

# iWay

iWay Installation and Configuration for  
BEA WebLogic  
Version 5 Release 5

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## Preface

This documentation describes how to install and configure iWay Adapters, iWay Connector for JCA, iWay Business Services Engine (iBSE), and iWay Application Explorer for use with BEA WebLogic Server. It is intended for those with an administrator's knowledge of the operating systems and target systems involved in their implementation.

## How This Manual Is Organized

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The following table includes numbers, titles, and brief descriptions of chapters and appendixes in this manual.

Chapter/Appendix		Contents
<b>1</b>	<i>iWay 5.5 for BEA WebLogic Installation Overview</i>	Provides a brief overview of iWay 5.5 products and components, as well as their installation steps.
<b>2</b>	<i>Installing iWay 5.5 Components</i>	Provides installation requirements, instructions for running the installation program, post-installation tasks, and third party requirements for adapters.
<b>3</b>	<i>Configuring iWay Connector for JCA</i>	Provides instructions for configuring iWay Connector for JCA.
<b>4</b>	<i>Configuring iWay Business Services Engine</i>	Provides instructions for configuring iWay Web services components.
<b>5</b>	<i>Configuring Application Explorer</i>	Provides instructions for configuring the different versions of iWay Application Explorer.
<b>A</b>	<i>Configuring the iWay Emulation Adapter (3270/5250)</i>	Provides instructions for installing the client components of the iWay Emulation Adapter.
<b>B</b>	<i>Configuring Legacy Adapters</i>	Provides instructions for configuring legacy adapters that require an iWay Server component.
<b>C</b>	<i>Configuring J.D. Edwards OneWorld for Outbound Transaction Processing</i>	Provides instructions for configuring J.D. Edwards for use with the iWay Adapter for J.D. Edwards.

## Documentation Conventions

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The following table lists the conventions that apply in this manual and a description of each.

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), a cross-reference, or an important term.
<b>this typeface</b>	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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To help our consultants answer your questions effectively when you call, please provide the following information:

- Your six-digit site code number (xxxx.xx).
- Your software configuration.

The following table lists the information to provide about your software configuration.

	<b>Version-Build Date</b>	<b>HF/Service Pack</b>	<b>Patches</b>	<b>OS</b>	<b>Java Version</b>
iWay Product					
Third-party Application Server					
EIS (adapter target)					

**Note:** For EIS, ensure you record the application or database name and release level, including minor versions, for example, 4.6.1.

- The exact nature of the error or problem, specified as follows:
  - Steps to reproduce the problem.
  - Problem description (be as specific as possible).
  - Error message(s).
- To best define the problem, provide the following:
  - Screen captures of the error
  - Error output files
  - Trace files and log files
  - Log transaction
  - XML schemas and/or document instances
  - Other input documents (for example, transformations)
  - Configuration files (all are applicable):

.xch files

config.xml file

base.xml file

repository.xml file

ibserrepo.xml file

.dic files

.rules files

- Environment variable settings:

IWAY55

IWAY55OEM

CLASSPATH

JAVA\_HOME

ACBDIR

CBDIR (UNIX)

- Has the process, procedure, or query ever worked in its current form? Has it changed recently? If so, how (provide specific details)? How often does the problem occur?
- Can this problem be reproduced? If so, how? Can it be consistently reproduced?
- Have you tried to reproduce your problem in the simplest form possible?
- Do you have a trace file?
- How is the problem affecting your business? Is it halting development or production?
- Do you just have questions about functionality or documentation?

## 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.

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## CHAPTER 1

# iWay 5.5 for BEA WebLogic Installation Overview

### Topics:

- iWay 5.5 Products and Components
- Installation and Configuration Overview

This section provides an overview of the installation and configuration of iWay 5.5 products and components.

## **iWay 5.5 Products and Components**

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This manual explains how to install and configure the following products for use with BEA WebLogic Server:

- iWay Adapters
- iWay Connector for JCA
- iWay Business Services Engine (iBSE)
- iWay Application Explorer

The following topics briefly summarize the iWay 5.5 components. This manual explains how to install all components. Most users require only a subset of the available components.

## **iWay Adapters**

iWay adapter offerings consist of adapters for accessing and integrating information and systems across many different protocols and data sources. iWay Software provides over 200 types of adapters connecting everything from legacy systems and databases to the most recent advancements in information technology. Different iWay installation packages include different adapters, so the available adapters depend on which version of iWay you install. The following are some of the most common adapters installed with iWay 5.5:

- AS2
- Baan
- BroadVision
- CICS Transaction Adapter (XML)
- ClarifyCRM (Amdoc ClarifyCRM)
- CORBA
- DB2 Net Driver  
(iWay Adapter for RDBMS)
- eMail
- Emulation (for 3270/5250)
- FIX
- HIPAA
- HL7
- IMS
- Informix  
(iWay Adapter for RDBMS)
- iWay/WebFOCUS (EDA) Server  
(iWay Adapter for RDBMS)
- J.D. Edwards OneWorld
- J.D. Edwards WorldSoft
- JMS
- Lawson
- Lotus Notes
- Manugistics
- MFG/PRO
- Microsoft .NET
- Microsoft Message Queueing (MSMQ)
- MQ Series (IBM WebSphere MQ)
- Oracle (iWay Adapter for RDBMS)
- Oracle Applications (E-Business Suite)
- Oracle AQ
- PeopleSoft
- RDBMS
- SAP R/3
- Siebel
- SQL Server 2000  
(iWay Adapter for RDBMS)
- SWIFT
- Sybase (iWay Adapter for RDBMS)
- TIBCO Rendezvous
- Transora
- Tuxedo (Transaction Adapter for BEA Tuxedo)
- UCCnet
- VSAM

By default, you can use any of the adapters installed with iWay 5.5 on a 90-day trial license. If you do not see your adapter in the previous list, contact your iWay Software representative for a complete list of available adapters.

Adapters can be deployed through an application server using iWay Connector for JCA or Servlet iBSE. In addition, adapters can be integrated directly into your own applications. For information on integrating adapters into your applications, contact an iWay Software representative.

**Note:** When used with BEA WebLogic, the iWay Adapter for RDBMS is used to provide SQL based access to select relational (DB2 on z/OS or OS/400) and non-relational data sources on IBM compatible mainframes (OS/390, Z/OS, VM), midrange (OS/400), and legacy (OpenVMS, Tandem) platforms. In addition, the iWay Adapter for RDBMS can be used to enable SQL call access to business logic stored in iWay stored procedures. iWay stored procedures are often used to provide multi-platform joins and specialized routines. For more details on using the iWay Adapter for RDBMS and a list of supported data sources, see the *iWay Adapter for RDBMS for BEA WebLogic User's Guide Version 5 Release 5*.

## **iWay Connector for JCA**

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.

iWay Connector for JCA provides XML transformation, adapter hosting, and integration capabilities. After you deploy iWay Connector for JCA, you have access to adapters.

## **iWay Business Services Engine**

iWay Business Services Engine (iBSE) provides transformation and adapter hosting functionality as well as an environment for developing, running, and integrating Web services. It provides a transformation and integration engine for processing XML files and SOAP messages for exchanges with Web services applications. For use with application servers, iBSE is provided as a Web or Enterprise application and referred to as Servlet iBSE.

Servlet iBSE is deployed through a J2EE compliant application server. After you deploy Servlet iBSE, you have access to the adapters you installed. Although you can run both iBSE and iWay Connector for JCA, only one is required to host adapters.

**Note:** The term Servlet iBSE is used to distinguish the Web application version of iBSE from a version of iBSE that runs external to application servers in a standalone iWay Adapter Manager. iWay Adapter Manager is not required or provided for use with BEA WebLogic.

## iWay Application Explorer

iWay Application Explorer is a GUI tool that uses iWay adapters to create schemas and Web services for use with iWay Connector for JCA, iBSE, or other XML or Web services based programs. It enables you to quickly generate schemas and publish Web services from objects and procedures in production ERP systems, without requiring in-depth knowledge of the objects or systems.

For BEA WebLogic, two versions of Application Explorer are available:

- The Java **Swing** version is a window accessible within BEA WebLogic Workshop. The iWay installation automatically makes this available if Workshop is installed.
- The Java **Servlet** version is a Web application accessible through a Web browser. The iWay installation creates the Web application that you must deploy to WebLogic server through the console.

## Installation and Configuration Overview

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Depending on the components you wish to use, installation and configuration steps for iWay 5.5 may include:

1. Review the requirements and install any required third party components. (Chapter 2, *Installing iWay 5.5 Components*)
2. Run the installation program to install iWay 5.5 components. (Chapter 2, *Installing iWay 5.5 Components*)
3. On UNIX, set environment variables. (Chapter 2, *Installing iWay 5.5 Components*)
4. Copy third party adapter-related files into the iWay 5.5 directory structure. (Chapter 2, *Installing iWay 5.5 Components*)
5. To use iWay Connector for JCA, deploy iWay Connector for JCA and the Connector Test Tool on your application server. (Chapter 3, *Configuring iWay Connector for JCA*)
6. To use the iWay Business Services Engine (iBSE), deploy Servlet iBSE on your application server and optionally set up a database repository. (Chapter 4, *Configuring iWay Business Services Engine*)
7. Configure Application Explorer. (Chapter 5, *Configuring Application Explorer*)
8. Perform any adapter-specific post-installation steps.





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## CHAPTER 2

# Installing iWay 5.5 Components

### Topics:

- Installation Requirements
- Installing iWay 5.5
- Copying and Collecting Files for Adapters
- Configuration Steps

The following topics describe the requirements and initial installation procedures for iWay 5.5 components.

## **Installation Requirements**

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Review the following installation requirements to ensure your system supports iWay 5.5.

### **Hardware Requirements**

For Windows:

- 400 megahertz (MHz) or higher Intel® Pentium® compatible CPU.
- 256 megabytes (MB) of RAM.
- 50 MB of disk space.

For other platforms, ensure that your machine has a reasonable supply of resources. For exact requirements, contact iWay Software Customer Support.

### **Operating System Requirements**

At this time, iWay 5.5 for BEA WebLogic is supported on the following operating systems:

- Microsoft Windows 2000 with SP2 and Windows 2003
- Linux
- Solaris 8 and 9
- HP/UX 11
- AIX 5

For additional operating system support information, contact iWay Software Customer Support.

**Note:** The procedures, names, and paths in this manual use Windows conventions and default locations unless otherwise indicated. For other operating systems and non-default locations, substitute accordingly. Names and case may vary between operating systems.

### **Browser Requirements**

Internet Explorer 6 or higher.

## Java Requirements

Java 2 Standard Edition (J2SE™) SDK 1.3.1 or higher is required for iWay 5.5 components. For Windows, LINUX, and Solaris™, you can download and install the latest SDK at no charge from:

<http://java.sun.com/j2se/downloads.html>

For other platforms, contact the appropriate vendor.

**Note:** The terms JDK™ and Java SDK™ are synonymous. Java SDK was formerly called JDK.

To determine if Java is properly installed, execute the following at a command prompt:

```
java -version
```

Information on the Java build appears. For example:

```
java version "1.4.1_03"  
Java(TM) 2 Runtime Environment, Standard Edition (build 1.4.1_03-b02)  
Java HotSpot(TM) Client VM (build 1.4.1_03-b02, mixed mode)
```

After installing the Java SDK, the Java command must be in your search path to install and run iWay 5.5. On Windows, the Java SDK installation normally handles this for you by placing a copy of java.exe in C:\WINNT\system32. On other platforms, ensure the following is in your PATH variable:

```
/java_home/bin
```

where:

```
java_home
```

Is the absolute path where the Java SDK is installed.

**Note:** Swing Application Explorer requires Java SDK 1.4.1 or higher.

## Additional iBSE Requirements

iBSE requires a repository in which to store transactions and metadata required for the delivery of Web services. iWay Software recommends using a JDBC™ compliant database. However, a file system repository is available and configured by default, so no initial database configuration is required to get started with iWay 5.5.

If you wish to use a database repository, the SQL required to create the repository tables is installed with iWay 5.5. The required steps are explained in Chapter 4, *Configuring iWay Business Services Engine*. The following are certified as iBSE repository databases:

- Microsoft SQL Server 2000 with SP1
- Oracle 8 and 9
- Sybase 12
- DB2 8

## BEA Requirements

Ensure that BEA WebLogic Server 8.1 (with service pack 3) is properly installed and functioning before configuring it for use with iWay 5.5. For more information on BEA WebLogic installation and configuration, see BEA documentation. You should install available BEA WebLogic service packs before installing iWay.

You can use an existing domain or create a new domain for iWay 5.5 using the Configuration Wizard.

- You can access the Configuration Wizard on Windows from the *Start* menu by selecting *Programs, BEA WebLogic Platform 8.1*, and then *Configuration Wizard*.
- You can access the Configuration Wizard on UNIX by executing the following:

`/BEA_HOME/weblogic81/common/bin/config.sh`

**Note:** If multiple domains run on your machine, chose a custom configuration to change the default port so it does not conflict with other domains. For more information, see the documentation for BEA WebLogic.

## Adapter Requirements

Many adapters require third party libraries or JDBC drivers provided by the vendor of the target data source, system, or protocol. You must copy these files into the iWay 5.5 directory structure after you install iWay 5.5. For more information, see *Copying and Collecting Files for Adapters* on page 2-11.

**Note:** Some adapters for legacy data require that you install an iWay Server component on the mainframe containing the data you wish to access. For more information, see Appendix B, *Configuring Legacy Adapters*.

## Installing iWay 5.5

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The initial iWay 5.5 installation procedure installs iWay Connector for JCA, iBSE, and Application Explorer components, as well as a set of adapters. After installation, iWay 5.5 components and adapters are available for a 90 day trial. After the trial period, contact iWay Software to obtain a license for the components you wish to continue using.

On Windows, you must be an administrator for the local machine to run the installation.

On UNIX, since iWay components run as part of your application server, it is a good idea to install as the user ID under which your application server runs.

### iWay 5.5. Installation

The following procedure installs files for iWay 5.5. After installation, follow the procedures in this manual to activate features that require additional configuration.

**Note:** If you installed the BEA WebLogic ERP adapters and wish to use them with iWay adapters on the same BEA WebLogic Server, install the iWay adapters in the same iWay55 directory. Then when prompted by the installation to overwrite existing files, choose *No to All*.

#### **Procedure** How to Install iWay 5.5

1. Execute the installation program for your platform and version of iWay 5.5. The name of this program may vary. For example:

- On Windows:

```
iwl8sp3.win32.exe
```

- On UNIX platforms there are two options:

If you have an X Windows environment, you can use a GUI-based installation by executing the installation program with no options. For example:

```
./iwl8sp3.linux.bin
```

If you do not have an X Windows environment, use the text-based installation by executing the installation program with the `-console` option. For example:

```
./iwl8sp3.linux.bin -console
```

**Note:** This procedure follows the GUI installation. The prompts for the text-based installation are almost identical.

The installation begins and the Welcome window opens.

2. Click **Next**.

The License Agreement appears.

3. Review the information, indicate that you accept the terms, and click *Next* to continue.

The Choose Destination Location window opens.

**Note:** If you previously installed iWay 5.5 and did not uninstall, you may not be prompted to choose the destination. iWay 5.5 is automatically installed in the location specified by the IWAY55 environment variable. On UNIX, the install checks your profile and if an IWAY55 variable is declared, you cannot change the location when logged on as the same user ID.

4. Accept the default or click *Browse* to specify a new location and then click *Next*.

The BEA parameters window appears.

5. Complete the *Base Url* and *BEA Home* fields as follows and then click *Next*.

<i>Base Url</i>	Specify the URL (protocol (http vs. https), hostname, and port) for accessing your application server. For example: <a href="http://hostname:7001">http://hostname:7001</a>
<i>BEA Home</i>	Specify the BEA directory into which WebLogic and other BEA software are installed. If BEA WebLogic Workshop is installed, iWay Swing Application Explorer and an iWay Connector for JCA (CCI) Control are added to it.

The Start Copying Files window appears.

6. Click *Next* to start the installation.

Files are copied to your system in the directory you specified.

**Note:** If a version already exists, you are prompted to overwrite existing files. If you have the BEA WebLogic ERP adapters installed, choose *No to All* when prompted. Some screen may vary when installing iWay adapters with BEA ERP adapters.

