ❑ Packaged applications.
- ❑ Terminal emulation and screen-based systems.
- ❑ Transactional systems.

Coupled with a platform and language independent messaging protocol called SOAP (Simple Object Access Protocol), XML enables application development and integration by assembling previously built components from multiple web services.

Application Adapter for J.D. Edwards World Information Roadmap

The following table lists the location of deployment and user information for components of the iWay Application Adapter for J.D. Edwards World.

Deployed Component	For more information, see
iWay Service Manager	Appendix A of this guide <i>iWay Service Manager User's Guide</i>
iWay Explorer	Chapters 2 and 3 of this guide <i>iWay Installation and Configuration</i>
iWay Business Services Provider (iBSP)	<i>iWay Installation and Configuration</i>

Application Adapter for J.D. Edwards World Supported Platforms Matrix

iWay Software is committed to support the diverse environments and varied systems of our users through support for leading enterprise applications, platforms, and databases.

This section specifies version, platform, and database support information for iWay Application Adapter for J.D. Edwards World. It is designed to provide a consolidated view of J.D. Edwards World releases and the various operating systems and databases, on which they are supported.

In this chapter:

- ☐ [Application Adapter for J.D. Edwards World Supported Platform Overview](#)
 - ☐ [Supported J.D. Edwards World Versions](#)
 - ☐ [Application Adapter for J.D. Edwards World Operating Systems](#)
 - ☐ [Application Adapter for J.D. Edwards World Databases](#)
 - ☐ [Java Development Kit \(JDK\)](#)
 - ☐ [Application Adapter for J.D. Edwards World Communication Modes](#)
 - ☐ [Application Adapter for J.D. Edwards World Object Types and Interfaces](#)
 - ☐ [Application Adapter for J.D. Edwards World Communication Types](#)
 - ☐ [Application Adapter for J.D. Edwards World Operations](#)
 - ☐ [Application Adapter for J.D. Edwards World Data Types](#)
 - ☐ [Other Application Adapter for J.D. Edwards World Functions](#)
 - ☐ [Application Adapter for J.D. Edwards World Security](#)
 - ☐ [Application Adapter for J.D. Edwards World Known Limitations](#)
 - ☐ [Related Information for Application Adapter for J.D. Edwards World in Specific iWay Releases](#)
-

Application Adapter for J.D. Edwards World Supported Platform Overview

J.D. Edwards World provides interoperability by means of database tables through JDBC connections to DB2 on AS400, using AS400 jars.

Supported J.D. Edwards World Versions

iWay Application Adapter for J.D. Edwards World supports J.D. Edwards World versions as listed below.

- ☐ A7.3
- ☐ A8.1
- ☐ A9.1
- ☐ A9.2
- ☐ AS400.jar
- ☐ OS
 - ☐ V5R4
 - ☐ V6R1
 - ☐ V7R1

Application Adapter for J.D. Edwards World Operating Systems

iWay Application Adapter for J.D. Edwards World supports all of the operating systems that are listed in the *iWay Installation and Configuration Guide* under *Operating System Requirements*.

Application Adapter for J.D. Edwards World Databases

iWay Application Adapter for J.D. Edwards World functions directly with the databases.

Java Development Kit (JDK)

iWay Application Adapter for J.D. Edwards World supports the Java Development Kit (JDK) versions that are listed in the *iWay Installation and Configuration Guide* under *Java Requirements*.

Application Adapter for J.D. Edwards World Communication Modes

iWay Application Adapter for J.D. Edwards World supports the following communication modes:

- ☐ **Services.** iWay Application Adapter for J.D. Edwards World can receive messages from JD Edwards World.
- ☐ **Events.** iWay Application Adapter for J.D. Edwards World can send messages to J.D. Edwards World.

Application Adapter for J.D. Edwards World Object Types and Interfaces

iWay Application Adapter for J.D. Edwards World supports the *Tables* Object Type and Interface. Tables are used for outbound and inbound communication from the J.D. Edwards World adapter to J.D. Edwards World.

Application Adapter for J.D. Edwards World Communication Types

iWay Application Adapter for J.D. Edwards World supports the Tables communication type, and is synchronous. It supports through all SQL scripts.

Application Adapter for J.D. Edwards World Operations

iWay Application Adapter for J.D. Edwards World supports the following operations:

- ☐ Create
- ☐ Retrieve
- ☐ Update/Change
- ☐ Delete

Application Adapter for J.D. Edwards World Data Types

iWay Application Adapter for J.D. Edwards World supports the following data types:

- ☐ Char
- ☐ Varchar
- ☐ Integer
- ☐ Numeric
- ☐ Date - Julian Format and Hungarian

Other Application Adapter for J.D. Edwards World Functions

There is no known list related to other functions for iWay Application Adapter for J.D. Edwards World.

Application Adapter for J.D. Edwards World Security

Operations are governed by the privileges of a user at the level of tables.

Application Adapter for J.D. Edwards World Known Limitations

There are no known limitations for iWay Application Adapter for J.D. Edwards World.

Related Information for Application Adapter for J.D. Edwards World in Specific iWay Releases

For more information, see the *iWay New Features Bulletin and Release Notes* documentation for a specific release (for example, iWay Version 7.0.2).



Chapter 3

Application Adapter for J.D. Edwards World Quick Start Guide

This chapter provides a quick start guide for the iWay Application Adapter for J.D. Edwards World.

In this chapter:

- ❑ [Application Adapter for J.D. Edwards World Quick Start Overview](#)
 - ❑ [J.D. Edwards World Quick Start Guide](#)
-

Application Adapter for J.D. Edwards World Quick Start Overview

This quick start guide summarizes the high-level key steps that are required to install, configure, and use the iWay Application Adapter for J.D. Edwards World. The quick start guide does not elaborate on any of the steps in detail. Instead, cross-references are provided for the corresponding sections in the *iWay Application Adapter for J.D. Edwards World User's Guide*. Users of the iWay Application Adapter for J.D. Edwards World are encouraged to follow the sequence of steps in this guide to quickly connect to a J.D. Edwards World system and begin using the adapter. To gain a complete understanding about the adapter, it is recommended for users to review the entire *iWay Application Adapter for J.D. Edwards World User's Guide*, as the quick start guide section is not a replacement for that level of detail.

J.D. Edwards World Quick Start Guide

This section lists and describes the key configuration steps for configuring the iWay Application Adapter for J.D. Edwards World and then integrating with J.D. Edwards World.

1. Ensure that you are using a supported environment, as described in [Application Adapter for J.D. Edwards World Supported Platforms Matrix](#) on page 17.
2. Copy the jt400.jar file to the \lib subdirectory where iWay Service Manager (iSM) is installed.
3. Open iWay Integration Tools (iIT) and access the iWay Explorer tab to create a new configuration.

For more information, see [Starting iWay Explorer](#) on page 23.

4. Add the iWay Application Adapter for J.D. Edwards World to iWay Explorer.

For more information, see [Establishing a Target for J.D. Edwards World](#) on page 25.

5. Create and configure an adapter target to your J.D. Edwards World system.

For more information, see [Establishing a Target for J.D. Edwards World](#) on page 25.

6. Examine the available metadata for your J.D. Edwards World business functions that you want to integrate and create corresponding XML request and response documents.

For more information, see [Creating an XML Schema](#) on page 32.

7. Create an XML request document (payload) based on the generated XML request schema.

8. Create iWay Business Services (web services) based on the generated XML schema documents.

For more information, see [How to Create a Web Service](#) on page 35.

9. Test the iWay Business Service (web service) that has been created using the sample XML request document.

For more information, see [Sample File for the Application Adapter for J. D. Edwards World](#) on page 77 and [Testing a Web Service](#) on page 37.

10. Verify the response by logging into J.D. Edwards World Client.

Creating XML Schemas for J.D. Edwards World

This section describes how to create XML schemas and generate an iWay Business Service for J.D. Edwards World libraries using iWay Explorer.

In this chapter:

- ☐ [J.D. Edwards World XML Schema Overview](#)
 - ☐ [Starting iWay Explorer](#)
 - ☐ [Establishing a Target for J.D. Edwards World](#)
 - ☐ [Modifying a Target](#)
 - ☐ [Viewing J.D. Edwards World Libraries](#)
 - ☐ [Creating an XML Schema](#)
 - ☐ [Generating an iWay Business Service for J.D Edwards World](#)
-

J.D. Edwards World XML Schema Overview

The iWay Application Adapter for J.D. Edwards World enables the processing of J.D. Edwards World libraries.

External applications that access J.D. Edwards World through the adapter use either XML schemas or web services to pass data between the external application and the adapter. You can use iWay Explorer to create the required XML schemas and web services.

For more information on installing and configuring iWay Explorer, see the *iWay Installation and Configuration* manual.

Starting iWay Explorer

Before you can use iWay Explorer, you must start your application server.

Procedure: **How to Open Servlet iWay Explorer**

To open iWay Explorer:

1. Ensure that your application server is running.
2. Enter the following URL in your browser:

<http://hostname:port/iwae/index.html>

where:

[hostname](#)

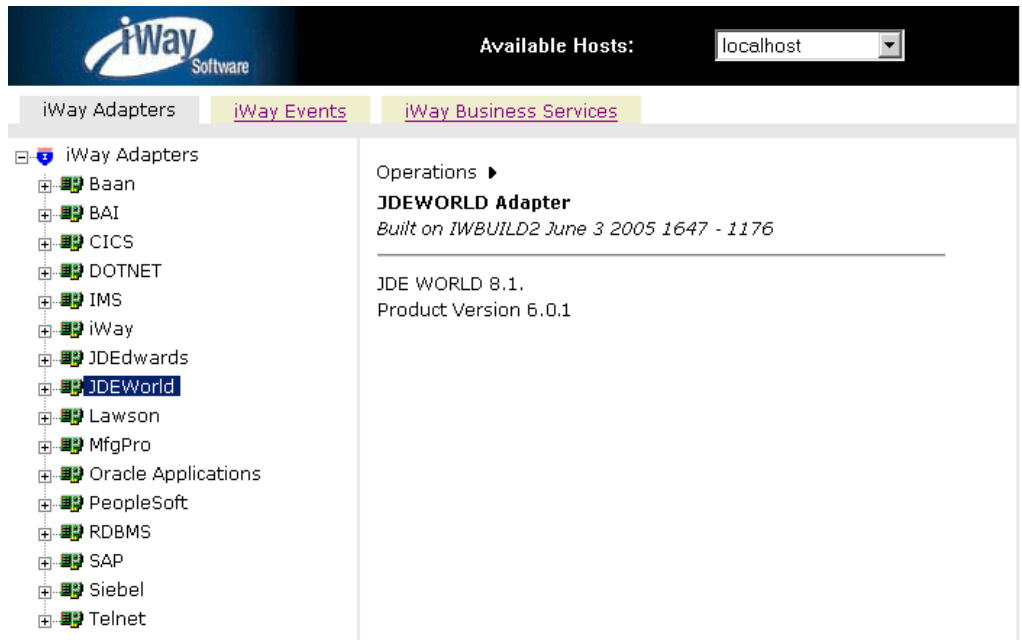
Is the name of the machine where your application server is running.

