

iWay

BEA WebLogic Solutions Guide for iWay
Version 5.5

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Preface

This guide describes a use case for integrating SAP and Siebel systems using BEA WebLogic and iWay tools and gives an overview of iWay functionality as deployed to the BEA WebLogic Server

Documentation Conventions

The following conventions apply throughout this manual:

Convention	Description
THIS TYPEFACE 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), a cross-reference, or an important term. It may also indicate a button, menu item, or dialog box option you can click or select.
this typeface	Highlights a file name or command.
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.

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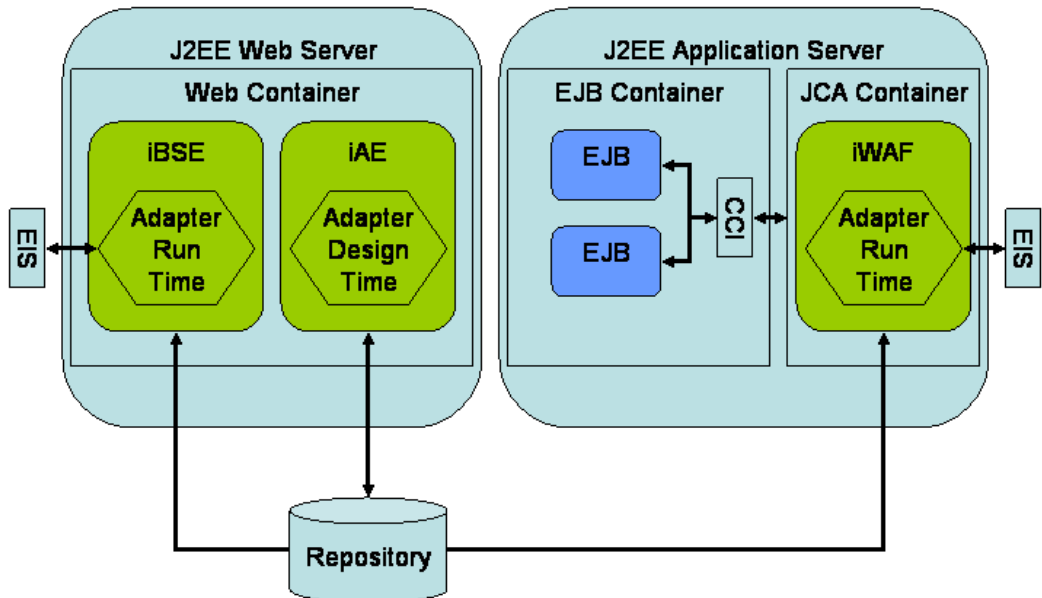
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- 2.0 SAP to Siebel Use Case
- 3.0 Web Service Integration
- 4.0 JCA Integration
- 5.0 Web Services Versus JCA Deployment

This guide describes a use case for integrating SAP and Siebel systems using BEA WebLogic and iWay tools and gives an overview of iWay functionality as deployed to the BEA WebLogic Server.

1.0 iWay 5.5

1.1 Architecture

The following diagram illustrates the iWay 5.5 architecture.



The iWay Business Services Engine (iBSE) and iWay Application Explorer (iAE) are deployed to the J2EE Web container. The iWay Connector for JCA is deployed to the JCA container in the J2EE server. The repository is written at design time and read at run time. The container (iAE, iWAF, or iBSE) is responsible for the connection to the repository as shown.

1.2 iWay Application Explorer

Working in conjunction with iWay adapters, iWay Application Explorer (iAE) uses an explorer metaphor for browsing objects in an ERP system, such as Siebel or SAP. The explorer enables you to create XML schemas and Web services for the associated objects in the ERP, without requiring in-depth knowledge of the object or system. External applications that access the ERP through an iWay adapter use either XML schemas or Web services to pass data between the external application and the adapter.

The two versions of iWay Application Explorer that are supported for BEA WebLogic deployment are Servlet iWay Application Explorer, a Java Web application running within a servlet container that is accessible through a Web browser, and Application Explorer running in BEA WebLogic Workshop.

The functionality of each version is almost identical, and you can choose which version to use after installation. The version you use depends on your platform, deployment preferences, and third party considerations.

1.3 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 but 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.

1.4 iWay Connector for JCA

The iWay Connector for JCA runs in J2EE Connector Architecture (JCA) compliant application servers and uses the Common Client Interface (CCI) to provide fast integration services using iWay adapters. The connector provides an extremely quick way to deploy adapters to connect data, applications, systems, and protocols through an application server or servlet container.

The iWay Connector for JCA provides XML transformation, adapter hosting, and integration capabilities. After you deploy the iWay Connector for JCA, you have access to all adapters installed with iWay 5.5.

2.0 SAP to Siebel Use Case

The use case for the integration scenarios represents “real-world” integration requirements between Siebel and SAP. The functionality defined in the use case is described in general terms below.

The following scenario is demonstrated:

When a customer account is created in the SAP system, account details must be in sync with the Siebel system. In this use case, a JPD is created to receive an IDOC DEBMA505 event from the SAP system and trigger the Workflow to insert the record into a Siebel Business Account.

2.1 Installations and Setup

1. Install WebLogic 8.1.2 (SP2).
2. Install the iWay55 ERP bundle.

The default installation is

`C:\Program Files\iWay55`

For more information, see the iWay55 ERP installation documentation.

3. Install the Siebel Client (Siebel 7.0.3 Thick Client).

You must Install Oracle 8.1.7 client on the machine where Siebel Client is to be installed.

4. Install SAP GUI Client (SAP GUI version compatible to SAP R/3 4.6C IDES System).

2.2 Server Creation and Adapter Installation

1. Create the BEA WebLogic Integration Server using the Configuration Wizard.
2. Install the iWay Adapter for Siebel (refer to the iWay55 installation documentation).
3. Install the iWay Adapter for SAP (refer to the iWay55 installation documentation).

2.3 Siebel Integration Object

On the Siebel System, we used the following Integration Objects.

- Sample Account

If you cannot locate the Integration Objects, perform the following:

1. Using Siebel Tools, find the Integration Objects mentioned previously.
2. If the object does not exist, it can be imported in Siebel System from the objects.sif Archive file provided.

3. For more information on how to import Integration Objects, refer to the Siebel documentation.

2.4 Siebel Workflows

On the Siebel System, we created and used the following Workflows:

- Account_HTTP.xml

If you cannot locate the Workflows, import them from the provided Siebel Workflow directory.

1. Import the Siebel Workflows using the Siebel client.
2. Start the *Siebel* client.
3. Go to the Site Map Area (Ctrl+Shift+A).
4. Click *Siebel Workflow Administration*.
5. Click *Workflow Processes*.
6. From the drop-down menu, select *Import Workflow*.
7. Import the Workflow.

2.5 SAP Schema

The IDOC DEBMA05 schema is provided in the reference directory.

2.5.1 Service WSDL File

A Siebel Account WSDL file is provided in the reference directory.

2.5.2 Deploying the Application and Updating the JCX

1. Unzip the *SAP2Siebel.zip* file.
2. Open the application in BEA WebLogic Workshop.
3. Modify the WSDL file.
 - a. Correct the SOAP address.
 - b. Update the *@jc:location* tag in the JCX file to the new environment or target environment.
 - c. For more information, see on page 1-61 and the release notes.

2.6 Application Description

In this application, the DEBMA05 schema is generated using Servlet Application Explorer and is imported to the Project Schema directory to generate the XML bean classes.

1. Create a channel file in the Schema directory and specify *DEBMAS05* as the qualified Message Type in the channel file.

A JPD is created with the Message Broker subscription as the start node that listens to the correct channel that you created.

 - For examples and more information on these procedures, see 3.2.3 *Setting up a JMS Event Generator* on page 1-34 and 3.2.4 *Integration With JPD* on page 1-36.
 - For more information on these procedures in a JCA context, see 4.2.3 *Setting up a JMS Event Generator* on page 1-57 and 4.2.4 *Integration With JPD* on page 1-58.
2. Create a Web service control based on the SiebelAccount WSDL file that was generated.
 - For an example of creating a Web service and generating a WSDL file, see 3.1.1 *Deploying a Web Service Using iWAE and iBSE* on page 1-7.
 - For an example of creating a Web service control, see 3.1.2 *Using the Service Control to Call iBSE* on page 1-17.
 - For information on creating an iWay control, which provides a way to integrate with an iWay JCA adapter deployment, see 4.1.2 *Using the iWay Control to Call iWay JCA CCI* on page 1-41.
3. Place the Web service control after the Message Broker subscription node.
4. In the Send Data selection of the Web service control, select transformation to map the parameters between the SAP event data and the request Siebel service data.

2.7 Running the Project

To run/execute the project:

1. For the Partner profiles, ensure the outbound parameter type is set for Basic type: DEBMAS05.
 - a. Start the SAP client.
 - b. Start with transaction: */nWE20*.
 - c. Select the Logical system, for example, BEALOG.
 - d. Select Outbound parameters table: Message type - DEBMAS.
 - e. In the Partner profiles: Outbound parameters page, select *DEBMAS05* as the Basic type in the IDoc type session.
2. Execute the customer record in the SAP system using IDOC: DEBMAS05.
 - a. Start the SAP client.
 - b. Start with transaction: */nbd12*.

- c. For Customer, select *3000 to 3000*.
- d. For Output type, select *DEBMAS*.
- e. For Logical system, select *BEALOG*.

If the previous customer record is new to the Siebel system, the SAP event triggers the Workflow and adds the customer record to the Siebel system.

The JPD returns the response. If this is a new customer, it inserts a new record to the Siebel system. If the customer record exists, it replies that the customer record already exists.

2.8 Known Issues

SOAP Address in the Production Mode. The Web service request does not work if you deploy the developed application on a different machine (when the IP address changes), in a different domain (when the IP and port change), or build the EAR file and deploy it on a different environment (when IP, port, and machine name change). This limitation occurs on both migration of the application/EAR and on the production mode.

For more information, see the iWay 5.5 Release Notes.

3.0 Web Service Integration

3.1 Services

3.1.1 Deploying a Web Service Using iWAE and iBSE

Step1: Choose the iBSE Configuration and the Adapter

1. To open iWay Application Explorer, enter the following URL in your browser window:

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

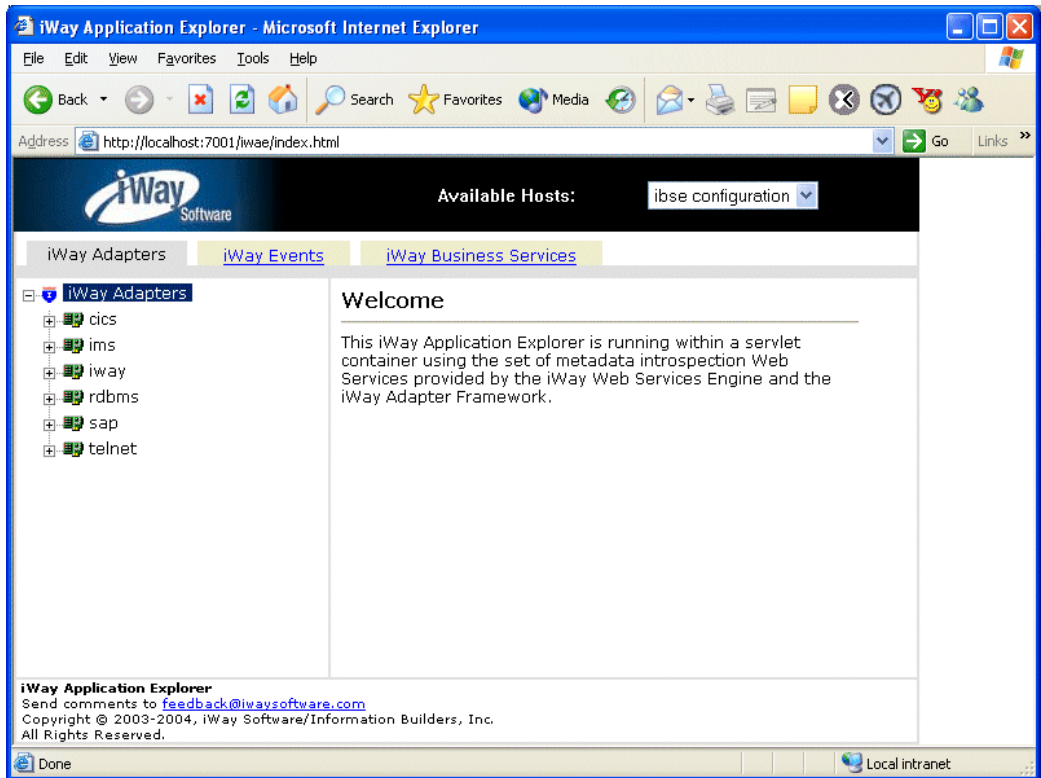
where:

[*hostname*](#)

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

[*port*](#)

Is the port for the domain you are using for iWay. The port for the default domain is 7001.



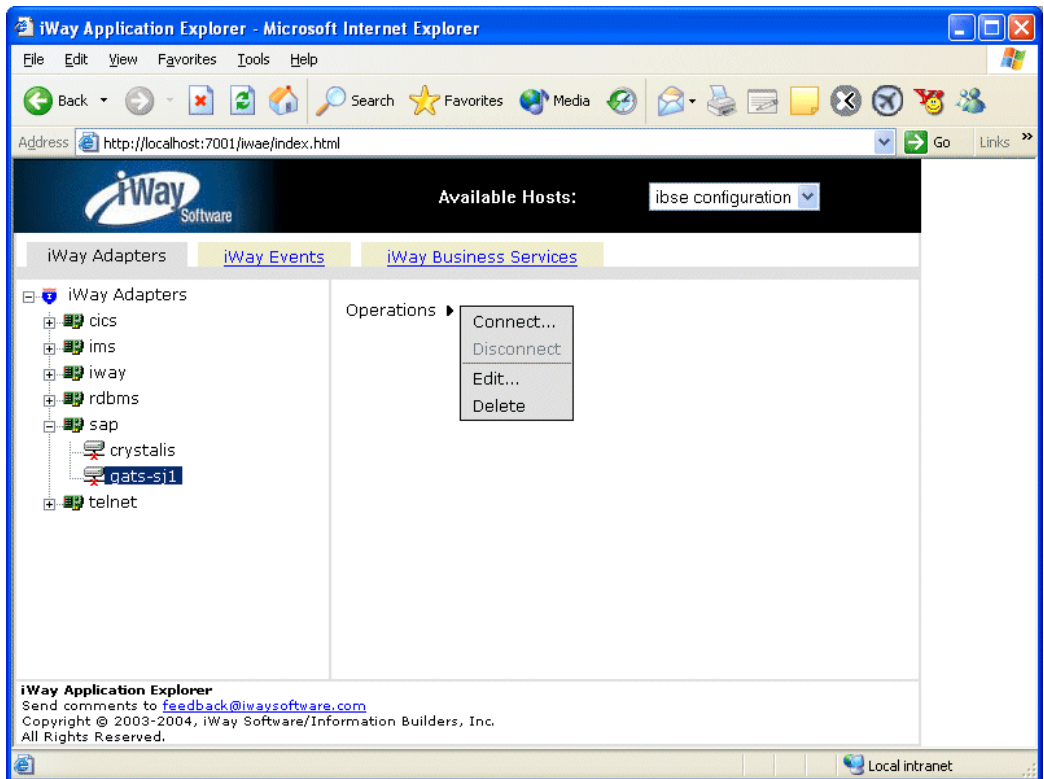
2. From the Available Hosts drop-down list, select *ibse configuration*.

Step 2: Set up Connection Information

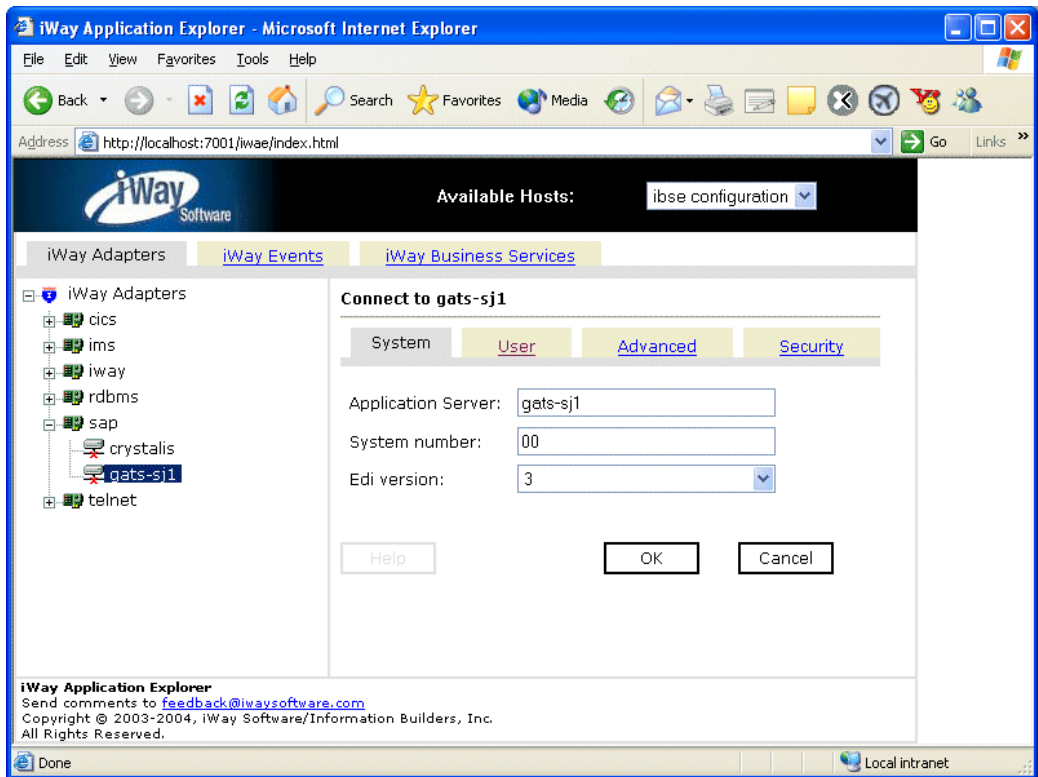
1. From the list of adapters on the iWay Adapters tab, select your adapter, for example, SAP.

Connection information must be entered to connect to the target system.

You can select an existing connection or you can create a new connection. In this example, you add the connection information for the iWay Adapter for SAP.



