

# iWay

iWay Adapter for IBM WebSphere MQ (MQSeries)  
User's Guide  
Version 5 Release 5

Updated for J2EE CA 1.5

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## Preface

This document is written for system integrators who develop client interfaces between IBM WebSphere MQ (MQSeries) and other applications. It describes how to use the iWay Adapter for IBM WebSphere MQ (MQSeries) to integrate the MQSeries queue with the Sun Java System Application Server. It is assumed that readers understand Web technologies and have a general understanding of Microsoft Windows and UNIX systems.

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## How This Manual Is Organized

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The following table lists and describes the chapters in this manual.

Chapter		Contents
<b>1</b>	Introducing the iWay Adapter for IBM WebSphere MQ (MQSeries)	Provides an overview of the iWay Adapter for IBM WebSphere MQ (MQSeries) and discusses key features and functionality.
<b>2</b>	Creating XML Schemas or Web Services for IBM WebSphere MQ (MQSeries)	Describes how to use iWay Servlet Application Explorer as deployed to a Sun Java System Application Server.
<b>3</b>	Listening for Events	Describes how to use iWay Servlet Application Explorer to listen for events.
<b>4</b>	Using Web Services Policy-Based Security	Describes how Web services policy-based security works and how to configure it.
<b>5</b>	Management and Monitoring	Describes how you can use managing and monitoring tools provided by iBSE and JCA to gauge the performance of your run-time environment.

## What You Need to Know

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This document is written for system integrators who develop client-server interfaces between MQSeries and other applications. The iWay Adapter for IBM WebSphere MQ (MQSeries) provides a means to exchange real-time business data between MQSeries systems and other application, database, or external business partner systems. The adapter allows for inbound and outbound processing with MQSeries. It is assumed that readers have:

- General knowledge of the MQSeries environment and how to configure MQSeries tasks.
- General knowledge of MQSeries EAI concepts.
- Specific knowledge of MQSeries business applications.
- Knowledge of MQSeries processes and data models for the required application area.
- General knowledge of client-server concepts.

## Requirements

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- Installation of the proper iWay components.
- Developer access to MQSeries interfaces and components.

## Documentation Conventions

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The following table lists and describes the conventions that apply in this manual.

Convention	Description
<b>THIS TYPEFACE</b> or <i>this typeface</i>	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>underscore</u>	Indicates a default setting.
<i>this typeface</i>	Represents a placeholder (or variable) in a text paragraph, a cross-reference, or an important term.
<b>this typeface</b>	Highlights a file name or command in a text paragraph that must be lowercase.
<i>this typeface</i>	Indicates a button, menu item, or dialog box option 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.
	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.
...	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis points (...).
. . . . . .	Indicates that there are (or could be) intervening or additional commands.

## Customer Support

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Do you have questions about iWay Adapter for IBM WebSphere MQ (MQSeries)?

If you bought the product from a vendor other than iWay Software, contact your distributor.

If you bought the product directly from iWay Software, call Information Builders Customer Support Service (CSS) at (800) 736-6130 or (212) 736-6130. Customer Support Consultants are available Monday through Friday between 8:00 a.m. and 8:00 p.m. EST to address all your iWay Adapter for IBM WebSphere MQ (MQSeries) questions. Information Builders consultants can also give you general guidance regarding product capabilities and documentation. Please be ready to provide your six-digit site code number (xxxx.xx) when you call.

You can also access support services electronically, 24 hours a day, with InfoResponse Online. InfoResponse Online is accessible through our World Wide Web site, <http://www.informationbuilders.com>. It connects you to the tracking system and known-problem database at the Information Builders support center. Registered users can open, update, and view the status of cases in the tracking system and read descriptions of reported software issues. New users can register immediately for this service. The technical support section of [www.informationbuilders.com](http://www.informationbuilders.com) also provides usage techniques, diagnostic tips, and answers to frequently asked questions.

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

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

The following tables list the specifications our consultants require.

<b>Platform</b>	
<b>Operating System</b>	
<b>OS Version</b>	
<b>Product List</b>	
<b>Adapters</b>	
<b>Adapter Deployment</b>	For example, JCA, Business Services Engine, iWay Adapter Manager
<b>Container Version</b>	

The following table lists components. Specify the version in the column provided.

<b>Component</b>	<b>Version</b>
iWay Adapter	
EIS (DBMS/APP)	
HOTFIX / Service Pack	

The following table lists the types of Application Explorer. Specify the version (and platform, if different than listed previously) in the columns provided.

<b>Application Explorer Type</b>	<b>Version</b>	<b>Platform</b>
Swing		
Servlet		
ASP		

In the following table, specify the JVM version and vendor in the columns provided.

<b>Version</b>	<b>Vendor</b>

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

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

The following table lists error/problem files that might be applicable.

XML schema
XML instances
Other input documents (transformation)
Error screen shots
Error output files
Trace and log files
Log transaction



## **User Feedback**

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In an effort to produce effective documentation, the Documentation Services staff welcomes your opinions regarding this manual. Please use the Reader Comments form at the end of this manual to communicate suggestions for improving this publication or to alert us to corrections. You also can go to our Web site, <http://www.iwaysoftware.com> and use the Documentation Feedback form.

Thank you, in advance, for your comments.

## **iWay Software Training and Professional Services**

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Interested in training? Our Education Department offers a wide variety of training courses for iWay Software and other Information Builders products.

For information on course descriptions, locations, and dates, or to register for classes, visit our World Wide Web site, <http://www.iwaysoftware.com> or call (800) 969-INFO to speak to an Education Representative.

Interested in technical assistance for your implementation? Our Professional Services department provides expert design, systems architecture, implementation, and project management services for all your business integration projects. For information, visit our World Wide Web site, <http://www.iwaysoftware.com>.



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## CHAPTER 1

# Introducing the iWay Adapter for IBM WebSphere MQ (MQSeries)

### Topics:

- Features of the iWay Adapter for IBM WebSphere MQ (MQSeries)
- Using the iWay Application Explorer With the iWay Adapter for IBM WebSphere MQ (MQSeries)
- Deployment Information for the iWay Adapter for IBM WebSphere MQ (MQSeries)

The iWay Adapter for IBM WebSphere MQ (MQSeries) provides you with message connectivity between Java Applications. The following section provides an overview of the adapter and discusses key features and functionality.

## Features of the iWay Adapter for IBM WebSphere MQ (MQSeries)

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The IBM WebSphere® (formerly MQSeries®) messaging products enable application integration by helping business applications to exchange information across different platforms by sending and receiving data as messages. WebSphere consists of Native MQ and MQSeries JMS (MQJMS). These products take care of network interfaces, assure once-only delivery of messages, deal with communication protocols, dynamically distribute workloads across available resources, handle recovery after system problems occur, and help make programs portable. These actions are performed so that programmers can use their skills to handle key business requirements, instead of wrestling with underlying network complexities.

Using the iWay Adapter for IBM WebSphere MQ (MQSeries), your application can read messages arriving on a named queue, and route the responses to either another queue or to a non-MQ destination. Similarly, messages received through any channel can be directed to an MQ queue. During the message flow, the adapter can apply the standard document analysis, validation, transformation, and business logic capabilities to the message. An optional pending facility ensures that messages are retried if appropriate resources are not available at the time of execution.

The adapter also supports queue operations using the WebSphere client, so that each user does not need to install the full IBM WebSphere Server product.

Message Queuing provides applications with reliable communication and efficient use of network resources. Developers can focus on business logic instead of networking issues, because Message Queuing guarantees network communication.

- **Services:** Applications use this capability to direct messages to an MQSeries queue.
- **Events:** Applications use this capability to read messages arriving on an MQSeries queue.

After deployment, the iWay Adapter for IBM WebSphere MQ (MQSeries):

- Provides bi-directional message interactions and transactional support, facilitating the exchange of messages between IBM WebSphere MQSeries queues and other enterprise systems.
- Enables an application to read messages arriving on a queue and route those messages to another queue or to a non-MQSeries destination.
- Includes the iWay Application Explorer, a GUI tool that enables the configuration of the adapter.
- Enables messages to be directed to a named queue.

## Using the iWay Application Explorer With the iWay Adapter for IBM WebSphere MQ (MQSeries)

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The iWay Application Explorer uses an explorer metaphor for browsing objects. The explorer enables you to create XML schemas and Web services for interaction with an MQSeries system. External applications that interact with an MQSeries system through the iWay Adapter for IBM WebSphere MQ (MQSeries) use either XML schemas or Web services to pass data between the external application and the adapter.

External applications accessing an MQSeries queue via the iWay Adapter for IBM WebSphere MQ (MQSeries) use either the XML schema or Web service to pass data between the external application and the adapter.

The steps required to create XML schemas for Web services are illustrated in *Chapter 2, Creating XML Schemas or Web Services for IBM WebSphere MQ (MQSeries)*.

### Key Features of iWay Application Explorer

Key features of iWay Application Explorer include:

- The ability to connect to and explore a variety of application systems.
- Access to application system object metadata.
- A point-and-click process for generating XML schemas and Web services.

### Installing and Configuring the Servlet iWay Application Explorer

iWay Application Explorer must be deployed through a servlet container or application server (for example, Sun Java System Application Server, BEA WebLogic, Apache Tomcat, SAP J2EE Engine, or IBM WebSphere).

In addition, the MQSeries system must be installed, configured, and available for client access. Application Explorer need not reside on the same system as the MQSeries system, but network access is required.

For more information on installing and configuring the Java Servlet iWay Application Explorer, see the *iWay 5.5 Installation and Configuration* documentation.

## Deployment Information for the iWay Adapter for IBM WebSphere MQ (MQSeries)

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The iWay Adapter for IBM WebSphere MQ (MQSeries) works in conjunction with iWay Application Explorer with either of the following components:

- iWay Business Services Engine (iBSE)
- iWay Enterprise Connector for J2EE™ Connector Architecture (JCA)

iWay Application Explorer, used to configure MQSeries connections and create Web services and events, can be configured to work in a Web services environment in conjunction with the iWay Business Services Engine or with the iWay Enterprise Connector for J2EE Connector Architecture (JCA). When working in a JCA environment, the connector uses the Common Client Interface (CCI) to provide fast integration services using iWay Adapters instead of using Web services.

Both iBSE and the iWay connector for JCA are deployed to an application server with iWay Application Explorer and the adapters.

## **The iWay Business Services Engine (iBSE)**

The iWay Business Services Engine (iBSE) exposes—as Web services—enterprise assets that are accessible from adapters regardless of the programming language or the particular operating system.

iBSE 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

Web services is a distributed programming architecture that solves Enterprise Application Integration (EAI) hurdles that other programming models cannot. It enables programs to communicate with one another using a text-based, platform- and language-independent message format called XML.

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.

## **The iWay Enterprise Connector for J2EE Connector Architecture (JCA)**

The iWay Enterprise Connector for J2EE Connector Architecture (JCA) enables developers of JCA-compliant applications to deploy iWay adapters as JCA resources. The connector is supported on J2EE-compliant application servers such as Sun Java System Application Server.

The iWay Connector for JCA is distributed as a standard Resource Adapter Archive (RAR) for deployment to the application server. Thus, the connector can be used in systems that are non-compliant, although services such as pooled connections are not available.



Two connectors are distributed in the iWay installation package. One conforms to the JCA 1.0 specification, with extensions that allow for the consumption of events. The other conforms to the JCA 1.5 specification. The JCA 1.0 connector provides for event functionality through the configuration of ports and channels. When using the adapter in conjunction with a JCA 1.5 connector, there is no need to create event ports to dispose of event data. However, you must create a channel to enable event listening capabilities. For more information on event capabilities of the iWay JCA connectors, see Chapter 3, *Listening for Events*. For more information on installing and deploying both connectors, see *iWay Installation and Configuration*.

## Deployment Information Roadmap

The following table lists the location of deployment information for the iWay Adapter for IBM WebSphere MQ (MQSeries). A description of the iWay Business Services Engine (iBSE) and the iWay Enterprise Connector for J2EE Connector Architecture (JCA) follow the table.

Deployed Component	For more information, see
iWay Application Explorer	<ul style="list-style-type: none"> <li>• Chapters 2 and 3 of this guide</li> <li>• <i>iWay Installation and Configuration</i></li> <li>• <i>iWay Servlet Application Explorer User's Guide</i></li> </ul>
iWay Business Services Engine (iBSE)	<ul style="list-style-type: none"> <li>• <i>iWay Installation and Configuration</i></li> </ul>
iWay Enterprise Connector for J2EE Connector Architecture (JCA)	<ul style="list-style-type: none"> <li>• <i>iWay Connector for JCA User's Guide</i></li> <li>• <i>iWay Installation and Configuration</i></li> </ul>



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## CHAPTER 2

# Creating XML Schemas or Web Services for IBM WebSphere MQ (MQSeries)

### Topics:

- Overview
- Starting iWay Servlet Application Explorer
- Establishing a Target for MQSeries
- Creating a Schema
- Creating a Web Service

This section describes how to use iWay Servlet Application Explorer to create XML schemas or Web services as deployed to a Sun Java System Application Server.

## Overview

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External applications that access MQSeries through the adapter use either XML schemas or Web services to pass data between the external application and the adapter. You can use iWay Servlet Application Explorer to create the required XML schemas and Web services.

Application Explorer is a Web application running within a servlet container that is accessible through a Web browser. For more information on installing and configuring the iWay Servlet Application Explorer, see the *iWay 5.5 Installation and Configuration* documentation.

IBM WebSphere MQ must be installed, configured, and available for client access. Application Explorer need not reside on the same system as the application system being accessed, but network access is required.

## Starting iWay Servlet Application Explorer

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Before you can use iWay Servlet Application Explorer, you must start the Sun Java System Application Server. Then, you can open Application Explorer.

### Procedure: How to Open iWay Servlet Application Explorer

To open Application Explorer:

1. Enter the following URL in your browser window:

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

where:

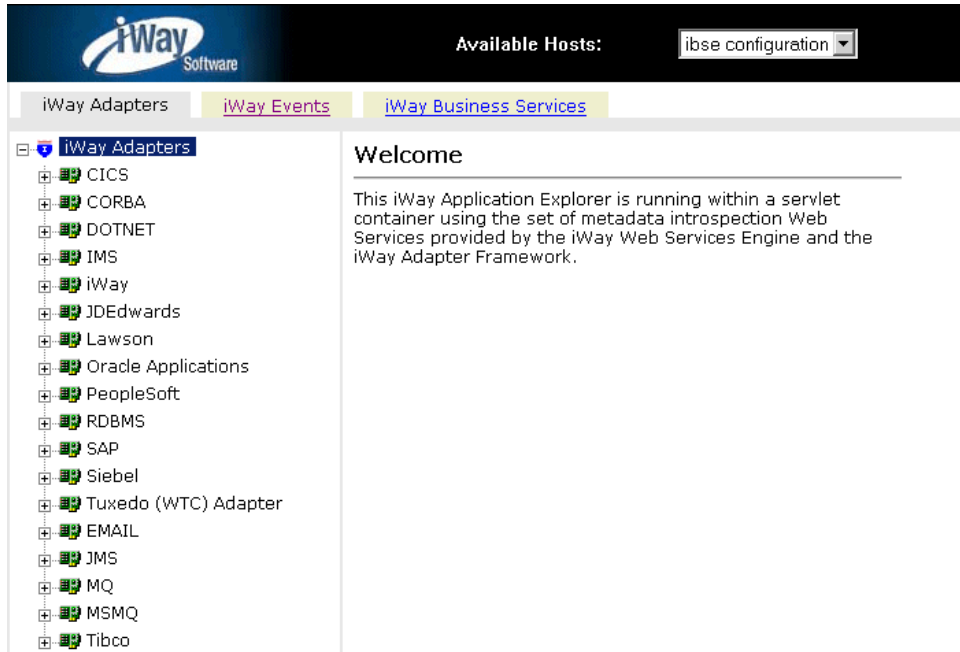
*hostname*

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

*port*

Is the port where the application server is listening.

After you open Application Explorer, the following Welcome window opens, showing the iWay Adapters, iWay Events, and iWay Business Services tabs. The iWay Adapters node is highlighted in the left pane as shown in the following image.



The Available Hosts drop-down menu in the upper right lists the iWay Connector for JCA or Servlet iBSE instance you can access.

For more information on adding instances, see the *iWay 5.5 Installation and Configuration* documentation.

You are now ready to create new targets for MQSeries.