[port](#)

Is the port for the domain you are using for iWay.

iWay Explorer opens.

The iWay Adapters tab is active, and a list of the supported adapters appears, as shown on the left in the following image. In the upper right, the Available Hosts drop-down list displays the Servlet iBSP instance you can access.



For more information on adding instances, see the *iWay Installation and Configuration* manual.

You are ready to create new targets for J.D. Edwards World.

Establishing a Target for J.D. Edwards World

To browse J.D. Edwards World libraries, you must create a target for the system you intend to use. The target serves as your connection point and automatically is saved after you create it. For information on creating a target, see [How to Create a New Target](#) on page 25.

You must establish a connection to this system every time you start iWay Explorer or after you disconnect from the system. When you open iWay Explorer, a list of supported application systems appears in the left pane. The list is based on the adapters that you installed and for which you have licenses. For information on connecting to a target, see [How to Connect to a Target](#) on page 28.

Procedure: How to Create a New Target

To create a new target using iWay Explorer:

1. Click *iWay Adapters*.

The following image shows iWay Explorer with the JDEWorld node selected in the left pane and the Operations menu available in the right pane.



2. Click the *JDEWorld* node.
3. Move the pointer over *Operations* and select *Define a new target*.

The Add a new JDEWORLD target pane opens on the right, as shown in the following image.

Add a new JDEWORLD target

Targets represent configured connections to instances of backend systems. Choose a name and description for the new target that you wish to create.

Target Name:

Description:

Target Type: ▼

- a. In the Target Name field, type a descriptive name for the target, (for example, JDETarget).
- b. In the Description field, type a brief description for the connection.
- c. From the Target Type drop-down list, select the type of target to which you are connecting.

The default value is Basic.

4. Click Next.

The Set connection info pane opens on the right, as shown in the following image.

Set connection info

Driver Name:

URL:

User Name:

Password:

- a. In the Driver Name field, the JDBC driver that is used to access the J.D. Edwards World system is provided. For example:
- b. In the URL field, type the URL where the J.D. Edwards World system is running. For example:

`com.ibm.as400.access.AS400JDBCDriver`

`jdbc:as400://HOST/;translate binary=true`

where:

`HOST`

Is the name of the machine where the J.D. Edwards World system resides.

- c. In the User field, type a valid user ID for the J.D. Edwards World system.
 - d. In the Password field, type a valid password for the J.D. Edwards World system.
5. Click *Finish*.

The following image shows the J.D. Edwards World target, JDETarget, that appears below the JDEWorld node in the left pane.



You are ready to connect to your J.D. Edwards World target.

Procedure: How to Connect to a Target

To connect to a target using iWay Explorer:

1. Expand the *JDEWorld* node and select the target you defined (for example, JDETarget).

The following image shows the defined (but disconnected) J.D. Edwards World target below the expanded JDEWorld node in the left pane.



2. In the right pane, move the pointer over *Operations* and select *Connect*.

The Connect to JDETarget pane opens on the right, as shown in the following image.

Connect to JDETarget

Driver Name:	<input type="text" value="com.ibm.as400.access.AS400JDI"/>
URL:	<input type="text" value="jdbc:as400://HOST;translate binar"/>
User Name:	<input type="text" value="edamcs2"/>
Password:	<input type="password"/>

3. In the Password field, enter a valid password and click *OK*.

The following image shows that the JDETarget node in the left pane changed to reflect that a connection was made.



4. Expand the *JDETarget* node.

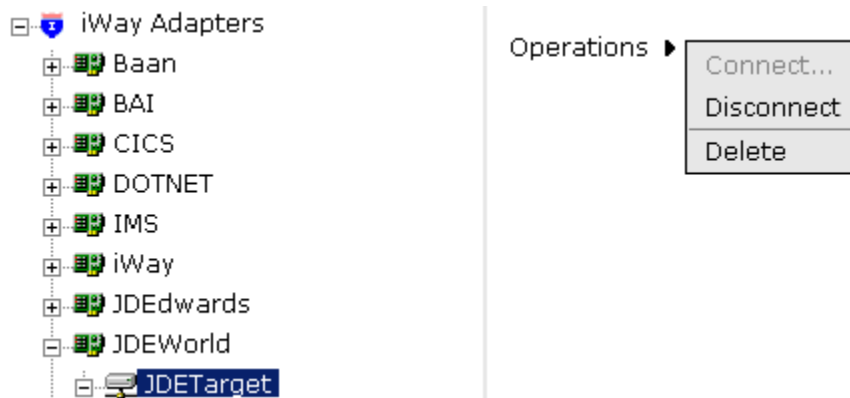
The J.D. Edwards World libraries are available.

Procedure: How to Disconnect From a Target

To disconnect from a target using iWay Explorer:

1. In the left pane, click the target to which you are connected (for example, JDETarget).
2. In the right pane, move the pointer over *Operations* and select *Disconnect*.

The following image shows that the connected J.D. Edwards World target appears below the expanded JDEWorld node in the left pane, and that the Operations menu appears in the right pane.



Disconnecting from the application system drops the connection, but the node remains.

The JDETarget node in the left pane changes to reflect that a connection was closed.

Modifying a Target

After you create a target for J.D. Edwards World using iWay Explorer, you can edit any of the information that you provided previously. For more information, see [How to Edit a Target](#) on page 30.

Although you can maintain multiple open connections to different application systems, it is recommended to close connections when you are not using them. For information on disconnecting from a target, see [How to Disconnect From a Target](#) on page 29.

In addition to closing a target, you can delete a target that is no longer required. You can delete it whether or not it is closed. If open, the target automatically closes before it is deleted. For more information, see [How to Delete a Target](#) on page 30.

Procedure: How to Edit a Target

To edit a target using iWay Explorer:

1. In the left pane, click the target (for example, JDETarget).
2. In the right pane, move the pointer over *Operations* and select *Edit*.

The Edit JDEWORLD target JDETarget pane opens on the right, as shown in the following image with fields for Target Name and Description, a Target Type drop-down list, and buttons to click to choose whether to proceed to the next pane or to cancel the action.

Edit JDEWORLD target JDETarget

Targets represent configured connections to instances of backend systems. Choose a name and description for the new target that you wish to create.

Target Name:

Description:

Target Type:

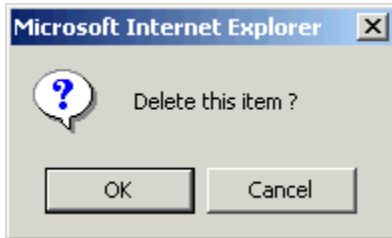
3. Modify the connection information.
4. To display additional information, click *Next*.
5. After you complete your edits in the next pane, click *Finish*.

Procedure: How to Delete a Target

To delete a target using iWay Explorer:

1. In the left pane, click the target (for example, JDETarget).
2. In the right pane, move the pointer over *Operations* and select *Delete*.

A confirmation dialog box opens, as shown in the following image.



3. To delete the target you selected, click *OK*.

The JDETarget node disappears from the left pane.

Viewing J.D. Edwards World Libraries

After you create a new configuration and connect to J.D. Edwards World, iWay Explorer enables you to explore and browse libraries. The iWay Application Adapter for J.D. Edwards World enables Insert, Update, Delete, and Select.

Procedure: How to View J.D Edwards World Libraries

To view J.D. Edwards World libraries:

1. Click the icon to the left of the target name (for example, JDETarget).
2. To expand the desired J.D. Edwards World library node, click the icon to the left of the root node, for example, IBIAS4L.

The following image shows the list of J.D. Edwards World libraries that appears in the left pane.



You can now generate schemas. For more information, see [Creating an XML Schema](#) on page 32.

Creating an XML Schema

After you browse the J.D. Edwards World libraries, you can generate XML request and response schemas for the object you wish to use with your adapter.

When the adapter is used with an iBSP configuration, iWay Explorer stores the schemas in a subdirectory of the iWay installation directory, for example,

```
C:\Program  
Files\iway7\config\base\wsdl\schemas\service\jdedeworld\JDETarget
```

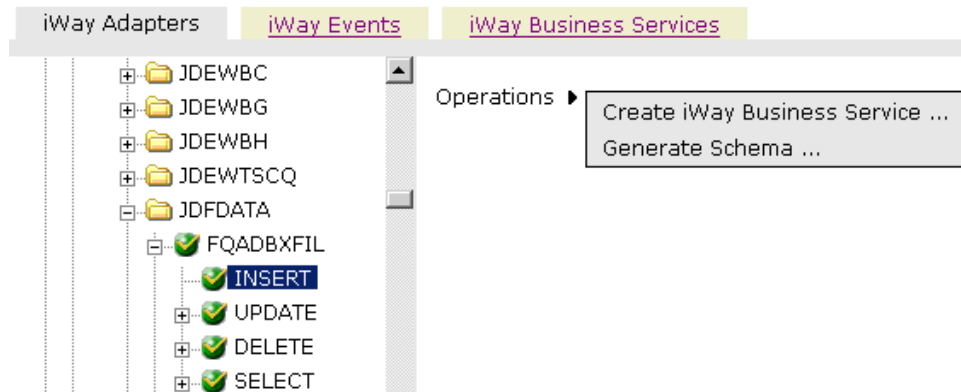

where:

JDETarget

Is the name of the connection to the J.D. Edwards World system, as defined in iWay Explorer. Under this directory, iWay Explorer creates subdirectories containing schemas.

Procedure: How to Create an XML Schema

To create XML request and response schemas for a J.D. Edwards World library using iWay Explorer:



1. Select the J.D. Edwards World library you require, for example, FQADBXFIL under the JDFDATA node.
2. In the right pane, move the pointer over *Operations* and select *Generate Schema*.

The following image shows the Schemas pane on the right with a table that defines the root tag for each schema and provides associated hyperlinks.

Schemas

Part	Root Tag	Schema
Request	JDERequest	...
Response	result	...
Event	N/A	N/A
EventReply	N/A	N/A

Help

OK

Cancel

3. Click the hyperlink associated with the type of schema you want to view, for example, request schema.

The XML request schema appears on the right, as shown in the following image.

```
<?xml version="1.0" encoding="UTF-8" ?>
<!-- Generated by the iBSE 2005-06-07T15:42:45Z
-->
- <xs:schema attributeFormDefault="unqualified"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="qualified">
- <xs:element name="JDERequest">
- <xs:complexType>
- <xs:sequence>
- <xs:element name="TABLE">
- <xs:complexType>
  <xs:attribute type="xs:string"
    use="required"
    name="LIBRARY" />
- <xs:sequence>
  <xs:element
    type="xs:string"
    name="ACTION" />
  <xs:element
    type="xs:string"
    name="NAME" />
- <xs:element minOccurs="0"
  name="TABLEJOIN">
- <xs:complexType>
- <xs:simpleContent>
- <xs:extension
```

4. Click the *Back* button on your web browser to return to the previous window.

After you create schemas, you can create web services.

