

iWay

iWay Installation and Configuration for
BEA WebLogic
Version 5 Release 5

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Preface

This documentation describes how to install iWay Adapters, iWay Connector for JCA, iWay Business Services Engine (iBSE), and iWay Application Explorer for use with BEA WebLogic Server.

How This Manual Is Organized

This manual includes the following chapters:

Chapter/Appendix		Contents
1	<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.
2	<i>Installing iWay 5.5 Components</i>	Provides installation requirements, instructions for running the installation program, registration information, and third party requirements for adapters.
3	<i>Configuring the iWay Connector for JCA</i>	Provides instructions for configuring the iWay Connector for JCA.
4	<i>Configuring the iWay Business Services Engine</i>	Provides instructions for configuring iWay Web services components.
5	<i>Configuring Application Explorer</i>	Provides instructions for configuring the different versions of iWay Application Explorer.
A	<i>Configuring the iWay Adapter for Telnet</i>	Provides instructions for installing the client components of iWay Adapter for Telnet.
B	<i>Configuring Legacy Adapters</i>	Provides instructions for configuring legacy adapters that require an iWay Server component.
C	<i>Configuring the iWay Adapter for PeopleSoft</i>	Provides instructions for configuring the iWay Adapter for PeopleSoft.

Documentation Conventions

The following conventions apply throughout this manual:

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

Related Publications

Visit our World Wide Web site, <http://www.iwaysoftware.com>, to view a current listing of our publications and to place an order. You can also contact the Publications Order Department at (800) 969-4636.

Customer Support

Do you have questions about iWay products or services?

Call Customer Support Service (CSS) at (800) 736-6130 or (212) 736-6130. Customer Support Consultants are available Monday through Friday between 8:00 a.m. and 8:00 p.m. EST to address all your iWay questions. Our consultants can also give you general guidance regarding product capabilities and documentation. Please be ready to provide your six-digit site code number (xxxx.xx) when you call.

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

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

Information You Should Have

To help our consultants answer your questions most effectively, be ready to provide the following information when you call:

- Your six-digit site code number (xxxx.xx).
- Your iWay Software configuration:
 - The iWay Software version and release.
 - The communications protocol (for example, TCP/IP or LU6.2), including vendor and release.
- The stored procedure (preferably with line numbers) or SQL statements being used in server access.
- The database server release level.
- The database name and release level.

- The Master File and Access File.
- The exact nature of the problem:
 - Are the results or the format incorrect; are the text or calculations missing or misplaced?
 - The error message and return code, if applicable.
 - Is this related to any other problem?
- Has the procedure or query ever worked in its present form? Has it been changed recently? How often does the problem occur?
- What release of the operating system are you using? Has it, your security system, communications protocol, or front-end software changed?
- Is this problem reproducible? If so, how?
- Have you tried to reproduce your problem in the simplest form possible? For example, if you are having problems joining two data sources, have you tried executing a query containing just the code to access the data source?
- 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

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

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

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:

- Baan
- CICS
- CORBA
- CLARIFY
- DB2 Net Driver
(iWay Adapter for RDBMS)
- IMS
- Informix
(iWay Adapter for RDBMS)
- iWay/WebFOCUS (EDA) Server
(iWay Adapter for RDBMS)
- J.D. Edwards OneWorld
- J.D. Edwards WorldSoft
- Lawson
- Microsoft .NET
- Oracle E-Business Suite
- Oracle (iWay Adapter for RDBMS)
- PeopleSoft
- RDBMS
- SAP
- Siebel
- SQL Server 2000
(iWay Adapter for RDBMS)
- SWIFT
- Sybase (iWay Adapter for RDBMS)
- Telnet
- VSAM

By default, you can use any of the adapters installed with iWay 5.5 on a 30-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 your 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

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

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

iWay Business Services Engine (iBSE)

The 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 or servlet container. After you deploy Servlet iBSE, you have access to adapters installed with iWay 5.5. 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 Run-Time Environment. The iWay Run Time Environment is not required or provided for use with iWay for BEA WebLogic.

iWay Application Explorer

iWay Application Explorer is a GUI tool that uses the adapters to create schemas and Web services for use with the 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 WebLogic, two versions of Application Explorer are available:

- **Java Swing.** Either a window accessible within WebLogic workshop or an independent Java application. On Windows, the iWay installation for BEA WebLogic installs this into WebLogic Workshop for you.
- **Java Servlet.** Web application accessible through a Web browser. After installing iWay, it must be deployed into WebLogic server through the console.

Servlet Application Explorer can be used with either iBSE or Connector for JCA. Swing Application is only available for use with iBSE.

Note: An ASP.NET version of the Application Explorer is also available from iWay Software. The ASP version is not provided with iWay for BEA WebLogic.

Installation and Configuration Overview

Depending on your requirements, some of the following installation and configuration steps for iWay 5.5 are optional.

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. Copy third party adapter-related files into the iWay 5.5 directory structure. (Chapter 2, *Installing iWay 5.5 Components*)
4. To use the iWay Connector for JCA, deploy the iWay Connector for JCA and Connector Test Tool on your application server. (Chapter 3, *Configuring the iWay Connector for JCA*)
5. Optional set up WebLogic Workshop to use the iWay Connector for JCA Control. (Chapter 3, *Configuring the 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 the 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

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

Installation Requirements

To ensure that your system supports iWay 5.5, review the following installation requirements.

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

iWay 5.5 for BEA WebLogic is supported on the following operating systems:

- Microsoft Windows 2000 with SP2 and Windows 2003
- UNIX
- OS/390 and z/OS (under UNIX System Services (USS))

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

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

Java 2 Standard Edition (J2SE™) SDK 1.3.1 or higher is required for all 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.

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)
```

Note: After installing the Java SDK, the Java command must be in your search path in order 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, make sure that the following is in your PATH variable:

```
/java_home/bin
```

where:

```
java_home
```

Is the absolute path where the Java SDK is installed.

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 the iWay Business Services Engine*. The following are certified as iBSE repository databases:

- Microsoft SQL Server 2000 with SP1
- Oracle

BEA Requirements

Ensure that BEA WebLogic Server 8.1 is properly installed and functioning before configuring it for use with iWay 5.5. For more information on WebLogic installation and configuration, see the BEA documentation.

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 using `/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 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 2-9.

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

The initial iWay 5.5 installation procedure installs the iWay Connector for JCA and iBSE components, as well as a set of adapters. The set of adapters varies depending on which version of the iWay 5.5 installation you install. After installation, iWay 5.5 components and adapters are available for a 30-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.

iWay 5.5. Installation

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

Procedure How to Install iWay 5.5

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

- On Windows:

```
iwl8mf.win32.exe
```

or

```
iwl8erp.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:

```
./iwl8mf.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:

```
./iwl8mf.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 Home window appears.

5. Specify the BEA directory into which WebLogic and other BEA software are installed. If 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.

Post-Installation Information

After installation, an iWay55 directory is created and includes the subdirectories described below. If you installed on Windows, the environment variables described in a following procedure are set for you. On other operating systems, you may need to set the variables before using iWay components.

Reference iWay 5.5 Directory Structure

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

`bea`

Contains expanded Web applications to be deployed into WebLogic Server.

`bin`

Contains XML files required for iWay 5.5.

`config`

Contains configuration directories for the 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 the 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.

Procedure How to Set Environment Variables

After installation, environment variables are required to use iWay 5.5 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 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.

Be sure profiles are executed before attempting to run iWay 5.5 components.

The following environment variable settings are required to use iWay 5.5 components:

1. The following variable must be defined and set to the location where iWay 5.5. is installed:

`IWAY55`

For example:

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

2. The PATH variable must contain the iWay 5.5 lib directory. For example:

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

3. On UNIX, the shared library variable must contain the iWay 5.5 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
```

Note: If you plan to run multiple installations of iWay 5.5 components, environment variables must have different values when running and installing each installation.

Uninstalling iWay 5.5

If you wish to uninstall iWay 5.5, ensure that WebLogic is stopped and execute the uninstall file that was installed with iWay 5.5. On Windows the default location for this file is:

`C:\Program Files\iWay55\etc\uninstall\iwl8mf\uninstaller.exe`

On other platforms, use the corresponding location.

Before uninstalling be sure to copy any files you wish to save from iWay directories.

Copying and Collecting Files for Adapters

Some adapters installed with iWay 5.5 require third party libraries or JDBC drivers. To enable these adapters, you must:

1. Use the table on the next page to determine third party files required for your adapter. If you do not see your adapter listed in the table, check the iWay Web site or contact a Customer Service representative.
2. Copy those files into the iWay 5.5 lib directory. The default location for this directory on Windows is:

`C:\Program Files\iWay55\lib`

On other platforms, use the corresponding location.

If 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.

3. For some adapters, you must also add these files to WebLogic's CLASSPATH. This is explained following the table that lists adapters and required files.

Note: For BEA WebLogic, the iWay Adapter for RDBMS is only used for SQL and non-SQL access to mainframe and legacy systems.

The adapters installed with iWay 5.5 vary according to which version of iWay 5.5 you installed. If you do not see your adapter listed in the table, check the iWay Web site or contact your iWay Software representative.

Note: The table sometimes lists the actual names of needed files rather than just saying the generic name of the driver or library. For example, classes12.zip is the name of the file that is the Oracle JDBC driver. However, your vendor may change file names, update files, or have different versions of the drivers for different releases. Therefore, confirm which files are needed by reviewing information provided by your vendor. Make sure to use the latest version of the driver for the correct release of your target system, data source, or protocol.

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

iWay Adapter for...	Required Libraries or Drivers
CICS	None.
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>
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>
iWay/WebFOCUS (EDA) Server (iWay Adapter for RDBMS)	None.
MQ Series	<p>com.ibm.mq.jar</p> <p>For BEA WebLogic, this file must be added to your WebLogic domain's CLASSPATH.</p>

iWay Adapter for...	Required Libraries or Drivers
Oracle 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).</p> <p>You can download this driver from the Oracle Web 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>For more information on Oracle JDBC issues, see the Oracle JDBC FAQ:</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 <p>For more information, see the appendix to this document that refers to the Adapter for PeopleSoft.</p>
RDBMS	See requirements in this table for specific target data sources.
SAP	<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. Follow the information provided on the SAP Java Connector (SAP JCo) overview page to download the current version. 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>For BEA WebLogic, the sapjco.jar file must be added to your WebLogic domain's 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>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 that comes 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> <p>The Siebel COM-based API (Windows only) requires the Siebel Thin Client to be installed and accessible to iWay 5.5.</p> <p>Note: The following files listed previously 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 following file:</p> <ul style="list-style-type: none"> <code>com.ibi.mq.jar</code> <p>For BEA WebLogic, this MQ Series file must also be added to your domain's CLASSPATH as explained later in this chapter.</p>

iWay Adapter for...	Required Libraries or Drivers
Sybase (iWay Adapter for RDBMS)	JDBC driver for Sybase servers (jConnect for JDBC). You can download the driver from the Sybase downloads Web site: http://www.sybase.com/downloads Select "jConnect for JDBC" and review information on the jConnect for JDBC Web site. Obtain the jConnect.zip that corresponds to your version of Sybase and follow the steps described on the jConnect download page to extract the JDBC driver.
Telnet	None. However, additional information is available in an appendix that deals with the Adapter for Telnet.
VSAM	None.

Adding Drivers to CLASSPATH

In addition to copying files into the lib directory, the following must be added to your WebLogic's domains CLASSPATH if you use the relevant adapter or adapter components.

iWay Adapter for...	Files Needed in CLASSPATH
SAP	sapjco.jar
MQ Series	com.ibm.mq.jar

Procedure How to Add Files to CLASSPATH

1. If it is started, stop the domain you are using for iWay.
2. In a text editor, open the file in which you set CLASSPATH. CLASSPATH is set in different places depending on the release and type of WebLogic domain. It is often set in one of the following files:

[BEA_HOME\bea\user_projects\domains\your_domain\startWebLogic.cmd](#)

[BEA_HOME\bea\user_projects\domains\your_domain\setDomainEnv.cmd](#)

If you are not sure where to set CLASSPATH, consult BEA WebLogic documentation.

3. Find the lines that set CLASSPATH. For example:

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}:${JAVA_:xHOME}
/jre/lib/rt.jar:${WL_HOME}/server/lib/webservices.jar:${CLASSPATH}"
export CLASSPATH
```

4. Add the full path to any files needed for you adapter, including the file name. Adding directories to CLASSPATH is not sufficient. You must add the full paths including each file. For example:

Windows:

```
set CLASSPATH=%WEBLOGIC_CLASSPATH%;%POINTBASE_CLASSPATH%;%JAVA_HOME%\j
re\lib\rt.jar;%WL_HOME%\server\lib\webservices.jar;"C:\Program
Files\iWay55\lib\sapjco.jar";%CLASSPATH%
```

UNIX:

```
CLASSPATH="${WEBLOGIC_CLASSPATH}:${POINTBASE_CLASSPATH}:${JAVA_:xHOME}
/jre/lib/rt.jar:${WL_HOME}/server/lib/webservices.jar:/opt/iWay55/lib/
sapjco.jar:${CLASSPATH}"
export CLASSPATH
```

5. Save and exit the file.

Configuration Steps

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

1. For the iWay Connector for JCA, deploy the connector and test tool. Then, optionally configure WebLogic Workshop to use the iWay Connector for JCA Control. (Chapter 3, *Configuring the iWay Connector for JCA*)
2. For iBSE, configure Servlet iBSE. (Chapter 4, *Configuring the iWay Business Services Engine*)
3. For iBSE, optionally set up a database repository. (Chapter 4, *Configuring the iWay Business Services Engine*)
4. Configure the Servlet Application Explorer. (Chapter 5, *Configuring Application Explorer*)
5. Review the appendixes for any adapter-specific post installation steps.

CHAPTER 3

Configuring the iWay Connector for JCA

Topics:

- Deploying and Configuring the iWay Connector for JCA
- Deploying and Running the JCA Test Tool
- Configuring WebLogic Workshop to use the iWay Connector for JCA Control

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

Deploying and Configuring the iWay Connector for JCA

The iWay Connector for JCA runs in J2EE Connector Architecture (JCA) compliant application servers and uses the Common Client Interface (CCI) to provide fast integration services using iWay adapters. The connector provides 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.

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

`C:\Program Files\iWay55\etc\setup\iwafjca.rar`

For other platforms, see the corresponding location.

Before deploying the connector, review the information below regarding configurations and settings.

Connector Configurations Overview

The 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`

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

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

On UNIX, 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 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 the iWay Connector for JCA, see the *iWay Connector for JCA for BEA WebLogic Server User's Guide*.

Changing Default Connector Settings

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

`META-INF\ra.xml`

This section explains how to change the default settings for the iWay Connector for JCA. If you did not install in C:\Program Files\iWay55 and your applications will access the connector via JNDI, changing defaults is required to specify where iWay is installed.

Reference How to Configure iWay Connector for JCA Settings

To change defaults, you must:

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

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

- b. Issue the following command:

