

iWay

iWay Installation and Configuration Version 5 Release 5

Includes support for JCA 1.5

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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 Sun Java System Application 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

The following table lists the titles and numbers of the chapters and appendixes for this manual with a brief description of the contents of each chapter or appendix.

Chapter/Appendix		Contents
1	<i>iWay 5.5 for Sun Java System Application Server</i>	Provides a brief overview of iWay 5.5 products and components, as well as their installation steps.
2	<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.
3	<i>Configuring iWay Connector for JCA</i>	Provides instructions for configuring iWay Connector for JCA.
4	<i>Configuring iWay Business Services Engine</i>	Provides instructions for configuring iWay Web services components.
5	<i>Configuring Application Explorer</i>	Provides instructions for configuring iWay Application Explorer.
A	<i>Configuring the iWay Emulation Adapter (3270/5250)</i>	Provides instructions for installing the client components of the iWay Emulation Adapter.
B	<i>Configuring Legacy Adapters</i>	Provides instructions for configuring legacy adapters that require an iWay Server component.

Documentation Conventions

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

Convention	Description
THIS TYPEFACE or <i>this typeface</i>	Denotes syntax that you must enter exactly as shown.
<i>this typeface</i>	Represents a placeholder (or variable) in syntax for a value that you or the system must supply.
<u>underscore</u>	Indicates a default setting.
<i>this typeface</i>	Represents a placeholder (or variable), a cross-reference, or an important term.
this typeface	Highlights a file name or command.
Key + Key	Indicates keys that you must press simultaneously.
{ }	Indicates two or three choices; type one of them, not the braces.
	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.
...	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis points (...).
.	Indicates that there are (or could be) intervening or additional commands.

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Help Us to Serve You Better

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

The following tables list the specifications our consultants require.

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

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

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

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

Application Explorer Type	Version	Platform
Swing		
Servlet		
ASP		

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

Version	Vendor

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

Request/Question	Error/Problem Details or Information
Provide usage scenarios or summarize the application that produces the problem.	
Did this happen previously?	
Can you reproduce this problem consistently?	

Request/Question	Error/Problem Details or Information
Any change in the application environment : software configuration, EIS/ database configuration, application, and so forth?	
Under what circumstance does the problem <i>not</i> occur?	
Describe the steps to reproduce the problem.	
Describe the problem .	
Specify the error message(s).	

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

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

User Feedback

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 Sun Java System Application Server

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 for use with Sun Java System Application Server.

Note: Sun Java System Application Server was formerly known as Sun One Application Server.

iWay 5.5 Products and Components

This manual explains how to install and configure the following products for use with Sun Java System Application Server:

- iWay Adapters
- iWay Connector for JCA (1.0 and 1.5)
- 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:

- AS1
- AS2
- Baan
- BroadVision
- CICS Transaction Adapter (XML)
- ClarifyCRM (Amdoc ClarifyCRM)
- CORBA
- DB2 Net Driver (iWay Adapter for RDBMS)
- eMail
- Emulation (for 3270/5250)
- ESRI
- 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.

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 installed with iWay 5.5.

Two versions of iWay Connector for JCA are available:

- The JCA 1.5 Connector runs in JCA 1.5 compliant application servers such as Sun Java System Application Server 8.
- The JCA 1.0 Connector runs in JCA 1.0 or JCA 1.5 compliant application servers.

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 Sun Java System Application Server.

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 use with your application server, Application Explorer is available as a Web application. It is referred to as Servlet Application Explorer to distinguish it from other versions of Application Explorer available from iWay Software.

Note: iWay Software also offers a standalone Java Swing implementation of Application Explorer and an ASP.NET implementation of Application Explorer.

Installation and Configuration Overview

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

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. Perform post-installation tasks to prepare your application server for iWay components. (Chapter 2, *Installing iWay 5.5 Components*)
4. Copy third party adapter-related files into the iWay 5.5 and application server directory structure. (Chapter 2, *Installing iWay 5.5 Components*)
5. To use iWay Connector for JCA, deploy iWay Connector for JCA and the JCA Test Tool on your application server. (Chapter 3, *Configuring iWay Connector for JCA*)
6. To use 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.

CHAPTER 2

Installing iWay 5.5 Components

Topics:

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

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

Installation Requirements

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

Sun Requirements

To use iWay for Sun Java System Application Server, a Sun application server 7 or higher must be installed. You should ensure that you meet the hardware and software requirements needed for the application server. iWay will run as part of your application server. Therefore, iWay has the same operating system and Java software requirements.

Ensure that Sun Java System Application Server is installed and functioning properly before installing iWay. For more information, refer to the installation documentation for your application server.

Steps, paths, and examples in the document correspond to Sun Java System Application Server 8. If you use release 7, use the corresponding step, locations, and files.

Additional iWay Requirements

- Approximately 75 MB of disk space.
- For end users, Internet Explorer 6 or higher.

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.

Additional iWay Connector for JCA Requirements

Requirements for iWay Connector for JCA depend on whether you use the JCA 1.5 or JCA 1.0 Connector:

- The JCA 1.5 Connector requires Sun Java System Application Server 8 or higher.
- The JCA 1.0 Connector requires Sun Java System Application Server 7 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 or higher
- Oracle

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 and application server 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*.

Migration and Upgrading Requirements

If this is the first time you are installing iWay 5.5 proceed to *Installing iWay 5.5* on page 2-5.

If you are upgrading a previous iWay 5.5 release and wish to preserve your repository, schemas, and other information, you must do the following:

1. Back up your existing iBSE or JCA repository as explained in *How to Back Up iWay Repositories* on page 2-4 .
2. Undeploy all iWay components from your Application Server.
3. Uninstall the older iWay release. Steps to uninstall iWay appear in *How to Uninstall iWay* on page 2-20.
4. Optionally reboot your system.
5. Install the new iWay release.
6. If necessary, copy the backed up iWay repositories into the new directory structure.
7. Redeploy iWay components using the steps in this manual.

Note: If you wish to migrate from a development to a production environment, see the user documentation for your adapter.

Procedure How to Back Up iWay Repositories

- For **iWay Connector for JCA**:

Copy your JCA configuration directory out of the iWay55 directory structure, for example:

```
C:\Program Files\iWay55\base
```

After reinstalling iWay 5.5, copy this directory back.