After you create schemas, you can also create events. For more information, see [Configuring Events for the iWay Application Adapter for J.D. Edwards World](#) on page 39.

Generating an iWay Business Service for J.D Edwards World

You can generate iWay Business Services (web services) for J.D. Edwards World. To generate web services, you must deploy the adapter in a web services environment using iWay Business Services Provider (iBSP). iBSP exposes functionality as web services and serves as a gateway to heterogeneous back-end applications and databases.

A web service is a self-contained, modularized function that can be published and accessed across a network using open standards. It is the implementation of an interface by a component and is an executable entity. For the caller or sender, a web service can be considered a "black box" that may require input and delivers a result. Business services can be integrated within an enterprise as well as across enterprises on any communication technology stack, whether asynchronous or synchronous, in any format.

You can make web services available to other services within a host server by generating WSDL (Web Services Description Language) from the web service.

Procedure: How to Create a Web Service

To create a web service for J.D. Edwards World:

1. If you have not already done so, connect to a J.D. Edwards World target as described in [Establishing a Target for J.D. Edwards World](#) on page 25.
2. Expand the *JDEWorld* node and select the interface for which you want to create a web service.
3. In the right pane, move the pointer over *Operations* and select *Create iWay Business Services*.

The Create Web Service for INSERT pane opens on the right, as shown in the following image.

Create Web Service for INSERT

- ☒ Create a new service
- ☐ Use an existing service

Help

< Back

Next >

Cancel

You can select to create a new service or you can select to use an existing service.

If you select to create a new service, the following Create Web Service for INSERT pane opens.

Create Web Service for INSERT

Service Name:	<input type="text" value="JDFDATA"/>
Description:	<input type="text"/>
License:	<div><div>production</div><div>test</div></div>

<input type="button" value="Help"/>	<input type="button" value=" < Back"/>	<input type="button" value="Next >"/>	<input type="button" value="Cancel"/>
-------------------------------------	---	--	---------------------------------------

- a. In the Service Name field, type a descriptive name for the web service.
 - b. In the Description field, type a brief description of the web service.
 - c. From the License list, select *production* or *test*.
4. Click *Next*.

The following image shows the next pane that opens, where you continue to input information.

Create Web Service for INSERT

Method Name:

Description:

- a. In the Method Name field, type a descriptive name for the method.
 - b. In the Description field, type a brief description of the method.
5. Click *Finish*.

iWay Explorer switches the view to the iWay Business Services tab, and the new web service appears in the left pane.

Testing a Web Service

After a web service is created, test it to ensure that it functions properly. A test tool is provided for testing the web service.

Procedure: How to Test a Web Service

To test a web service:

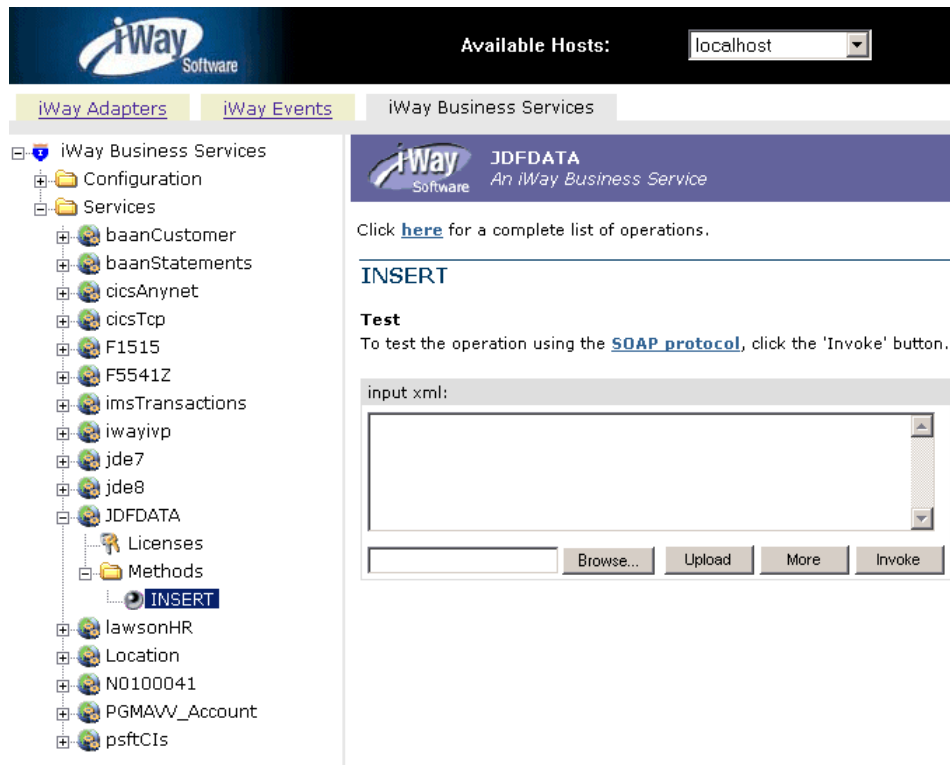
1. If you are not on the iWay Business Services tab of iWay Explorer, click the tab to access web services.
2. If it is not expanded, expand the list of web services under iWay Business Services.
3. Expand the *Services* node.
4. Select the name of the web service you want to test.

The web service name appears as a hyperlink in the right pane.

5. In the right pane, click the named web services hyperlink.

The test option appears in the right pane.

If you are testing an iWay Business Service that requires XML input, an input xml field appears, as shown in the following image.



6. In the input XML field, either type a sample XML document that queries the service or browse to the location of an XML instance and click *Open*.
7. Click *Invoke* to display the result.

Configuring Events for the iWay Application Adapter for J.D. Edwards World

This section describes how to configure events for the iWay Application Adapter for J.D. Edwards World.

You must configure a temporary interface table and database trigger in your J.D. Edwards World database.

In this chapter:

- ☐ [Creating a Trigger on a Base Table](#)
 - ☐ [Creating a Custom Table for J.D. Edwards World](#)
 - ☐ [Understanding Event Functionality](#)
 - ☐ [Creating, Editing, or Deleting a Port](#)
 - ☐ [Creating, Editing, or Deleting a Channel](#)
-

Creating a Trigger on a Base Table

You can create a trigger on a base table using a command line in J.D. Edwards World, or a third-party tool, such as DB Visualizer. The following example describes how to create a trigger using a command line in J.D. Edwards World.

***Procedure:* How to Create a Trigger on a Base Table**

To create a trigger on a base table:

1. Run *STRSQL* from a command line.
The Enter SQL Statements screen opens.
2. Type the trigger syntax. For example:

```
CREATE TRIGGER JDFDATA.GIL_PO_F4311_INSERT AFTER INSERT ON
JDFDATA.F4311
REFERENCING NEW AS N
FOR EACH ROW MODE DB2SQL
WHEN      (
            N.PDDCTO='OP' )
BEGIN ATOMIC
INSERT INTO JDFDATA.IWAY_JDE
VALUES
(
    CURRENT DATE
    ,4
    , CHAR(N.PDDOCO) || ' ' || N.PDDCTO || ' ' ||
      CHAR(N.PDLNID)
    , 'INSERT'
);
END
```

Creating a Custom Table for J.D. Edwards World

You must create a custom table for J.D. Edwards World to store key fields of an activity on J.D. Edwards World base tables. You can create a custom table using a J.D. Edwards World Table Design Aid, or third-party tool, such as DB Visualizer. The following example describes how to create a custom table using DB Visualizer.

Procedure: How to Create a Custom Table

The iWay custom table, IWAY_JDE, must be created in the World DB2 Database. This is the table that will receive key-based data for transactional events.

Copy the following SQL script and paste it into the top input box on the DB Visualizer SQL Commander tab.

```
Create table JDFDATA.IWAY_JDE
(IWAY_DATE          DATE,
 IWAY_TRANSACTION   NUMERIC,
 IWAY_KEYS          CHAR(256),
 IWAY_ACTION        CHAR(12))
```

Note: This JDFDATA string references the "Library" where the table will reside in DB2. The DB2/World Administrator must provide support and guidance for the DBA functions. They might specify a different "Library" designation for their specific site/environment.

Understanding Event Functionality

The iWay Application Adapter for J.D. Edwards World receives events by listening for changes on your J.D. Edwards World database (SQL events).

Events are generated as a result of activity in an application system. You can use events to trigger an action in your application. For example, J.D. Edwards World may generate an event when customer information is updated. If your application performs an action when this happens, your application is a consumer of this event.

After you create a connection to your application system, you can add events using iWay Explorer. To create an event, you must create a port and a channel.

The following is a description of how ports and channels work.

Port

A port associates a particular business object exposed by an adapter with a particular disposition. A disposition defines the protocol and location of the event data. The port defines the end point of the event consumption. For more information, see [Creating, Editing, or Deleting a Port](#) on page 41.

Channel




A channel represents configured connections to particular instances of back-end or other types of systems. A channel binds one or more ports to a particular listener managed by an adapter. For more information, see [Creating, Editing, or Deleting a Channel](#) on page 54.

Creating, Editing, or Deleting a Port

You can create, edit, or delete a port using iWay Explorer.

You create a port for J.D. Edwards World from the iWay Events tab. You can use an iBSP implementation through the Available Hosts drop-down list in iWay Explorer.

The following dispositions are available when using the iWay Explorer in conjunction with an iBSP implementation.

-  **File.** The File disposition uses a file URL to specify the destination file name or directory where the event document will be written. During run time, the destination file name may require indexing to avoid overwriting. For more information, see [How to Create a Port for the File Disposition](#) on page 42.
-  **HTTP.** The HTTP disposition uses an HTTP URL to specify an HTTP end point to which the event document is posted. For more information, see [How to Create a Port for the HTTP Disposition](#) on page 45.
-  **iBSP.** The iBSP disposition enables an event to launch a business service method. For more information, see [How to Create a Port for the iBSP Disposition](#) on page 46.