## Establishing a Target for MQSeries

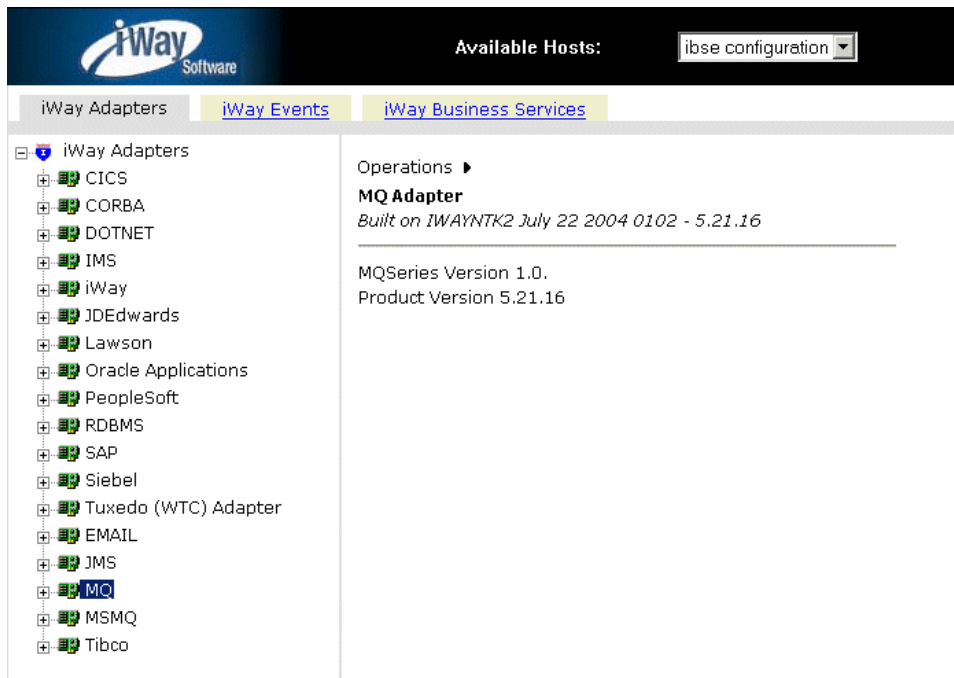
A target serves as your connection point and is automatically saved after you create it. You must establish a connection to MQSeries every time you start iWay Application Explorer or after you disconnect from the system.

### Creating a New Target

To connect to MQSeries for the first time, you must create a new target.

## Procedure: How to Create a New Target

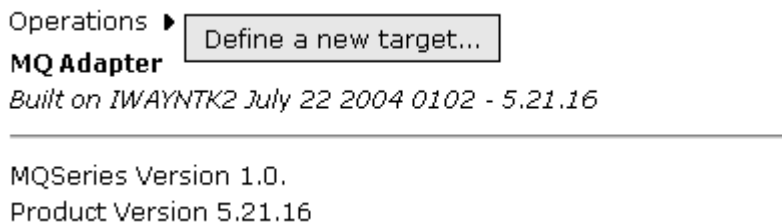
The following image shows the list of supported adapters in the left pane and information about the selected adapter in the right pane.



To create a new target:

1. In the left pane, click the *MQ* node.

Descriptive information (for example, title and product version) for the iWay Adapter for IBM WebSphere MQ (MQSeries) appears in the right pane as shown in the following image.



2. In the right pane, move the pointer over *Operations* and select *Define a new target*.  
The Add a new MQ target pane opens on the right as shown in the following image.

### Add a new MQ target

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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 new target.
- b. In the Description field, type a brief description of the target.
- c. From the Target Type drop-down list, select *MQSeries* to specify that you are connecting to an IBM WebSphere MQ system.

3. Click Next.

The Set connection info pane where you enter connection information for the target appears on the right, as shown in the following image.

**Set connection info**

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Queue Manager:	<input type="text" value="qm53"/>
Queue:	<input type="text" value="testing"/>
Correlation ID:	<input type="text"/>
Correlation ID Tag:	<input type="text"/>
Host:	<input type="text" value="edamxs2"/>
Port:	<input type="text" value="1414"/>
Channel:	<input type="text" value="SYSTEM.DEF.SVRCONN"/>
Report Queue:	<input type="text"/>
Priority:	<input type="text"/>
Expiry:	<input type="text"/>
CCSID:	<input type="text"/>
Format:	<input type="text"/>
Type:	<input type="text" value="datagram"/>
Persist:	<input type="text" value="queue"/>
reqcoa:	<input type="text" value="none"/>
reqcod:	<input type="text" value="none"/>
Return status or in document:	<input type="text" value="status"/>
Include user attributes:	<input type="checkbox"/>
Should any preemitter be avoided?:	<input type="checkbox"/>



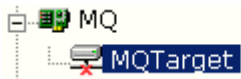
4. Provide information for the IBM WebSphere MQ parameters that are listed and described in the following table.

Parameter	Description
Queue Manager	Name of the MQSeries queue manager.
Queue	Case-sensitive name of the queue where request documents are received. Queues are named message repositories upon which messages accumulate until they are retrieved by programs that service those queues. Queues are managed by, a queue manager.
Correlation ID	The Correlation Id of the message to be received. Enter a value in valid hexadecimal string format.
Correlation ID Tag	
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. Use SYSTEM.DEF.SVRCONN.
Report Queue	Destination to which MQSeries must send requested CODs and COAs.
Priority	Sets the message priority level. The lowest priority is 0 and the highest priority is 9.
Expiry	Determines the length of time the message must remain on the queue waiting to be retrieved, in tenths of a second.
CCSID	Specifies the coded character set number to be used, overriding the machine configured CCSID. If omitted, the configured CCSID is used.
Format	Determines the format used for message data. The available choices include None, String, or MQRFH2.

Parameter	Description
Type	The options in the drop-down list are datagram, request, or response.
Persist	The options in the drop-down list are queue, persistent, or non-persistent.
reqcoa	Sets the report property of an outgoing MQSeries message to request that a Confirmation of Arrival (COA) is sent to the report queue. The options in the drop-down list are none, nodata, partial, or full.
reqcod	Sets the report property of an outgoing MQSeries message to request that a Confirmation of Delivery (COD) is sent to the report queue. The options in the drop-down list are none, nodata, partial, or full.
Return status or in document	The options in the drop-down list are status or input.
Include user attributes	Select the check box if you want the adapter to include user attributes.
Should any preemitter be avoided?	If you want the adapter to avoid any preemitters, select the check box.

5. Click *Finish*.

The following image shows the MQSeries target (MQTarget) that appears below the MQSeries node in the left pane.



You are now ready to connect to your MQSeries target.

## Connecting to a Target

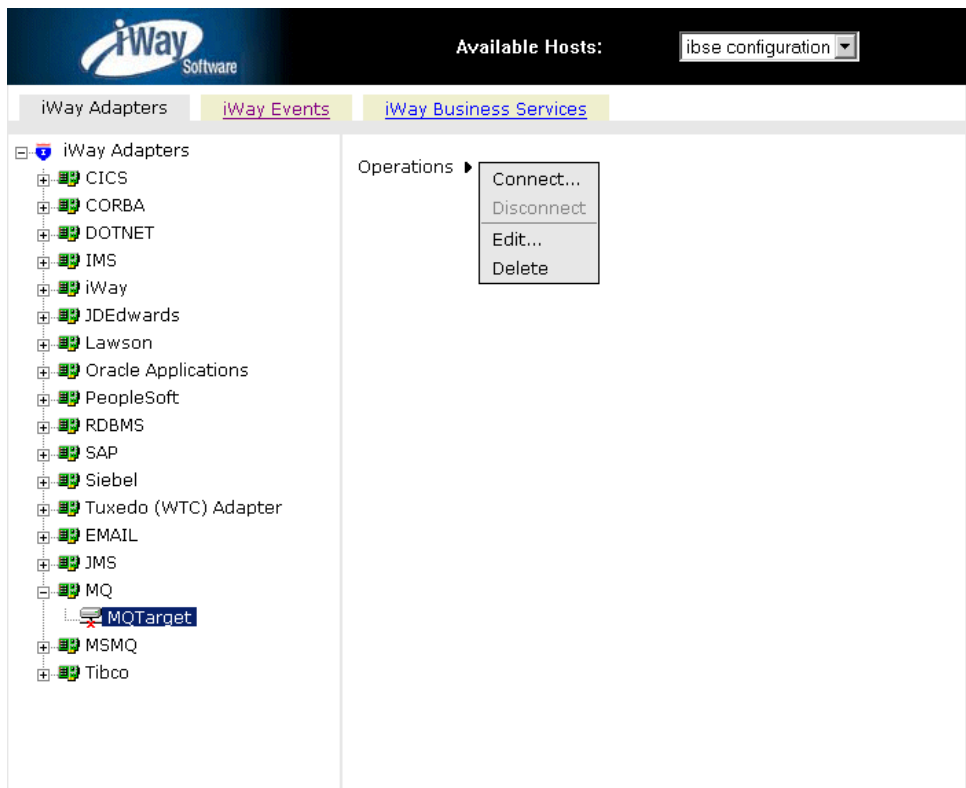
You must use the target you defined to connect to IBM WebSphere MQ.

### Procedure: How to Connect to a Target

To connect to a target:

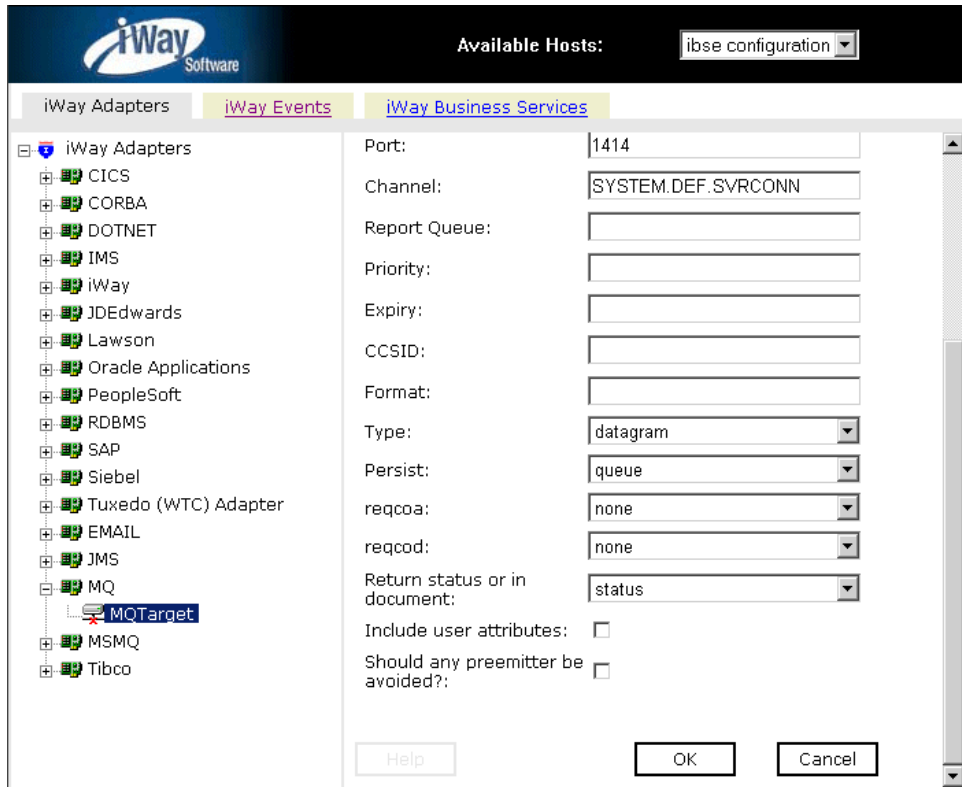
1. In the left pane, expand the *MQ* node and select the target you defined, for example, *MQTarget*.

The following image shows the *MQTarget* node selected in the left pane and the Operations menu expanded in the right pane.



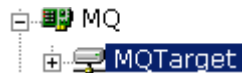
2. Move the pointer over *Operations* and select *Connect*.

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

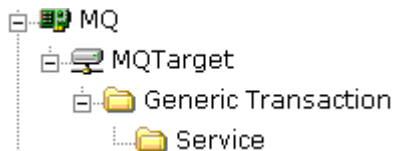


3. Click OK.

The following image shows that the x icon that appeared previously to the left of the MQTarget node has disappeared, indicating that the node is now connected.



The following image shows the expanded MQTarget node.



## Disconnecting From a Target

Although you can maintain multiple open connections to different application systems, it is a good practice to close connections when you are not using them.

### Procedure: How to Disconnect From a Target

To disconnect from a target:

1. In the left pane, select the target, for example, MQTarget, to which you are connected.
2. Move the pointer over *Operation* and select *Disconnect*.

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

## Modifying a Target

After you create a target for MQSeries using iWay Servlet Application Explorer, you can edit any of the information that you provided previously.

### Procedure: How to Edit a Target

To edit a target:

1. In the left pane, select the target, for example, MQTarget.
2. Move the pointer over *Operations* and select *Edit*.
3. Modify the connection information.
4. Click *Next* to continue editing additional fields.
5. After you complete your edits, click *Finish*.

## Deleting a Target

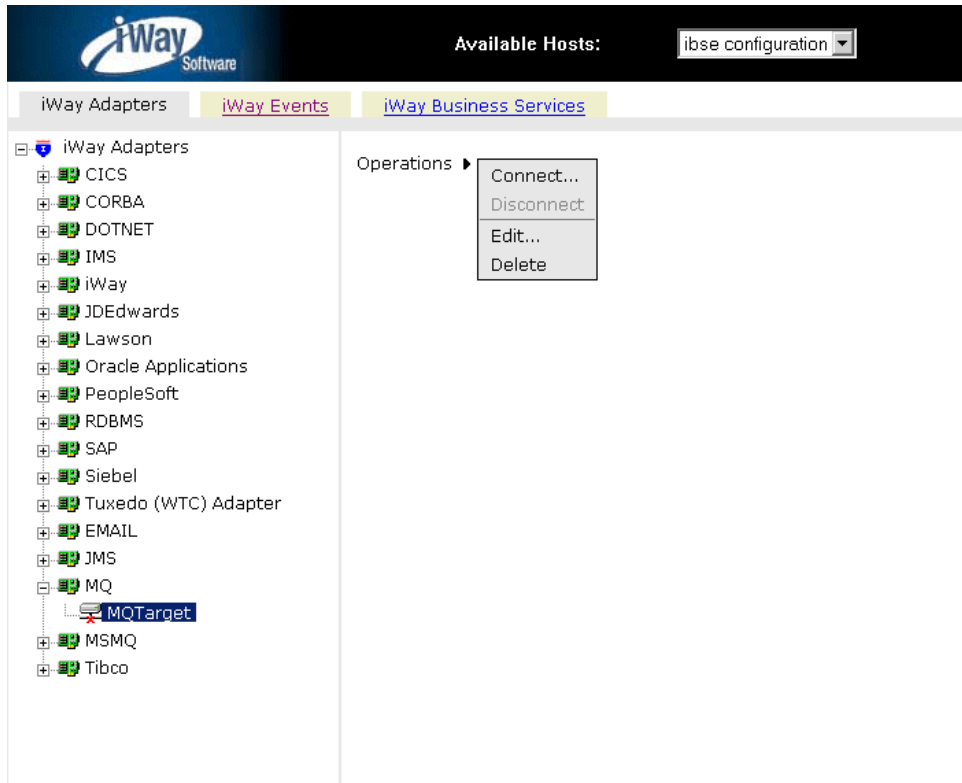
In addition to closing a target, you can delete a target that is no longer required. You can delete it whether or not it is closed. If open, the target automatically closes before it is deleted.

## Procedure: How to Delete a Target

To delete a target:

1. In the left pane, select the target, for example, MQTarget.

The following image shows the target selected in the left pane, and the operations menu expanded in the right pane.



2. Move the pointer over *Operations* and select *Delete*.
3. To delete the target you selected, click *OK*.

The MQTarget node disappears from the left pane.

## Creating a Schema

---

You can create service schemas for Business Services and Business Components using iWay Application Explorer.

When deployed to the Sun Java System Application Server and used in conjunction with an iBSE configuration, Application Explorer stores the schemas it creates in subdirectories under the Sun directory structure on the machine where the Sun Java System Application Server is installed. When used in conjunction with an iWay JCA configuration, Application Explorer stores schemas in a subdirectory of the iWay home directory.

When using the adapter with an iBSE configuration, the schemas are stored under a \schemas subdirectory in the Sun Java System Application Server installation directory, for example,

```
C:\SUN\AppServer\domains\domain1\applications\j2ee-apps
\ibse\ibse_war\wsdl\schemas\service\MQSeries\MQTarget
```

where:

*MQTarget*

Is the name of the connection to the MQSeries system as defined in Application Explorer. Under this directory, Application Explorer creates subdirectories containing schemas.

When using the adapter with a JCA configuration, the schemas are stored under a \schemas subdirectory of the iWay home directory, for example,

```
C:\Program Files\iWay55\config\base\schemas\MQSeries\MQTarget
```

where:

*MQTarget*

Is the name of the connection to the MQSeries system as defined in Application Explorer. Application Explorer stores the schemas in this directory.

The following procedure describes how to create schemas for the adapter when you deploy the iWay Adapter for IBM WebSphere MQ (MQSeries) for Sun Java System Application Server for use either in a JCA (iWay Enterprise Connector for J2EE Connector Architecture) environment or a Web services environment.

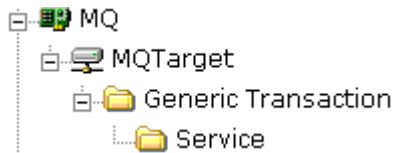
If you plan to deploy the iWay Adapter for IBM WebSphere MQ (MQSeries) in a Web services environment, see also *Creating a Web Service* on page 2-15.

## Procedure: How to Create an XML Schema

To generate service request and response schemas:

1. If you have not started the explorer, start Application Explorer and connect to your MQSeries system.
2. In the left pane, expand the MQTarget node and continue expanding nodes to the Service node.

The following image shows the nodes in the left pane expanded through the Service node.

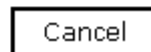
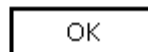


3. In the right pane, move the cursor over *Operations* and select *Generate Schema*.

Application Explorer builds schemas. A schemas table similar to the one in the following image appears in the right pane. This table contains three columns labeled Part, Root Tag, and Schema. The Schema column provides hyperlinks to the different schemas.