- For an **iBSE file** repository:

Copy the ibserepo.xml file out of the iWay55 directory structure. If it exists, also copy the ibsemrepo.xml file. These files are normally located in the base configuration directory, for example:

```
C:\Program Files\iWay55\base
```

However, they may be located in the directory where your application server expanded and runs the iBSE Web application.

After reinstalling iWay 5.5, copy the ibserepo.xml and ibsemrepo.xml files back into the base directory.

In addition, copy the wsdl directory from the iBSE Web application. This is located where your application server has expanded it, for example:

```
C:\Sun\AppServer\domains\domain1\applications\j2ee-apps\ibse\ibse_war\wsdl
```

You normally do not need to copy the wsdl directory back into the Web application after it is deployed. However, it is a good idea to preserve this directory when possible.

- For an **iBSE database** repository:

No back up is required when using a database repository. After reinstalling iWay 5.5, specify your old database when you access the Servlet iBSE Configuration page.

However, it is a good idea to copy the wsdl directory from the iBSE Web application. This is located where your application server has expanded it, for example:

```
C:\Sun\AppServer\domains\domain1\applications\j2ee-apps\ibse\ibse_war\wsdl
```

You normally do not need to copy the wsdl directory back into the Web application after it is deployed. However, it is a good idea to preserve this directory when possible.

Installing iWay 5.5

The initial iWay installation procedure installs a set of adapters, iWay Connectors for JCA, iBSE, and Application Explorer. The set of adapters varies depending on which version of the iWay installation you install. After installation, iWay 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.

If you are upgrading from a previous release, be sure to review *Migration and Upgrading Requirements* on page 2-3.

Procedure How to Install iWay 5.5

Warning: The iWay installation program does not currently support Java 1.5 in all environments. If you are using Java 1.5, change your environment to use Java 1.4 or 1.3 when you launch the installation.

1. Start the installation by executing the installation program for your platform and version of iWay 5.5. The name of the installation program may vary.

- On **Windows**, execute:

```
iwsun.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:

```
./iwsun.solaris.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:

```
./iwsun.solaris.bin -console
```

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

The installation begins by temporarily copying files and analyzing your environment. This may take some time. When this completes, the Welcome window opens.

2. Click *Next* at the Welcome window.

The Choose Destination Location window opens and lets you choose where to install iWay components.

Note: If an IWAY55 environment variable is already defined in your environment, this might not appear and the install will take place in the IWAY55 location.

3. Accept the default or specify a new location to install iWay. Then, click *Next*.

A window appears where you must enter the *Base Url* for your application server. This is the hostname, port, and protocol (http vs. https) for accessing your application server.

4. Enter the Base Url and click *Next*, for example:

`http://hostname:8080`

A summary window appears.

5. Click *Next* to start the installation.

Files are copied to your system in the directory you specified. On UNIX systems, you should log off and log back on to reapply your profile.

Note: If you backed up a previous JCA or iBSE file repository, copy the old base or other configuration directory into the new iWay directory structure.

Post-Installation Tasks and Information

After installation, an iWay55 directory is created. Review the information below for information on required tasks, directory structure, security settings, and environment variables.

Reference iWay 5.5 Directory Structure

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

`bin`

Contains XML files required for iWay 5.5.

`config`

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

`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.

`sun`

Contains Web applications and connector modules to be deployed to Sun Java System Application Server.

On UNIX, ensure that the user ID your application server runs under has full permissions to the iway55 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.

Procedure How to Set Environment Variables

After installation, environment variables are required to use iWay adapters and components.

- 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.

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=SUN
```

For example:

```
export IWAY55OEM=SUN
```


4. On UNIX, the shared library variable must contain the iWay55/lib directory. This variable varies depending on your platform as defined in the following table which lists platforms and associated variables.

AIX	LIBPATH
HP-UX	SHLIB_PATH
Other UNIX Platforms	LD_LIBRARY_PATH

For example:

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

Procedure How to Configure Endorsed Files

iWay components rely on several files and classes that must be loaded before any of your application server's default classes. To ensure classes load in the correct order, do the follow.

1. Determine your application server JAVA_HOME directory. If you installed a Java SDK/JDK with your application server, the default location on Windows is normally:

```
C:\SUN\AppServer\jdk
```

On other platforms, use the corresponding location.

If you specified a different Java installation, you can determine JAVA_HOME by looking at the asenv.bat or asenv.conf file for your applications server. For the default domain and server on Windows, this is:

```
C:\Sun\AppServer\config\asenv.bat
```

On other platforms, use the corresponding location.

2. If it does not exist, create an endorsed directory in the jre/lib or jdk/lib directory, for example:

```
C:\SUN\AppServer\jdk\lib\endorsed
```

or

```
C:\j2sdk1.4.2_03\jre\lib\endorsed
```

3. Copy the iwafjca.rar file installed with iWay to the endorsed directory. The default location for iwafjca.rar on Windows is:

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

On other platforms, use the corresponding location.

4. Open a command or shell prompt and navigate to the endorsed directory.
5. Use the jar command to extract three files from iwafjca.rar.

```
jar xvf iwafjca.rar xalan.jar xercesImpl.jar xmlParserAPIs.jar
```

If you receive an error, then the jar command is probably not in your search path. You can add the jar command to your search path or execute it using its full path. The jar command is located in the Java SDK bin directory, which varies depending on your Java release, for example:

```
C:\j2sdk1.4.2_03\bin\jar xvf iwafjca.rar xalan.jar xercesImpl.jar xmlParserAPIs.jar
```

6. Confirm that the endorsed directory now contains the following three files:

```
xalan.jar  
xercesImpl.jar  
xmlParserAPIs.jar
```

7. Remove the iwafjca.rar file from the endorsed directory.
8. If your application server is running, restart it.

Procedure How to Configure Security Settings for iWay

You should disable server.policy as explained below before deploying iWay components.

1. Using a text editor, open the domain.xml file for your domain. For the default domain on Windows, this is:

```
C:\Sun\AppServer\domains\domain1\config\domain.xml
```

On other platforms, use the corresponding location. For other domains, use the corresponding location.

2. Remove the following line from server.xml where it corresponds to your server.