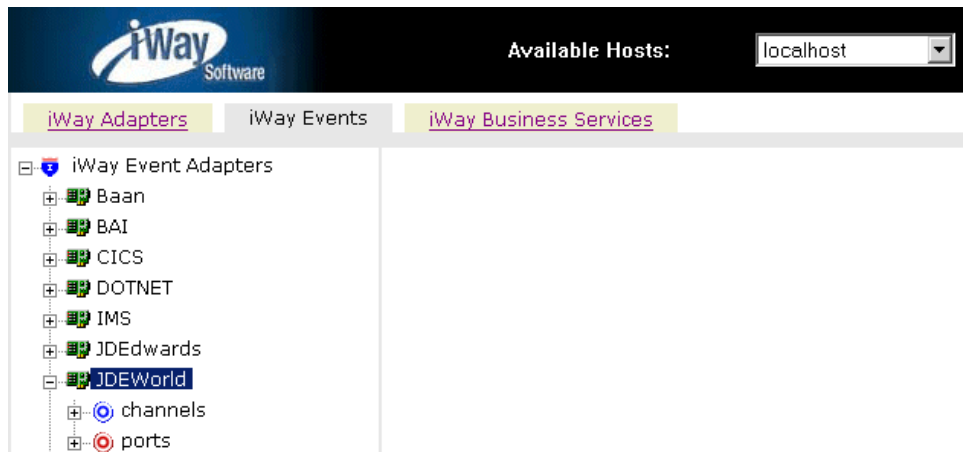
- ❑ **JMSQ.** The JMS queue disposition allows an event to be enqueued to a JMS queue. For more information, see [How to Create a Port for the JMS Queue Disposition](#) on page 50.
- ❑ **SOAP.** The SOAP disposition allows an event to launch a business service specified by a WSDL file. A SOAP action is optional; " " is the default value. For more information, see [How to Create a Port for the SOAP Disposition](#) on page 48.
- ❑ **MSMQ.** The Microsoft Message Queuing (MSMQ) disposition supports public and private queues. For more information, see [How to Create a Port for the MSMQ Disposition](#) on page 47.
- ❑ **MQSeries.** The MQSeries disposition enables an event to be enqueued to an MQSeries queue. Both queue manager and queue name may be specified. For more information, see [How to Create a Port for the MQSeries Disposition](#) on page 51.

For information on editing a port, see [How to Edit a Port](#) on page 52. For information on deleting a port, see [How to Delete a Port](#) on page 53.

Procedure: How to Create a Port for the File Disposition

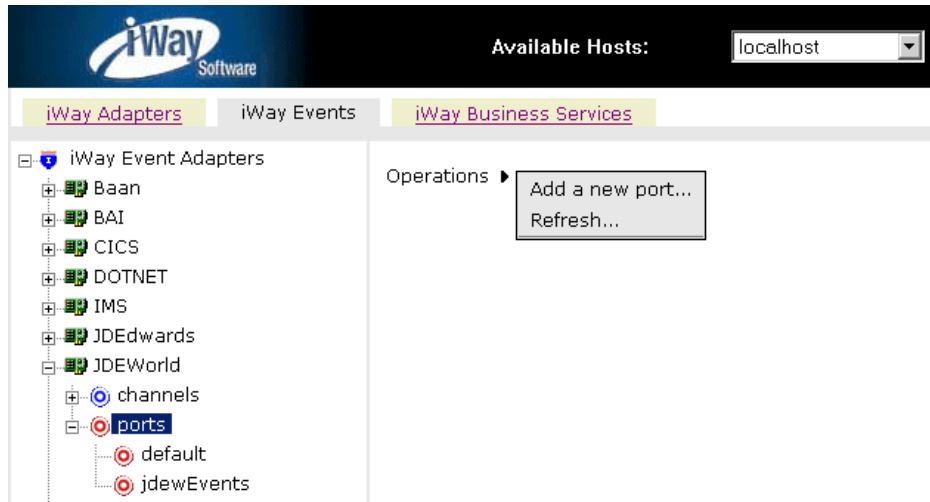
To create a specific port for the File disposition using iWay Explorer:

1. Click the *iWay Events* tab.



2. In the left pane, expand the *JDEWorld* node.

3. Select the *ports* node.



4. Move the pointer over *Operations* and select *Add a new port*.

The Create New Port pane opens on the right, as shown in the following image where you choose parameters for the new port.

Create New Port

Choose parameters of the port that you wish to create.

Port Name:	<input type="text" value="FileEventPort"/>
Description:	<input type="text"/>
Disposition Protocol:	<input type="text" value="FILE"/>
Disposition:	<input type="text" value="ifile://[location];errorTo=[pre-define"/>

<input type="button" value="Help"/>	<input type="button" value="OK"/>	<input type="button" value="Cancel"/>
-------------------------------------	-----------------------------------	---------------------------------------

- a. In the Port Name field, type a name for the event.
- b. In the Description field, type a brief description.
- c. From the Disposition Protocol drop-down list, select *FILE*.
- d. In the Disposition field, type a File destination to which event data is written.

When pointing iWay Explorer to an iBSP deployment, specify the destination file using the following format:

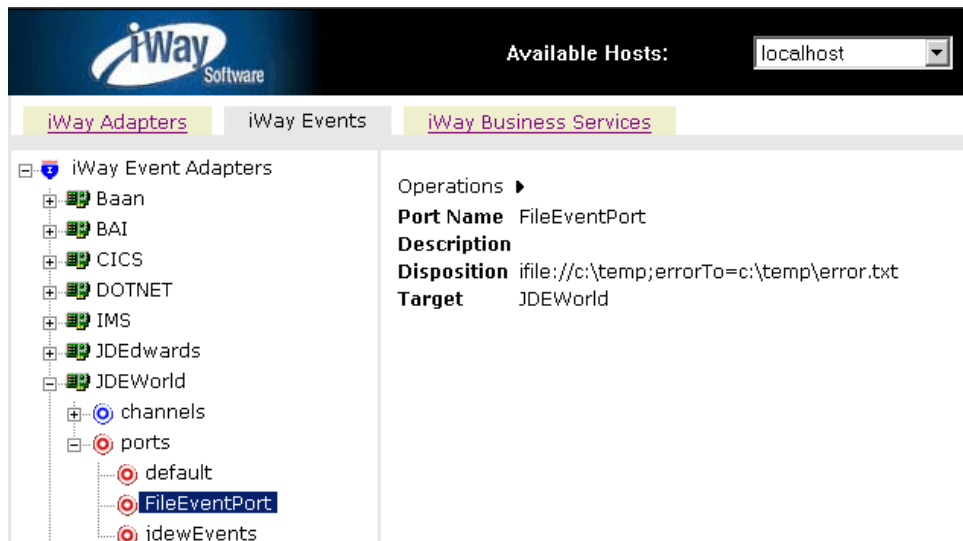
```
ifile://[location];errorTo=[pre-defined port name or another disposition url]
```

The following table describes the parameters for the disposition.

Parameter	Description
location	Destination and file name of the document where event data is written, for example, <code>ifile://D:\in\x.txt;errorTo=ifile://D:\error.txt</code>
errorTo	Predefined port name or another disposition URL where error logs are sent.

5. Click OK.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the port you created.



You are ready to associate the port with a channel. For more information, see [Creating, Editing, or Deleting a Channel](#) on page 54.

Procedure: How to Create a Port for the HTTP Disposition

To create a port for an HTTP disposition using iWay Explorer:

1. Click the *iWay Events* tab.
2. In the left pane, expand the *JDEWorld* node.
3. Select the *ports* node.
4. Move the pointer over *Operations* and select *Add a new port*.

The Create New Port pane opens on the right.

To point the iWay Explorer to an iBSP deployment, follow the steps in [How to Create a Port for the HTTP Disposition for an iBSP Deployment](#) on page 45.

Procedure: How to Create a Port for the HTTP Disposition for an iBSP Deployment

To create a port for the HTTP Disposition and point iWay Explorer to an iBSP deployment:

1. Perform the procedure, [How to Create a Port for the HTTP Disposition](#) on page 45.
2. In the Port Name field, type a name for the event.
3. In the Description field, type a brief description.
4. From the Disposition Protocol drop-down list, select *HTTP*.
5. In the Disposition field, enter an HTTP destination.
6. To point iWay Explorer to an iBSP deployment, use the following format

```
ihttp://[myurl];responseTo=[pre-defined port name or another disposition url];
```

where:

`url`

Is the URL target for the post operation, for example,

```
http://myhost:1234/docroot
```

`responseTo`

Is the location where responses are posted, if desired.

7. Click *OK*.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the port you created.

You are ready to associate the port with a channel. For more information, see [Creating, Editing, or Deleting a Channel](#) on page 54.

Procedure: How to Create a Port for the iBSP Disposition

To create a port for an iBSP disposition using iWay Explorer:

1. Click the *iWay Events* tab.
2. In the left pane, expand the *JDEWorld* node.
3. Select the *ports* node.
4. Move the pointer over *Operations* and select *Add a new port*.

The Create New Port pane opens on the right.

- a. In the Port Name field, type a name for the event.
- b. In the Description field, type a brief description.
- c. From the Disposition Protocol drop-down list, select *iBSP*.
- d. In the Disposition field, enter an iBSP destination in the form of:

```
ibse:svcName.mthName;  
responseTo=[pre-defined port name or another disposition url];  
errorTo=[pre-defined port name or another disposition url]
```

The following table lists and defines the parameters for the disposition.

Parameter	Description
svcName	Name of the service created with iBSP.
mthName	Name of the method created for the business service.
responseTo	Location where responses to the business service are posted. Predefined port name or another full URL. Optional.
errorTo	Location where error documents are sent. Predefined port name or another full URL. Optional.

5. Click *OK*.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the port you created.

You are ready to associate the port with a channel. For more information, see [Creating, Editing, or Deleting a Channel](#) on page 54.

Procedure: How to Create a Port for the MSMQ Disposition

To create a port for an MSMQ disposition using iWay Explorer:

1. Click the *iWay Events* tab.
2. In the left pane, expand the *JDEWorld* node.
3. Select the *ports* node.
4. Move the pointer over *Operations* and select *Add a new port*.

The Create New Port pane opens on the right.

- a. In the Port Name field, type a name for the event.
- b. In the Description field, type a brief description.
- c. From the Disposition Protocol drop-down list, select *MSMQ*.
- d. In the Disposition field, enter a MSMQ destination in the form of:

```
msmq://host/private$/qName;
errorTo=[pre-defined port name or another disposition url]
```

The following table defines the parameters for the disposition.

Parameter	Description
host	Machine name where the Microsoft Queuing system is running.
Queue Type	For private queues, enter <i>Private\$</i> . Private queues are queues that are not published in Active Directory. They appear only on the local computer that contains them. Private queues are accessible only by Message Queuing applications that recognize the full path name or format name of the queue.
qName	Name of the private queue where messages are placed.
errorTo	Location where error documents are sent. Predefined port name or another full URL. Optional.

5. Click *OK*.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the port you created.

You are ready to associate the port with a channel. For more information, see [Creating, Editing, or Deleting a Channel](#) on page 54.

Procedure: How to Create a Port for the SOAP Disposition

To create a port for a SOAP disposition:

- 1. Click the *iWay Events* tab.
- 2. In the left pane, expand the *JDEWorld* node.
- 3. Select the *ports* node.
- 4. Move the pointer over *Operations* and select *Add a new port*.

The Create New Port pane opens on the right.

