## Contents

**Preface** ......................................................................... 7  
- Documentation Conventions .................................................. 7  
  - Related Publications .............................................................. 8  
- Customer Support .................................................................... 8  
- Help Us to Serve You Better ....................................................... 9  
- User Feedback ...................................................................... 11  
- Information Builders Consulting and Training ............................ 11  

**1. iWay 8.0 Service Manager Installation Overview** ......................... 13  
- iWay 8.0 Service Manager Products and Components .................. 13  
  - iWay Adapters .................................................................. 13  
  - iWay Service Manager ........................................................... 15  
  - iWay Extensions ................................................................ 15  
  - iWay Business Services Provider ............................................. 16  
- Installation and Configuration Overview ........................................ 17  

**2. Installing iWay 8.0 Service Manager Components** .......................... 19  
- iWay Service Manager Installation Requirements .......................... 19  
  - Hardware Requirements ......................................................... 19  
  - Operating System Requirements ............................................. 19  
  - Java Requirements .............................................................. 20  
  - Adapter Requirements ........................................................... 21  
- Installing iWay 8.0 Service Manager ............................................. 21  
- iWay 8.0 Service Manager Installation ........................................... 21  
- Installing iWay 8.0 Service Manager With iWay 5.x, 6.x, or 7.x Service Manager .............. 46  
- Post-Installation Topics and Tasks ................................................ 46  
  - iWay 8.0 Service Manager Directory Structure .......................... 46  
  - Installing Third-Party Jar Files ............................................... 47  
  - Installing Ebix Archives ......................................................... 48  
  - iWay TCP Ports .................................................................. 48  
  - Environment Variables ........................................................... 50  
  - Configuring iWay Service Manager Service as a Separate Process ............. 51  
  - Uninstalling iWay Service Manager .......................................... 51
3. Preparing Adapters .......................................................... 57

Preparing Adapters .................................................................. 57

Legacy Mainframe Adapters With iWay Server Requirement. .................................................... 57

Connect Direct......................................................................... 58

ESRI (GEOLoad). ................................................................ 59

FIX............................................................................ 60

J.D. Edwards EnterpriseOne (OneWorld). .................................................... 60

J.D. Edwards WorldSoft....................................................... 63

LDAP.......................................................................... 63

Required Installation Files.................................................. 63

Microsoft CRM 2011............................................................ 64

Microsoft .NET.................................................................. 64

  Required Installation Files.................................................. 65

  Sample Files................................................................... 65

MySAP ERP (SAP Java Connector Version 3.x)........................................... 65

  Required SAP Library Files.................................................. 66

  Installing the Required SAP Library Files........................................ 67

Oracle Applications (E-Business Suite).............................................. 69

PeopleSoft. ...................................................................... 69

RDBMS. ........................................................................ 70

  DB2........................................................................... 71

  Informix. .................................................................... 71

  Oracle. ........................................................................ 71

  Microsoft SQL Server....................................................... 72

  MySQL................................................................... 72

  PostGres. .................................................................... 72

  Sybase. ........................................................................ 72
SAP R/3............................................................................................................ 72
Siebel.................................................................................................................. 72
Terminal Emulation Adapter (3270/5250) (Telnet)............................................. 74
TIBCO Rendezvous............................................................................................... 74

4. Configuring iWay Components .................................................................... 77
   Configuring and Verifying iWay Service Manager ........................................ 77
   Starting and Stopping iWay Service Manager on Windows Platforms. ............ 77
   Starting and Stopping iWay Service Manager on Non-Windows Platforms ...... 78
   Configuring Service Manager........................................................................ 81
   Getting Started With iWay.............................................................................. 84
   Additional Configurations.............................................................................. 84
   Configuring a Unique ID for an iWay Service.............................................. 87
   Configuring the Java Memory Size Settings.............................................. 88
   Verifying Service Manager iBSP................................................................. 90
   iWay Integration Tools Transformer............................................................ 91
   iWay Integration Tools Designer..................................................................... 91
   Configuring iWay Application Server Components ........................................ 92

5. Configuring iWay Explorer ......................................................................... 93
   Configuring iWay Explorer............................................................................ 93
   Configuring Eclipse iWay Explorer............................................................... 93
      Installing iWay Integration Tools for Eclipse........................................... 93
   Using Eclipse iWay Explorer.......................................................................... 95

6. Configuring the iWay Repository .............................................................. 97
   Configuring and Creating the Repository..................................................... 97
   Creating the Repository.................................................................................. 97
   Installing the JDBC Driver........................................................................... 101
   Connecting iWay to the Repository............................................................ 102
   File System Repositories.............................................................................. 108
   Migrating Repositories.............................................................................. 108
   Migration Steps.............................................................................................. 108
Preface

This documentation describes how to install and configure iWay Adapters, iWay Service Manager, and iWay Business Service Provider (iBSP). It is intended for those with an administrator knowledge of the operating systems and target systems involved in their implementation.

How This Manual Is Organized

This manual includes the following chapters:

<table>
<thead>
<tr>
<th>Chapter/Appendix</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>iWay 8.0 Service Manager Installation Overview</td>
</tr>
<tr>
<td>2</td>
<td>Installing iWay 8.0 Service Manager Components</td>
</tr>
<tr>
<td>3</td>
<td>Preparing Adapters</td>
</tr>
<tr>
<td>4</td>
<td>Configuring iWay Components</td>
</tr>
<tr>
<td>5</td>
<td>Configuring iWay Explorer</td>
</tr>
<tr>
<td>6</td>
<td>Configuring the iWay Repository</td>
</tr>
</tbody>
</table>

Documentation Conventions

The following table describes the documentation conventions that are used in this manual.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>THIS TYPEFACE or this typeface</td>
<td>Denotes syntax that you must enter exactly as shown.</td>
</tr>
<tr>
<td>this typeface</td>
<td>Represents a placeholder (or variable), a cross-reference, or an important term. It may also indicate a button, menu item, or dialog box option that you can click or select.</td>
</tr>
<tr>
<td>underscore</td>
<td>Indicates a default setting.</td>
</tr>
</tbody>
</table>
### Convention

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key + Key</td>
<td>Indicates keys that you must press simultaneously.</td>
</tr>
<tr>
<td>{ }</td>
<td>Indicates two or three choices. Type one of them, not the braces.</td>
</tr>
<tr>
<td></td>
<td>Separates mutually exclusive choices in syntax. Type one of them, not the symbol.</td>
</tr>
<tr>
<td>...</td>
<td>Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis (...).</td>
</tr>
<tr>
<td>. . . . .</td>
<td>Indicates that there are (or could be) intervening or additional commands.</td>
</tr>
</tbody>
</table>

### Related Publications

Visit our Technical Documentation Library at [http://documentation.informationbuilders.com](http://documentation.informationbuilders.com). You can also contact the Publications Order Department at (800) 969-4636.

### Customer Support

Do you have any questions about this product?

Join the Focal Point community. Focal Point is our online developer center and more than a message board. It is an interactive network of more than 3,000 developers from almost every profession and industry, collaborating on solutions and sharing tips and techniques. Access Focal Point at [http://forums.informationbuilders.com/eve/forums](http://forums.informationbuilders.com/eve/forums).

You can also access support services electronically, 24 hours a day, with InfoResponse Online. InfoResponse Online is accessible through our website, [http://www.informationbuilders.com](http://www.informationbuilders.com). It connects you to the tracking system and known-problem database at the Information Builders support center. Registered users can open, update, and view the status of cases in the tracking system and read descriptions of reported software issues. New users can register immediately for this service. The technical support section of [http://www.informationbuilders.com](http://www.informationbuilders.com) also provides usage techniques, diagnostic tips, and answers to frequently asked questions.
Call Information Builders Customer Support Services (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 questions. Information Builders consultants can also give you general guidance regarding product capabilities and documentation. Please be ready to provide your six-digit site code number (xxxx.xx) when you call.

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

Help Us to Serve You Better

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

The following tables list the environment information our consultants require.

<table>
<thead>
<tr>
<th>Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>OS Version</td>
</tr>
<tr>
<td>JVM Vendor</td>
</tr>
<tr>
<td>JVM Version</td>
</tr>
</tbody>
</table>

The following table lists the deployment information our consultants require.

<table>
<thead>
<tr>
<th>Adapter Deployment</th>
<th>For example, JCA, Business Services Provider, iWay Service Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container</td>
<td>For example, WebSphere</td>
</tr>
<tr>
<td>Version</td>
<td></td>
</tr>
<tr>
<td>Enterprise Information System (EIS) - if any</td>
<td></td>
</tr>
<tr>
<td>EIS Release Level</td>
<td></td>
</tr>
<tr>
<td>EIS Service Pack</td>
<td></td>
</tr>
<tr>
<td>EIS Platform</td>
<td></td>
</tr>
</tbody>
</table>
The following table lists iWay-related information needed by our consultants.

<table>
<thead>
<tr>
<th>iWay Adapter</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>iWay Release Level</td>
<td></td>
</tr>
<tr>
<td>iWay Patch</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Request/Question</th>
<th>Error/Problem Details or Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the problem arise through a service or event?</td>
<td></td>
</tr>
<tr>
<td>Provide usage scenarios or summarize the application that produces the problem.</td>
<td></td>
</tr>
<tr>
<td>When did the problem start?</td>
<td></td>
</tr>
<tr>
<td>Can you reproduce this problem consistently?</td>
<td></td>
</tr>
<tr>
<td>Describe the problem.</td>
<td></td>
</tr>
<tr>
<td>Describe the steps to reproduce the problem.</td>
<td></td>
</tr>
<tr>
<td>Specify the error message(s).</td>
<td></td>
</tr>
<tr>
<td>Any change in the application environment: software configuration, EIS/database configuration, application, and so forth?</td>
<td></td>
</tr>
<tr>
<td>Under what circumstance does the problem not occur?</td>
<td></td>
</tr>
</tbody>
</table>
The following is a list of error/problem files that might be applicable.

- Input documents (XML instance, XML schema, non-XML documents)
- Transformation files
- Error screen shots
- Error output files
- Trace files
- Service Manager package to reproduce problem
- Custom functions and agents in use
- Diagnostic Zip
- Transaction log

For information on tracing, see the iWay Service Manager User’s Guide.

**User Feedback**

In an effort to produce effective documentation, the Technical Content Management staff welcomes your opinions regarding this document. Please use the Reader Comments form at the end of this document to communicate your feedback to us or to suggest changes that will support improvements to our documentation. You can also contact us through our website, http://documentation.informationbuilders.com/connections.asp.

Thank you, in advance, for your comments.

**Information Builders Consulting and Training**

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

For information on course descriptions, locations, and dates, or to register for classes, visit our website (http://education.informationbuilders.com) or call (800) 969-INFO to speak to an Education Representative.
Chapter 1

iWay 8.0 Service Manager Installation Overview

This section provides an overview of the installation and configuration of iWay 8.0 Service Manager products and components.

In this chapter:
- iWay 8.0 Service Manager Products and Components
- Installation and Configuration Overview

iWay 8.0 Service Manager Products and Components

This manual explains the installation and initial configuration of iWay 8.0 Service Manager components. The topics that follow briefly summarize some of the iWay 8.0 Service Manager 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:

Technology Adapters
- iWay
- Java
- RDBMS
- ESRI
- Microsoft .NET

Application Adapters
- J.D. Edwards EnterpriseOne
- J.D. Edwards World
Microsoft Dynamics CRM 2011
Microsoft Exchange
SAP ERP
Oracle E-Business Suite
PeopleSoft
Siebel
Salesforce.com
VistA MUMPS
eBusiness Adapters
EDIFACT
EDI/X12
EDIHL7
Excel
HIPAA
SWIFT
Legacy Adapters
COBOL Data Conversion
CICS
IMS
Terminal Emulation
Log Event Adapters
Informix Dynamic Server 11.50
Oracle 10g and 11g
Protocol Adapters
AQ
Adapters can be deployed through iWay Service Manager. In addition, adapters can be integrated directly into your own applications. For information on integrating adapters into your applications, contact an iWay Software representative.

**iWay Service Manager**

iWay Service Manager is a highly scalable enterprise service bus, with fully integrated service design-time environment and web services creation/deployment capabilities. It provides a hosting environment for adapters and includes components for integrating data, applications, systems, and protocols. It also provides a web-based configuration and monitoring tool referred to as the iWay Service Manager Administration Console.

iWay Service Manager is a stand-alone Java application and requires only a Java Virtual Machine to run.