```
<jvm-options>-Djava.security.policy=${com.sun.aas.instanceRoot}/config  
/server.policy</jvm-options>
```

It may appear multiple times and you can remove each appearance of the line.

3. Save and exit domain.xml.
4. If your application server is running, restart it.

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.

3. For Sun Java System Application Server 8 and higher, also copy any required library files into the lib directory for your domain, for example:

`C:\Sun\AppServer\domains\domain1\lib`

Also, copy any required JDBC drivers into the lib\ext directory for your domain, for example:

`C:\Sun\AppServer\domains\domain1\lib\ext`

Note: If you are not sure which is which, copy files into both.

4. For iWay Adapter for TIBCO, add binary files to your application server's PATH.
5. Restart your application server after copying files.

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.

The following table lists the required libraries or drivers for your adapter.

iWay Adapter for	Required Libraries or Drivers
CICS Transaction Adapter (XML)	None.
ClarifyCRM (Amdoc ClarifyCRM)	<p>ClfyCbo.jar</p> <p>And all .dll or .so files in the Clarify client bin directory, for example: C:\ClarifyCRM12.0\eSupport\Clarify\bin.</p> <p>You can also add this directory to the PATH variable used by your application server.</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>C:\SQLLIB\java\db2java.zip</p> <p>C:\Program Files\SQLLIB\java\db2java.zip</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>Note: To run the usejdbc2 procedure, you must stop the DB2 instance.</p>
eMail	<p>None in the lib directory.</p> <p>However, for Sun Java System Application Server, you may need to download the latest activation.jar file. This file is included in the jaf-1_0_2-upd.zip archive that you can download from the Sun Microsystems Web site. Extract activation.jar from the archive and replace the activation.jar files in the application server's share\lib and imq\lib directories. See Release Notes for more information.</p>
Emulation (3270/5250) (Telnet)	None. However, additional information is available in Appendix A, <i>Configuring the iWay Emulation Adapter (3270/5250)</i>
Flat Files	None.

iWay Adapter for	Required Libraries or Drivers
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.
iWay/WebFOCUS (EDA) Server (iWay Adapter for RDBMS)	None.
J.D. Edwards EnterpriseOne (OneWorld)	<p>J.D Edwards EnterpriseOne (OneWorld) Java-based ThinNet API.</p> <p>This is normally distributed as .jar files with the J.D Edwards installation media. These libraries may vary depending on the J.D. Edwards release. They usually consist of the following:</p> <p>Kernel.jar</p> <p>Connector.jar</p>
J.D Edwards WorldSoft	DB2/400 JDBC drivers.
JMS	None
Lawson	None.
Lotus Notes	JdbcDomino.jar
Microsoft .NET	<p>None in the lib directory but Microsoft .NET Framework should be installed on the iWay machine.</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>http://iwse.ibi.com/iway55/redist/dotnetfx.exe</p>

iWay Adapter for	Required Libraries or Drivers
Microsoft Message Queueing (MSMQ)	None
MQ Series (IBM WebSphere MQ)	<p>com.ibm.mq.jar com.ibm.mqbind.jar</p> <p>Also ensure that the following MQ Series directory is in PATH: MQSeries\Java\lib</p> <p>or</p> <p>WebSphereMQ\Java\lib</p> <p>For MQ Series 5.2, you need IBM Product Extension MA88 MQ Series classes.</p>
Oracle Applications (E-Business Suite)	<p>Oracle JDBC drivers (thin type4 or OCI type2) and/or Oracle Client NET8 or NET9.</p> <p>All calls to Oracle E-Business Suite occur through these drivers. If you do not have the appropriate JDBC driver, Oracle Technology Network (OTN) provides a download site:</p> <p>http://otn.oracle.com/software/tech/java/sqlj_jdbc/content.html</p> <p>Note: You require a logon ID to download the drivers.</p> <p>If you are using OCI drivers, you must install and configure Oracle Client on the machine with the iWay Adapter for Oracle.</p> <p>To use iWay Concurrent Program request functionality, you must install and configure Oracle Client on the Oracle database that supports Oracle E-Business Suite.</p>
Oracle (iWay Adapter for RDBMS)	<p>Oracle JDBC driver (classes12.zip or ojdbc14.jar)</p> <p>You can download this driver from the Oracle Web site at:</p> <p>http://otn.oracle.com/software/tech/java/sqlj_jdbc/content.html</p> <p>Note: You require a logon ID to download the drivers.</p> <p>For more information on Oracle JDBC issues, see the Oracle JDBC FAQ at:</p> <p>http://otn.oracle.com/tech/java/sqlj_jdbc/htdocs/jdbc_faq.htm</p>

iWay Adapter for	Required Libraries or Drivers
PeopleSoft	<ul style="list-style-type: none"> • PeopleSoft Java Object Adapter (psjoa.jar) This file provides a low level interface between client applications and PeopleSoft. This file is provided with PeopleSoft in the following directory: PS_HOME\web\PSJOA where: PS_HOME Is the PeopleSoft home directory. Note: The psjoa.jar file is different for every version of PeopleSoft. When you upgrade your Peopletools release, ensure you copy the psjoa.jar file for the new release into the iWay55\lib directory and restart all components. • pstools.properties (for PeopleSoft 8.1x) PeopleSoft release 8.1x requires an additional file called pstools.properties in the following directory: PS_HOME\web\jmac For more information, see the <i>iWay Adapter for Peoplesoft user's guide</i> documentation.
RDBMS (XML Adapter for RDBMS)	See requirements in this table for specific target data sources. For example, DB2, Oracle, SQL Server, and so forth.

iWay Adapter for	Required Libraries or Drivers
SAP R/3	<p>SAP Java connector (normally sapjco.jar).</p> <p>Information on the current set of SAP connectors is available at: http://service.sap.com/connectors</p> <p>A valid SAP service ID is required to access this site. To download the current version, follow the information provided on the SAP Java Connector (SAP JCo) overview page. For more information, contact your SAP BASIS Administrator.</p> <p>Using the appropriate archive tool, open the archive containing the SAP Java Connector (SAP JCo) 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>When using an application server, if you run into problems with the adapter for SAP, add sapjco.jar to your application server CLASSPATH.</p>

iWay Adapter for	Required Libraries or Drivers
Siebel	<p>For Siebel 6.3.x and higher, Siebel Java Data Bean API.</p> <p>This is distributed as .jar files with the Siebel Thin Client. These libraries vary by Siebel release in both content and name. Therefore, the Siebel Thin Client provided with the target Siebel system must always be used with the adapter, for example:</p> <ul style="list-style-type: none"> • Siebel 6.3.x <ul style="list-style-type: none"> <code>SiebelTcOM.jar</code> <code>SiebelTcCommon.jar</code> <code>SiebelTC_enu.jar</code> <code>SiebelDataBean.jar</code> • Siebel 7.0.3 <ul style="list-style-type: none"> <code>SiebelJI_Common.jar</code> <code>SiebelJI_enu.jar</code> • Siebel 7.5.2 <ul style="list-style-type: none"> <code>SiebelJI_Common.jar</code> <code>SiebelJI_enu.jar</code> <code>SiebelJI.jar</code> • Siebel 7.7 <ul style="list-style-type: none"> <code>SiebelJI_enu.jar</code> <code>Siebel.jar</code> <p>The Siebel COM-based API (Windows only) requires the Siebel Thin Client to be installed and accessible to the adapter.</p> <p>Note: The following files are for English language implementations:</p> <ul style="list-style-type: none"> <code>SiebelTC_enu.jar</code> <code>SiebelJI_enu.jar</code> <p>For non-English installations, the last three letters (<code>_enu</code>) vary.</p> <p>If you are using MQ Series as a transport, you also need the files for <i>MQ Series (IBM WebSphere MQ)</i> on page 2-14.</p>

iWay Adapter for	Required Libraries or Drivers
<p>SQL Server 2000 (iWay Adapter for RDBMS)</p>	<p>SQL Server 2000 JDBC driver.</p> <p>The JDBC driver includes the following three files:</p> <p>msbase.jar mssqlserver.jar msutil.jar</p> <p>You can download the driver free of charge from:</p> <p>http://microsoft.com</p> <p>Search the site for "SQL Server 2000 JDBC driver" to download and run an installation program to install the driver. The installation program installs the three driver files in:</p> <p>drive:\Program Files\Microsoft SQL Server 2000 Driver for JDBC\lib</p> <p>Note: Running the driver installation program is not required. If these files are on another machine, simply copy them.</p>
<p>Sybase (iWay Adapter for RDBMS)</p>	<p>JDBC driver for Sybase servers (jConnect for JDBC).</p> <p>You can download the driver from the Sybase downloads Web site:</p> <p>http://www.sybase.com/downloads</p> <p>Select "jConnect for JDBC" and review information on the jConnect for JDBC Web site.</p> <p>Obtain the jConnect.zip file that corresponds to your version of Sybase and follow the steps described on the jConnect download page to extract the JDBC driver.</p>
<p>TIBCO Rendezvous</p>	<p>tibrvj.jar</p> <p>In addition to the Java file, tibrvj.jar, the iWay Adapter for TIBCO requires several TIBCO binary files. These files are stored in the following TIBCO directory:</p> <p>C:\tibco\tibrv\bin</p> <p>These files must be added to the PATH variable used by your application server.</p>
<p>Tuxedo (Transaction Adapter for BEA Tuxedo)</p>	<p>weblogic.jar</p>

Adjusting PATH for iWay Adapters

Some adapters require third party non-Java files or libraries, such as .dll files or .so files. These non-Java files must be in the PATH variable for your application server. You can ensure this by adding the iWay55\lib directory to the application server PATH through the console. In addition, when many files are involved, you can add their directories to the PATH variable as well as the iWay55\lib directory.

The iWay Adapter for TIBCO requires several TIBCO binary files, and you can add these to PATH as follows. These files are stored in the following TIBCO directory on Windows.