### Schemas

Part	Root Tag	Schema
Request	MQ	<a href="#">...</a>
Response	emitStatus	<a href="#">...</a>
Event	N/A	N/A
EventReply	N/A	N/A





4. To view a schema, click the ellipsis (...) in the row corresponding to the schema you want to view.

The following image shows an example of a request schema.

```

<?xml version="1.0" encoding="UTF-8" ?>
<!-- Generated by the iBSE 2004-08-06T21:48:11Z
-->
- <xs:schema
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns:eb="http://www.ebxml.org/namespaces/messa"
  elementFormDefault="qualified"
  attributeFormDefault="unqualified">
- <xs:element name="MQ">
  - <xs:complexType>
    - <xs:sequence>
      <xs:any minOccurs="0"
        maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
</xs:schema>

```

## Creating a Web Service

---

You can generate a business service (also known as a Web service) for MQSeries operations.

Ensure you properly configure the servlet iBSE. For more information on installing and deploying iWay components, see the *iWay Installation and Configuration* manual.

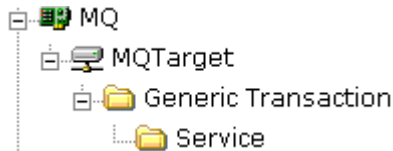
**Note:** In a J2EE Connector Architecture (JCA) implementation of iWay adapters, Web services are not available. When the adapters are deployed to use the iWay Connector for JCA, the Common Client Interface provides integration services using the iWay adapters. For more information, see the *iWay Installation and Configuration* guide. .

## Procedure: How to Generate a Web Service

To generate a Web service:

1. If you have not already connected, connect to your MQSeries system.
2. Expand the *MQ* node and continue expanding nodes to the Service node.

The following image shows the nodes in the left pane expanded through the Service node.



3. In the right pane, move the pointer over *Operations* and select *Create iWay Business Services*.

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

### Create Web Service for Service

---

- Create a new service
- Use an existing service

Help

< Back

Next >

Cancel

4. Choose whether to create a new service or use an existing service.

If you select **Use an existing service**, a drop-down list appears from which you must select the service.

If you select **Create a new service**, the Create Web Service pane opens on the right, as shown in the following image.

**Create Web Service for Service**

---

Service Name:

Description:

License:

- a. In the Service Name field, type a name to identify the Web service (under the Service node in the left pane of the iWay Business Services tab).
- b. In the Description field, type a brief description of the Web service.
- c. In the License field, select the license(s) with which you want to associate this business service. To select more than one, hold down the *Ctrl* key and click the licenses.

5. After you select an existing service or you create a new service, click *Next*.

A second Create Web Service pane opens on the right and prompts you for information about the method of the service.

### Create Web Service for Service

---

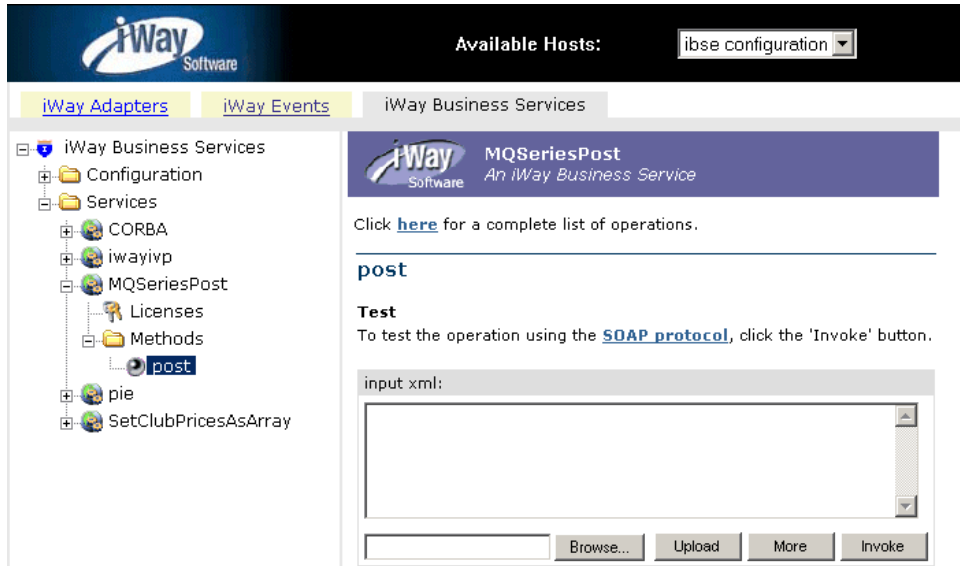
Method Name:

Description:

- a. In the Method Name field, type a name to specify the name of the method to be added to the business service.
- b. In the Description field, type a brief description of the method.

6. Click *Finish*.

Application Explorer switches the view to the iWay Business Services tab, and the new business service appears in the left pane as shown in the following image.



## Testing a Web Service for a Business Object

After you create a Web service, test it to ensure it functions properly. Application Explorer includes a test tool for testing a Web service.

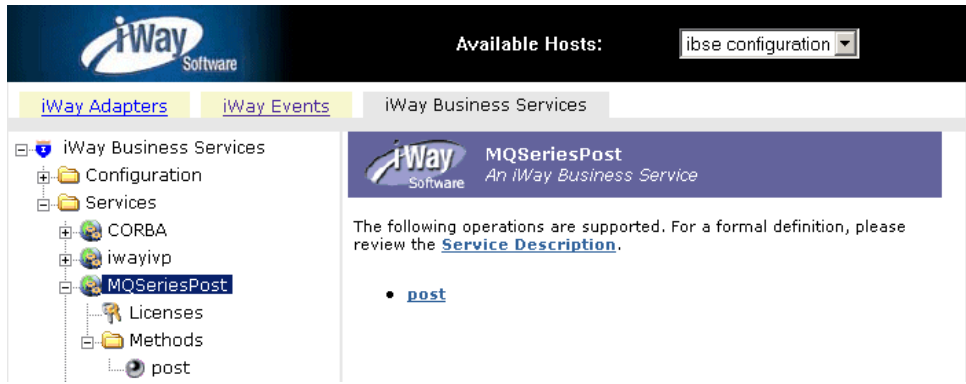
### Procedure: How to Test a Web Service for a Business Object

To test a Web service:

1. If you are not on the iWay Business Services tab of Application Explorer, click the tab to access business services.
2. If it is not expanded, expand the *iWay Business Services* node.
3. Expand the *Services* node.

4. Select the name of the business service you want to test.

The business service name appears as a hyperlink as shown in the following image.



5. In the right pane, click the business services hyperlink, for example, post.

The right pane shows the test option and provides a text field in which to paste the XML input as shown in the following image.



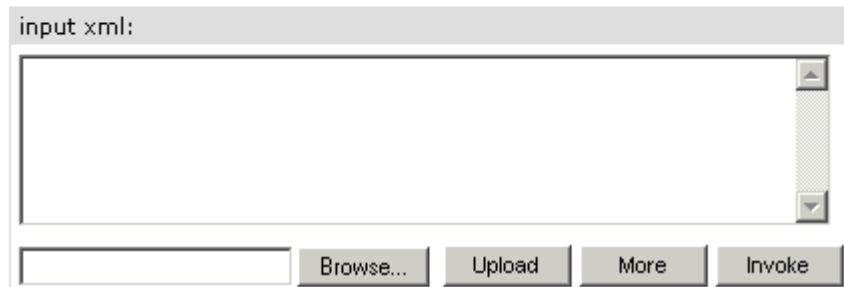
Click [here](#) for a complete list of operations.

---

## post

### Test

To test the operation using the [SOAP protocol](#), click the 'Invoke' button.



- 6.** Provide the appropriate XML input or browse to a file that can be uploaded.
- 7.** Click *Invoke*.

Application Explorer displays the results in a results pane on the right.





---

---

## CHAPTER 3

# Listening for Events

### Topics:

- Understanding iWay Event Functionality
- Creating an Event Port
- Creating a Channel

iWay Servlet Application Explorer deployed to a Sun Java System Application Server enables you to listen for IBM WebSphere messages arriving at an MQSeries system queue.

Although this section describes the Java™ servlet implementation of Application Explorer, other implementations provide the same functionality by means of similar graphical user interfaces.

## Understanding iWay Event Functionality

---

Events are generated as a result of a message arriving at a particular queue. You can use messages arriving at a queue to trigger an action in your application. For example, information in a message arriving at a queue can be used to update customer information in a database. If your application must perform 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 Servlet Application Explorer. To create an iWay 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 an Event Port* on page 3-2.

- Channel

A channel represents configured connections to particular instances of back-end or other types of systems. A channel binds one or more event ports to a particular listener managed by an adapter. For more information, see *Creating a Channel* on page 3-14.

**Important:** When using the adapter in conjunction with the iWay Connector for JCA 1.5, there is no need to create event ports to dispose of event data. However, you must create a channel to enable event listening capabilities.

## Creating an Event Port

---

The following procedures describe how to create an event port from the iWay Event Adapters tab for various dispositions using Application Explorer.

The following dispositions are available when using the servlet Application Explorer in conjunction with an iBSE implementation. You can switch between an iBSE and a JCA implementation by choosing one or the other from the drop-down menu in the upper right of the Application Explorer.

- File
- iBSE
- MSMQ
- JMS queue
- SOAP

- HTTP
- MQSeries

**Note:** The MAIL disposition option will be supported in a future release.

The following dispositions are available when using Application Explorer in conjunction with a JCA connector implementation.

- File
- HTTP
- JMS queue
- MQSeries

**Important:** When using the adapter in conjunction with the iWay connector for JCA 1.5, there is no need to create event ports to dispose of event data. However, you must create a channel to enable event listening capabilities.

### Procedure: How to Create an Event Port for the File Disposition

To create a specific event port for the File disposition:

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

The Create New Port pane appears on the right, as shown in the following image.

#### Create New Port

Choose parameters of the port that you wish to create.

Port Name:

Description:

Disposition Protocol:

Disposition:

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

When pointing Application Explorer to an **IBSE** deployment, use the following format:

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

For example:

```
ifile://D:\in\x.txt;errorTo=ifile://D:\error
```

When pointing Application Explorer to a **JCA** deployment, provide the full path to the directory.

**Important:** When using the adapter in conjunction with the iWay Connector for JCA 1.5, there is no need to create event ports to dispose of event data. However, you must create a channel to enable event listening capabilities.

The following table lists and describes the parameters for the File disposition.

Parameter	Description
location	The destination and file name of the document where event data is written, for example, C:\in\x.txt.
errorTo	Predefined port name or another disposition URL to which error logs are sent. Optional.

5. Click *OK*.

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

```

Operations ▶
Port Name   SampleFilePort
Description Writes event data to a file location.
Disposition ifile://C:\in\x.txt;errorTo=C:\error
Target     MQSeries
    
```

You are ready to associate the event port with a channel. For more information, see *How to Create an MQSeries Channel* on page 3-14.

### Procedure: How to Create an Event Port for iBSE

You can call a Web Service created through iWay Business Services Engine (iBSE).

To create an event port for iBSE:

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

The Create Event Port pane opens on the right.

- a. In the Port Name field, type a name for the port.

The name is used to build a repository entry as well as to identify the port.

- b. In the Description field, type a description for the port name you just created.
- c. From the Disposition Protocol drop-down list, select *iBSE*.
- d. In the Disposition field, enter an iBSE 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 defines the parameters for the disposition.

Parameter	Description
svcName	Name of the service created with iBSE.
mthName	Name of the method created for the Web service.
responseTo	Location where responses to the Web 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*.

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

You are ready to associate the event port with a channel. For more information, see *How to Create an MQSeries Channel* on page 3-14.

### Procedure: How to Create an Event Port for a JMS Queue

To create an event port for Sun Java System Message Queue:

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

The Create Event Port pane opens on the right.

- a. In the Port Name field, type a name for the new event port.
- 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 Application Explorer to an **IBSE** 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]
```

When pointing Application Explorer to a **JCA** deployment, use the following format:

```
jms:jmsqueue@jmsfactory;jndiurl=;jndifactory=;
```

**Important:** When using the adapter in conjunction with the iWay Connector for JCA 1.5, there is no need to create event ports to dispose of event data. However, you must create a channel to enable event listening capabilities.

The following table defines the parameters for the disposition.

Parameter	Description
queue	JNDI name of a queue to which events are emitted.
Connection Factory	A resource that contains information about the JMS Server. You must create the connection factory, for example: <code>sampleQCF</code>
jndiurl	The URL to use to contact the JNDI provider. The syntax of this URL depends on which JNDI provider is being used. This value corresponds to the standard JNDI property, <code>java.naming.provider.url</code> The URL of the Sun Java System Application Server is <code>iiop://localhost:3700</code> where: 3700 Is a default port.
jndifactory	Is JNDI context.INITIAL_CONTEXT_FACTORY and is provided by the JNDI service provider. For Sun Java System Application Server, this is <code>com.sun.jndi.cosnaming.CNCTXFactory</code>
user	Valid user name required to access a JMS server.
password	Valid password required to access a JMS server.
errorTo	Location where error documents are sent. Predefined port name or another full URL. Optional.

**5.** Click *OK*.

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

You are now ready to associate the event port with a channel. For more information, see *How to Create an MQSeries Channel* on page 3-14.

## Procedure: How to Create an Event Port for MSMQ

To create an event port for MSMQ:

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

The Create Event Port pane opens on the right.

- a. In the Port Name field, type a name for the port.  
The name is used to build a repository entry as well as to identify the port.
- b. In the Description field, type a description for the port name you just created.
- 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	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.  For private queues, enter <i>Private\$</i> .
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 event port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the event port you created.

You are ready to associate the event port with a channel. For more information, see *How to Create an MQSeries Channel* on page 3-14.

## Procedure: How to Create a Port for the SOAP Disposition

To create a port for a SOAP disposition:

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

The Create Event Port window opens in the right pane.

- a. In the Port Name field, type a name for the new event port.
- 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];responseTo=[pre-defined port name or another disposition URL];errorTo=[pre-defined port name or another disposition url]
```

The following table defines the parameters for the disposition

Parameter	Description
wsdl-url	The URL to the WSDL file that is required to create the SOAP message.
soapaction	Method that is called by the disposition.
responseTo	Predefined port name or another disposition URL to which response documents are sent. Optional.
errorTo	Location where error documents are sent. Predefined port name or another full URL. Optional.

5. Click *OK*.

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

You are ready to associate the event port with a channel. For more information, see *How to Create an MQSeries Channel* on page 3-14.

### Procedure: How to Create an Event Port for an HTTP Disposition

To create an event port for an HTTP disposition:

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

The Create iWay Event Port pane opens on the right.

- a. In the Port Name field, type a name for the new event port.
- b. In the Description field, type a brief description.
- c. From the disposition protocol drop-down list, select *HTTP*.
- d. From the Disposition field, enter an HTTP destination.

When pointing Application Explorer to an **IBSE** 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 (optional).

When pointing Application Explorer to a **JCA** deployment, use the following format:

```
http://host:port/uri
```

where:

*host:port*

Is the combination of the name of the host on which the Web server resides and the port on which the server is listening for the post operation.

*uri*

Is the universal resource identifier that completes the url specification.

**Important:** When using the adapter in conjunction with the iWay Connector for JCA 1.5, there is no need to create event ports to dispose of event data. However, you must create a channel to enable event listening capabilities.

5. Click *OK*.

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

You are now ready to associate the event port with a channel. For more information, see *How to Create an MQSeries Channel* on page 3-14.

### Procedure: How to Create an Event Port for MQSeries Disposition

To create an event port for MQSeries using Application Explorer:

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

The Create iWay Event Port pane opens on the right.

- a. In the Port Name field, type a name for the new event port.
- b. In the Description field, type a brief description.
- c. From the disposition protocol drop-down list, select *MQSeries*.
- d. In the Disposition field, enter an MQSeries destination.

When pointing Application Explorer to an **iBSE** deployment, use the following format:

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

When pointing Application Explorer to a **JCA** deployment, use the following format:

```
mq:qmanager@respqueue;host=;port=;channel=
```

**Important:** When using the adapter in conjunction with the iWay Connector for JCA 1.5, there is no need to create event ports to dispose of event data. However, you must create a channel to enable event listening capabilities.

The following table defines the parameters for the disposition.

Parameter	Description
qManager	Name of the queue manager to which the server must connect.
qName or respqueue	Name of the queue where messages are placed.
host	Host on which the MQ Server is located (MQ Client only).
port	The number to connect to an MQ Server queue manager (MQ client only).
channel	The 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 event port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the event port you created.

You are now ready to associate the event port with a channel. For more information, see *How to Create an MQSeries Channel* on page 3-14.

## Editing or Deleting an Event Port

The following procedures provide information on how to modify and delete an event port.

### Procedure: How to Edit an Event Port

To edit an existing event port:

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

The Edit Port panes opens on the right as shown in the following image.

#### Edit Port

Choose parameters of the port that you wish to edit.

Port Name:	<input type="text" value="SampleFilePort"/>
Description:	<input type="text" value="Writes event data to a file location"/>
Disposition Protocol:	<input type="text" value="FILE"/>
Disposition:	<input type="text" value="ifile://C:\in\x.txt;errorTo=C:\error"/>

3. Make the required changes to the Description, Disposition Protocol, or Disposition fields, and click *OK*.

**Note:** The Edit Port pane does not allow you to change the name of the port in the Port Name field.

### Procedure: How to Delete an Event Port

To delete an existing event port:

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

A confirmation dialog box opens.