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

Note: 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 iway.home parameter is ignored. This is needed when your application is access 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. For information on configurations, see *Connector Configurations Overview* on page 3-2. 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>
```

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 following directory that contains the connector:
`C:\Program Files\iWay55\etc\setup`
 - b. Issue the following command:
`jar uvf iwafjca.rar META-INF/ra.xml`

Deploying the iWay Connector for JCA to BEA WebLogic

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

Procedure How to Deploy the iWay Connector for JCA

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

BEA_HOME\user_projects\domains\DOMAIN_NAME\startWebLogic.cmd

2. Use the WebLogic console to deploy the iWay Connector for JCA.

The WebLogic console is accessible through a browser at:

http://hostname:port/console

where:

hostname

Is the name of the machine where WebLogic is running.

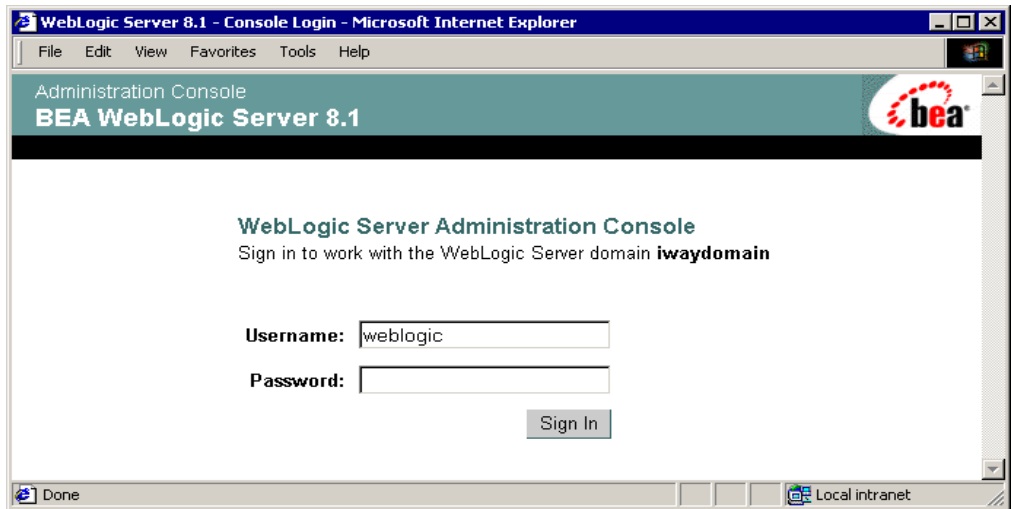
port

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

For example:

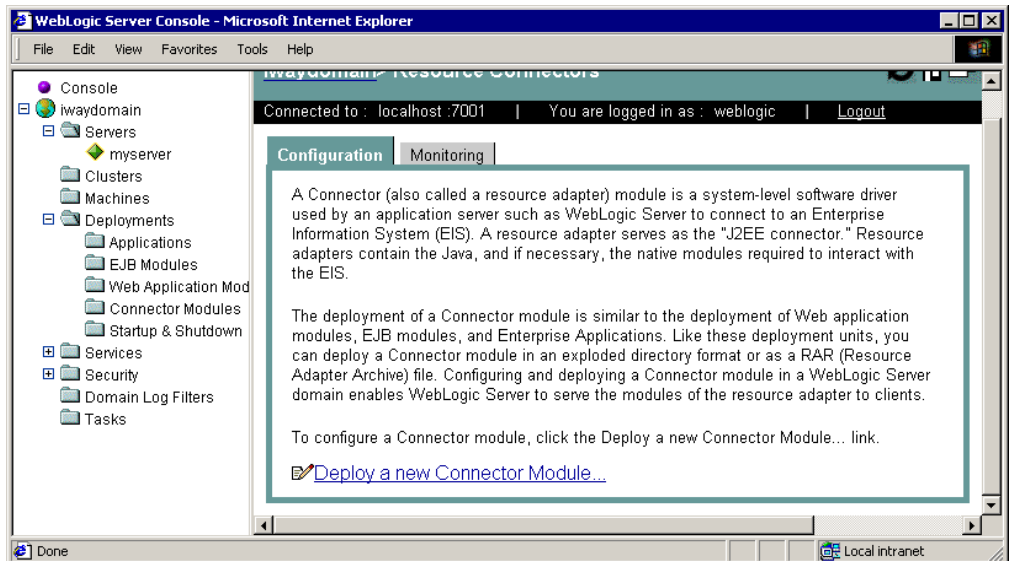
http://localhost:7001/console

The following page opens. If it does not open, ensure your WebLogic domain is started and that you used the correct port.



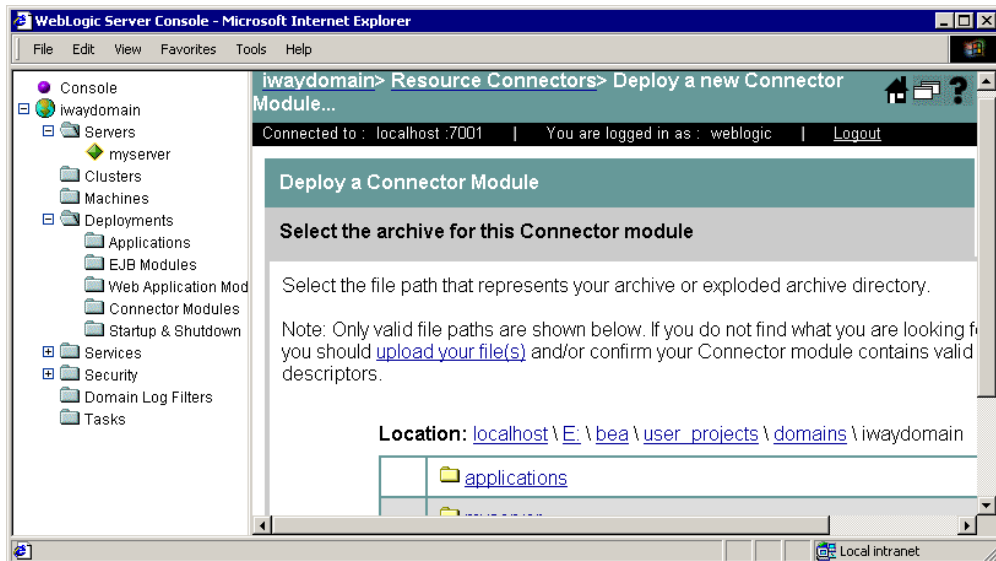
3. Log on to WebLogic.
4. Expand the *Deployments* folder in the left pane and then, click *Connector Modules*.

The following pane opens on the right.

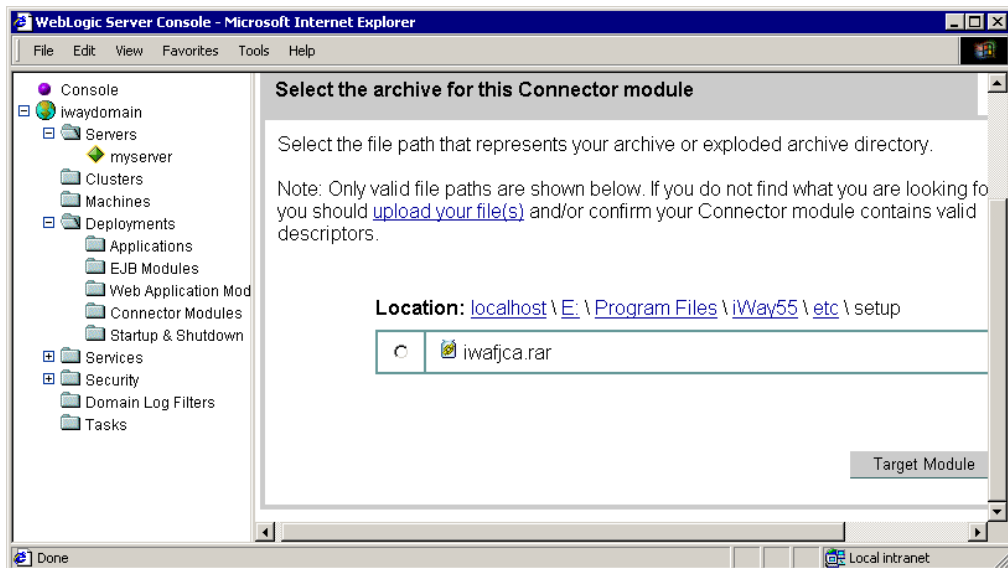


5. Click *Deploy a new Connector Module*.

The following pane opens on the right.



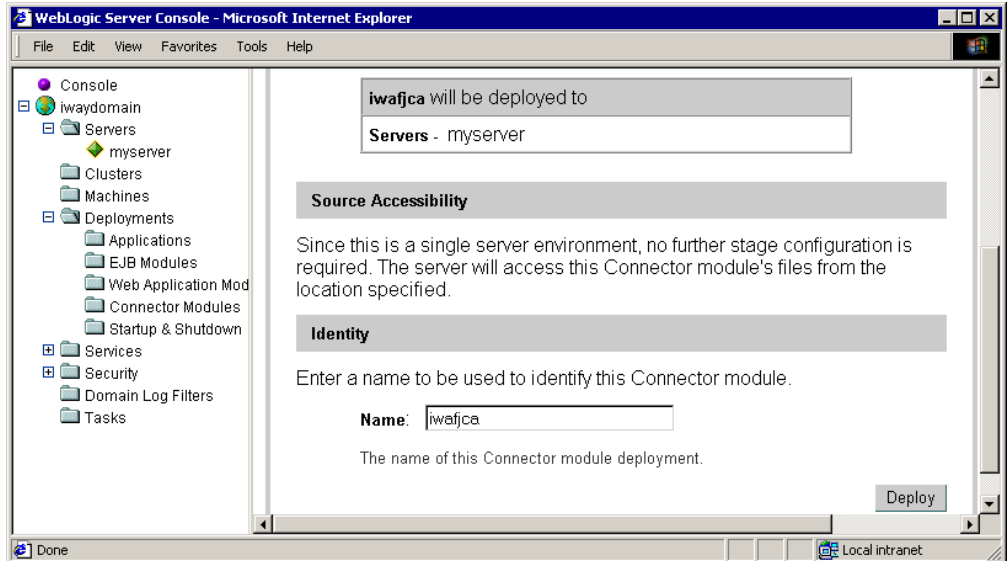
- Click the links next to *Location* to view and specify the location of the iWay Connector for JCA (iwafjca.rar).



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

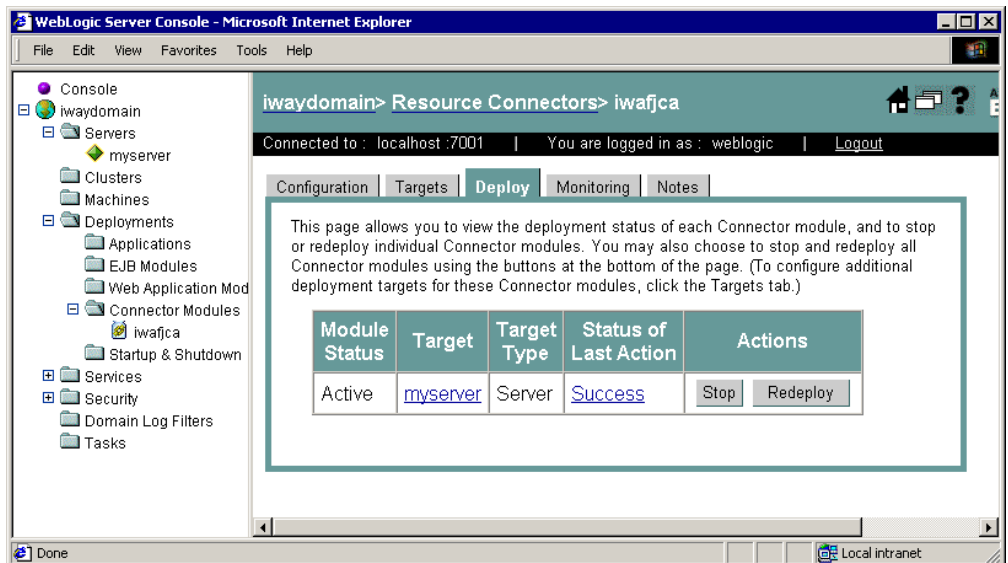
Note: If there are multiple servers in your domain, you are prompted to specify into which server or servers to deploy.

A pane opens and displays details about the server where you deployed the connector.



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

After the deployment completes, iwafjca appears on the left under Connector Modules.



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

Deploying and Running the JCA Test Tool

iWay 5.5 includes a sample Web application called the JCA Test Tool. On Windows its default location is:

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

On other platforms, use the corresponding location.

The JCA Test Tool includes sample code that enables you to test iWay service and event adapters.

Deploying the JCA Test Tool

Deploy the JCA Test Tool to WebLogic as explained below.

Procedure How to Deploy the JCA Test Tool to WebLogic

To deploy the JCA Test Tool:

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

`http://hostname:port/console`

where:

`hostname`

Is the name of the machine where WebLogic is running.

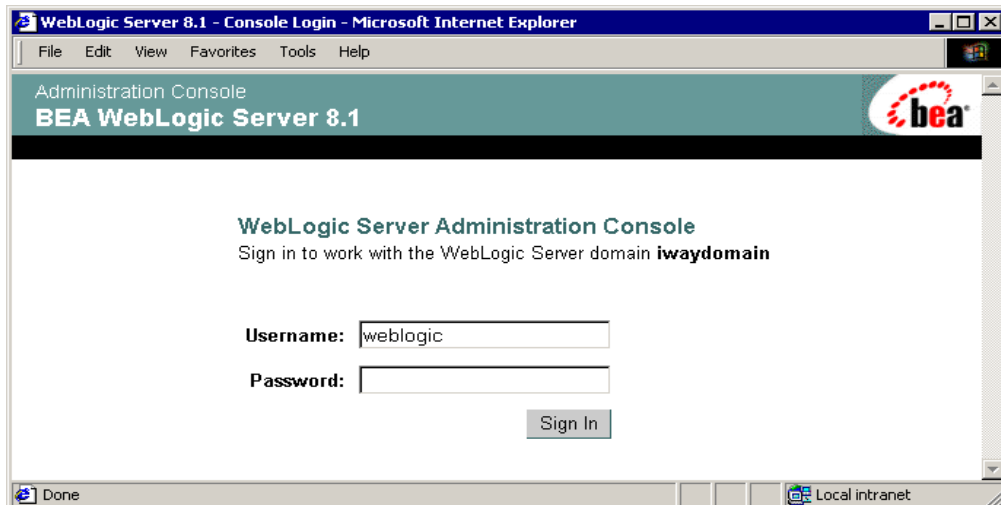
`port`

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

For example:

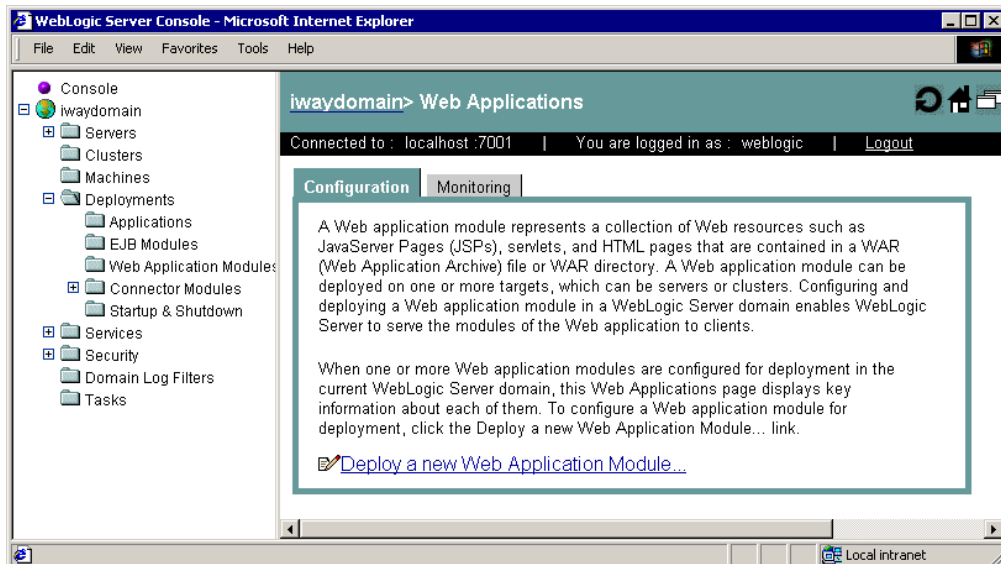
`http://localhost:7001/console`

The following page opens.



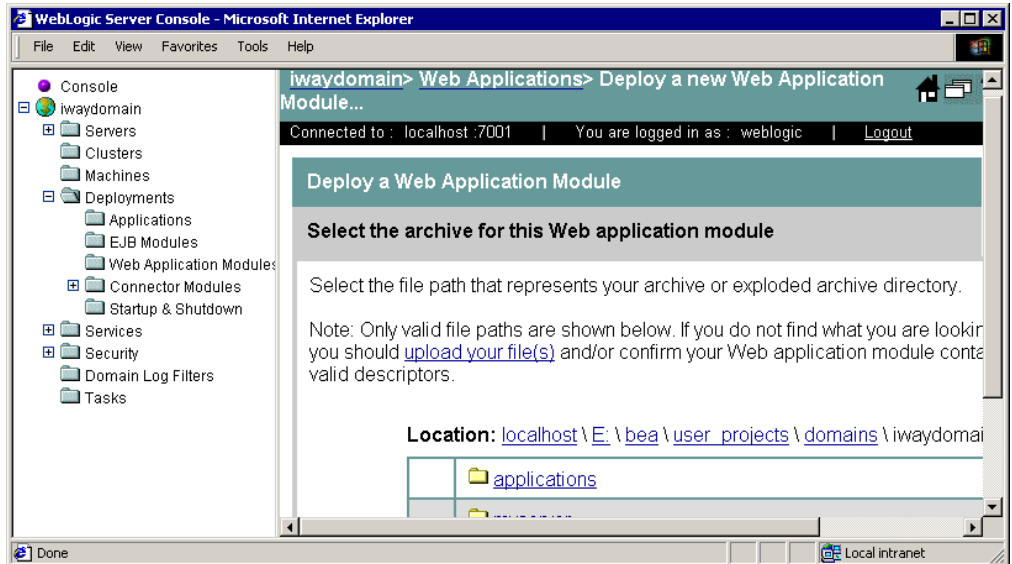
2. Log on to WebLogic.
3. Expand the *Deployments* folder on the left and then, click *Web Application Modules*.

The following pane opens on the right.

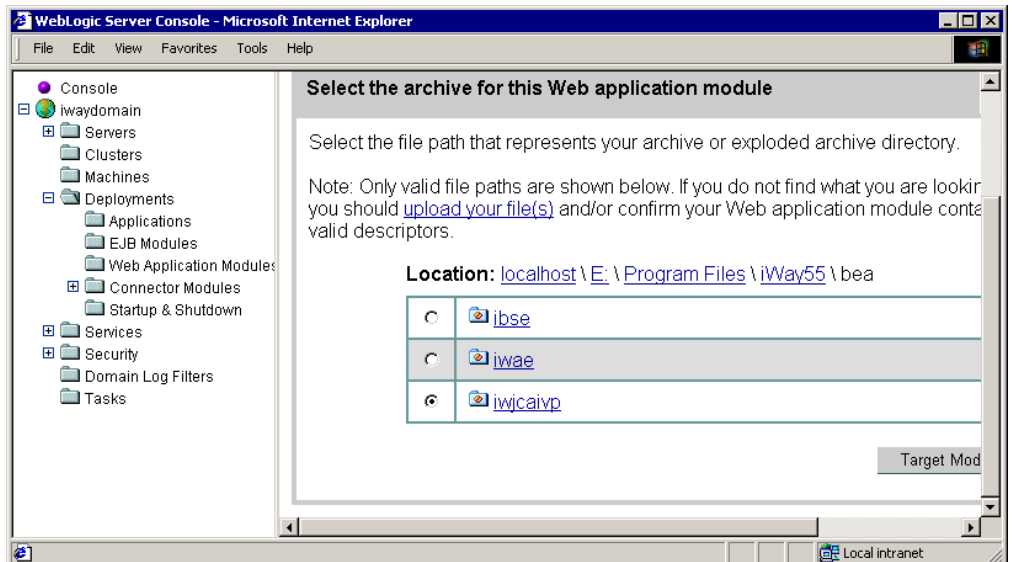


4. Select *Deploy a new Web Application Module*.

The following opens on the right.



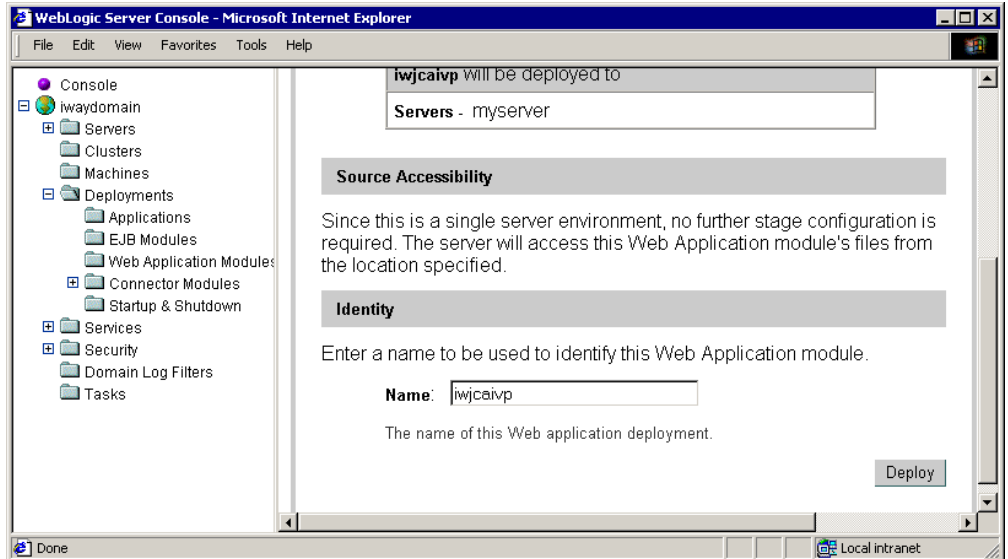
5. Click the links next to *Location* to view and specify the location of the directory with the Test Tool files.



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

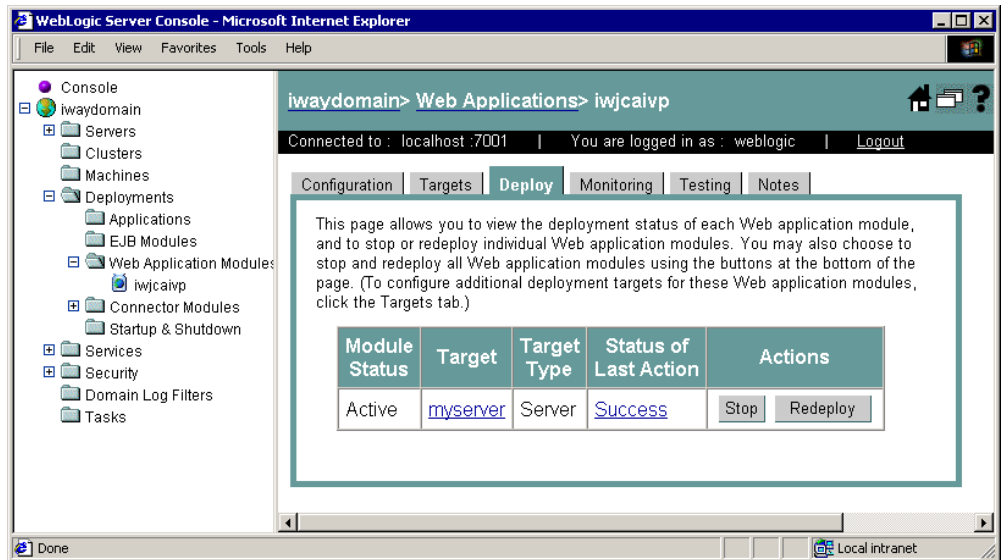
Note: If there are multiple servers in your domain, you are prompted to specify into which server to deploy.

A pane displays details about the server where the Test Tool is deployed.



7. 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.

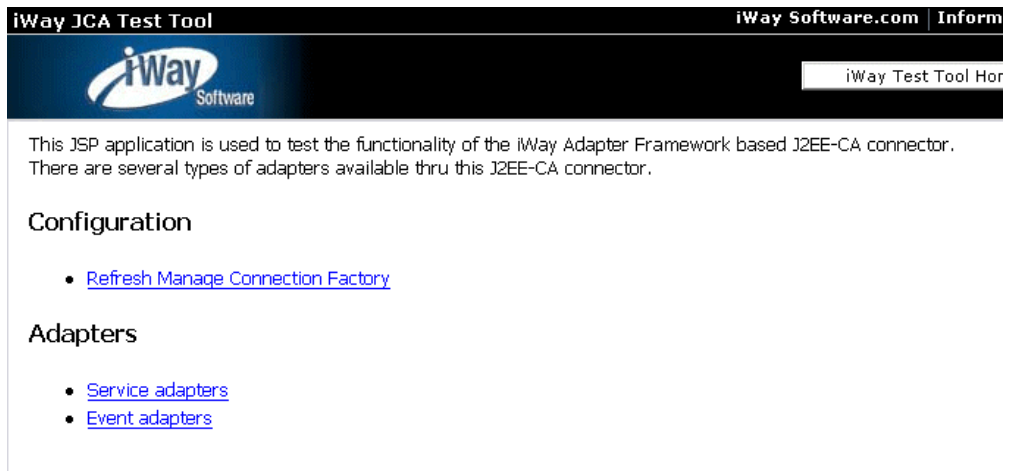
[port](#)

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

For example:

<http://localhost:7001/iwjcaivp>

The iWay JCA Test Tool window opens.



2. To display the available adapters, click the *Service adapters* link.

The following pane opens.



Service Adapters

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

- [CICS](#)
- [IMS](#)
- [iWay](#)
- [JDEdwards](#)
- [Lawson](#)
- [Oracle Applications](#)
- [PeopleSoft](#)
- [RDBMS](#)
- [SAP](#)
- [Siebel](#)
- [Telnet](#)

The adapters that appear will vary depending on which 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.

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

If you wish to change defaults for the JCA Test Tool, you must modify the web.xml file installed with the Test Tool. Its default location on Windows is:

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

On other platforms, use the corresponding location.

This file defines aspects of the iWay 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:

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