```
C:\tibco\tibrv\bin
```

On other platforms, use the corresponding location.

Procedure How to Add Files to PATH

1. If it is not started, start your application server.
2. Log on to the Sun Admin Console. If you kept the default port, you can use:

```
https://hostname:4849
```

where:

```
hostname
```

Is the hostname for your application server.

The Admin Console opens in your browser.

3. On the left, expand the *Configurations* and then expand the server instance you are using for iWay.
4. Under your sever on the left, select *JVM Settings*.
5. On the right, select *Path Settings*.
6. In the *Native Library Path Prefix* text box, enter the path where iWay is installed. This path cannot have spaces. On Windows, you can use the DOS name, for example:

```
C:\Progra~1\iWay55
```

Use the corresponding location on your system.

7. Click *Save*.
8. If you use iWay Adapter for TIBCO, in the *Native Library Path Prefix* field, enter the full path to the following TIBCO directory:

```
C:\tibco\tibrv\bin
```

Specify the full path on your system.

9. Click *Save*.

10. Restart the application server.

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 Application Explorer. (Chapter 5, *Configuring Application Explorer*)
4. Review the appendixes for any adapter-specific post-installation steps.

Uninstalling iWay 5.5

An uninstall utility is provided to remove iWay components from your machine. Be sure to use this if you wish to uninstall. If you manually remove directories, you may have problems installing a later release.

Procedure How to Uninstall iWay

1. Ensure all iWay components are undeployed from your application server.
2. Back up any files in the iWay55 directory structure that you wish to save.
3. Navigate to the directory containing the uninstall utility.

On Windows, the default location for this directory is:

```
C:\Program Files\iWay55\etc\uninstall\sun
```

On other platforms, use the corresponding directory.

4. Execute the uninstall utility.
 - On Windows, execute:

```
uninstaller.exe
```
 - On UNIX, issue:

```
java -jar uninstall.jar -silent
```

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, 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.

Two version of iWay Connector for JCA are provided:

- The JCA 1.5 Connector requires Sun Java System Application Server 8 or higher. The default location is on Windows is:

`C:\Program Files\iWay55\sun\iwjca15.rar`

- The JCA 1.0 Connector requires Sun Java System Application Server 7 or higher. The default location is on Windows is:

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

For other platforms, see the corresponding locations.

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.

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.

Deploying iWay Connector for JCA

Follow the steps below to deploy the iWay Connector for JCA.

Procedure How to Deploy the iWay Connector for JCA

1. Start Sun Java System Application Server.
2. Log on to the Sun Admin Console. If you kept the default port, you can use:
<https://hostname:4849>
 where:
[hostname](#)
 Is the hostname for your application server.
 The Admin Console opens in your browser.
3. On the left, expand the *Applications* folder.
4. On the left, click *Connector Modules*.
5. On the right, click *Deploy*.
6. Specify the *iwafjca.rar* or *iwjca15.rar* file depending on which connector you use, for example:
[C:\Program Files\iWay55\sun\iwjca15.rar](#)
 or
[C:\Program Files\iWay55\sun\iwafjca.rar](#)
7. Click *Next*.
8. Ensure the *Application Name* is one of the following depending on which connector you deploy:
[iwjca15](#)
 or
[iwafjca](#)
9. If you are using the JCA 1.5 connector, under *Resource Adapter Properties*, provide values for the properties listed in the following table. The table lists the name of the property in one column and the value in a second column.

Name	Value
IWayConfig	Provide the configuration name. The default is: base

Name	Value
IWayRepoURL	Clear this field so it has no value.
LogLevel	Provide the LogLevel, for example: <code>DEBUG</code>
IWayRepoPassword	Clear this field so it has no value.
IWayRepoUser	Clear this field so it has no value.
IWayHome	Provide the directory where iWay is installed, for example: <code>C:\Program Files\iWay55</code>

10. Specify which servers you are deploying into by moving them from the *Available* to *Selected* boxes.
11. Click *OK*.

When the connector is deployed, it is expanded to a directory under the application server, for example:

`C:\Sun\AppServer\domains\domain1\applications\j2ee-modules\iwjca15`

or

`C:\Sun\AppServer\domains\domain1\applications\j2ee-modules\iwafjca`

If you receive an error, stop the server instance and remove each appearance of the following line from domain.xml file for your domain (AppServer\domains\domain1\config\domain.xml):