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

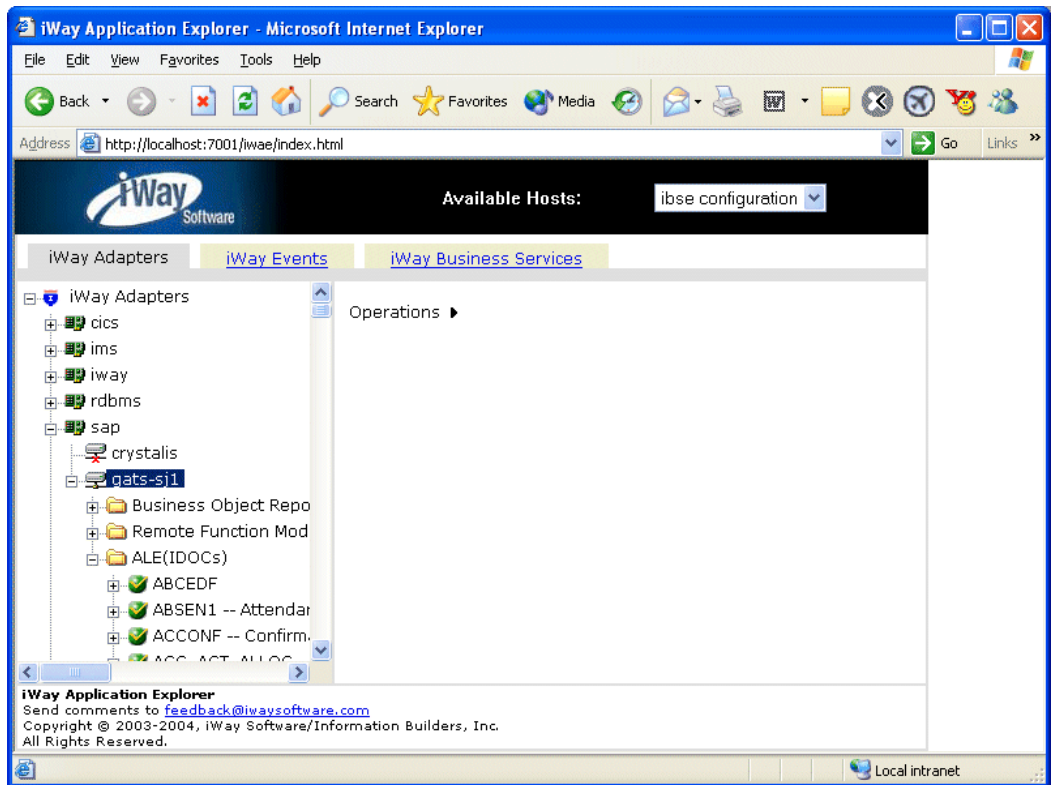


3. Specify the required connection information to connect to the target system.

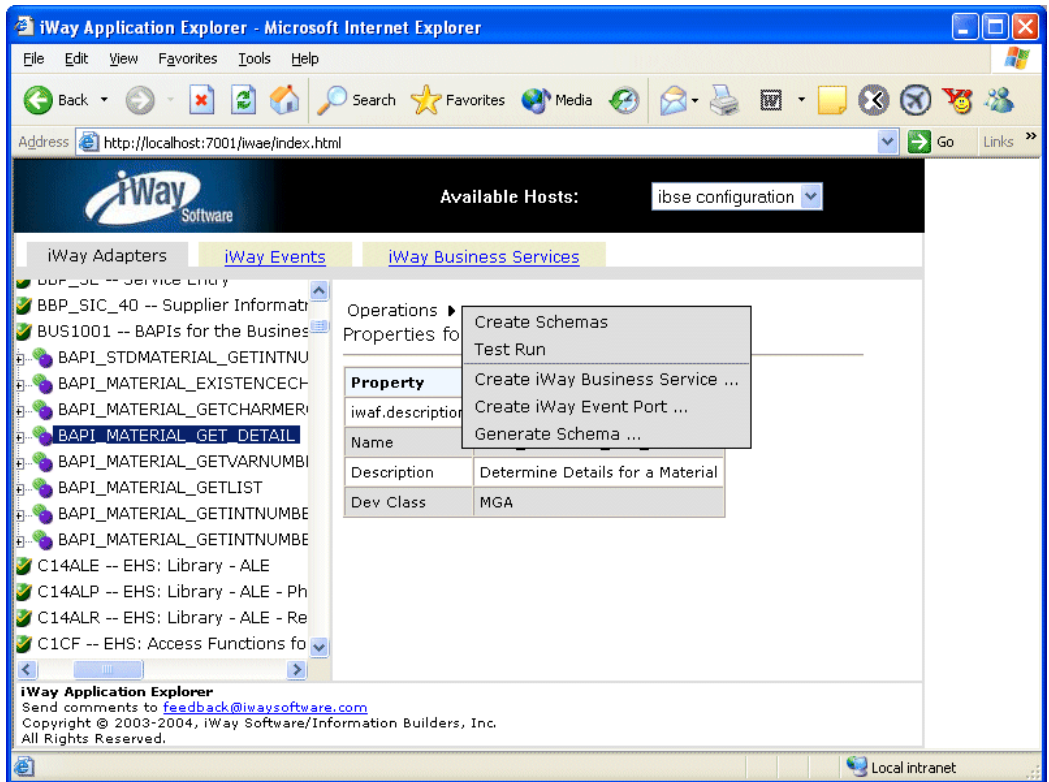
After you provide information for the System and User tabs, you complete the SAP target configuration. However, you can specify additional parameters in the Advanced and Security tabs.

Step 3: Browse the End System Metadata for the EIS Function

After connecting to the EIS, you can browse a metadata tree or search for the end system function.

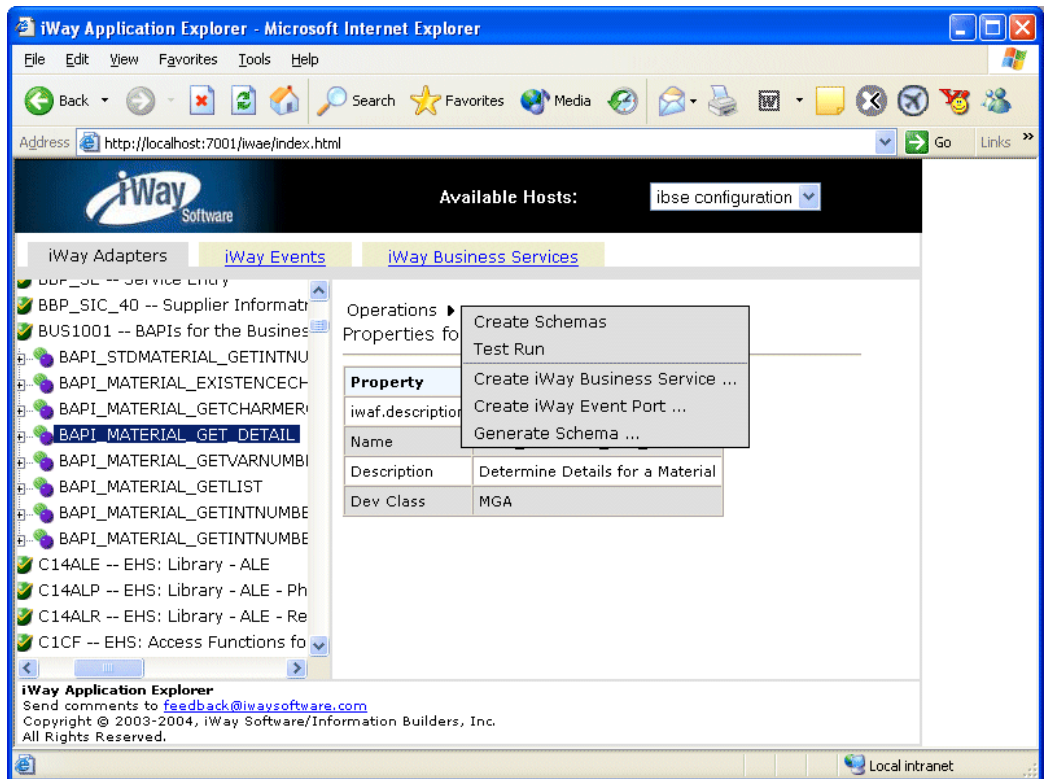


After selecting the appropriate function, you can test the function on the EIS.



Step 4: Create Schemas

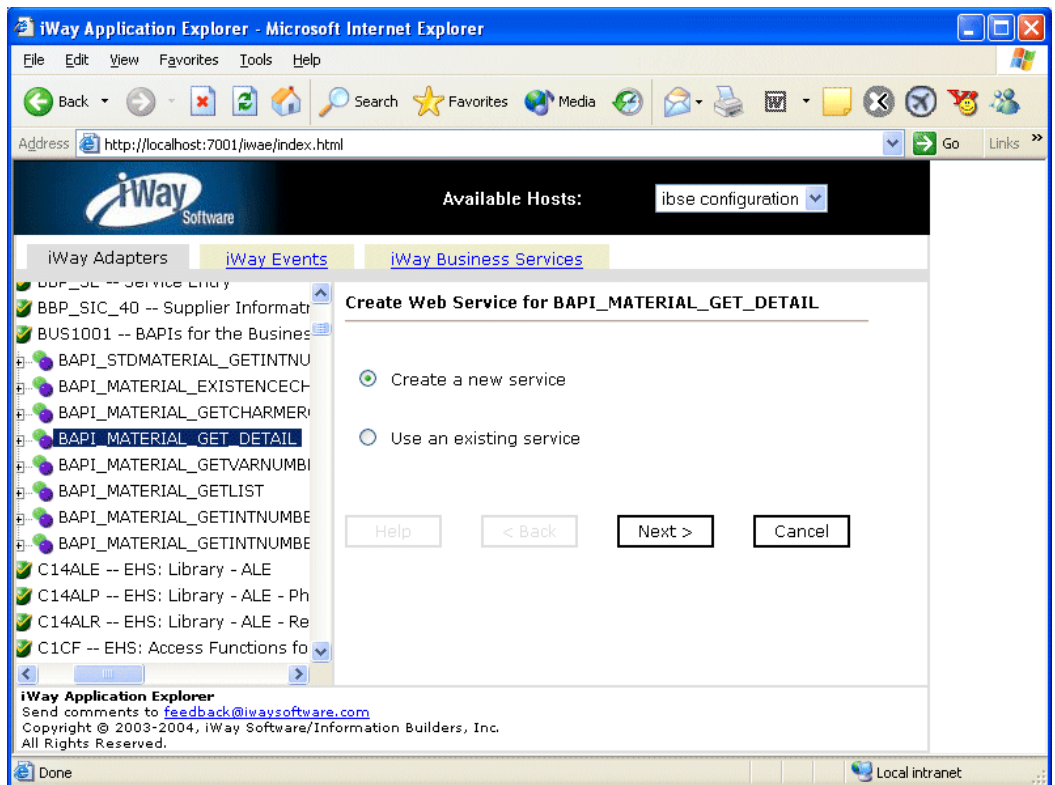
After selecting and testing the required end system function, you create the request and response schemas corresponding to the service. These schemas are stored in the Application Explorer repository.



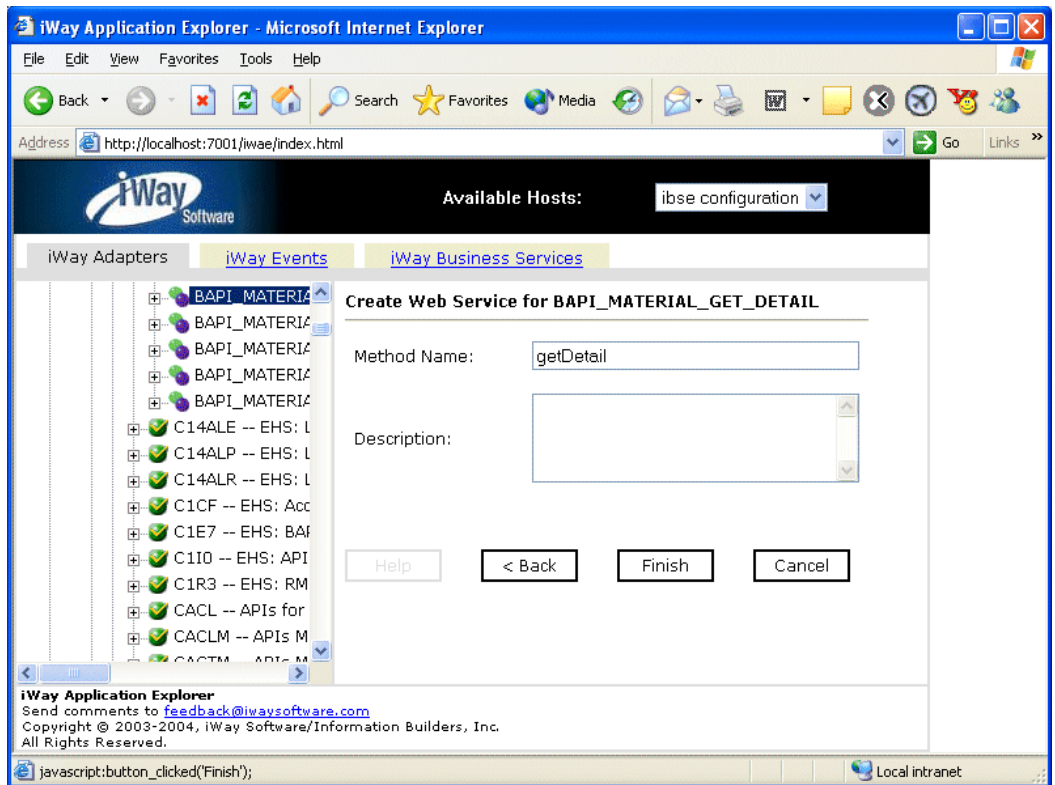
Step 5: Generate a Business Service (Web Service)

After creating the schemas, deploy the service as an iWay Business service.

3.1 Services



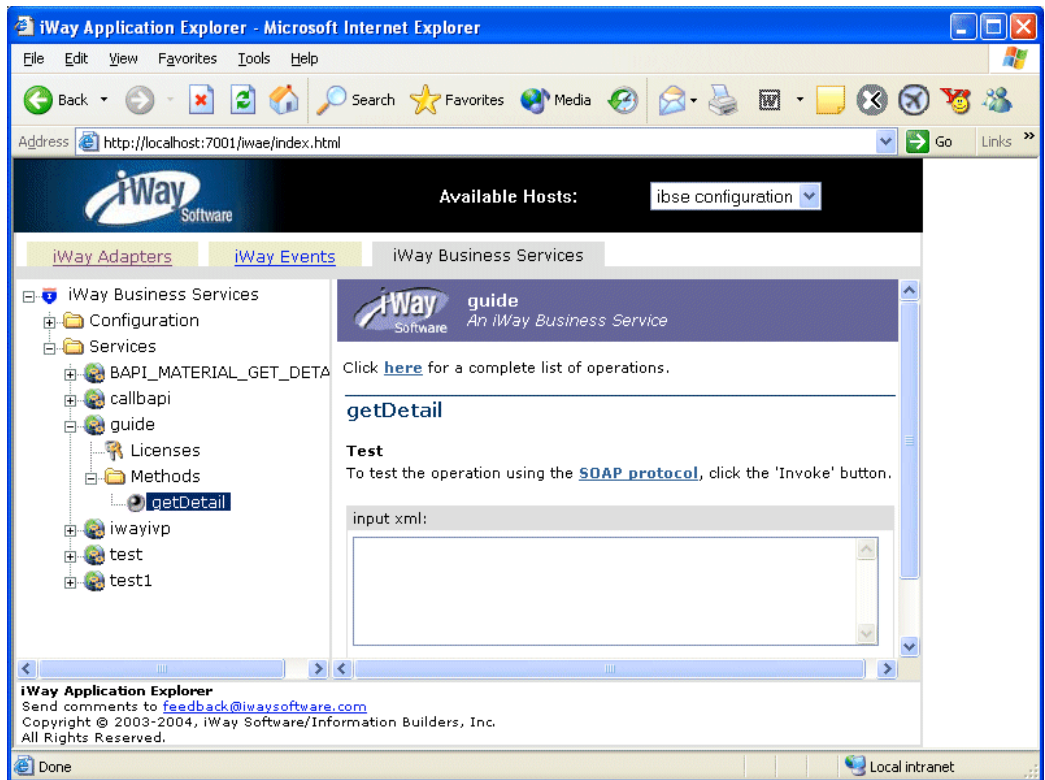
You can add a service as a method to an existing Web service definition or create a new Web service definition.



You must provide the Method Name.

Step 6: Test the Web Service

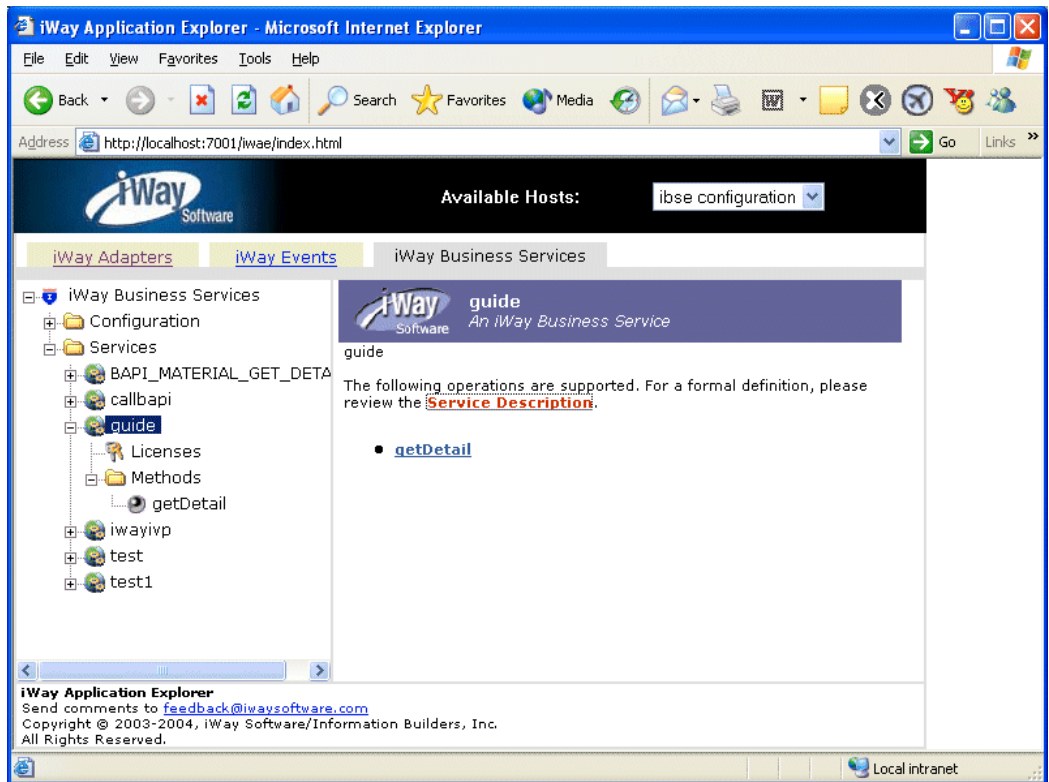
After defining the Web service, test it using the Application Explorer test feature.



Step 7: Download the WSDL

The iWay Business Services tab displays a list of deployed Web services. You can obtain the WSDL for each Web service from the Service Description link for each service.

1. To save the WSDL definition, right-click the *Service Description* link and select *Save Target As*.



2. Save the file with a WSDL extension.

Note: The default file format for an iWay Web service description is .ibs.