- a. In the Port Name field, type a name for the event.
- b. In the Description field, type a brief description.
- c. From the Disposition Protocol drop-down list, select SOAP.
- d. In the Disposition field, enter an SOAP destination, using the following format:

```
soap:[wsdl-url];soapaction=[myaction];
method=[web service method];namespace=[namespace];
responseTo=[pre-defined port name or another disposition URL];
errorTo=[pre-defined port name or another disposition url]
```

The following table lists and defines the parameters for the disposition.

Parameter	Description
wsdl-url	<p>The URL to the WSDL file that is required to create the SOAP message, for example:</p> <pre>http://localhost:7001/ibse/IBSEServlet/ test/webservice.ibs?wsdl</pre> <p>where:</p> <pre>webservice</pre> <p>Is the name of the web service you created using iWay Explorer.</p> <p>To find this value, navigate to the iWay Business Services tab and click the <i>Service Description</i> hyperlink. The WSDL URL appears in the Address field of your web browser.</p> <p>You can also open the WSDL file in a third-party XML editor (for example, XMLSPY) and view the SOAP request settings to find this value.</p>

Parameter	Description
soapaction	<p>The method called by the SOAP disposition, for example:</p> <p><i>webservice.method@test@@</i></p> <p>where:</p> <p><i>webservice</i></p> <p>Is the name of the web service you created using iWay Explorer.</p> <p><i>method</i></p> <p>Is the method being used.</p> <p><i>test</i></p> <p>Is the license that is being used by the web service.</p> <p>To find this value, navigate to the iWay Business Services tab and click the <i>Service Description</i> hyperlink. The WSDL file is displayed in your web browser. Perform a search for <i>soapAction</i>.</p>
method	The web service method you are using. This value can be found in the WSDL file.
namespace	The XML namespace you are using. This value can be found in the WSDL file.
responseTo	<p>Location where responses are posted. Predefined port name or another URL. Optional.</p> <p>Predefined port name or another disposition URL. The URL must be complete, including the protocol.</p>
errorTo	<p>Location where error logs are sent. Optional.</p> <p>Predefined port name or another disposition URL. The URL must be complete, including the protocol.</p>

5. Click *OK*.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the port you created.

You are ready to associate the port with a channel. For more information, see [Creating, Editing, or Deleting a Channel](#) on page 54.

Procedure: How to Create a Port for the JMS Queue Disposition

To create a port for a JMS queue disposition using iWay Explorer:

1. Click the *iWay Events* tab.
2. In the left pane, expand the *JDEWorld* node.
3. Select the *ports* node.
4. Move the pointer over *Operations* and select *Add a new port*.

The Create New Port pane opens on the right.

- a. In the Port Name field, type a name for the event.
- b. In the Description field, type a brief description.
- c. From the Disposition Protocol drop-down list, select *JMSQ*.
- d. In the Disposition field, enter a JMS destination.

When pointing iWay Explorer to an iBSP deployment, use the following format:

```
jmsq:myQueueName@myQueueFac;jndiurl=[myurl];
jndifactory=[myfactory];user=[user];password=[xxx];
errorTo=[pre-defined port name or another disposition url]
```

The following table lists and defines the parameters for the disposition.

Parameter	Description
queue	Name of a queue to which events are emitted.
Connection Factory	A resource that contains information about the JMS Server.
jndi_url	The URL to use to contact the JNDI provider. The syntax of this URL depends on the JNDI provider that is used. This value corresponds to the standard JNDI property: <code>java.naming.provider.url</code>
jndi_factory	Is JNDI context. INITIAL_CONTEXT_FACTORY and is provided by the JNDI service provider.
user	User ID associated with this queue.
password	Password for the user ID.

Parameter	Description
errorTo	Location where error logs are sent. Optional. Predefined port name or another disposition URL. The URL must be complete, including the protocol.

- Click OK.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the port you created.

You are ready to associate the port with a channel. For more information, see [Creating, Editing, or Deleting a Channel](#) on page 54.

Procedure: How to Create a Port for the MQSeries Disposition

To create a port for an MQSeries disposition using iWay Explorer:

- Click the *iWay Events* tab.
- In the left pane, expand the *JDEWorld* node.
- Select the *ports* node.
- Move the pointer over *Operations* and select *Add a new port*.

The Create New Port pane opens on the right.

- In the Port Name field, type a name for the event.
- In the Description field, type a brief description.
- From the Disposition Protocol drop-down list, select *MQSeries*.
- In the Disposition field, enter an MQSeries destination.

When pointing iWay Explorer to an iBSP deployment, use the following format:

```
mqseries:/qManager/qName;host=[hostname];
port=[port];channel=[channelname];
errorTo=[pre-defined port name or another disposition url]
```

The following table lists and defines the parameters for the disposition.

Parameter	Description
qManager	Name of the queue manager to which the server must connect.

Parameter	Description
qName or respqueue	Name of the queue where messages are placed.
host	Host on which the MQ server is located (MQ Client only).
port	Number to connect to an MQ server queue manager (MQ client only).
channel	Case-sensitive name of the channel that connects with the remote MQ server queue manager (MQ client only). The default channel name for MQSeries is SYSTEM.DEF.SVRCONN.
errorTo	Location where error documents are sent. Predefined port name or another full URL. Optional.

5. Click *OK*.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the port you created.

You are ready to associate the port with a channel. For more information, see [Creating, Editing, or Deleting a Channel](#) on page 54.

Procedure: How to Edit a Port

To edit a port:

1. Select the port you want to edit.
2. In the right pane, move the pointer over *Operations*, and select *Edit*.

The Edit Port pane opens on the right.

Edit Port

Choose parameters of the port that you wish to edit.

Port Name:	<input type="text" value="FileEventPort"/>
Description:	<input type="text"/>
Disposition Protocol:	<input type="text" value="FILE"/>
Disposition:	<input type="text" value="ifile://c:\temp;errorTo=c:\temp\errc"/>

<input type="button" value="Help"/>	<input type="button" value="OK"/>	<input type="button" value="Cancel"/>
-------------------------------------	-----------------------------------	---------------------------------------

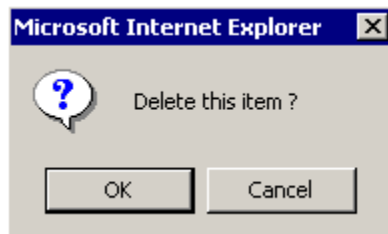
3. Make the required changes to the port configuration fields.
4. Click *OK*.

Procedure: How to Delete a Port

To delete a port:

1. Select the port you want to delete.
2. In the right pane, move the pointer over *Operations*, and select *Delete*.

A confirmation dialog box opens, as shown in the following image.



3. To delete the port you selected, click *OK*.

The port disappears from the list in the left pane.

Creating, Editing, or Deleting a Channel

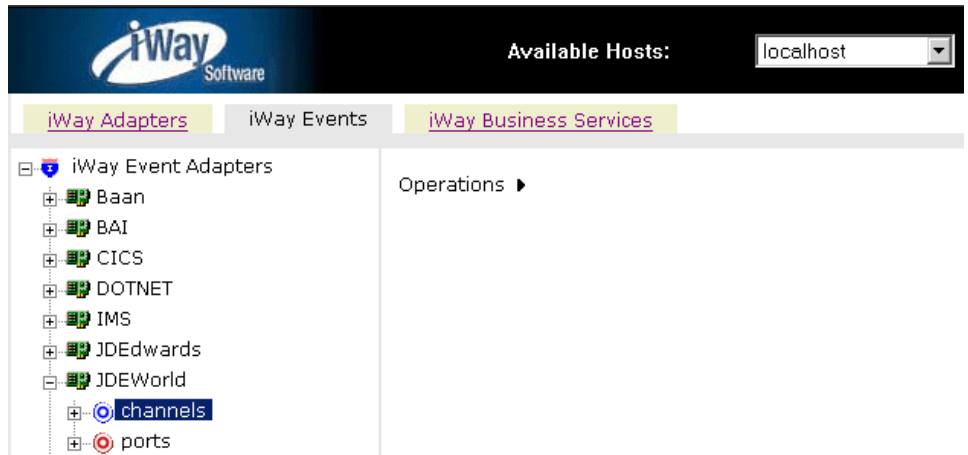
All defined ports must be associated with a channel. You can create, edit, or delete a channel for your event adapter using iWay Explorer. For information on creating a channel, see [How to Create a Channel](#) on page 54. For information on editing a channel, see [How to Edit a Channel](#) on page 59. For information on deleting a channel, see [How to Delete a Channel](#) on page 60.

Procedure: How to Create a Channel

To create a channel using iWay Explorer:

1. Click the *iWay Events* tab.
 - a. In the left pane, expand the *JDEWorld* node.

The ports and channels nodes appear.



- b. Click the *channels* node.
2. In the right pane, move the pointer over *Operations* and select *Add a new channel*.

The Add a new JDEWORLD channel pane opens on the right, as shown in the following image.

Add a new JDEWORLD channel

Choose a name and description for the new channel that you wish to create.

Channel Name:

Description:

Channel Type: ▼

- a. In the Channel Name field, type a name, for example, JDEChannel.
 - b. In the Description field, type a brief description.
 - c. From the Channel Type drop-down list, select a channel type, for example, JDEWorld Listener (Default).
3. Click *Next*.

The Edit channels pane opens on the right, where you can enter the listener port number and choose the synchronization type from the drop-down list, as shown in the following image.

Edit channels

Driver Class:

com.ibm.as400.access.AS400JDI

Driver URL:

jdbc:as400://HOST;translate binar

User:

Password:

Polling Interval:

SQL Query:

Post Query:

Delete Keys:

Synctype:

REQUEST

Help

< Back

Next >

Cancel

4. Provide the required values based on the list of parameters and their descriptions in the following table.

Parameter	Description
Driver Class	The JDBC driver that is used to access the J.D. Edwards World system is provided. For example: <code>com.ibm.as400.access.AS400JDBCdriver</code>

Parameter	Description
Driver URL	<p>Type the URL where the J.D. Edwards World system is running. For example:</p> <pre>jdbc:as400://HOST/;translate binary=true</pre> <p>where:</p> <pre>HOST</pre> <p>Is the name of the machine where the J.D. Edwards World system resides.</p>
User	Type a valid user ID for the J.D. Edwards World system.
Password	Type a valid password for the J.D. Edwards World system.
Polling Interval	This is a time, expressed in milliseconds. The maximum interval between checks for new documents. The higher this value, the longer the interval, and the fewer system resources that are used. The side-effect of a high value is that a worker thread cannot respond to a stop command. If this value is set to 0, the listener runs once and terminates.
SQL Query	<p>The SQL query used to return data from the custom table. For example:</p> <pre>select * from JDFDATA.IWAY_JDE where IWAY_TRANSACTION=4</pre>
Post Query (Optional)	Optional.
Delete Keys	<p>An SQL statement to delete key fields from the custom table. For example:</p> <pre>IWAY_TRANSACTION</pre>

Parameter	Description
Synctype	<p>Select one of the following options:</p> <ul style="list-style-type: none"> <input type="checkbox"/> If the event application expects a reply sent back to it, select <i>REQUEST_RESPONSE</i>. Specify a premitter. <input type="checkbox"/> When a TCP/IP acknowledgement (ACK) is sent back to the event application, select <i>REQUEST_ACK</i>. <input type="checkbox"/> If the event application does not expect a return, select <i>REQUEST</i>.