```
<jvm-options>-Djava.security.policy=${com.sun.aas.instanceRoot}/config/server.policy</jvm-options>
```

Procedure How to Create Connection Pools for the iWay Connector for JCA 1.5

For JCA 1.5, create a connection pool for the connector:

1. On the left of the Admin Console, expand *Resources*.
2. Under *Resources*, expand *Connectors*.
3. Click *Connector Connection Pools*.
4. On the right, click *New*.
5. In the *Name* field enter:
`eis/iWay`
6. For the *Resource Adapter* menu, choose:

`iwjca15`

7. Click *Next*.
8. Click *Next* again.
9. For the Transaction Support drop down menu, choose one of the following:

`NoTransaction`

or

`LocalTransaction`

Note: Leave the *Additional Properties* as they appear.

10. Click *Finish*.
11. On the left, under *Connectors*, click *Connector Resources*.
12. On the right, click *New*.
13. In the *JNDI Name* field enter:
`eis/iWay`
14. For the *Pool Name* menu, choose:
`eis/iWay`
15. In the *Targets* area, select your sever or servers in the *Available* text box and click *Add*.
16. Click *OK*.

Changing Default Connector Settings

The behavior of iWay Connector for JCA is controlled by the following file inside the iwafjca.rar or iwjca15.war 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 3-8.

To change defaults, you must:

1. Find the META-INF/ra.xml file for iwafjca.rar or iwjca15.rar. You can edit the file included with the deployed connector or extract the META-INF/ra.xml file from an undeployed archive.

For an already deployed file, its location varies depending on your server, domain, and platform, for example:

```
C:\Sun\AppServer\domains\domain1\applications\j2ee-modules\iwafjca\META-INF
```

For an undeployed archive, extract ra.xml as follows:

- a. Open a command prompt and navigate to the directory containing the connector, for example:

```
C:\Program Files\iWay55\sun
```

- b. Issue the following command:

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

or

```
jar xvf iwjca15.rar META-INF/ra.xml
```

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

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

Note: Be sure to use the jar command and not Winzip. Winzip does not properly extract Java related archives.

2. Open the ra.xml file in a text editor.
3. Modify the contents of the <param-value> tags to change defaults. Ensure the iWayHome variable specifies the iWay55 directory.

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>
```

- **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>
```

Note: If you create a new configuration, you may need to manually create a directory with the same named under iWay55\config. You may also need to manually create a log directory under that new directory.

- **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. If you edited the deployed file, stop and then restart the application server. If you edited an extracted file, use the jar command to return ra.xml file to the META-INF directory within the archive as follows:

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

```
C:\Program Files\iWay55\sun
```

- b. Issue the following command:

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

or

```
jar uvf iwjca15.rar META-INF/ra.xml
```

Deploying and Running the JCA Test Tool

iWay 5.5 includes a sample Web application called the JCA Test Tool. The JCA Test Tool includes sample code that enables you to test iWay Service and Event Adapters. You should deploy the iWay Connector for JCA before the JCA Test Tool.

Two version of iWay Connector for JCA Test Tool are provided:

- If you deployed the JCA 1.5 Connector, you must use 1.5 Test Tool. The default location is on Windows is:

```
C:\Program Files\iWay55\sun\iwjca15ivp.war
```

- If you deployed the JCA 1.0 Connector, you must use 1.0 Test Tool. The default location is on Windows is:

```
C:\Program Files\iWay55\sun\iwjcaivp.rar
```

For other platforms, see the corresponding locations.

Deploying the JCA Test Tool

Deploy the JCA Test Tool to Sun Java System Application Server as explained below.

Procedure How to Deploy the JCA Test Tool

You can use the Sun Admin Console to deploy the JCA Test Tool.

1. Start Sun Java System Application Server if it is not started.
2. Log on to the Sun Admin Console. If you kept the default port and access it locally, you can use:

```
https://localhost:4849
```

The Admin Console opens in your browser.

3. On the left, expand the *Applications* folder.
4. On the left, click *Web Applications*.
5. On the right, click *Deploy*.
6. Specify the iwjcaivp.war or iwjca15ivp.war file depending on which connector you use, for example:

```
C:\Program Files\iWay55\sun\iwjca15ivp.war
```

or

`C:\Program Files\iWay55\sun\iwjcaivp.war`

7. Click *Next*.
8. Ensure the *Application Name* is one of the following depending on which connector you deploy:

`iwjca15ivp`

or

`iwjcaivp`

9. Ensure the *Context Root* is one of the following depending on which connector you deploy:

`/iwjca15ivp`

or

`/iwjcaivp`

10. Click *OK*.

When the Test Tool is deployed, it is expanded to a directory under the application server, for example:

`C:\Sun\AppServer\domains\domain1\applications\j2ee-modules\iwjca15ivp`

`C:\Sun\AppServer\domains\domain1\applications\j2ee-modules\iwjcaivp`

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/iwjca15ivp`

or

`http://hostname:port/iwjcaivp`

Depending on which JCA Test Tool and connector you deployed.

where:

`hostname`

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

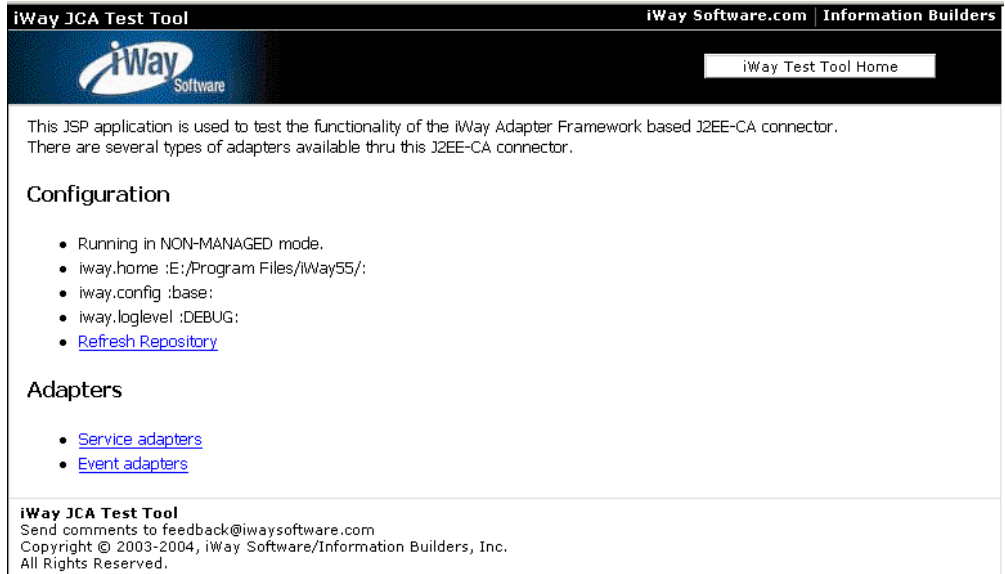
`port`

Is the HTTP port for the application server.

For example:

<http://localhost:8080/iwjca15ivp>

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



The screenshot shows the iWay JCA Test Tool web application. The header includes the iWay Software logo and the text "iWay Software.com | Information Builders". A button labeled "iWay Test Tool Home" is visible in the top right. The main content area contains the following text:

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

Configuration

- Running in NON-MANAGED mode.
- iway.home :E:/Program Files/iWay55/:
- iway.config :base:
- iway.loglevel :DEBUG:
- [Refresh Repository](#)

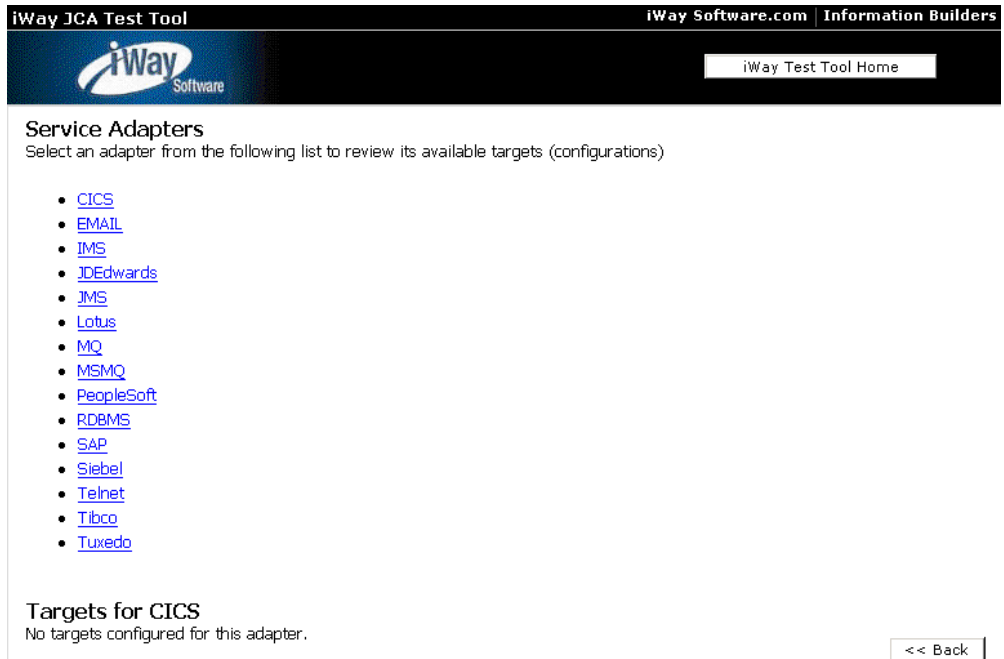
Adapters

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

iWay JCA Test Tool
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2. To display the available adapters, click the *Service adapters* or *Event adapters* option.

The following window opens and lists the available adapters as hyperlinks.



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. After targets are configured using Application Explorer, you can test them using this tool.

After configuring targets using Application Explorer, you may need to restart the application server before the targets appear.

Configuring the iWay JCA 1.0 Test Tool

The behavior of the JCA Test Tool is controlled by the following file inside the archive:

[WEB-INF/web.xml](#)

This file defines aspects of the JCA Test Tool running environment.

For JCA 1.5, there is no need to configure the test tool.

Procedure How to Extract and Configure the JCA Test Tool

This is not a required configuration. It is provided for reference.

1. Extract the WEB-INF/web.xml file from the iwjcaivp.war or iwjca15ivp.war archive. To do this:

- a. Open a command prompt and navigate to the directory containing the Test Tool, for example:

```
C:\Program Files\iWay55\sun
```

- b. Issue the following command:

```
jar xvf iwjcaivp.war WEB-INF/web.xml
```

or

```
jar xvf iwjca15ivp.war WEB-INF/web.xml
```

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

```
C:\j2sdk1.4.1_03\bin\jar xvf iwjcaivp.war WEB-INF/web.xml
```

Note: Be sure to use the jar command and not Winzip. Winzip does not properly extract Java related archives.

2. Open the extracted web.xml file in a text editor.
3. Modify the contents of the <param-value> tags to change defaults. Ensure iway.home specifies the location of the iWay55 directory.
 - Optionally, provide the connection factory name for iWay Connector for JCA. The connection factory is eis/IWAFConnectionFactory. The iWay JCA Test Tool attempts to connect to the adapter via JNDI if this is defined. If this 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>
```

For example:

```
<param-value>eis/IWAFConnectionFactory</param-value>
```


- Provide the directory where iWay 5.5 is installed by changing the path that appears.

```
<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>
```

- Optionally change the configuration to be 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>
```

- Optionally change the tracing level to debug, info, or 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>
```

4. Save and exit web.xml.

- 5.** Use the jar command to return the web.xml file to the WEB-INF directory within the archive. To do this, you can:

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

```
C:\Program Files\iWay55\sun
```

- b.** Issue the following command:

```
jar uvf iwjcaivp.war WEB-INF/web.xml
```

or

```
jar uvf iwjca15ivp WEB-INF/web.xml
```

- 6.** If the JCA Test Tool is deployed, undeploy it and then redeploy the edited version.