**iWay Extensions**

iWay Extensions supplement iWay Service Manager by adding or extending capabilities for servicing messages. The extension services integrate with the native services of Service Manager during execution and configuration. Extensions can be installed along with iWay or as packages after iWay Service Manager is installed. The following are some of the most common extensions:

- **RVI Gateway.** Links two or more iWay Service Managers in a message receiver/message executor relationship for the purpose of tunneling through secure firewalls.

- **Enterprise Index.** Provides indexing services through the Google Search Appliance.
- **LDAP High Water Mark Listener.** Provides the ability to read records from an LDAP if an attribute is defined with increasing values, such as a timestamp of the last change.

- **RDBMS High Water Mark Listener.** Provides the ability to read records from an RDBMS if a column or set of columns is defined with increasing values, such as a timestamp of the last change.

- **Telnet Control Console.** Used to remotely access the iWay Service Manager command line console through a Telnet session. The Telnet session can connect to any iSM instance running either in the foreground or the background.

- **Hot Backup.** Hot backup allows a secondary iWay Service Manager system to act as the backup for a live iWay Service Manager. The backup iWay Service Manager will take over if the live iWay Service Manager fails.

- **PGP Encryption Components.** Supports standard OpenPGP, as specified in RFC 2440. The support includes decrypting incoming messages and encrypting outgoing messages using simple PGP and key pair (public key) PGP.

- **Security Developers Tools.** Provides a utility program for signing and verifying files.

- **Data Quality Center.** iWay Data Quality Center (DQC) is an essential tool for complex data quality management. iWay DQC is designed not only to evaluate, monitor, and manage data quality in different information systems, but also to prevent incorrect data from entering these systems in the first place.

- **Real Time Data Replication.** The iWay Real Time Data Replication extension is composed of the SQL Batch Insert Iterator and the Data Integration Object.

- **XQuery.** Evaluates an XQuery 1.0 expression against an input XML document. The result is available in the output XML document that is generated. XQuery can be used to select a portion of an XML document or to transform an XML document.

### iWay Business Services Provider

iWay Business Services Provider (iBSP) 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. Service Manager iBSP runs as a component of iWay Service Manager.

**Note:** iWay Business Services Provider (iBSP) was formerly known as iWay Business Services Engine (iBSE). Some references, files, and prompts may still use the previous name.
Installation and Configuration Overview

The following are steps for installing and configuring iWay components. Follow the steps for the components you wish to use:

1. Review the requirements and install any required third party components. (*Installing iWay 8.0 Service Manager Components* on page 19)

2. Run the installation program to install iWay 8.0 Service Manager components. (*Installing iWay 8.0 Service Manager Components* on page 19)

3. Copy third party adapter-related files into the iWay 8.0 Service Manager directory structure. (*Preparing Adapters* on page 57)

4. Start and configure iWay Service Manager. (*Configuring iWay Components* on page 77)

5. Register iWay 8.0 Service Manager. (*Configuring iWay Components* on page 77)

6. Refer to the documentation for your installed adapters and/or extensions.
Chapter 2

Installing iWay 8.0 Service Manager Components

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

In this chapter:

- iWay Service Manager Installation Requirements
- Installing iWay 8.0 Service Manager
- Installing iWay 8.0 Service Manager With iWay 5.x, 6.x, or 7.x Service Manager
- Post-Installation Topics and Tasks
- Registering iWay Software
- iWay Service Manager Configuration Steps

iWay Service Manager Installation Requirements

Review the following installation requirements to ensure your system supports iWay 8.0 Service Manager (iSM).

Hardware Requirements

Minimum requirements for Windows:

- 1 gigahertz (GHz) or higher Intel® Pentium® compatible CPU.
- 1 gigabyte (GB) of RAM.
- 1 gigabyte (GB) of disk space after installation (2 gigabytes during installation).

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

Operating System Requirements

iWay 8.0 iSM is certified on the following platforms. Additional platforms may be supported, as long as they meet Java requirements. For more information, contact iWay Customer Support.

- AIX 64-bit
- OS/400 64-bit
Red Hat Enterprise Linux 64-bit
Red Hat Enterprise Linux 64-bit (GUI)
Solsparc 64-bit
Suse Linux Enterprise 64-bit
Windows 7 64-bit
Windows 2008 R2 Standard 64-bit
Windows 2008 Enterprise 64-bit
Windows 2012 64-bit
Windows 10 64-bit
z/OS

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

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.

Java Requirements

Java 2 Standard Edition (J2SE™) JDK 1.8 or higher is required for iWay components.

For Windows, Linux, and Solaris, you can download and install the latest supported JDK from:

For other platforms, contact the appropriate vendor.

After installing the JDK, the Java command must be in your search PATH to install and run iWay. Ensure the following is in your PATH variable:

```
/java_home/bin
```

where:

```
java_home
```

Is the absolute path where the JDK is installed.

To determine if Java is properly installed and in your search PATH, execute the following at a command prompt or shell:

```
java -version
```
Information on the Java build appears, for example:

```
java version "1.8.0_152"
Java(TM) SE Runtime Environment, Standard Edition (build 1.8.0_152-b16)
Java HotSpot(TM) Client VM (build 152-b16, mixed mode, sharing)
```

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

**Adapter Requirements**

Many adapters require third-party libraries, such as JDBC drivers, provided by the vendor of the target data source, system, or protocol. You must copy these files into the iWay directory structure after you install iWay. More information is available in *Preparing Adapters* on page 57.

**Installing iWay 8.0 Service Manager**

The initial iWay installation procedure installs all iWay components and a set of adapters. These components and adapters are available for a 90-day trial. To receive a permanent license after you have installed iWay 8.0 SM, register the software using the instructions found in *Registering iWay Software* on page 52.

Additional procedures are found throughout this manual to explain how to activate and configure the components of iWay 8.0 SM.

**iWay 8.0 Service Manager Installation**

Follow the procedure for your platform:

- For Windows, see *Install iWay 8.0 Service Manager on Windows Platforms*.

- For UNIX, OS/400, and z/OS, see *Install iWay 8.0 Service Manager on UNIX, OS/400, and z/OS Platforms*.

**Procedure:** *How to Install iWay 8.0 Service Manager on Windows Platforms*

You must be an administrator for the local machine to run the installation.

1. Start the installation by executing the iway80.exe installation program.
The installation begins by temporarily copying files and analyzing your environment. This may take some time. When this process completes, the Welcome window opens, as shown in the following image.

**Note:** If you receive an error, ensure you are installing as an administrator and there is at least 2 GB of free space on your operating system drive.
2. Click Next.

The License Agreement window opens, as shown in the following image.

![License Agreement Window](image)

3. Review the information, and select I accept the terms of the license agreement if you agree to the terms.
The Customer Information window opens, as shown in the following image.

4. Provide your User Name, Company Name, and Site Code.

**Important:** The site code is a unique company identifier associated with a specific machine. Be sure to enter a valid and accurate site code in this step because this entry is used when generating your permanent license during the registration process. If you need assistance with the site code, contact your iWay Software sales representative.

5. Click Next.
6. Select the setup type (Typical, Runtime, or Custom) according to your requirements.
7. Click Next.
The Choose Destination Location window opens, as shown in the following image.

8. Accept the default location, which is C:\Program Files (x86)\iway8\, or click Browse to specify a new location.

9. Click Next.
The Adapter Selection window opens, as shown in the following image, where you can select the specific iWay adapters that you want to install. Ensure that you expand all of the categories to view the available adapters.

10. Select the adapters you want to install.
11. Click Next.
The Feature Selection window opens, as shown in the following image, where you can select the specific iSM features that you want to install. Ensure that you expand all of the categories to view the available features.

12. Select the features you want to install.
13. Click Next.

The iWay Service Manager Configuration options window opens, as shown in the following image.

![iWay Service Manager Configuration options](image)

You are prompted to specify the ports that iWay Service Manager uses, as listed and described in the following table.

<table>
<thead>
<tr>
<th>Name</th>
<th>Default Port</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Console</td>
<td>9999</td>
<td>HTTP listener for the iWay Service Manager Administration Console.</td>
</tr>
<tr>
<td>SOAP</td>
<td>9000</td>
<td>SOAP listener for iBSP and iWay Explorers.</td>
</tr>
<tr>
<td>Name</td>
<td>Default Port</td>
<td>Purpose</td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Envoy</td>
<td>9001</td>
<td>Designated port for Envoy to allow Sentinel monitoring.</td>
</tr>
<tr>
<td>(optional)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The Envoy port option is displayed only if *Envoy* is selected in the Feature Selection window.

14. Accept the default port values or specify new values and then click **Next**.

**Note:** Be sure to specify ports that are not being used by other programs or by another instance of iWay. If necessary, contact your system administrator for assistance in identifying available TCP ports.

If you selected *Envoy* to be installed from the Feature Selection window in step 11, then the Sentinel Registration window opens, as shown in the following image.

![Sentinel Registration](image.png)

This version of Service Manager can be remotely managed by iWay Sentinel. Enter the following to enable self registration with Sentinel.

- **Host:** localhost
- **Port:** 8080
- **User ID:** admin
- **Password:** ****

15. Accept the default Host and Port values or specify new values along with the correct User ID and Password, and then click **Next**.
The Start Copying Files window opens, as shown in the following image.

16. Review the settings and then click Next to start the installation.
The Setup Status window opens, as shown in the following image.

![Setup Status Window]

Files are copied to your system in the directory you specified.
You have the option to start the Service Manager when installation completes, as shown in the following image.

If you choose this option, the iWay Service Manager Administration Console launches in your default web browser. You can log on to the iWay Service Manager Administration Console using the default user name, admin, and password, admin. You can change the user name and password, as explained in Configuring iWay Components on page 77.

17. Click Finish to complete the installation Wizard.

18. Proceed to Post-Installation Topics and Tasks on page 46. For maximum performance, it is strongly recommend that you follow the post-installation procedure for Configuring iWay Service Manager Service as a Separate Process on page 51.

**Procedure:** How to Install iWay Service Manager on Windows Platforms Using Silent Mode

You can use the supported InstallShield command options that are described in this section to run an iSM installation in silent (unattended) mode on Windows platforms.

**Note:** Only major releases of iSM can be installed in silent (unattended) mode.

Before continuing, ensure that you are an administrator for the local machine.
The high-level process for configuring a silent (unattended) iSM installation on Windows platforms is as follows:

1. Record a response file for an iSM installation using the -r option.
2. Play back a silent (unattended) iSM installation using the -s option.

**Procedure:** How to Record a Response File to Install iWay Service Manager

1. Open a Windows command prompt.
2. Navigate to the location where the iway80.exe installation program is located, for example:
   
   c:\iWay8_Install_Source>

3. Type the following command:
   
   c:\iWay8_Install_Source>iway80.exe -r -f1my_response_file.iss

   where:

   - **-r**
     
     Indicates that a response file will be recorded for this iSM installation.

   - **-f1my_response_file.iss**
     
     Is the name of the response file that will be created as a result of the iSM installation. Do not include a space between -f1 and my_response_file.

   For example, to create a response file for the iSM installation called ism_install_config and save it in the c:\temp directory, type the following command:

   c:\iWay8_Install_Source>iway80.exe -r -f1c:\temp\ism_install_config.iss

   This command creates the response file in the specified directory.

   **Note:**

   - If no directory is specified using the -f1 option, a default response file (setup.iss) is written to the c:\windows directory.

   - There is also an -f2 option that is used to designate the location of the InstallShield log file. The InstallShield log file is created during the installation process. If no location is specified, then the InstallShield log file is written to the same location as the response file.

4. Complete a normal iSM installation using the Windows-based InstallShield installer.
The specified response file will record all of the settings that you specified during the iSM installation. You can edit and customize the settings in the generated response file according to your requirements.

Procedure: How to Play Back a Response File to Install iWay Service Manager

After you have created your response file, you can run the iSM installation in silent (unattended) mode. Only major releases of iSM can be installed in silent (unattended) mode.

Note: When running the iSM installation in silent (unattended) mode, no messages are displayed. All messages are written to a log file. Review this log file to determine the results of your iSM installation.