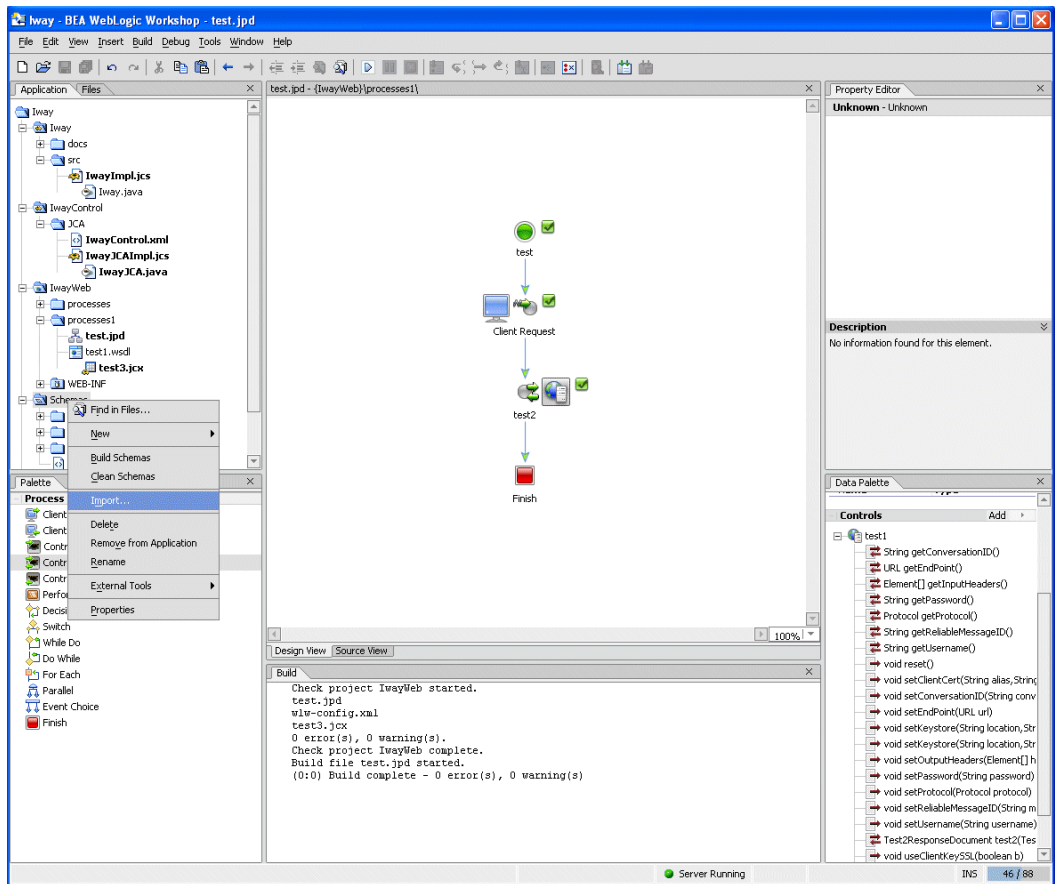
3.1.2 Using the Service Control to Call IBSE

iWay Web services can be invoked either as doc-literal or RPC-encoded. When invoked as doc-literal, XML generated using XML beans can be used to invoke the Web service using the service control.

Step 1: Import the WSDL File Into the Schemas Project for WLI Processes

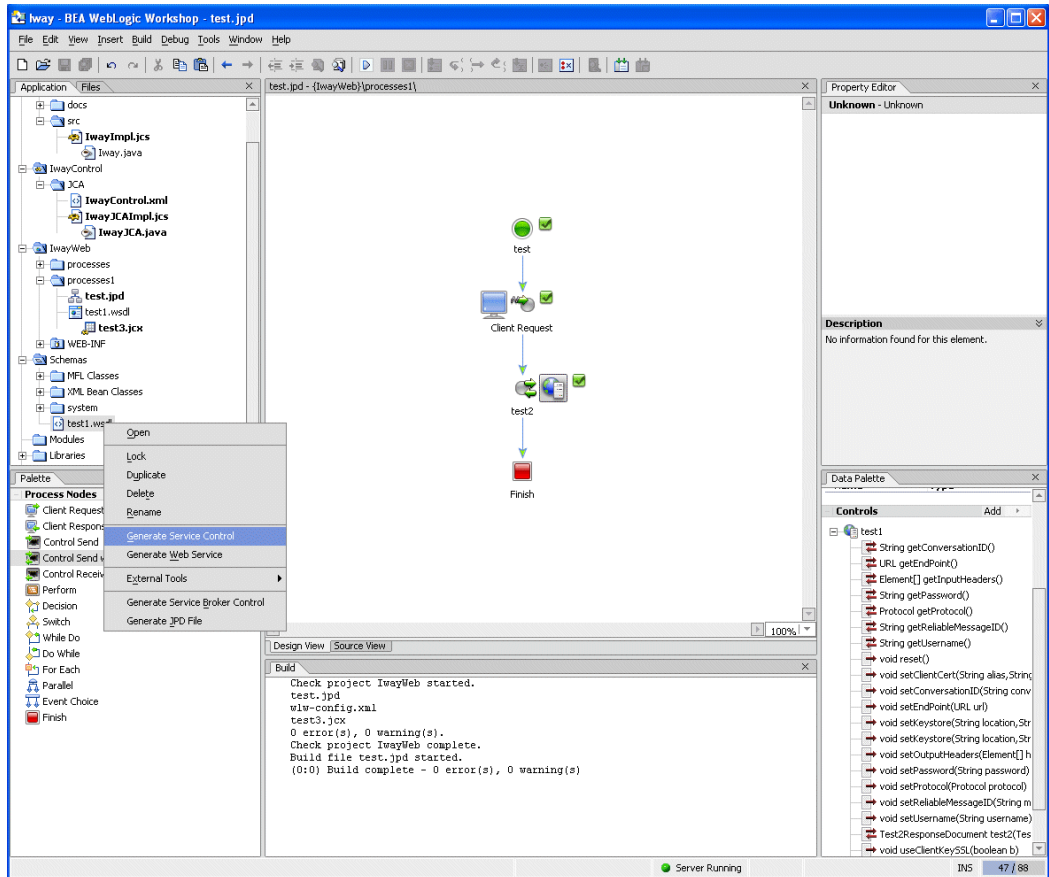
In BEA WebLogic Workshop, import the WSDL file into the schemas project. When the WSDL is imported, the XML types in the WSDL are compiled into XmlBeans.

3.1 Services



Step 2: Generate the Service Control

Generate a Service Control either by right-clicking the WSDL and selecting *Generate Service Control* or by adding it in the Control palette.



The Service Control can now be used from within a JPD to call the iWay Business Service.

3.1.3 Passing Identity Using a Web Service

This topic provides instructions on implementing security features for iBSE configuration. The instructions apply to any adapter currently available for iWay 5.5, that is, the iWay Adapter for Oracle E-Business Suite, the iWay Application Adapter for SAP, the iWay Adapter for Siebel, and the iWay Adapter for PeopleSoft.

IBSE Security

1. In a JPD, create a node that calls the service method used to perform any service predefined by the Web service control.
2. After the node is created, go to the Source View and find the method for the corresponding node in the source code.

3. Find the following line in your method:

```
//#START: CODE GENERATED - PROTECTED SECTION - you can safely add code  
above this comment in this method. #//
```

4. Insert the following code above the line specified in Step 3:

```
HeaderDocument hd = null;  
  
try  
{  
    hd = HeaderDocument.Factory.parse(  
        "<SOAP-ENV:Header  
xmlns:SOAP-ENV=\"http://schemas.xmlsoap.org/soap/envelope/\">" +  
        "// <my:content xmlns:my=\"http://my.com/uri/\">Content  
Text</my:content>" +  
        "<urn:ibsinfo xmlns:urn=\"urn:schemas-iwaysoftware-courn:iwse/\">" +  
        "<urn:service>wipJobSchedInterface</urn:service>" +  
        "<urn:method>wipJobSchedInterface</urn:method>" +  
        "<urn:license>production</urn:license>" +  
        "<urn:Username>wip</urn:Username>" +  
        "<urn:Password>wip</urn:Password>" +  
        "</urn:ibsinfo>" +  
        "</SOAP-ENV:Header>");  
}  
catch (XmlException xe)  
{  
    xe.printStackTrace();  
}  
  
Element header = (Element) hd.newDomNode().getFirstChild();  
wsCtrl.setOutputHeaders(new Element[] { header });
```

5. Edit the following properties in the pasted java code according to the user(s) you want to test with.

```
"<urn:Username>wip</urn:Username>" +  
"  
"<urn:Password>wip</urn:Password>" +
```

6. At the top of the source view, expand the import tree and paste the following java code:

```
import org.xmlsoap.schemas.soap.envelope.HeaderDocument;  
import com.bea.xml.XmlException;  
import org.w3c.dom.Element;
```

7. After full implementation as required, compile and run the JPD.

The user name and password provided in Step 5 should be used to run the test.

3.2 Events

3.2.1 Deploying an Event Port With JMS Disposition

Step1: Choose the Adapter

1. To open Application Explorer, enter the following URL in your browser window:

`http://hostname:port/iwae/index.html`

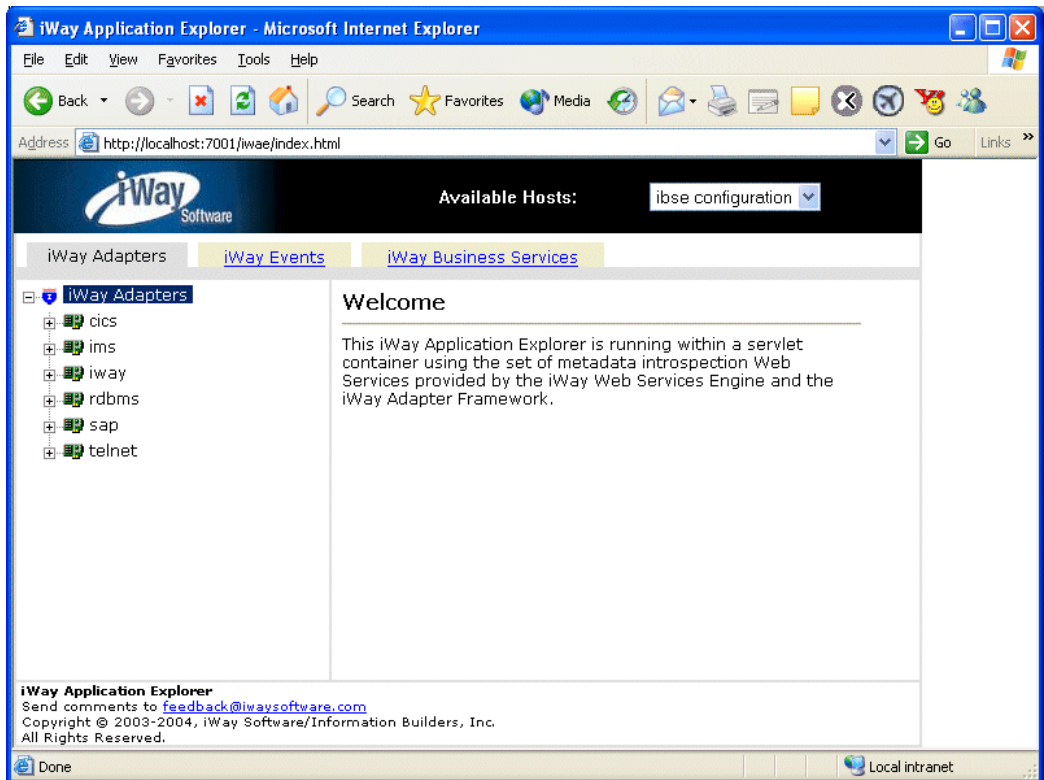
where:

`hostname`

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

`port`

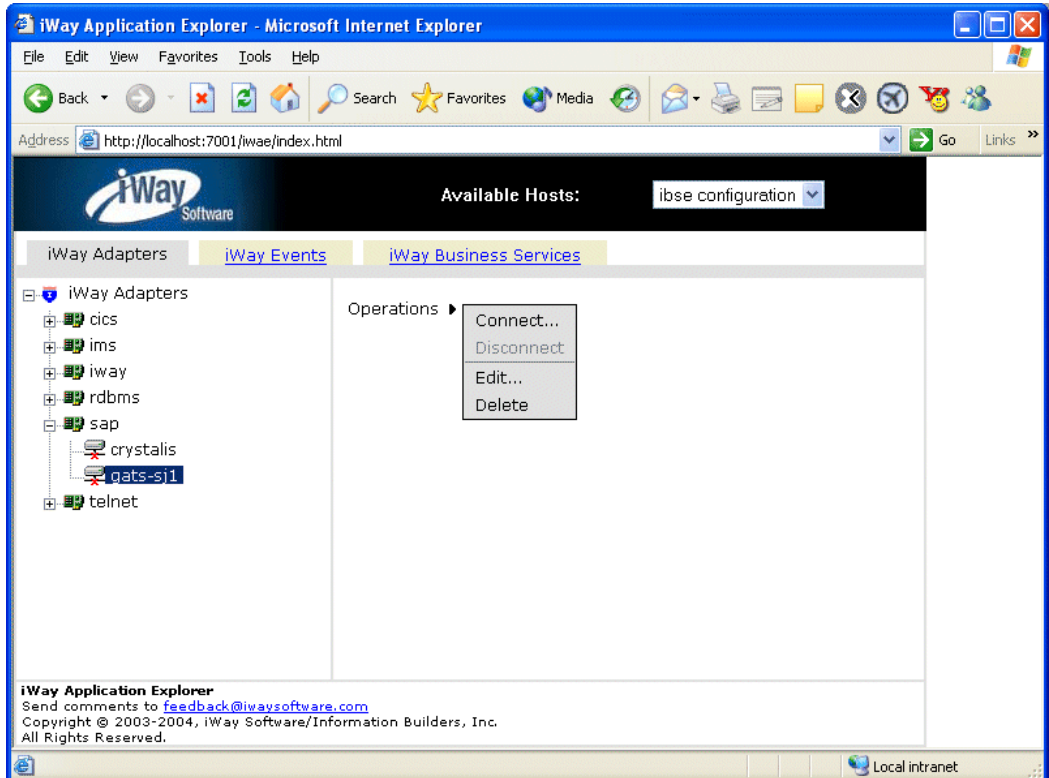
Is the port for the domain you are using for iWay. The port for the default domain is 7001.



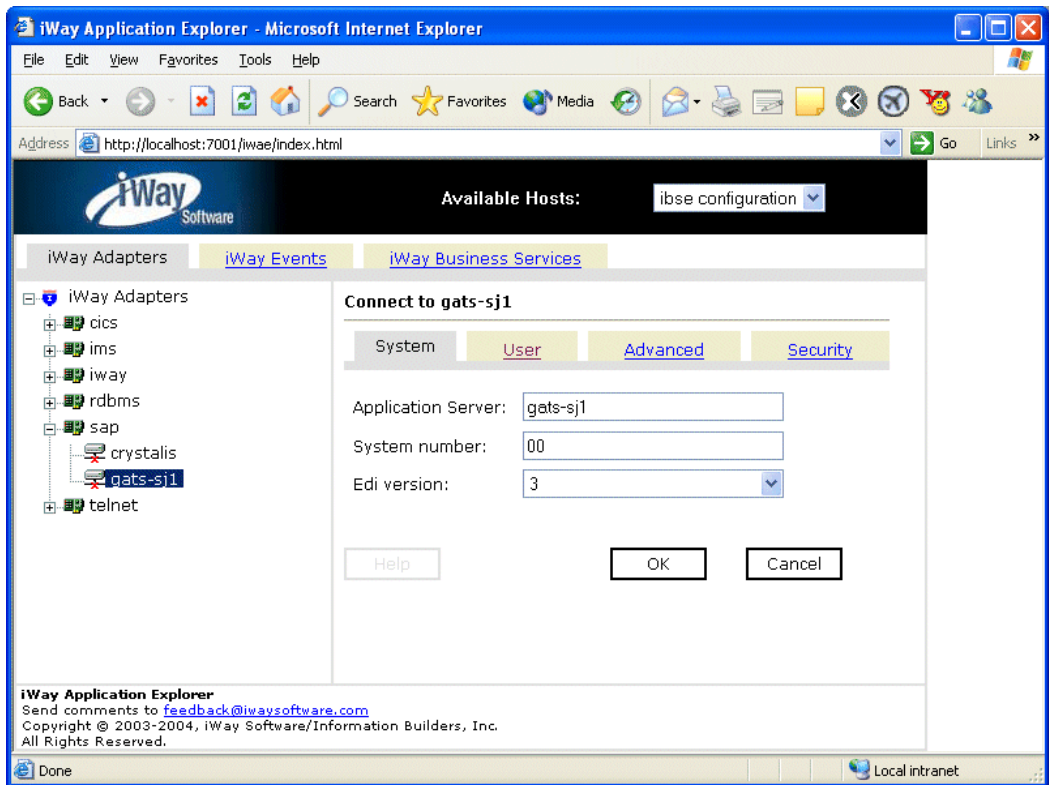
2. From the Available Hosts drop down select the *ibSE configuration*.

Step 2: Set up Connection Information

After selecting the adapter, connection information must be entered to connect to the end system.



An existing connection can be chosen or a new connection can be created. In this example, the SAP adapter connection information must be added.



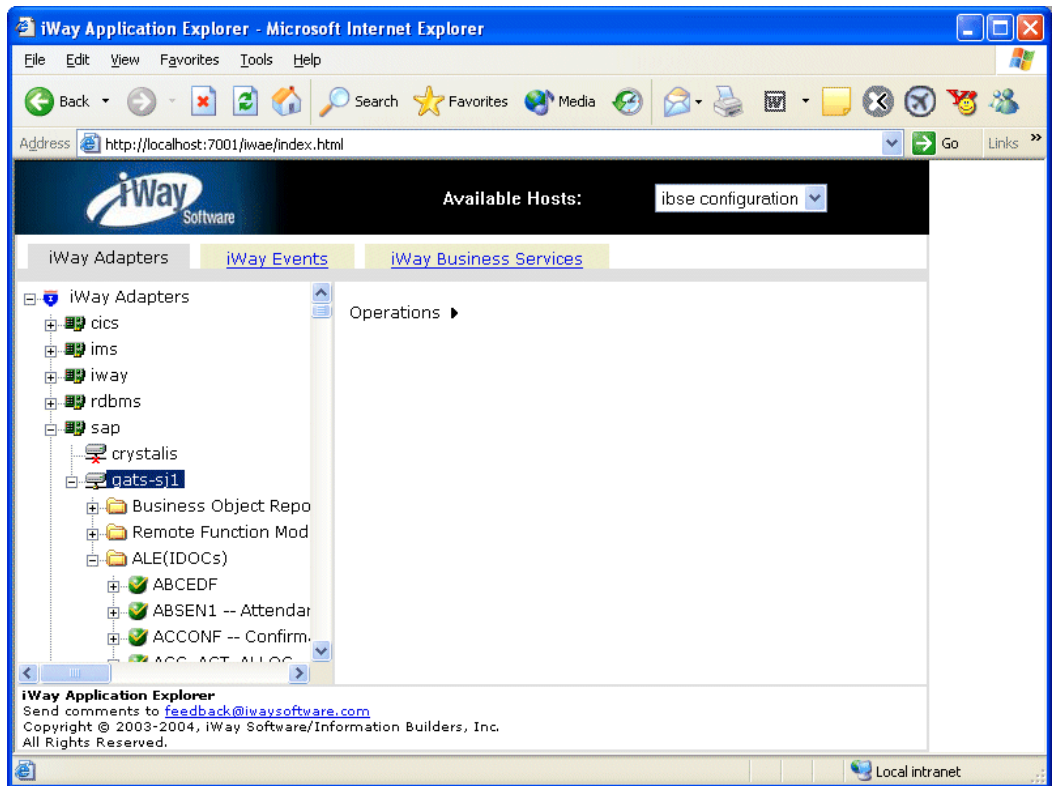
Specify the required connection information to connect to the end system.