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

The event port disappears from the list in the left pane.

## Creating a Channel

---

The following procedure describes how to create an MQSeries channel for your iWay Event. You must associate a port to a channel before you can make the channel active.

### Procedure: How to Create an MQSeries Channel

To create a channel using iWay Application Explorer:

1. Click the *iWay Events* tab.

The adapters that appear in the left pane support events.

2. Expand the *MQ* node.

The ports and channels nodes appear in the left pane as shown in the following image.



3. Select the *channels* node.

4. In the right pane, move the pointer over *Operations* and select *Add a new channel*.

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

### Add a new MQ 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 the channel, for example, MQSeriesChannel.
- b. In the Description field, type a brief description.
- c. From the drop-down list, select *MQ Listener*.

5. Click *Next*.

The Edit Channels pane opens on the right as shown in the following image and includes eight fields as described in the table that follows the image.

### Edit channels

Queue Manager:	<input type="text" value="qm53"/>
Queue:	<input type="text" value="testing"/>
Host:	<input type="text" value="edamxs2"/>
Port:	<input type="text" value="1414"/>
Channel:	<input type="text" value="SYSTEM.DEF.SVRCONN"/>
ccsid:	<input type="text"/>
Timeout Interval:	<input type="text"/>
Java Encoding:	<input type="text"/>





6. Provide the values listed and described in the following table.

Parameter	Description
Queue Manager	Name of the MQSeries queue manager.
Queue	Case-sensitive name of the queue where request documents are received. Queues are named message repositories where messages accumulate until they are retrieved by programs that service those queues. Queues are managed by a queue manager.
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).

Parameter	Description
Channel	Case-sensitive name of the channel that connects with the remote MQ Server queue manager. Use SYSTEM.DEF.SVRCONN.
ccsid	Specifies the coded character set number to be used, overriding the machine configured CCSID. If omitted, the configured CCSID is used.
Timeout Interval	Indicates the frequency in seconds that the MQ event returns control to the Sun Java System Application Server to determine if a stop or recycle of the MQ event was requested. The MQ event is constantly connected to the queue to retrieve incoming messages. The default value is 2 seconds.
Java Encoding	If not already specified in the incoming document, specify the character-encoding schemes that are supported by the Java platform (for example, UTF-8, UTF16, US-ASCII, or ISO-8859-1).

7. Click *Next*.

The Select Ports pane opens, as shown in the following image. A list of available ports appear in Available field on the left, and the ports that are currently associated appear in the Current field on the right.

**Select Ports**

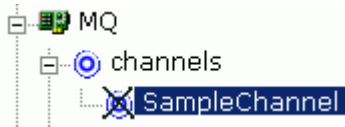
- a. Select an event port from the list of available ports.
- b. Click the single right arrow button to transfer the port to the list of current ports. To associate all the event ports, click the double right arrow button.



**8.** Click *Finish*.

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

The channel also appears under the channels node in the left pane as shown in the following image of a sample channel. The X over the icon indicates that the channel is currently disconnected. You must start the channel to activate your event configuration.



**9.** Select the channel and then, in the right pane, move the pointer over *Operations* and select *Start the channel*.

The channel you created becomes active.

The X over the icon disappears.

**10.** To stop the channel, move the pointer over *Operations* and select *Stop the channel*.

### Procedure: How to Edit a Channel

To edit an existing 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 channels pane opens.
3. Make the required changes to the channel configuration and click *Finish*.

### Procedure: How to Delete a Channel

To delete an existing 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.
3. To delete the channel you selected, click *OK*.  
The channel disappears from the list in the left pane.

## *Creating a Channel*

---

---

## CHAPTER 4

# Using Web Services Policy-Based Security

### Topics:

- iWay Business Services Policy-Based Security
- Configuring iWay Business Services Policy-Based Security

Servlet Application Explorer provides a security feature called iWay Business Services policy-based security. The following topics describe how this feature works and how to configure it.

## iWay Business Services Policy-Based Security

---

iWay Business Services provide a layer of abstraction between the back-end business logic they invoke and the user or application running the business service. This enables easy application integration but raises the issue of controlling the use and execution of critical and sensitive business logic that is run as a business service.

Servlet Application Explorer controls the use of business services that use adapters with a feature called policy-based security. This feature enables an administrator to apply *policies* to iWay Business Services (iBS) to deny or permit their execution.

A *policy* is a set of privileges associated with the execution of a business service that can be applied to an existing or new iBS. When you assign specific rights or privileges inside a policy, you need not recreate privileges for every iBS that has security issues in common with other iWay Business Services. Instead, you can use one policy for many iWay Business Services.

The goal is to secure requests at both the transport and the SOAP request level that is transmitted on the wire. Some policies do not deal with security issues directly but affect the run-time behavior of the business services to which they are applied.

The iBSE administrator creates an instance of a policy type, names it, associates individual users and/or groups (a collection of users), and then applies the policy to one or more business services.

You can assign a policy to an iBS or to a method within an iBS. If a policy is applied only to a method, other methods in that iBS are not governed by it. However, if a policy is applied to the iBS, all methods are governed by it. At run time, the user ID and password that are sent to iBSE in the SOAP request message are checked against the list of users for all policies applied to the specific iBS. The Resource Execution policy type is supported and dictates who can or cannot execute the iBS.

When a policy is not applied, the default value for an iBS is to “grant all.” For example, anyone can execute the iBS until the Resource Execution policy is associated to the iBS. At that time, only users granted execution permission, or those who do not belong to a group that was denied execution permissions, have access to the iBS.

## Configuring iWay Business Services Policy-Based Security

Before you create instances of policies, you must have a minimum of one user or one group to associate to an instance. You can create users and groups using Servlet Application Explorer. For more information, see *Create a User to Associate With a Policy* on page 4-3 or *Create a Group to Associate With a Policy* on page 4-5.

An execution policy governs who can execute the business service to which the policy is applied. For more information, see *Create an Execution Policy* on page 4-8.

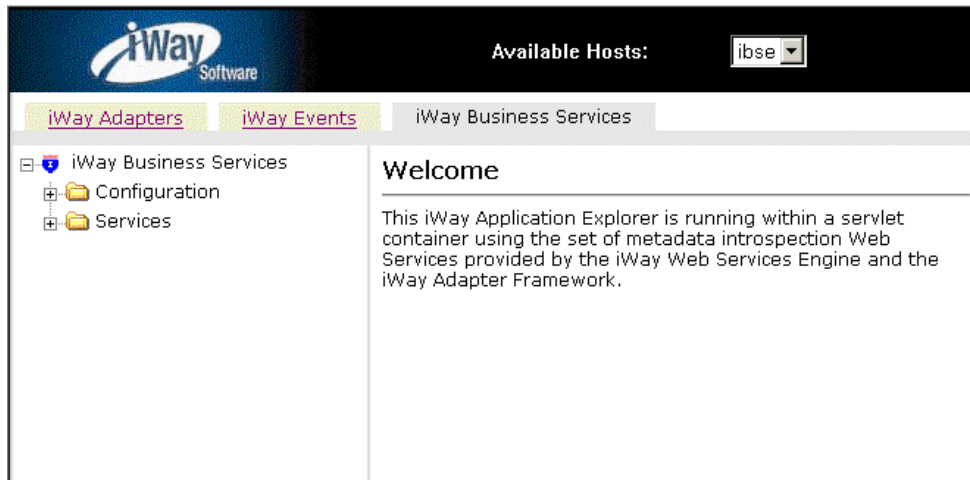
You configure the IP and Domain Restriction policy type slightly differently from other policy types. The IP and Domain Restriction policy type controls connection access to iBSE and therefore, need not be applied to an individual business service. You need not create a policy, however, you must enable the Security Policy option in Servlet Application Explorer. For more information, see *Configure IP and Domain Restrictions* on page 4-12.

### Procedure: How to Create a User to Associate With a Policy

To create a user to associate with a policy:

1. Open *Servlet Application Explorer*.

The following image shows the window that opens and includes three tabs corresponding to Service Adapters, Event Adapters, and iWay Business Services. The iWay Business Services tab is active and displays a Welcome screen on the right. The image shows the iWay Business Services node expanded in the left pane.



- a. Click the *iWay Business Services* tab.
- b. Expand the *Configuration* node.

- c. Expand the *Security* node.
  - d. Expand the *Users and Groups* node.
  - e. Select *Users*.
2. In the right pane, move the pointer over *Operations* and select *Add*.

The following image shows the Add a new user pane that opens and includes fields where you enter a user name, a password, and a description of the user. The pane includes a Help button, an OK button to instruct the system to accept inputs, and a Cancel button to escape from the pane.

---

**Add a new user**

---

Name:

Password:

Description:

- a. In the Name field, type a user ID.
- b. In the Password field, type the password associated with the user ID.
- c. In the Description field, type a description of the user (optional).

3. Click *OK*.

The following image opens and shows a new user added to the configuration. It includes a definition of a user and a user ID and description.

Operations ▶



A user is an object that can be granted or denied permissions to run iWay Business Services. A user can belong to one or more groups. Policies that specify particular rights can be associated with user.

User Id	Description
<input type="checkbox"/> bse1	

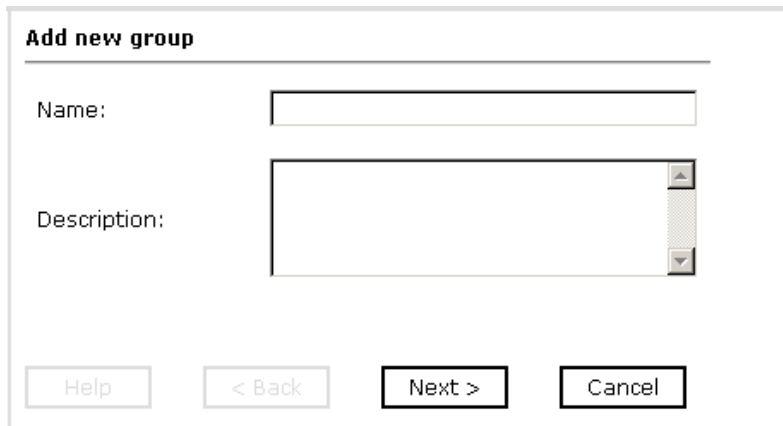
### Procedure: How to Create a Group to Associate With a Policy

To create a group to associate with a policy:

1. Open *Servlet Application Explorer*.
  - a. Click the *iWay Business Services* tab.
  - b. Expand the *Configuration* node.
  - c. Expand the *Security* node.
  - d. Expand the *Users and Groups* node.
  - e. Select *Groups*.

2. In the right pane, move the pointer over *Operations* and click *Add*.

The following image shows the Add new group pane that opens with fields where you enter a name and a description for the group. To continue after typing inputs, click the *Next* button. The pane also includes a *Help* button, a *Back* button to return to the previous screen, and a *Cancel* button to escape from the pane.



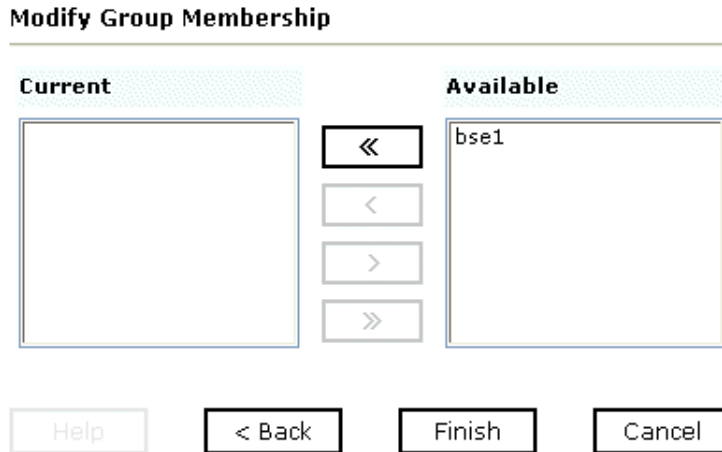
The image shows a dialog box titled "Add new group". It contains two input fields: "Name:" with a single-line text box, and "Description:" with a multi-line text area. At the bottom, there are four buttons: "Help", "< Back", "Next >", and "Cancel". The "Next >" button is highlighted with a black border.

- a. In the Name field, type a name for the group.
- b. In the Description field, type a description for the group (optional).



**3. Click Next.**

The following image shows the Modify Group Membership pane where you can move users to or from a group using the arrow keys to move them between the Current and Available lists and then clicking the Finish button. The pane includes a Help button, a Back button to return to the previous screen, and a Cancel button to escape from the pane.



You can either highlight a single user in the list of available users and add it to the current list by clicking the left arrow, or you can click the double left arrow to add all users in the list of available users to the group.

4. After you select a minimum of one user, click *Finish*.

The new group is added.

The following image shows a pane with a new group added to the configuration. It includes a definition of a group and the group name and description.

Operations ▶



## Groups

A group is an object that can be granted or denied permissions to run iWay Business Services. A group is used as a container for one or more users. Policies that specify particular rights can be associated with a group.

Group name	Description
<input type="checkbox"/> newgroup	

### Procedure: How to Create an Execution Policy

To create an execution policy:

1. Open *Servlet Application Explorer*.
  - a. Click the *iWay Business Services* tab.
  - b. Expand the *Configuration* node.
  - c. Select *Policies*.

The following image shows the Policies pane on the right where you apply a policy. The Operations menu becomes available with three options, Build/Rebuild, Add, and Refresh.



2. Move the pointer over *Operations* and click *Add*.

The following image shows the Add a new policy pane that opens with fields for entering the name, type, and description of the policy. To continue, click the *Next* button. The pane includes a *Help* button, a *Back* button to return to the previous screen, and a *Cancel* button to escape from the pane.

**Add a new policy**

Name:

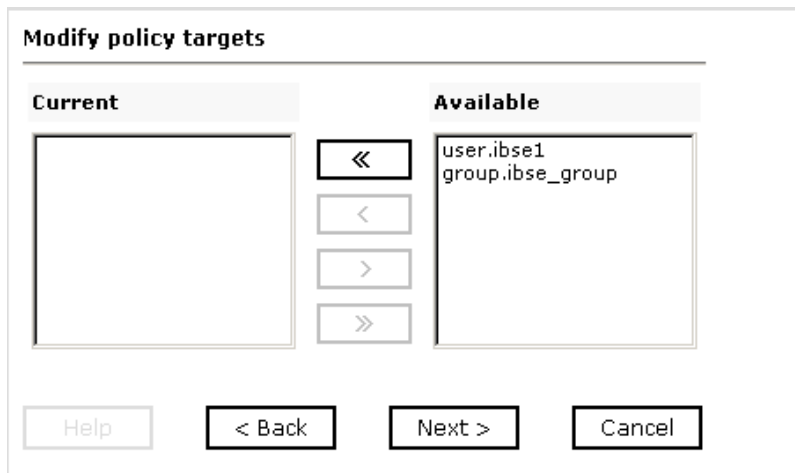
Type:

Description:

- a. In the Name field, type a name for the policy.
- b. From the Type drop-down list, select *Execution*.
- c. In the Description field, type a description for the policy (optional).

3. Click *Next*.

The following image shows the Modify policy targets pane that opens and includes a list of current and available targets and arrow buttons to move targets from one list to the other. The pane also includes a Help button, a Back button to return to the previous screen, a Next button to continue to the next screen, and a Cancel button to escape from the pane.



4. Select a minimum of one user or group from the Available pane.

**Note:** This user ID is checked against the value in the user ID element of the SOAP header sent to iBSE in a SOAP request.

5. Click *Next*.

The following image shows the Modify policy permissions pane that opens and includes drop-down lists where you can select to grant or deny permission to members and then click a button to finish. The pane also includes a Help button, a Back button to return to the previous screen, and a Cancel button to escape from the pane.

Member Id	Permission
user.ibse1	Deny
group.ibse_group	Deny

Buttons: Help, < Back, Finish, Cancel

6. To assign whether users or groups may execute the iBSE, select *Grant* to permit execution or *Deny* to restrict execution from a Permission drop-down list.
7. Click *Finish*.

The following image shows the pane that summarizes your configuration. It includes a definition of policies and the name, type, and description of the policies.

Operations ▶

**Policies**

You can configure policies for the iWay Business Services Engine to manage resource execution, service routing, data restrictions and failover/recovery actions.

Name	Type	Description
<input type="checkbox"/> ibse_policy	Execution	

## Procedure: How to Configure IP and Domain Restrictions

To configure IP and domain restrictions:

1. Open *Servlet Application Explorer*.
  - a. Select the *iWay Business Services* tab.
  - b. Expand the *Configuration* node.
  - c. Expand the *Security* node.
  - d. Select *IP and Domain*.
2. In the right pane, move the pointer over *Operations* and click *Add*.

The following image shows the Add a new IP/Domain pane that opens where you enter information for the IP/Domain in four fields. You must select a type of restriction from a drop-down list before you can enter information in the IP(Mask)/Domain field. The pane also includes a Help button, an OK button to instruct the system to accept inputs, and a Cancel button to escape from the pane.

**Add a new IP/Domain**

IP(Mask)/Domain:

Type:

Access Control:

Description:

- a. From the Type drop-down list, select the type of restriction.
- b. In the IP(Mask)/Domain field, type the IP or domain name using the following guidelines.

If you select Single (Computer) from the Type drop-down list, you must provide the IP address for that computer. If you only know the DNS name for the computer, click *DNS Lookup* to obtain the IP Address based on the DNS name.