```
<context-param>
  <param-name>ibway.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 ibway.home, ibway.config and ibway.loglevel.
  </description>
</context-param>
```

- **ibway.home.** The installation directory where iWay 5.5. is installed.

```
<context-param>
  <param-name>ibway.home</param-name>
  <param-value>c:\Program Files\ibway55</param-value>
  <description>
    ONLY USED IF IWAY.JNDI NOT SET.
    Absolute path of ibway installation directory.
  </description>
</context-param>
```

- **ibway.config.** Configuration used at run time. A configuration named base is installed with iWay 5.5 and available by default.

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

- **ibway.loglevel.** Tracing level. The level can be debug, info, or error.

```
<context-param>
  <param-name>ibway.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 the iWay Connector for JCA, see the *iWay Connector for JCA for BEA WebLogic Server User's Guide*.

Configuring WebLogic Workshop to use the iWay Connector for JCA Control

From within WebLogic Workshop, you can add an iWay Connector for JCA (CCI) Control to your projects and applications. In WebLogic Workshop, this is referred to as the iWay Control. During the iWay installation, components needed to use this control are installed into a WebLogic directory as the following:

`BEA_HOME\bea\ext_components\iWay Software\controls\iwaycontrol.jar`

To use the iWay Control in WebLogic Workshop, you must do the following:

- Add several iWay files to the CLASSPATH of the WebLogic domain where the iWay Connector for JCA is deployed as explained below.
- Register the iwaycontrol.jar file in each of your applications as explained in *Adding the iWay Control to WebLogic Workshop* on page 3-20.

Adjusting CLASSPATH for WebLogic Workshop

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

`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`

It may be a line similar to the following:

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

If you are not sure where to set CLASSPATH, consult BEA WebLogic documentation.

Procedure How to Adjust CLASSPATH to Use the iWay Control in WebLogic WorkShop.

Six files must be added to your WebLogic domain's CLASSPATH.

- Four of these files are located in the following directory by default:

`C:\Program Files\iWay55\lib`

Add the following files from this directory to CLASSPATH:

`iwaf.jar`
`iway55.jar`
`iwrepository.jar`
`iwutil.jar`

- Two of these files are located in the following directory by default:

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

Add the following files from this directory to CLASSPATH:

`iwafcont.jar`
`iwafjca.jar`

Adding the directories to CLASSPATH is not sufficient. You must add the full paths including each file. However, you can use the %IWAY55% environment variable created by the installation. This variable specifies the iWay55 installation directory, so you can append the rest of the PATH to it. For example:

`%IWAY55%\lib\iwaf.jar`

For example, adjust the current CLASSPATH line:

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

To add the location of the iWay55 files before %CLASSPATH% separating files by semi-colons.

```
set CLASSPATH=%WEBLOGIC_CLASSPATH%;%POINTBASE_CLASSPATH%;%JAVA_HOME%\jre\lib\rt.jar;
%WL_HOME%\server\lib\webservices.jar;%IWAY55%\lib\iwaf.jar;%IWAY55%\lib\iway55.jar;%IWAY55%\lib\iwrepository.jar;%IWAY55%\lib\iwutil.jar;%IWAY55%\bea\iwa\WEB-INF\lib\iwafcont.jar;%IWAY55%\bea\iwa\WEB-INF\lib\iwafjca.jar;%CLASSPATH%
```

Start or recycle your WebLogic domain after changing CLASSPATH.

Note: If you plan to use iBSE as well as Connector for JCA and you use iBSE with a database repository, there may be a conflict between your repository's JDBC driver and the files in CLASSPATH. To correct this conflict, be sure to add the repository's JDBC drivers to CLASSPATH. This only applies when using both iBSE and Connector for JCA. Pay close attention to notes in Chapter 4, *Configuring the iWay Business Services Engine*.

Adding the iWay Control to WebLogic Workshop

You must register the iWay Control before using it in WebLogic Workshop applications. This must be done in each application you create with WebLogic Workshop.

Procedure How to Add the iWay Control to WebLogic Workshop

1. Start WebLogic Workshop.
2. If it is not open, open or create the application in which you wish to use the iWay Control.
3. In the *application* pane in the upper left by default, right-click the *Libraries* folder and choose *Add Library...*

You are prompted for a file.

4. Browse to and select the following file:

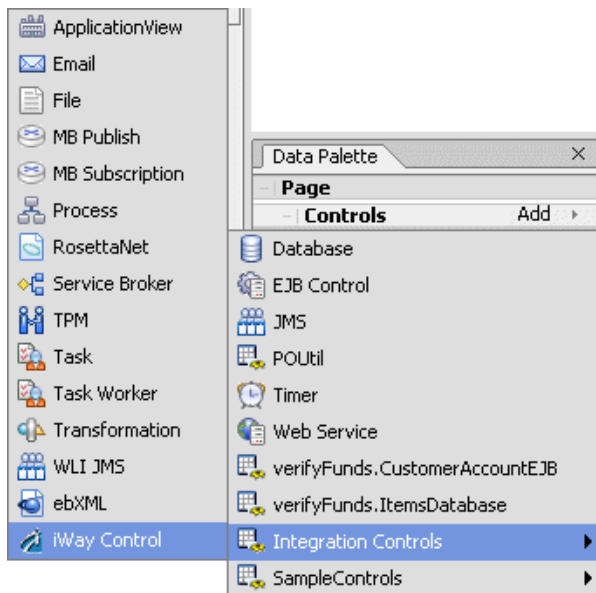
`BEA_HOME\bea\ext_components\iWay Software\controls\iwaycontrol.jar`

5. Click *Open*.

The iWay Control will be available through the *Data Palette* pane in the bottom right of WebLogic Workshop. The *Data Palette* pane should appear when an appropriate file, such as a .jpd file, is loaded in the center pane of WebLogic Workshop.

In the *Data Palette* pane, under *Page* and *Controls*, you add the iWay Control by clicking:

Add ---> Integration Controls --> iWay Control



However, before adding an iWay Control to any application or project, you should configure targets using the Servlet Application Explorer. To deploy and access the Servlet Application Explorer, see Chapter 5, *Configuring Application Explorer*.

Note: If the iWay Control does not appear, restart WebLogic Workshop.

CHAPTER 4

Configuring the iWay Business Services Engine

Topics:

- Deploying, Configuring, and Verifying Servlet iBSE
- Configuring and Creating 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 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 4-6)
3. Verify Servlet iBSE. (*Verifying and Accessing Servlet iBSE* on page 4-8).

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 WebLogic runs must have full access to this directory.

Procedure How to Configure BEA WebLogic 8.1 for Servlet iBSE Deployment

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

BEA_HOME\user_projects\domains\DOMAIN_NAME\startWebLogic.cmd

2. Open the console to deploy the ibse Web Application in a browser at:

http://hostname:port/console

where:

hostname

Is the name of the machine where WebLogic is running.

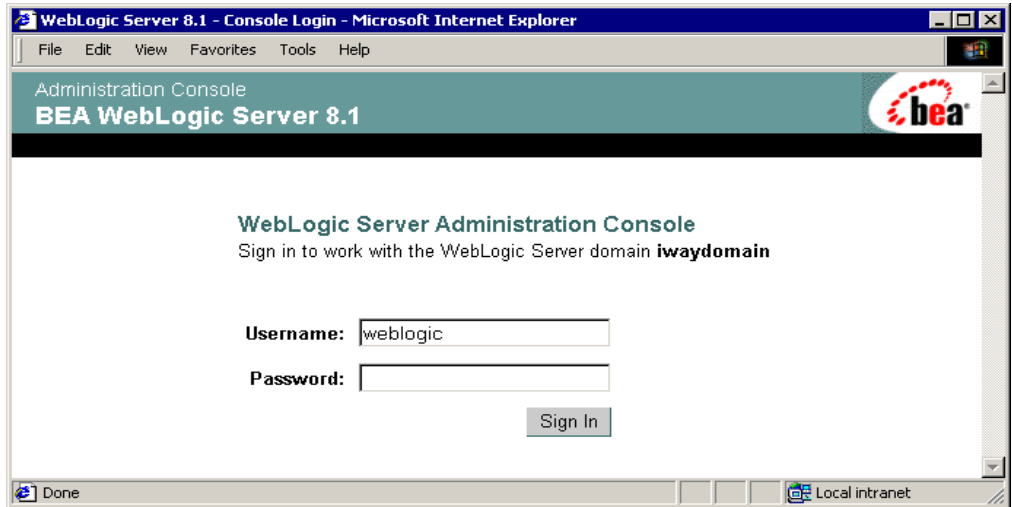
port

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

For example:

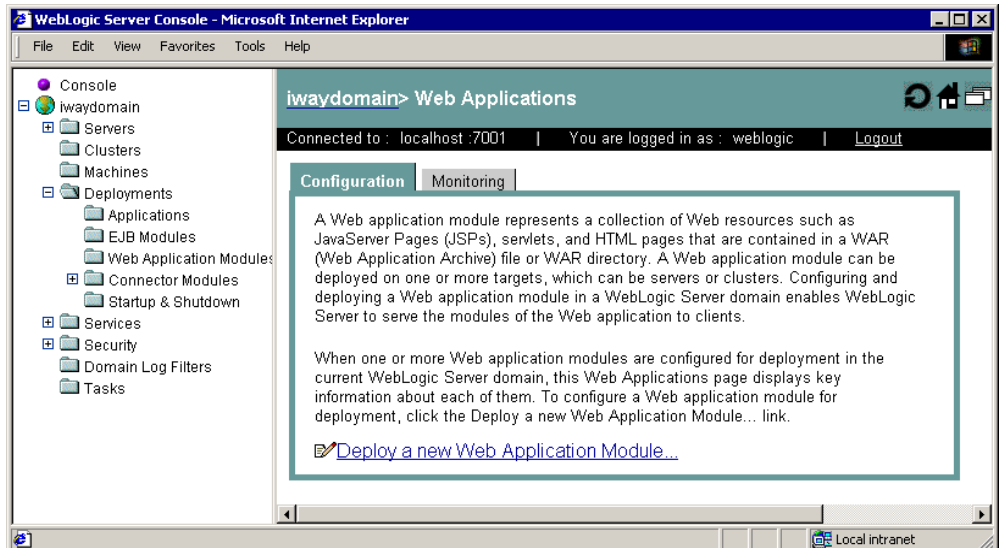
http://localhost:7001/console

The following page opens. If it does not open, ensure your WebLogic domain is started, and you used the correct port.



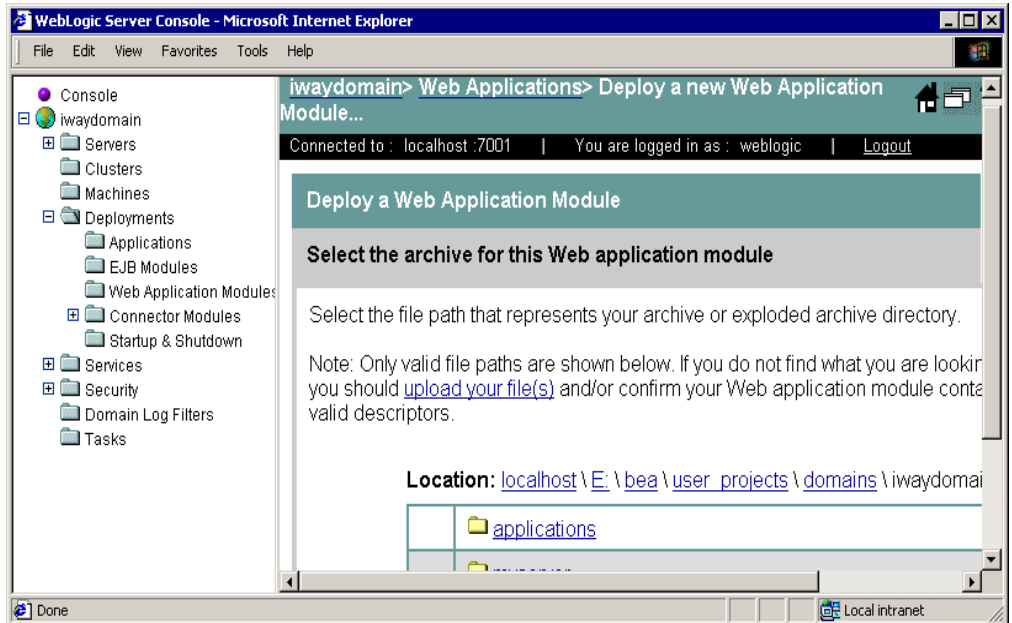
3. Log on to WebLogic.
4. In the left pane, expand the *Deployments* folder and then, click *Web Application Modules*.

The following pane opens on the right.