After you provide information for the System and User tabs, you complete the SAP target configuration. However, you can specify additional parameters in the Advanced and Security tabs.

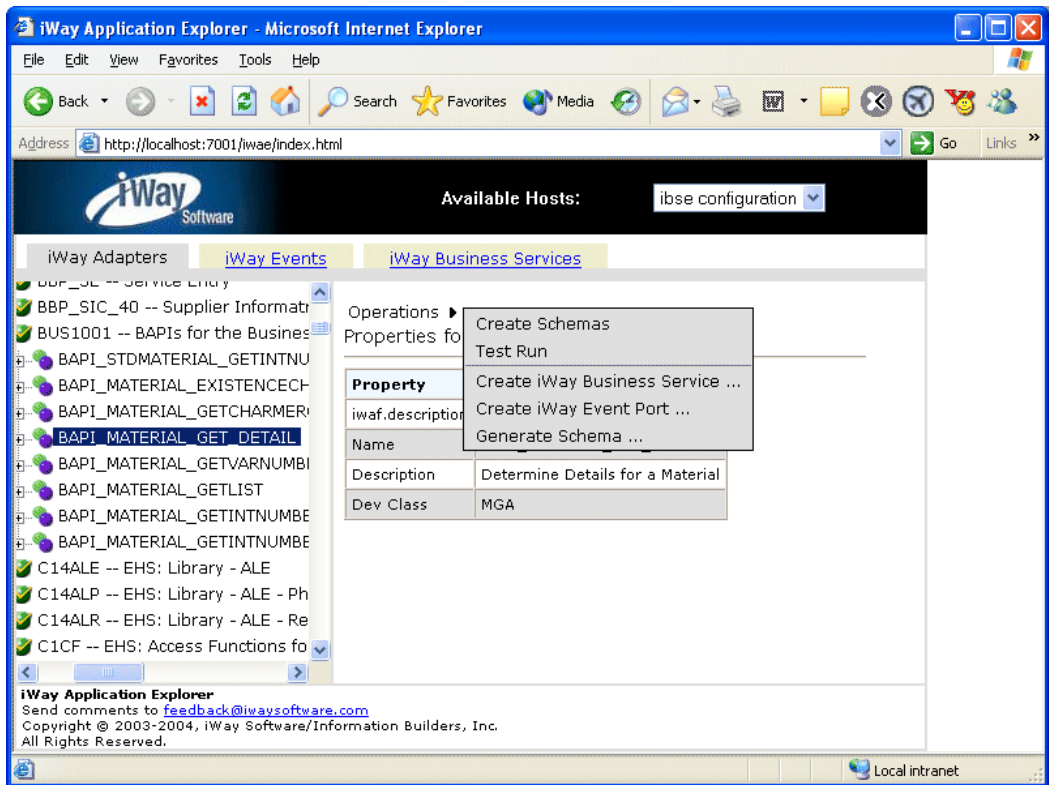
Step 3: Browse the End System Metadata for the EIS Function

1. After connecting to the EIS, you can browse a metadata tree or search for the end system function.

3.2 Events



2. After selecting the appropriate function, you can test the function on the EIS.



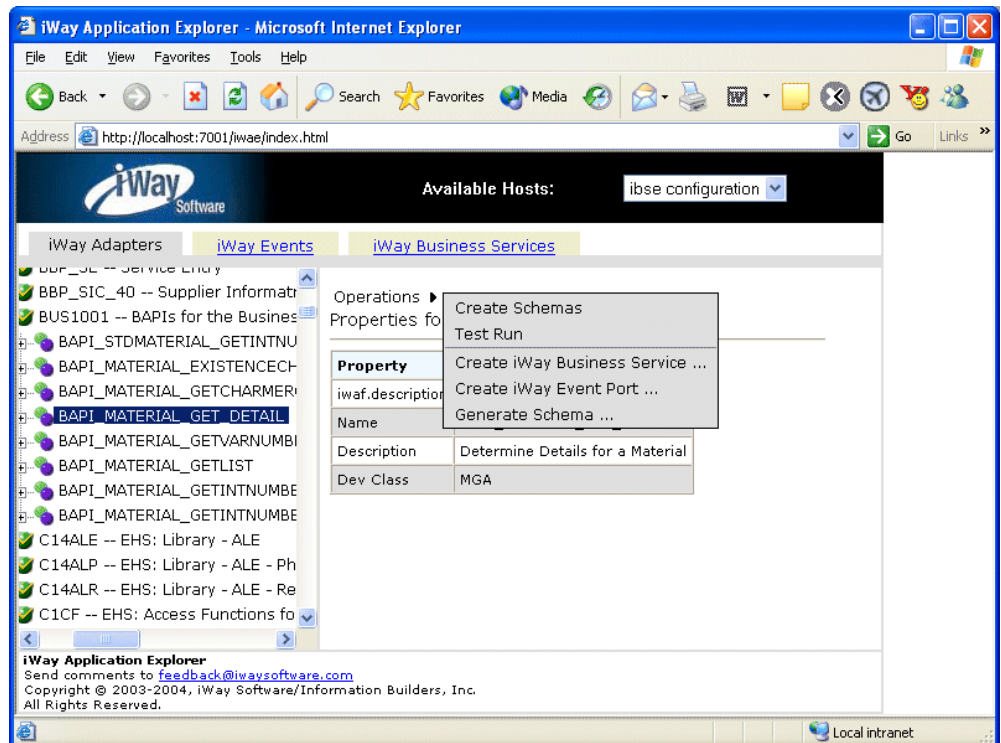
Step 4: Create Schemas

After selecting and testing the required end system function, you create the request and response schemas corresponding to the service by selecting *Create Schemas* from the Operations pop-up menu. These schemas are stored in the Application Explorer repository.

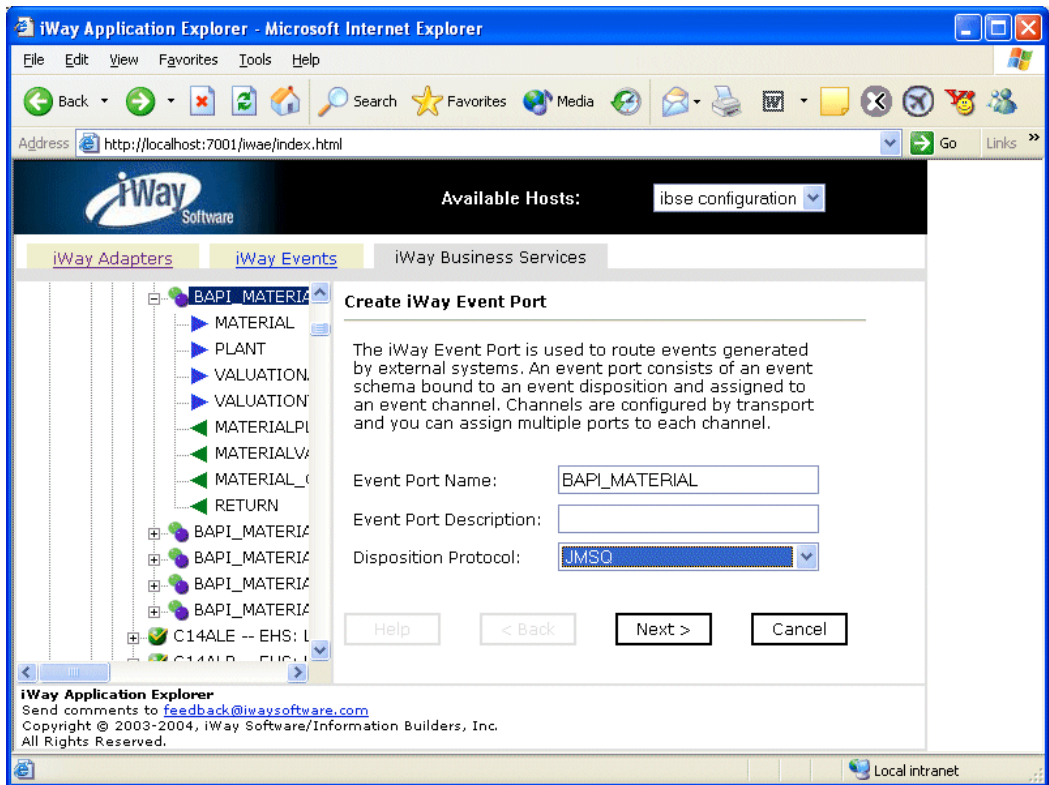
Step 5: Create an Event Port

1. After selecting the business function, choose *Create iWay Event Port* from the Operations pop-up menu to create an iWay Event Port for that function.

3.2 Events



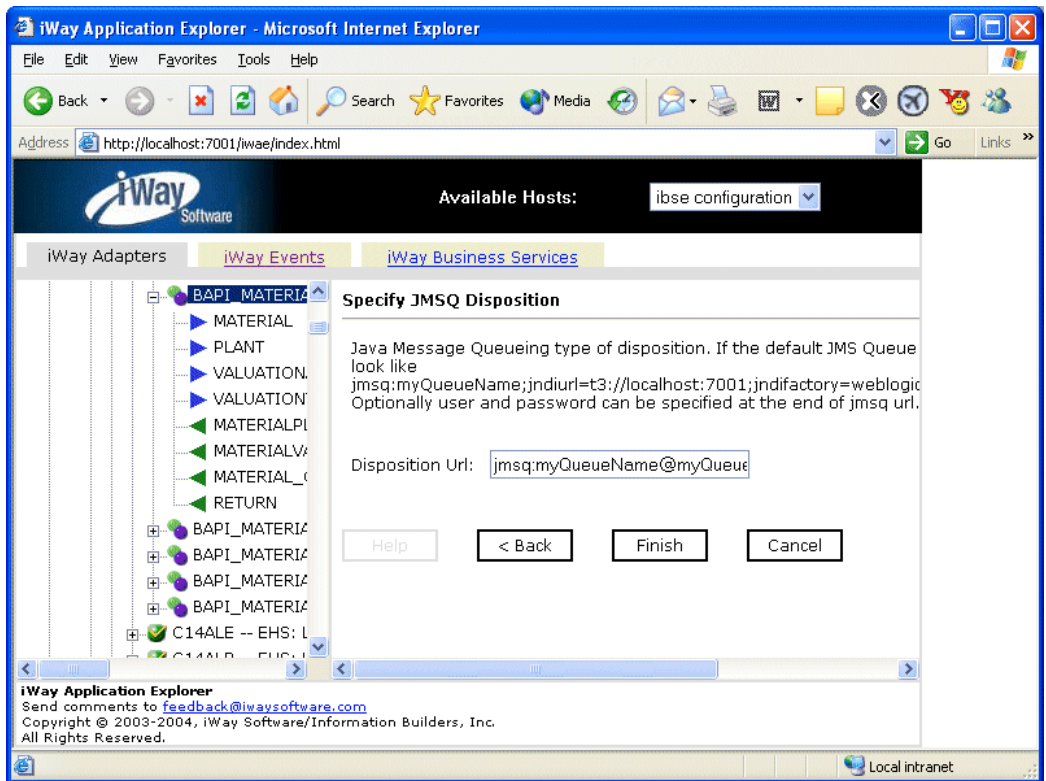
The Create iWay Event Port appears in the right pane.



2. Provide the name, the description, and the disposition information.

The disposition can be JMS or File.

3.2 Events

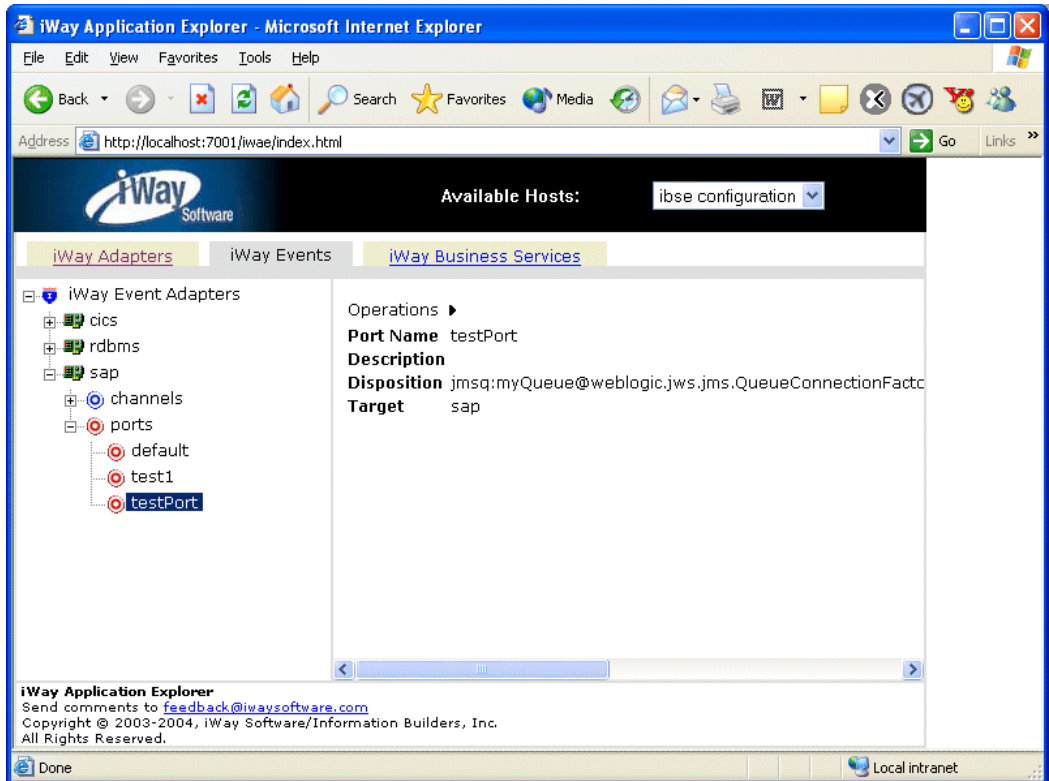


3. If you select JMSQ Disposition, provide the details of the JMS Queue, for example:

```
jmsq:myQueueName@myQueueFac;jndiurl=t3://localhost:7001;jndifactory=weblogic.jndi.WLInitialContextFactory
```

3.2.2 Deploying a Channel

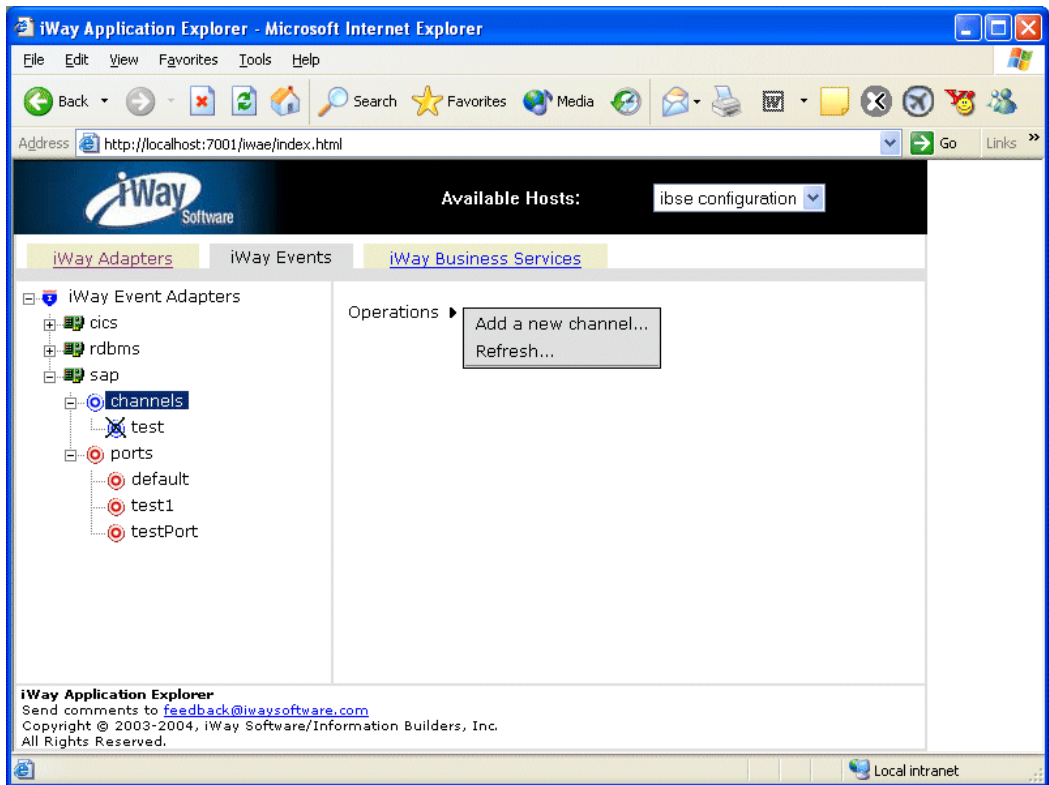
After defining a port, you must create a channel to listen to the EIS.



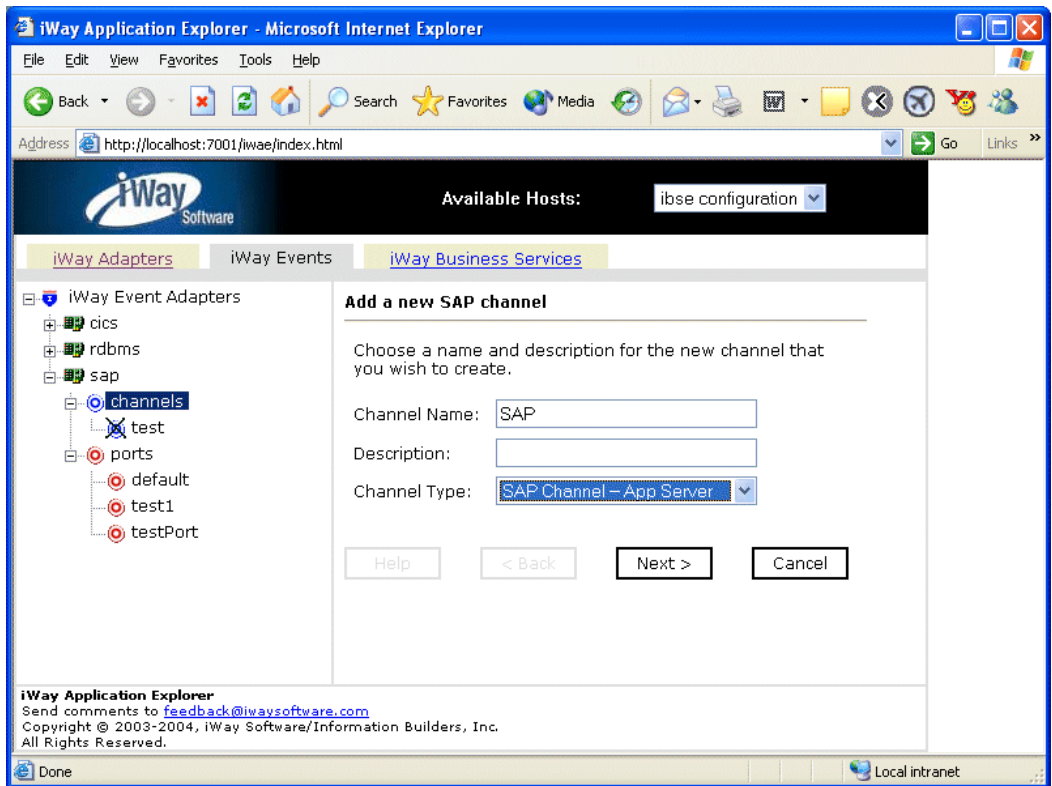
1. Define or add and modify channels using the iWay Events tab.