If you select Group (of Computers), you must provide the IP address and subnet mask for the computer group.

If you select Domain, you must provide the domain name, for example, yahoo.com.

3. From the Access Control drop-down list, select *Grant* to permit access or *Deny* to restrict access for the IP addresses and domain names you are adding.
4. Click OK.

The following image shows the pane that opens and summarizes your configuration including the domain name, whether access is granted or denied, and a description (optional).

Operations ▶



## IP and Domain

You can configure the iWay Business Services Engine to use policies that control access from a single IP address, a group of IP addresses, or all addresses within a particular domain.

IP(Mask) / Domain	Access	Description
<input type="checkbox"/> test	Deny	





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## CHAPTER 5

# Management and Monitoring

### Topics:

- Managing and Monitoring Services and Events Using iBSE
- Managing and Monitoring Services and Events Using the JCA Test Tool
- Setting Engine Log Levels
- Migrating Repositories
- Exporting or Importing Targets
- Retrieving or Updating Web Service Method Connection Information
- Starting or Stopping a Channel Programmatically

After you create services and events using Servlet Application Explorer, you can use managing and monitoring tools provided by the iWay Business Services Engine (iBSE) and the iWay Connector for JCA to measure the performance of your run-time environment. This section describes how to configure and use these features.

## Managing and Monitoring Services and Events Using iBSE

---

iWay Business Services Engine (iBSE) provides a console to manage and monitor services and events currently in use and to display resource usage and invocation statistics. These indicators can help you adjust your environment for optimum efficiency.

The following monitoring levels are available for services:

- System
- Service
- Method

The following monitoring levels are available for events:

- System
- Channel
- Port

### Procedure: How to Configure Monitoring Settings

To configure monitoring settings:

1. Ensure that your application server is started.
2. To access the monitoring console, enter the following URL in your Web browser:

`http://localhost:port/ibse/IBSEConfig`

where:

`localhost`

Is the machine where the application server is running.

`port`

Is the HTTP port for the application server.

The following image shows the iBSE Settings window that opens. It lists property names and includes fields where you can enter values for each property. To configure system settings, the System pane contains drop-down lists for selecting language, encoding, the debug level, and the number of asynchronous processors. It also contains a field where you can enter a path to the adapters lib directory.

To configure security settings, the Security pane contains fields for typing the Admin User name and the associated password and a check box for specifying policy.

To configure repository settings, the Repository pane contains a drop-down list for selecting the repository type, fields to type information for the repository URL, driver, user, and password, and a check box where you can enable repository pooling. In the upper and lower right of the window is a Save button. In the lower left of the window is an option to click to access more configuration settings.

iBSE Settings:		Save
Property Name	Property Value	
<b>System</b>		
Language	English	
Adapter Lib Directory	C:\Program Files\iWay55\lib	
Encoding	UTF-8	
Debug Level	NONE	
Number of Async. Processors	0	
<b>Security</b>		
Admin User	iway	
Admin Password	****	
Policy	<input type="checkbox"/>	
<b>Repository</b>		
Repository Type	File System	
Repository Url	file://C:\Program Files\iWay55\bea\ibe	
Repository Driver		
Repository User		
Repository Password		
Repository Pooling	<input type="checkbox"/>	
<a href="#">More configuration...</a>		
		Save

3. Click *More configuration*.

**Tip:** To access the monitoring console directly, enter the following URL in your Web browser:

<http://localhost:port/ibse/IBSEStatus>

where:

*localhost*

Is the machine where the application server is running.

*port*

Is the HTTP port for the application server.

The following image shows the iBSE Monitoring Settings window that opens. It lists property names and includes a corresponding field where you can enter values for each property. The Monitoring pane contains a drop-down list for selecting the repository type, fields to type information for the repository URL, driver, user, and password, and a check box where you can enable repository pooling. The Auditing pane contains an option button to click to specify whether to store a message and a drop-down list where you can select the maximum messages to store. At the bottom of the window is a row of buttons that you can click to save your configuration, view events, or view services. The Save History button is inactive. After you enter properties and choose whether to save or view, you can click the Start Monitoring button.

Property Name	Property Value
<b>Monitoring</b>	
Repository Type	File System
Repository Url	file://C:\Program Files\IWay55\bea
Repository Driver	
Repository User	
Repository Password	
Repository Pooling	<input type="checkbox"/>
<b>Auditing</b>	
Store Message	<input type="radio"/> yes <input checked="" type="radio"/> no
Max Message Stored	10,000
Save Configuration Save History View Events View Services	
Start Monitoring	

- a. In the Monitoring pane, from the Repository Type drop-down list, select the type of repository you are using.
- b. To connect to the database in the Repository Url field, type a JDBC URL.
- c. To connect to the database in the Repository Driver field, type a JDBC Class.
- d. To access the monitoring repository database, type a user ID and password.
- e. To enable pooling, click the *Repository Pooling* check box.
- f. In the Auditing pane, select *yes* if you want to store messages.

This option is disabled by default.

**Note:** You must start and then, stop monitoring to enable this option.

- g. Select the maximum number of messages you want to store.

By default, 10,000 is selected.

**Note:** Depending on your environment and the number of messages that are exchanged, storing a large number of messages may affect system performance. If you need more information about your system resources, consult your system administrator.

- h. Click *Save Configuration*.
4. Click *Start Monitoring*.  
iBSE begins to monitor all services and events currently in use. If you selected the option to store messages, iBSE stores messages.
5. To stop monitoring, click *Stop Monitoring*.

## Procedure: How to Monitor Services

To monitor services:

1. Ensure that your application server is started.
2. From the iBSE Monitoring Settings window, click *Start Monitoring*.
3. Click *View Services*.

The following image shows the System Level Summary (Service Statistics) window that opens. The Web Service Methods pane contains a drop-down list where you select a service. On the right, space is reserved for a drop-down list of methods that will appear. The Statistics pane contains a table with a summary of service statistics and two drop-down lists where you can select a successful or failed invocation to view more information about that service. At the bottom of the window is a home button to click to return to the iBSE Monitoring Settings window.

The screenshot shows a window titled "Service Statistics". It is divided into two main sections: "Web Service Methods" and "Statistics".

**Web Service Methods**

Service	Method
all	

**Statistics**

Total Time	55 min
Total Request Count	1
Total Success Count	1
Total Error Count	0
Average Request Size	409.0 bytes
Average Response Size	665.0 bytes
Average Execution Time	656 ms
Last Execution Time	828 ms
Average Back End Time	530 ms
Last Back End Time	765 ms
Successful Invocations	select a correlation id
Failed Invocations	select a correlation id

At the bottom right of the window is a button labeled "< home".

The system level summary provides services statistics at a system level.

The following table consists of two columns, one that lists the name of each statistic and the other that describes the corresponding service statistic.

<b>Statistic</b>	<b>Description</b>
Total Time	Total amount of time iBSE monitors services. The time starts after you click Start Monitoring in the iBSE Monitoring Settings window.
Total Request Count	Total number of services requests that were made during the monitoring session.
Total Success Count	Total number of successful service executions.
Total Error Count	Total number of errors that were encountered.
Average Request Size	Average size of an available service request.
Average Response Size	Average size of an available service response size.
Average Execution Time	Average execution time for a service.
Last Execution Time	Last execution time for a service.
Average Back End Time	Average back end time for a service.
Last Back End Time	Last back end time for a service.
Successful Invocations	A list of successful services arranged by correlation ID. To retrieve more information for a service, you can select the service from the drop-down list.
Failed Invocations	A list of failed services arranged by correlation ID. To retrieve more information for a service, you can select the service from the drop-down list.

4. Select a service from the drop-down list.

The following image shows the System Level Summary (Service Statistics) window that opens. The Web Service Methods pane contains a drop-down list on the left where you select a service and a drop-down list on the right where you select a service method. The Statistics pane contains a table with a summary of service statistics and two drop-down lists. To view more information about that service, you can select it from the Successful Invocations or Failed Invocations drop-down list. To suspend or resume a service, you can click a button in the lower right. To return to the iBSE Monitoring Settings window, you click the home button (also located in the lower right).

### Service Statistics

**Web Service Methods**

Service	Method
<input type="text" value="E0100033"/>	<input type="text" value="all methods"/>

---

**Statistics**

Total Time	1 hrs
Total Request Count	1
Total Success Count	1
Total Error Count	0
Average Request Size	409.0 bytes
Average Response Size	665.0 bytes
Average Execution Time	656 ms
Last Execution Time	656 ms
Average Back End Time	530 ms
Last Back End Time	530 ms
Successful Invocations	<input type="text" value="select a correlation id"/>
Failed Invocations	<input type="text" value="select a correlation id"/>

- a. To stop a service at any time, click *Suspend Service*.
- b. To restart the service, click *Resume Service*.



5. Select a method for the service from the Method drop-down list.

The following image shows the Method Level Summary (Service Statistics) window that opens. The Web Service Methods pane contains a drop-down list on the left where you select a service and a drop-down list on the right where you select a service method. The Statistics pane contains a table with a summary of service statistics and two drop-down lists. To view more information about that service, you can select it from the Successful Invocations or Failed Invocations drop-down list. To suspend or resume a service, you can click a button in the lower right. To return to the iBSE Monitoring Settings window, you click the home button (also located in the lower right).

### Service Statistics

**Web Service Methods**

Service

Method

---

**Statistics**

Total Time	1 hrs
Total Request Count	1
Total Success Count	1
Total Error Count	0
Average Request Size	409.0 bytes
Average Response Size	665.0 bytes
Average Execution Time	656 ms
Last Execution Time	656 ms
Average Back End Time	530 ms
Last Back End Time	530 ms
Successful Invocations	<input style="width: 90%;" type="text" value="select a correlation id"/>
Failed Invocations	<input style="width: 90%;" type="text" value="select a correlation id"/>

6. For additional information about a successful service and its method, select a service based on its correlation ID from the Successful Invocation drop-down list.

The following image shows the Invocation Level Statistics window that opens. The Message Information pane contains a table of information about the message. The Client Information pane contains a table of information about the client. The Detail pane contains a table that shows the size of the request and response messages, with options to click to view the respective XML documents. In the lower right of the window is a home button to click to return to the iBSE Monitoring Settings window.

The screenshot shows a window titled "Invocation Statistics" with three main sections: "Message Information", "Client Information", and "Detail".

**Message Information**

Received	2004-09-14 12:04:16.312
Sent to adapter	2004-09-14 12:04:16.406
Received from adapter	2004-09-14 12:04:16.936
Responded	2004-09-14 12:04:16.968
Status	SUCCESS

**Client Information**

Client IP	127.0.0.1
Client Host Name	127.0.0.1
User Name	

**Detail**

Message	Size
<a href="#">Request Message</a>	409 bytes
<a href="#">Response Message</a>	665 bytes

In the bottom right corner of the window, there is a button labeled "< home".

7. To view the XML request document in your Web browser, click *Request Message*.  
You can also view the XML response document for the service.
8. To return to the iBSE Monitoring Settings window, click *home*.

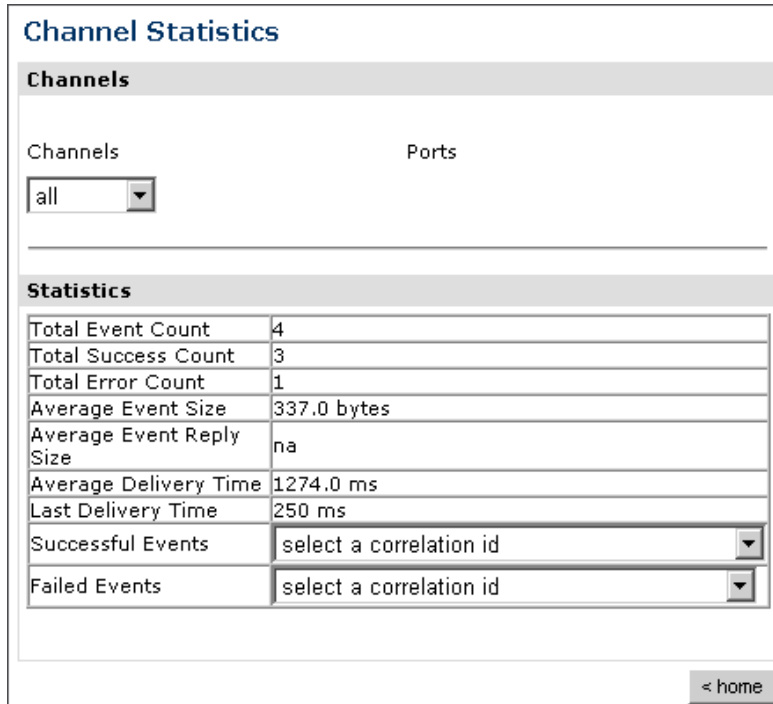
### Procedure: How to Monitor Events

To monitor events:

1. Ensure that your application server is started.
2. In the iBSE Monitoring Settings window, click *Start Monitoring*.

3. Click *View Events*.

The following image shows the System Level Summary (Channel Statistics) window that opens. The Channels pane contains a drop-down list on the left where you select a channel. On the right, space is reserved for a drop-down list of ports that will appear. The Statistics pane contains a table with a summary of event statistics and two drop-down lists where you can select a successful or failed event to view more information about that event. In the lower right of the window is a home button to click to return to the iBSE Monitoring Settings window.



The system level summary provides event statistics at a system level.

The following table consists of two columns, one that lists the name of each statistic and the other that describes the corresponding event statistic.

Statistic	Description
Total Event Count	Total number of events.
Total Success Count	Total number of successful event executions.
Total Error Count	Total number of errors that were encountered.

<b>Statistic</b>	<b>Description</b>
Average Event Size	Average size of an available event request.
Average Event Reply Size	Average size of an available event response.
Average Delivery Time	Average delivery time for an event.
Last Delivery Time	Last delivery time for an event.
Successful Events	List of successful events arranged by correlation ID. To retrieve more information for an event, select the event from the drop-down list.
Failed Events	List of failed events arranged by correlation ID. To retrieve more information for an event, select the event from the drop-down list.

4. Select a channel from the drop-down list.

The following image shows the Channel Level Event Summary (Channel Statistics) window that opens. The Channels pane contains a drop-down list on the left where you select a channel and a drop-down list on the right where you select a port. The Statistics pane contains a table with a summary of event statistics and two drop-down lists where you can select a successful or failed event to view more information about that event. In the lower right of the window is a button to click to suspend or resume a channel and a home button to click to return to the iBSE Monitoring Settings window.

### Channel Statistics

**Channels**

Channels

Ports

---

**Statistics**

Total Event Count	3
Total Success Count	2
Total Error Count	1
Average Event Size	401.0 bytes
Average Event Reply Size	na
Average Delivery Time	1542.0 ms
Last Delivery Time	250 ms
Successful Events	<input type="text" value="select a correlation id"/>
Failed Events	<input type="text" value="select a correlation id"/>

- a. To stop a channel at any time, click *Suspend Channel*.
- b. To start the channel, click *Start Channel*.

5. From the Ports drop-down list, select a port for the channel.

The following image shows the Port Level Event Summary (Channel Statistics) window that opens. The Channels pane contains a drop-down list on the left where you select a channel and a drop-down list on the right where you select a port. The Statistics pane contains a table with a summary of event statistics and two drop-down lists where you can select a successful or failed event to view more information about that event. In the lower right of the window is a button to click to suspend or resume a channel and a home button to click to return to the iBSE Monitoring Settings window.

**Channel Statistics**

**Channels**

Channels: TestChan ▾      Ports: TestPort ▾

---

**Statistics**

Total Event Count	2
Total Success Count	2
Total Error Count	0
Average Event Size	446.0 bytes
Average Event Reply Size	na
Average Delivery Time	2189.0 ms
Last Delivery Time	na
Successful Events	select a correlation id ▾
Failed Events	select a correlation id ▾

Suspend Channel      Start Channel

< home

6. For more information about a successful event and its port, select an event based on its correlation ID from the Successful Events drop-down list.

The following image shows the Event Level Statistics (Message Statistics) window that opens. The Message Information pane contains a table of information pertaining to the event message. The Messages pane contains a table that shows the size of the event and reply messages, with an option to view an XML document of the event message. In the lower right of the window is a home button to click to return to the iBSE Monitoring Settings window.

The screenshot shows a window titled "Message Statistics". It contains two main sections: "Message Information" and "Messages".

**Message Information**

Received At	2004-09-14 12:18:20.842
Disposed At	● TestPort
Delivered At	2004-09-14 12:18:23.562

**Messages**

Detail	size
<a href="#">Event Message</a>	446 bytes
Reply Message	na

In the bottom right corner of the window, there is a button labeled "< home".

- a. To view the XML event document in your Web browser, click *Event Message*.
- b. To return to the iBSE Monitoring Settings window, click *home*.

## Managing and Monitoring Services and Events Using the JCA Test Tool

---

The JCA Test Tool, which is also known as the JCA Installation Verification Program (IVP), provides a console to manage and monitor services and events currently in use and to display resource usage and invocation statistics. These indicators can help you adjust your environment for optimum efficiency.