## Post-Installation Topics and Tasks

Review the remainder of this chapter to determine if any tasks are required for your platform and adapters.

### **Reference** iWay 5.5 Directory Structure

After installation, an iWay55 directory is created and contains the following subdirectories:

#### `bea`

Contains components to be deployed into your application server.

#### `bin`

Contains XML files required for iWay 5.5.

#### `config`

Contains configuration directories for iWay Connector for JCA. By default, the connector is set to access the base configuration, and connector information is written to the base subdirectory. When additional connector configurations are created, their directories are placed here.

On UNIX, if you use iWay Connector for JCA, ensure that the user ID your application server runs under has full permissions to the iway55/config directory and subdirectories. If you installed under a different user ID than the user ID that runs the application server processes, you may need to use `chmod`, `chown`, and/or group ownership.

#### `etc`

Contains miscellaneous tools and files to configure additional components.

#### `lib`

Contains adapters, drivers, and other files used by iWay components. All iWay components must access this directory. In most cases, after iWay components recognize this location, the adapters and other files are accessible. For some components, the `lib` directory is determined automatically after the iWay installation directory is known.

**Warning:** A `license.xml` file appears in the iWay55 directory. Do not delete this file.

## **Procedure** How to Set Environment Variables

After installation, environment variables are required to use iWay adapters and components. The variables can be set in your profile or in the WebLogic environment settings (commEnv.cmd or commEnv.sh).

- On Windows, environment variables are automatically set by the installation program. No steps are necessary, but it is a good idea to be aware of them in case you need to troubleshoot.
- On UNIX, the installation program appends the PATH, IWAY55OEM, and IWAY55 environment variables to the end of the .profile (or .bash\_profile) in your home directory. However, you may need to add the shared library path variable listed below. In addition, if you run iWay components under different user IDs, be sure to add these variables to those profiles as well. This includes user IDs that run any third party components such as your application server. You must also add files to WebLogic's CLASSPATH variable (WEBLOGIC\_CLASSPATH) in commEnv.sh.

Ensure profiles are executed before attempting to run iWay adapters and components.

**Note:** If you plan to run multiple installations of iWay adapters and components, environment variables must have different values when running and installing each installation.

The following environment variable settings are required to use iWay adapters and components:

1. The following variable must be defined and set to the location of the iWay55 directory:

`IWAY55`

For example:

```
IWAY55=/opt/iWay55/  
export IWAY55
```

**Note:** Be sure to include the trailing slash.

2. The PATH variable must contain the iWay55/lib directory. For example:

```
PATH=$PATH:/opt/iWay55/lib  
export PATH
```

3. An IWAY55OEM variable must be defined and set as follows:

`IWAY55OEM=BEA`

For example:

```
export IWAY55OEM=BEA
```



4. On UNIX, the shared library variable must contain the iWay55/lib directory. This variable varies depending on your platform.

AIX	<code>LIBPATH</code>
HP-UX	<code>SHLIB_PATH</code>
Other UNIX Platforms	<code>LD_LIBRARY_PATH</code>

For example:

```
LD_LIBRARY_PATH=/opt/iWay55/lib:$LD_LIBRARY_PATH
export LD_LIBRARY_PATH
```

5. The `WEBLOGIC_CLASSPATH` (or `CLASSPATH`) variable must contain several iWay files installed with the adapters.

- On Windows, this is done for you in:

```
BEA_HOME\weblogic81\common\bin\commEnv.cmd
```

- On UNIX, you must set this in:

```
BEA_HOME/weblogic81/common/bin/commEnv.sh
```

Eight files must be added to the `WEBLOGIC_CLASSPATH`. Their locations depend on where you installed the adapters:

```
/opt/iWay55/lib/iwaf.jar
/opt/iWay55/lib/iwafcont.jar
/opt/iWay55/lib/iwrepository.jar
/opt/iWay55/lib/iwutil.jar
/opt/iWay55/bea/iwjcaivp/WEB-INF/lib/iwafjca.jar
/opt/iWay55/bea/iwjcaivp/WEB-INF/lib/xalan.jar
/opt/iWay55/bea/iwjcaivp/WEB-INF/lib/xercesImpl.jar
/opt/iWay55/bea/iwjcaivp/WEB-INF/lib/xmlParserAPIs.jar
```

For example, you can add the following line to the end of the `commEnv.sh` file:

```
WEBLOGIC_CLASSPATH=$WEBLOGIC_CLASSPATH:/opt/iWay55/lib/iwaf.jar:/opt/iWay55/lib/iwafcont.jar:/opt/iWay55/lib/iwrepository.jar:/opt/iWay55/lib/iwutil.jar:/opt/iWay55/bea/iwjcaivp/WEB-INF/lib/iwafjca.jar:/opt/iWay55/bea/iwjcaivp/WEB-INF/lib/xalan.jar:/opt/iWay55/bea/iwjcaivp/WEB-INF/lib/xercesImpl.jar:/opt/iWay55/bea/iwjcaivp/WEB-INF/lib/xmlParserAPIs.jar
export WEBLOGIC_CLASSPATH
```

Do not forget to export the variable on UNIX.

**Note:** When you run the startup script for a domain (e.g., startWebLogic.sh), the startup script imports variables from the commEnv.sh or commEnv.cmd file. It then sets the CLASSPATH variable to include the WEBLOGIC\_CLASSPATH variable. If you are not using clusters, you can set WEBLOGIC\_CLASSPATH in the startWebLogic.sh file. Also, if you plan to run multiple instances of the adapters on different servers, set this in startWebLogic.sh so that each server uses different files. If you do set the WEBLOGIC\_CLASSPATH in the startup script (startWebLogic.sh), be sure to set it before the line that adds WEBLOGIC\_CLASSPATH to CLASSPATH.

## Licensing iWay Adapters

When you license adapters, you receive xml files that you must rename and copy into the iWay55 directory.

### **Procedure** How to Update the License

After receiving a license, do the following:

1. Rename the license file to the following:

`license_adpatename.xml`

where:

`adpatename`

Is the name of the adapter.

For example:

`license_jdewards.xml`

2. Copy the license file to the iWay55 directory. The default location on Windows is:

`C:\Program Files\iWay55`

On other platforms, use the corresponding location.

3. Restart your domain.

**Note:** Do not delete the license.xml file that was installed with the adapters.

## Uninstalling iWay 5.5

An uninstall utility is provided to properly remove iWay from your system. You should use the uninstall utility rather than manually deleting directories. Manually removing directories on Windows or UNIX may cause problems if you wish to reinstall at a later time.

### **Procedure** How to Uninstall iWay

To uninstall iWay 5.5, do the following:

1. If you have deployed iWay components to your application servers, undeploy them.
2. Ensure your domain is stopped.
3. Copy any files you wish to save out of the iWay55 directories.
4. Execute the uninstall utility. The utility's location varies depending on your platform and the version of iWay you installed. For example:

`C:\Program Files\iWay55\etc\uninstall\iwl8sp3\uninstaller.exe`

On UNIX, the file is named `uninstaller.bin`.

## Copying and Collecting Files for Adapters

---

Some iWay adapters require third party libraries or JDBC drivers. To enable these adapters, you must:

1. Use the table that follows to determine third party files required for your adapter. Adapters may vary depending on the software you install. If you do not see your adapter listed in the table, check the iWay Web site or contact a Customer Service representative.
2. Copy any required files into the iWay55\lib directory. The default location for this directory on Windows is:

`C:\Program Files\iWay55\lib`

On other platforms, use the corresponding location.

If the required third party files are not copied into this directory, then your adapter will not be available and may not appear in the JCA Test Tool or Application Explorer.

**Note:** On UNIX, be sure to copy files and not use links.

**Note:** The table sometimes lists the actual names of required files rather than the generic name of the driver or library. However, your vendor may change file names, update files, or have different versions of the drivers for different releases. Therefore, confirm which files are required by reviewing information provided by your vendor. Ensure you use the latest version of the driver for the correct release of your target system, data source, or protocol.

If your adapter uses MQ Series as a transport, meet the requirements for MQ Series in the following table.

iWay Adapter for	Required Libraries or Drivers
CICS Transaction Adapter (XML)	None.
ClarifyCRM (Amdoc ClarifyCRM)	<p><a href="#">ClfyCbo.jar</a></p> <p>And all .dll or .so files in the Clarify client's bin directory. For example:  <a href="#">C:\ClarifyCRM12.0\esupport\Clarify\bin.</a></p> <p>You can also add this directory to the PATH variable used by your application server.</p>
CORBA	<p>Your ORB provider's API JAVA libraries.</p> <p>For ORBACUS, this is:</p> <p><a href="#">OB.jar</a>  <a href="#">OBnaming.jar</a></p> <p>For ORBACUS, you should also add these to your WebLogic Domain's CLASSPATH.</p>
DB2 Net Driver (iWay Adapter for RDBMS)	<p>JDBC driver for DB2 (db2java.zip).</p> <p>Installed as part of the DB2 server. The default location on Windows is one of the following:</p> <p><a href="#">C:\SQLLIB\java\db2java.zip</a>  <a href="#">C:\Program Files\SQLLIB\java\db2java.zip</a></p> <p>Because the iWay Adapter for RDBMS uses JDBC 2.0 features, you must run the usejdbc2.bat file supplied with DB2. Obtain the usejdbc2.bat from your DB2 server or download the current version from the DB2 JDBC driver download Web page.</p> <p>This process builds the proper JDBC 2.0-compliant version of the db2java.zip file.</p> <p><b>Note:</b> To run the usejdbc2 procedure, you must stop the DB2 instance.</p>
Emulation (3270/5250) (Telnet)	None. However, additional information is available in Appendix A, <i>Configuring the iWay Emulation Adapter (3270/5250)</i> .
FIX	None.

iWay Adapter for	Required Libraries or Drivers
HIPAA	None.
HL7	None.
IMS	None.
Informix (iWay Adapter for RDBMS)	<p>JDBC driver for Informix (ifxjdbc.jar).</p> <p>Download this driver from the Informix Web site.</p> <p>Using the appropriate archive tool, open the archive containing the Informix JDBC driver (ifxjdbc.jar) and extract the run-time files. The file names may vary by platform, but usually are contained in the root of the archive.</p> <p>Open setup.jar to copy the extracted files.</p>
IMS Database (iWay Adapter for RDBMS)	None.
IMS Transaction Manager	None.
ISO15022	None.
iWay/WebFOCUS (EDA) Server (iWay Adapter for RDBMS)	None.
J.D. Edwards OneWorld	<p>J.D Edwards OneWorld Java-based ThinNet API.</p> <p>This is normally distributed as .jar files with the J.D Edwards OneWorld installation media. These libraries may vary depending on the J.D. Edwards release. They usually consist of the following:</p> <p><a href="#">Kernel.jar</a></p> <p><a href="#">Connector.jar</a></p>
J.D Edwards WorldSoft	DB2/400 JDBC drivers.
Manugistics	Oracle JDBC driver ( <a href="#">classes12.zip</a> or <a href="#">ojdbc14.jar</a> )

iWay Adapter for	Required Libraries or Drivers
Microsoft .NET	<p>Microsoft .NET Framework.</p> <p>This is usually installed with Visual Studio .NET, ASP.NET, or other applications that require the .NET Framework. If you do not have any of these products, you can install the .NET Framework from the iWay Software Web site:</p> <p><a href="http://iwse.ibi.com/iway55/redist/dotnetfx.exe">http://iwse.ibi.com/iway55/redist/dotnetfx.exe</a></p>
MQ Series (IBM WebSphere MQ)	<p><a href="#">com.ibm.mq.jar</a></p> <p><a href="#">com.ibm.mqbind.jar</a></p> <p>For BEA WebLogic, these files must be added to your WebLogic domain's CLASSPATH. The following binary files are also required:</p> <p><a href="#">MQXAi02.dll</a></p> <p><a href="#">mqjbnd05.dll</a></p> <p><a href="#">mqjbdf02.dll</a></p> <p>For non-Windows platforms, use the corresponding files.</p>
Oracle AQ	<p><a href="#">Aqapi.jar</a></p> <p>and</p> <p>Oracle JDBC driver (<a href="#">classes12.zip</a> or <a href="#">ojdbc14.jar</a>)</p>
RDBMS Legacy (XML Adapter for RDBMS)	<p>See requirements in this table for specific target data sources.</p> <p>When used with BEA WebLogic, the iWay Adapter for RDBMS is used to provide SQL based access to select relational (DB2 on z/OS or OS/400) and non-relational data sources on IBM compatible mainframes (OS/390, Z/OS, VM), midrange (OS/400), and legacy (OpenVMS, Tandem) platforms. In addition, the iWay Adapter for RDBMS can be used to enable SQL call access to business logic stored in iWay stored procedures. iWay stored procedures are often used to provide multi-platform joins and specialized routines. For more details on using the iWay Adapter for RDBMS and a list of supported data sources, see the <i>iWay Adapter for RDBMS for BEA WebLogic User's Guide Version 5 Release 5</i>.</p>
SWIFT	None.
VSAM	None.

## Adding Drivers to CLASSPATH for MQ Series

If your adapter uses MQ Series as a transport, the com.ibm.mq.jar file must be added to your domain's CLASSPATH. You can set CLASSPATH by setting the WEBLOGIC\_CLASSPATH variable in the file that sets variables for all servers:

- Windows:

```
BEA_HOME\weblogic81\common\bin\commEnv.cmd
```

- UNIX:

```
BEA_HOME/weblogic81/common/bin/commEnv.sh
```

**Note:** When you start a domain, variables are imported from the commEnv.sh or commEnv.cmd file. The CLASSPATH variable is set to include the WEBLOGIC\_CLASSPATH variable. If you are not using clusters or manager servers, you can set CLASSPATH in the startWebLogic.sh or startWebLogic.cmd file for your domain. If you are not sure where to set CLASSPATH, consult BEA WebLogic documentation.

### **Procedure** How to Add Files to CLASSPATH

1. If it is started, stop the domain you are using.
2. Open the commEnv.cmd or commEnv.sh file in a text editor.
3. Add the full path to com.ibm.mq.jar to the WEBLOGIC\_CLASSPATH variable. You can add a line at the end of the file. For example

On Windows:

```
set WEBLOGIC_CLASSPATH=%WEBLOGIC_CLASSPATH%; "C:\Program  
Files\iWay55\lib\com.ibm.mq.jar"
```

On UNIX:

```
WEBLOGIC_CLASSPATH="${WEBLOGIC_CLASSPATH} " :/opt/iWay55/lib/com.ibm.mq.  
jar  
export WEBLOGIC_CLASSPATH
```

**Note:** Adding directories is not sufficient. You must add the full paths including each file. On UNIX, make sure to export the variable.

4. Save and exit the file.

## Configuration Steps

---

After installation, the configuration steps depend on the components you wish to use.

1. For iWay Connector for JCA, deploy the connector and JCA Test Tool. (Chapter 3, *Configuring iWay Connector for JCA*)
2. For iBSE, configure Servlet iBSE and optionally set up a database repository. (Chapter 4, *Configuring iWay Business Services Engine*)
3. Configure a version of Application Explorer. (Chapter 5, *Configuring Application Explorer*)
4. Review the appendixes for any adapter-specific post-installation steps.



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## CHAPTER 3

# Configuring iWay Connector for JCA

### Topics:

- Configuring and Deploying iWay Connector for JCA
- Deploying and Running the JCA Test Tool

This section explains how to configure iWay Connector for JCA. If you are using Servlet iBSE, but do not plan to use iWay Connector for JCA, you can skip to Chapter 4, *Configuring iWay Business Services Engine*.

## Configuring and Deploying iWay Connector for JCA

---

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 a quick way to deploy adapters and connect data, applications, systems, and protocols. After you deploy the connector, you have access to adapters installed with iWay 5.5.

iWay Connector for JCA is installed with iWay 5.5 as the iwafjca.rar file. The default location on Windows is:

`C:\Program Files\iWay55\bea\iwafjca.rar`

For other platforms, see the corresponding location.

**Caution:** The iwafjca.rar file in the iWay55\etc\setup directory is not configured by default. This should only be used if the bea\iwafjca.rar file does not exist or causes problems. If you use the file in the iWay55\etc\setup directory you must manually edit the ra.xml file located inside the archive.