Note: You can also add and modify ports using the iWay Events tab.

3.2 Events

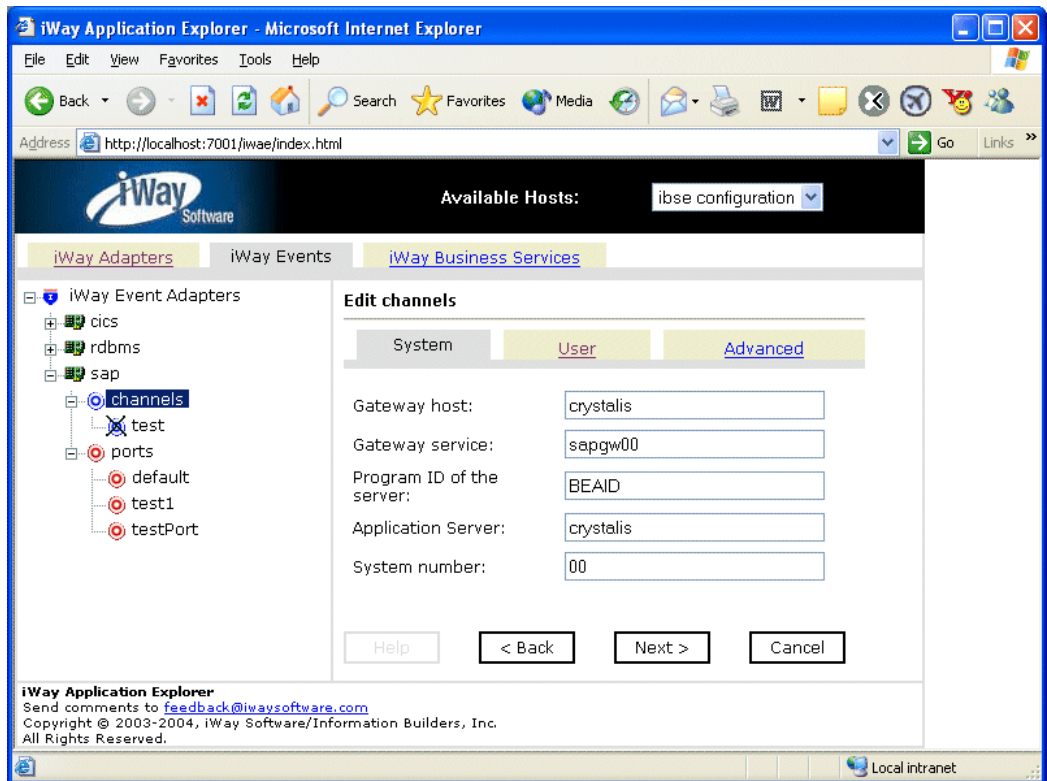


2. Provide a channel name and channel type for the channel definition, as shown in the following illustration.

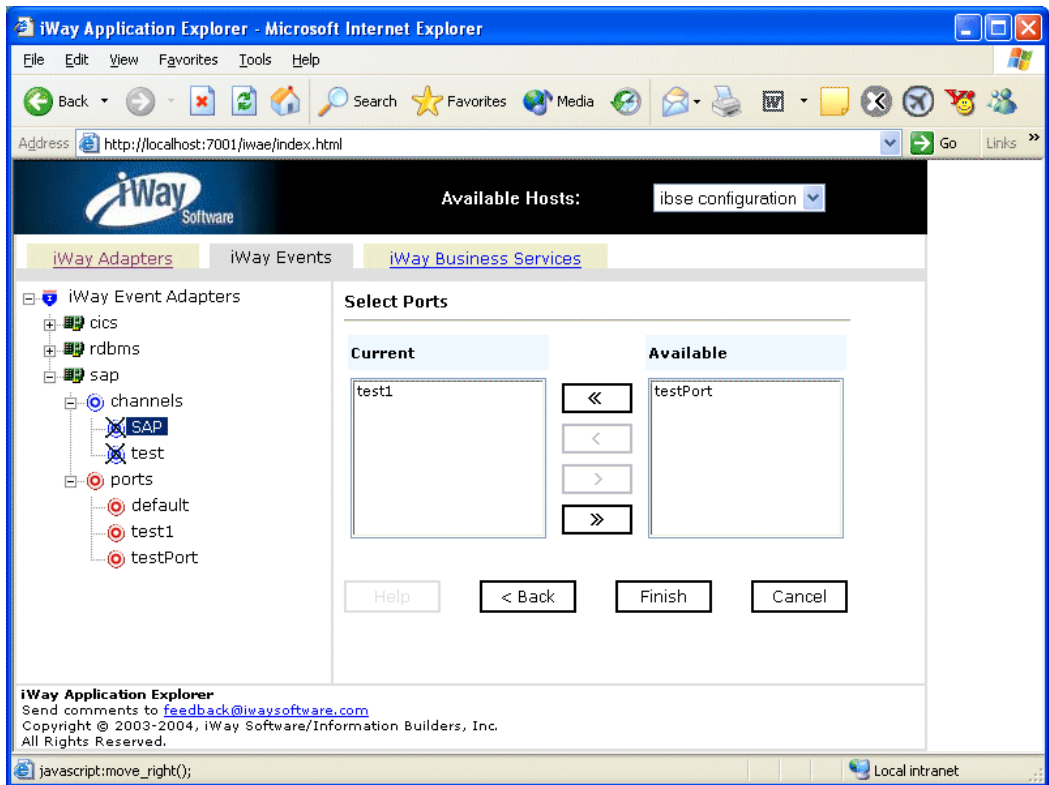


3. After defining the channel type, add the connection information for the channel.

3.2 Events

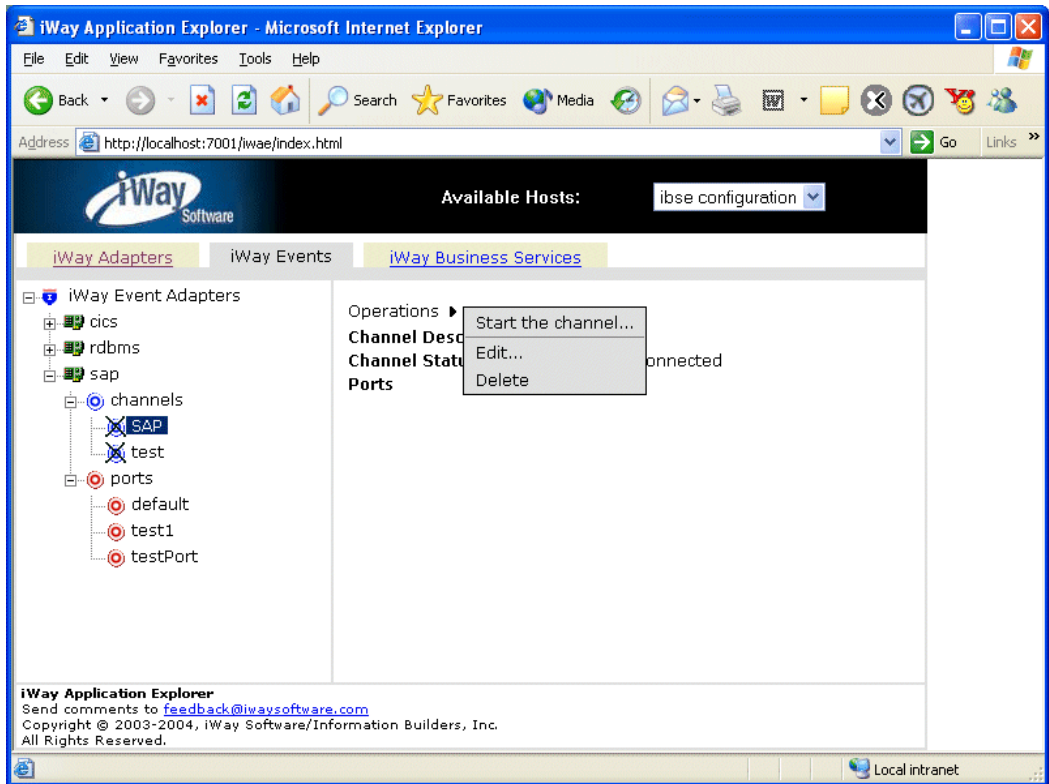


4. Bind a list of ports to the channel.



5. Start the channel.

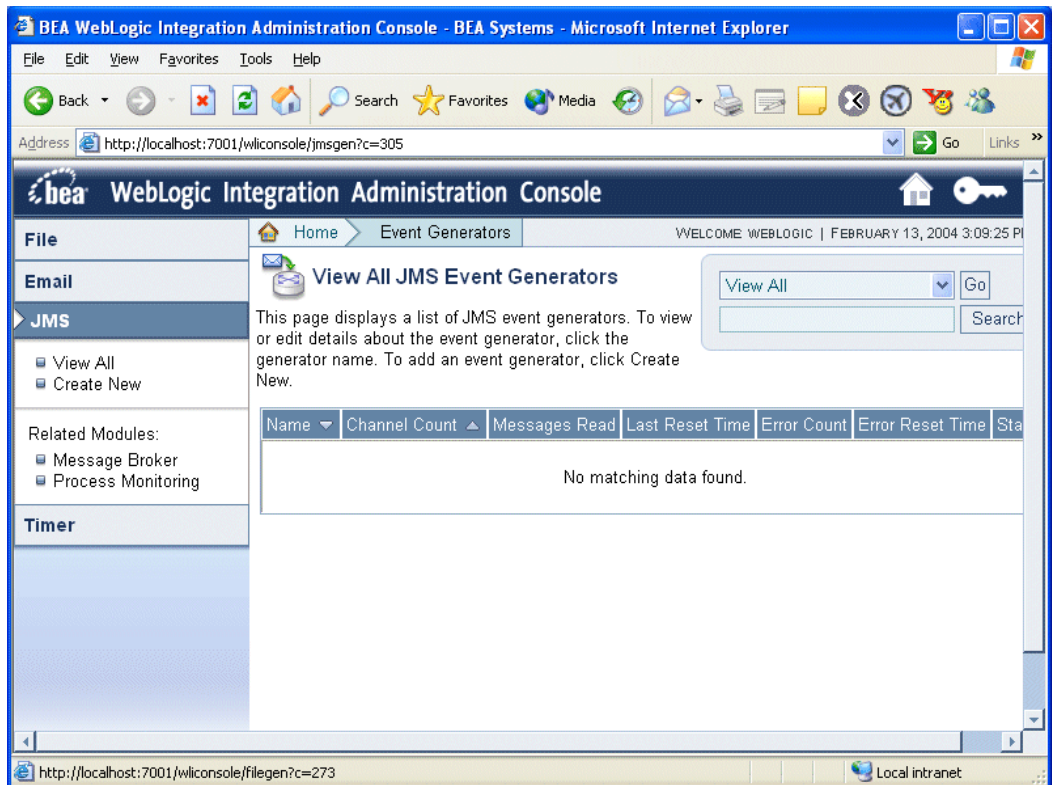
3.2 Events



After the channel is started, incoming events are posted to the associated ports.

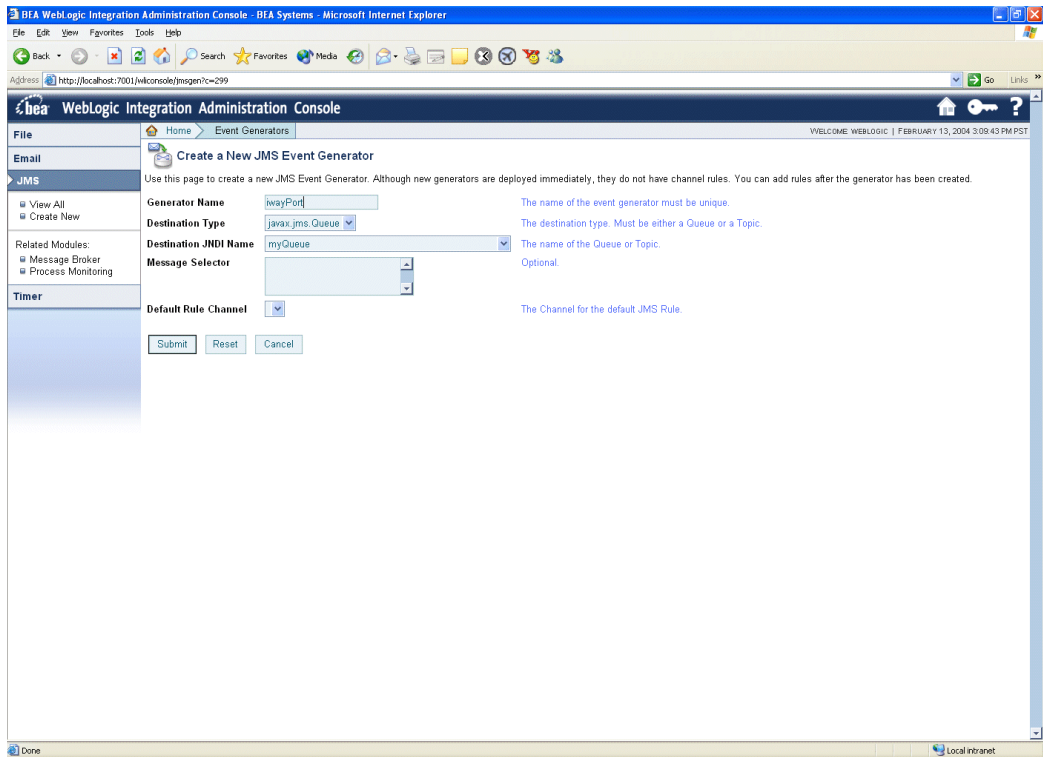
3.2.3 Setting up a JMS Event Generator

1. Using the WLI OAM Console, create a new JMS Event Generator to retrieve the JMS messages posted by the iWay JMS ports.



2. When defining the JMS Event Generator, ensure that the name of the queue is the same as the name used in the iWay JMS Queue port disposition.

3.3 Troubleshooting Web Services



3.2.4 Integration With JPD

Integration of events can be accomplished by using the:

- Start node listening to the message broker channel.
- MB Subscription control to subscribe to the message broker channel.

You must import the event schema from the iWay 5.5 engine to create a typed channel in the message broker.

3.3 Troubleshooting Web Services

iWay provides a tracing function for troubleshooting problems with Web services. Tracing is enabled on the iBSE servlet configuration tool.

To set the trace levels:

1. Enter the following URL in your browser window:

<http://hostname:port/ibse/IBSEConfig>

where:

hostname

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

port

Is the port for the domain you are using for iWay. The port for the default domain is 7001.

2. In the System area, ensure that *Debug* is selected.

The trace information is saved in the following location:

iWay55\bea\ibse\ibselogs

where:

iWay55

Is the full path to your iWay 5.5 installation. The default is C:\Program Files\iWay55.

Note: The log is also available on the BEA WebLogic server sysprint window.

4.0 JCA Integration

4.1 Services

4.1.1 Deploying a Service

Step1: Choose the iJCA Configuration and the Adapter

1. To open Application Explorer, enter the following URL in your browser window:

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

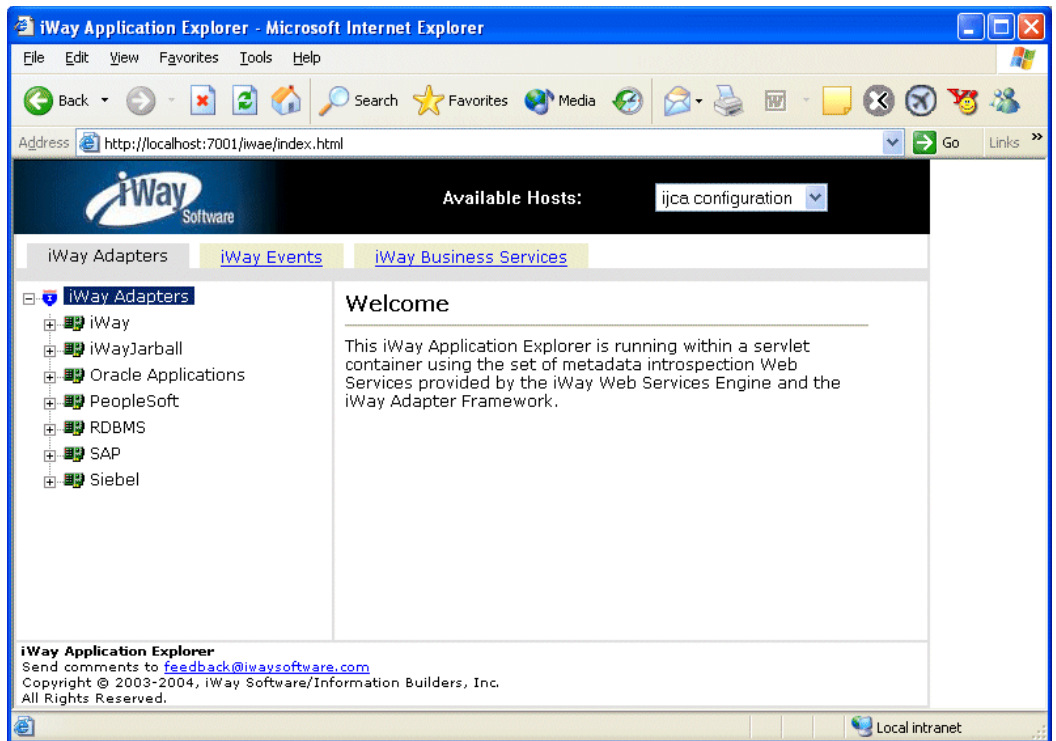
where:

hostname

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

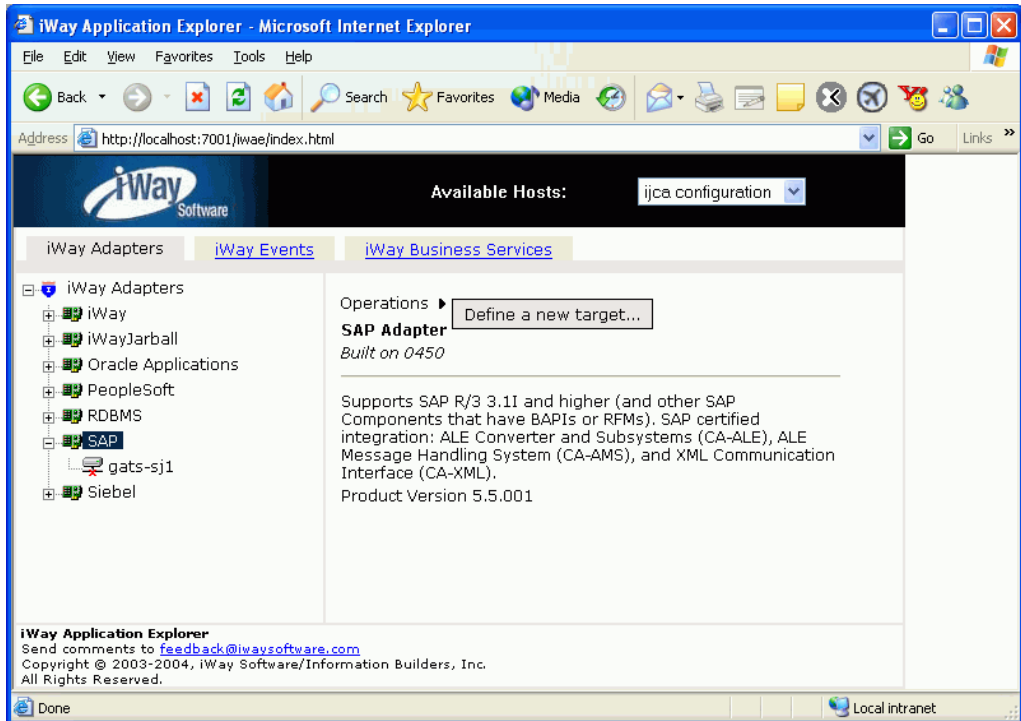
port

Is the port for the domain you are using for iWay. The port for the default domain is 7001.