### Procedure: How to Manage and Monitor Services Using the JCA Test Tool

To manage and monitor services using the JCA Test Tool:

1. Open a Web browser to:

<http://localhost:port/iwjcaivp>

where:

[localhost](#)

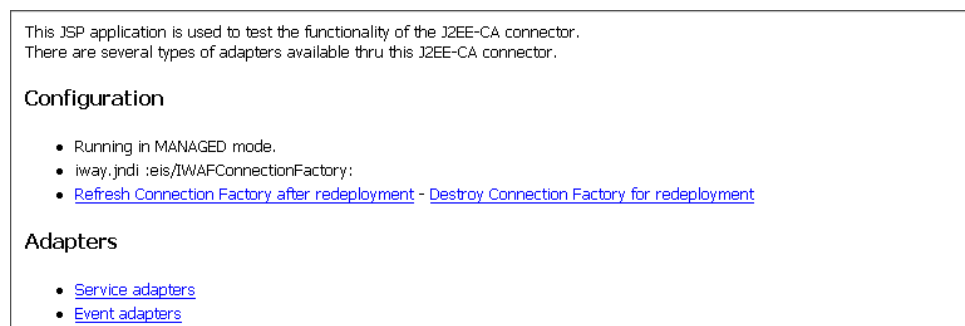
Is the name of the machine where your application server is running.

[port](#)

Is the HTTP port for the application server, for example:

<http://localhost:7001/iwjcaivp>

The following image shows the JCA Test Tool page that opens. The page contains a description of the function of the tool and configuration information, including options to change your connection settings. It also provides options for viewing service or event adapters.



The JCA Test Tool runs in managed mode by default.

2. Perform the following steps to monitor the latest service adapter configuration.

**Note:** You must perform these steps for every new adapter target that is created using a JCA implementation of Application Explorer. In addition, you also must perform these steps for every new JCA configuration that is created using Application Explorer.



- a. Click *Destroy Connection Factory for redeployment*.
  - b. Redeploy the JCA connector.
  - c. In the JCA Test Tool, click *Refresh Connection Factory after redeployment*.
3. Click *Service adapters*.

The following image shows the Service Adapters page that opens. The page provides a live list of available service adapters and a list of targets configured for a specific adapter. In the lower right is a Back button to click to return to the previous page.

#### Service Adapters

Select an adapter from the following list to review its available targets (configurations)

- [CICS](#)
- [Clarify\(CBO\)](#)
- [EMAIL](#)
- [IMS](#)
- [JDEdwards](#)
- [JMS](#)
- [Lotus](#)
- [MQ](#)
- [MSMQ](#)
- [Oracle Applications](#)
- [PeopleSoft](#)
- [RDBMS](#)
- [SAP](#)
- [Siebel](#)
- [Telnet](#)
- [Tibco](#)

#### Targets for MQ

No targets configured for this adapter.

<< Back

4. Select a service adapter to monitor.

The following image shows the page that opens. The left side provides a live list of available service adapters and a list of any targets configured for a specific adapter. The upper right side shows statistics for a selected target. The middle right has a User field and a Password field. The lower right contains a box where you type or paste an input document. Below the input box is a Send button to click to send a request for a test service and a Reset button to click to reset the fields. In the lower right is a Back button to click to return to the previous page.

The screenshot displays the JCA Test Tool interface. On the left, under 'Service Adapters', there is a list of adapters: CICS, Clarify(CBO), EMAIL, IMS, JMS, Lotus, MQ, MSMQ, Oracle Applications, RDBMS, Telnet, Tibco, and Tuxedo. Below this is 'Targets for MQ' with a single entry: TestService. On the right, 'Statistics for MQ target TestService' shows: TotalRequestCount: 0, TotalSuccessCount: 0, TotalErrorCount: 0, AverageExecutionTime: 0 msec, and LastExecutionTime: 0 msec. Below the statistics is the 'Request for MQ target TestService' section, which includes a 'User:' field, a 'Password:' field, and a large 'Input Doc:' text area. At the bottom of the form are 'Send' and 'Reset' buttons, and a '<< Back' button in the bottom right corner.

- a. Click the desired target for your service adapter.
- b. In the Request area, enter a user name and password.
- c. In the Input Doc area, enter a request document that was created from the request schema for your service.

5. Click *Send*.

The following image shows the updated statistics that appear for your service if the request is successful. The statistics include the total number of requests, successes, and errors and the average and last execution time in milliseconds.

TotalRequestCount	: 0
TotalSuccessCount	: 0
TotalErrorCount	: 0
AverageExcecutionTime	: 0 msec.
LastExcecutionTime	: 0 msec.

## Procedure: How to Manage and Monitor Events Using the JCA Test Tool

To manage and monitor events using the JCA Test Tool:

1. Open a Web browser to:

<http://localhost:port/iwjcaivp>

where:

*localhost*

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

*port*

Is the HTTP port for the application server, for example:

<http://localhost:7001/iwjcaivp>

The following image shows the JCA Test Tool page that opens. The page contains a description of the function of the tool and configuration information, including options to change your connection settings. It also provides options for viewing service or event adapters.

This JSP application is used to test the functionality of the J2EE-CA connector. There are several types of adapters available thru this J2EE-CA connector.

**Configuration**

- Running in MANAGED mode.
- `iway.jndi :eis/IWAFConnectionFactory:`
- [Refresh Connection Factory after redeployment](#) - [Destroy Connection Factory for redeployment](#)

**Adapters**

- [Service adapters](#)
- [Event adapters](#)

The JCA Test Tool runs in managed mode by default.

2. Perform the following steps to monitor the latest event adapter configuration.

**Note:** You must perform these steps for every new adapter target that is created using a JCA implementation of Application Explorer. In addition, you must also perform these steps for every new JCA configuration that is created using Application Explorer.

- a. Click *Destroy Connection Factory for redeployment*.
  - b. Redeploy the JCA connector.
  - c. In the JCA Test Tool, click *Refresh Connection Factory after redeployment*.
3. Click *Event adapters*.

The Event Adapters page opens.

4. Select the event adapter to monitor.
5. Click the desired channel for your event adapter.
6. Click *start*.

The following image shows the updated statistics for your channel and the port. The statistics include the total number of requests, successes, and errors and the average and last execution time in milliseconds. There are options to click in the upper right of the page to start or refresh the channel.

Current channel Statistics	
Commands: <a href="#">start</a> <a href="#">refresh</a>	
Active: false	
TotalRequestCount	: 0
TotalSuccessCount	: 0
TotalErrorCount	: 0
AverageExcecutionTime	: 0 msec.
LastExcecutionTime	: 0 msec.
Statistics for port 'fileIN'	
TotalRequestCount	: 0
TotalSuccessCount	: 0
TotalErrorCount	: 0
AverageExcecutionTime	: 0 msec.
LastExcecutionTime	: 0 msec.

## Setting Engine Log Levels

---

The following section describes how to set engine log levels for Servlet iBSE and JCA. For more information, see the *iWay 5.5 Installation and Configuration* documentation.

## Procedure: How to Enable Tracing for Servlet iBSE

To enable tracing for Servlet iBSE:

1. Open the Servlet iBSE configuration page at:

`http://localhost:port/ibse/IBSEConfig`

where:

`localhost`

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

`port`

Is the HTTP port for the application server, for example:

`http://localhost:7001/ibse/IBSEConfig`

2. In the System pane, from the Debug drop-down list, select the level of tracing.
3. Click *Save*.

Tracing information is written to the `ibselogs` directory where your application server accesses or has expanded Servlet iBSE.

## Procedure: How to Enable Tracing for JCA

To enable tracing for JCA:

1. Open the extracted `ra.xml` file in a text editor.
2. Locate and change the following setting:

**LogLevel.** This setting can be set to `DEBUG`, `INFO`, or `ERROR`.

```
<context-param>
<config-property>
  <config-property-name>LogLevel</config-property-name>
  <config-property-type>java.lang.String</config-property-type>
  <config-property-value></config-property-value>
</config-property>
```

For example:

```
<config-property-value>DEBUG</config-property-value>
```

A directory in the configuration directory contains the logs.

- a. Review the logs generated by your application server.
  - b. Leave the remainder of the previous file unchanged.
3. Save the file and exit the editor.
  4. Redeploy the connector.

## Migrating Repositories

---

During design time, a repository is used to store metadata created when using Application Explorer to configure adapter connections, browse EIS objects, configure services, and configure listeners to listen for EIS events. For more information on configuring repositories, see the *iWay 5.5 Installation and Configuration* documentation.

The information in the repository also is referenced at run time. For management purposes, you can migrate iBSE and JCA repositories to new destinations without affecting your existing configuration. For example, you may want to migrate a repository from a development environment to a production environment.

### File Repositories

If you want to migrate a File repository to another destination, copy the `ibserrepo.xml` file from the following path:

```
drive:\Program Files\iWay55\ibse\ibserrepo.xml
```

where:

```
drive
```

Is the location of your iWay 5.5 installation.

You can place the `ibserrepo.xml` file in a new location that is a root directory of the iBSE Web application, for example:

```
drive:\ProductionConfig\ibse\ibserrepo.xml
```

### iBSE Repositories

The following topic describes how to migrate an iBSE repository that is configured for Oracle. You can follow the same procedure if you want to migrate an iBSE repository that is configured for Microsoft SQL Server 2000, Sybase, or DB2. However, when you are configuring a new environment, you must execute the script that creates the repository tables for your database. In addition, verify that all required files and drivers for your database are in the class path. For more information on configuring repositories, see the *iWay 5.5 Installation and Configuration* documentation.

**Note:** The following procedure allows you to migrate only Web services. If migrating event handling information is one of your requirements, you must migrate at the database level. For more information, see *Migrating Event Handling Configurations* on page 5-26.

## Procedure: How to Migrate an iBSE Repository Configured for Oracle

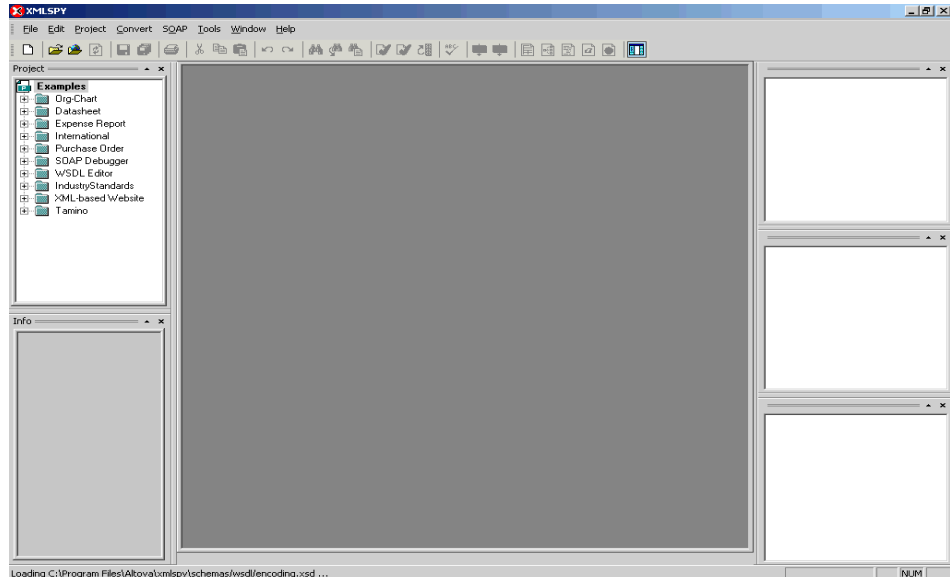
To migrate an iBSE repository that is configured for Oracle:

1. Copy the iBSE configuration service URL, for example:

<http://localhost:7777/ibse/IBSEServlet/admin/iwconfig.ibs?wsdl>

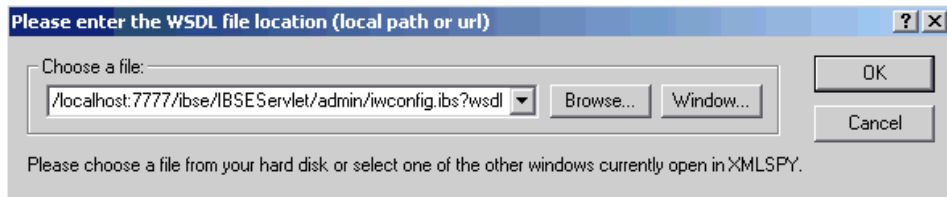
2. Open a third party XML editor, for example, XMLSPY.

The following image shows the XMLSPY window. The upper left has a Project pane that contains a tree of sample files, and the lower left has a blank Info pane. The middle pane is blank. The right side is divided into three blank panes.



3. From the SOAP menu, select *Create new SOAP request*.

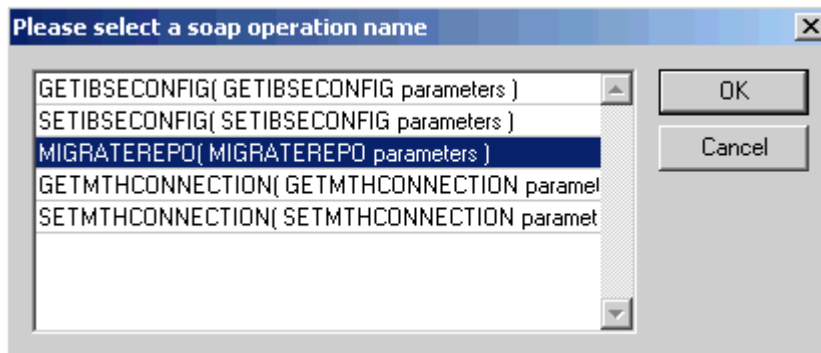
The following image shows the WSDL file location dialog box that opens, where you enter a local path or URL. The dialog includes Browse, Window, OK, and Cancel buttons.



4. In the Choose a file field, paste the iBSE configuration service URL.

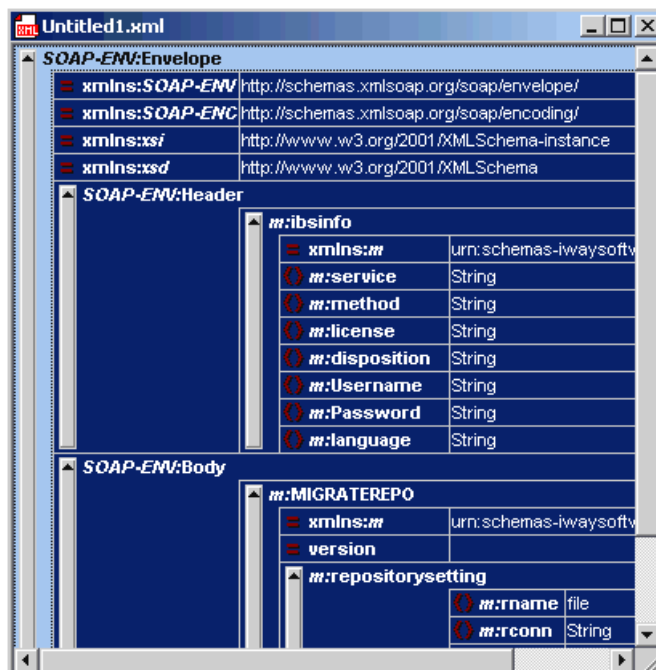
5. Click **OK**.

The following image shows the soap operation name dialog box that opens with a list of available control methods. You can select from the list and click **OK** or to escape from the dialog box, you can click **Cancel**.



6. Select the *MIGRATEREPO(MIGRATEREPO parameters)* control method and click **OK**.

The following image shows a portion of the window that opens with the structure of the SOAP envelope. It includes information about location and schemas.





7. Locate the *Text view* icon in the tool bar.

In the following image, the pointer points to the Text view icon.



8. To display the structure of the SOAP envelope as text, click the *Text view* icon.

The <SOAP-ENV:Header> tag is not required and can be deleted from the SOAP envelope.

9. Locate the following section:

```
<m:MIGRATEREPO
xmlns:m="urn:schemas-iwaysoftware-com:jul2003:ibse:config" version="">
<m:repositorysetting>
<m:rname>oracle</m:rname>
<m:rconn>String</m:rconn>
<m:rdriver>String</m:rdriver>
<m:ruser>String</m:ruser>
<m:rpwd>String</m:rpwd>
</m:repositorysetting>
<m:servicename>String</m:servicename>
</m:MIGRATEREPO>
```

- a. For the <m:rconn> tag, replace the String placeholder with the repository URL where you want to migrate your existing iBSE repository.

For example, the Oracle repository URL has the following format:

```
jdbc:oracle:thin:@[host]:[port]:[sid]
```

- b. For the <m:rdriver> tag, replace the String placeholder with the location of your Oracle driver.

**Note:** This is an optional tag. If you do not specify a value, the default Oracle JDBC driver is used.

- c. For the <m:ruser> tag, replace the String placeholder with a valid user name to access the Oracle repository.
- d. For the <m:rpwd> tag, replace the String placeholder with a valid password to access the Oracle repository.

### 10. Perform one of the following migration options.

If you want to migrate a **single** Web service from the current iBSE repository, enter the Web service name in the `<m:servicename>` tag, for example:

```
<m:servicename>Service1</m:servicename>
```

If you want to migrate **multiple** Web services from the current iBSE repository, duplicate the `<m:servicename>` tag for each Web service, for example:

```
<m:servicename>Service1</m:servicename>  
<m:servicename>Service2</m:servicename>
```

If you want to migrate **all** Web services from the current iBSE repository, remove the `<m:servicename>` tag.

### 11. From the SOAP menu, select *Send request to server*.

Your iBSE repository and the Web services you specified migrate to the new Oracle repository URL that you specified.