## Connector Configurations Overview

iWay Connector for JCA has configuration directories where repository, schemas, and other information are stored. By default, a configuration called base is used and files and information are written under the iWay55 directories to the following default location on Windows:

```
C:\Program Files\iway55\config\base
```

For other platforms, see the corresponding location.

The default file system repository for the base configuration on Windows is:

```
C:\Program Files\iway55\config\base\repository.xml
```

The repository.xml file is not created until you access the configuration using Application Explorer or the JCA Test Tool.

A second repository stores the states of channels:

```
C:\Program Files\iway55\config\base\st_repository.xml
```

iWay Connector for JCA configurations can be created by manually creating directories under iway55\config with the name of the configuration.

On UNIX, ensure the user ID under which your application server runs has full permissions to the iWay55/config directory and subdirectories. If you installed under a user ID other than the user ID that runs the application server processes, you may be required to use chmod, chown, and/or group ownership.

For more information on iWay Connector for JCA, see the *iWay Connector for JCA for BEA WebLogic Server User's Guide*.

## Deploying iWay Connector for JCA to BEA WebLogic

The following procedure refers to the directory where BEA WebLogic is installed as *BEA\_HOME*. The procedure refers to the root of a domain as *DOMAIN\_NAME*. Substitute the absolute paths on your system for *BEA\_HOME* and *DOMAIN\_NAME*. The procedure contains paths for a Windows system. If you are on a UNIX system, substitute accordingly.

### **Procedure** How to Deploy iWay Connector for JCA

1. Start the domain you are using for iWay , for example:

`BEA_HOME\user_projects\domains\DOMAIN_NAME\startWebLogic.cmd`

2. Open the BEA WebLogic console to deploy iWay Connector for JCA.

The BEA WebLogic console is accessible through a browser at:

`http://hostname:port/console`

where:

`hostname`

Is the hostname of the machine where your domain is running.

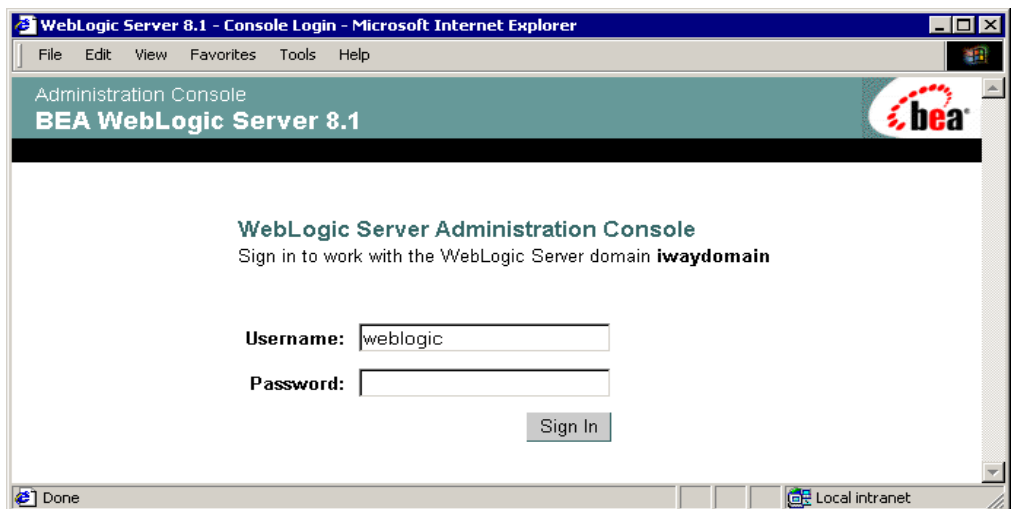
`port`

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

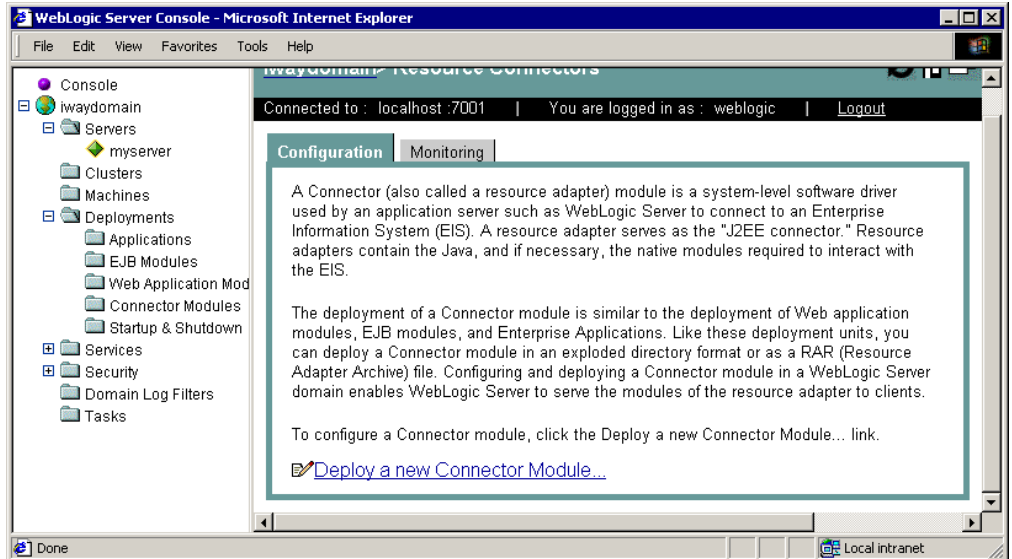
For example:

`http://localhost:7001/console`

A logon page appears. If the logon page does not open, ensure your WebLogic domain is started and that you used the correct port.

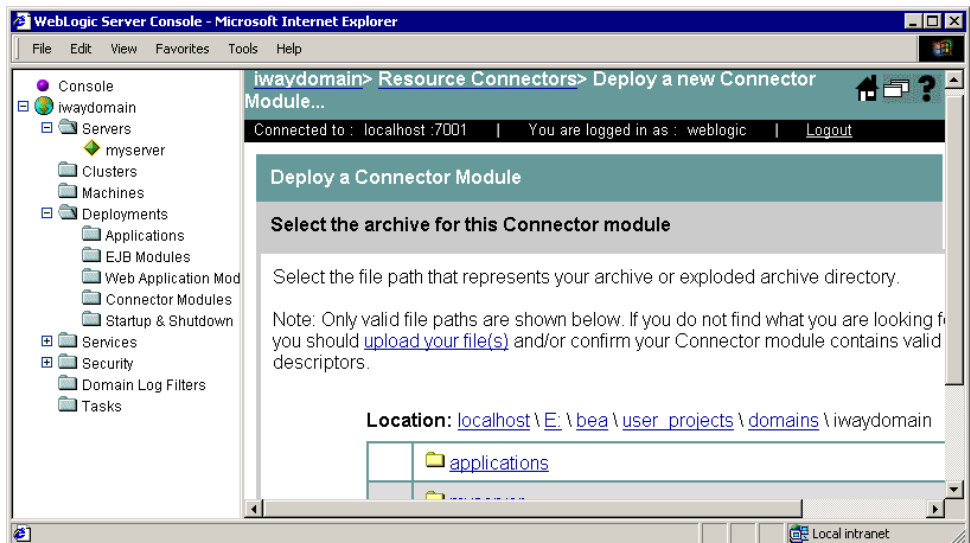


3. Log on to WebLogic.
4. Expand the *Deployments* folder in the left pane and then, click *Connector Modules*.  
A page appears for deploying .rar files.

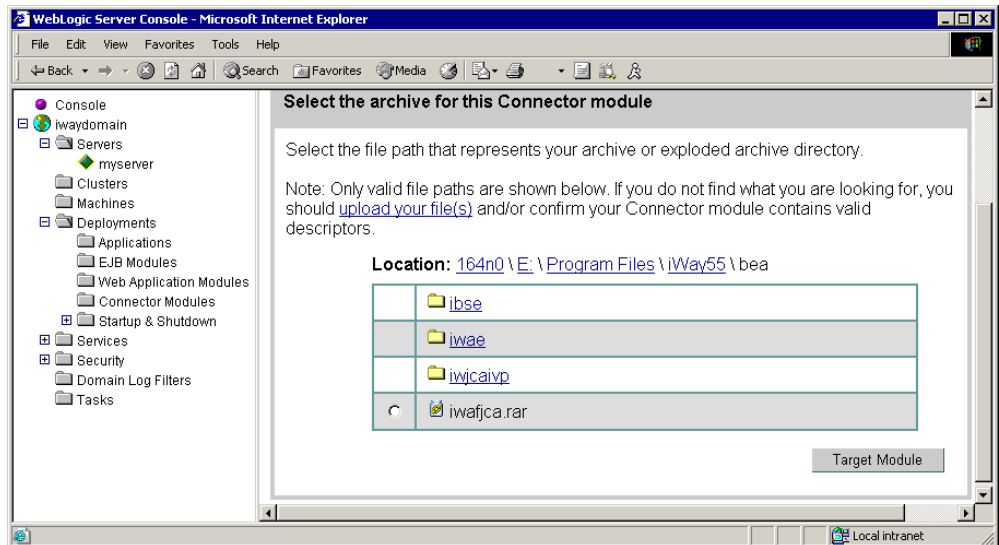


5. Click *Deploy a new Connector Module*.

A page appears for you to specify where the connector is installed.



- Click the links next to *Location* to view and specify the directory containing the iWay Connector for JCA file (iwafjca.rar).

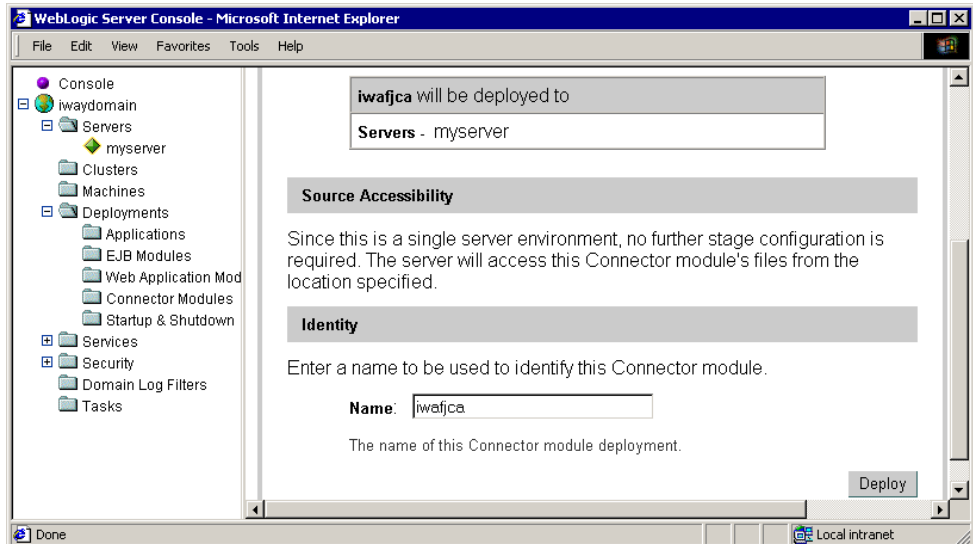


- Select the option button next to *iwafjca.rar* and then, click *Target Module*.

If there are multiple servers in your domain, you are prompted to specify into which server or servers to deploy.

- If prompted, check which servers to deploy to.

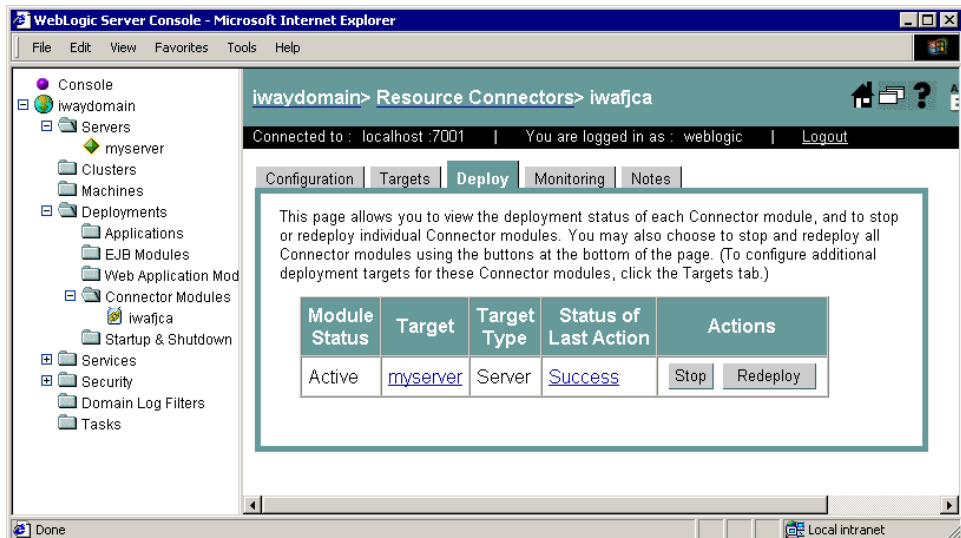
If you are deploying into a single server, information about the server displays.



If you are deploying into multiple servers, you are prompted to copy the module to each server.

9. Click **Deploy** to complete the deployment process.

After the deployment completes, *iwayfca* appears on the left below *Connector Modules*.



**Note:** You may need to expand the *Connector Modules* folder to see *iwayfca*.

## Changing Default Connector Settings

The behavior of iWay Connector for JCA is controlled by the following file inside the iwafjca.rar archive:

`META-INF/ra.xml`

The following topic explains how to change the default settings for iWay Connector for JCA.

### **Reference** How to Configure iWay Connector for JCA Settings

This is not a required configuration. It is provided for reference. If you wish, you can proceed to *Deploying and Running the JCA Test Tool* on page 3-10.

To change defaults, you must:

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

`C:\Program Files\iWay55\bea`

- b. Issue the following command:

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

The jar command is located in the Java SDK's 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:** Be sure to 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. If you did not install in C:\Program Files\iWay55, be sure to change the IWayHome variable.

The following settings can be changed:

- **IWayHome.** The installation directory where iWay 5.5. is installed.

```
<config-property-name>IWayHome</config-property-name>
  <config-property-type>java.lang.String</config-property-type>
  <config-property-value>c:\program files\iway55</config-property-value>
</config-property>
```

**Note:** In some environments, the IWayHome parameter is ignored. This parameter is required when your application accesses the JCA Connector via JNDI.