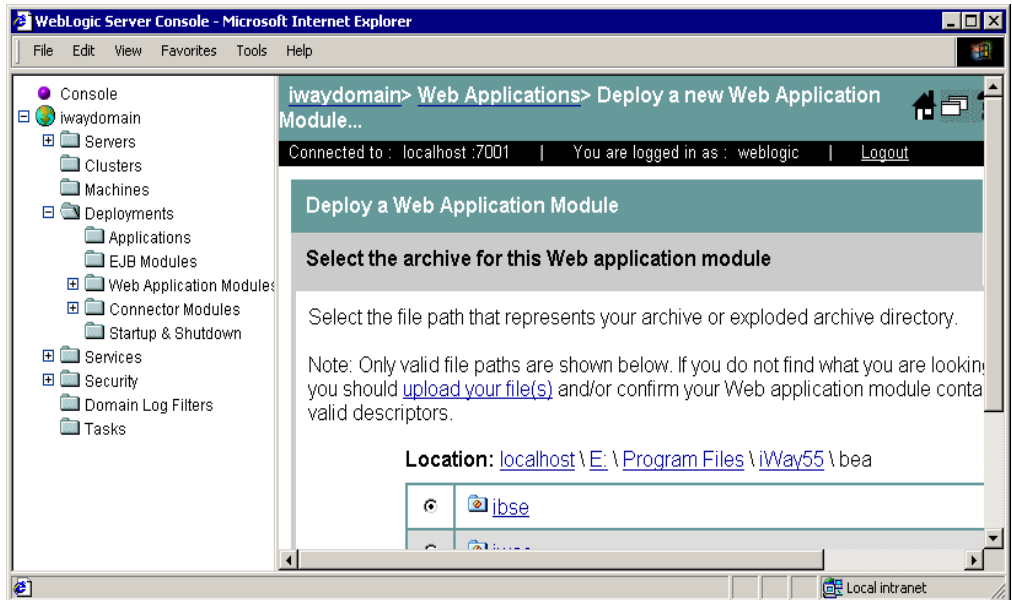


5. Select *Deploy a new Web Application Module*.

The following pane opens on the right.



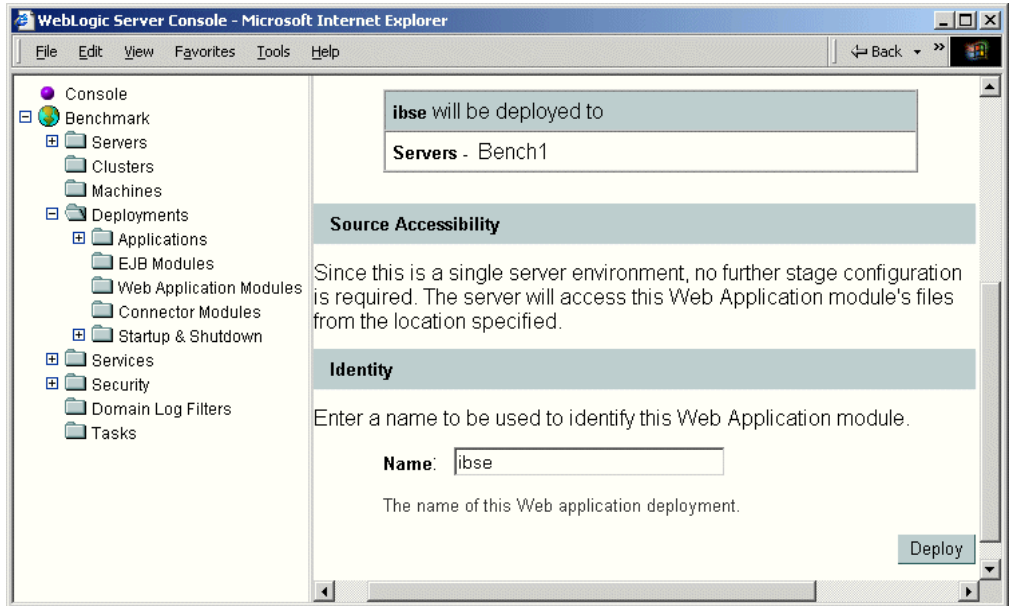
6. Click the links next to *Location* to view and specify the location of the directory above the directory with Servlet iBSE files.



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

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

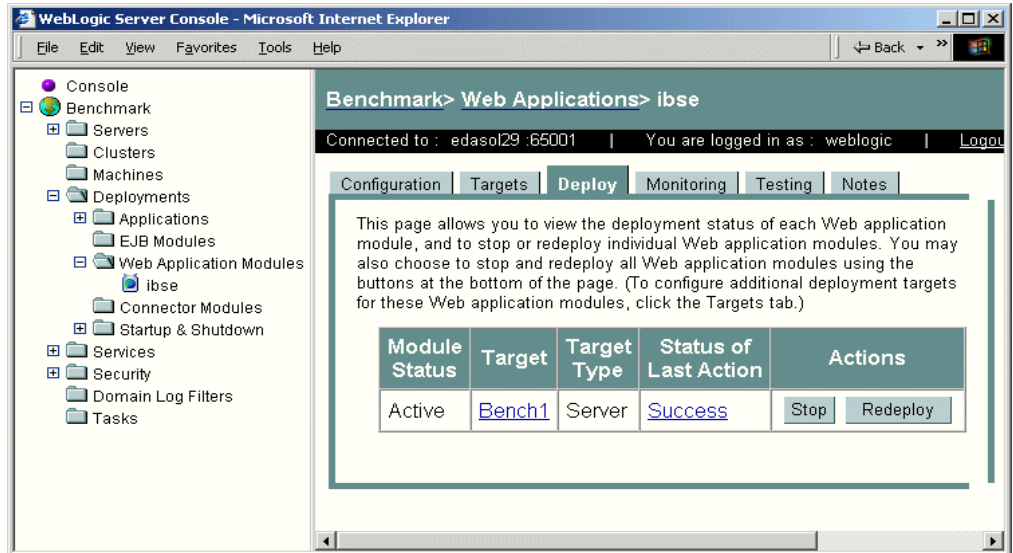
A pane displays details about the server where Servlet `ibse` is deployed.



8. Click *Deploy*.

After a few seconds, the application is deployed.

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. Go to 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 for iWay. 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: iway
- Password: iway

The Servlet iBSE configuration page opens.

iBSE Settings:
Save

Property Name	Property Value
System	
Language	English ▼
Adapter Lib Directory	C:\Program Files\iWay55\lib
Encoding	UTF-8 ▼
Debug	<input type="checkbox"/>
Number of Async. Processors	0 ▼
Security	
Admin User	iway
Admin Password	****
Policy	<input type="checkbox"/>
Repository	
Repository Type	File System ▼
Repository Url	file://C:\Program Files\iWay55\bea\ibse
Repository Driver	
Repository User	
Repository Password	
Repository Pooling	<input type="checkbox"/>

Save

3. Ensure the *Adapter Lib Directory* field specifies the path to the iWay 5.5 lib directory. For example:

`C:\Program Files\iway55\lib`

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

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

4. For security purposes, it is a good idea to change the *Admin Password*.

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, but you can do so later as explained later in this section. By default, a file system repository is used.

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 and Accessing Servlet iBSE

When applications, such as Application Explorer, must 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

1. Go to the following page in your browser:

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

where:

hostname

Is the hostname of the application server machine.

port

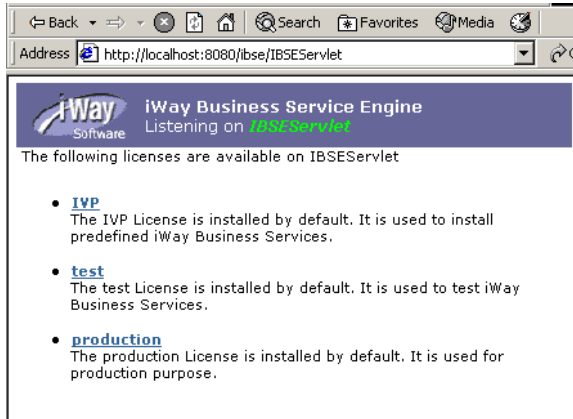
Is the port for the domain you are using for iWay. The port for the default domain is 7001.

For example:

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

Note: This page automatically opens when you click *Save* on the configuration page.

The iBSE home page opens:



This page enables you to test the sample Web service installed with iWay 5.5.

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

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

An XML responses 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>
```

For more information on iBSE, see the *iWay Business Services Engine User Guide*.

Configuring and Creating the iBSE Repository

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, but a file system-based repository is available and configured by default. If you want to use a database repository, 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.
- Configure iBSE to access the repository.

Creating the iBSE Repository

The following topics describe how to create the repository:

For a **File System** repository, see *Configuring a File System Repository* on page 4-10.

For **Microsoft SQL Server 2000**, see *How to Configure a Microsoft SQL Server 2000 Repository* on page 4-11.

For **Oracle**, see *How to Configure an Oracle Repository* on page 4-12.

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 its default location is:

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

On other platforms, use the corresponding location.

If you are using a file system repository, you are not required to configure any 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. iWay 5.5 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. Its 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 iWay 5.5, 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 4-11.

loginID

Is the SQL Server ID with db_owner rights from step 3 on page 4-11.

password

Is the password for the SQL Server ID.

The tables should be created in your database.

6. Proceed to *Configuring iBSE to Use a Database Repository* on page 4-13.

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 iWay 5.5 copy the iwse.ora file 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
```

Configuring iBSE to Use a Database Repository

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

SQL Server 2000 (three files):

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

Oracle:

`classes12.zip`

Note: If you use the iWay Connector for JCA Control in WebLogic Workshop, you added several files to WebLogic's CLASSPATH. These files may cause a conflict with the iBSE repository in certain environments. To correct this conflict, you must add the JDBC driver to your domain's CLASSPATH and restart the domain.

2. Redeploy the `ibse` Web Application.
3. Log on to the Servlet iBSE Configuration page at:

<http://hostname:port/ibse>

Note: This page was introduced in *Configuring Servlet iBSE* on page 4-6.

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

Field	Usage
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>
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>

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.

5. Click Save.

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

6. Redeploy the iBSE Web application.

7. After the application is redeployed, test it by going to the Servlet iBSE home page:

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

If you receive an error when accessing the Servlet iBSE home page, stop your domain, add the JDBC driver to your CLASSPATH, and restart the domain.

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 WebLogic Server:

- **Swing Application Explorer.** Either a window accessible within WebLogic Workshop or an independent Java application. This is available for use with iBSE. If you use iWay Connector for JCA, this is not available.

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

- **Servlet Application Explorer.** Web application accessible through a Web browser. This is available for use with both iBSE and iWay Connector for JCA.

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

Configuring Swing Application Explorer

iWay Application Explorer is a GUI tool that uses adapters to create schemas and business services for use with the 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.

Swing Application Explorer runs inside WebLogic Workshop and can be used with iBSE. For iWay Connector for JCA, see *Configuring Servlet Application Explorer* on page 5-5.

Accessing Swing Application Explorer

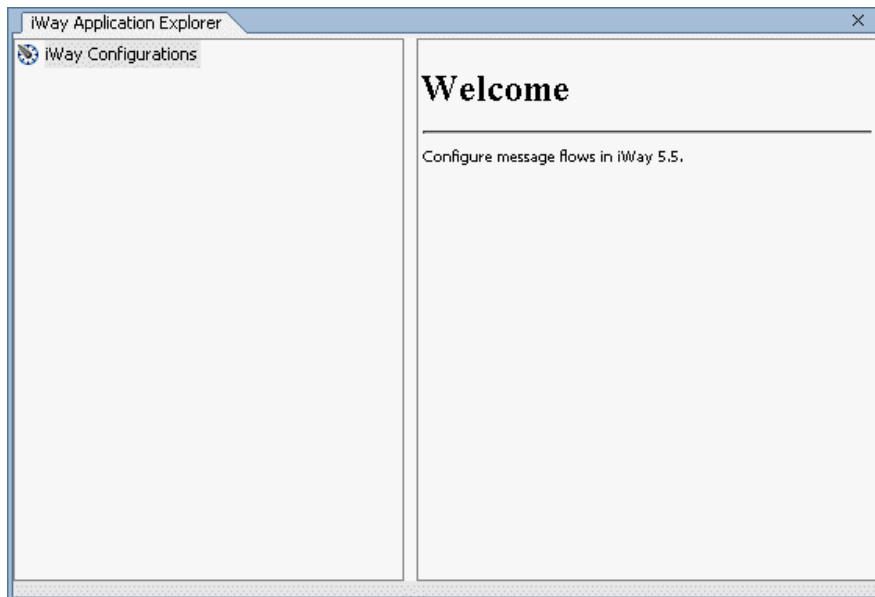
If WebLogic Workshop is installed, Swing Application Explorer is installed automatically with iWay and accessible from within WebLogic Workshop.

Procedure How to Access Swing Application Explorer

1. Ensure the domain into which you deployed iBSE is started and iBSE is deployed.
2. Start WebLogic Workshop.
3. Open Application Explorer by clicking the following:

View --> Windows --> iWay Application Explorer

The Application Explorer appears in WebLogic Workshop



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

You are prompted to name the configuration. A configuration specifies an instance of iBSE. You can choose any name you wish.

5. Name the configuration and click *OK*.

You are prompted for the iBSE URL. This is the URL to access iBSE and depends upon the port on which WebLogic is listening.

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

where:

`hostname`

Is the hostname of the application server machine.

`port`

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

6. Provide the iBSE URL and click *OK*.

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

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



Expand *iWay Service Adapters* and *iWay Event Adapters* to see available adapters. The available adapters will vary depending on which 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 the Swing Application Explorer a complete XML response is not available within the Swing Application Explorer. To fully test, Web services created using the 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 WebLogic is listening.

For example:

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

Note: If you wish to use Swing Application Explorer outside of WebLogic Workshop, you can manually install it as a separate application using the iwaeswingwin32.exe file installed with iWay. Its default location is:

<C:\Program Files\iWay55\etc\setup\iwaeswingwin32.exe>

Configuring Servlet Application Explorer

iWay Application Explorer is a GUI tool that uses adapters to create schemas and business services for use with the 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\iwae`

For other platforms, see the corresponding location.

Configuring Servlet Application Explorer Communications

If you are using both Servlet iBSE and the iWay Connector for JCA and your WebLogic domain listens on port 7001, you can use default communication settings and proceed to *Deploying the Servlet Application Explorer* on page 5-7.

By default, Application Explorer is set to access the Connector for JCA's base configuration and Servlet iBSE on port 7001. If you wish to use a different configuration or your WebLogic domain is not listening on port 7001, you must modify the communication settings as explained in the following procedure. In addition, if you are not using both the iWay Connector for JCA and Servlet iBSE, you must remove connection information for the product you are not using.

Note: Technically, Application Explorer does not actually communicate with the connector for JCA. Instead, Application Explorer handles schema generation and target configuration itself. Application Explorer then writes information to the configuration directories from which the Connector for JCA reads. However for Servlet iBSE, Application Explorer connects directly to Servlet iBSE to generate Web services, so the correct port must be defined.

Procedure How to Configure Application Explorer Communications

To configure Application Explorer communications:

1. Open the web.xml file for the iwaee Web Application. Its default location on Windows is:

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

For other platforms, see the corresponding location.

This file controls the behavior and communications of Application Explorer.