1. Copy the iway80.exe installation program to the location where you want to install iSM using silent (unattended) mode, for example:
   
   c:\iWay8_Install_Prod>

2. Type the following command:
   
   c:\iWay8_Install_Prod\iway80.exe -s -f1 my_response_file.iss -f2 log_file

   where:

   - **-s**
     
     Indicates that the iSM installation will run in silent (unattended) mode.

   - **-f1 my_response_file.iss**
     
     Specifies the file name and location of the response file. Do not include a space between -f1 and my_response_file.

   - **-f2 log_file**
     
     Specifies the file name and location where the InstallShield log files will be written. Do not include a space between -f2 and log_file.

For example, to run an iSM installation in silent (unattended) mode from the c:\iWay8_Install_Prod directory, which references the ism_install_config.iss response file from the c:\temp directory, and writes an InstallShield log file (ism_install_log_file) to the c:\temp directory, type the following command:

   c:\iWay8_Install_Prod\iway80.exe -s -f1c:\temp\ism_install_config.iss -f2c:\temp\ism_install_log_file
The iSM installation runs automatically in the background without any user interaction. Review the log file to determine the results of your iSM installation that ran in silent (unattended) mode.

Procedure: How to Uninstall iWay Service Manager on Windows Platforms Using Silent Mode

This section describes how to uninstall iSM in silent (unattended) mode on Windows platforms. Before continuing, ensure that you are an administrator for the local machine.

The high-level process for configuring a silent (unattended) iSM uninstallation on Windows platforms is as follows:

- Record a response file to uninstall iSM using the `-r` option.
- Play back a silent (unattended) iSM uninstallation using the `-s` option.

Procedure: How to Record a Response File to Uninstall iWay Service Manager

1. Open a Windows command prompt.
2. Navigate to the location where the `iway80.exe` installation program is located, for example:
   
   ```
c:\iWay8_Install_Source>
   ```
3. Type the following command:

   ```
c:\iWay8_Install_Source>iway80.exe -r -f1 my_response_file.iss
   ```

   where:
   
   `-r`

   Indicates that a response file will be recorded for this iSM uninstallation.

   `-f1 my_response_file.iss`

   Is the name of the response file that will be created as a result of the iSM uninstallation.

   For example, to create a response file for the iSM uninstallation called `ism_uninstall` and save it in the `c:\temp` directory, type the following command:

   ```
c:\iWay8_Install_Source>iway80.exe -r -f1c:\temp\ism_uninstall.iss
   ```

   This command creates the response file in the specified directory.

   **Note:**

   - If no directory is specified using the `-f1` option, a default response file (`setup.iss`) is written to the `c:\windows` directory.
There is also an \texttt{-f2} option that is used to designate the location of the InstallShield log file. The InstallShield log file is created during the uninstallation process. If no location is specified, then the InstallShield log file is written to the same location as the response file.

4. When you run the \texttt{iway80.exe} installation program on a machine where iSM is already installed, the \textit{Modify, repair, or remove the program} dialog box opens, as shown in the following image.

![InstallShield dialog box](image)

5. Select \textit{Remove} and then click \textit{Next} to complete the uninstallation process.

The specified response file (for example, \texttt{ism\_uninstall.iss}) will record the \textit{Remove} option, which instructs the \texttt{iway80.exe} installation program to uninstall iSM. You are now ready to play back your response file to uninstall iSM.

\textbf{Procedure: How to Play Back a Response File to Uninstall iWay Service Manager}

After you have created your response file, you can run the iSM uninstallation in silent (unattended) mode. Only major releases of iSM can be uninstalled in silent (unattended) mode.
Note: When running the iSM uninstallation in silent (unattended) mode, no messages are displayed. All messages are written to a log file. Review this log file to determine the results of your iSM uninstallation.

1. Copy the iway80.exe installation program to the location where you want to uninstall a copy of iSM using silent (unattended) mode, for example:

   c:\iWay8_Install_Prod>

2. Type the following command:

   c:\iWay8_Install_Prod>iway80.exe -s -f1my_response_file.iss -f2log_file

   where:

   -s
     Indicates that the iSM uninstallation will run in silent (unattended) mode.

   -f1my_response_file.iss
     Specifies the file name and location of the response file for the uninstallation. Do not include a space between -f1 and my_response_file.

   -f2log_file
     Specifies the file name and location where the InstallShield log files will be written. Do not include a space between -f2 and log_file.

   For example, to run an iSM uninstallation in silent (unattended) mode from the c:\iWay8_Install_Prod directory, which references the ism_uninstall.iss response file from the c:\temp directory, and writes an InstallShield log file (ism_uninstall_log_file) to the c:\temp directory, type the following command:

   c:\iWay8_Install_Prod>iway80.exe -s -f1c:\temp\ism_uninstall.iss
   -f2c:\temp\ism_uninstall_log_file

   The iSM installation runs automatically in the background without any user interaction. Review the log file to determine the results of your iSM uninstallation that ran in silent (unattended) mode.

Procedure: How to Install iWay 8.0 Service Manager on UNIX, OS/400, and z/OS Platforms

On UNIX/Linux, installing as root is not recommended. Creating a dedicated iWay user ID and group with appropriate rights is preferable.

On OS/400, your user ID must have *ALLOBJ, *JOBCTL, and *SAVSYS authority.

On z/OS, the iway80.jar file must be placed in the USS file system.
The new unified iWay installer can enable silent, unattended installation. Contact iWay Customer Support for more information.

1. Use FTP in binary mode to transfer the installation file to your UNIX or OS/400 machine. For OS/400, place the file in a directory under QSH.
2. Navigate to the directory containing the installation file. On OS/400, you must be running under QSH.
3. Ensure the installation file is executable, for example:
   ```
   chmod 755 iway80.jar
   ```
4. Start the installation by executing:
   ```
   java -jar iway80.jar
   ```
   The installation initializes, which may take some time. When initialization is complete, a Welcome prompt appears:
   
   Welcome to the iWay 8.0.4 Service Manager Setup Wizard. This setup program installs iWay 8.0.4 Service Manager on this system.

   8.0.4

   Setup is using Windows 10 10.0 x68 Settings
   File encoding is Cp1252, XML encoding is UTF-8

   Copyright (C) 2003-2020, iWay Software/Information Builders, Inc.
   All Rights Reserved.

   Press 1 for Next, 2 to Cancel [1]

   **Note:** If the installation does not launch, ensure that `/JAVA_HOME/bin` is in your `$PATH` variable. See *Java Requirements* on page 20 for information on setting up your Java environment.

5. Press Enter to continue.
   A license agreement appears.

6. Review the agreement and press Enter until you see the following prompt:
   ```
   Please choose from the following options:

   [ ] 1 - I accept the terms of the license agreement.
   [X] 2 - I do not accept the terms of the license agreement.

   To select an item enter its number, or 0 when you are finished: [0]
   ```
   If you accept the terms, type 1 and press Enter.
   The prompt repeats showing the new value.
[X] 1 - I accept the terms of the license agreement.
[ ] 2 - I do not accept the terms of the license agreement.

To select an item enter its number, or 0 when you are finished: [0]

8. Type 0, then press Enter to continue.

The Customer Information prompts appear:

Customer Information

Please enter your information.

User Name: [unknown]

9. Type a user name for the product registration and then press Enter. This user name does not affect product operations.

Company Name: [unknown]

10. Type your company name for the product registration and then press Enter.

Site Code: [nnnx.nn] or q to quit: [unknown]

11. Type your site code or press q to quit, and then press Enter.

   **Important:** The site code is a unique company identifier associated with a specific machine. Be sure to type a valid and accurate site code in this step because this entry is used when generating your permanent license during the registration process. If you need assistance with the site code, contact your Information Builders sales representative.

   The Navigation prompt appears:

   Press 1 for Next, 2 for Previous, 3 to Cancel or 4 to Redisplay [1]

12. Press Enter to continue.

The installation directory prompt appears:

Destination Location

Setup will install iWay 8.0.4 Service Manager in the following location. Setup allows users to enter a different location.

Directory: [/iway/install/iWay8]

**Note:** On Linux systems, you may need to change the default directory that appears. The default directory normally should be named iWay8, but some Linux environments do not follow this default.
13. Specify where to install iWay on your system and then press Enter. Ensure this is a directory to which you have write access.

The navigation prompt appears.

Press 1 for Next, 2 for Previous, 3 to Cancel or 4 to Redisplay [1]

14. Press Enter.

The following prompt for iWay adapter selection appears.

iWay Adapters

iWay 8.0.4 Service Manager is packaged with a subset of iWay adapters. From the list below select the adapter(s) you want to install with your configuration.

[ ] 1 - Technology Connectors
[ ] 2 - Application Adapters
[ ] 3 - eBusiness Components
[ ] 4 - Legacy Adapters
[ ] 5 - Queuing Connectors
[ ] 6 - Protocol Connectors
[ ] 7 - IOT Connectors

Enter a number, (a)ll, (n)one or 0 to finish: [0]

Note: An X next to an adapter category indicates one or more adapters are selected.

15. Type the number of the adapter you want to install and press Enter.

Note: You can only type one adapter number at a time.

16. When you are finished with your selections, type 0 and press Enter.

You are returned to the iWay Adapters selection prompt.

iWay Adapters

iWay 8.0.4 Service Manager is packaged with a subset of iWay adapters. From the list below, select the adapter(s) you want to install with your configuration.

[ ] 1 - Technology Connectors
[ ] 2 - Application Adapters
[ ] 3 - eBusiness Components
[ ] 4 - Legacy Adapters
[ ] 5 - Queuing Connectors
[ ] 6 - Protocol Connectors
[ ] 7 - IOT Connectors

Enter a number, (a)ll, (n)one or 0 to finish: [0]
17. Type 0 and press Enter.
   The navigation prompt appears.
   Press 1 for Next, 2 for Previous, 3 to Cancel or 4 to Redisplay [1]

18. Type 1 and press Enter to continue.
   The Extensions menu appears.

Extensions

iWay Service Manager comes with a set of additional components that can be used to extend standard functionality. From the list below, select the extension(s) you want to install.

[ ] 1 - Gateway (RVI)
[ ] 2 - Enterprise Index
[ ] 3 - LDAP High Water Mark Listener
[ ] 4 - RDBMS High Water Mark Listener
[ ] 5 - Hot backup
[ ] 6 - Compatibility Services
[ ] 7 - PGP Encryption Components
[ ] 8 - Security Developers Tools
[ ] 9 - Data Quality Service
[ ] 10 - Real-Time Data Replication
[ ] 11 - XQuery
[ ] 12 - Simple Network Management Protocol Agent (SNMP)
[ ] 13 - Command Scheduler
[ ] 14 - Java Scripting Engine
[ ] 15 - Schema Validation Services
[ ] 16 - Advanced XML Digital Signature
[ ] 17 - De-identification Services
[ ] 18 - Envoy
[ ] 19 - Open Rules Decision Management Integration
[ ] 20 - PDF Services
[ ] 21 - WebFOCUS support

Enter a number, (a)ll, (n)one or 0 to finish: [0]

19. Type the number of the extension you want to install and press Enter.
   **Note:** You can only type one extension number at a time. When you press Enter, the Extensions menu reappears with your selection checked.

20. When you are finished with your selections, type 0 and press Enter.
   The navigation prompt appears.
   Press 1 for Next, 2 for Previous, 3 to Cancel or 4 to Redisplay [1]

21. Type 1 and press Enter to continue.
   You are prompted for the iWay port assignments. You can accept the default value listed with each prompt or type a new value appropriate for your installation, and press Enter.
Resource Assignments

Setup allows users to customize the default port numbers used within the installed iWay 8.0.4 Service Manager configuration.

Console Port [9999]

SOAP Port [9000]

Envoy Port [9001]

Press 1 for Next, 2 for Previous, 3 to Cancel or 4 to Redisplay [1]

*Note:* The Envoy Port option is displayed only if *Envoy* is selected in the Extensions menu.

22. Type 1 and press Enter to continue.

If you selected *Envoy* in the Extensions menu, then you are prompted for Sentinel Registration. You can accept the default value listed with each prompt or type a new value appropriate for your installation, and press Enter.

Sentinel Registration

This version of Service Manager can be remotely managed by iWay Sentinel. Enter the following to enable self-registration with Sentinel.

Host: [localhost]

Port: [8080]

Userid: [admin]

Password: [admin]

Press 1 for Next, 2 for Previous, 3 to Cancel or 4 to Redisplay [1]

23. Type 1 and press Enter to continue.

A notice and summary are displayed to inform you that you have provided enough information to start copying files.