5. Click *Next*.

The Select Ports pane opens, as shown in the following image.

Select Ports

Available		Current
jdewEvents	<div>«</div> <div><</div> <div>></div> <div>»</div>	FileEventPort

Help

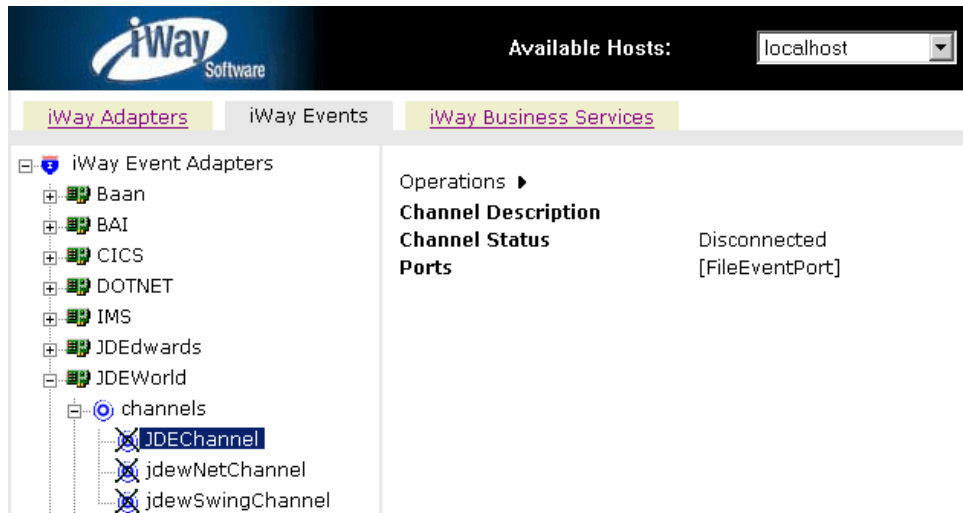
< Back

Finish

Cancel

- a. Select a port from the list of current ports.
 - b. To transfer the port to the list of available ports, click the single right-arrow button. To associate all ports, click the double right-arrow button.
6. Click *Finish*.

The channel appears in the left pane under the channels port with an X over the icon to indicate that the channel is disconnected, as shown in the following image.



A summary window opens in the right pane, showing the channel description, channel status, and available ports. All the information in the summary is associated with the channel you created.

You must start the channel to activate your event configuration.

7. In the right pane, move the pointer over *Operations* and select *Start the channel*.

When the channel is activated, the X over the icon in the left pane disappears.

To stop the channel at any time, you can move the pointer over *Operations* and select the option to stop the channel.

Procedure: How to Edit a Channel

To edit a channel:

1. In the left pane, select the channel you want to edit.
2. In the right pane, move the pointer over *Operations* and select *Edit*.

The Edit channel pane opens on the right and includes current information for Channel Name, Description, and Channel Type, as shown in the following image.

Edit JDEWORLD channel JDEChannel

Choose a name and description for the channel that you wish to create.

Channel Name:

Description:

Channel Type:

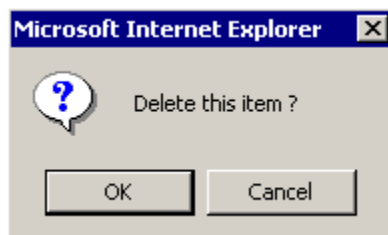
3. Make the required changes to the channel configuration fields.
4. Click *Next* to continue making changes on the next pane.
5. When you are finished making your changes, click *Finish*.

Procedure: How to Delete a Channel

To delete a channel:

1. In the left pane, select the channel you want to delete.
2. In the right pane, move the pointer over *Operations* and select *Delete*.

A confirmation dialog box opens, as shown in the following image.



3. To delete the channel you selected, click *OK*.

The channel disappears from the list in the left pane.

Configuring the Application Adapter for J.D. Edwards World in an iWay Environment

After you successfully configure the adapter to represent a particular adapter target, the adapter can be assigned to an iWay Service Manager channel.

This section also includes information about processing adapter requests.

In this appendix:

- ❑ [Configuring the Application Adapter for J.D. Edwards World in iWay Service Manager](#)
-

Configuring the Application Adapter for J.D. Edwards World in iWay Service Manager

Before configuring the adapter in iWay Service Manager, you must first create a target, which represents a connection to a backend system, using iWay Explorer. For more information on configuring targets and connections using iWay Explorer, see [Establishing a Target for J.D. Edwards World](#) on page 25 or the *iWay Explorer User's Guide*.

Important: When using the adapter on UNIX platforms, you must manually modify the script that is used to start iWay Service Manager by adding a JVM option that specifies the type of file encoding that is used.

You configure the adapter in the iWay Service Manager console. The configuration process creates run-time connection and persistent data files within Service Manager. The configuration process interrogates the Service Manager repository entries that were built when the target and connection were created using iWay Explorer. The define adapter process creates the run-time repository based on the design-time repository.

Procedure: How to Define an Adapter

To define an adapter:

1. In the Service Manager console, select *Registry*, then *Adapters*.
2. Click *Add*.

The iBSP URL pane opens, as shown in the following image.

Provide Repository Url for the new Adapter

iBSP URL * Repository of available adapters with user defined targets

<< Back Next >>

3. Enter your iBSP URL, which is the location of the Service Manager repository, for example, *http://localhost:9000*. This field is required.
4. Click *Next*.

An adapter selection pane opens, as shown in the following image.

Adapter * Adapters with targets defined at http://localhost:9000. If you don't see an adapter, it's probably because you do not have the adapter's JAR on the classpath.

<< Back Next >>

5. From the Adapter drop-down list, select the Adapter, then click *Next*.
6. From the Target drop-down list, select a target you configured for the adapter in iWay Explorer, then click *Next*.

The connection information associated with the target selected is displayed.

Adapters

iWay Service Manager implements an adapter container to configure/invoke iWay Adapters. The adapter container acts as a Services Provider to access configurational metadata on behalf of its adapters. Listed below are reference registry.

Set properties of the new Adapter	
Adapter	JDEWorld
Target	JDWorld1
Create Error Document	If on, an error document will be returned when an error occurs <input type="checkbox"/> On
Persist Connection	If on, adapter connection will be reused between executes <input type="checkbox"/> On
Settings	
Driver Name *	<input type="text" value="com.ibm.as400.access.AS400JDBCdriver"/>
URL *	<input type="text" value="jdbc:as400://ibias4l/ibias4l; translate binary=true"/>
User Name *	<input type="text" value="EDAMCS2"/>
Password *	<input type="password" value="....."/>

- a. Select whether to return an error document when an error occurs.
 - b. Select whether an adapter connection will be reused between executes.
 - c. Review the connection information you specified in iWay Explorer. You can change or update any information.
7. Click *Next*.
 8. Provide a name and, optionally, a description, for the adapter, and click *Finish*.

The adapter appears in the adapters list, as shown in the following image.

Adapters				
<input type="checkbox"/> Filter By Name Where Name <input type="text"/> Equals <input type="text"/>				
<input type="checkbox"/>	Name	Target	References	Description
<input type="checkbox"/>	JDWorldAdapter	JDEWorld		none

Procedure: How to Modify or Update an Adapter Connection

The following image shows the Adapter Defines pane which displays the name of the adapter and the description (optional).

<input type="checkbox"/>	Name	Target	References	Description
<input type="checkbox"/>	JDWorldAdapter	JDEWorld		none

To modify or update an adapter connection:

1. From the Adapters list, click the adapter reference that you defined, in this example, *JDWorldAdapter*.

The pane that displays the target connection information opens. You cannot change the name of the adapter or the target, but you can edit the connection information.

2. After you modify the connection information, click *Update Connection Properties*.
3. After you make changes or additions to the adapter target in iWay Explorer, click *Update Adapter Data*.
4. Click *Finish*.

Configuring the Application Adapter for J. D. Edwards World in iWay Integration Tools Designer

After you successfully configure the adapter to represent a particular adapter target, the adapter can be used within a process flow.

In this appendix:

- ❑ [Using the Application Adapter for J. D. Edwards World in iWay Integration Tools Designer](#)

Using the Application Adapter for J. D. Edwards World in iWay Integration Tools Designer

You can make an adapter available to a process flow created in iWay Integration Tools (iIT) Designer, a GUI-based tool, used to build stateless process flows that execute within iWay Service Manager (iSM). The adapter can be incorporated as a node, called an Adapter object, in an iWay process flow, allowing you to integrate it easily into a business process solution.

When creating an Adapter object, you can add an adapter to the object in one of two ways:

- ❑ Add an adapter that has already been defined either in a process flow or in iWay Service Manager. For more information, see [How to Add a Previously Defined Adapter](#) on page 65.
- ❑ Add an adapter that has *not* been previously defined in iIT Designer or iWay Service Manager. For more information, see [How to Define a New Adapter in iWay Integration Tools Designer](#) on page 68.

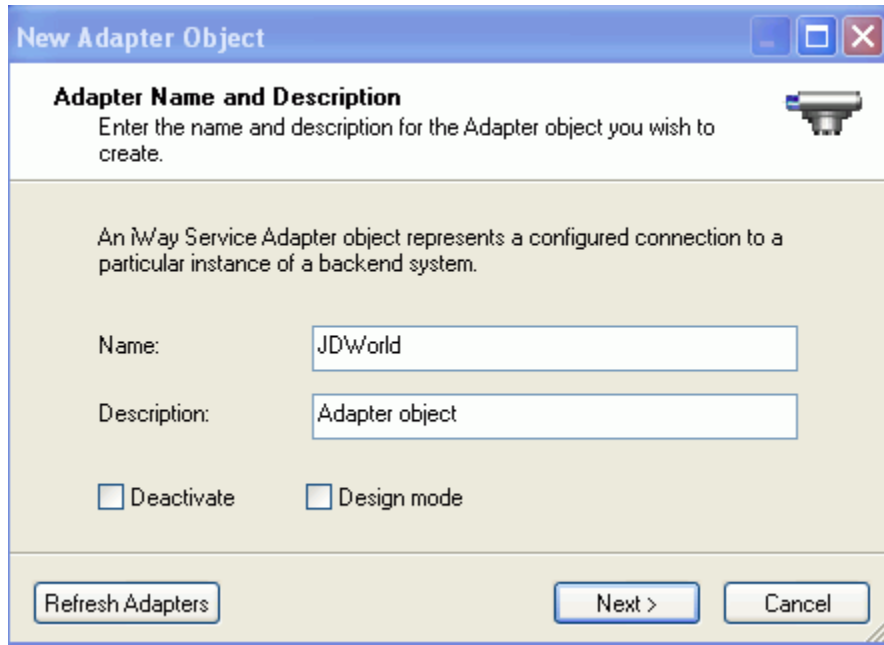
To use an adapter in a process flow, you must first configure a target for the adapter within iWay Explorer. For more information on configuring a target see [Creating XML Schemas for J.D. Edwards World](#) on page 23.