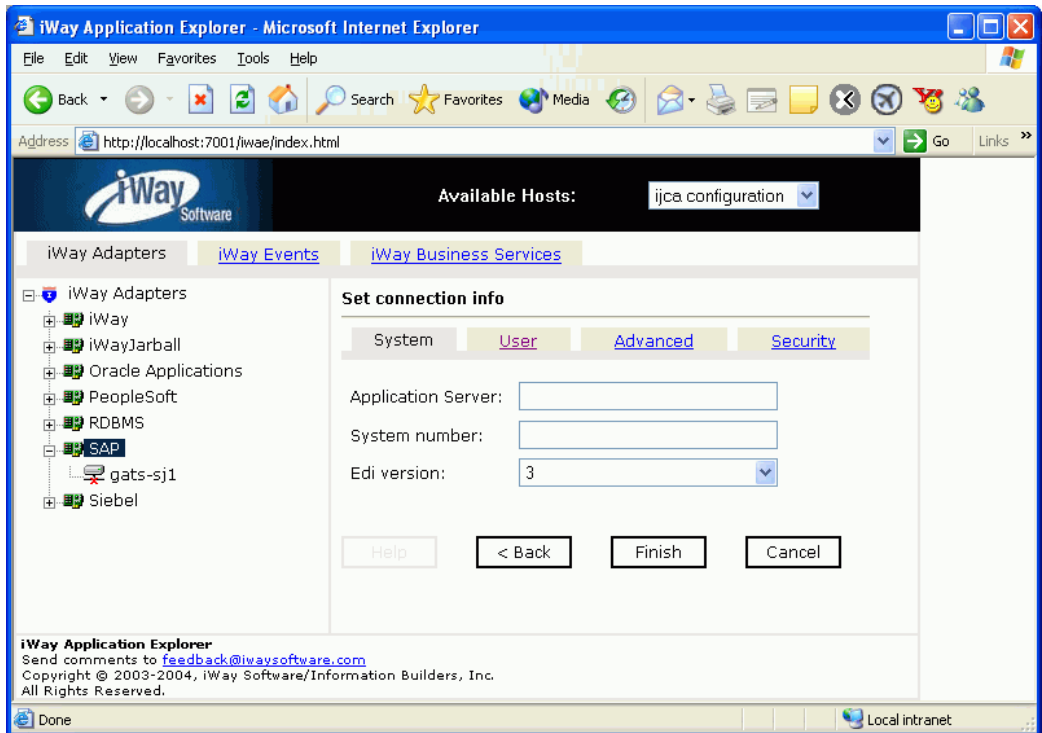
2. From the Available Hosts drop-down list, select the *ijca configuration*.

Step 2: Create an EIS Target



1. After selecting an adapter, create a new target.

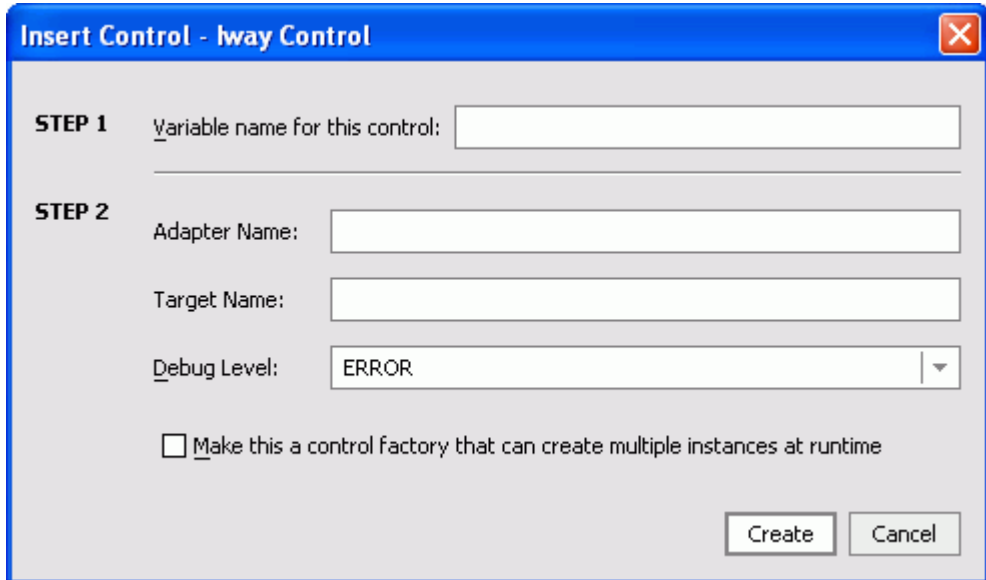
4.1 Services



2. Provide connection information and connect to the target.

4.1.2 Using the iWay Control to Call iWay JCA CCI

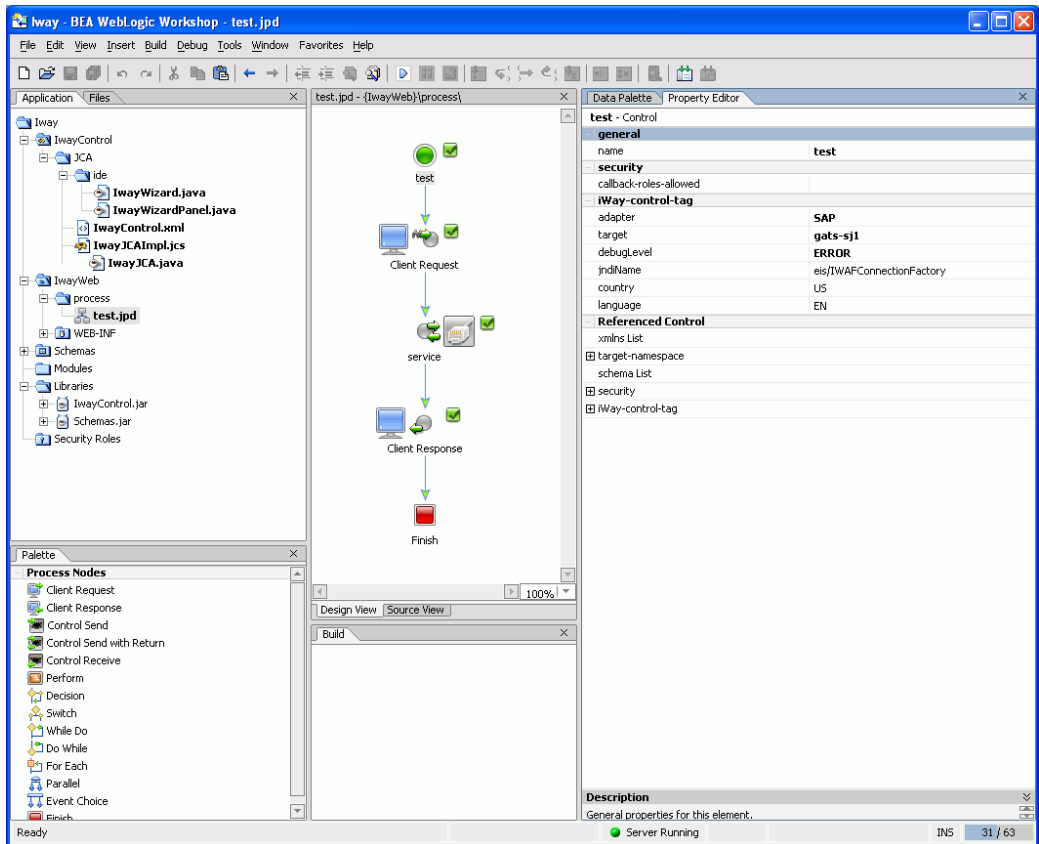
The iWay Control, available as an add-on, provides a way to integrate to the JCA adapter without writing any code. The control appears in the list of integration controls in the data palette. For more installation information, see the Control installation guide.



The image shows a dialog box titled "Insert Control - iWay Control" with a blue header bar and a red close button in the top right corner. The dialog is divided into two steps. STEP 1 contains a label "Variable name for this control:" followed by an empty text input field. STEP 2 contains three labels: "Adapter Name:" followed by an empty text input field, "Target Name:" followed by an empty text input field, and "Debug Level:" followed by a dropdown menu showing "ERROR". Below these fields is a checkbox labeled "Make this a control factory that can create multiple instances at runtime". At the bottom right of the dialog are two buttons: "Create" and "Cancel".

When creating a new control, you are prompted for the adapter name, for example, SAP, and the target EIS name, for example, SJSAP.

4.1 Services

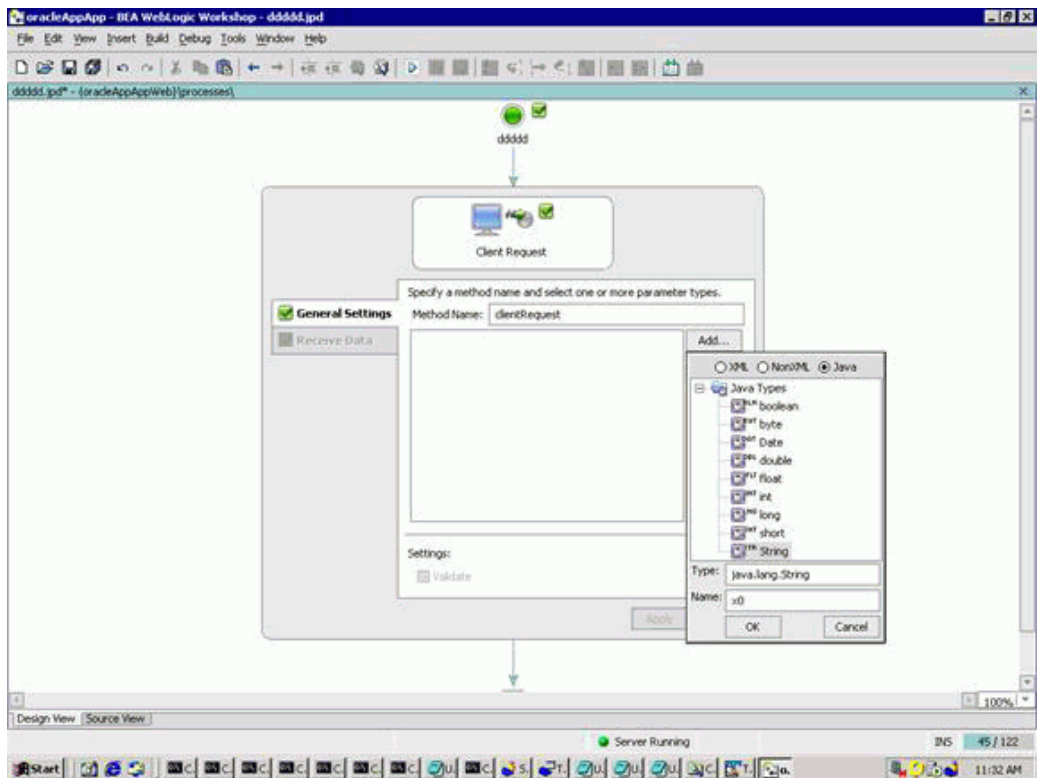


You can use the property editor on the control to modify additional properties such as language and country.

4.1.3 Passing Identity Using CCI

For a client request, as input into the JPD, obtain the usual XML data and two Java string variables.

1. Click the *Add* button and select the *Java* option button.
2. At the bottom of the list, select the option, *String*, twice with two different variables for the end system user and the password.



3. In a JPD, create a node that calls the `authServe` (String user, String password, `com.bea.xml.XmlObject` input) method of the iWay Control.
4. Pass the user and password entries as the `authService` method parameters for user and password.
5. After full implementation as required, compile and run the JPD.

The user name and password used to run the test should be those entered at the time of the client request.

4.2 Events

4.2.1 Deploying an Event Port With JMS Disposition

Step1: Choose the Adapter

1. To open Application Explorer, enter the following URL in your browser window:

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

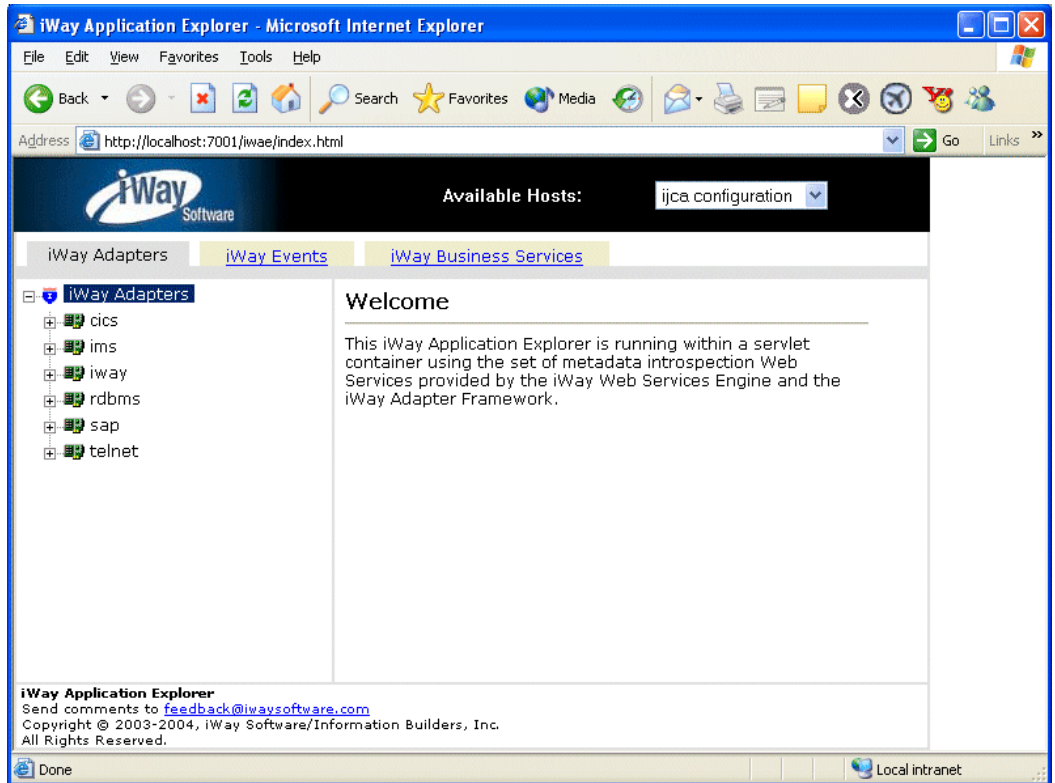
where:

hostname

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

port

Is the port for the domain you are using for iWay. The port for the default domain is 7001.

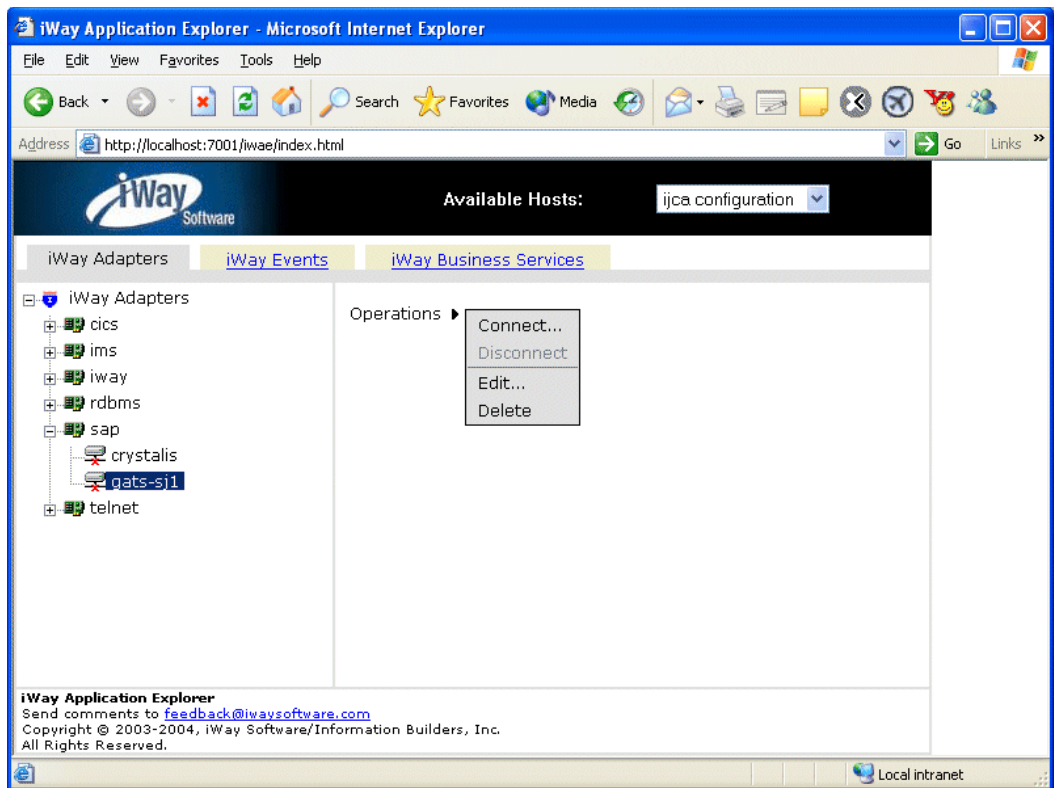


2. From the Available Hosts drop-down list, select the *iBSE configuration*.

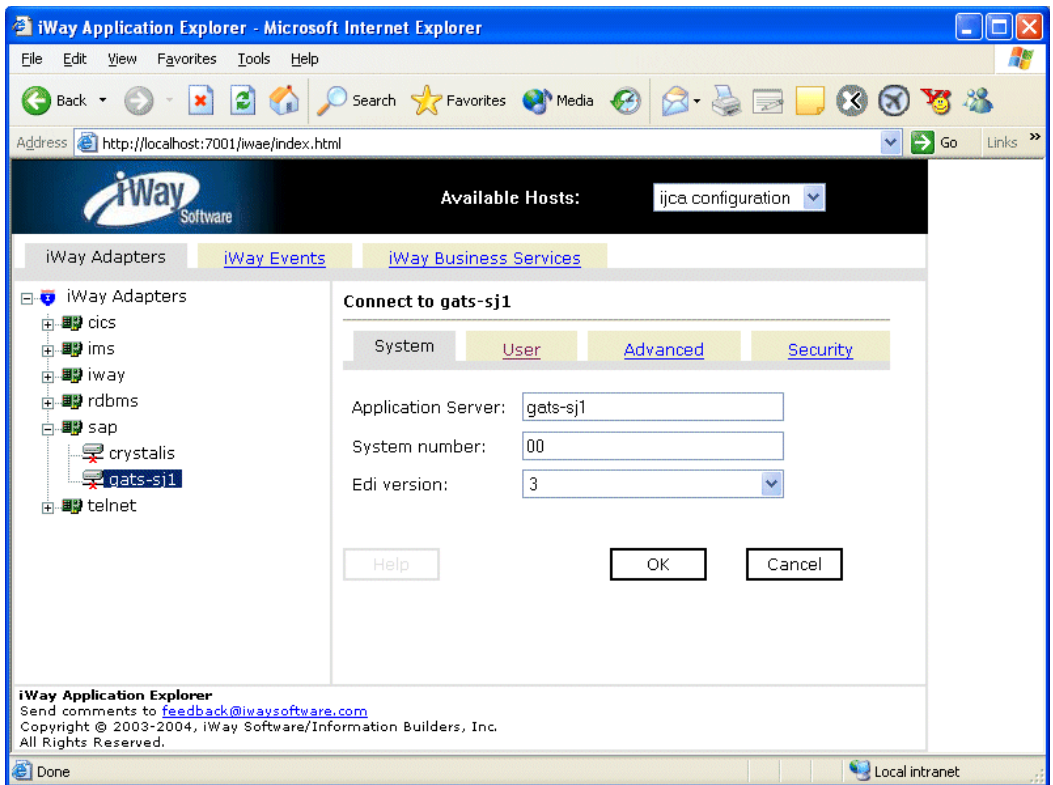
Step 2: Set up Connection Information

1. After selecting the adapter, connection information must be entered to connect to the end system.

You can choose an existing connection or create a new connection. In this example, the iWay Adapter for SAP connection information must be added.