Start Copying Files

Setup has enough information to start copying the program files. If you want to review or change any settings, now is the time to do so.

*iWay 8.0.4 Service Manager will be installed in the following location:*

/iway/install/iWay8
The base configuration will be installed with the following settings:
- Default console userid is set to iway
- Default console password is set to iway
- Default console port is set to 9999
- Default SOAP port is set to 9000
- Default ENVOY port is set to 9001
- Register with Sentinel as admin, admin@localhost:8080
- Site Code is 9999

Press 1 for Next, 2 for Previous, 3 to Cancel or 4 to Redisplay [1]

24. Press Enter to start the installation.

The Setup Status information is displayed.

Setup Status

Setup is configuring your new software installation.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>25%</td>
<td>50%</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
100%      

Once installation has finished, a message appears indicating that the setup is complete.

Setup Completes

Setup has finished installing iWay 8.0.4 Service Manager on your system.

Press 1 to Finish Setup [1]

25. Proceed to Post-Installation Topics and Tasks on page 46 for information on customizing the iWay Service Manager profile and other settings.

Procedure: How to Install iWay Service Manager on UNIX, OS/400, and z/OS Platforms Using Silent Mode

On UNIX/Linux, installing as root is not recommended. Creating a dedicated iWay user ID and group with appropriate rights is preferable.

On OS/400, your user ID must have *ALLOBJ, *JOBCTL, and *SAVSYS authority.

On z/OS, the iway80.jar file must be placed in the USS file system.

1. Use FTP in binary mode to transfer the iway80.jar installation file to your UNIX or OS/400 machine. For OS/400, place this file in a directory under QSH.

2. Navigate to the directory containing the installation file. On OS/400, you must be running under QSH.
3. Ensure the installation file is executable, for example:
   
   ```
   >chmod 755 iway80.jar
   ```

4. To review a summary of options that are supported by the Java installer, type the following command:
   
   ```
   >java -jar iway80.jar -help
   ```

   The following is a summary of the key options that should be used when performing a silent installation for iSM.

   Usage: run [[-s file] [-r file]] [-f]

   -s file       save all responses to the named file
   -r file       replay responses from the named file
   -f            overwrite existing files in the install directory

   The -s option is used to create a response file, which records all of the settings that are specified during an iSM installation using the Java installer.

   The -r option is used to replay the settings that were recorded in the response file during a silent (unattended) iSM installation.

5. Start the iSM installation by typing the following command:
   
   ```
   java -jar iway80.jar -s my_response_file
   ```

   where:

   my_response_file

   Is the name of the response file that is created. By default, the response file will be saved in the same directory where the iway80.jar file is located.

6. Complete a normal iSM installation using the Java installer. The response file records all of the settings that you specified during the installation. You can edit and customize the settings in the generated response file according to your requirements.

   After you have created your response file, you can run the iSM installation in silent (unattended) mode. Only major releases of iSM can be run in silent (unattended) mode.

7. Copy the response file to the location where you want to install iSM installation using silent (unattended) mode.

8. Navigate to the location where the response file is located and start the iSM installation to run in silent (unattended) mode by typing the following command:
   
   ```
   java -jar iway80.jar -r my_response_file
   ```
where:

\[\text{my\_response\_file}\]

Is the name of the response file that you want to reference and use for the iSM installation in silent (unattended) mode.

**Note:** You can also use the `-f` option to overwrite existing files in the installation directory, for example:

```
java -jar iway80.jar -r my_response_file -f
```

The iSM installation runs automatically in the background without any user interaction.

## Installing iWay 8.0 Service Manager With iWay 5.x, 6.x, or 7.x Service Manager

iWay 8.0 Service Manager (SM) can be installed onto a system that already has iWay 5.x, 6.x, or 7.x SM installed. However, there is a consideration that should be noted. For all machines and operating systems, it is important that you choose an iWay 8.0 SM installation directory that is different from the existing iWay 5.x, 6.x, or 7.x directory.

## Post-Installation Topics and Tasks

After installation, review the following topics and perform the steps needed for your environment.

## iWay 8.0 Service Manager Directory Structure

After installation, an `iway8` directory is created and contains the following subdirectories:

- **bin**
  - Contains files required to start and access iWay Service Manager.

- **config**
  - Contains configuration files for the base server and the application folders for each deployed application.
  - User IDs used to run iWay components must have full permissions to the config directory.
**Note:** You can run more than one instance of Service Manager by defining multiple configurations using the iWay Service Manager Administration Console. The iWay Service Manager Administration Console is introduced in *Configuring iWay Components* on page 77. By default, two configurations are defined, base and raw. The base configuration sets up everything you require to get started and includes SOAP and HTTP listeners. The raw configuration contains no listeners and provides a useful template to define additional configurations.

**etc**

Contains documentation, miscellaneous tools, and files to configure additional components. Subdirectories of etc also contain Extensions and additional tools.

**lib**

Contains adapters, drivers, and other files used by iWay components. All iWay components must access this directory and your library path must be set to this location. For details, see *Environment Variables* on page 50.

**Installing Third-Party Jar Files**

Many protocols that iWay Service Manager supports require the presence of third-party jar files. Specific requirements are documented for each protocol in the *iWay Service Manager Protocol Guide*.

The j2ee.jar file is required for a number of iWay Service Manager features and functions across protocols.

J2EE is not a component that is normally distributed with JRE. If you are compiling an iSM exit that requires J2EE, Oracle provides a skeleton version that does not contain any method code.

The actual .jar file that contains the appropriate method code is licensed and supplied by the vendor of an application server (for example, Glassfish, JBOSS, and so on). The Apache Tomcat web server does not provide a J2EE, so you must locate the appropriate executable code. For example, you may need the mail.jar file from Oracle if you are using iSM mail systems.

There is a j2ee.jar file that is distributed by Oracle, which can be used.

Download and install the software according to the instructions from the vendor and copy the j2ee.jar to [IWAYHOME]/lib.

For more information about your specific platform, contact iWay Customer Support.
Installing Ebix Archives

Ebix archives are not packaged with the iWay 8.0 Service Manager installation. However, Ebix metadata is available for download from the following website, which is hosted and maintained by iWay Software and Information Builders:

http://techsupport.ibi.com

iWay TCP Ports

iWay Service Manager uses two TCP ports for system communication. The following table lists the function and default values of these ports.

<table>
<thead>
<tr>
<th>Listener</th>
<th>Default Port</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Console</td>
<td>9999</td>
<td>HTTP listener for the iWay Service Manager Administration Console.</td>
</tr>
<tr>
<td>SOAP</td>
<td>9000</td>
<td>SOAP listener for iBSP.</td>
</tr>
</tbody>
</table>

During iWay SM installation, you can select values other than the default for either or both of these ports (for security or in case of a port conflict).

Under certain circumstances, it may be necessary to change the iWay Service Manager system port assignments after installation is completed. This section describes the procedures to change the Console and SOAP and iBSP port assignments.

Procedure: How to Change the iWay Service Manager Administration Console Port Assignment

The iWay Service Manager Administration Console port assignment can be modified by accessing the console and navigating to Console Settings.

Procedure: How to Set Up the SOAP Listener to Follow the ibse-port Special Register

The SOAP listener port is set to the integer value literal entered during iWay Service Manager installation, with the default being 9000. This is not ideal for situations where the SOAP port will be changed after installation, since the ibse-port Special Register and the SOAP port must always be changed in tandem.

1. Access the iWay Service Manager Administration Console.
2. Click Registry in the top pane, and then click Listeners in the left pane.
   The Listeners pane opens.
3. Click Add.
   The Select listener type pane opens.

4. Select the SOAP1 listener from the Type drop-down list and click Next.

5. In the Port Property Value field, enter \texttt{SREG(ibse-port)}.
   The value you are replacing should be an integer port number, its value being 9000 if the default was accepted during installation. Do not change any of the other properties of the SOAP1 listener.

6. Click Finish to save the change. The SOAP port will not change until the ibse-port Special Register is updated (see \textit{How to Set the ibse-port Special Register} on page 49) and iWay Service Manager is restarted.

   \textbf{Note:} You only need to add the ibse-port Special Register in the SOAP1 Listener Port field once. After this has been set up, future changes to the ibse-port Special Register will automatically update the iWay Service Manager SOAP port.

\textbf{Procedure:} \textit{How to Set the ibse-port Special Register}

Once you have successfully completed setting up the SOAP listener value to follow that of the ibse-port Special Register, changing the ibse-port register will automatically change the iWay Service Manager SOAP listener port, as well.

1. Navigate to the iWay Service Manager home page by clicking the Server menu link in the upper-left corner.

2. Select the server configuration you want to change from the Managed Server drop-down list. In most cases, this will be the single, master configured server named base.
   The console refreshes with the General Properties of the selected server.

3. In the left pane, select Register Settings.
   A list of special registers appears in the right pane.

4. Click on the link for ibse-port to display its Special Register Definition information.

5. In the Value field, enter a new value for the ibse-port register.
   \textbf{Note:} This value must be an integer, within the range of valid port numbers, and currently not used by any other process on the machine. If necessary, contact your system administrator for assistance in choosing an available TCP port.

6. Click Update to accept the change.
   The Register Settings page is displayed so you can confirm the new ibse-port value.
   As with all iWay Service Manager Special Register settings, you must restart the server for the new ibse-port setting to take effect.
7. To restart the server, click Restart in the upper-right of the console.

The following message appears in your browser:

Server's master configuration is restarting...

When restart is complete, the iWay Service Manager Administration Console home page appears.

Environment Variables

After installation, environment variables are required to use iWay adapters and components. The variables can be set in your profile.

- On Windows platforms, 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, OS/400, and z/OS platforms, you must manually set the appropriate environment variables for all user IDs that run iWay components.

  **Note:** If you plan to run multiple installations of iWay components, the environment variables must be set up appropriately for each installation.

**Procedure:** How to Set Environment Variables on UNIX Systems

The following environment variable settings are required to use iWay Service Manager and iWay adapters and components on a UNIX system:

1. The following variable must be defined and set to the location of the iWay8 directory. The commands can be issued interactively or added to the iWay user .profile file using a text editor.

   \[\text{IWAY8}\]

   For example:

   \[\text{IWAY8=\text{/home/userID/iWay8/}}\]

   \[\text{export IWAY8}\]

   **Note:** Be sure to include the trailing slash (/).

2. The PATH variable must contain the iWay8/lib directory, for example:

   \[\text{PATH=$PATH:/>home/userID/iWay8/lib}}\]

   \[\text{export PATH}\]

3. On UNIX, the shared library variable must contain the iWay8/lib directory. This variable varies depending on your platform. The following table lists platforms and their associated variables.
### Configuring iWay Service Manager Service as a Separate Process

By default, the `iwsrv` executable program installs the iSM Windows service to run out of process.

For more information on the `iwsrv` executable program, see the *iWay Service Managers User's Guide*.

### Uninstalling iWay Service Manager

If you wish to remove iWay from your system, do the following:

1. Copy any files you wish to save out of the iWay directory structure. Most user files are stored with the configuration, for example:
   
   ```
   C:\Program Files\iWay8\config
   ```

2. Stop Service Manager if it is running.

3. If you have deployed iWay components to an Application Server, undeploy them.

4. Uninstall components using the provided utility.

   - On Windows platforms, open the *Control Panel* and then use the *Add or Remove Programs* option to remove iWay components. The main uninstall component is listed as:
     
     ```
     iWay 8.0
     ```

   You can also delete any iWay installation files in subdirectories of the following:

   ```
   C:\WINNT\Downloaded Installations\  
   C:\WINDOWS\Downloaded Installations\  
   ```
If you ran the deploy tool to configure components for an application server, run its uninstall utility as well, for example:

C:\Program Files\iWay8\etc\uninstall\deploy\uninstaller.exe

- On UNIX, OS/400, and z/OS platforms, delete the iWay directories and remove the environment variables.

### Registering iWay Software

A default license file, provided when you install iWay 8.0 SM, allows you to use all features of iWay, including adapters, for 90 days. In order to receive a permanent license file that allows you to use the iWay features you purchased beyond this trial period, you must register your software.

**Note:** Once you receive your permanent license, you will also receive a 90-day trial extension for all non-purchased iWay features.