Before you begin, ensure that you have created a project and created a process for that project. You can create a project by right-clicking the Processes folder in your project and selecting New Process from the context menu. For more information, see the *iWay Integration Tools (iIT) Designer User's Guide*.

Procedure: How to Add a Previously Defined Adapter

1. Select the process to which you want to add the adapter.
2. From the button bar, click and drag the Adapter object icon to the workspace.

The New Adapter Object dialog box appears, as shown in the following image.



- a. Provide a descriptive name and a brief description (optional) for the Adapter object.
- b. If you have updated adapter target information in iWay Explorer, click *Refresh Adapters*.

Note: The Deactivate option allows you to configure the object, but suppress its function within the process flow (usually used for debugging). The Design Mode option allows you to insert the object without configuring it, so that it acts as a placeholder in the process flow.

3. Click *Next*.

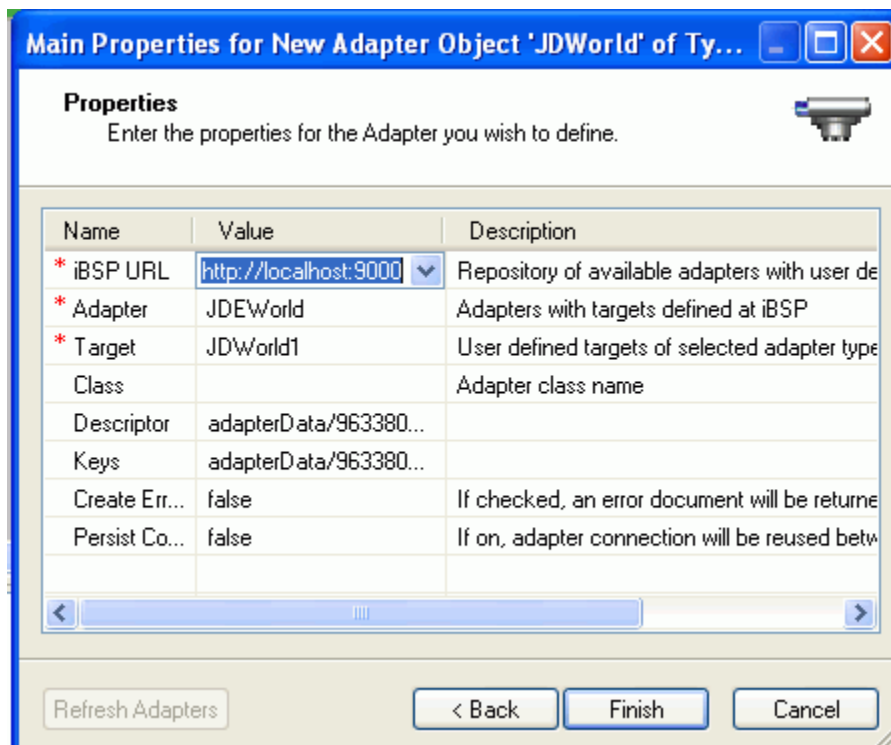
You are prompted to select the adapter type from the Defined Adapters list.

4. Select the adapter target from the Defined Adapters drop-down list.

If you do not see the adapter target in the list, you must go through the process of defining the adapter. For instructions, see [How to Define a New Adapter in iWay Integration Tools Designer](#) on page 68.

5. Click *Next*.

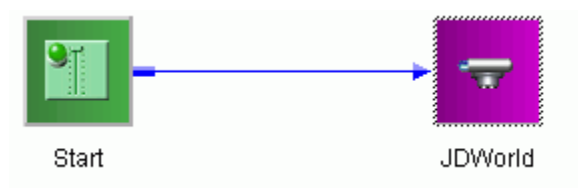
The Properties dialog box for the adapter you selected opens. The following image is an example of the adapter Properties dialog box.



In this dialog box, you can review and change the properties associated with the target. To change a property, click in the field and edit it directly. If multiple dialog boxes appear, continue to click *Next* to review all of the properties.

6. Click *Finish*.

An icon representing the Adapter object appears in the workspace and the adapter is available to your iWay process flow. For information on defining relationships between the Adapter object and other objects in your iWay process flow, see the *iWay Integration Tools (iIT) Designer User's Guide*.

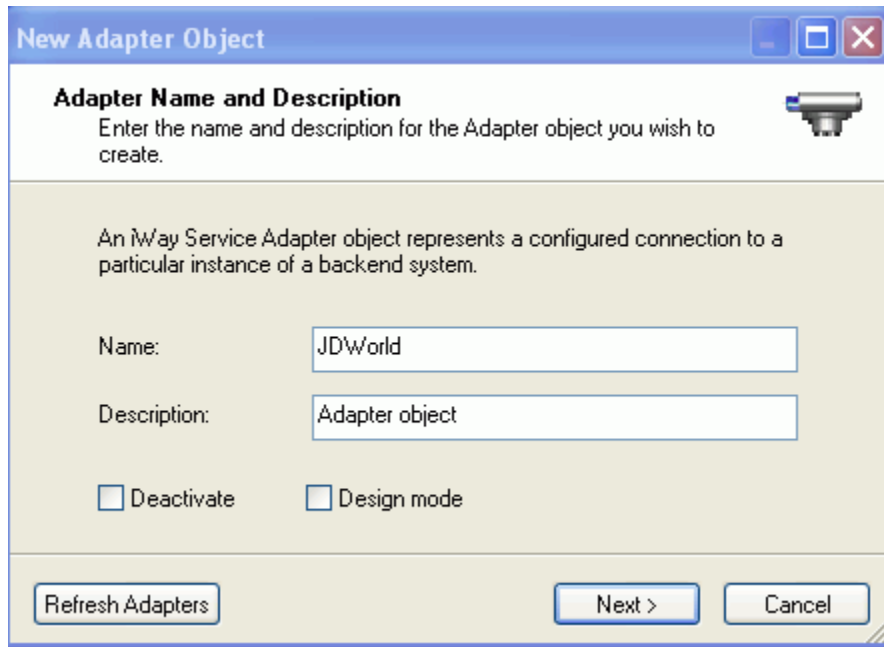


Procedure: How to Define a New Adapter in iWay Integration Tools Designer

You can create a new adapter object that has *not* been previously defined in the repository from the New Adapter Object dialog box.

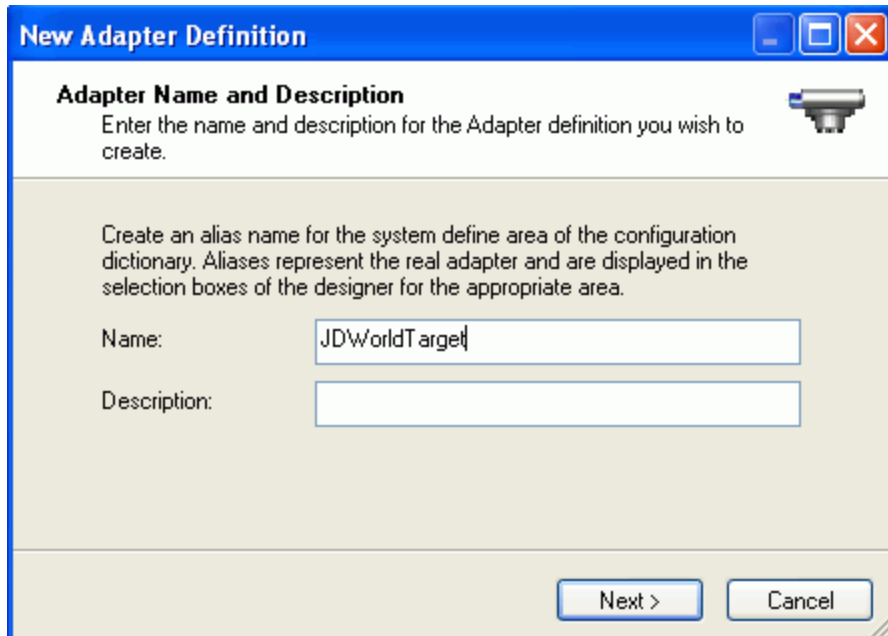
1. Select the process to which you want to add the adapter object.
2. From the button bar, click and drag the Adapter Object icon to the workspace.

The New Adapter Object - Adapter Name and Description dialog box opens, as shown in the following image.



- a. Provide a descriptive name and a brief description (optional) for the Adapter object.
 - b. If you have updated adapter target information in iWay Explorer, click *Refresh Adapters*.
3. Click *Next*.
4. In the Adapter Type dialog box, click *New*.

The New Adapter Definition - Adapter Name and Description dialog box opens, as shown in the following image.

The image shows a Windows-style dialog box titled "New Adapter Definition". It has a blue title bar with standard minimize, maximize, and close buttons. The main content area is divided into two sections. The top section, titled "Adapter Name and Description", contains the instruction "Enter the name and description for the Adapter definition you wish to create." and a small icon of a camera. The bottom section contains the instruction "Create an alias name for the system define area of the configuration dictionary. Aliases represent the real adapter and are displayed in the selection boxes of the designer for the appropriate area." Below this instruction are two text input fields. The first field is labeled "Name:" and contains the text "JDWorldTarget". The second field is labeled "Description:" and is empty. At the bottom right of the dialog are two buttons: "Next >" and "Cancel".

New Adapter Definition

Adapter Name and Description
Enter the name and description for the Adapter definition you wish to create.

Create an alias name for the system define area of the configuration dictionary. Aliases represent the real adapter and are displayed in the selection boxes of the designer for the appropriate area.