CHAPTER 4

Configuring iWay Business Services Engine

Topics:

- Deploying, Configuring, 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*.

Deploying, Configuring, 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 Sun Java System Application Server, 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 4-3)
3. Verify Servlet iBSE. (*Verifying Servlet iBSE* on page 4-4).

Deploying Servlet iBSE

You can use the Sun Admin Console to deploy Servlet iBSE packaged in `ibse.ear`. Its default location on Windows is:

`C:\Program Files\iWay55\sun\ibse.ear`

For other platforms, see the corresponding location.

Procedure How to Deploy Servlet iBSE

1. Start Sun Java System Application Server.
2. Log on to the Sun Admin Console. If you kept the default port and access it locally, you can use:

`https://localhost:4849`

The Admin Console opens in your browser.

3. On the left, expand the *Applications* folder.
4. On the left, click *Enterprise Applications*.
5. On the right, click *Deploy*.
6. Specify the `ibse.ear` file, for example:

`C:\Program Files\iWay55\sun\ibse.ear`

7. Click *Next*.
8. Ensure the *Application Name* is:
`ibse`
9. Click *OK* and Servlet iBSE is deployed.

The `ibse` application is expanded into a directory under your domain, for example:

<C:\Sun\AppServer\domains\domain1\applications\j2ee-apps\ibse>

Some data generated by iBSE may be written to this directory and its subdirectories.

10. After iBSE is deployed, stop your application server, so you can modify some of its components.

11. Remove the jms.jar file from the WEB-INF/lib directory of Servlet iBSE, for example:

C:\Sun\AppServer\domains\domain1\applications\j2ee-apps\ibse\ibse_war\WEB-INF\lib\jms.jar

12. Replace the jms.jar file by copying the following file into the WEB-INF/lib directory of Servlet iBSE:

<C:\Sun\AppServer\lib\j2ee.jar>

Note: For Application Server 7, you need to download this file. It is available as part of the Sun Java J2EE SDK.

13. After replacing jms.jar with j2ee.jar, restart your application server.

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 HTTP port for the application server.

For example:

<http://localhost:8080/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: iway
 - Password: iway

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

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 HTTP port for the application server.

For example:

`http://localhost:8080/ibse/IBSEServlet/`

The iBSE home page opens.

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 HTTP port for the application server.

For example:

<http://localhost:8080/ibse/IBSEConfig>

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

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

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 the repository, you must:

- Create the 5.5 repository and its tables as explained in *Creating the iBSE Repository* on page 4-6.
- Configure iBSE to access the repository as explained in *Configuring iBSE to Use a Repository Database* on page 4-9.

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 4-6.
- For **Microsoft SQL Server 2000**, see *How to Configure a Microsoft SQL Server 2000 Repository* on page 4-7.
- For **Oracle**, see *How to Configure an Oracle Repository* on page 4-8.

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 either the root directory of the *ibse* Web application under the application server or a directory under *iWay55*, for example:

`C:\Program Files\iWay55\config\base\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\config\base\ibsemrepo.xml
```

On other platforms, use the corresponding location.

For a file system repository, you are not required to configure additional iBSE components. 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 4-7.

loginID

Is the SQL Server ID with db_owner rights from step 3 on page 4-7.

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 4-9.

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 in the following file:

```
iwse.ora
```

Note: If Oracle is not on the same machine as iBSE copy iwse.ora 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 depending on your Oracle release:

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

or

```
sqlplus userid/password @database @ iwse.ora9
```

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

```
monitoring.ora
```

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.

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 lib directory for your domain, for example:

```
C:\Sun\AppServer\domains\domain1\lib
```

If you are not using the default domain1, substitute accordingly.

For Sun Java System Application Server 7, add these files to CLASSPATH.

The required driver files depend on your database and driver type, 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)

2. Log on to the Servlet iBSE Configuration page at:

<http://hostname:port/ibse>

Note: This page was introduced in *Configuring Servlet iBSE* on page 4-3.

3. At the bottom of the page, provide the repository connection information.

The following table lists and describes the 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: com.microsoft.jdbc.sqlserver.SQLServerDriver For Oracle: oracle.jdbc.driver.OracleDriver
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 forms listed in the following table.

SQL Server	jdbc:microsoft:sqlserver://hostname:port;DatabaseName=dbname;SelectMethod=cursor
Oracle	jdbc:oracle:thin:@hostname:port;SID

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.

SID

Is the ORACLE SID.

4. Click *Save*.

You should be redirected to the Servlet iBSE home page where you can test the sample Web service. However, until you redeploy or restart the server, your repository is not actually used.

5. Restart the application server.

After the server restarts or the application is redeployed, test it by going to the Servlet iBSE home page at:

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

If you receive an error, confirm the settings in:

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

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

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

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

8. 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 for the regular repository. If you set up a different database, provide the information for the monitoring database.

9. Click *Save Configuration*.

10. Click *Start Monitoring*.

11. Restart the server or redeploy the iBSE Web application.

If you still receive errors, try adding the JDBC driver to your application server's CLASSPATH and then restart the application server.

CHAPTER 5

Configuring Application Explorer

Topic:

- Configuring Servlet Application Explorer

This section explains how to configure Application Explorer.

Configuring Servlet Application Explorer

iWay 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 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.

Servlet Application Explorer is provided as the `iwae.war` file. The default location on Windows is:

```
C:\Program Files\iWay55\sun\iwae.war
```

For other platforms, see the corresponding location.

Configuring Servlet Application Explorer Communications

To use Application Explorer, you must set up communications to iWay components or configurations. Communications are controlled by the following file inside the `iwae.war` archive:

```
WEB-INF/web.xml
```

To create business 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 from which iWay Connector for JCA will read. 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. For Servlet iBSE, Application Explorer uses the Base URL you provided during the installation. If you are not using Servlet iBSE, you provided the wrong Base URL, or you wish to access a different connector configuration, you must edit `web.xml` as explained below. If you are confident that default settings are sufficient, proceed to *Deploying Servlet Application Explorer* on page 5-5.

Procedure: How to How to Configure Application Explorer Communications

To configure Application Explorer communications:

1. Open a command prompt and navigate to the directory containing the `iwae.war` file, for example:

```
C:\Program Files\iWay55\sun\iwae.war
```

2. Use the `jar` command to extract the `web.xml` file.