**Tip:** To view the features you have purchased, log onto the iWay Service Manager Administration Console and click **Licenses** in the top-right corner. The features that are currently in effect are displayed.

An iWay software license is associated with a specific site and a specific machine. When you register your software, your license file is generated based on information provided during the installation (Site Code) and registration (email address). Therefore, the site code you provide during installation must be accurate. The license files are sent to you through email. The process validates the email address supplied during registration and matches it to the domain name associated with the site code. License files cannot be sent to other domain names.

iWay 8.0 SM uses a software-based license management technology that verifies that the site code is valid and that the software has been activated on the eligible machine(s).

The license file (license.xml) contains one or more license keys required to activate specific features of iWay 8.0 SM. Do not attempt to edit this file.

### When Should You Register iWay Software

You must register iWay software for each machine on which iWay is installed. The registration process will generate a separate license file for each specific machine.

You must re-register iWay software when you:

- Install a new major release of iWay.
- Install iWay in a new directory on the same machine.
- Upgrade or replace the computer where iWay resides.
- Replace the operating system of the computer where iWay resides.

### How to Register iWay Software

There are three methods available to register iWay 8.0 SM. If you have email or Internet access from the machine where the iWay software resides, then you can use the iWay Service Manager Administration Console to register through either email or the Internet. If you do not have email or Internet access from the machine where the iWay software resides, we provide an alternate method of registration.

This section explains how to register your software using the three methods.

**Procedure:** How to Register iWay Using the iWay Service Manager Administration Console

To register iWay using the iWay Service Manager Administration Console:

1. Start iWay Service Manager and log on to the iWay Service Manager Administration Console if you have not already done so.
2. At the top-right of the iWay Service Manager Administration Console, click **Licenses**.
   
   A page appears with information about your current licenses.
3. Click the **register the software** hyperlink.
   
   A registration form is displayed.
4. Provide the requested information.
5. Click either **Web** or **EMail**.
   
   - **Web** sends the form using HTTP.
   - **EMail** opens your default email client and creates an email with the form contents in the message body. Use the email client Send button to submit the registration form.
6. Once the registration request is processed, you will receive an email with a license file (license.xml) within 72 hours containing the license key(s) for your site and details on how to install the file.
7. Copy the license file onto your computer and place it in the root directory of your iWay 8.0 SM installation.
   
   **Note:** iWay Service Manager must be stopped at this stage.
8. Start iWay Service Manager to activate the registration.
**Procedure:** How to Register iWay Using an Alternate Method

If you do not have email or Internet service on the machine where iWay is installed, use the following steps to register the iWay software.

1. Send the install.xml file, located in the `iWay8\bin` directory, to feedback@iwaysoftware.com with the following information in the body of the email:
   - Company Name
   - Your Full Name
   - Email Address
   - City, Province, Postal Code, and Country
   - Phone Number

   Once the registration request is processed, you will receive an email at the address you provided within 72 hours that contains the license file (license.xml) and details on how to install the file.

2. Stop iWay Service Manager.

3. Copy the license file onto your computer and place it in the root directory of your iWay 8.0 SM installation.

4. Start iWay Service Manager to activate the registration.

**Registration Help**

If you do not receive your license file email within five business days, verify that you provided the correct site code and email address (either by registering from the machine on which iWay resides or sending it in the alternate registration method). If you are sure you provided accurate information, contact iWay Customer Support and provide the following information:

- Site Code
- Host name
- Email address used to register the software

If you have licensing issues after receiving your license file, contact iWay Customer Support and provide them with the following information:

- License file you received
- The install.xml file located in the `iWay8\bin` directory
Any license error messages found in the iWay Service Manager Administration Console

iWay Service Manager Configuration Steps

Now that you have installed and registered iWay 8.0 SM, review the following configuration steps for iWay components.

1. Prepare your adapter by reviewing the information in Preparing Adapters on page 57.
2. Start iWay Service Manager as explained in Configuring iWay Components on page 77.
3. To use an application server component like Servlet iBSP, prepare and deploy the component as explained in Configuring iWay Components on page 77.
4. Configure a version of iWay Explorer as explained in Configuring iWay Explorer on page 93.
5. To change the default iWay Service Manager repository or optionally configure a database repository, see Configuring the iWay Repository on page 97.
6. Refer to the documentation for your installed adapters and extensions.
Preparing Adapters

This section explains steps that are needed after installing iWay, but before using adapters.

In this chapter:

- Preparing Adapters

Preparing Adapters

Some iWay adapters require additional steps or files before they can be used. Your adapter may not be available and may not appear in iWay Explorer until these steps are performed. In many cases, this involves copying third-party libraries or JDBC drivers into the iWay \lib directory, for example:

`C:\Program Files\iway8\lib`

After performing the steps for your adapter, you will need to restart Service Manager if it is currently running. If you deploy components to an application server, you will need to restart the application server.

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

Review the topics that follow. If you do not see your adapter listed, check the iWay website or contact a Customer Service representative.

Legacy Mainframe Adapters With iWay Server Requirement

Access to the following legacy mainframe data sources is provided through an iWay (EDA) Full-Function Server component that must be installed and configured on the mainframe.

- Adabas
- BULL GCOS
- Datacom
Connecting to and from these data sources are accomplished by first connecting to the iWay Server. Adapters for other legacy data sources do not require an iWay Server.

To configure legacy data adapters for use with iWay 8.0 SM:

1. Install an iWay Server on the mainframe containing the data sources you wish to access.

   For information on iWay Server installation and configuration, see the WebFOCUS and iWay Server Installation manual and refer to the Server for z/OS chapter.

2. Configure the iWay Server to access the data source using the iWay Full-Function Server Administration Console. The Administration Console help explains the required steps. These steps also appear in the Data Adapter Administrator User's Guide and the Server Administration for UNIX, Windows NT, OpenVMS, OS/400, & z/OS manual.

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 catalog so the procedures are accessible from iWay Explorer.

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

**Connect Direct**

The iWay Adapter for Connect Direct requires the following library files:

- CDJAI.jar. The CDJAI.jar library file is used to implement Java APIs.
- JMS.jar
ESRI (GEOLoad)

This section provides the supported versions and required library files for the iWay Technology Adapter for ESRI (GEOLoad).

Note: The iWay Technology Adapter for ESRI (GEOLoad) is supported only on Windows platforms.

Supported Versions

- ArcSDE Version 9.0, 9.2, and 9.3 (For ESRILOAD)
  
  Note: ArcSDE is a part of ArcGIS in Version 9.2 and 9.3. However, ArcSDE is still only supported through the ArcSDE API. It is not supported through any other API, including ArcObjects.

- GDT Matchmaker Version 6 (For Geocoding)

Required Library Files

ArcSDE Version 9.0 (For ESRILOAD):

- jpe90_sdk.jar
- jsde90_sdk.jar

  Copy these files into the iWay \lib directory, for example:

  C:\Program Files\iway8\lib

ArcSDE Version 9.2 (For ESRILOAD):

- jsde92_sdk.jar
- jpe92_sdk.jar
- icu4j_3_2.jar
- concurrent.jar

  Copy these files into the iWay \lib directory, for example:

  C:\Program Files\iway8\lib

ArcSDE Version 9.3 (For ESRILOAD):

- jsde_sdk.jar
- jpe_sdk.jar
Preparing Adapters

- icu4j_3_2.jar
- concurrent.jar

Copy these files into the iWay \lib directory, for example:

C:\Program Files\iway8\lib

GDT Matchmaker Version 6 (For Geocoding):

- mmaxwus3.dll
- usgeo.dll
- usattr.dll

On Windows platforms, these files must be copied into the system32 directory, for example:

C:\WINNT\system32

or

C:\WINDOWS\system32

**FIX**

The iWay Integration Solution for FIX requires the B2BITS® FIX Engine.

The B2BITS® FIX Engine is packaged as an archive (B2Bits_jar.zip) and can be downloaded from:

http://techsupport.informationbuilders.com/

For more information on installing the B2BITS® FIX Engine and configuring the iWay Integration Solution for FIX, see the iWay Integration Solution for FIX User’s Guide.

**J.D. Edwards EnterpriseOne (OneWorld)**

J.D. Edwards EnterpriseOne (OneWorld) Java-based ThinNet API is required. This is normally distributed as JAR files with the J.D. Edwards installation media. These files may vary depending on the J.D. Edwards release. They usually consist of the following:

For J.D. Edwards OneWorld B7333 (XE) and B7334 (ERP8):

- Kernel.jar
- Connector.jar
For EnterpriseOne 8.10:

Kernel.jar  
Connector.jar  
jdeutil.jar  
log4j.jar  

For EnterpriseOne 8.11:

Base_JAR.jar  
JdeNet_JAR.jar  
System_JAR.jar  
Connector.jar  
log4j.jar  

For EnterpriseOne 8.12 (Tools Release 8.96.2.0):

Base_JAR.jar  
JdeNet_JAR.jar  
System_JAR.jar  
Connector.jar  
EventProcessor_EJB.jar  
EventProcessor_JAR.jar  
log4j.jar  

For EnterpriseOne 8.12 (Tools Release 8.97.1.2 and 8.97.2.0):

Base_JAR.jar  
JdeNet_JAR.jar  
System_JAR.jar  
Connector.jar  
EventProcessor_EJB.jar
Preparing Adapters

EventProcessor_JAR.jar
commons-httpclient-3.0.jar
jmxri.jar
ManagementAgent_JAR.jar
log4j.jar

For EnterpriseOne 9.0 (Tools Release 8.98):
Base_JAR.jar
JdeNet_JAR.jar
System_JAR.jar
Connector.jar
EventProcessor_EJB.jar
EventProcessor_JAR.jar
commons-httpclient-3.0.jar
jmxri.jar
jmxremote_optional.jar
ManagementAgent_JAR.jar
log4j.jar

For EnterpriseOne 9.10 (Tools Release 9.1.0.4):
Base_JAR.jar
JdeNet_JAR.jar
System_JAR.jar
Connector.jar
EventProcessor_EJB.jar
EventProcessor_JAR.jar
commons-httpclient-3.0.jar

jmxremote.jar

commons-logging.jar

jmxri.jar

jmxremote_optional.jar

ManagementAgent_JAR.jar

log4j.jar

**Note:** These files are located in the `\system\classes` folder on the JDE Client and the Deployment Server.

You must copy the JAR files into the iWay `\lib` directory, for example:

```
C:\Program Files\iway8\lib
```

**J.D. Edwards WorldSoft**

The DB2/400 JDBC driver (`jt400.jar`) is required. Copy the driver into the iWay `\lib` directory, for example:

```
C:\Program Files\iway8\lib
```

**LDAP**

Before installing iWay Application Protocol Adapter for LDAP, iWay Service Manager (iSM) Version 7.0 or higher must be installed on a system that is running Java 2 Standard Edition (J2SE™) JDK 1.8 or higher. For more information, see *Installing iWay 8.0 Service Manager Components* on page 19.

**Required Installation Files**

This section lists and describes the required installation files for iWay Application Protocol Adapter for LDAP.

- **iwldap.jar.** Exposes design time and runtime interfaces for the iWay Application Protocol Adapter for LDAP.
Idapbp-1.0.jar.

The following file is required for the operation of the LDAP adapter, but is considered optional for a Java VM installation:

dnsns.jar. Used for the InetAddress wrapper of the JNDI DNS Provider. This file is located in the following directory:

`jdk_home\jre\lib\ext`

where:

`jdk_home`

Is the root installation directory for your JDK. For example:

`c:\jdk1.8.0_45\jre\lib\ext\dnsns.jar`

The iWay Application Protocol Adapter for LDAP supports only Simple Bind and Transport (SSL) security. For more information about advanced LDAP security implementations, see the Java Cryptography Architecture Reference Guide on the following Oracle Java web site:

`http://docs.oracle.com/javase/6/docs/technotes/guides/security/crypto/CryptoSpec.html`

Microsoft CRM 2011

All required .jar library files for the iWay Application Adapter for Microsoft Dynamics 2011 CRM On-Premises are provided in the iWay \lib folder.

**Note:** The iWay Application Adapter for Microsoft Dynamics CRM (Compatibility Mode) cannot be used with Microsoft CRM 2013.

Microsoft .NET

The iWay Technology Adapter for Microsoft .NET allows you to expose Microsoft .NET assemblies without requiring any additional custom attributes or wrapper code.