2. Specify the requisite connection information to connect to the end system.

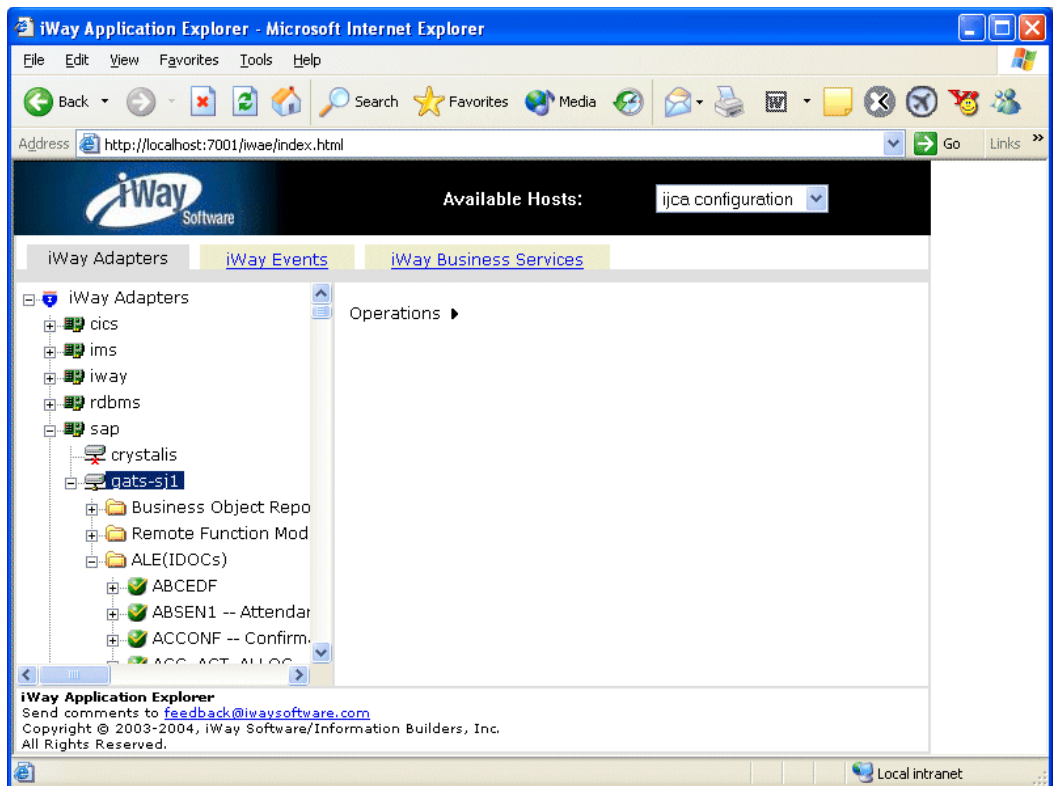


3. After you provide information for the System and User tabs, you complete the SAP target configuration.

However, you can specify additional parameters in the Advanced and Security tabs.

Step 3: Browse the End System Metadata for the EIS Function

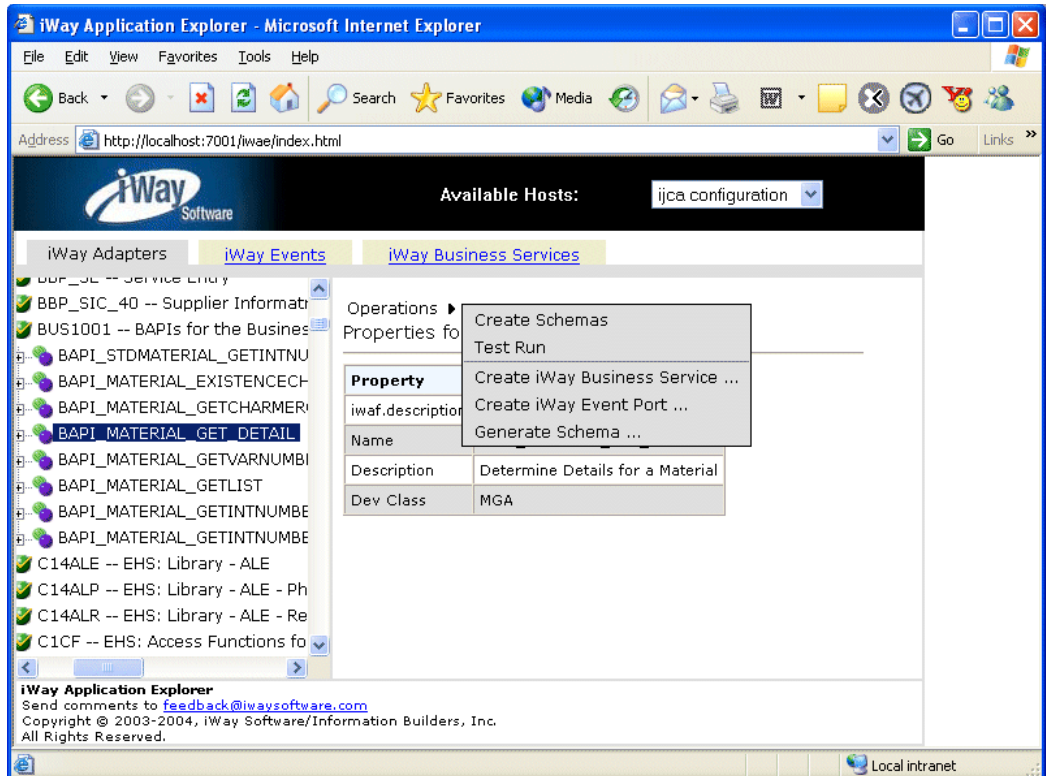
1. After connecting to the EIS, you can browse a metadata tree or search for the end system function.



2. After selecting the appropriate function, you can test the function on the EIS.

Step 4: Create Schemas

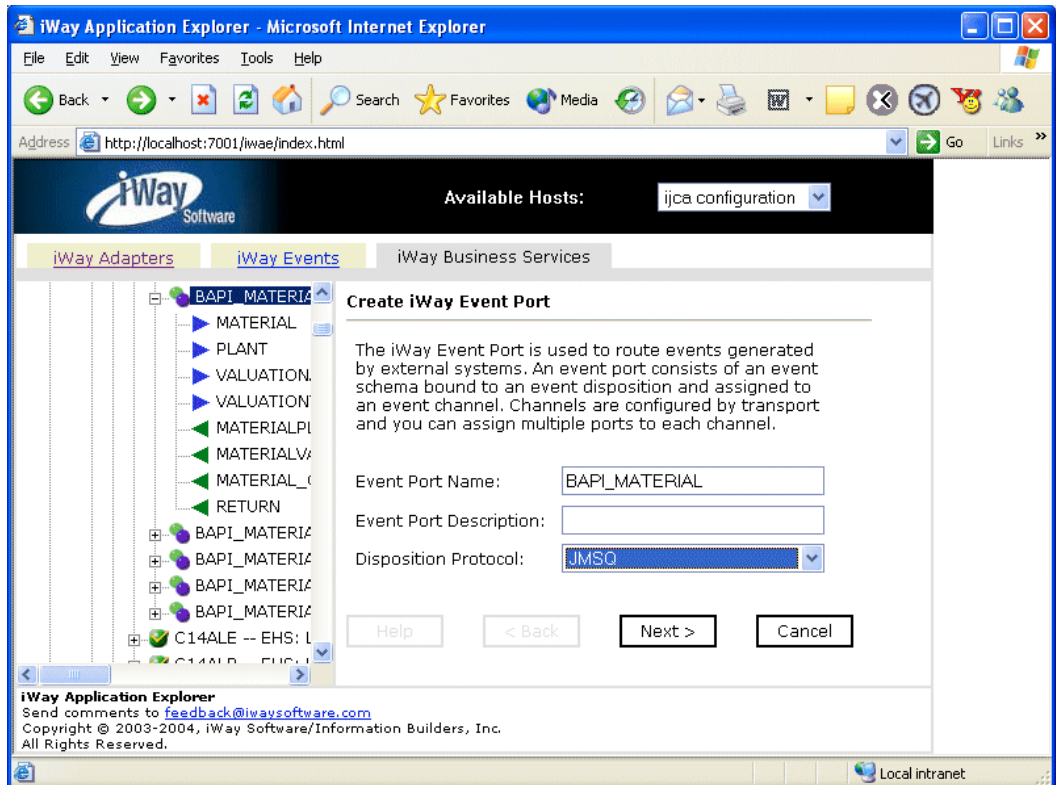
After selecting and testing the required end system function, you create the request and response schemas corresponding to the service.



The schemas are stored in the Application Explorer repository.

Step 5: Create an Event Port

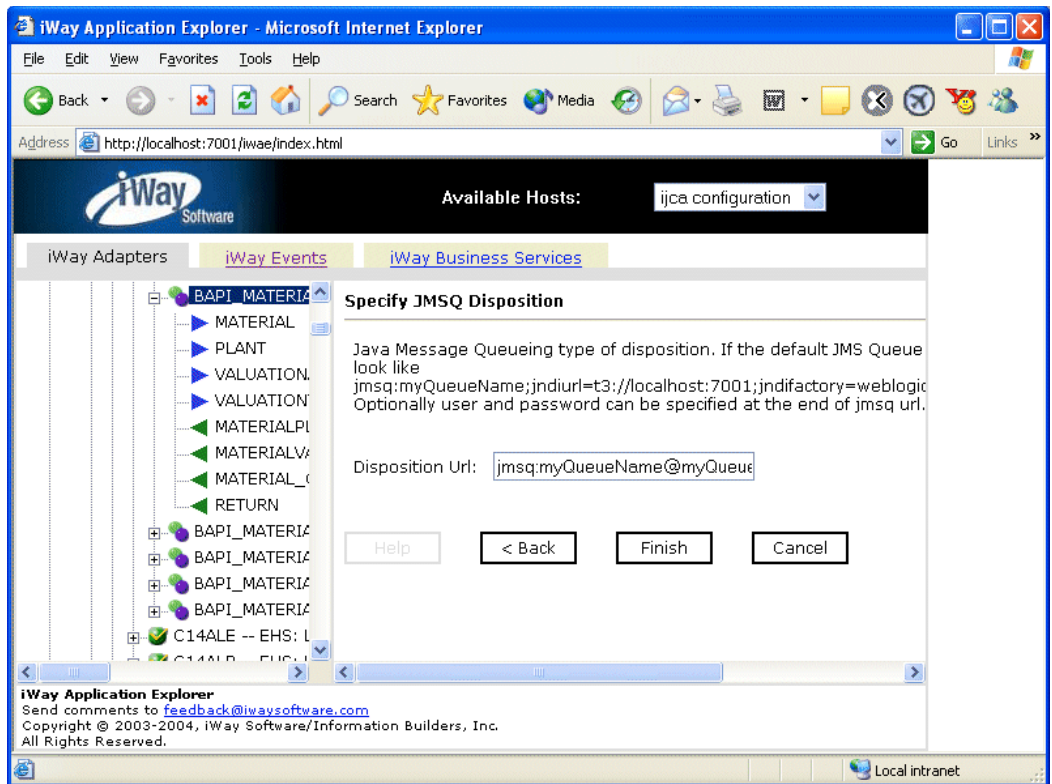
After selecting the business function, you must create an iWay Event port.



1. To create an Event port, provide the name, the description, and the disposition information.

The disposition can be JMS or File.

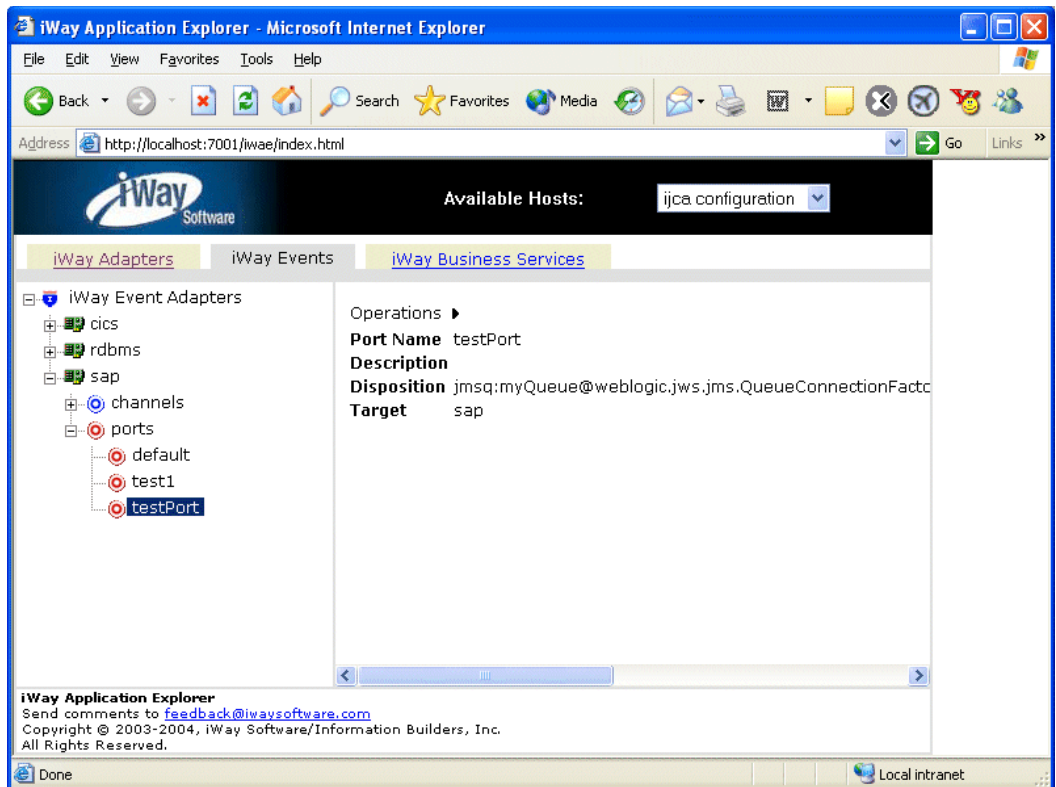
4.2 Events



2. If you select JMS Disposition, provide the details of the JMS Queue, for example:

`jmsq:myQueueName@myQueueFac;jndiurl=t3://localhost:7001;jndifactory=weblogic.jndi.WLInitialContextFactory`

3. Click Finish.

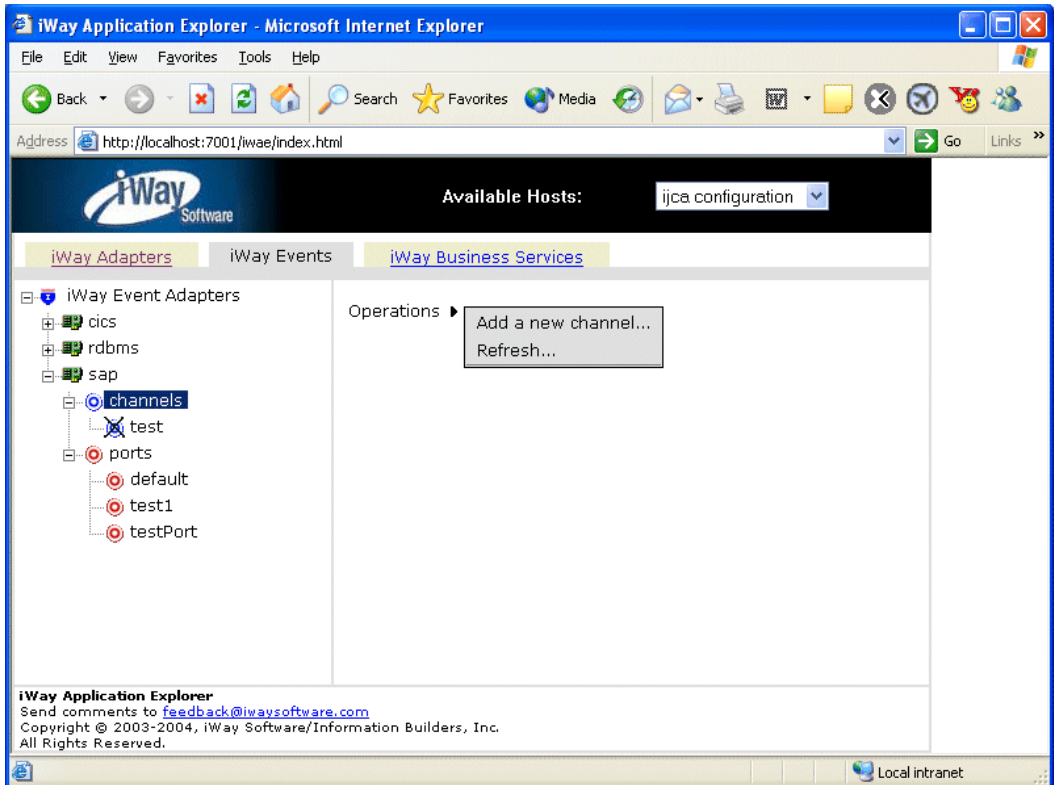


4.2.2 Deploying a Channel

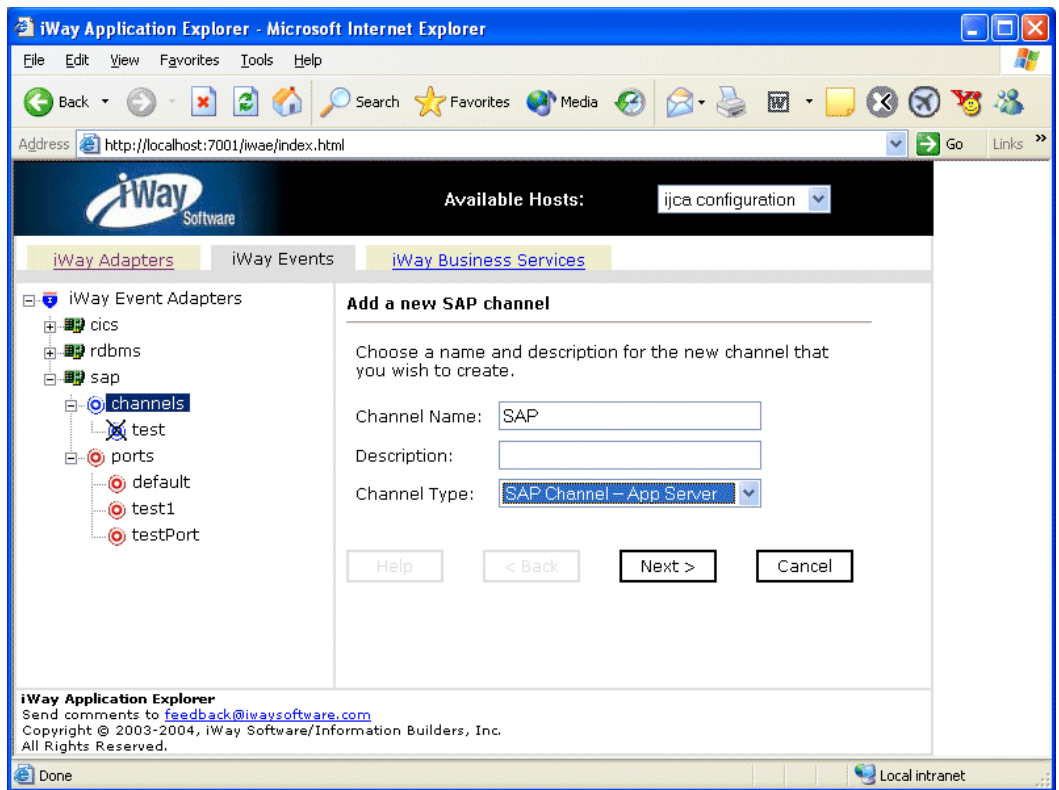
After defining a port, you must create a channel to listen to the EIS.