- **IWayConfig.** Configuration instance for the connector to use at run time. By default, a base configuration is available and defined in this file. A program can access this information via JNDI, or it can override these values.

```
<config-property>
  <config-property-name>IWayConfig</config-property-name>
  <config-property-type>java.lang.String</config-property-type>
  <config-property-value>base</config-property-value>
</config-property>
```

- **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>
```

A directory in the configuration directory contains the logs. Also, be sure to review logs generated by your application server.

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, you can:

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

```
C:\Program Files\iWay55\bea
```

- b. Issue the following command:

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

6. Redeploy the connector.

## Deploying and Running the JCA Test Tool

---

iWay 5.5 includes a sample Web application called the JCA Test Tool. The JCA Test Tool lets you test iWay Service and Event adapters with iWay Connector for JCA. On Windows, the default location for the Test Tool Web application is:

`C:\Program Files\iWay55\bea\iwjcaivp`

On other platforms, use the corresponding location.

### Deploying the JCA Test Tool

Deploy the JCA Test Tool to BEA WebLogic as explained below.

#### **Procedure** How to Deploy the JCA Test Tool to BEA WebLogic

To deploy the JCA Test Tool:

1. In a browser, open the BEA WebLogic console at:

`http://hostname:port/console`

where:

`hostname`

Is the hostname of the machine where BEA WebLogic is running.

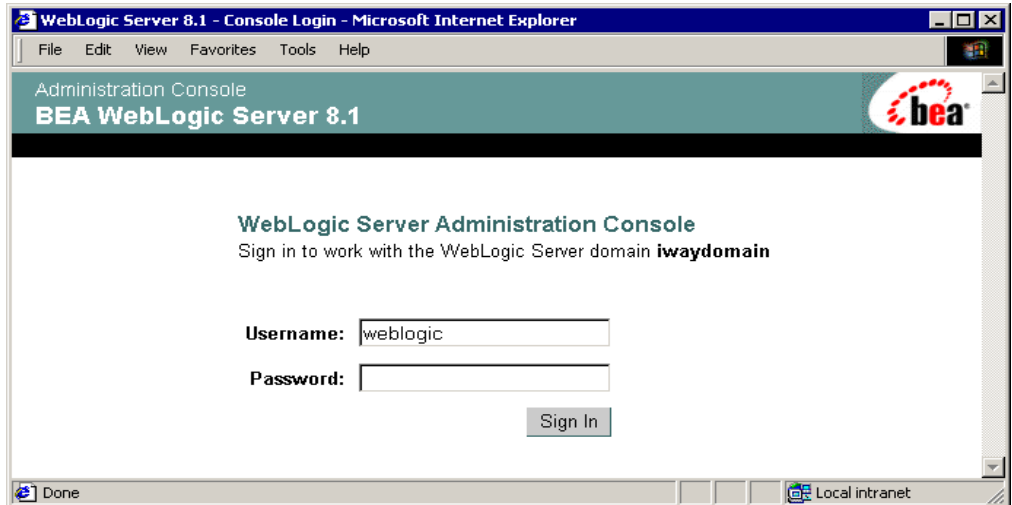
`port`

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

For example:

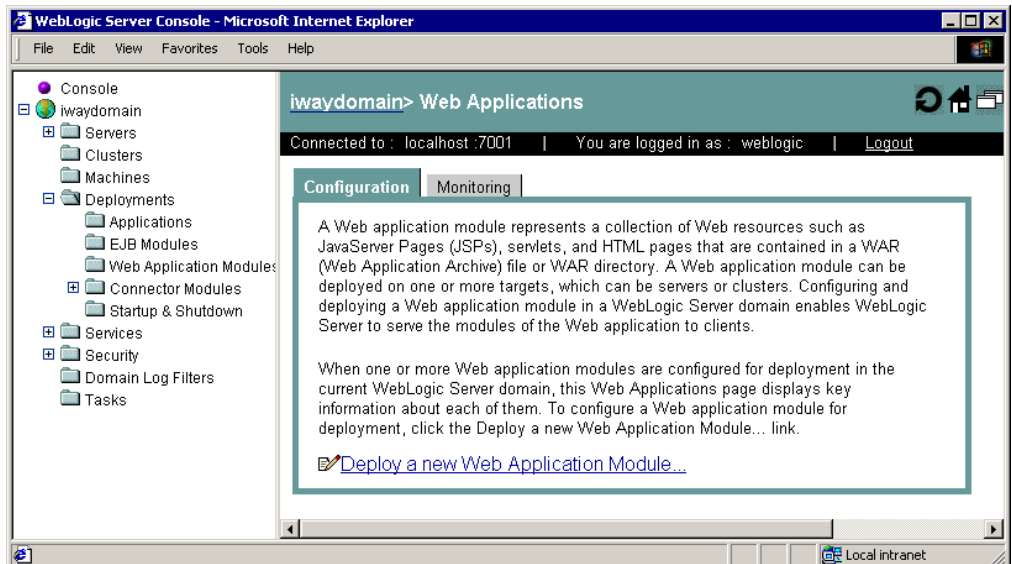
`http://localhost:7001/console`

A login page appears.



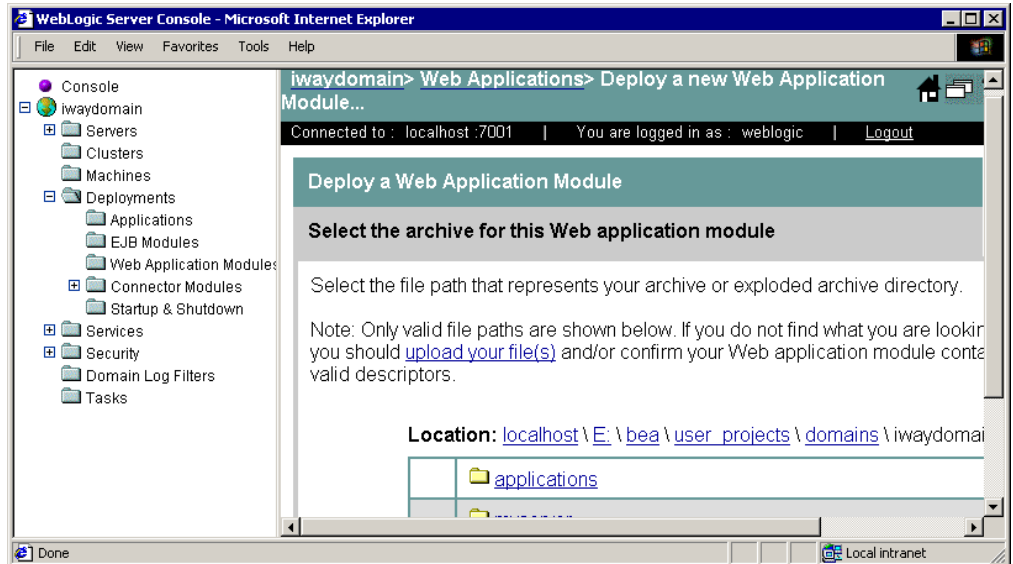
2. Log on to WebLogic.
3. Expand the *Deployments* folder on the left and then, click *Web Application Modules*.

A page appears for deploying and controlling Web applications. If other applications are already deployed, they appear.

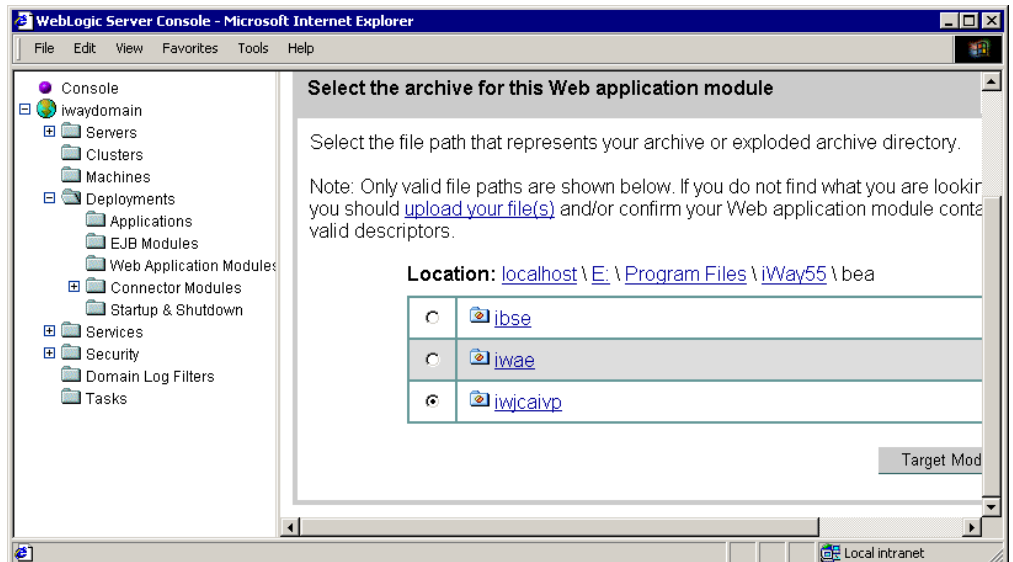


4. Select *Deploy a new Web Application Module*.

A page appears for you to specify where the Web application is located.



5. Click the links next to *Location* to view and specify the location of the directory with the Test Tool files.

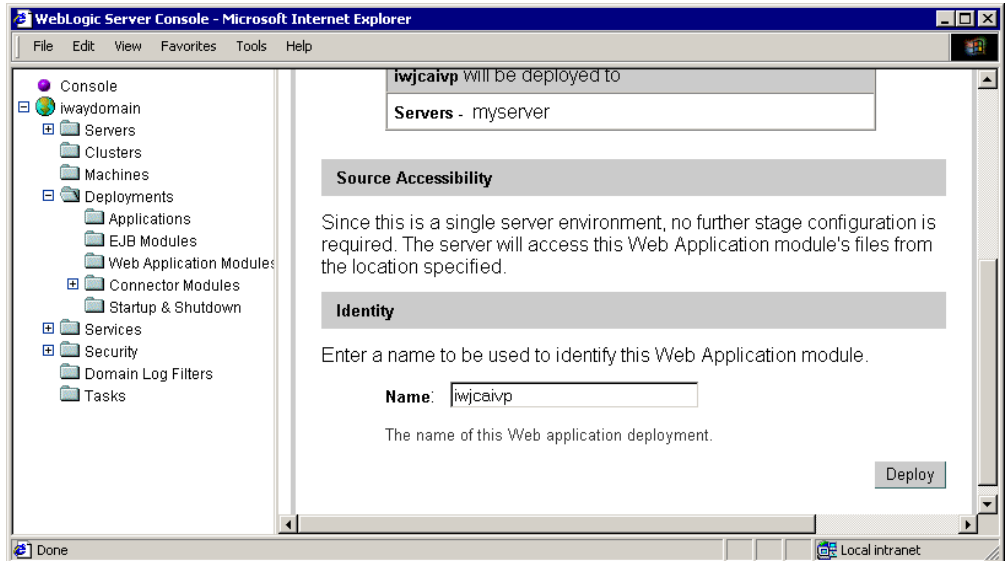


6. Select the option button next to the *iwjcaivp* directory and then, click *Target Module*.

If there are multiple servers in your domain, you are prompted to specify into which server or servers to deploy.

7. If prompted, check which servers to deploy to and click *Continue*.

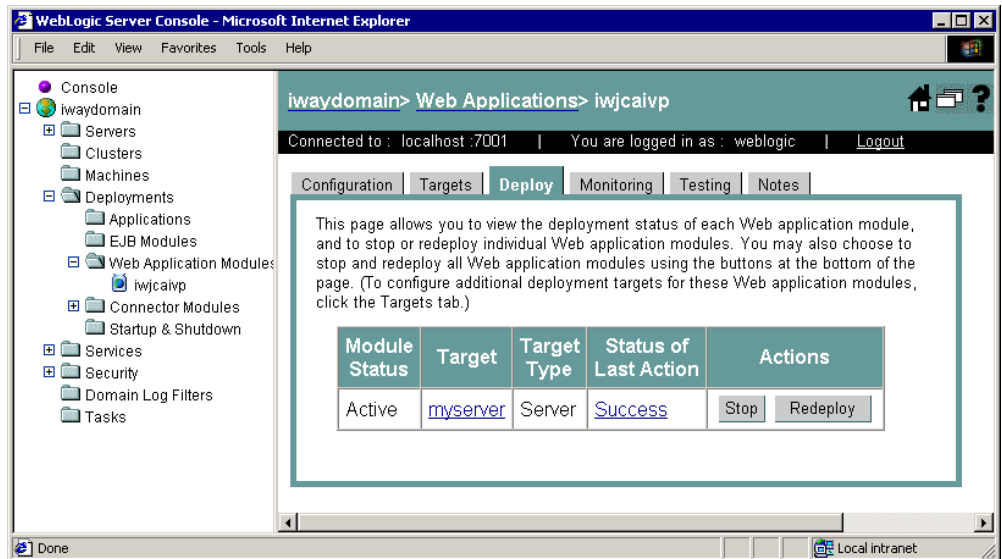
If you are deploying into a single server, information about the server displays.



If you are deploying into multiple servers, you are prompted to copy the module to each server.

8. Click *Deploy*.

After a few seconds, the application is deployed, and appears on the left under *Web Application Modules*.



**Note:** You may need to expand the *Web Application Modules* folder to see the application.

## Running the JCA Test Tool

After deploying the JCA Test Tool, access it to test the deployment.

### **Procedure** How to Run the JCA Test Tool

To run the JCA Test Tool:

1. Open a browser to:

<http://hostname:port/iwjcaivp>

where:

[hostname](#)

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

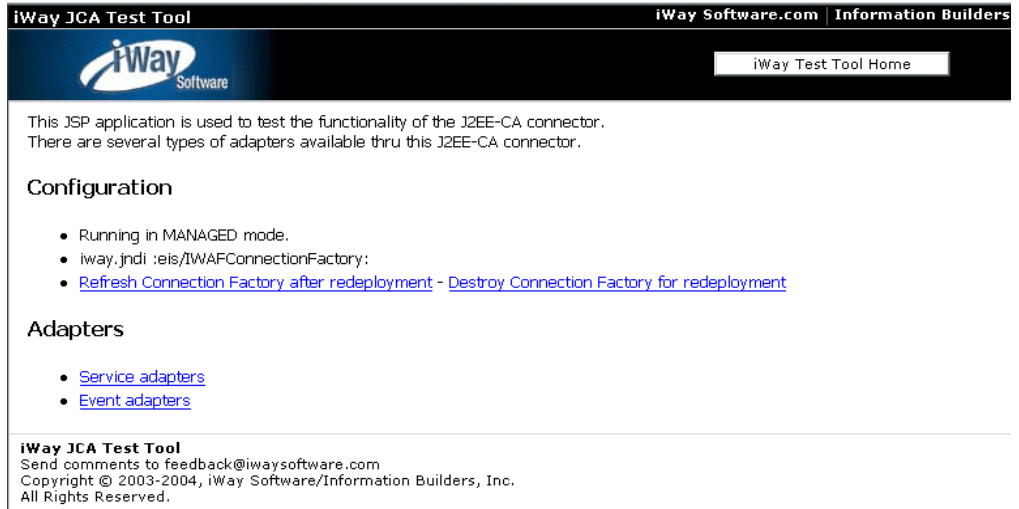
[port](#)

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

For example:

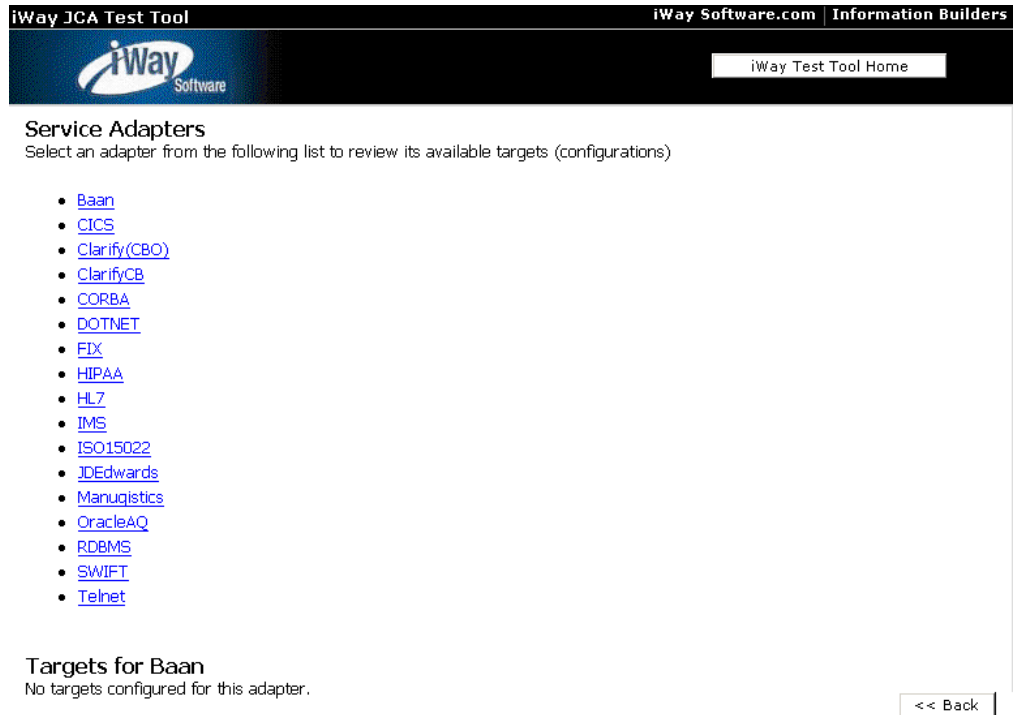
<http://localhost:7001/iwjcaivp>

The iWay JCA Test Tool window opens and provides links for viewing iWay Service or Event adapters.



2. To display the available adapters, click the *Service adapters* or *Event adapters* links.

A page appears displaying links for available adapters.



The adapters that appear vary depending on the version you install and which files are in the iWay55\lib directory. If your adapter requires third party drivers or libraries, they must be in the lib directory or your adapter may not appear.

Initially, no targets are configured for the iWay Connector for JCA. However, after targets are configured using Application Explorer, you can test them using this tool.

**Note:** After configuring targets using Application Explorer, you may need to redeploy the JCA Test Tool before the targets appear.



## Configuring the JCA Test Tool

Although there is normally no need to do this, you can change JCA Test Tool default settings by modifying its web.xml file. The default location on Windows is:

`C:\Program Files\iWay55\bea\iwfjcaivp\WEB-INF\web.xml`

On other platforms, use the corresponding location.

This file defines aspects of the JCA Test Tool running environment. Modifying this file is optional in most environments. You change parameters in this file by modifying the contents of the `<param-value>` tags.

The following parameters can be changed:

- **iway.jndi.** (optional) Connection factory name for iWay Connector for JCA. The connection factory name under BEA WebLogic is `eis/IWAFConnectionFactory`. The JCA Test Tool attempts to connect to the adapter via JNDI if JNDI is defined. If JNDI is undefined, `iway.home` and `iway.config` are used instead.