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

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

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

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

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

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

- For the **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 5.5 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.CustomJCAI
WAEConnection" url="C:\Program Files\iWay55#test"/>
```

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

Deploying the Servlet Application Explorer

The following procedure describes how to configure the Servlet Application Explorer to deploy it on WebLogic. The procedure shows Windows paths. If you are on a UNIX system, substitute accordingly.

Procedure How to Configure the Servlet Application Explorer for WebLogic

This procedure refers to the directory where WebLogic is installed as *BEA_HOME*. Substitute the absolute path on your system for *BEA_HOME*.

To deploy the Servlet Application Explorer:

1. Access the WebLogic console through a browser at

`http://hostname:port/console`

where:

`hostname`

Is the name of the machine where WebLogic is running.

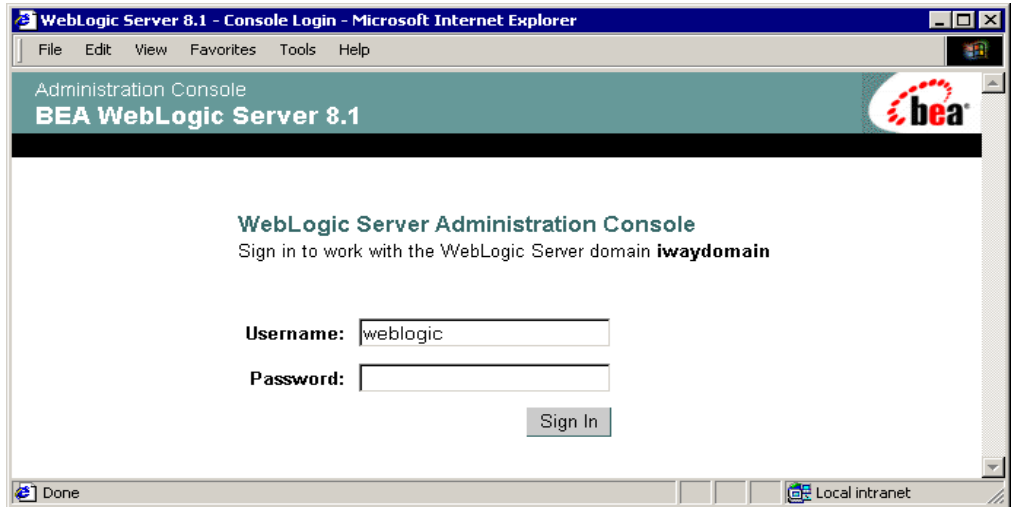
`port`

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

For example:

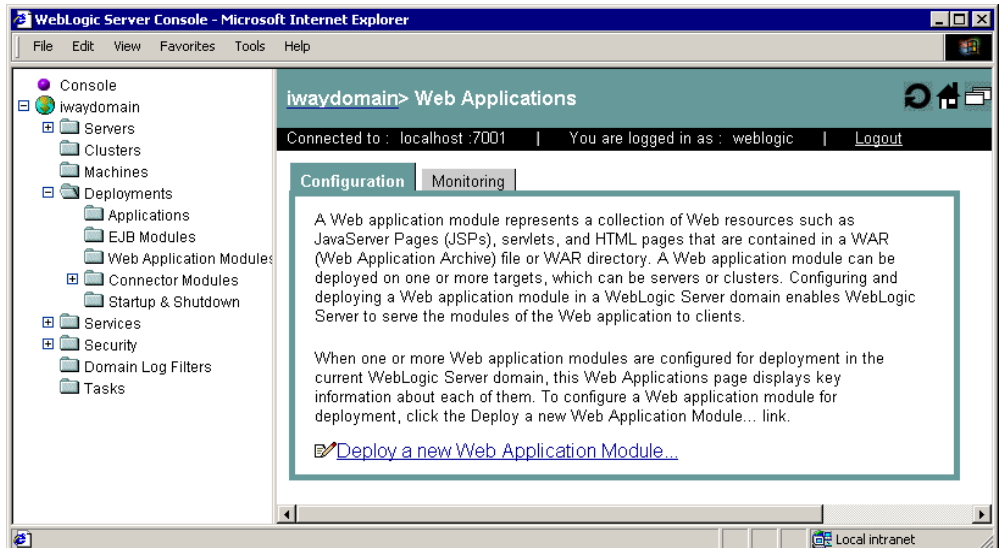
`http://localhost:7001/console`

The following page opens. If it does not open, ensure your WebLogic domain is started, and you used the correct port.



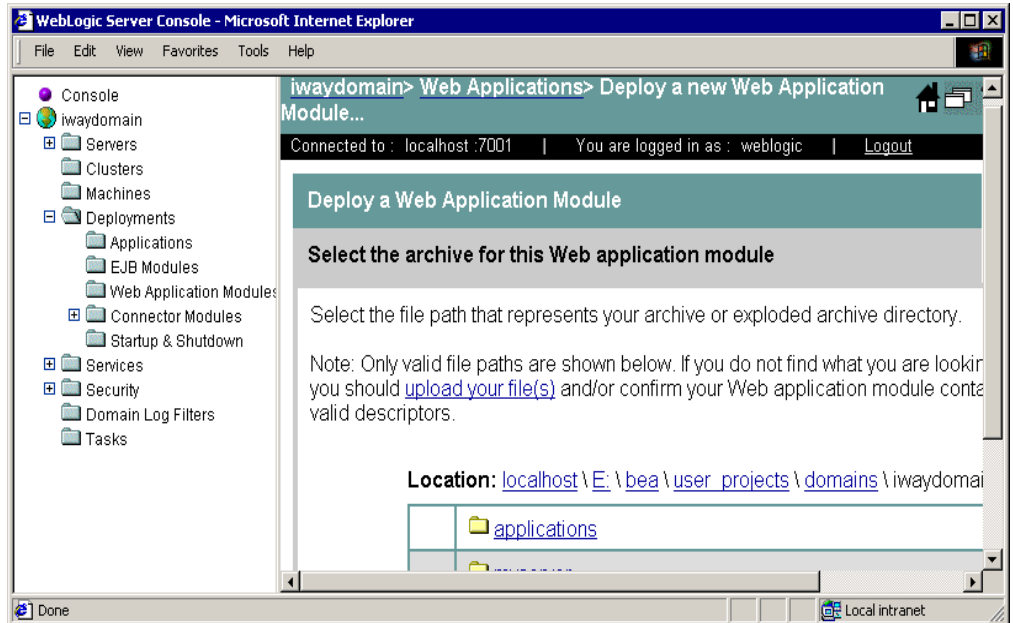
2. Log on to WebLogic.
3. In the left pane, expand the *Deployments* folder and then, click *Web Application Modules*.

The following pane opens on the right:

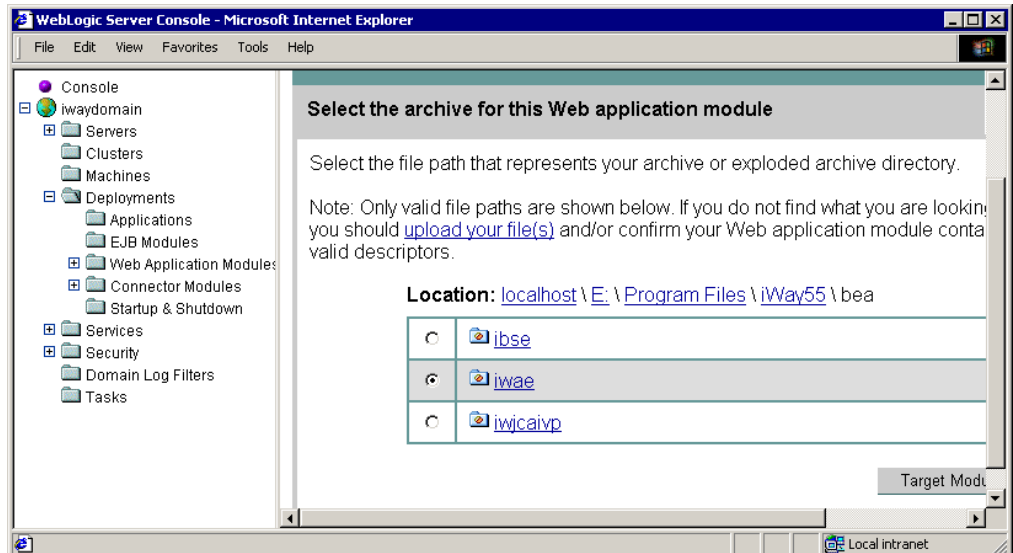


4. Select *Deploy a new Web Application Module*.

The following pane opens on the right.



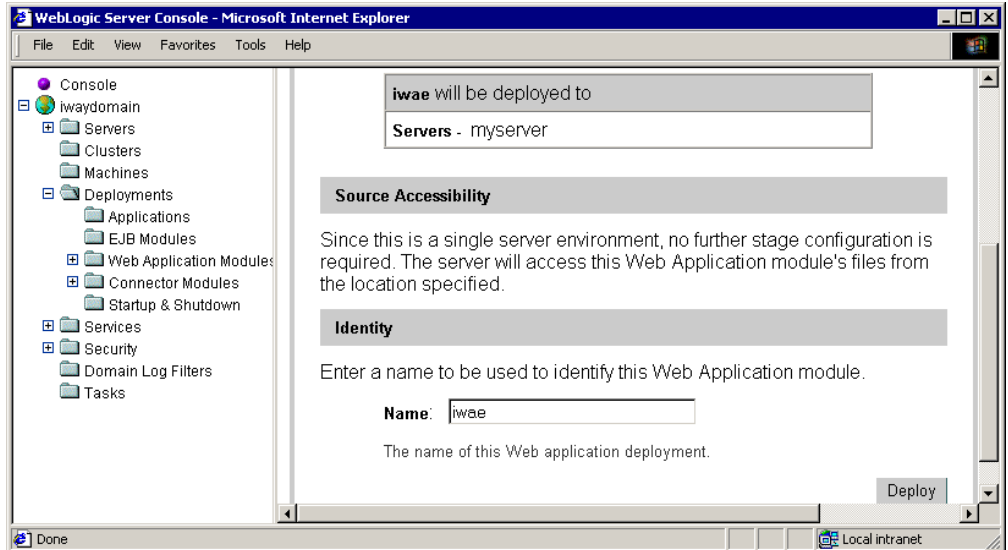
5. Click the links next to *Location* to view and specify the location of the Servlet Application Explorer files.



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

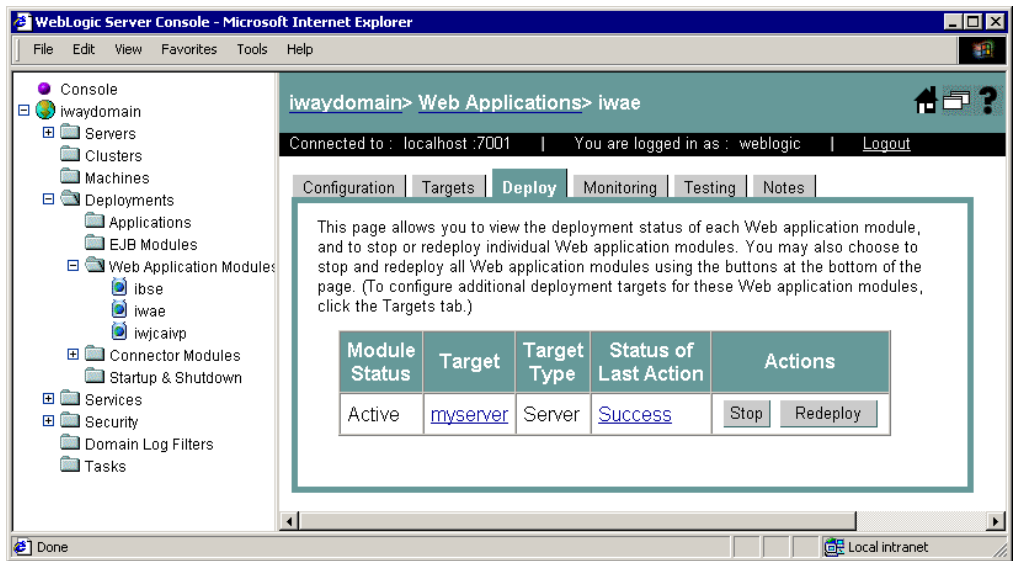
Note: If there are multiple servers in your domain, you are prompted to specify into which server or servers to deploy.

A pane displays details about the server where Application Explorer will be deployed.



7. Click Deploy.

When deployment completes, *iwaee* appears on the left under *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 later.

Procedure How to Access Servlet Application Explorer

After Servlet Application Explorer is deployed through your application server, you can access it through a browser at the following URL:

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

where:

hostname

Is the name for the application server machine.

port

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

For example:

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

The Servlet Application Explorer opens in your browser.



Expand *iWay Adapters* to see available adapters. Available adapters vary depending on which 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.

The *Available Hosts* drop-down menu 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` as explained earlier in this chapter.

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 menu.

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

- For the 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 of the ibse Web application.

For more information on the Servlet Application Explorer, see the *iWay Application Explorer (Java Servlet Version) User's Guide Version 5 Release 5*.

APPENDIX A

Configuring the iWay Adapter for Telnet

Topic:

- Installing the iWay Adapter for Telnet Client Components

This section provides post-installation steps for the iWay Adapter for Telnet.

Installing the iWay Adapter for Telnet Client Components

The iWay Adapter for Telnet 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 Adapter for Telnet 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 iWay Adapter for Telnet on a UNIX system, you must install iWay 5.5 and the iWay Adapter for Telnet 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 Adapter for Telnet Client Components on Windows

The iWay Adapter for Telnet 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.

```
drive:\Program Files\iway55\etc\setup\iwtelnetwin32.exe
```

2. Click through the installation to install the adapter's client components.

Procedure How to Install the iWay Adapter for Telnet Client Components on Linux

Run the following to configure the client components on Linux:

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

You may need to make this file executable first. For example:

```
chmod 555 iwtranslinux.bin
```

For information about using the adapter, including the Telnet Designer, see the *iWay Adapter for Telnet User's Guide*.

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/SQL
- CA-IDMS/DB
- MODEL 204
- Millennium
- Supra
- Teradata
- Total
- VSAM

Not all legacy adapters require an iWay Server; only the data sources listed previously do. Access to and from these data sources using the iWay Connector for JCA, Servlet iBSE, or Application Explorer is accomplished by first connecting to the 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.

APPENDIX C

Configuring the iWay Adapter for PeopleSoft

Topics:

- Specifying the PeopleSoft Version
- Installing the Adapter Component Interfaces
- Installing the TCP/IP Message Router for the iWay Adapter for PeopleSoft 8
- Copying PeopleSoft Files Into the iWay lib Directory

This section describes how to set up the iWay Adapter for PeopleSoft 8. This involves the following:

- Specifying which version of PeopleSoft you are using
- Installing the adapter's Component interfaces.
- Installing the adapter's TCP/IP message router.
- Copying the psjoa.jar file (and, for PeopleSoft release 8.1, the pstools.properties file) into the iWay55\lib directory.

Specifying the PeopleSoft Version

The iWay Adapter for PeopleSoft 8 supports multiple versions of PeopleSoft. However, certain versions are incompatible with each other, and the adapter needs to know which version you are using:

After installation, files for both PeopleSoft versions appear in the iWay55\lib directory. The default location for this directory on Windows is:

`C:\Program Files\iWay55\lib`

Use the corresponding location on non-Windows systems.

To ensure the adapter functions properly, you should remove the file that does not correspond to your release:

- For PeopleSoft 8.4x releases, remove the following file:

`iwpsci81.jar`

- For PeopleSoft 8.1x releases, remove the following file:

`iwpsci84.jar`

After changing the contents of the lib directory, restart or deploy iWay components.

Installing the Adapter Component Interfaces

The iWay Adapter for PeopleSoft 8 includes two custom iWay component interfaces; iWay Application Explorer uses these component interfaces to create schemas for events and services.

To configure these component interfaces for use by the iWay Adapter for PeopleSoft 8:

1. Import and build the component interfaces.
2. Configure component interface security.
3. Test the component interfaces.

Step 1. Importing and Building the Component Interfaces

The component interfaces supplied with the iWay Adapter for PeopleSoft 8 are delivered via a PeopleSoft project:

- For PeopleSoft Release 8.4, it is the IWY_CI_84 project, packaged in iwpsci84.zip.
- For PeopleSoft Release 8.1, it is the IWY_CI_81 project, packaged in iwpsci81.zip.

These files are installed with iWay 5.5. On Windows, their default location is:

`C:\Program Files\iWay55\etc\misc\peoplesoft`

Use the corresponding location on non-Windows systems.

If this location does not exist, contact iWay Software for copies of the relevant files.

To import the IWY_CI_81 or IWY_CI_84 project to PeopleSoft 8:

1. Unzip iwpsci81.zip or iwpsci84.zip to a directory of your choice.

The unzip process creates its own subdirectory. For example, if you extract the file to c:\temp, it creates c:\temp\IWY_CI_81 or c:\temp\IWY_CI_84.

2. Launch the PeopleSoft 8 Application Designer in two-tier mode.

3. In PeopleSoft release:

- 8.4, choose *Copy Project* from the *Tools* menu, and then choose *From File*.

The Copy From File: Select Project dialog box opens.

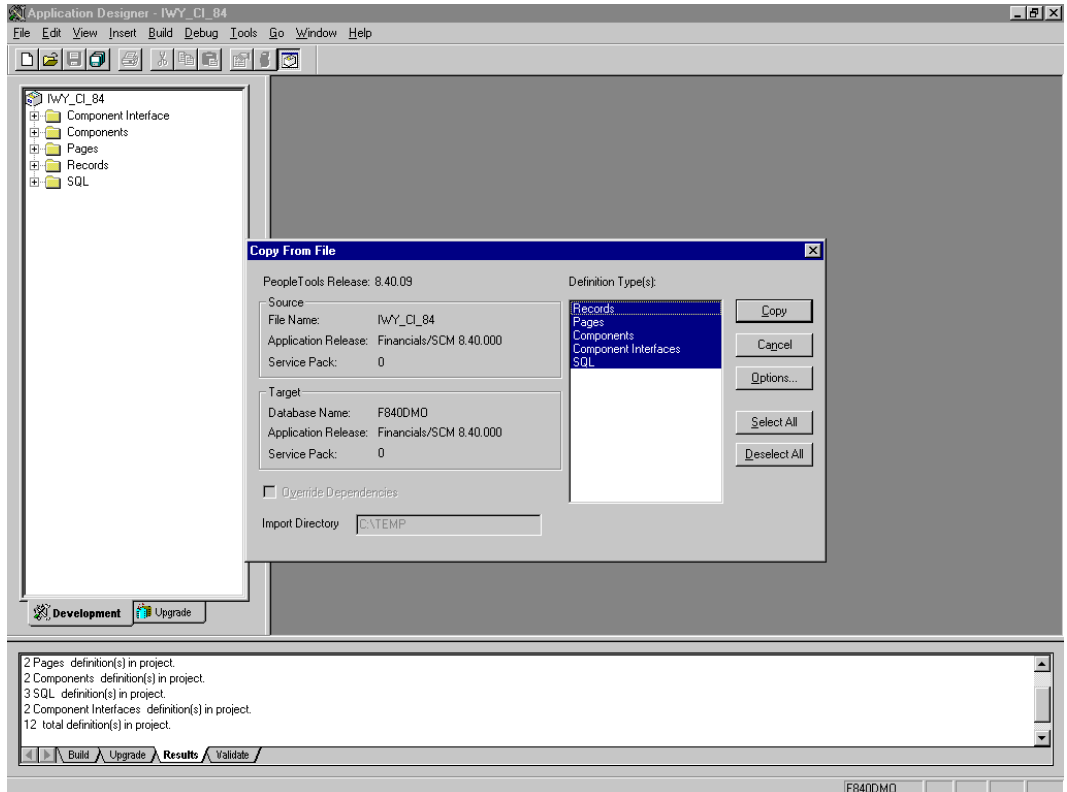
- 8.1, choose *Copy Project from File* from the *File* menu.

The Copy Project From File dialog box opens.

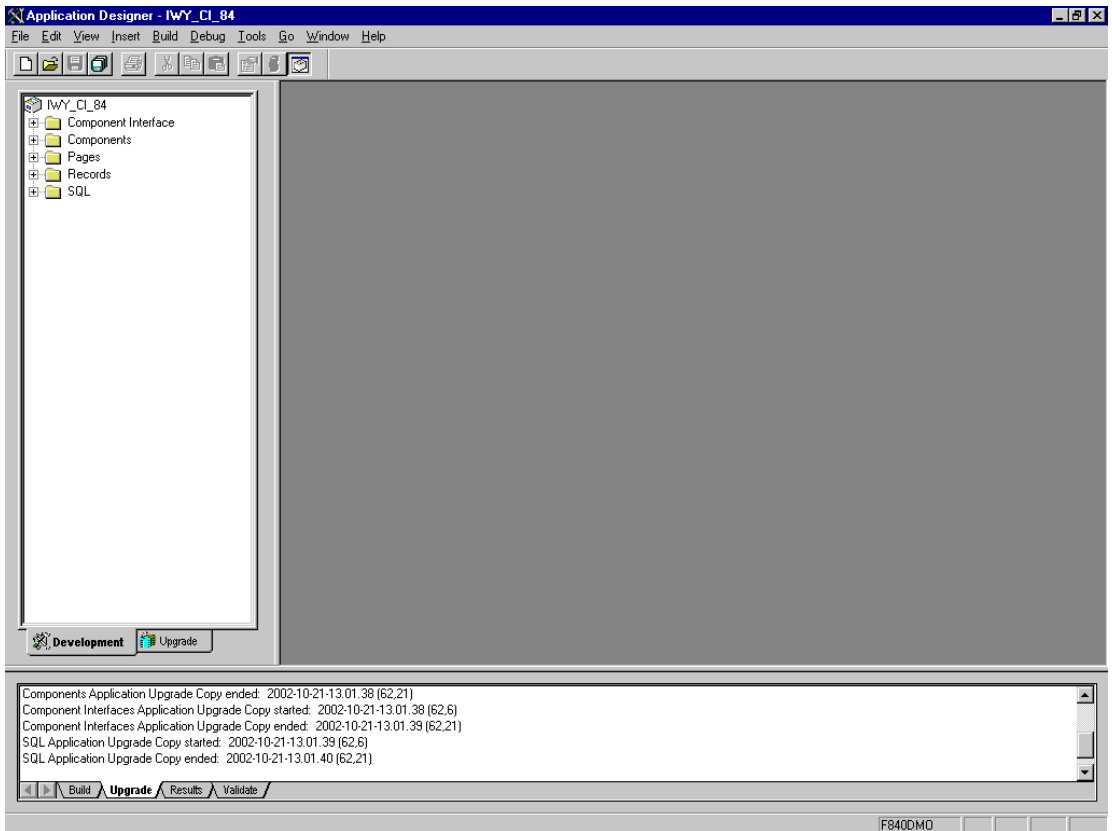
4. Navigate to the original directory to which you unzipped the file.

5. Click *Open* (in release 8.4) or *Copy* (in release 8.1) to open the Copy From File dialog box.

Note: Although the following figures illustrate PeopleSoft release 8.4, the corresponding instructions are accurate for releases 8.1 and 8.4.

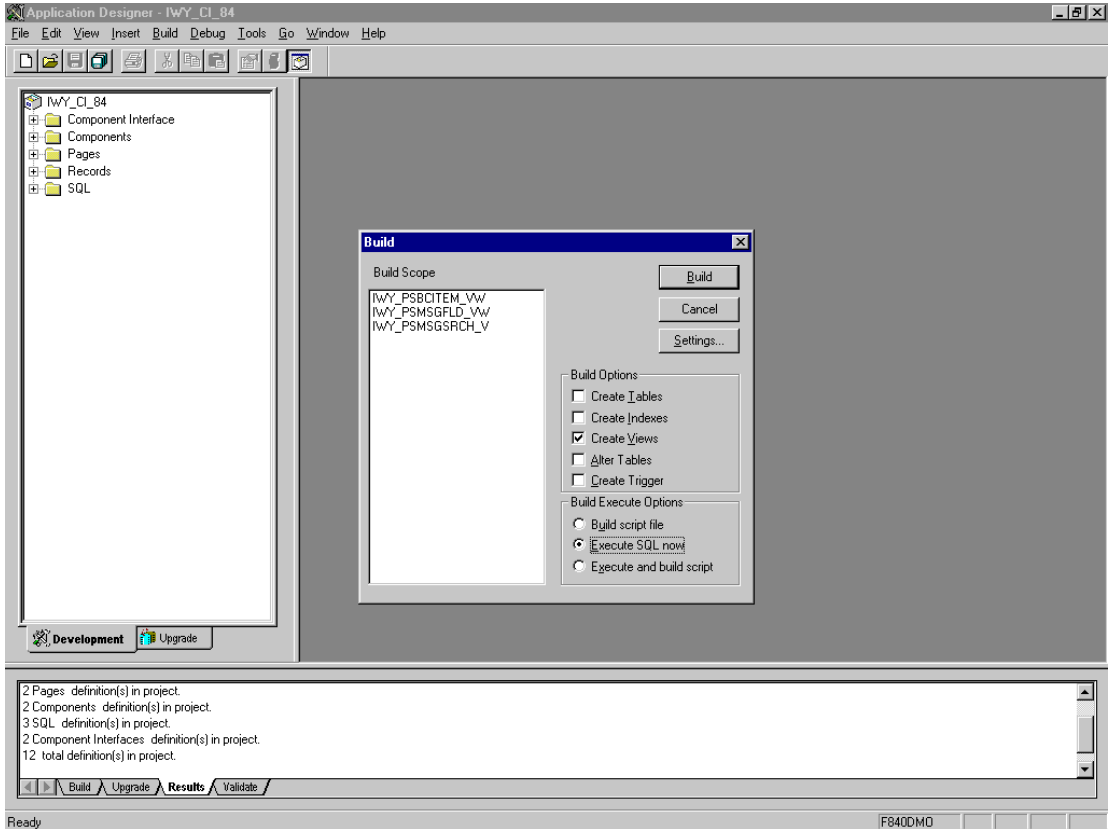


6. Make sure all objects listed under *Object Types* are highlighted and click *Copy*. The Application Designer displays a copy ended message to indicate successful completion.



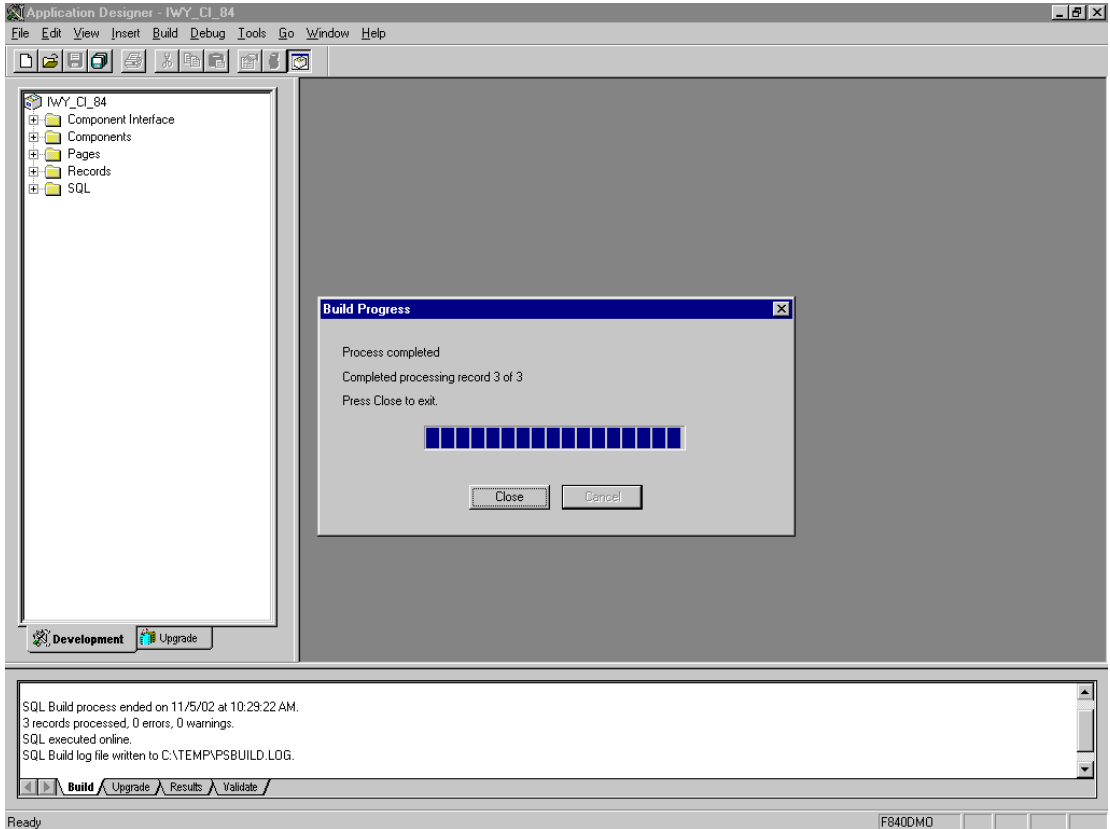
7. Build the views in the project by choosing *Build-->Project*.

The Build dialog box opens.



8. Select *Create Views* in Build Options. Select your site's customary option in Build Execute Options. (In the previous figure, we have selected *Execute SQL now*.)
9. Click *Build*.

The Application Designer displays a Build Progress status window.

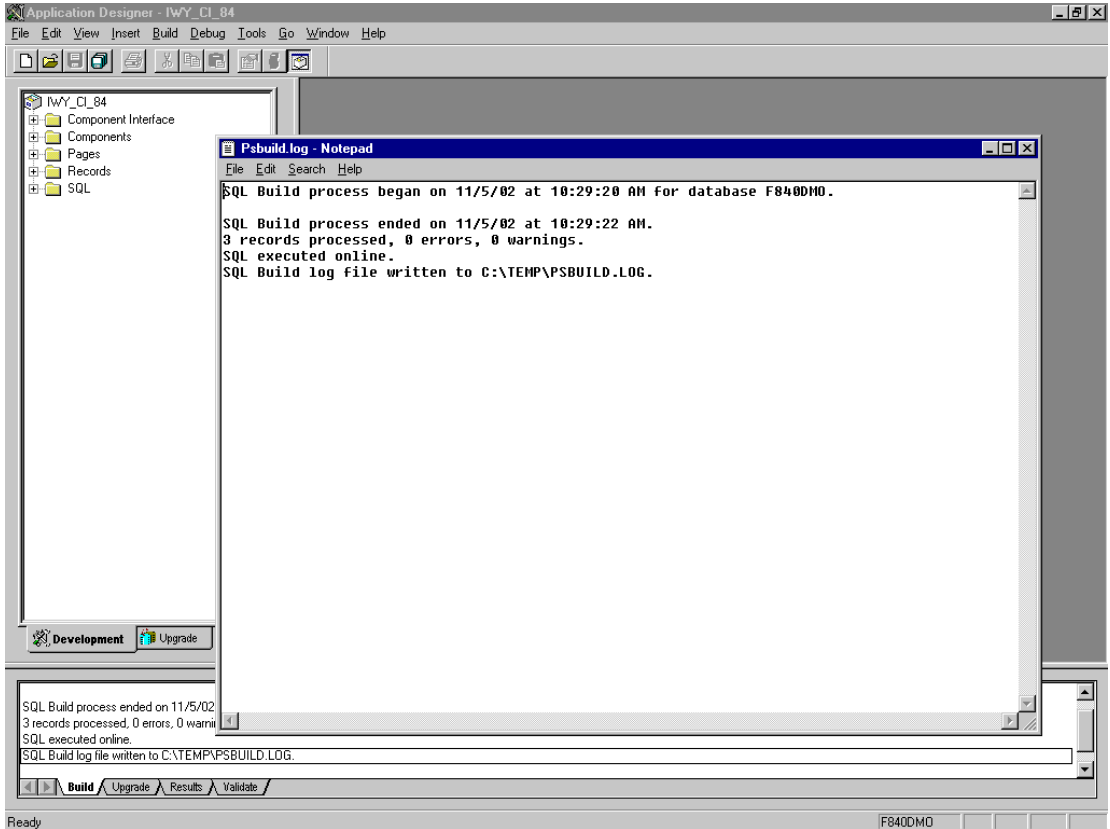


Notice that there are zero errors and zero warnings.

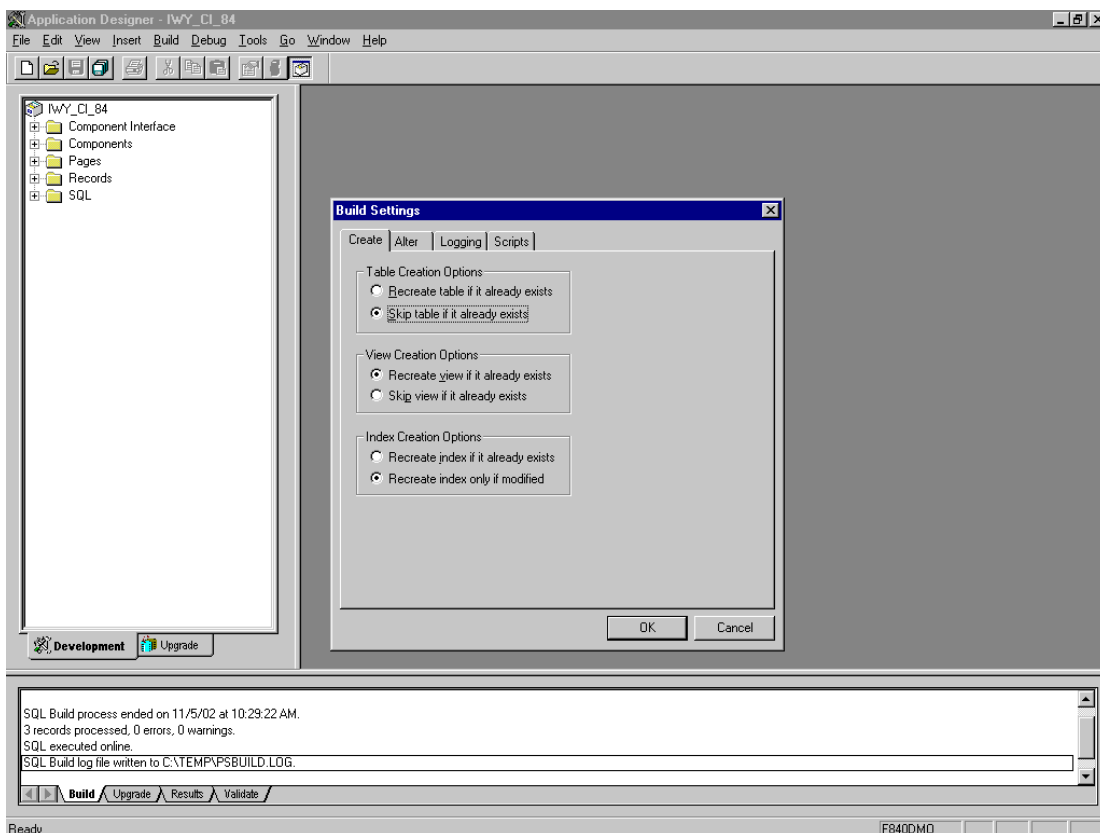
You may use your native SQL Tool to view the records from the generated view to ensure that they have been created correctly.

- 10.** If the view has not been generated correctly, click *Close* and double-click the SQL Build log statement.

The PSBUILD log file displays.



11. If you encounter problems, check the Build settings options by choosing *Build-->Settings*.



Depending on the application server database for PeopleSoft 8, some databases may require the Tablespace name. Consult your PeopleSoft 8 database administrator for more information regarding this function.

You have now finished importing and building the component interfaces. To configure security for them, see *Step 2. Configuring Component Interface Security* on page C-9.

Step 2. Configuring Component Interface Security

iWay Application Explorer requires the custom component interfaces that you imported and built in the previous step, so you need to ensure that all iWay Application Explorer users have access to these component interfaces. As with all PeopleSoft objects, security is assigned at the Permission List level. Review your site security requirements to determine which users are going to work with iWay Application Explorer, and then set component interface security for each distinct Permission List belonging to those users.