1. Define or add and modify channels using the iWay Events tab.

Note: You can also add and modify ports using the iWay Events tab.

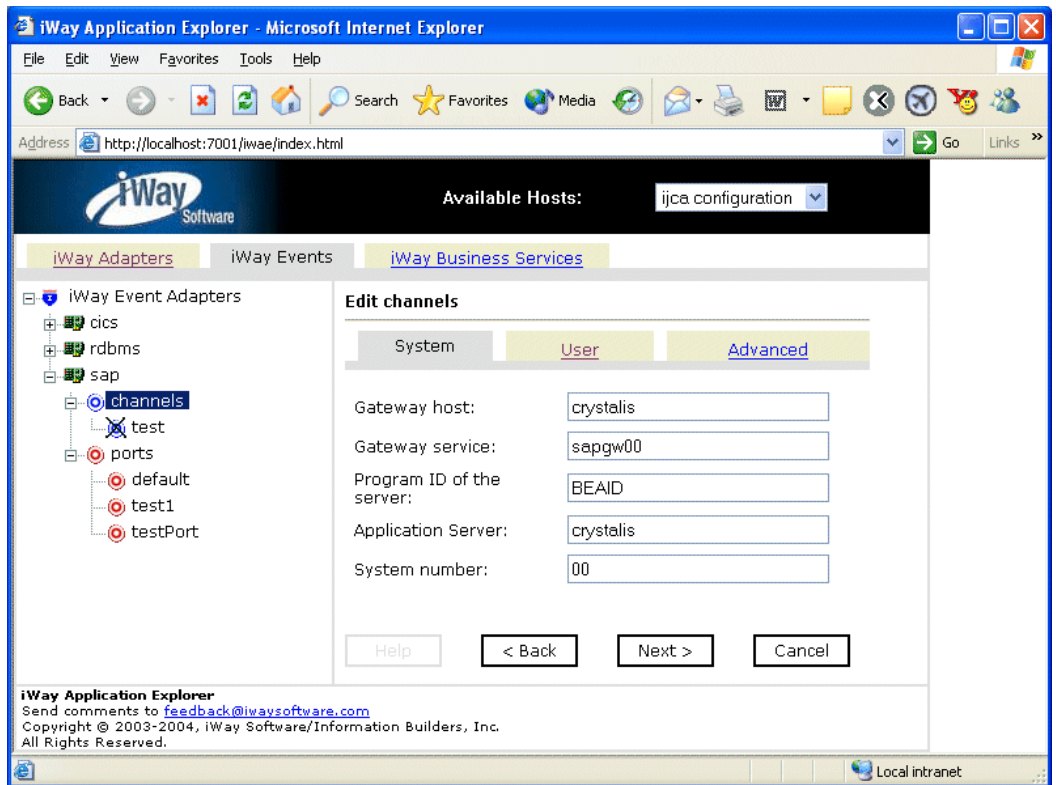


2. Provide a channel name and channel type for the channel definition, as shown in the following illustration.

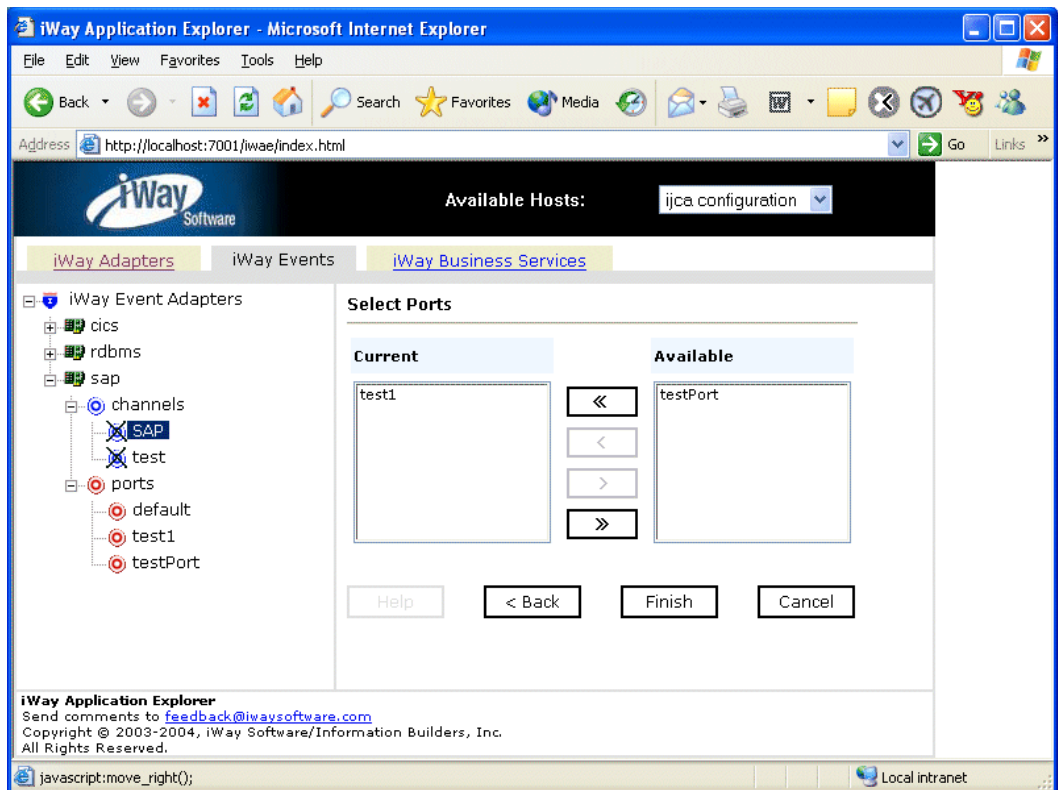


3. After defining the channel type, add the connection information for the channel.

4.2 Events

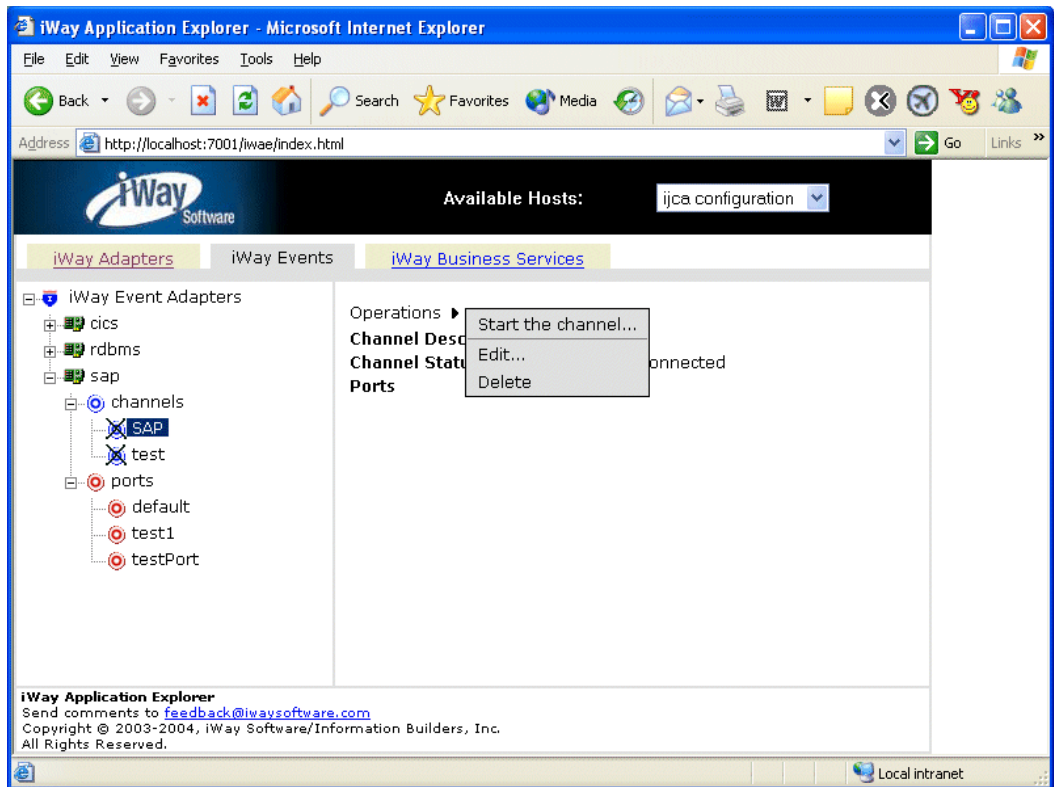


4. Bind a list of ports to the channel.



5. Start the channel.

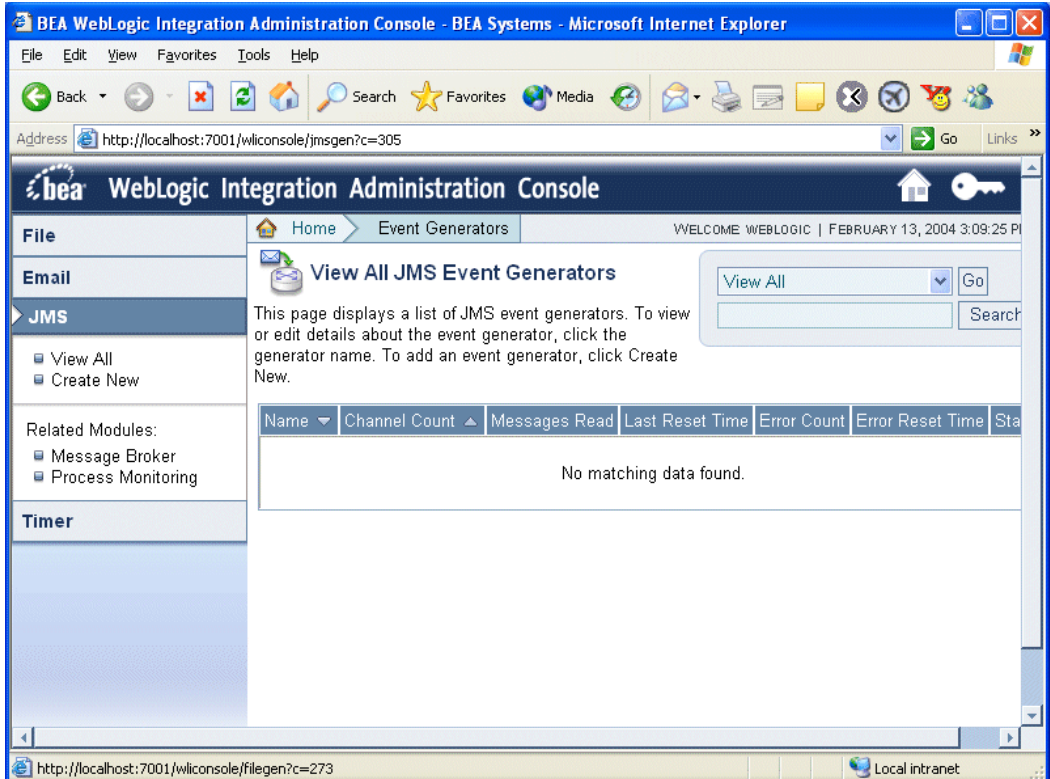
4.2 Events



After the channel is started, incoming events are posted to the associated ports.

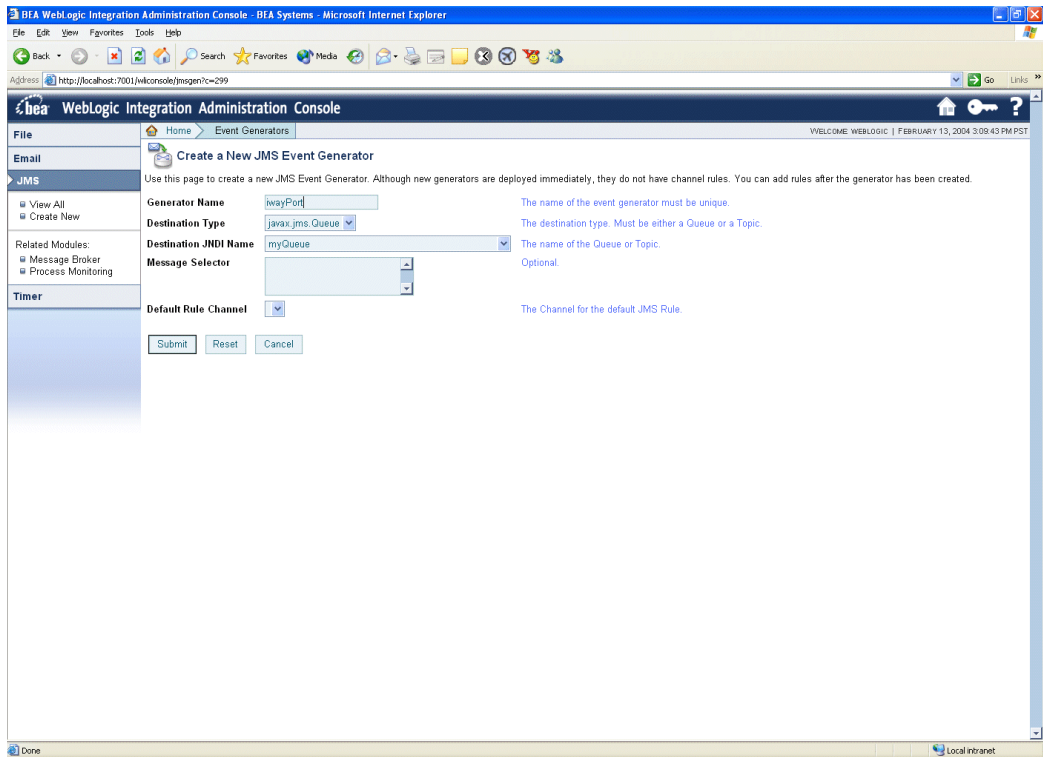
4.2.3 Setting up a JMS Event Generator

1. Using the WLI OAM Console, create a new JMS Event Generator to retrieve the JMS messages posted by the iWay JMS Ports.



2. When defining the JMS Event Generator, ensure that the name of the queue is the same as the name used in the iWay JMS Queue port disposition.

4.2 Events



4.2.4 Integration With JPD

Integration of events can be accomplished by using the:

- Start node listening to the message broker channel
- MB Subscription control to subscribe to the message broker channel

You must import the event schema from the iWay 5.5 engine to create a typed channel in the message broker.

4.3 Troubleshooting JCA

iWay provides the ability to set multiple log levels for JCA. The log level is set in the META-INF\ra.xml file.

To change defaults, you must:

1. Extract the META-INF\ra.xml file from the iwafjca.rar archive.
 - a. Open a command prompt and navigate to the directory containing the connector, for example:

```
iWay55\etc\setup
```

where:

```
iWay55
```

Is the full path to your iWay 5.5 installation. The default is C:\Program Files\iWay55.

- b. Issue the following command:

```
jar xvf iwafjca.rar META-INF/ra.xml
```

The JAR command is located in the Java SDK bin directory which might not be in your search path. If you receive an error, execute the jar command using its full path. This path varies depending on which version of Java is installed, for example:

```
C:\j2sdk1.4.1_03\bin\jar -xvf iwafjca.rar META-INF/ra.xml
```

Note: Ensure you use the JAR command and not Winzip. Winzip does not properly extract Java related archives.

2. Open the extracted ra.xml file in a text editor.
3. Modify the contents of the <param-value> tags to change defaults.
 - **LogLevel.** Trace setting. This 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>
```

Leave the remainder of this file unchanged.

4. Save the file and exit the editor.

5. Use the JAR command to return the ra.xml file to the META-INF directory within the archive. To do this:

- a. Ensure that you are in the following directory that contains the connector:

`iWay55\etc\setup`

where:

`iWay55`

Is the full path of your iWay 5.5 installation directory. The default is C:\Program Files\iWay55.

- b. Issue the following command:

`jar -uvf iwafjca.rar META-INF/ra.xml`

6. Redeploy the connector.

The trace information is written to the BEA WebLogic server log file.

5.0 Web Services Versus JCA Deployment

The following four factors explain the differences between deploying iWay Web services and deploying the iWay JCA option. Understanding the factors can help in selecting a deployment option.

1. iWay Web services is the preferred deployment option because the iWay 5.5 engine:

- Can be deployed in a separate instance of BEA WebLogic server.
- Provides better distribution of load.
- Provides better isolation from any errors from third party libraries.
- Provides better capability to isolate issues for debugging purposes.
- Conforms more closely to SOA model for building applications.

2. JCA provides slightly better performance

JCA does provide slightly better performance than the Web services option; however, the difference decreases as the transaction rate increases.

3. The Web services and JCA options both provide identity propagation at run time.

The Web services option provides the capability to pass identity using the SOAP header. For the JCA option, user name and password can be passed using the connection spec of the CCI.

4. Transactions

Because no adapters currently being resold by BEA support XA transactions, transactions are not a consideration when choosing between JCA and Web services.

Reader Comments

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