Microsoft .NET Versions 2.0 - 4.5 are supported by the adapter.

In iWay Service Manager (iSM), the iWay Technology Adapter for Microsoft .NET supports 32- and 64-bit JVM environments. The required components for both environments are automatically installed. During the iSM installation process, ensure that Microsoft .NET is selected under the Technology Adapters category in the Adapter Selection pane.
Required Installation Files

The iSM installation process installs the following adapter components in the `<ism_home>`\lib directory:

- **iwdotnet.jar.** Exposes design time and runtime interfaces for the iWay Technology Adapter for Microsoft .NET

- **iwdotnet32.dll** or **iwdotnet64.dll.** Export the JNI methods that are required by the Java classes, which implement the adapter and act as a common language runtime host.
  
  **Note:** Both versions of the iwdotnet DLL file are shipped with the adapter. Depending on the JVM, the adapter will select the appropriate DLL file to load. A 64-bit JVM can load 32- and 64-bit assemblies. A 32-bit JVM can only load 32-bit assemblies no matter the platform type (32- or 64-bit).

- **iwclr.dll.** Contains the functionality to explore assemblies during design time, load and invoke classes and methods at runtime, and implement the optional custom attributes used for assembly annotation.

Sample Files

The iWay Technology Adapter for Microsoft .NET installs the following sample .NET assemblies in the `<ism_home>`\etc\samples\dotnet\bin directory:

- Complex.dll
- Math.dll
- Misc.dll
- Scriptor.dll
- SubComplex.dll

These Microsoft .NET assemblies can be used for adapter testing and verification purposes.

MySAP ERP (SAP Java Connector Version 3.x)

The iWay Application Adapter for mySAP ERP uses the SAP Java Connector (JCo) to communicate with SAP ABAP system targets. The following protocols and document styles are supported:

- SAP ALE Intermediate Document (IDOC)
- Remote Function Call (RFC)
Business API (BAPI)

No other connection methods and interface types are supported.

The official supported platform for the iWay Application Adapter for mySAP ERP is SAP Java Connector (JCo) Version 3.nn for Java Version 1.8nn. In this section, nn refers to release specifications. For a list of supported platforms and exact library names, refer to SAP Note 1077727. Use the SAP note to ensure the JVM and the JCo are compatible for the selected hardware and software platform.

Not all SAP supported platforms are supported by iWay Service Manager. For more information, check the list of iWay supported platforms to ensure compatibility.

The SAP JCo library files must be downloaded from the SAP Service Marketplace. A valid SAP support ID is required to access the SAP Service Marketplace. For assistance, contact your SAP administrator. For more information on installing, configuring, and verifying the iWay Application Adapter for mySAP ERP, see the iWay Application Adapter for mySAP ERP User’s Guide.

To install iWay Application Adapter for mySAP ERP (SAP JCo 3.0), ensure that MySAP JCO 30 is selected under the Application Adapters category in the Adapter Selection pane during the iSM installation process.

The iSM installation process automatically adds the iwmysap30.jar file to the <ism_home>\lib directory.

Required SAP Library Files

This section lists the SAP library files that are required by the iWay Application Adapter for mySAP ERP (SAP JCo 3.0).

<table>
<thead>
<tr>
<th>Platform</th>
<th>SAP Library Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows</td>
<td>sapjco3.jar</td>
</tr>
<tr>
<td></td>
<td>sapjco3.dll</td>
</tr>
<tr>
<td>Linux/Solaris/OS400</td>
<td>sapjco3.jar</td>
</tr>
</tbody>
</table>

Preparing Adapters
## Installing the Required SAP Library Files

This section describes the specific directories where the library files must be copied for the iWay Application Adapter for mySAP ERP (SAP JCo 3.0).

### Note:
When the sapjco3.jar library file is added to the `<ism_home>\lib` folder, iWay Service Manager will automatically add this .jar file to the CLASSPATH environment variable at runtime.

The sapjco3.jar library file must always be added to the environment variable locating the system load library path, and must be the first entry in the list of library paths.

### Windows

Copy the sapjco3.jar and sapjco3.dll library files to the following directory:

```
<ism_home>\lib
```

where:

```
<ism_home>
```

Is the root installation directory where iSM is installed (for example, C:\Program Files \iway8).

The sapjco3.dll library file will be added to the PATH by iWay Service Manager at runtime if it is located in the `<ism_home>\lib` folder. Do not install this file into the Windows\System32 folder as this file is not compatible with other versions of the library file and may cause issues if an instance of SAP GUI or other program is found on the system.

### Linux

Copy the sapjco3.jar and libsapjco3.so library files to the following directory:

```
<ism_home>/lib
```
where:

<ism_home>

Is the root installation directory where iSM is installed (for example, /iway/install/iway8).

After installing the libsapjco3.so library file, this file must be added to the path indicated by the LD_LIBRARY_PATH environment variable and be the first library in the list.

**HP-UX**

Copy the sapjco3.jar and libsapjco3.sl library files to the following directory:

<ism_home>/lib

where:

<ism_home>

Is the root installation directory where iSM is installed (for example, /iway/install/iway8).

After installing the libsapjco3.sl library file, this file must be added to the path indicated by the SHLIB_PATH environment variable and be the first library in the list.

**AIX**

Copy the sapjco3.jar and libsapjco3.so library files to the following directory:

<ism_home>/lib

where:

<ism_home>

Is the root installation directory where iSM is installed (for example, /iway/install/iway8).

After installing the libsapjco3.so library file, this file must be added to the path indicated by the LIBPATH environment variable and be the first library in the list.

**IBM iSeries**

Consult SAP Note 1269638 on configuring the SAP JCo 3.0 on IBM iSeries. The default JVM provided cannot be used with JCo 3.0. SAP Note 1269638 has more information on this topic.

**Solaris**

There are different packages for different architectures (SPARC, X64, INTEL, or AMD 64 bit processor). Locate and install the correct package. Add the library file to the path indicated by the LD_LIBRARY_PATH environment variable and ensure the file is the first library in the list.
Oracle Applications (E-Business Suite)

Oracle JDBC driver (ojdbc6.jar) is required by the iWay Application Adapter for Oracle E-Business Suite. You must copy this .JAR file into the iWay \lib directory, for example:

C:\Program Files\iway8\lib

To use iWay Concurrent Program request functionality, you must install and configure Oracle Client on the Oracle database that supports Oracle E-Business Suite.

Installing the iWay Oracle API Wrapper

If you want to use the iWay Application Adapter for Oracle E-Business Suite to interact with Oracle APIs (Stored Procedures and Packages), you must install the iWay Oracle API wrapper. For more information, see the iWay Application Adapter for Oracle E-Business Suite User’s Guide.

Installing the GETCLOB Procedure

The GETCLOB procedure must be installed under the schema the adapter uses to run Oracle APIs. For more information, see the iWay Application Adapter for Oracle E-Business Suite User’s Guide.

PeopleSoft

This section indicates which combination of releases and system platforms are supported for the iWay Application Adapter for PeopleSoft.

<table>
<thead>
<tr>
<th>PeopleSoft Platform</th>
<th>PeopleSoft Release</th>
<th>PeopleTools Release Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>All PeopleSoft supported platforms</td>
<td>8.1</td>
<td>8.16.03 - 8.22</td>
</tr>
<tr>
<td>(Windows, Solaris, AIX, Linux, and HP-UX)</td>
<td>8.4</td>
<td>8.40.05 - 8.52</td>
</tr>
</tbody>
</table>

Note that the adapter goes by the PeopleTools release and not by the PeopleSoft application version.

Note: You must connect with only one version of an EIS at a given point in time. You cannot connect to two different versions of PeopleTools using the adapter. Do not use two versions of an EIS library file simultaneously. You also cannot use the library files for two different versions in the \lib folder.


**Required Library Files**

This section lists the library files that are required by the iWay Application Adapter for PeopleSoft.

- **PeopleSoft Java Object Adapter file (psjoa.jar)**
  
  This file provides a low-level interface between client applications and PeopleSoft. This file is provided with PeopleSoft in the `<PeopleSoft_Home>/web/PSJOA` directory. The `psjoa.jar` file is different for every version of PeopleSoft. When you upgrade your PeopleTools release, ensure that you copy the `psjoa.jar` file for the new release into the `<iWAY_Home>/lib` directory and restart all components.

- **pstools.properties**
  
  This file is required for PeopleTools 8.1x. This file belongs in the `<PeopleSoft_Home>/web/jmac` directory.

- **PeopleSoft Generated Java APIs**
  
  For more information on generating the Component Interface Java APIs, see the *iWay Application Adapter for PeopleSoft User’s Guide*.

All the library files for the PeopleSoft adapter must be copied to the specific directory, such as `<iWAY_Home>/lib`.

**RDBMS**

iWay Technology Adapter for RDBMS connects iSM to various database engines that have an available JDBC compliant driver from the database or third party vendor. Generally, the JDBC driver should match the database version as well as the version of the JVM that is hosting iSM. Database versions that have reached the end of their vendor supported lifecycle are no longer supported by iSM and the iWay Technology Adapter for RDBMS.

All JDBC drivers are installed in the `/lib`. For example:

- **On Windows:**
  
  `iway8\lib`

- **On UNIX (for example, Linux and AIX):**
  
  `$IWAYHOME/lib`
DB2

iSM requires a class 4 DB2 JDBC driver to access functionality database and data types. Currently, the following driver versions are required:

- Version 9.4.7 and higher on AIX
  - db2jcc.jar
  - db2jcc_license_cu.jar
- Version 10.0 and higher on z/OS
  - db2jcc.jar
  - db2jcc_license_cisuz.jar
- Version 5R3 and higher on iSeries (AS 400)
  - jt400.jar

Informix

- Versions 11.5, 12.1, and higher on AIX
  - ifxjdbc.jar

  **Note:** Additional .jar files may be required depending on the specific environment.

Oracle

- Versions 10g, 11g, and higher
  - ojdbc6.jar

  The following .jar file is required when Oracle RAC is implemented:
  - ucp.jar

  The following .jar files are required when XMLType data types are used:
  - xdb6.jar
  - xmlparserv2.jar
Preparing Adapters

Microsoft SQL Server
- SQL Version 2012
  - sqljdbc42.jar

MySQL
- Version 5.5.8 and higher
  - mysql-connector-java-5.1.14-bin.jar

PostGres
- Versions 8.4 and 9.3 and later
  - postgresql-9.0-801.jdbc4.jar

Sybase
- Adaptive Server ASE V15.x
  - jconn4d.jar

SAP R/3
The iWay Application Adapter for SAP R/3 using SAP JCo 2 is no longer supported. SAP has discontinued support for SAP JCo 2 and as a result, iWay cannot offer the adapter on unsupported versions of the JCo. For all SAP adapter installations, use the iWay Application Adapter for mySAP ERP instead. The installation instructions for mySAP ERP should be followed in any scenario that requires the SAP R/3 adapter. The mySAP ERP adapter will support SAP releases from SAP R/3 4.6C to SAP ERP 7.

For more information, see MySAP ERP (SAP Java Connector Version 3.x) on page 65.

Siebel
For Siebel Versions 6.3 - 8.1, Siebel Java Data Bean API is required. This is distributed as JAR files with the Siebel Thin Client.

Copy the required JAR files into the iWay \lib directory, for example:

C:\Program Files\iway8\lib
The required files vary by Siebel release in both content and name. Therefore, the Siebel Thin Client provided with the target Siebel system must always be used with the adapter, for example:

- **Siebel 6.3.x**
  - SiebelTcOM.jar
  - SiebelTcCommon.jar
  - SiebelTC_enu.jar
  - SiebelDataBean.jar

- **Siebel 7.0.3**
  - SiebelJI_Common.jar
  - SiebelJI_enu.jar

- **Siebel 7.5.2**
  - SiebelJI_Common.jar
  - SiebelJI_enu.jar
  - SiebelJI.jar

- **Siebel 7.7 - 7.8.2**
  - SiebelJI_enu.jar
  - Siebel.jar

- **Siebel 8.0 - 8.1**
  - SiebelJI_enu.jar
  - Siebel.jar

The Siebel COM-based API (Windows only) requires the Siebel Thin Client to be installed and accessible to the adapter.

The following files are for English language implementations:

- SiebelTC_enu.jar
- SiebelJI_enu.jar

For non-English installations, the last three letters (_enu) vary.