```
jar xvf iwae.war WEB-INF/web.xml
```


If you receive an error, then the jar command is probably not in your search path. You can execute the command by specifying its exact location. The jar command is located in the Java SDK bin directory, which varies depending on your Java release, for example:

```
C:\j2sdk1.4.1_03\bin\jar xvf iwae.war WEB-INF/web.xml
```

Note: Be sure to use the jar command and not Winzip. Winzip may not properly extract Java related archives.

3. In a text editor, open the web.xml file for Servlet Application Explorer. This file is located in the WEB-INF directory that was created when you extracted web.xml from iwae.war, for example:

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

This file controls the behavior and communications of Application Explorer.

4. Find the "<service..." lines which define connections.

The default content of these lines may vary depending on which version of iWay you install, for example:

```
<explorer>
  <service displayName="localhost" url="http://localhost:8080/ibse/IBSEServlet"/>
  <service displayName="jca" provider="com.ibi.adapter.jspae.CustomJCAIWAEConnectio
n" url="C:\Program Files\iWay55#base" />
</explorer>
```

A service line can have the following parameters:

displayName

Is the name that appears in Application Explorer. This is your choice. The displayNames appear when you access Application Explorer and you can toggle between them.

url

Is information Application Explorer needs to access an iWay component or configuration. This varies depending on whether you access iWay Connector for JCA or Servlet iBSE. The correct formats are described in the next steps.

provider

Is required for iWay Connector for JCA and should be com.ibi.adapter.jspae.CustomJCAIWAEConnection.

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

5. If you are not using both Servlet iBSE and Connector for JCA, remove the line for the component you are not using.
6. For **Servlet iBSE**, you need a service line with the following url:

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

where:

hostname

Is the hostname of your application server machine.

port

Is your application server HTTP port.

For example:

```
<service displayName="Servlet ibse" url="http://localhost:8080/ibse/IBSEServlet"/>
```

7. For **iWay Connector for JCA**, edit the jca line so the url is the following. Make sure the correct directory where you installed iWay appears:

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

where:

IWAY_HOME

Is the directory where iWay 5.5 is installed.

IWAY_CONFIG

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

The provider parameter must appear as well.

```
provider="com.ibi.adapter.jspae.CustomJCAIWAEConnection"
```

For example:

```
<service displayName="jca" provider="com.ibi.adapter.jspae.CustomJCAIWAEConnection"
url="c:\program files\iway55#base" />
```

Note: Technically this line enables Application Explorer to write to the configuration directory from which the Connector for JCA reads.

8. Save and exit the web.xml file.
9. In a command prompt, navigate to the directory containing the iwaewar file.

10. From the directory containing the `iwae.war` file, use the `jar` command to add the new `web.xml` file.

```
jar uvf iwae.war WEB-INF/web.xml
```

Deploying Servlet Application Explorer

The following procedure describes how to deploy Servlet Application Explorer.

Procedure: How to How to Configure Servlet Application Explorer for Sun Java System Application Server

You can use the Sun Admin Console to deploy Servlet Application Explorer.

1. Start Sun Java System Application Server if it is not started.
2. Log on to the Sun Admin Console. If you kept the default port and access it locally, you can use:

```
https://localhost:4849
```

The Admin Console opens in your browser.

3. On the left, expand the *Applications* folder.
4. On the left, click *Web Applications*.
5. On the right, click *Deploy*.
6. Specify the `iwae.war` file, for example:

```
C:\Program Files\iWay55\sun\iwae.war
```

7. Click *Next*.
8. Ensure the *Application Name* is:

```
iwae
```

9. Ensure the *Context Root* is:

```
/iwae
```

10. Click *OK*.

The application is expanded into a directory under your domain, for example:

```
C:\Sun\AppServer\domains\domain1\applications\j2ee-modules\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 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 HTTP port for the application server.

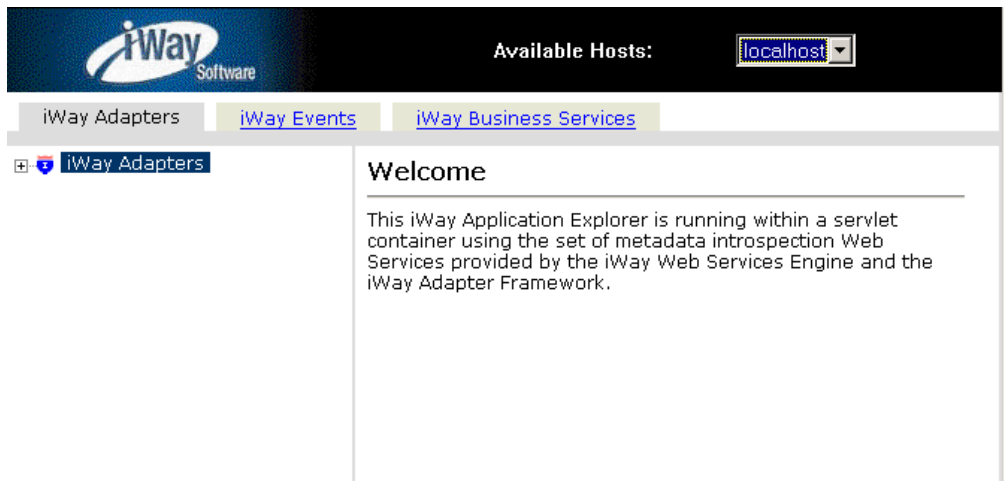
For example:

<http://localhost:8080/iwae/index.html>

Servlet Application Explorer opens in your browser as shown in the following image.

In the upper right is the Available Hosts drop-down list. 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.

Tabs representing event and service adapters and business services appear above the lower two-thirds of the window that is divided into two panes. The supported adapters appear in the left pane. A Welcome pane appears on the right.



2. Expand *iWay 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.

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 or in an iWay directory.

`C:\Program Files\iWay55\config\base\ibserepo.xml`

Additional information, such as schemas and wsdl, is created in subdirectories beneath the ibserepo.xml file or in subdirectories where your application server accesses Servlet iBSE files, for example:

`C:\Sun\AppServer\domains\domain1\applications\j2ee-apps\ibse\ibse_war\wsdl`

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

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\iwtelnetwin32.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 iwtelnetlinux.bin
```

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

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

3. Execute the installation utility, for example:

```
$IWAY55/etc/setup/iwtlinux.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*.

Installing the iWay Emulation Adapter Client Components

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

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.

Legacy Adapter Configuration

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