## JCA Repositories

The following procedure describes how to migrate a JCA repository. For more information on configuring JCA repositories, see the *iWay 5.5 Installation and Configuration* documentation.

### Procedure: How to Migrate a JCA Repository

To migrate a JCA repository:

1. Navigate to the location of your JCA configuration directory where the repository schemas and other information is stored, for example:  

```
C:\Program Files\iway55\config\base
```
2. Locate and copy the *repository.xml* file.
3. Place this file in a new JCA configuration directory to migrate the existing repository.

Your JCA repository migrates to the new JCA configuration directory.

## Migrating Event Handling Configurations

This topic describes how to migrate your iBSE repositories at a database level for Microsoft SQL Server 2000, Oracle, Sybase, or DB2. You can use this information to migrate event handling information, for example, port or channel configurations.

## Procedure: How to Migrate a Microsoft SQL Server 2000 Repository

To migrate a Microsoft SQL Server 2000 repository:

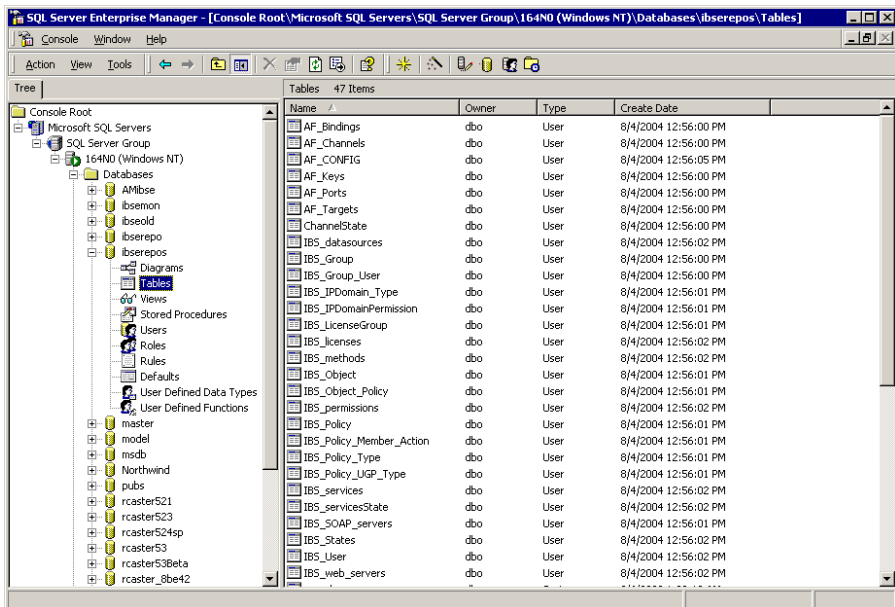
1. Open a command prompt and navigate to the iWay setup directory. The default location on Windows is:

```
C:\Program Files\iWay55\etc\setup
```

This directory contains SQL to create the repository tables in the following file:

```
iwse.sql
```

You can use iwse.sql to create the database tables that are used by iBSE. For example, the following image shows the tree in the left pane and tables in the right pane. The tables are listed by name in one column with corresponding columns for information about owner, type, and the date the table was created.



For more information on configuring the Microsoft SQL Server 2000 repository, see the *iWay 5.5 Installation and Configuration* documentation.

2. To migrate the tables that were created by the iwse.sql script for iBSE, use your Microsoft SQL Server 2000 database tool set. For more information, consult your database administrator.

## Procedure: How to Migrate an Oracle Repository

To migrate an Oracle repository:

1. Open a command prompt and navigate to the iWay setup directory. The default location on Windows is:

```
C:\Program Files\iWay55\etc\setup
```

This directory contains SQL to create the repository tables in the following files:

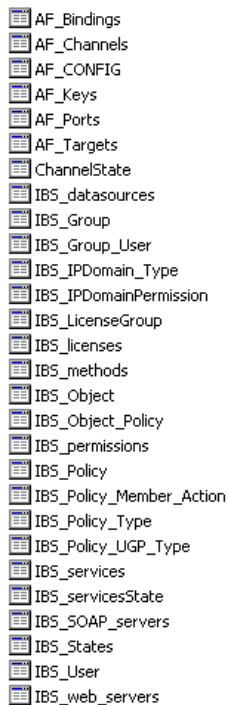
For Oracle 8:

```
iwse.ora
```

For Oracle 9:

```
iwse.ora9
```

2. To create the Oracle database tables that are used by iBSE, use the SQL script as shown in the example in the following image that shows a list of tables.



A screenshot of a list of Oracle database tables. Each table name is preceded by a small icon of a document with a grid. The list includes:

- AF\_Bindings
- AF\_Channels
- AF\_CONFIG
- AF\_Keys
- AF\_Ports
- AF\_Targets
- ChannelState
- IB5\_datasources
- IB5\_Group
- IB5\_Group\_User
- IB5\_IPDomain\_Type
- IB5\_IPDomainPermission
- IB5\_LicenseGroup
- IB5\_licenses
- IB5\_methods
- IB5\_Object
- IB5\_Object\_Policy
- IB5\_permissions
- IB5\_Policy
- IB5\_Policy\_Member\_Action
- IB5\_Policy\_Type
- IB5\_Policy\_UGP\_Type
- IB5\_services
- IB5\_servicesState
- IB5\_SOAP\_servers
- IB5\_States
- IB5\_User
- IB5\_web\_servers

For more information on configuring the Oracle repository, see the *iWay 5.5 Installation and Configuration* documentation.

3. To migrate the tables that were created by the SQL script for iBSE, use your Oracle database tool set. For more information, consult your database administrator.

## Procedure: How to Migrate a Sybase Repository

To migrate a Sybase repository:

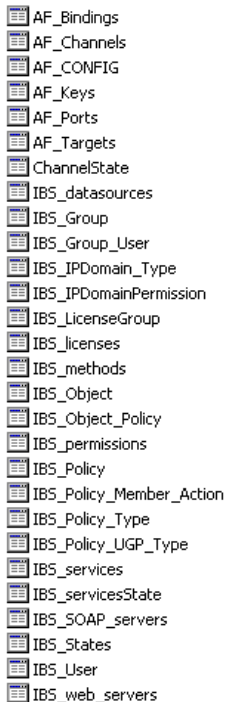
1. Open a command prompt and navigate to the iWay setup directory. The default location on Windows is:

```
C:\Program Files\iWay55\etc\setup
```

This directory contains SQL to create the repository tables in the following file:

```
sybase-iwse.sql
```

2. To create the Sybase database tables that are used by iBSE, use the SQL script as shown in the example in the following image that shows a list of tables.



A screenshot of a database table list. The list contains the following tables:

- AF\_Bindings
- AF\_Channels
- AF\_CONFIG
- AF\_Keys
- AF\_Ports
- AF\_Targets
- ChannelState
- IB5\_datasources
- IB5\_Group
- IB5\_Group\_User
- IB5\_IPDomain\_Type
- IB5\_IPDomainPermission
- IB5\_LicenseGroup
- IB5\_licenses
- IB5\_methods
- IB5\_Object
- IB5\_Object\_Policy
- IB5\_permissions
- IB5\_Policy
- IB5\_Policy\_Member\_Action
- IB5\_Policy\_Type
- IB5\_Policy\_UGP\_Type
- IB5\_services
- IB5\_servicesState
- IB5\_SOAP\_servers
- IB5\_States
- IB5\_User
- IB5\_web\_servers

For more information on configuring the Sybase repository, see the *iWay 5.5 Installation and Configuration* documentation.

3. To migrate the tables that were created by the SQL script for iBSE, use your Sybase database tool set. For more information, consult your database administrator.

## Procedure: How to Migrate a DB2 Repository

To migrate a DB2 repository:

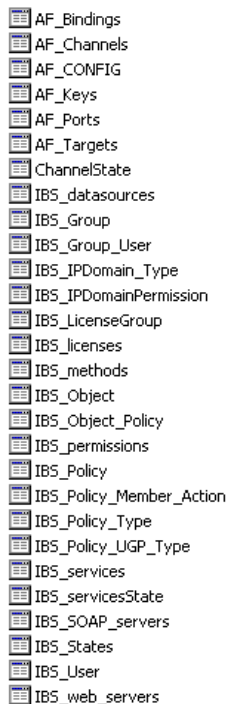
1. Open a command prompt and navigate to the iWay setup directory. The default location on Windows is:

```
C:\Program Files\iWay55\etc\setup
```

This directory contains SQL to create the repository tables in the following file:

```
db2-ibse.sql
```

2. To create the DB2 database tables that are used by iBSE, use the SQL script as shown in the example in the following image that shows a list of tables.



A screenshot of a list of database tables, each preceded by a small icon representing a table. The list includes:

- AF\_Bindings
- AF\_Channels
- AF\_CONFIG
- AF\_Keys
- AF\_Ports
- AF\_Targets
- ChannelState
- IB5\_datasources
- IB5\_Group
- IB5\_Group\_User
- IB5\_IPDomain\_Type
- IB5\_IPDomainPermission
- IB5\_LicenseGroup
- IB5\_licenses
- IB5\_methods
- IB5\_Object
- IB5\_Object\_Policy
- IB5\_permissions
- IB5\_Policy
- IB5\_Policy\_Member\_Action
- IB5\_Policy\_Type
- IB5\_Policy\_UGP\_Type
- IB5\_services
- IB5\_servicesState
- IB5\_SOAP\_servers
- IB5\_States
- IB5\_User
- IB5\_web\_servers

For more information on configuring the DB2 repository, see the *iWay 5.5 Installation and Configuration* documentation.

You can migrate the tables that were created by the SQL script for iBSE using your DB2 database toolset. For more information, consult your database administrator.

## Exporting or Importing Targets

After you migrate your repository, you can export or import targets with their connection information and persistent data between repositories.

### Procedure: How to Export a Target

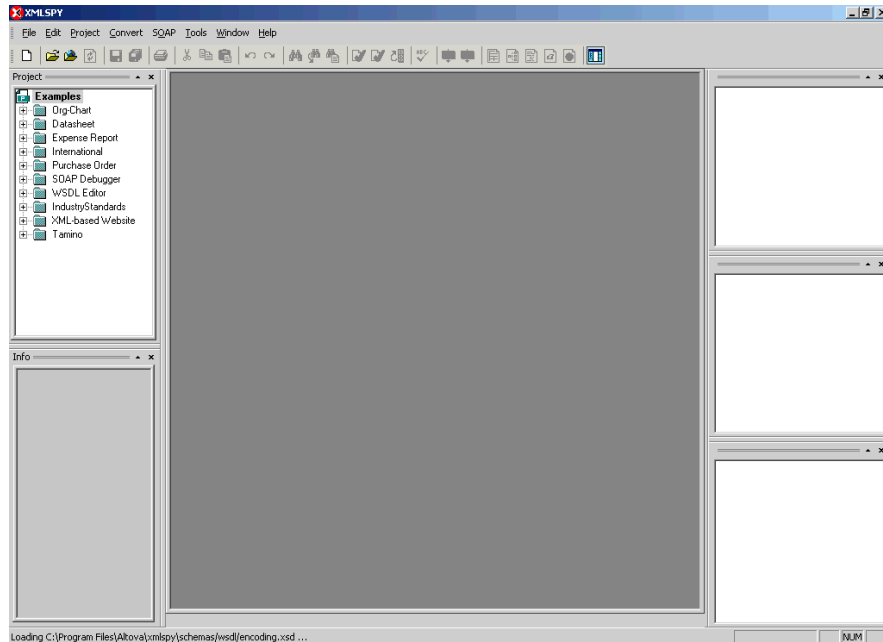
To export a target:

1. Copy the iBSE administrative services for Application Explorer URL, for example:

<http://localhost:7777/ibse/IBSEServlet/admin/iwae.ibs?wsdl>

2. Open a third party XML editor, for example, XMLSPY.

The following image shows the XMLSPY window. The upper left has a Project pane that contains a tree of sample files, and the lower left has a blank Info pane. The middle pane is blank. The right side is divided into three blank panes.



3. From the SOAP menu, select *Create new SOAP request*.

The WSDL file location dialog box opens.

4. In the Choose a file field, paste the iBSE administrative services for Application Explorer URL.

## Exporting or Importing Targets

5. Click *OK*.

The soap operation name dialog box opens and lists the available control methods.

6. Select the *EXPORTTARGET(EXPORTTARGET parameters)* control method and click *OK*.

A window opens that shows the structure of the SOAP envelope.

7. Locate the *Text view* icon in the tool bar.

In the following image, the pointer points to the Text view icon.



8. To display the structure of the SOAP envelope as text, click the *Text view* icon.

The `<SOAP-ENV:Header>` tag is not required and can be deleted from the SOAP envelope.

9. Locate the following section:

```
<m: EXPORTTARGET  
xmlns:m="urn:schemas-iwaysoftware-com:dec2002:iwse:af">  
<m:target>String</m:target>  
<m:name>String</m:name>  
</m: EXPORTTARGET>
```

- a. For the `<m:target>` tag, replace the String placeholder with the EIS target system name as it appears in Application Explorer and verify whether this value is case sensitive.
  - b. For the `<m:name>` tag, replace the String placeholder with the name of the target you want to export.
10. From the SOAP menu, select *Send request to server*.

A response is returned that contains the `<m: exporttime>` and `<m: contents>` elements. You must use these elements when importing your target.



## Procedure: How to Import a Target

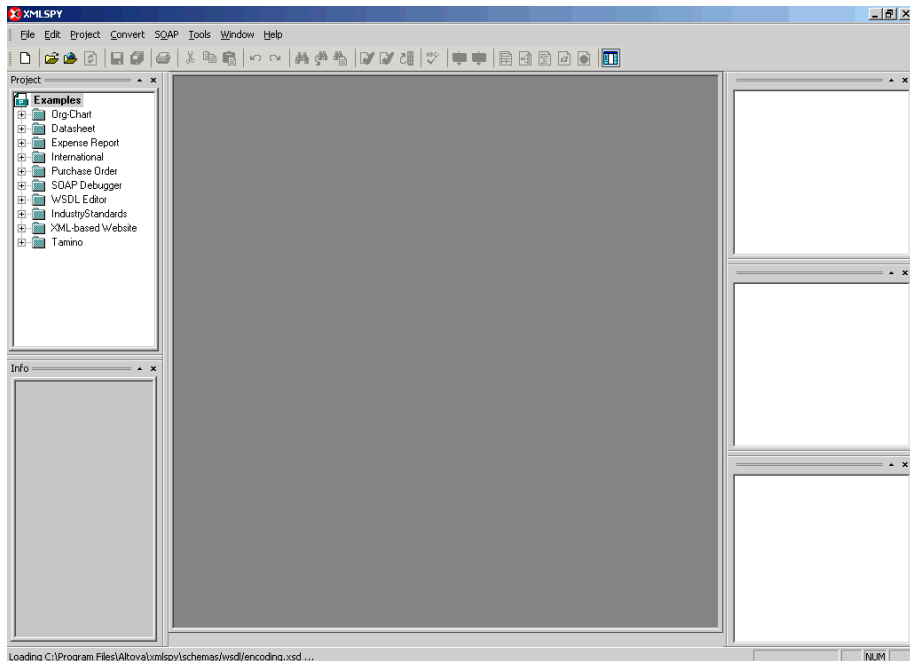
To import a target:

1. Copy the iBSE administrative services for Application Explorer URL, for example:

<http://localhost:7777/ibse/IBSEServlet/admin/iwae.ibs?wsdl>

2. Open a third party XML editor, for example, XMLSPY.

The following image shows the XMLSPY window. The upper left has a Project pane that contains a tree of sample files, and the lower left has a blank Info pane. The middle pane is blank. The right side is divided into three blank panes.



3. From the SOAP menu, select *Create new SOAP request*.

The WSDL file location dialog box opens.

4. In the Choose a file field, paste the iBSE administrative services for Application Explorer URL and click *OK*.

The soap operation name dialog box opens and lists the available control methods.

5. Select the *IMPORTTARGET(IMPORTTARGET parameters)* control method and click *OK*.

A window opens, which shows the structure of the SOAP envelope.

6. Locate the *Text view* icon in the toolbar.

In the following image, the pointer points to the Text view icon.



7. To display the structure of the SOAP envelope as text, click the *Text view* icon.

The <SOAP-ENV:Header> tag is not required and can be deleted from the SOAP envelope.

8. Locate the following section:

```
<m:IMPORTTARGET
xmlns:m="urn:schemas-iwaysoftware-com:dec2002:iwse:af">
<m:targetinstance>
<m:target>String</m:target>
<m:name>String</m:name>
<m:description>String</m:description>
<m:repositoryid>String</m:repositoryid>
<m:exporttime>2001-12-17T09:30:47-05:00</m:exporttime>
<m:contents>R0lGODlhcgGSALMAAAQCAEMmCZtuMFQxDS8b</m:contents>
</m:targetinstance>
</m:IMPORTTARGET>
```

- a. For the <m:target> tag, replace the String placeholder with the EIS target system name.
  - b. For the <m:name> tag, replace the String placeholder with the new name of the target you want to import.
  - c. For the <m:description> tag, replace the String placeholder with a description of the target.
  - d. For the <m:repositoryid> tag, copy and paste the contents of the <m:repositoryid> tag that was returned when you exported your target.
  - e. For the <m: exporttime> tag, copy and paste the contents of the <m: exporttime> tag that was returned when you exported your target.
  - f. For the <m: contents> tag, copy and paste the contents of the <m: contents> tag that was returned when you exported your target.
9. From the SOAP menu, select *Send request to server*.