```
<context-param>
  <param-name>iway.jndi</param-name>
  <param-value></param-value>
  <description>
    JNDI name for the IWAF JCA Resource Adapter. If not
    provided, the application will create a new one based
    on iway.home, iway.config and iway.loglevel.
  </description>
</context-param>
```

- **iway.home.** The installation directory where the adapters are installed (iWay55).

```
<context-param>
  <param-name>iway.home</param-name>
  <param-value>c:\Program Files\iway55</param-value>
  <description>
    ONLY USED IF IWAY.JNDI NOT SET.
    Absolute path of iway installation directory.
  </description>
</context-param>
```

- **iway.config.** Configuration used at run time. A configuration named base is installed and available by default.

```
<context-param>
  <param-name>iway.config</param-name>
  <param-value>base</param-value>
  <description>
    ONLY USED IF IWAY.JNDI NOT SET.
    configuration name
  </description>
</context-param>
```

- **iway.loglevel.** Tracing level. The level can be DEBUG, INFO, and ERROR.

```
<context-param>
  <param-name>iway.loglevel</param-name>
  <param-value>DEBUG</param-value>
  <description>
    ONLY USED IF IWAY.JNDI NOT SET.
    Log level: DEBUG FATAL ERROR INFO WARN
  </description>
</context-param>
```

For more information on Connector for JCA, see the *iWay Connector for JCA for BEA WebLogic Server User's Guide*.

---

---

## CHAPTER 4

# Configuring iWay Business Services Engine

### Topics:

- Configuring, Deploying, and Verifying Servlet iBSE
- Creating and Configuring the iBSE Repository

This section explains how to configure and install iWay Business Services Engine (iBSE) components. If you are not using Web services components, proceed to Chapter 5, *Configuring Application Explorer*.

## Configuring, Deploying, and Verifying Servlet iBSE

---

The iWay Business Services Engine (iBSE) is a transformation and integration engine for processing XML files and SOAP messages for exchange with Web services applications and other systems. For use with BEA WebLogic, iBSE is available as a Web application and referred to as Servlet iBSE.

To use Servlet iBSE:

1. Deploy the iBSE Web application. (*Deploying Servlet iBSE* on page 4-2)
2. Configure Servlet iBSE. (*Configuring Servlet iBSE* on page 4-7)
3. Verify Servlet iBSE. (*Verifying Servlet iBSE* on page 4-9).

### Deploying Servlet iBSE

Servlet iBSE is a Web application installed as an expanded directory with iWay 5.5. The default location on Windows is:

`C:\Program Files\iWay55\bea\ibse`

For other platforms, see the corresponding location.

When using a file-based repository, information is written within the Web application's directory structure. Therefore, the user ID under which your domain runs must have full access to this directory.

### **Procedure** How to Configure BEA WebLogic 8.1 for Servlet iBSE Deployment

1. Start the domain you are using for iWay. For example:

`BEA_HOME\user_projects\domains\DOMAIN_NAME\startWebLogic.cmd`

2. Open the WebLogic Console in a browser at:

`http://hostname:port/console`

where:

`hostname`

Is the hostname of the machine where WebLogic is running.

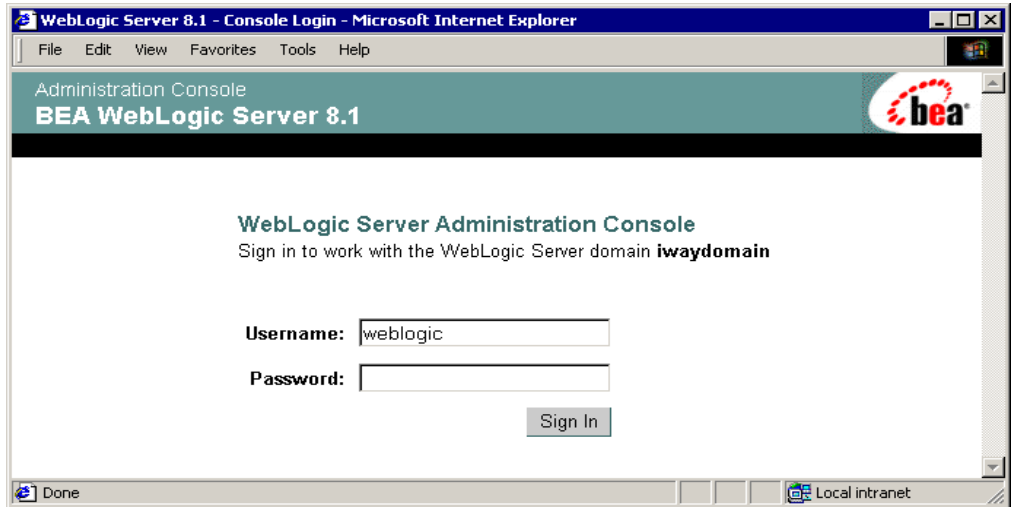
`port`

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

For example:

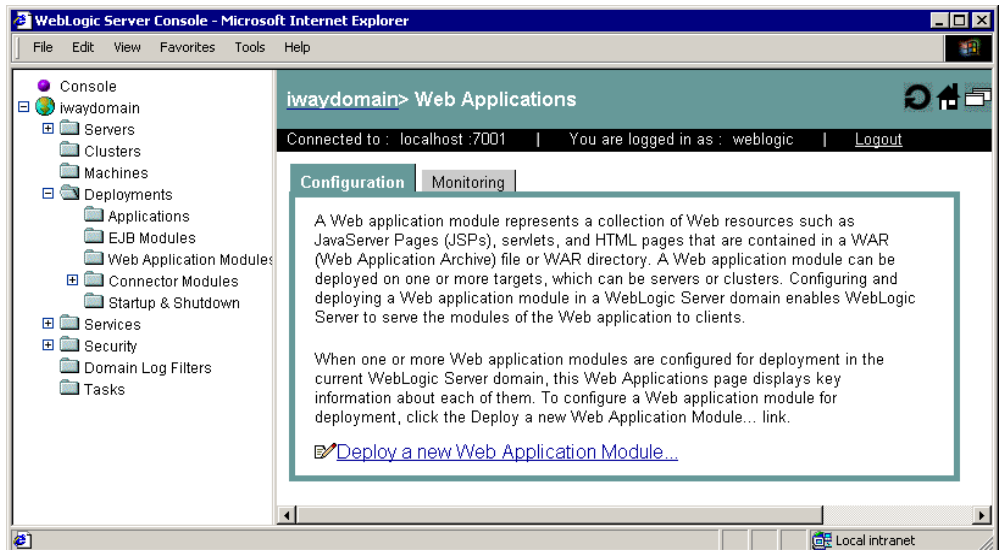
`http://localhost:7001/console`

A logon page opens. If the page does not open, ensure your domain is started, and you used the correct port.



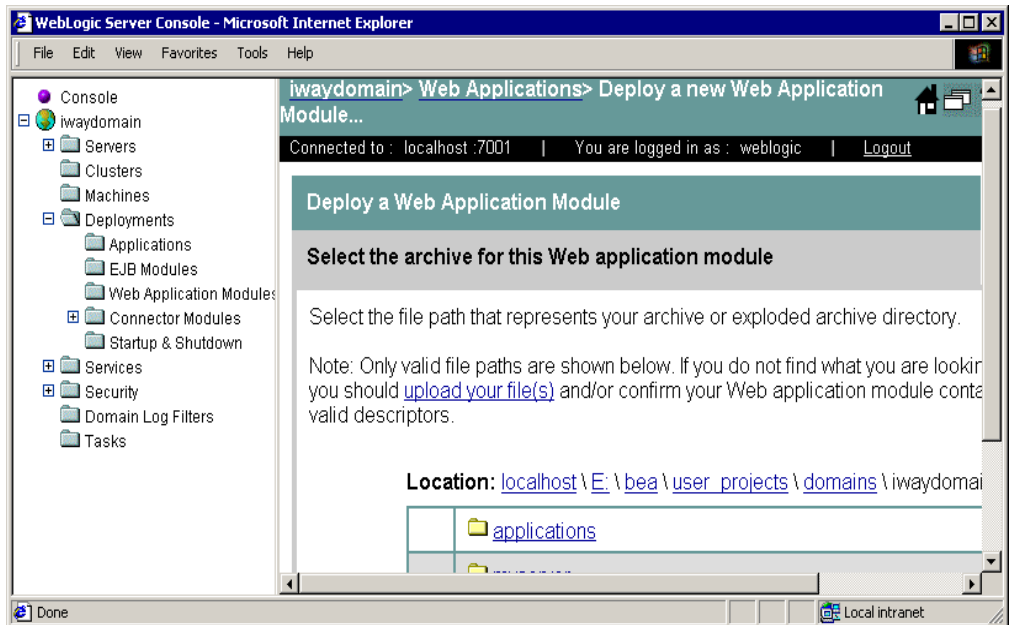
3. Log on to WebLogic.
4. In the left pane, expand the *Deployments* folder and then, click *Web Application Modules*.

A page appears for deploying and controlling Web applications. If other applications are already deployed, they appear.

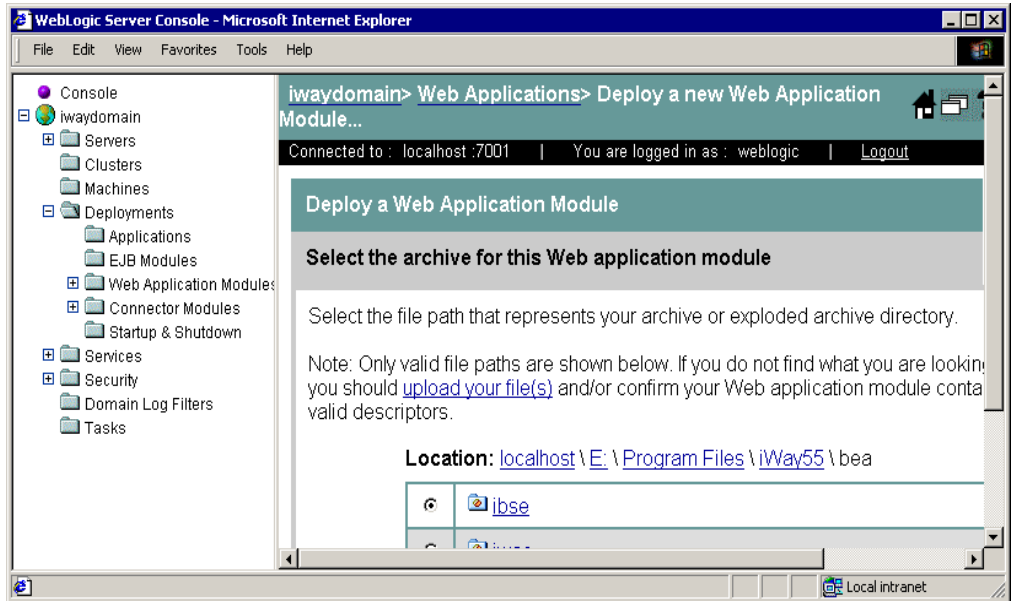


5. Select *Deploy a new Web Application Module*.

A page appears for you to specify where the Web application is located.



6. Click the links next to *Location* to view and specify the location of the directory above the directory with Servlet iBSE files.

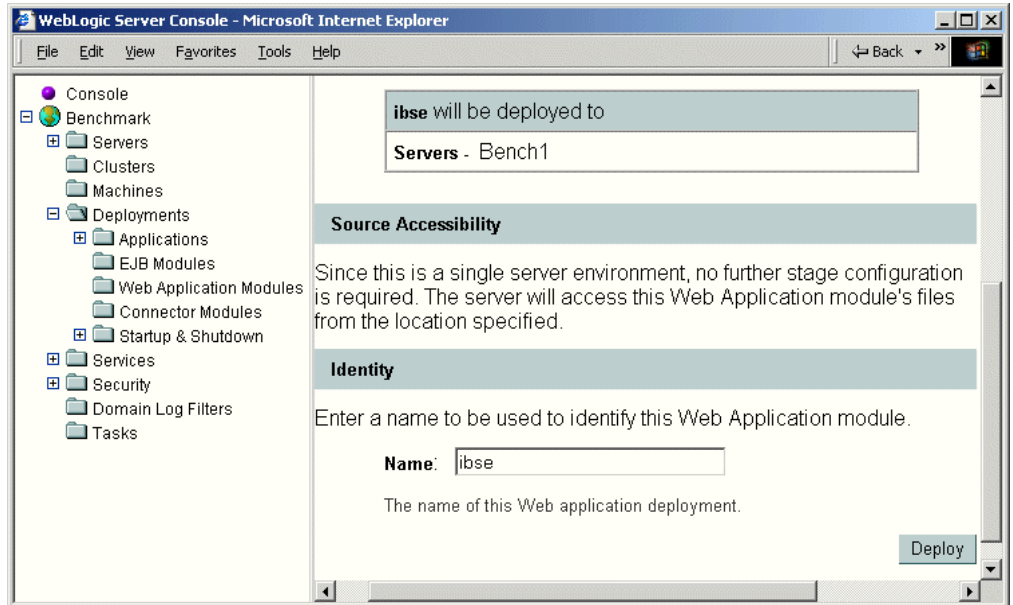


7. Select the option button next to the *ibse* directory and then click *Target Module*.

If there are multiple servers in your domain, you are prompted to specify into which server or servers to deploy.

8. If prompted, check which servers to deploy to and click *Continue*.

If you are deploying into a single server, information about the server displays.

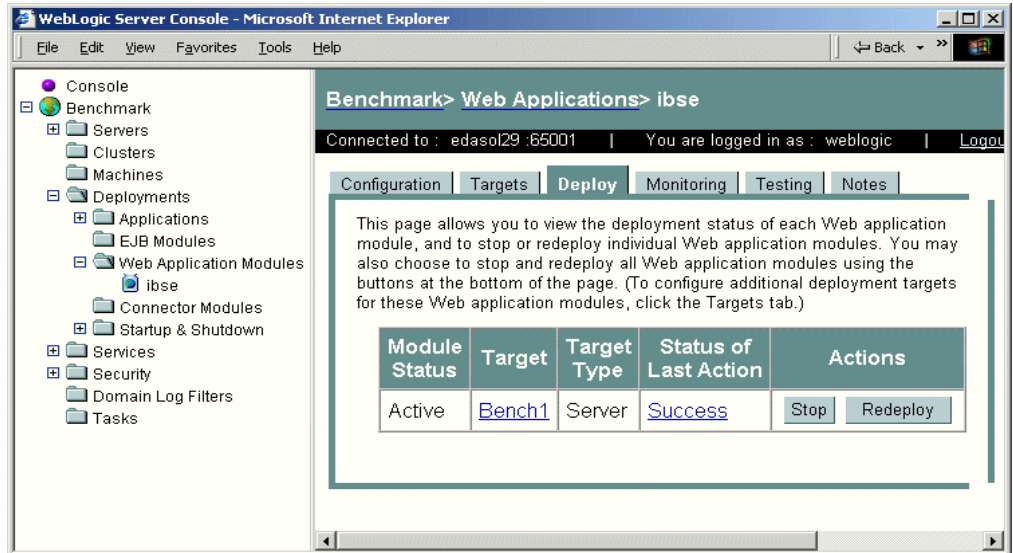


If you are deploying into multiple servers, you are prompted to copy the module to each server.

9. Click *Deploy*.



When deployment completes, *ibse* appears on the left under *Web Application Modules*.



**Note:** You may need to expand the *Web Application Modules* folder to see *ibse*.

## Configuring Servlet iBSE

After Servlet iBSE is deployed through your application server, you can configure it using its configuration Web page.

### **Procedure** How to Configure Servlet iBSE

1. Open the following page in your browser:

<http://hostname:port/ibse>

where:

[hostname](#)

Is the hostname of the application server machine.

[port](#)

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

For example:

<http://localhost:7001/ibse>

**Note:** The first time you access this page, it may take some time to load.

2. Log on when prompted. When first installed, the user ID and the password are:

- User Name: admin
- Password: admin

The Servlet iBSE configuration page opens and provides fields for editing iBSE parameters.

**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	INFO
Number of Async. Processors	0
<b>Security</b>	
Admin User	admin
Admin Password	*****
Policy	<input type="checkbox"/>
<b>Repository</b>	
Repository Type	File System
Repository Url	file://C:/Program Files/iWay55/bea/lib
Repository Driver	
Repository User	
Repository Password	
Repository Pooling	<input type="checkbox"/>
<a href="#">More configuration...</a>	

Save

3. Ensure the *Adapter Lib Directory* field specifies the path to the iWay55/lib directory. For example:

`C:\Program Files\iWay55\lib`

For some environments, this defaults, but for others, it does not.

After the path is specified, adapters in the lib directory are available to Servlet iBSE.

4. For security purposes, provide a new password in the *Admin Password* field.

**Note:** The *Repository Url* field specifies where the file system repository will be created. To use a database repository, you must enter the repository connection information. For now, use a file system repository for the initial verification. You can switch to a database repository as explained later in this section.

5. Click *Save*.

The file-based repository is created, and Servlet iBSE is ready for use. If you wish, you can change to a database repository after verifying Servlet iBSE.

## Verifying Servlet iBSE

When applications, such as Application Explorer, access Servlet iBSE, they can use one of the following URLs:

`http://hostname:port/ibse/IBSEServlet/`

`http://hostname:port/ibse/IBSEServlet/XDSOAPAdapterFactory`

## **Procedure** How to Verify Servlet iBSE

You verify iBSE from the iBSE home page. This page should automatically open when you click Save on the configuration page.

1. If it is not open, open the following page in your browser:

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

where:

[hostname](#)

Is the hostname of the application server machine.

[port](#)

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

For example:

<http://localhost:7001/ibse/IBSEServlet/>

The iBSE home page opens.



- [\*\*IVP\*\*](#)  
The IVP License is installed by default. It is used to install predefined Integration Business Services Engine Services.
- [\*\*test\*\*](#)  
The test License is installed by default. It is used to test Integration Business Services Engine Services.
- [\*\*production\*\*](#)  
The production License is installed by default. It is used for production purpose.

This page enables you to test the sample Web service provided with iBSE.

When you create Web services using Application Explorer, you can also test them from this page.

2. Click *IVP*.
3. Click *iwayivp*.
4. Click *ivp*.
5. Click *Invoke*.

An XML response like the following appears in your browser:

```
<?xml version="1.0" encoding="UTF-8" ?>
- <SOAP-ENV:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:SOAP-
  ENV="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  - <SOAP-ENV:Body>
  - <ivpResponse xmlns="urn:iwaysoftware:ibse:jul2003:ivp:response"
    cid="A0328ED84ABFA055C4F64B8039C991AA">
    <CurrentTime>2004-01-05T19:15:48Z</CurrentTime>
    <Version>IWAY5.5</Version>
  - </ivpResponse>
  - </SOAP-ENV:Body>
- </SOAP-ENV:Envelope>
```

## Enabling Tracing for Servlet iBSE

iBSE provides tracing functionality for troubleshooting problems with Web services. Only enable this for troubleshooting as it can affect performance.

### **Procedure** How to Enable Tracing for Servlet iBSE

To enable tracing:

1. Open the Servlet iBSE configuration page:

`http://hostname:port/ibse/IBSEConfig`

where:

`hostname`

Is the hostname of the application server machine.

`port`

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

For example:

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

2. In the top *System* area, specify the level of tracing from the *Debug* drop-down list.
3. Click *Save*.

The default location for the trace information on Windows is:

`C:\Program Files\bea\ibse\ibselogs`

On other platforms, use the corresponding location.

## Creating and Configuring the iBSE Repository

---

iBSE requires a repository in which to store transactions and metadata needed for the delivery of Web services. In addition, a second repository can be used for information needed to monitor services and events. iWay Software recommends using a JDBC-compliant database for repositories, but file system repositories are available and configured by default. To use database repositories, the SQL required to create the repository tables is installed with iWay 5.5.

To set up repositories, you must:

- Create the repositories and tables.
- Configure iBSE to access the repositories.

### Creating the iBSE Repository

Follow the steps for your type of repository:

- For a **File System** repository, see *Configuring a File System Repository* on page 4-12.
- For **Microsoft SQL Server 2000**, see *How to Configure a Microsoft SQL Server 2000 Repository* on page 4-13.
- For **Oracle**, see *How to Configure an Oracle Repository* on page 4-15.
- For **Sybase**, see *How to Configure a Sybase Repository* on page 4-16.
- For **DB2**, see *How to Configure a DB2 Repository* on page 4-16.

### Reference **Configuring a File System Repository**

If you do not have access to a database for the repository, you can store repository information in an XML file on your local machine. However, a file system repository is less secure and efficient than a database repository. When iBSE is first installed, it is automatically configured to use a file system repository.

For Servlet iBSE, the default location is the root directory of the ibse Web application. On Windows, this default location is:

`C:\Program Files\iWay55\bea\ibse\ibserrepo.xml`

On other platforms, use the corresponding location.

If you wish to use the iBSE monitoring information, a second repository is required. The default file for the monitoring repository on Windows is:

`C:\Program Files\iWay55\bea\ibse\ibsemrepo.xml`

On other platforms, use the corresponding location.

For a file system repository, no additional configuration is needed. You can proceed to Chapter 5, *Configuring Application Explorer*.

### **Procedure** How to Configure a Microsoft SQL Server 2000 Repository

To configure a Microsoft SQL Server 2000 repository:

1. Create a SQL Server database to use as the iBSE repository.
2. Ensure that SQL Server authentication is supported.

You can do this from the SQL Server Enterprise Manager by right-clicking your SQL Server, choosing *Properties*, and clicking the *Security* tab. If Authentication is set to *Windows only*, change it to *SQL Server and Windows*, and then restart SQL Server.

**Note:** SQL Server has two authentication modes, Windows and SQL Server. Windows Authentication uses the same IDs as the Windows operating system. SQL Server Authentication uses IDs defined within SQL Server. iBSE uses the Microsoft SQL Server 2000 JDBC driver, and this driver requires SQL Server authentication.

3. Create a SQL Server ID and grant it db\_owner rights to the iBSE repository database.
4. 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`

Once the database exists, you can use `iwse.sql` to create the database tables.

**Note:** If SQL Server is not on the same machine as iBSE, copy the `iwse.sql` file to the SQL Server machine. From a command prompt on the SQL Server machine, navigate to the directory containing the `iwse.sql` file.

5. Issue the following command:

```
osql -S hostname -d databasename -U loginID -P password -i iwse.sql
```

where:

*hostname*

Is the name of the machine where SQL Server is running.

*databasename*

Is the database you created in step 1 on page 4-13.

*loginID*

Is the SQL Server ID with db\_owner rights from step 3 on page 4-13.

*password*

Is the password for the SQL Server ID.

The tables should be created in your database.

If you wish to use the iBSE monitoring features, the SQL to create monitoring tables is in the following file:

```
C:\Program Files\iWay55\etc\setup\monitoring.sql
```

You can create these tables in the same database as the regular repository, or create a new database for the monitoring information. Creating a new database is recommended. Repeat the steps above, but submit monitoring.sql instead of iwse.sql when executing osql.

6. Proceed to *Configuring iBSE to Use a Repository Database* on page 4-17.



**Procedure How to Configure an Oracle Repository**

To configure an Oracle repository:

1. Contact your database administrator to obtain an Oracle user ID and password to create the iBSE repository.

This user ID should have rights to create and modify tables as well as the ability to create and execute stored procedures.

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

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

For other platforms, see the corresponding location.

This directory contains SQL to create the repository tables.

- For Oracle 8: `iwse.ora`
- For Oracle 9: `iwse.ora9`

**Note:** If Oracle is not on the same machine as iBSE copy `iwse.ora` or `iwse.ora9` to the Oracle machine. Then, from a command prompt on the Oracle machine, navigate to the directory containing the `iwse.ora` file.

3. Issue the following command:

`sqlplus userid/password @database @ iwse.ora`

If you wish to use the iBSE monitoring features, SQL to create monitoring tables is provided.

- For Oracle 8: `monitoring.ora`
- For Oracle 9: `monitoring.ora9`

The monitoring tables are separate from the other iBSE tables, so you can create them in a different instance or tablespaces if you wish. To create an iBSE monitoring repository, submit the `monitoring.ora` SQL.

4. Proceed to *Configuring iBSE to Use a Repository Database* on page 4-17.

**Procedure How to Configure a Sybase Repository**

SQL needed to create the repository is installed in the following file on Windows:

`C:\Program Files\iWay55\etc\setup\sybase-iwse.sql`

For other platforms, see the corresponding location.

A Sybase DBA should submit this SQL to create the repository tables and structure.

If you wish to use the iBSE monitoring features, the SQL to create monitoring tables is in the following file on Windows:

`C:\Program Files\iWay55\etc\setup\sybase-monitoring.sql`

For other platforms, see the corresponding location.

A Sybase DBA should submit this SQL to create the monitoring tables and structure.

**Procedure How to Configure a DB2 Repository**

SQL needed to create the repository is installed in the following file on Windows:

`C:\Program Files\iWay55\etc\setup\db2-iwse.sql`

For other platforms, see the corresponding location.

A DB2 DBA should submit this SQL to create the repository tables and structure.

If you wish to use the iBSE monitoring features, the SQL to create monitoring tables is in the following file on Windows:

`C:\Program Files\iWay55\etc\setup\db2-monitoring.sql`

For other platforms, see the corresponding location.

A DB2 DBA should submit this SQL to create the monitoring tables and structure. You can create monitoring tables in the same database as the regular repository, or create a new database for the monitoring information. Creating a new database is recommended.

## Configuring iBSE to Use a Repository Database

After creating the repository database, you must provide the connection information that iBSE requires to access the repository.

### **Procedure** How to Enter Connection Information for Servlet iBSE

To enter connection information for Servlet iBSE:

1. Copy the JDBC driver for your database into the `ibse\WEB-INF\lib` directory where the iBSE Web application is deployed. For example:

`C:\Program Files\iWay55\bea\ibse\WEB-INF\lib`

The required driver files depend on your database and driver. For example:

#### **SQL Server 2000 (three files):**

`msbase.jar`  
`mssqlserver.jar`  
`msutil.jar`

#### **Oracle:**

`classes12.zip`  
 or  
`ojdbc14.jar` (SDK 1.4.x and higher)

#### **Sybase:**

`jconn.jar`

#### **DB2 Type2 App driver:**

`db2j2classes.zip`

Using the DB2 Type2 App driver is recommended. For the Type2 driver, you must install DB2 Client on the iBSE machine. For other DB2 drivers, see your driver documentation.

**2. Add the JDBC driver to your domain's CLASSPATH:**

CLASSPATH is set in different places depending on the server release and type of domain. It is often set in one of the following files:

Windows:

```
BEA_HOME\bea\user_projects\domains\your_domain\startWebLogic.cmd
BEA_HOME\bea\user_projects\domains\your_domain\setDomainEnv.cmd
BEA_HOME\bea\user_projects\domains\your_domain\startManagedWebLogic.cmd
BEA_HOME\bea\weblogic81\common\bin\commEnv.cmd
```

UNIX:

```
BEA_HOME/bea/user_projects/domains/your_domain/startWebLogic.sh
BEA_HOME/bea/user_projects/domains/your_domain/setDomainEnv.sh
BEA_HOME/bea/user_projects/domains/your_domain/startManagedWebLogic.sh
BEA_HOME/bea/weblogic81/common/bin/commEnv.sh
```

It may be set by a line similar to the following:

Windows:

```
set CLASSPATH=%WEBLOGIC_CLASSPATH%;%POINTBASE_CLASSPATH%;%JAVA_HOME%\j
re\lib\rt.jar;%WL_HOME%\server\lib\webservices.jar;%CLASSPATH%
```

UNIX:

```
CLASSPATH="${WEBLOGIC_CLASSPATH}:${POINTBASE_CLASSPATH}:${JAVA_HOME}/j
re/lib/rt.jar:${WL_HOME}/server/lib/webservices.jar:${CLASSPATH}"
```

Append your driver's file or files to the CLASSPATH setting by adding the full paths of any JDBC files, including file names. If you are not sure where to set CLASSPATH, consult BEA WebLogic documentation.

**3. Restart the domain.**

**4. Log on to the Servlet iBSE Configuration page at:**

<http://hostname:port/ibse>

**Note:** This page was introduced in *Configuring Servlet iBSE* on page 4-7.

**5. At the bottom of the page, provide the repository connection information by completing the following fields:**

Field	Description
Repository Type	Specify the type of repository you are using.
Repository URL	Provide a JDBC URL to connect to the database. Examples follow this table.

Repository Driver	Provide the JDBC Class to connect to the database. For SQL Server: <code>com.microsoft.jdbc.sqlserver.SQLServerDriver</code> For Oracle: <code>oracle.jdbc.driver.OracleDriver</code> For Sybase: <code>com.sybase.jdbc2.jdbc.SybDriver</code> For the DB2 Type2 App driver: <code>COM.ibm.db2.app.DB2Driver</code> For other DB2 drivers, see your driver documentation.
Repository User	Provide the user ID to access the repository database.
Repository Password	Provide the password to access the repository database.

The repository URLs have the following forms:

SQL Server	<code>jdbc:microsoft:sqlserver://hostname:port;DatabaseName=dbname;SelectMethod=cursor</code>
Oracle	<code>jdbc:oracle:thin:@hostname:port;SID</code>
Sybase	<code>jdbc:sybase:Tds:hostname:port</code>
DB2 Type2 Driver	<code>jdbc:db2:dbname@driverType=APP</code> For other DB2 drivers, see your driver documentation.

where:

`hostname`

Is the name of the machine for the database server.

`port`

Is the port number for the database server. The SQL Server default is 1433. The Oracle default is 1521.

`dbname`

Is the database name or DB2 database alias or location name.

`SID`

Is the ORACLE SID.

**6. Click *Save*.**

You should be redirected to the Servlet iBSE home page where you can test the sample Web service.

If you receive an error, ensure CLASSPATH is properly set and redeploy the iBSE Web application. Then, test Servlet iBSE by going to the home page at:

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

**7. If you wish to use the iBSE monitoring, return to the Servlet iBSE Configuration page:**

<http://hostname:port/ibse>

**8. At the bottom of the page, click *More configuration....***

**9. Specify the information to connect to the monitoring repository. If it is the same database as the regular iBSE repository, enter the same information as you did in step 5 on page 4-18. If you set up a different database, provide the information for the monitoring database.**

**10. Click *Save Configuration*.**

**11. Click *Start Monitoring*.**

---

---

## CHAPTER 5

# Configuring Application Explorer

### Topic:

- Configuring Swing Application Explorer
- Configuring Servlet Application Explorer

This section explains how to configure Application Explorer. Two versions of Application Explorer are available when using iWay with BEA WebLogic Server:

- **Swing Application Explorer** is a window accessible within BEA WebLogic Workshop.

For Swing Application Explorer, see *Configuring Swing Application Explorer* on page 5-2

- **Servlet Application Explorer** is a Web application accessible through a Web browser.

For Servlet Application Explorer, see *Configuring Servlet Application Explorer* on page 5-5.

## Configuring Swing Application Explorer

---

iWay Swing Application Explorer is a GUI tool that uses adapters to create schemas and business services for use with iWay Connector for JCA, iBSE, or other XML or Web services-based programs. It enables you to generate and publish a Web service from objects and procedures in many different systems, without requiring in-depth knowledge of the object or system.

For Servlet Application Explorer, see *Configuring Servlet Application Explorer* on page 5-5.

### Accessing Swing Application Explorer

If BEA WebLogic Workshop is installed, Swing Application Explorer is installed automatically with iWay and accessible from within BEA WebLogic Workshop.

**Note:** Java SDK 1.4.1 or higher is required to use Swing Application Explorer.

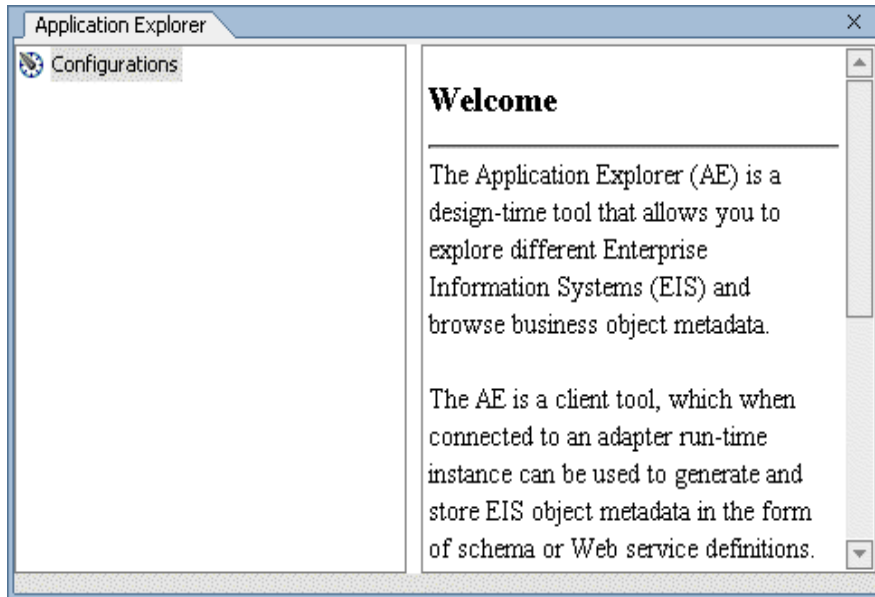
#### **Procedure** How to Access Swing Application Explorer

To access Swing Application Explorer:

1. Ensure your domain is started and iBSE and/or iWay Connector for JCA are deployed.
2. Start BEA WebLogic Workshop.
3. Open Application Explorer by clicking *View, Windows*, and then *iWay Application Explorer*.



Application Explorer appears in BEA WebLogic Workshop.



**4.** Right-click *iWay Configurations* and select *New*.

You are prompted to name the configuration. A configuration specifies an instance of iBSE or a JCA configuration. For Connector for JCA, the name should match the configuration, base, by default. For iBSE, you can choose any name you wish.

**5.** Name the configuration and click *OK*.

You must set up the connection to iBSE or a JCA Configuration.

- For iBSE, specify the iBSE URL. This is the URL to access iBSE and depends upon the port on which your domain is listening. The URL is:

`http://hostname:port/ibse/IBSEServlet`

where:

`hostname`

Is the hostname of the application server machine.

`port`

Is the HTTP port for the domain where iBSE is deployed. The port for the default domain is 7001.

- For JCA, specify where iWay is installed. For example:

`C:\Program Files\iWay55`

6. Specify the connection information and click *OK*.

Your configuration appears on the left under *iWay Configurations*.

7. Right-click the configuration you created and select *Connect*.

A connection is made.

8. Expand *iWay Service Adapters* and *iWay Event Adapters* to see available adapters.

The available adapters may vary depending on the version of iWay you install and which files are in the iWay55\lib directory. If your adapter requires third party drivers or libraries, they must be in the lib directory or your adapter may not appear.

When you create a Web service using Swing Application Explorer a complete XML response is not available within Swing Application Explorer. To fully test, Web services created using Swing Application Explorer, use the Servlet iBSE home page:

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

where:

[hostname](#)

Is the hostname of the application server machine.

[port](#)

Is the port on which your server is listening.

For example:

<http://localhost:7001/ibse/IBSEServlet>

## Configuring Servlet Application Explorer

---

iWay Servlet Application Explorer is a GUI tool that uses adapters to create schemas and business services for use with iWay Connector for JCA, iBSE, or other XML or Web services based programs. It enables you to generate and publish a Web service from objects and procedures in many different systems, without requiring in-depth knowledge of the object or system.

Servlet Application Explorer is a Web application installed as an expanded directory with iWay 5.5. The default location on Windows is:

`C:\Program Files\iWay55\bea\iwa`

For other platforms, see the corresponding location.

## Configuring Servlet Application Explorer Communications

Servlet Application Explorer communications are defined in the Web application's web.xml file. The default location on Windows is:

`C:\Program Files\iWay55\bea\iwa\WEB-INF\web.xml`

For other platforms, see the corresponding location.

Communications vary depending on whether you access iBSE or iWay Connector for JCA:

- To create Web services or schemas for iBSE, Application Explorer connects to iBSE. Therefore, Application Explorer must know the correct URL to access it.
- For iWay Connector for JCA, Application Explorer handles schema generation and target configuration itself. Application Explorer then writes information to the configuration directories that iWay Connector for JCA uses. Therefore, Application Explorer must know the location of the configuration directories.

By default Application Explorer is set to connect to both Servlet iBSE and the iWay Connector for JCA base configuration. You must edit web.xml as explained below if you are not using Servlet iBSE, if you provided the wrong Base Url during installation, or if you wish to access a different connector configuration. If you are confident that default settings are sufficient, proceed to *Deploying Servlet Application Explorer* on page 5-8.

## **Procedure** How to Configure Application Explorer Communications

To configure Application Explorer communications:

1. Open the web.xml file for the iway Web application. The default location on Windows is:

`C:\Program Files\iWay55\bea\iway\WEB-INF\web.xml`

For other platforms, see the corresponding location.

2. Find the "<service..." lines which define the connections. For example:

```
<explorer>
  <service displayName="ibse" url="http://localhost:7001/ibse/IBSEServlet"/>
  <service displayName="ijca" provider="com.ibi.adapter.jspae.CustomJCAIWAEConnection" url=C:\Program Files\iWay55\base"/>
</explorer>
```

3. If you are using Servlet iBSE but not iWay Connector for JCA, remove the iWay Connector for JCA line:

```
<service displayName="ijca" provider="com.ibi.adapter.jspae.CustomJCAIWAEConnection" url=C:\Program Files\iWay55\base"/>
```

4. If you are using iWay Connector for JCA but not Servlet iBSE, remove the Servlet iBSE line:

```
<service displayName="ibse" url="http://localhost:7001/ibse/IBSEServlet"/>
```

**5.** Optionally add or edit "<service..." lines to define connections.

You can define as many connections as you wish. When you access Application Explorer in a browser, you choose the connections to access, and you can switch between them.

- For **Servlet iBSE**, ensure the correct port appears. If you wish to access Servlet iBSE installed on a different host, modify the hostname as well. The URL is as follows:

```
url="http://hostname:port/ibse/IBSEServlet/"
```

For example:

```
<service displayName="ibse" url="http://localhost:22001/ibse/IBSEServlet"/>
```

- For **iWay Connector for JCA**, if you wish to use different configurations, edit or copy the existing JCA line and change the URL to indicate your configuration. The URL has the following form

```
url="IWAY_HOME#IWAY_CONFIG"
```

where:

*IWAY\_HOME*

Is the directory where iWay is installed.

*IWAY\_CONFIG*

Is the iWay Connector for JCA configuration instance. By default, a base configuration exists.

For example:

```
<service displayName="ijca configuration" provider="com.ibi.adapter.jspae.CustomJCAIWAYConnection" url="C:\Program Files\iWay55#test"/>
```

**6.** Save and exit the web.xml file.

## Deploying Servlet Application Explorer

Use the BEA WebLogic Console to deploy Servlet Application Explorer.

### **Procedure** How to Configure Servlet Application Explorer for BEA WebLogic

To deploy Servlet Application Explorer:

1. Access the BEA WebLogic console through a browser at:

<http://hostname:port/console>

where:

[hostname](#)

Is the name of the machine where BEA WebLogic is running.

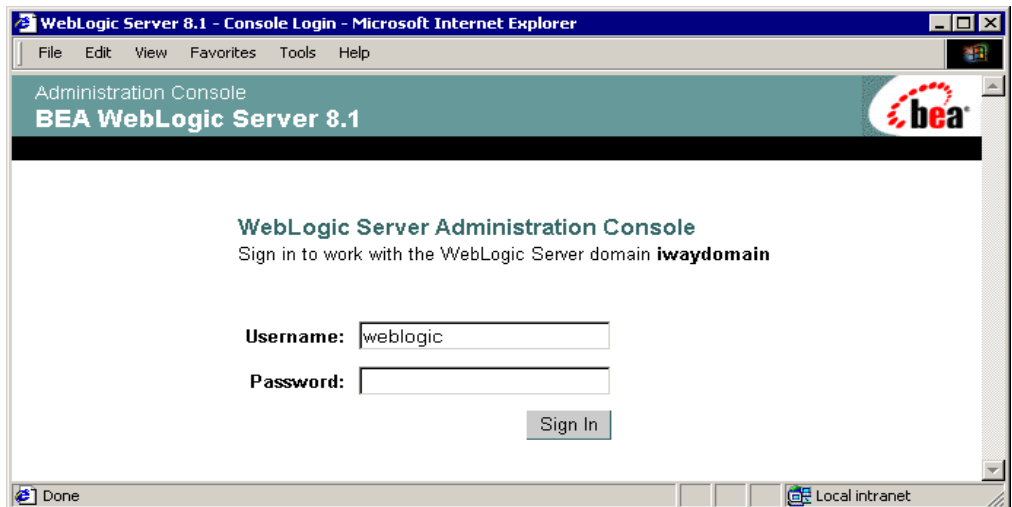
[port](#)

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

For example:

<http://localhost:7001/console>

A logon page appears. If the page does not open, ensure your domain is started, and you used the correct port.

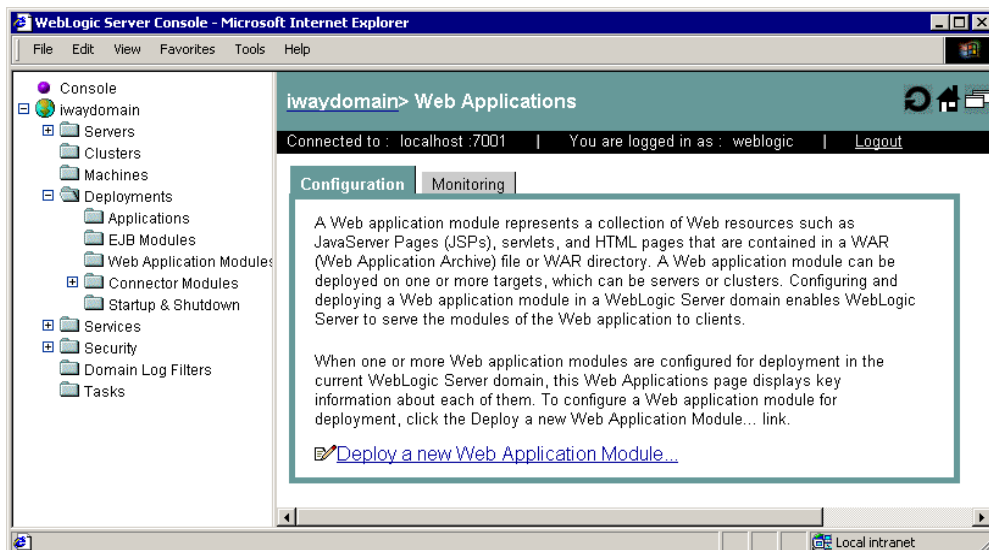


2. Log on to WebLogic.

**Warning:** To use Application Explorer, the server's *Listen Address* cannot be set to localhost. You can determine this by expanding the *Servers* folder on the left pane and clicking your server's name. The *Listen Address* appears on the *General* tab and must be either blank or the fully qualified hostname for WebLogic. This field should not say localhost.

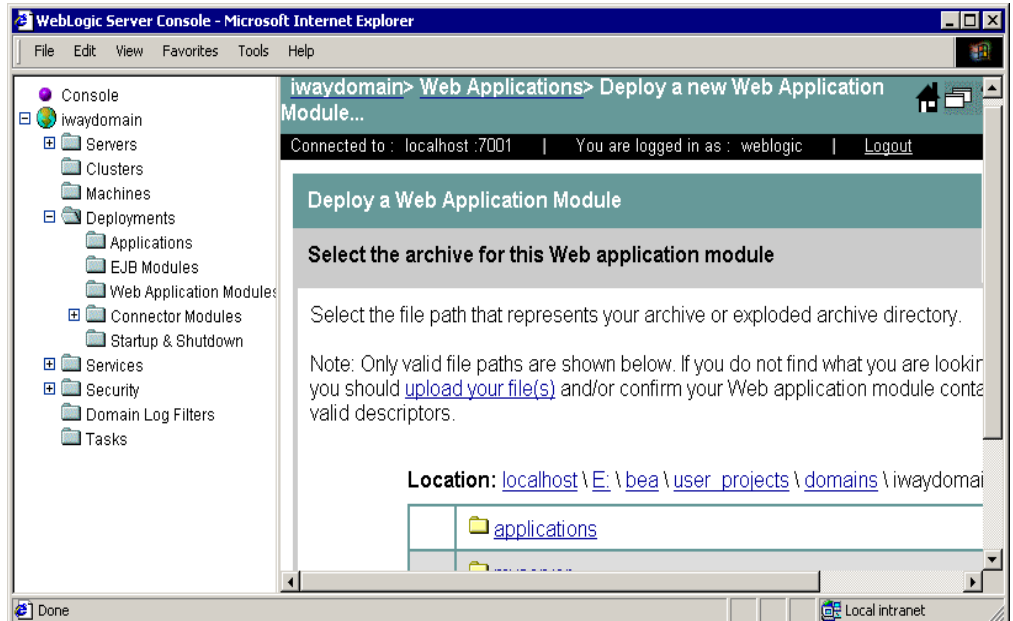
3. In the left pane, expand the *Deployments* folder and then, click *Web Application Modules*.

A page appears for deploying and controlling Web applications. If other applications are already deployed, they appear.

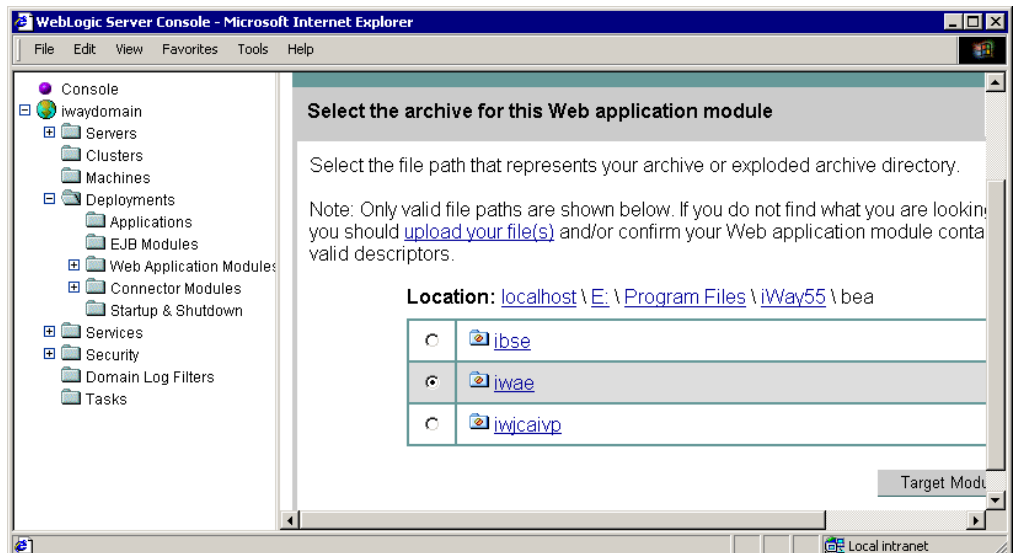


4. Click *Deploy a new Web Application Module*.

A page appears for you to specify where the Web application is located.



5. Click the links next to *Location* to view and specify the location of Servlet Application Explorer files.



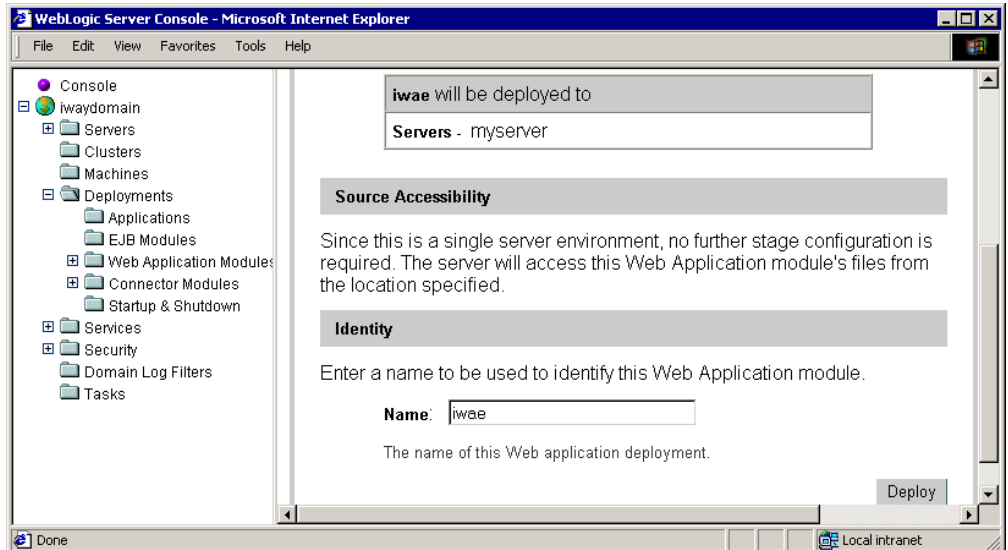
6. Select the option button next to the *iwaee* directory and then, click *Target Module*.



If there are multiple servers in your domain, you are prompted to specify into which server or servers to deploy.

7. If prompted, check which servers to deploy to and click *Continue*.

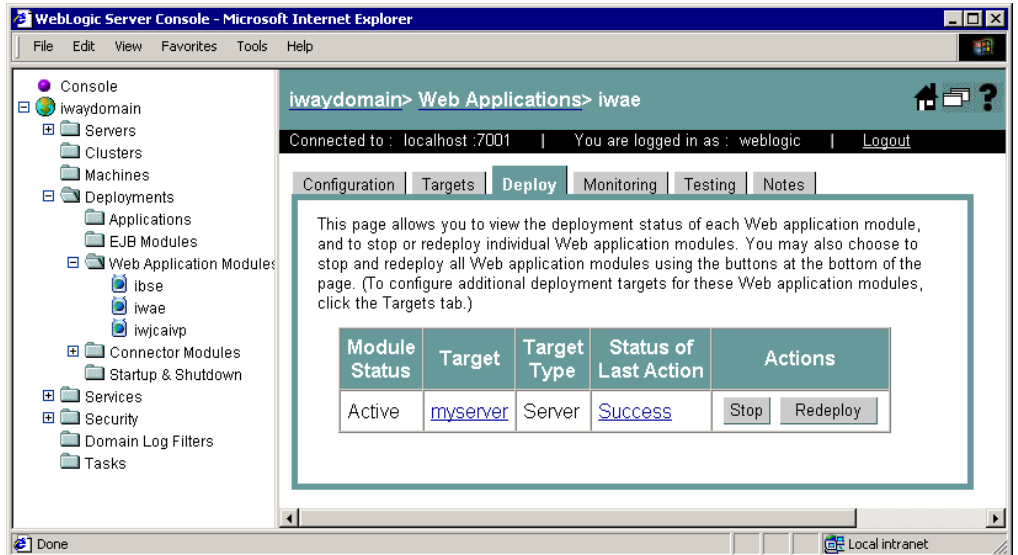
If you are deploying into a single server, information about the server displays.



If you are deploying into multiple servers, you are prompted to copy the module to each server.

8. Click *Deploy*.

When deployment completes, *iwae* appears on the left below *Web Application Modules*.



**Note:** You may need to expand the *Web Application Modules* folder to see *iwae*.

## Accessing Servlet Application Explorer

After Servlet Application Explorer is deployed through your application server, you can access it.

**Note:** You may receive errors if you use Internet Explorer 5.5 or earlier. Before using Application Explorer, update to Internet Explorer 6 or higher.

### Procedure How to Access Servlet Application Explorer

After Servlet Application Explorer is deployed through your application server, you can access it as follows:

1. Go to the following URL in a browser:

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

where:

[hostname](#)

Is the hostname for the application server machine.

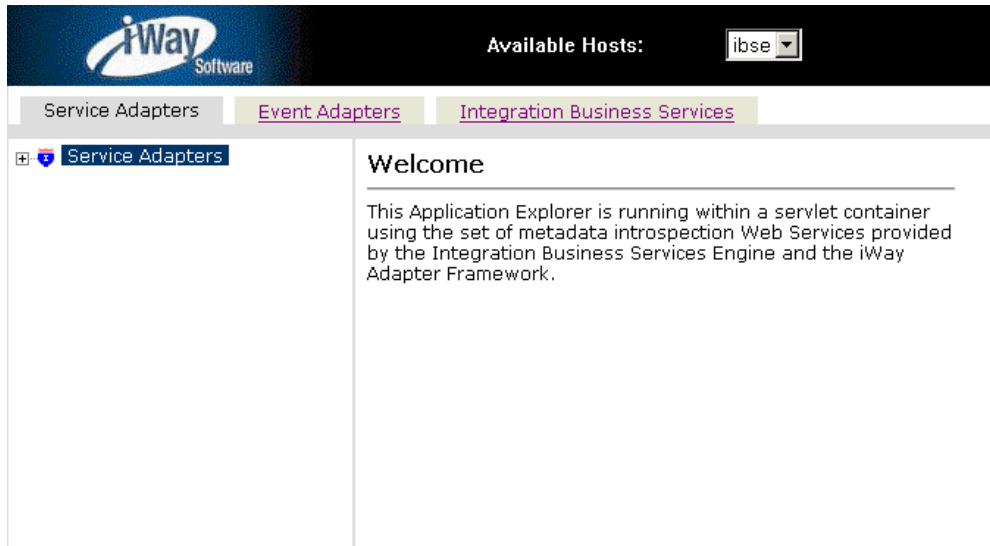
[port](#)

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

For example:

<http://localhost:7001/iwae/index.html>

Servlet Application Explorer opens in your browser.



## 2. Expand *Service Adapters* to see available adapters.

Available adapters may vary depending on which files are in the iWay55\lib directory. If your adapter requires third party drivers or libraries, they must be in the lib directory or your adapter may not appear.

The *Available Hosts* drop-down list in the upper right determines which iWay Connector for JCA configuration or Servlet iBSE instance you access. If one of them is not available, you receive an error if it is selected in the *Available Hosts* drop-down menu. You can remove, add, or modify connections by editing web.xml.

When you configure adapters, Web services, settings, or schemas, information is generated. This information is then stored in the repository and directories corresponding to what is selected in the *Available Hosts* drop down list.

For example, for file system repositories with the default base configuration:

- For iWay Connector for JCA, information is created in the repository.xml file for the configuration. For example:

`C:\Program Files\iway55\config\base\repository.xml`

Additional information, such as schemas, is created in subdirectories of base.

- For Servlet iBSE, information is created in ibserepo.xml under the ibse Web application's root. For example:

`C:\Program Files\iWay55\bea\ibse\ibserepo.xml`

Additional information, such as schemas and wsdl, is created in subdirectories beneath the ibserepo.xml file.

For more information on Servlet Application Explorer, see the *iWay Application Explorer (Java Servlet Version) User's Guide*.

You should now review the appendixes to see if any information appears for your adapters. If your adapters are not discussed in the appendixes, proceed to your adapter documentation.

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## APPENDIX A

### Configuring the iWay Emulation Adapter (3270/5250)

**Topic:**

- Installing the iWay Emulation Adapter Client Components

This section provides post-installation steps for the iWay Emulation Adapter (3270/5250).

The iWay Emulation Adapter was formerly known as the iWay Adapter for Telnet.

## **Installing the iWay Emulation Adapter Client Components**

---

The iWay Emulation Adapter (3270/5250) links new business applications to mainframe-based business logic through IBM 3270 and 5250 terminal screens and data streams. It enables you to transform your 3270 or 5250 mainframe screens into HTML pages or to create a remote procedure request (RPC) to transform the output of screens into an answer set. The adapter provides a simple, lightweight, and scalable way to reuse the business logic and data of terminal applications.

The iWay Emulation Adapter (3270/5250) requires client components that you must configure after installing iWay 5.5. The two client components are:

- The **run-time component**, which is supported on:
  - Microsoft Windows 2000 with SP2 and Windows 2003.
  - UNIX.
  - OS/390 and z/OS (under UNIX System Services (USS)).
- The **Telnet Designer**, which is supported on:
  - Microsoft Windows 2000 with SP2, Windows 2003, and Windows XP SP1.

**UNIX note:** if you plan to run the Emulation Adapter on a UNIX system, you must install iWay 5.5 and the Emulation Adapter client components on the UNIX system and *also* install the adapter's client components on a Windows system. This enables you to use the Telnet Designer, which is supported on Windows only.

**Procedure How to Install the iWay Emulation Adapter Client Components on Windows**

The iWay Emulation Adapter requires client components, including the Telnet Designer, that must be configured after installing iWay 5.5.

To configure the client components on Windows:

1. Run the following utility installed with iWay 5.5.

```
C:\Program Files\iway55\etc\setup\iwtntwin32.exe
```

2. Follow the installation windows to install the adapter's client components.

**Procedure How to Install the iWay Emulation Adapter Client Components on UNIX**

To configure the client components on Linux:

1. Navigate to the following directory:

```
$IWAY55/etc/setup
```

2. Use chmod to ensure the installation utility is executable. The name of the utility varies depending on your platform. For example:

```
chmod 555 iwtntlinux.bin
```

**Note:** If this file does not appear for your platform, download the current version from:

```
http://iwse.ibi.com/iway55/support/adapters/telnet/
```

3. Execute the installation utility. For example:

```
$IWAY55/etc/setup/iwtntlinux.bin -console
```

4. Respond to the prompts.

For information about using the adapter, including the Telnet Designer, see the *iWay Emulation Adapter (3270/5250) User's Guide*.





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## APPENDIX B

# Configuring Legacy Adapters

### Topic:

- Legacy Adapter Configuration

This section provides information on the steps and documentation required to configure legacy data adapters.

## **Legacy Adapter Configuration**

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Access to the following legacy mainframe data sources is provided through an iWay Server component that must be installed and configured on the mainframe.

- Adabas
- BULL GCOS
- Datacom
- Flat Files
- CA-IDMS/DB
- CA-IDMS/SQL
- Millennium
- MODEL 204
- Supra
- Teradata
- Total
- VSAM

Access to and from these data sources using iWay Connector for JCA, Servlet iBSE, or Application Explorer is accomplished by first connecting to the iWay Server.

Adapters for other legacy data sources do not require an iWay Server.

**Procedure How to Configure Legacy Data Adapters for use With iWay 5.5**

To configure legacy data adapters for use with iWay 5.5:

- 1.** Install an iWay Server on the mainframe containing the data sources you wish to access.
  - a.** For Information on iWay Server installation and configuration, see the *iWay Server Installation Manual*.
  - b.** Install the Server for OS/390 and z/OS, not the Server for MVS.
- 2.** Configure the iWay Server to access the data source as explained in the following manuals:
  - *iWay Data Adapter Administrator User's Guide*
  - *iWay Server Administration for UNIX, Windows NT OpenVMS, OS/400, OS/390 & z/OS*
- 3.** Install the iWay Data Management Administration Tools (DMAT) Suite on a Windows machine as explained in the *iWay Data Management Administration Tools Suite Installation Guide*.
- 4.** Use the Catalog Administrator (installed with iWay DMAT) to add stored procedures to the iWay Server's catalog so the procedures are accessible from Application Explorer.

For information on adding stored procedures, see the *iWay Catalog Administrator* manual.



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## APPENDIX C

# Configuring J.D. Edwards OneWorld for Outbound Transaction Processing

### Topics:

- Specifying Outbound Functionality for a Business Function
- Modifying the OneWorld jde.ini File

J.D. Edwards OneWorld enables you to specify outbound functionality for Master Business Functions (MBFs).

The following topics describe how to enable outbound transaction processing in OneWorld and how to modify the jde.ini file for XML support.

## Specifying Outbound Functionality for a Business Function

---

You can specify outbound functionality for business functions and manage the flow of data. You enable outbound transaction processing using a processing option that controls how a transaction is written.

### Outbound Transaction Processing

To process outbound data, you use the:

- Data Export Control table
- Processing Log table

The Data Export Control table manages the flow of the outbound data to third-party applications. The Processing Log table contains all the information about the OneWorld event.

For more information on configuring J.D. Edwards OneWorld for outbound processing, see *Detailed Tasks for OneWorld Operations* in the *J.D. Edwards Interoperability Guide for OneWorld Xe*.

### **Procedure** How to Enable Outbound Transaction Processing

To enable outbound transaction processing:

1. Right-click the application that contains the processing options for the Master Business Functions of the transaction.

For a list of these options, see Appendix B of the *J.D. Edwards Interoperability Guide for OneWorld Xe*.

2. From the shortcut menu, select *Prompt for Values*.
3. Click either the *Outbound* tab or the *Interop* tab.
4. Enter the transaction type.

The OneWorld Event listener processes only the *after* image for the business function.

You are not required to set the *before* image function.

## The Data Export Control Table and the Processing Log Table

The Data Export Control table manages the flow of the outbound data to third-party applications. OneWorld allows for the subscription of multiple vendor-specific objects for an interoperability transaction.

The records in the Data Export Control table are used to determine the vendor-specific objects to call from the Outbound Subsystem batch process (R00460) or the Outbound Scheduler batch process (R00461).

The Processing Log table contains all the information about the OneWorld event including the transaction type, order type, and sequence number from the Data Export Control table.

### **Procedure** How to Use the Data Export Controls

To use the data export controls:

1. On the Work With Data Export Controls pane, click *Add*.
2. Type values in the Transaction Type and Order Type fields.
3. For each detail row, enter either a batch process name or version or a function name and the library.
4. To launch the vendor-specific object for an add or insert, type *1*.
5. For the update, delete, and inquiry actions, type *1*.
6. In the Launch Immediately column, type *1*.
7. Click *OK*.

## Modifying the OneWorld jde.ini File

---

Because the iWay Adapter for J.D. Edwards OneWorld uses XML for the transfer of information to and from J.D. Edwards OneWorld, you must configure the OneWorld environment to support XML. You can do this easily by modifying the OneWorld jde.ini file.

### **Example**    **Modifying a jde.ini File for XML Support**

The following is a sample of the modifications required to implement XML support.

1. Add the following blocks:

```
[JDENET_KERNEL_DEF6]
;krnlName=CALL OBJECT KERNEL
;dispatchDLLName=jdekrnl.dll
;dispatchDLLFunction=_JDEK_DispatchCallObjectMessage@28
;maxNumberOfProcesses=10
;numberOfAutoStartProcesses=0
krnlName=CALL OBJECT KERNEL
dispatchDLLName=XMLCallObj.dll
dispatchDLLFunction=_XMLCallObjectDispatch@28
maxNumberOfProcesses=10
numberOfAutoStartProcesses=0

[JDENET_KERNEL_DEF15]
krnlName=XML TRANSACTION KERNEL
dispatchDLLName=XMLTransactions.dll
dispatchDLLFunction=_XMLTransactionDispatch@28
maxNumberOfProcesses=1
numberOfAutoStartProcesses=1
```

2. Change the following block:

```
[JDENET]
serviceNameListen=6009
serviceNameConnect=6009
maxNetProcesses=5
maxNetConnections=400
maxKernelProcesses=50
maxKernelRanges=15
netTrace=1
ServiceControlRefresh=5
MonitorOption=0 0 0 0 0 0 0 0
```

**Note:** Change maxKernelRanges to 15.

For more information on establishing your J.D. Edwards OneWorld environment for XML support, see *Setting the jde.ini File for XML* in the *J.D. Edwards Interoperability Guide for OneWorld Xe*.



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## Reader Comments

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