**Siebel Version 6.2 and Lower Connectivity Prerequisites**

You must perform additional steps to connect to a Siebel system (version 6.2 and lower) using COM connectivity for an iBSP configuration. For more information, see the *iWay Application Adapter for Siebel User's Guide*. 
Configuring Connection Pooling for Siebel

To configure connection pooling for Siebel, you must create a siebel.properties file for use with the iWay Application Adapter for Siebel. For more information on how to configure the siebel.properties file, see the iWay Application Adapter for Siebel User's Guide.

Terminal Emulation Adapter (3270/5250) (Telnet)

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

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

- The run-time component, which is supported on:
  - Microsoft Windows
  - UNIX
  - z/OS (under UNIX System Services)
- The Telnet Designer, which is supported on:
  - Microsoft Windows

The iWay Emulation Adapter (3270/5250) includes the Telnet Designer, which is a tool to create screen-based interactions that can run with the adapter. The Telnet Designer is supported on Windows platforms only.

If the adapter is installed on a UNIX platform, then you will need to copy the Telnet Designer component, in binary format, from the UNIX system to the Windows system.

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

TIBCO Rendezvous

The following file is required.

tibrvj.jar

Copy this file into the iWay \lib directory, for example:

C:\Program Files\iway8\lib
In addition to the Java file, tibrv.jar, the iWay Adapter for TIBCO requires several TIBCO binary files. These files are stored in the following TIBCO directory:

C:\tibco\tibrv\bin

This directory must be added to the search PATH variable of any user ID that runs iWay components.
This section describes how to configure components for iWay Service Manager.

In this chapter:

- Configuring and Verifying iWay Service Manager
- Configuring iWay Application Server Components

Configuring and Verifying iWay Service Manager

iWay Service Manager is a highly scalable enterprise service bus. It contains fully-integrated service design-time workbench and web services creation and deployment capabilities, and it provides a hosting environment for adapters.

This section explains how to start and stop iWay Service Manager, configure and create additional instances of Service Manager, configure the Java memory size, and verify the iWay Business Services Provider (iBSP).

At this time, you are ready to start iWay Service Manager and access the iWay Service Manager Administration Console.

Starting and Stopping iWay Service Manager on Windows Platforms

If you are not on a Windows system, proceed to Starting and Stopping iWay Service Manager on Non-Windows Platforms on page 78.

The following procedure explains how to start and stop iWay Service Manager on Windows platforms. If you copied third-party files for your adapters into the iWay \lib directory, you should restart it at this time. If it is not started, start it as explained in the following section.

Procedure: How to Start and Stop Service Manager on Windows Platforms

By default, Service Manager runs as a Windows Service and there are two ways to start and stop it.

- Use the Windows start menu to select Programs, iWay 8.0 Service Manager, base, and Start Service Manager - base or Stop Service Manager - base.
or

- Open the Services window (Control Panel, Administrative Tools, and then Services), right-click iWay Service Manager -base, and select Start, Restart, or Stop.

**Note:** By default, Service Manager starts with Windows. To prevent it from starting with Windows, open the Services window, right-click iWay Service Manager -base, choose Properties, and change the Startup type to Manual.

Windows users can proceed to Configuring Service Manager on page 81.

### Starting and Stopping iWay Service Manager on Non-Windows Platforms

For non-Windows systems, you can run Service Manager as a service (daemon) or as a user task.

Windows users can proceed to Configuring Service Manager on page 81.

**Procedure:** How to Start Service Manager on Non-Windows Platforms as a User Task

To start Service Manager as a user task:

1. Navigate to the directory where iWay 8.0 SM is installed, for example:
   /
   /home/userID/iway8

2. Type the following:
   .
   /iway8.sh base

When you start Service Manager, you specify which configuration to use. The base configuration is available by default and includes SOAP and HTTP listeners. You can run more than one instance of Service Manager by defining multiple configurations using the iWay Service Manager Administration Console.

When iWay has started, you receive the following prompt:

Enter command:

**Procedure:** How to Stop Service Manager on Non-Windows Platforms as a User Task

To stop Service Manager when it runs as a user task:

1. Go to the Service Manager prompt:
   Enter command:

2. At the Service Manager prompt, enter the following to stop listeners:
   stop
3. When listeners have stopped, enter the following:
   
   `quit`

**Procedure:** How to Start Service Manager on Non-Windows Platforms as a Service

To start Service Manager as a service (daemon):

1. Navigate to the iway8/bin directory, for example:
   
   `/home/userID/iway8/bin`

2. Edit the following file.
   
   **Note:** This step is only required the first time you start Service Manager.
   
   a. Open the following file in a text editor:

   `startservice.sh`

   b. Edit the IWAY8 line to specify where iWay is installed. Be sure to include the final trailing slash, for example:

   `IWAY8=/home/userID/iway8/`

   c. Edit the IWAYUSER line so that it specifies the user ID that you want Service Manager to run under, for example:

   `IWAYUSER=userID`

   This user ID requires full permissions to the iway8 directory structure. For security reasons, it is not recommended to run iWay Service Manager as root.

   d. Save and exit the file.

3. Execute the startup service file, for example:

   `./startservice.sh`

   If you are not logged on as root, you are prompted for the password of the user ID under which Service Manager runs.

   **Password:**

4. Enter the password for this user ID.

   The base configuration of Service Manager is started in the background and includes SOAP and HTTP listeners. A serviceOut.txt file appears in the iway8 directory and contains log information.
**Procedure: How to Stop Service Manager on Non-Windows Platforms as a Service**

To stop Service Manager running as a service (daemon):

1. Navigate to the iway8/bin directory, for example:
   
   /home/userID/iway8/bin

2. Edit the shutdown file.
   
   **Note:** This step is only required the first time you stop Service Manager.

   a. Open the following file in a text editor:
      
      stopservice.sh

   b. Edit the IWAY8 line to specify where iWay is installed. Be sure to include the final trailing slash, for example:
      
      IWAY8=/home/userID/iway8/

   c. Edit the IWAYUSER line so that it specifies the user ID you are using to run Service Manager, for example:
      
      IWAYUSER=userID

   d. Save and exit the file.

3. Execute the shutdown file, for example:

   ./stopservice.sh

   If you are not logged on as root, you are prompted for the password of the user ID under which Service Manager runs.

   **Password:**

4. Enter the password for this user ID.

   **Note:** If you receive an error, ensure the user ID is defined in the shutdown file.
Procedure: How to Start Service Manager as a Batch Process on z/OS

On z/OS systems, you can start Service Manager as a batch process using JCL.

1. Use the following sample JCL as a model to start Service Manager in batch:

```jcl
//EDABGBPX JOB (SMITH), 'JAVA BPXBATCH', CLASS=A, MSGLEVEL=(1,1),
//   MSGCLASS=X, REGION=0M, NOTIFY=EDABG, USER=EDABG1, PASSWORD=XXXXXXX
//********************************************************************
//* RUN JAVA UNDER A UNIX SYSTEM SERVICE SHELL
//********************************************************************
//STEP2 EXEC PGM=BPXBATSL,
// PARM='PGM /bin/sh /u/edabg1/iway8/iway8.sh base -c'
//STDOUT DD SYSOUT=* 
//STDERR DD SYSOUT=* 
//STDENV DD *
JAVA_HOME=/usr/lpp/java/J1.6 
PATH=/usr/lpp/java/J1.6/bin 
//
```

2. Substitute the appropriate job card and HFS locations on your system accordingly.

Procedure: How to Stop Service Manager as a Batch Process on z/OS

On z/OS systems, you can stop Service Manager as a batch process using JCL.

1. Use the following sample JCL as a model to stop Service Manager in batch:

```jcl
//EDABGBPS JOB (SMITH), 'JAVA BPXBATCH', CLASS=A, MSGLEVEL=(1,1),
//   MSGCLASS=X, REGION=0M, NOTIFY=EDABG, USER=EDABG1, PASSWORD=XXXXXXX
//********************************************************************
//* RUN JAVA UNDER A UNIX SYSTEM SERVICE SHELL
//********************************************************************
//STEP2 EXEC PGM=BPXBATSL,
// PARM='PGM /bin/sh /u/edabg1/iway8/bin/iway8sd.sh'
//STDOUT DD SYSOUT=* 
//STDERR DD SYSOUT=* 
//STDENV DD *
JAVA_HOME=/usr/lpp/java/J1.6 
PATH=/usr/local/diff/bin:.:/usr/lpp/java/J1.6/bin:/bin:/usr/local/subin:/usr/sbin/J1.6/bin
LIBPATH=/lib:/usr/lib:/usr/lpp/java/J1.6/bin:
JAVA_HOME=/usr/lpp/java/J1.6 
//
```

2. Substitute the appropriate job card and HFS locations on your system accordingly.

Configuring Service Manager

The installation program automatically installs and configures Service Manager. The initial base configuration sets up SOAP and HTTP listeners. You can modify the base configuration, set up additional listeners, or create a new configuration using a web-based configuration tool called the iWay Service Manager Administration Console.
Procedure: How to Configure and Secure Service Manager

To access the iWay Service Manager Administration Console:

1. Open the following page in your web browser:
   
   http://hostname:9999

   where:

   hostname

   Is the host name where you installed iWay.

   If you changed the default port, substitute accordingly.

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

<table>
<thead>
<tr>
<th>User Name</th>
<th>Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>admin</td>
<td>admin</td>
</tr>
</tbody>
</table>
The iWay Service Manager Administration Console opens.

```
3. At the top of the console, click Managed Servers.

The Server Management page opens.

The bottom of the page shows a list of existing users. By default, there are two user IDs:

admin
  For administration.

iway
  For general usage.

4. In the Name column, click iway to change the user password.
```
5. Type a new password in the Password field, confirm the password, and click Finish.

6. In the Name column, click admin to change the user password.

7. Type a new password in the Password field, confirm the password, and click Finish.
   You are prompted to log on with the new password.

8. Log on with the new password and click OK.

Getting Started With iWay

After iWay starts, review the iWay Welcome pages. These pages are part of the iWay Console and accessible at:

http://hostname:9999/ism/welcome

where:

hostname

Is the host name where you installed iWay. If you change the default port, substitute it accordingly.

These pages provide an excellent way to become familiar with iWay functionality and features.

Additional Configurations

You can create a new configuration if you wish to run more than one instance of iWay Service Manager. Most iWay documentation assumes you are using the default base configuration. If you create a new configuration, substitute accordingly when reading iWay documentation.

It is recommended that you create at least one application configuration, particularly in production and test environments, since the base configuration is used by iWay Service Manager for console and GUI tool communications.

Procedure: How to Create an Additional Configuration

1. If it is not already open, access the iWay Service Manager Administration Console and log on as an administrator.

2. On top of the console, click Managed Servers.
   The Server Management page opens.

3. Under the Configurations area, click Add.
   A form appears to define the new configuration.
4. Complete the form as explained in the following table:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter a name for the configuration. A directory with this name will be created under iway8\config, for example: \C:\Program Files\iway8\config\myconf&lt;br&gt;This name is case-sensitive, even on Windows platforms.</td>
</tr>
<tr>
<td>Description</td>
<td>Optionally enter a description for this configuration.</td>
</tr>
<tr>
<td>Based On</td>
<td>Select a configuration or use a template for the new configuration. You can use one of the two defaults:&lt;br&gt;&lt;br&gt;❑ The <em>raw</em> configuration contains no listeners and provides a blank template for defining additional configurations.&lt;br&gt;&lt;br&gt;❑ The <em>base</em> configuration includes the default SOAP listener. If you use the base configuration as your template, you will need to later change the SOAP port of the new configuration so it does not conflict between instances.&lt;br&gt;&lt;br&gt;Note: If you have added additional listeners to the base configuration, those listeners will also be part of the new configuration.</td>
</tr>
<tr>
<td>Port</td>
<td>Enter a port number that the new configuration will use for its console processing.</td>
</tr>
<tr>
<td>Bind Address</td>
<td>Optionally enter an address for multihomed hosts.</td>
</tr>
<tr>
<td>Secure</td>
<td>Optionally click the <em>On</em> check box to enable SSL.</td>
</tr>
</tbody>
</table>

5. After completing the form, click *Finish*.

The new configuration is created. A directory for the configuration is added to the file system under the config directory. On Windows platforms, this is:

\C:\Program Files\iway8\config

**Procedure:** How to Run Additional Configurations on Windows Platforms

If you are not using Windows, proceed to *How to Run Additional Configurations on Non-Windows Platforms* on page 86.
On Windows platforms, to create and run a new Windows service for the configuration:

1. Open a command prompt and navigate to the iway8\bin directory:
   
   C:\Program Files\iway8\bin

2. Enter the following to create the service.
   
   iwsrv config_name -s install

   where:

   **config_name**

   Is the name of the new configuration. This is case-sensitive, even on Windows platforms.