## Retrieving or Updating Web Service Method Connection Information

After you migrate your repository, you can retrieve or update connection information for your Web service methods.

### Procedure: How to Retrieve Web Service Method Connection Information

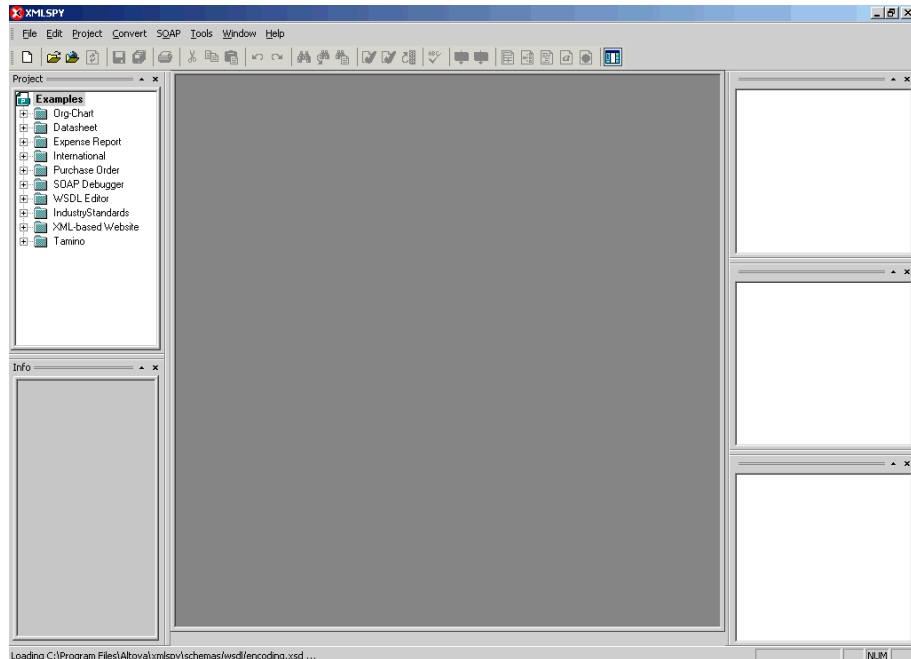
To retrieve Web service method connection information:

1. Copy the iBSE configuration service URL, for example:

<http://localhost:7777/ibse/IBSEServlet/admin/iwconfig.ibs?wsdl>

2. Open a third party XML editor, for example, XMLSPY.

The following image shows the XMLSPY window. The upper left has a Project pane that contains a tree of sample files, and the lower left has a blank Info pane. The middle pane is blank. The right side is divided into three blank panes.



3. From the SOAP menu, select *Create new SOAP request*.

The WSDL file location dialog box opens.

4. In the Choose a file field, paste the iBSE configuration service URL, and click *OK*.

The soap operation name dialog box opens and lists the available control methods.

5. Select the *GETMTHCONNECTION*(*GETMTHCONNECTION parameters*) control method and click *OK*.

A window opens, which shows the structure of the SOAP envelope.

6. Locate the *Text view* icon in the toolbar.

In the following image, the pointer points to the *Text view* icon.



7. To display the structure of the SOAP envelope as text, click the *Text view* icon.

The `<SOAP-ENV:Header>` tag is not required and can be deleted from the SOAP envelope.

8. Locate the following section:

```
<m:GETMTHCONNECTION
xmlns:m="urn:schemas-iwaysoftware-com:jul2003:ibse:config">
<m:serviceName>String</m:serviceName>
<m:methodName>String</m:methodName>
</m:GETMTHCONNECTION>
```

- a. For the `<m:serviceName>` tag, replace the `String` placeholder with the name of the Web service.
  - b. For the `<m:methodName>` tag, replace the `String` placeholder with name of the Web service method.
9. From the SOAP menu, select *Send request to server*.

A response is returned that contains the `<m:descriptor>` element. You must use this element when updating your Web service method.

## Procedure: How to Update Web Service Method Connection Information

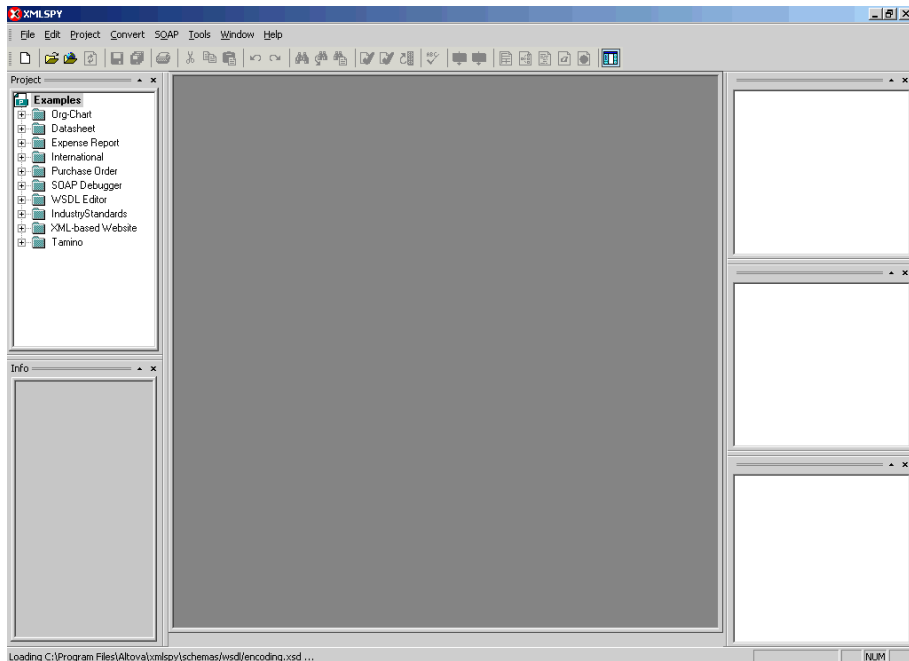
To update Web service method connection information:

1. Copy the iBSE configuration service URL, for example:

<http://localhost:7777/ibse/IBSEServlet/admin/iwconfig.ibs?wsdl>

2. Open a third party XML editor, for example, XMLSPY.

The following image shows the XMLSPY window. The upper left has a Project pane that contains a tree of sample files, and the lower left has a blank Info pane. The middle pane is blank. The right side is divided into three blank panes.



3. From the SOAP menu, select *Create new SOAP request*.

The WSDL file location dialog box opens.

4. In the Choose a file field, paste the iBSE configuration service URL, and click *OK*.

The soap operation name dialog box opens and lists the available control methods.

5. Select the *SETMTHCONNECTION(SETMTHCONNECTION parameters)* control method and click *OK*.

A window opens that shows the structure of the SOAP envelope.

6. Locate the *Text view* icon in the toolbar.

In the following image, the pointer points to the *Text view* icon.



7. To display the structure of the SOAP envelope as text, click the *Text view* icon.

The `<SOAP-ENV:Header>` tag is not required and can be deleted from the SOAP envelope.

8. Locate the following section:

```
<m:SETMTHCONNECTION
xmlns:m="urn:schemas-iwaysoftware-com:jul2003:ibse:config">
<m:servicename>String</m:servicename>
<m:methodname>String</m:methodname>
<m:descriptor format="" channel="">
  <m:option title="">
    <m:group title="">
      <m:param/>
    </m:group>
  </m:option>
</m:descriptor>
</m:SETMTHCONNECTION>
```

- a. For the `<m:servicename>` tag, replace the String placeholder with the name of the Web service.
  - b. For the `<m:methodname>` tag, replace the String placeholder with the name of the Web service method.
  - c. For the `<m: descriptor>` tag, copy and paste the contents of the `<m: descriptor>` tag that was returned when you retrieved Web Service method connection information.
9. Modify the contents of the `<m: descriptor>` tag to change the existing Web Service method connection information.
  10. From the SOAP menu, select *Send request to server*.

## Starting or Stopping a Channel Programmatically

The following topic describes how to start or stop a channel programmatically.

### Procedure: How to Start a Channel Programmatically

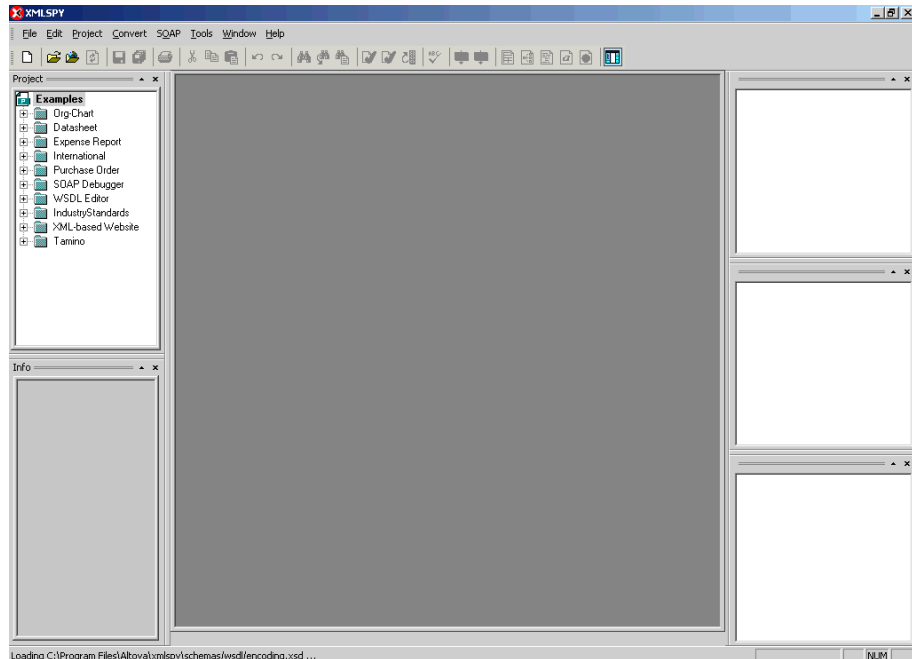
To start a channel programmatically:

1. Copy the iBSE control event URL, for example:

<http://localhost:7777/ibse/IBSEServlet/admin/iwevent.ibs?wsdl>

2. Open a third party XML editor, for example, XMLSPY.

The following image shows the XMLSPY window. The upper left has a Project pane that contains a tree of sample files, and the lower left has a blank Info pane. The middle pane is blank. The right side is divided into three blank panes.



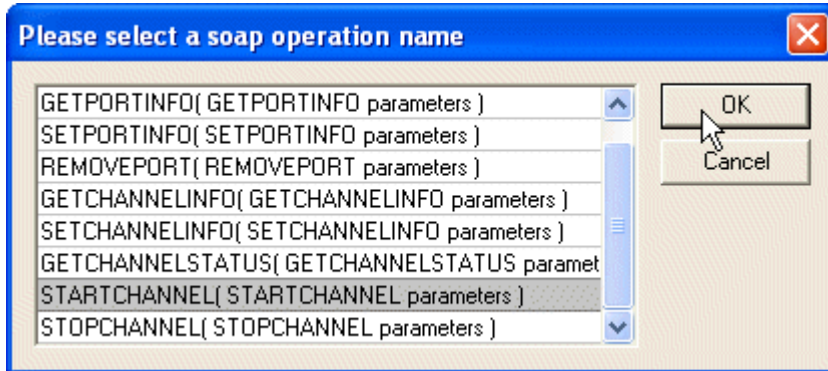
3. From the SOAP menu, select *Create new SOAP request*.

The WSDL file location dialog box opens.

## Starting or Stopping a Channel Programmatically

4. In the Choose a file field, paste the iBSE control event URL, and click *OK*.

The following image shows the soap operation name dialog box that opens with a list of available control methods. You can select one and click *OK* or to escape from the dialog box, you can click *Cancel*.



5. Select the *STARTCHANNEL(STARTCHANNEL parameters)* control method and click *OK*.

A window opens, which shows the structure of the SOAP envelope.

6. Locate the *Text view* icon in the toolbar.

In the following image, the pointer points to the *Text view* icon.



7. To display the structure of the SOAP envelope as text, click the *Text view* icon.

The `<SOAP-ENV:Header>` tag is not required and can be deleted from the SOAP envelope.

8. Locate the following section:

```
<SOAP-ENV:Body>
  <m:STARTCHANNEL
    xmlns:m="urn:schemas-iwaysoftware-com:dec2002:iwse:event">
    <m:channel>String</m:channel>
  </m:STARTCHANNEL>
</SOAP-ENV:Body>
```

9. For the `<m:channel>` tag, replace the `String` placeholder with the name of the channel you want to start.
10. From the SOAP menu, select *Send request to server*.



## Procedure: How to Stop a Channel Programmatically

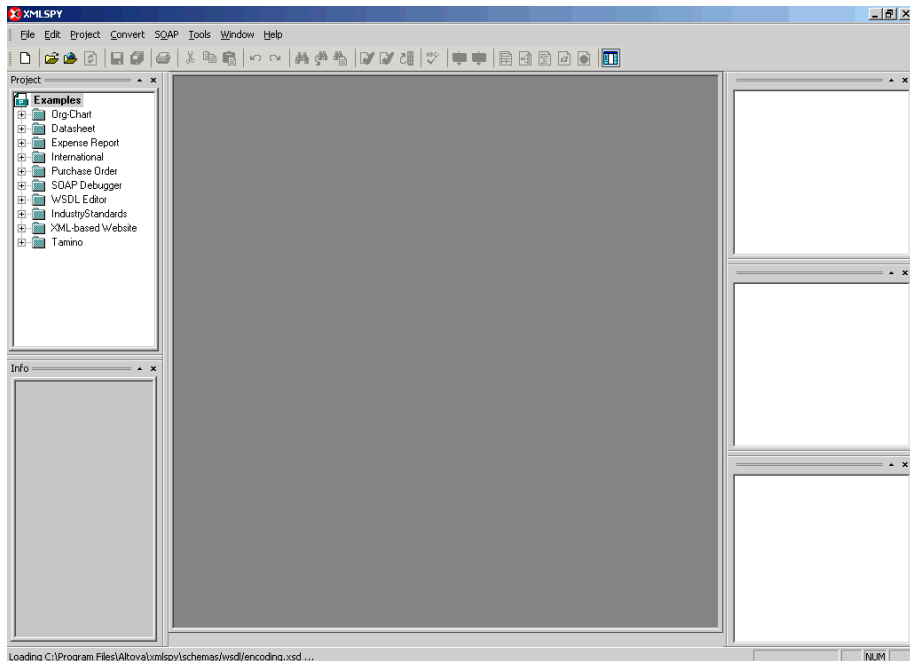
To stop a channel programmatically:

1. Copy the iBSE control event URL, for example:

<http://localhost:7777/ibse/IBSEServlet/admin/iwevent.ibs?wsdl>

2. Open a third party XML editor, for example, XMLSPY.

The following image shows the XMLSPY window. The upper left has a Project pane that contains a tree of sample files, and the lower left has a blank Info pane. The middle pane is blank. The right side is divided into three blank panes.



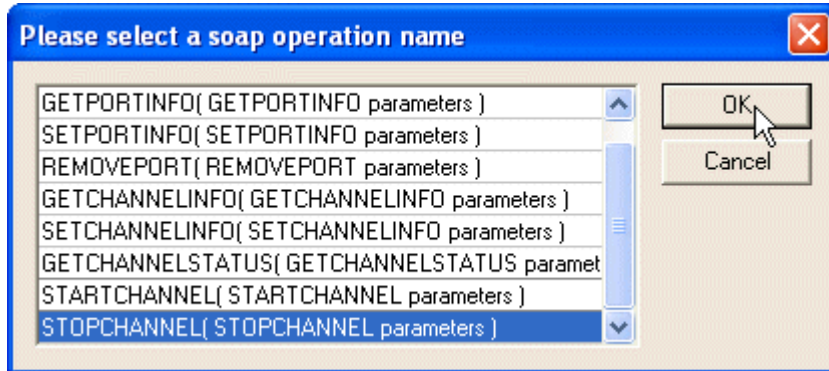
3. From the SOAP menu, select *Create new SOAP request*.

The WSDL file location dialog box opens.

## Starting or Stopping a Channel Programmatically

4. In the Choose a file field, paste the iBSE control event URL, and click *OK*.

The following image shows the soap operation name dialog box that opens with a list of available control methods. You can select one and click *OK* or to escape from the dialog box, you can click *Cancel*.



5. Select the *STOPCHANNEL(STOPCHANNEL parameters)* control method and click *OK*.

A window opens, which shows the structure of the SOAP envelope.

6. Locate the *Text view* icon in the toolbar.

In the following image, the pointer points to the *Text view* icon.



7. To display the structure of the SOAP envelope as text, click the *Text view* icon.

The `<SOAP-ENV:Header>` tag is not required and can be deleted from the SOAP envelope.

8. Locate the following section:

```
<SOAP-ENV:Body>
  <m:STOPCHANNEL
    xmlns:m="urn:schemas-iwaysoftware-com:dec2002:iwse:event">
    <m:channel>String</m:channel>
  </m:STOPCHANNEL>
</SOAP-ENV:Body>
```

9. For the `<m:channel>` tag, replace the `String` placeholder with the name of the channel you want to stop.

10. From the SOAP menu, select *Send request to server*.

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## Reader Comments

In an ongoing effort to produce effective documentation, the Documentation Services staff at Information Builders welcomes any opinion you can offer regarding this manual.

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## Reader Comments