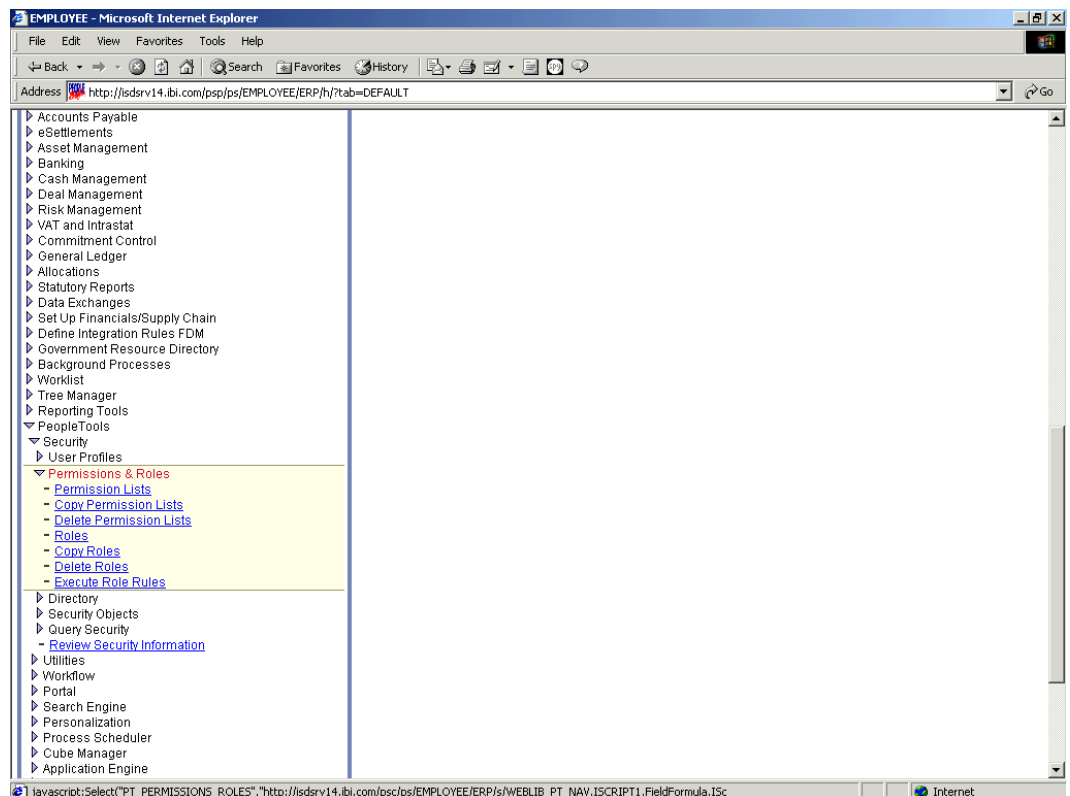
Note that these component interfaces are required for creating schemas and Web services, and they are utilized at run time for using the Find method. They have only Get and Find access and cannot be used to update your PeopleSoft database; this minimizes any possible security exposure.

In PeopleSoft release 8.1, you may set security in 2, 3, or 4-tier mode; in release 8.4 and higher, you may set security 4-tier mode only.

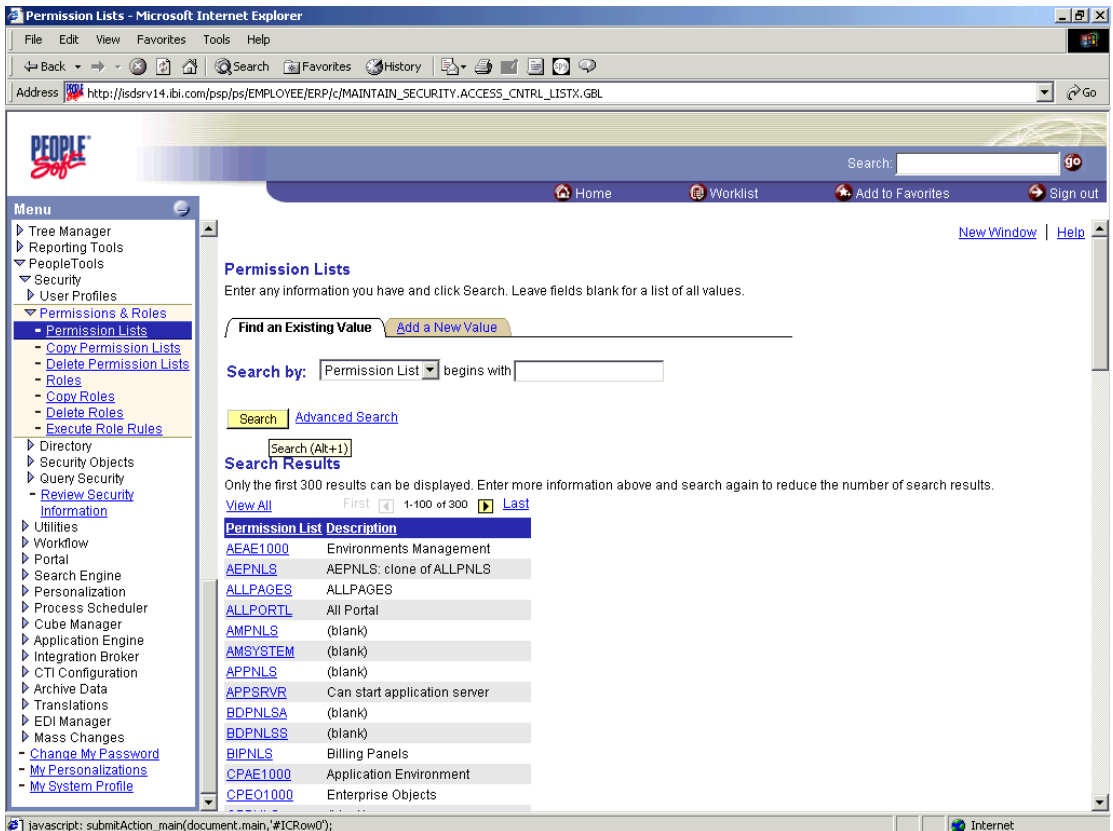
The following steps describe how to configure security for all supported releases of PeopleSoft in all supported modes. The figures shown in the steps reflect PeopleSoft release 8.4 in 4-tier mode.

To configure security for each iWay Adapter for PeopleSoft 8 component interface:

1. Choose *PeopleTools-->Security-->User Profiles-->Permissions & Roles-->Permission Lists*.

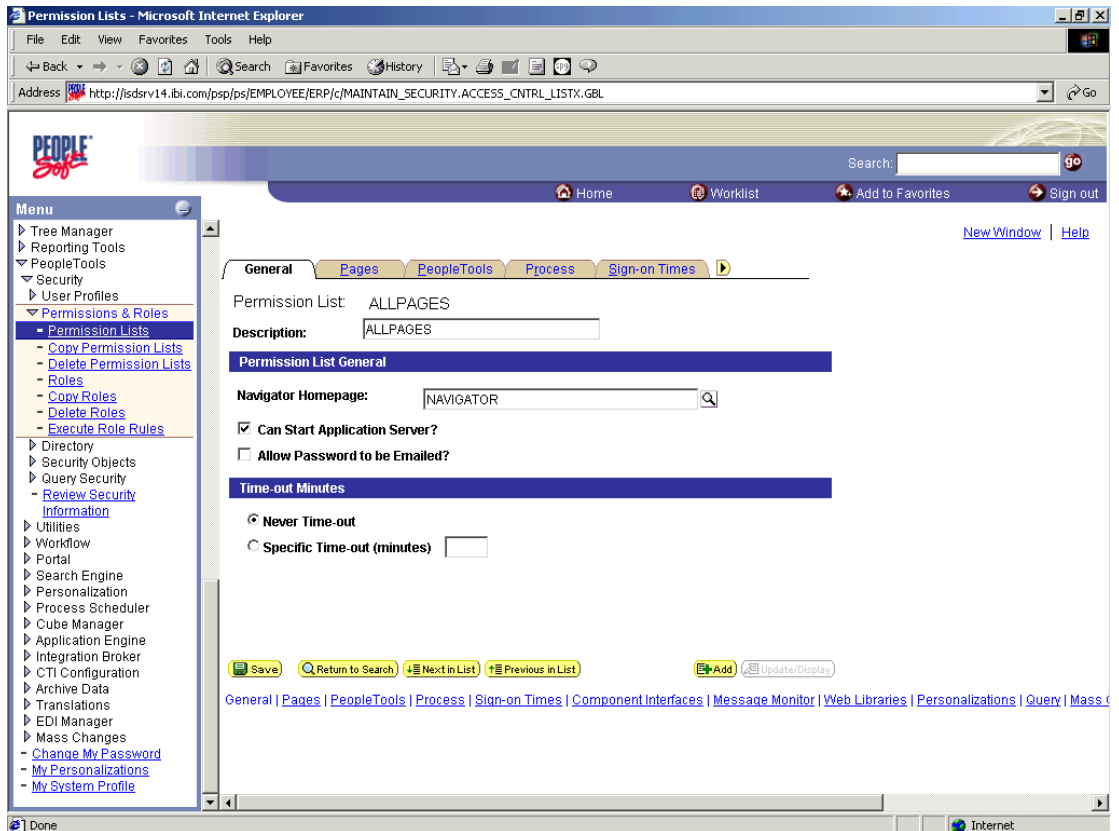


2. Click *Search* and select the relevant Permission List.

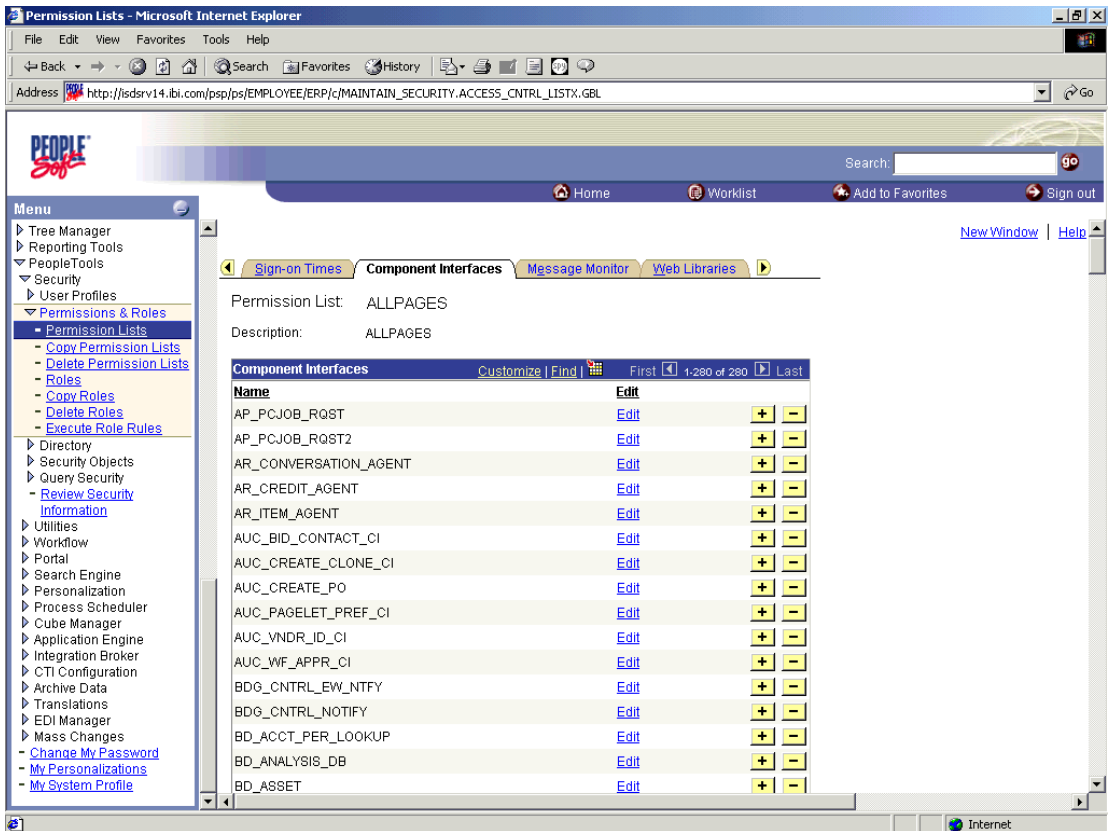


- Click the right arrow next to the *Sign-on Times* tab to display the *Component Interfaces* tab.

Installing the Adapter Component Interfaces

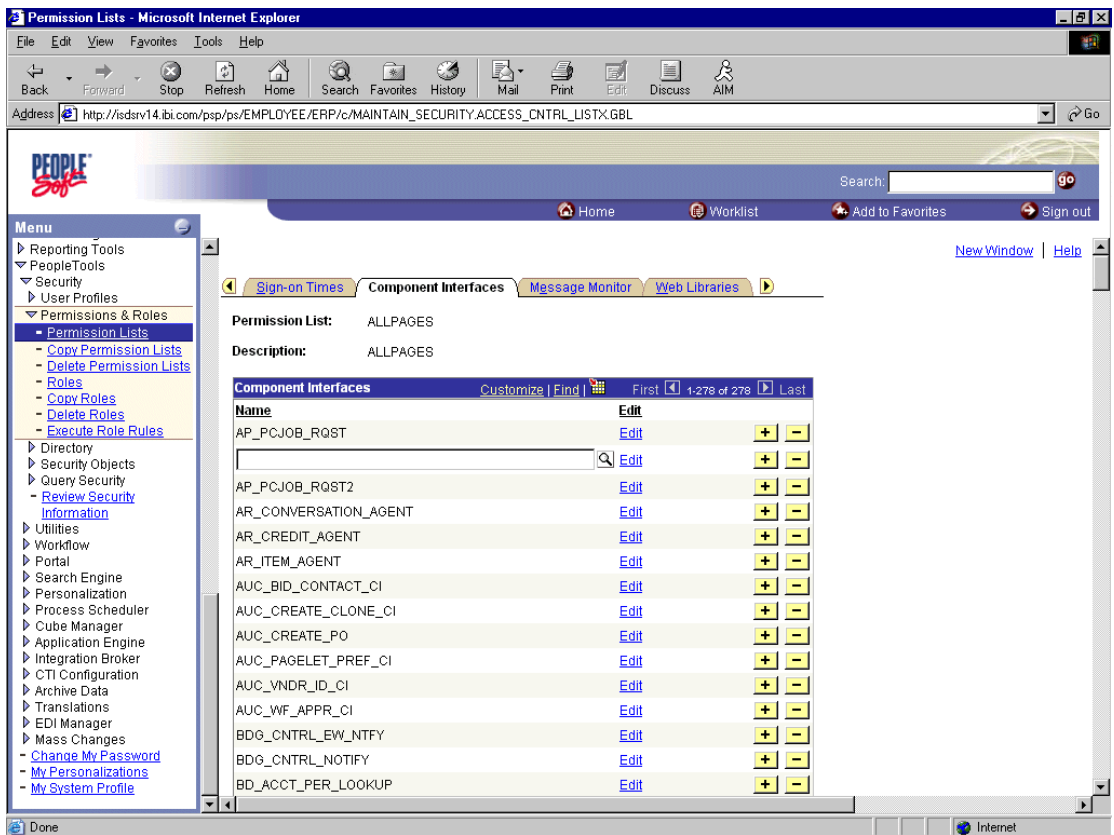


4. Click the *Component Interfaces* tab.

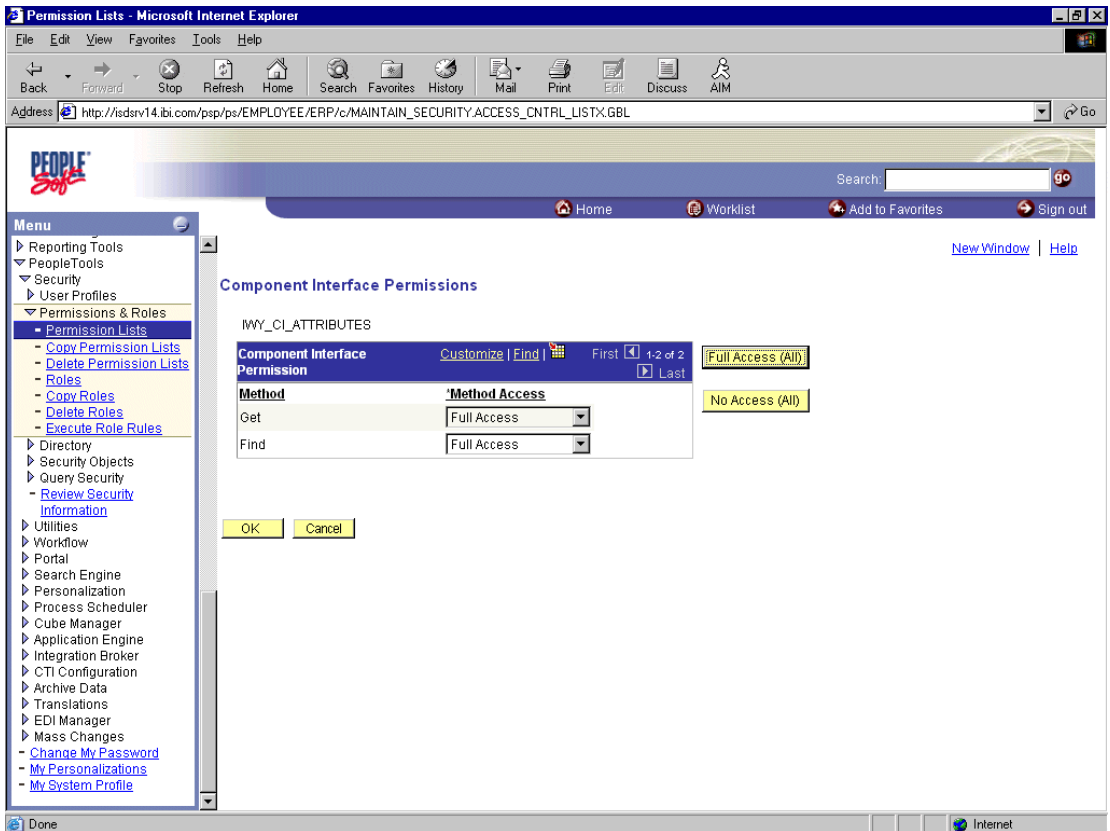


- Click the + button to add a new row to the Component Interfaces list.

Installing the Adapter Component Interfaces



6. Enter or select the IWY_CI_ATTRIBUTES component interface and click *Edit*.



7. Click *Full Access (All)* to set the Get and Find methods to Full Access.
8. Click *OK*.
9. Repeat steps 5 through 8 for the IWY_CI_MESSAGES component interface.
10. Scroll down to the bottom of the Component Interfaces window and click *Save*.

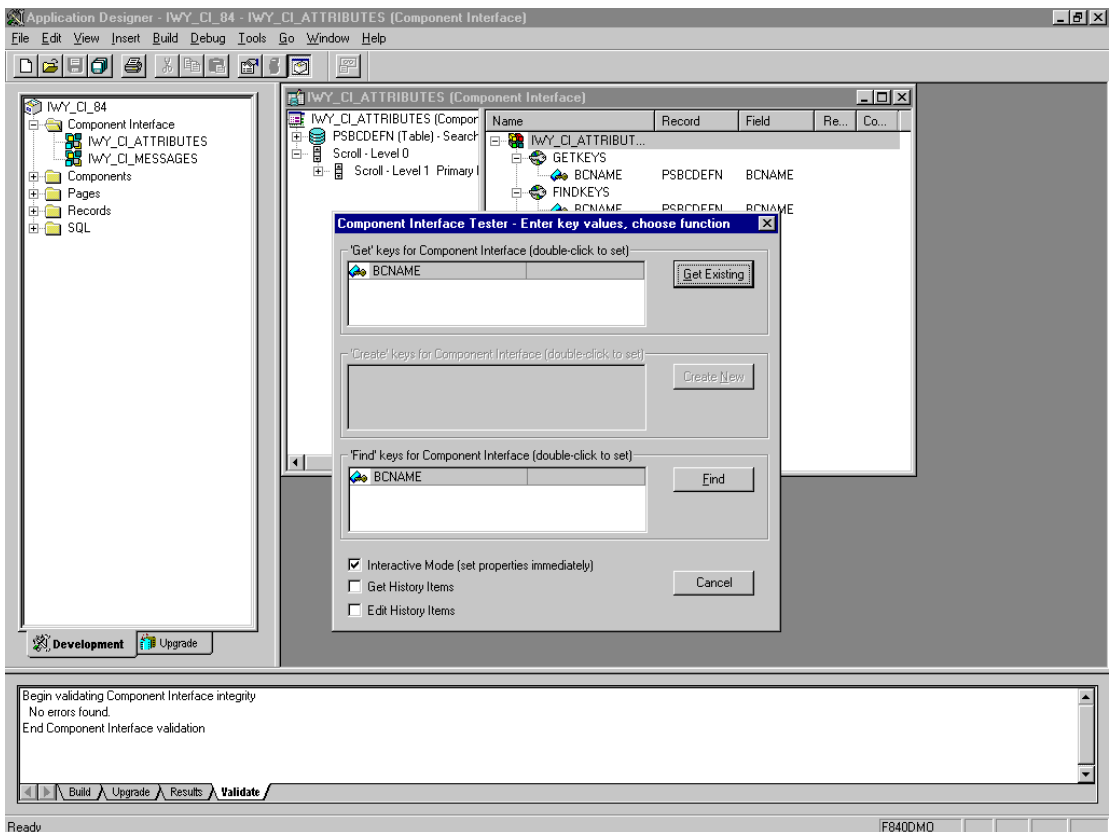
You have finished configuring security for the component interfaces delivered with iWay Adapter for PeopleSoft 8. To test these component interfaces, see *Step 3. Testing the Component Interfaces* on page C-16.

Step 3. Testing the Component Interfaces

You must test each of the iWay Adapter for PeopleSoft 8 component interfaces before using them:

1. In PeopleSoft Application Designer, open the IWY_CI_ATTRIBUTES component interface.
2. Choose *Tools-->Test Component Interface*.

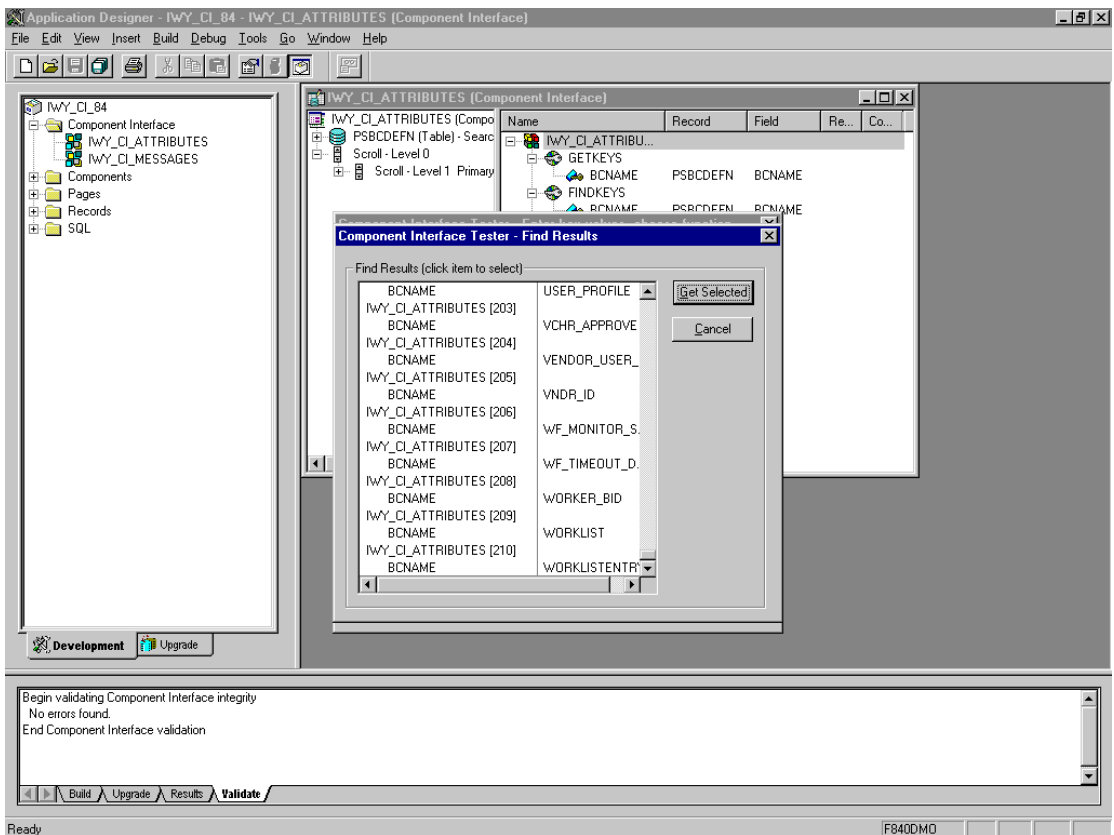
The Component Interface Tester dialog box opens.



Note that the Create New option is disabled. This is because the Add method is not applicable to this component interface.

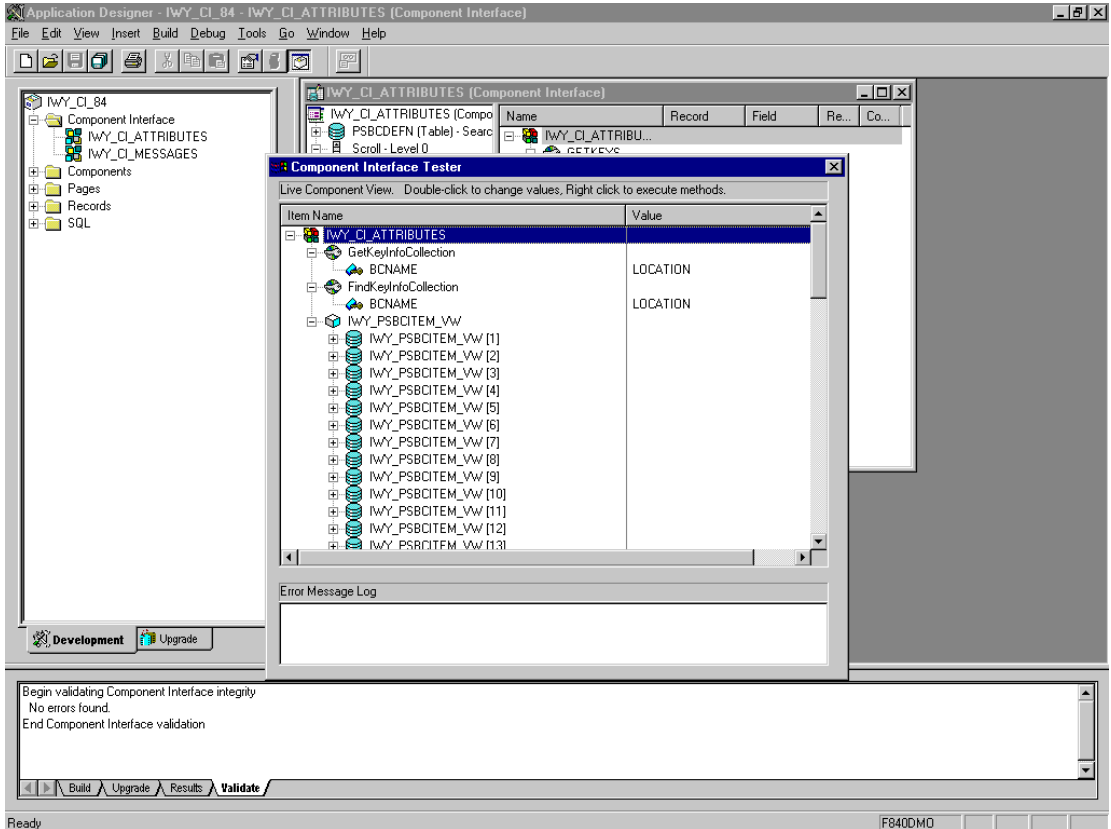
3. Click the *Find* button. Entries for the underlying component are displayed.

A message may appear stating that display is limited to a certain number of entries; this is not a problem.



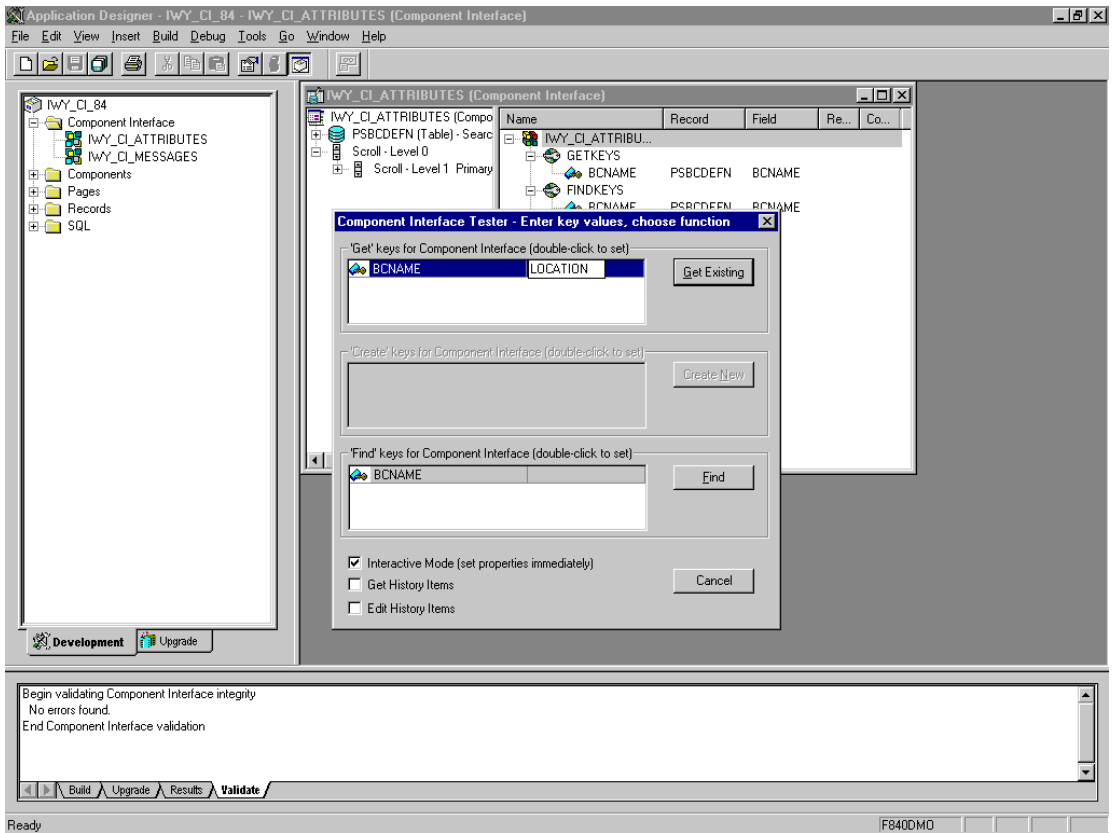
4. Highlight one of the lines with its corresponding key in the Find Results window and click the *Get Selected* button.

The relevant data for the selected key is displayed.



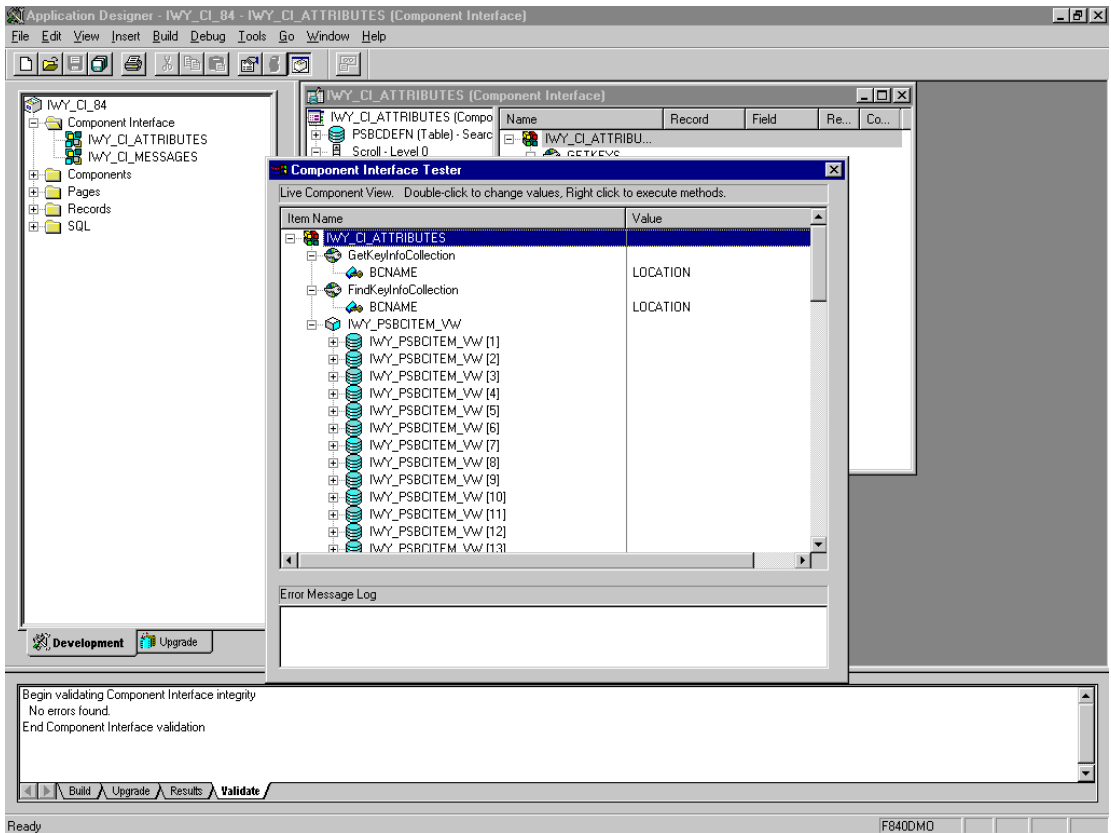
If this window is displayed, the component interface has been successfully tested for the Find method.

5. Click the Get button. For the Get method, an existing key must be entered.



The exposed properties for the key that is entered are returned.

Installing the Adapter Component Interfaces



If this window is displayed, the component interface has been successfully tested for the Get method.

6. Repeat this process for the IWY_CI_MESSAGES component interface.

You have finished testing the component interfaces.

Installing the TCP/IP Message Router for the iWay Adapter for PeopleSoft 8

To enable PeopleSoft 8 to send an XML event document to iWay components using TCP/IP, you must install the type of TCP/IP message router required for your PeopleSoft release. For PeopleSoft:

- Release 8.1, install the TCP/IP handler.
- Release 8.4, install the TCP/IP target connector.

Note: If you are not using PeopleSoft messages for event handling, you may skip this section.

Installing the TCP/IP Target Connector for PeopleSoft Release 8.4

The TCP/IP target connector for PeopleSoft release 8.4 is installed with iWay55. The default location on Windows is:

`C:\Program Files\iWay55\etc\misc\peoplesoft\iwpsevent84.jar`

Use the corresponding location on non-Windows systems.

If this location does not exist, contact iWay Software for copies of the relevant files.

1. Extract TCPIPTARGET84.class from iwpsevent84.jar. Use any extraction utility appropriate for your platform.
2. Port TCPIPTARGET84.class to the platform where the PeopleSoft 8 gateway Web server is located.
3. Place TCPIPTARGET84.class in the PeopleSoft server target connector directory. This may vary by Web or Application server.
 - WebLogic is usually:

`c:\bea\wlserver6.1\config\peoplesoft\applications\PSIGW\Web-inf\classes\com\peoplesoft\pt\integrationgateway\targetconnector`

Installing the TCP/IP Handler for PeopleSoft Release 8.1

The TCP/IP target connector for PeopleSoft release 8.1 is installed with iWay55. The default location on Windows is:

`C:\Program Files\iWay55\etc\misc\peoplesoft\iwpsevent81.jar`

Use the corresponding location on non-Windows systems.

If this location does not exist, contact iWay Software for copies of the relevant files.

To install the TCP/IP Handler for PeopleSoft release 8.1:

1. Port `iwpsevent81.jar` to the platform on which the PeopleSoft 8 gateway Web server is located.
2. Place `iwpsevent81.jar` in the `servletclasses` directory under the PeopleSoft Web server.
3. Extract the embedded class files.

Example Installing the TCP/IP Handler on a UNIX System

To install the TCP/IP handler for PeopleSoft release 8.1 on a UNIX system:

1. Log on to the UNIX system with the proper PeopleSoft 8 ID and permissions.
2. Navigate to the PeopleSoft 8 Web servlets directory. This may vary by release and by Web server, but usually is:

```
$PS_HOME/webserv/servletclasses
```

3. Issue the `jar` command to extract the class files required by PeopleSoft.

This is a sample command:

```
jar -xvf /tmp/iwpsevent81.jar
```

It displays the following output on a Sun/Solaris system:

```
$ jar -xvf /tmp/iwpsevent81.jar
created: META-INF/
extracted: META-INF/MANIFEST.MF
extracted: psft/pt8/tcphandler/TCPIPHandler81$Entry.class
extracted:
psft/pt8/tcphandler/TCPIPHandler81$HandlerEntry.class
extracted:
psft/pt8/tcphandler/TCPIPHandler81$PublicationHandler.class
extracted: psft/pt8/tcphandler/TCPIPHandler81.class
$
```

Notice that the files are placed in a new directory, `tcphandler`, under `psft/pt8`.

Copying PeopleSoft Files Into the iWay lib Directory

The iWay Application Explorer creates XSD schemas and Web services from PeopleSoft component interfaces, and creates XSD schemas from PeopleSoft messages. To do this, the file(s) below must be in the `iWay55\lib` directory. The default location for this directory on Windows is:

```
C:\Program Files\iWay55\lib
```

Use the corresponding location on non-Windows systems.

Ensure the following is in the `lib` directory:

- PeopleSoft Java Object Adapter (psjoa.jar)

This file provides a low level interface between client applications and PeopleSoft. This file is provided with PeopleSoft and can be found in the following directory:

PS_HOME\web\PSJOA

where:

PS_HOME

Is the PeopleSoft home directory.

The psjoa.jar file is different for every version of PeopleSoft. When you upgrade your Peopletools release, be sure to copy the new release's psjoa.jar file into the iWay55\lib directory and restart all components.

- pstools.properties (for PeopleSoft 8.1.x)

PeopleSoft release 8.1x requires an additional file, pstools.properties found in the following directory:

PS_HOME\web\jmac

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