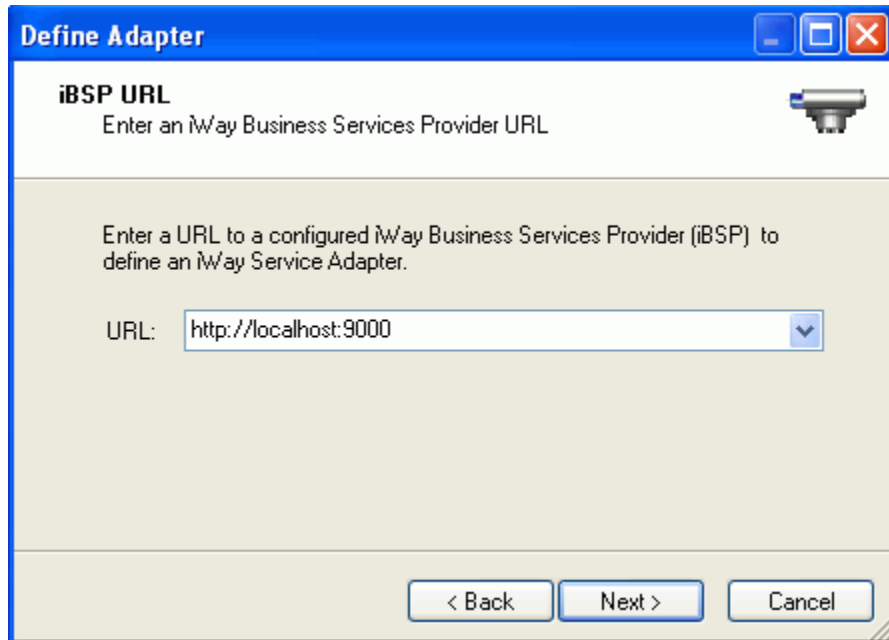
Name: JDWorldTarget

Description:

Next > Cancel

5. Type a unique, descriptive name to be used as an alias and a brief description (optional) for the adapter you are defining.
6. Click *Next*.

The Define Adapter iBSP URL dialog box opens, as shown in the following image.



7. Select an available iBSP URL from the drop-down list or type a URL in the following format

http://host:port

where:

host

Is the name of the machine on which iWay Service Manager is installed.

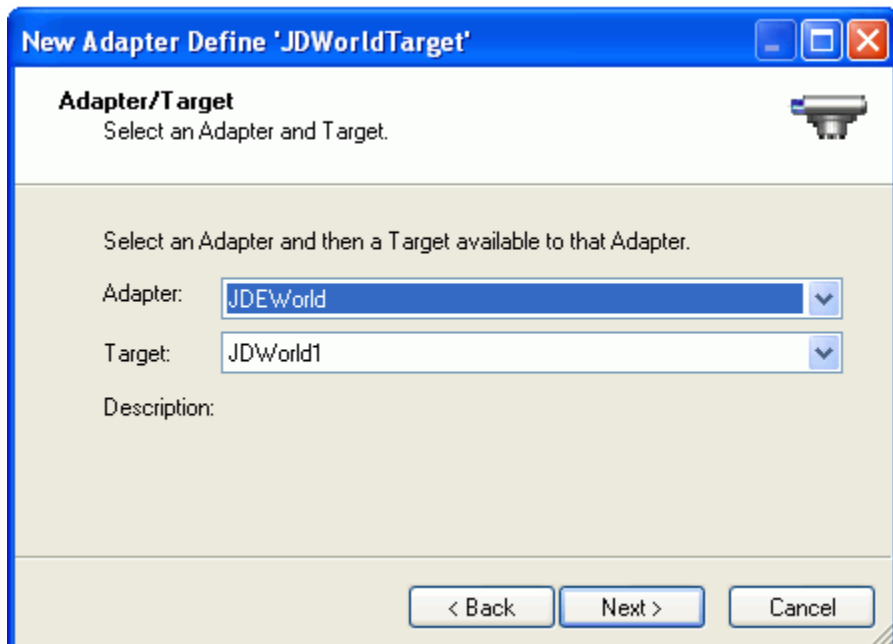
port

Is the port number on which iBSP listens for SOAP requests. The default is 9000.

The iBSP URL allows you to access targets defined in the iBSP repository.

8. Click Next.

The Adapter/Target dialog box opens, as shown in the following image.



- a. From the Adapter drop-down list, select the adapter.
 - b. From the Target drop-down list, select the target you want to use in your iWay process flow.
9. Click *Next*.

The descriptor properties for the adapter and target you selected appear. The following image shows an example of the Properties dialog box.

New Adapter Define 'JDWorldTarget'

Properties
Enter the Adapter Properties

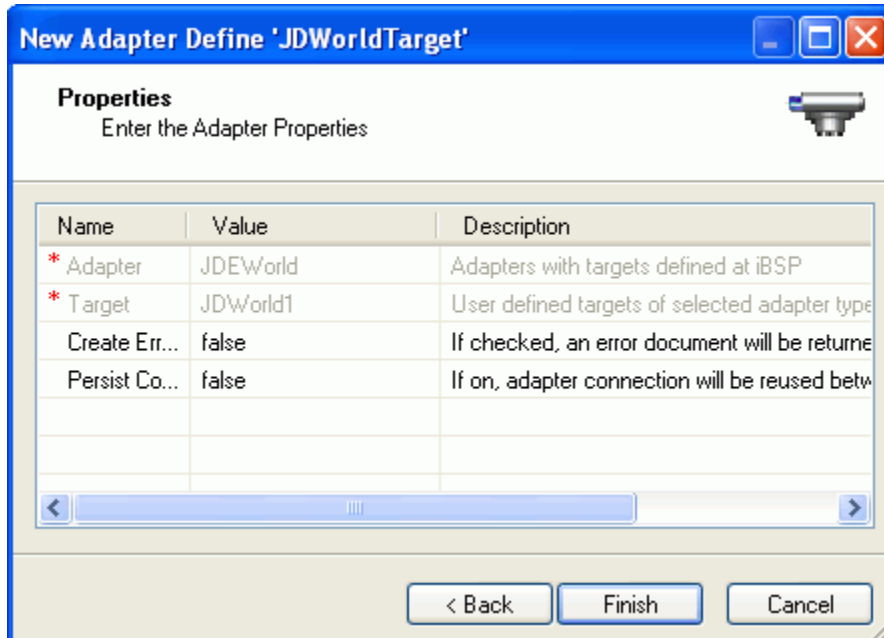
Name	Value	Description	Type
* Driver Name	com.ibm.as400.acces...		string
* URL	jdbc:as400://ibias4l/...		string
* User Name	EDAMCS2		string
* Password	*****		password

< Back Next > Cancel

You can review and change the parameters associated with the target. To change a parameter, click in the field and edit it directly. If multiple dialog boxes appear, continue to click *Next* to review all of the properties.

10. Click *Next* at the last New Adapter Define dialog box.

The Main Properties dialog box appears. You can review and change the properties for the new adapter definition. For example, if you want to create an error document, change the value to *true*.



11. Click *Finish*.

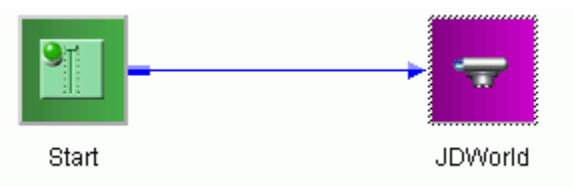
The Adapter Type dialog box appears with the newly created adapter in the Defined Adapters field.

12. To use this adapter to create the Adapter object, click *Next*.

The adapter and target properties for the Adapter object appear in the Properties dialog box. You can review all parameters associated with the target again. Continue to click *Next* to move through the dialog boxes.

13. At the final Properties dialog box, click *Finish*.

An icon representing the Adapter object appears in the workspace, and the adapter is available to your iWay process flow. For information on defining relationships between the Adapter object and other objects in your iWay process flow, see the *iWay Integration Tools (iIT) Designer User's Guide*.



Sample File for the Application Adapter for J. D. Edwards World

This section contains a sample XML file for the iWay Application Adapter for J.D. Edwards World.

In this appendix:

 [Sample XML File](#)

Sample XML File

```
<?xml version="1.0" encoding="UTF-8" ?>
<JDERequest Distinct="N" Operation="SELECT" DBOperation="INSERT" ">
  <TABLE LIBRARY="JDFDATA">
    <ACTION>SPECIFIED</ACTION>
    <NAME>F4201</NAME>
    <ROW>
      <SHDOCO Visible="Y" order="" group="">
        <NAME />
        <TYPE>NUMERIC</TYPE>
        <VALUE />
        <WHERE>
          <OPERATOR>=</OPERATOR>
          <VALUE>112891 </VALUE>
        </WHERE>
      </SHDOCO>
      <SHDCTO Visible="Y" order="" group="">
        <NAME />
        <TYPE>CHAR</TYPE>
        <VALUE />
        <WHERE>
          <OPERATOR>=</OPERATOR>
          <VALUE>SO</VALUE>
        </WHERE>
      </SHDCTO>
      <SHVR01 Visible="Y" order="" group="">
        <NAME />
        <TYPE>CHAR</TYPE>
        <VALUE />
      </SHVR01>
      <SHSHAN Visible="" order="" group="">
        <NAME />
        <TYPE>NUMERIC</TYPE>
        <VALUE />
      </SHSHAN>
      <SHAN8 Visible="Y" order="" group="">
        <NAME />
        <TYPE>NUMERIC</TYPE>
        <VALUE />
      </SHAN8>
    </ROW>
  </TABLE>
```

```

<TABLE LIBRARY="JDFDATA">
  <ACTION>SPECIFIED</ACTION>
  <NAME>F4211</NAME>
  <TABLEJOIN SIDE="">INNER</TABLEJOIN>
  <ROW>
    <SDDOCO Visible="Y" order="" group="">
      <NAME />
      <TYPE>NUMERIC</TYPE>
      <VALUE />
      <FROM>
        <JOIN>F4201.SHDOCO</JOIN>
      </FROM>
    </SDDOCO>
    <SDDCTO Visible="Y" order="" group="">
      <NAME />
      <TYPE>CHAR</TYPE>
      <VALUE />
      <FROM>
        <JOIN>F4201.SHDCTO</JOIN>
      </FROM>
    </SDDCTO>
    <SDRCDC Visible="Y" order="" group="">
      <NAME />
      <TYPE>CHAR</TYPE>
      <VALUE />
    </SDRCDC>
    <SDCARS Visible="Y" order="" group="">
      <NAME />
      <TYPE>NUMERIC</TYPE>
      <VALUE />
    </SDCARS>
    <SDSOQS Visible="Y" order="" group="">
      <NAME />
      <TYPE>DECIMAL</TYPE>
      <VALUE />
    </SDSOQS>
    <SDUORG Visible="Y" order="" group="">
      <NAME />
      <TYPE>DECIMAL</TYPE>
      <VALUE />
    </SDUORG>
    <SDLITM Visible="Y" order="" group="">
      <NAME />
      <TYPE>CHAR</TYPE>
      <VALUE />
    </SDLITM>
    <SDDRQJ Visible="Y" order="" group="">
      <NAME />
      <TYPE>NUMERIC</TYPE>
      <VALUE />
    </SDDRQJ>
    <SDLNID Visible="Y" order="" group="">
      <NAME />
      <TYPE>DECIMAL</TYPE>
      <VALUE />
      <WHERE>
        <OPERATOR>=</OPERATOR>
        <VALUE>1000</VALUE>
      </WHERE>
    </SDLNID>
    <SDUPRC Visible="Y" order="" group="">
      <NAME />
      <TYPE>DECIMAL</TYPE>
      <VALUE />

```




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iWay

/ iWay Application Adapter for J.D. Edwards World User's Guide

Version 7.0.x and Higher

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