   The following is displayed:

   iWay Service Manager - config_name Service
   Installed Successfully.

   For details on iWay Service Manager, see the *iWay Service Manager User's Guide*.

3. Open the Control Panel, double-click Administrative Tools, and select Services.

4. Start and stop the configuration from the Services window. The service appears as:

   iWay Service Manager - config_name

   If you want to remove the service, ensure the service is stopped and then enter the following in a command prompt at the iway8\bin directory:

   iwsrv config_name -s remove

5. Proceed to _How to Configure an Additional Configuration_ on page 87.

**Procedure:**  _How to Run Additional Configurations on Non-Windows Platforms_

On other platforms, you can run the new configuration as a service (daemon) or as a user task.

- To run as a user task, navigate to the directory where you installed iWay and enter the following:

  iway8.sh config_name

  where:

  **config_name**

  Is the name of the new configuration.
To run as a service, you must copy, edit, and then execute the default startup and stop files in the iway8/bin directory:

```
startservice.sh
stopservice.sh
```

Copy and rename these files and then edit them to replace base with the name of your configuration. Also be sure to change the log file names serviceOut.txt and serviceShutdown.txt so they are unique to this configuration. After copying and editing the startup file, execute it. The exact names of these files may vary depending on your platform.

**Procedure:** How to Configure an Additional Configuration

1. After the configuration has started, return to the iWay Service Manager Administration Console home page for the default configuration:

   `http://hostname:9999`

   **Note:** Although each configuration has a iWay Service Manager Administration Console port, the console port for an additional configuration is not normally used. If you do use the iWay Service Manager Administration Console port for an additional configuration, you still need to select that configuration from the Managed Servers drop-down list.

2. In the Managed Servers drop-down list, select your configuration.

3. Use the iWay Service Manager Administration Console to configure the new configuration.

4. If you used the base configuration as a template, change the SOAP port so it does not conflict with the default base configuration. Then restart the configuration.

**Configuring a Unique ID for an iWay Service**

You can configure iWay Service Manager to run as a Windows service (iWay service). By default, the iWay service runs as the Local System ID.

```
| iWay Service Manager 8.0 - ... Provides configuration | Running | Automatic | Local System |
```

However, the Local System ID does not allow you to set user level environment variables (for example, _JAVA_OPTIONS).
As a best practice, a unique, dedicated ID (account) should be created to run the iSM service. This allows you to customize the iSM service environment.

Configuring the Java Memory Size Settings

Although most users can skip ahead to Verifying Service Manager iBSP on page 90, it is a good idea to review this information, should you need to troubleshoot.

Setting some Java VM (JVM) options can improve performance or correct problems with Service Manager. The most common settings involve the size of the Java heap and stack, which determine memory availability for Java programs and the JVM. Errors can occur if not enough memory is available, and the heap size impacts performance, since it determines how often garbage collection occurs.

If you run into performance problems or receive out of memory exceptions, you can adjust these sizes. The following are the most common JVM options related to memory settings. Replace the ### with the size you wish to set:

- `Xmx###M`

  Sets the maximum Java heap size.
-Xms###M
Sets the initial Java heap size.

-Xss###M
Sets the Java thread stack size.

The size is normally set in Megabytes, for example:

-Xms512M

Optimum sizes vary depending on your total memory, the needs of your application, how many other processes require memory, the type of Java VM, and other considerations.

Where to set these and other JVM options, depends on your operating system:

- On Windows platforms, set JVM options using the iWay Service Manager Administration Console. On the home page, under Settings, click Java Settings, specify your JVM options in the Startup Options box, and click Update. Then stop and start Service Manager. An example of these options is:

-Xmx1024M -Xms512M

- On non-Windows platforms, you must manually modify the script you use to start Service Manager:

  - If you run Service Manager as a service (daemon), edit the script you use to start the service (for example, startservice.sh) and add JVM options to the line that calls the java command, for example:

    su $IWAYUSER -c "java -Xmx1024M -Xms512M $REMDBG -cp $CLASSPATH -DIWAY8=$IWAY8 com.ibi.service.edaqmSilentService -config $IWAYCONFIG >> $IWAY8/serviceOut.txt &"

  - If you run Service Manager as a user task, edit the script you use to start Service Manager (for example, iway8.sh) and add JVM options to the line that calls the Java command, for example:

    java -Xmx1024M -Xms512M $REMDBG -cp $CLASSPATH -DIWAY8=$IWAY8 edaqm -config $SCRI PT $2 $3 $4 $5 $6

    Alternately, the environment variable _JAVA_OPTIONS can be set accordingly for the iWay user ID.
Verifying Service Manager iBSP

iWay Business Services Provider (iBSP) is a transformation and integration engine for processing XML files and SOAP messages for exchange with web service applications and other systems. iBSP runs as a component of iWay Service Manager (iSM) and is configured automatically. No steps are required for its initial setup.

When first installed, iSM is configured for iBSP and its default SOAP listener is on port 9000. You can verify the installation by accessing a sample web service.

**Note:** iWay Business Services Provider (iBSP) was formerly known as iWay Business Services Engine (iBSE). Some references, files, and prompts may still use the older name.

**Procedure:** How to Verify Service Manager iBSP

1. Ensure Service Manager is started.
2. Go to the following page in your browser:
   
   http://hostname:9000
   
   where:

   **hostname**

   Is the host name where you installed iWay.

   If you changed the default port, substitute accordingly.

   The iBSP home page opens as shown below. Three hyperlinks are available by default for the three default licenses, IVP, test, and production.

   ![iBSP Home Page](image)

   The following licenses are available on SOAP1

   - **IVP**
     The IVP License is installed by default. It is used to install predefined iWay Business Service Provider Services.

   - **production**
     The production License is installed by default. It is used for production purposes.

   - **test**
     The test License is installed by default. It is used to test iWay Business Service Provider Services.

   This page allows you to test the sample web service installed with iWay 8.0 SM. When you create web services using iWay Explorer, you can also test them from this page.
3. Click IVP.
4. Click iwayivp.
5. Click ivp.
6. Click Invoke.

An XML response that is similar to the following appears in your browser:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<SOAP-ENV:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:SOAPENV="http://schemas.xmlsoap.org/soap/envelope/"
xmns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <SOAP-ENV:Body>
    <ivpResponse xmlns="urn:iwaysoftware:iBSP:jul2003:ivp:response"
cid="A0328ED84ABFA055C4F64B8039C991AA">
      <CurrentTime>2017-05-02T19:14:03Z</CurrentTime>
      <Version>iWAY 8.0 Service Manager</Version>
    </ivpResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

### iWay Integration Tools Transformer

iWay Integration Tools (iIT) Transformer (previously known as iWay Transformer) is a GUI tool that is delivered as a plugin with iIT. iIT Transformer is used to specify how records and fields map to one another. It supports one-to-one, one-to-many, or many-to-one mapping relationships. Documents created by iIT Transformer are characterized as transformation templates and can be used throughout iWay. After being created, the templates are stored as XML documents, so they can be maintained and managed with or without iWay Transformer.

Data domain experts can use iIT Transformer to create sophisticated transformation templates without programming assistance. Both transformations for XML and non-XML, input and output document types can be created.

For more information, see the *iIT Transformer User Guide*.

### iWay Integration Tools Designer

iWay Integration Tools (iIT) Designer (previously known as iWay Designer) is a GUI tool that is delivered as a plugin with iIT. iIT Designer is used to build workflows for use with iWay. Workflows model business processes and control tasks in a correct sequence. A workflow definition serves to control the sequence in which external program modules are executed.

For more information, see the *iIT Designer User Guide*. 
Configuring iWay Application Server Components

iWay provides several components that can be deployed and run in J2EE Application Servers:

- iWay Business Services Provider (iBSP) 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.

- iWay Explorer uses iWay adapters to create schemas and web services for use with iWay components or other XML or web service-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 object or system. iWay Explorer is delivered as a plugin with iWay Integration Tools (iIT).

For more information on how to configure these components, see Installing iWay 8.0 Service Manager Components on page 19. The following steps are involved:

- Ensure your application server is properly installed and configured.
- Perform any prerequisites to configure the application server for iWay components.
- Prepare iWay application server components to be deployed. For certain application servers, this can be automated by running the iWay deploy tool.
- Deploy your application server components.
- If needed, create a database repository.
Chapter 5

Configuring iWay Explorer

This section explains how to configure iWay Explorer.

If you are planning to use Servlet iBSP, you should first review Configuring iWay Components on page 77 and then return to this section.

In this chapter:

- Configuring iWay Explorer
- Configuring Eclipse iWay Explorer

Configuring iWay Explorer

iWay Explorer is a GUI tool that uses iWay Adapters to create schemas and web services for use with iWay components or other XML or web service-based programs. It allows you to quickly generate and publish a web service from objects and procedures in many different systems, without requiring in-depth knowledge of the object or system.

An Eclipse Plugin for iWay Explorer is provided, which can be embedded in the open source Eclipse development environment using iWay Integration Tools (iIT) for Eclipse. See Configuring Eclipse iWay Explorer on page 93 for configuration information.

If you are planning to use Servlet iBSP, you should first review Configuring iWay Components on page 77 and then return to this section.

Configuring Eclipse iWay Explorer

Eclipse Plugin iWay Explorer can be embedded in the open source Eclipse development environment using iWay Integration Tools for Eclipse. In addition to iWay Explorer, these tools allow you to start and stop Service Manager and view schemas within Eclipse.

Note: Java Development Kit (JDK) 1.8 or higher is required.

Installing iWay Integration Tools for Eclipse

For the Eclipse rich client (standalone) iWay Explorer, proceed to Using Eclipse iWay Explorer on page 95.

For the Eclipse plugin iWay Explorer, Eclipse 3.4 or higher must be installed and configured on your system. Earlier Eclipse releases are not supported.
You can download Eclipse from:

http://www.eclipse.org/

**Note:** You can embed iWay Integration Tools into Eclipse, using the Eclipse update manager as explained in the following procedure. The update manager makes it easy to add additional features and plug-ins to an Eclipse based product. You can also manually embed the tools by unzipping the iway8\etc\setup\iweclipse.zip file into the Eclipse installation directory.

**Procedure:** **How to Install iWay Integration Tools for Eclipse**

1. Open Eclipse.
   
   **Note:** If Eclipse is already open, ensure that all active projects have been saved.

2. In the Help menu, select **Software Updates**.
   
   The Software Updates and Add-ons window opens.

3. Go to Available Software and click the **Add Site** button.
   
   The Add Site window opens.

4. Type the following location:
   
   `C:\Program Files\iway8\etc\setup\eclipse`

5. Click the **Installed** button.
   
   A progress window opens and displays a message that requirements and dependencies are being calculated. A window then opens with information about the iWay Integration Tools version being upgraded.

6. Click **Next**.

7. Review the license agreement, and if you agree, select the **I accept ...** radio button, and click **Next**.

8. Click **Finish**.
   
   When the installation completes, you must restart Eclipse.

9. Click Yes to restart Eclipse.

10. When Eclipse restarts, you are asked for the work space location again. Enter the following location and click **OK**.

   `C:\Program Files\iway8\etc\setup\eclipse`

11. Select the **Window** menu, choose **Show View**, and then **Other**.
   
   The Show View dialog opens.

12. Expand **iWay Integration Tools** and select **iWay Explorer** and **Complex Properties**.
13. Click OK.
   An iWay Explorer tab appears in Eclipse.

**Using Eclipse iWay Explorer**

Using the Eclipse iWay Explorer is the same whether you run the plugin or rich client version.

**Procedure: How to Access Eclipse iWay Explorer**

1. Start Eclipse, open a project, and select the iWay Explorer tab.
   Initially, no connections are defined. You must define a connection between iWay Explorer and an iWay component, such as Service Manager or Servlet iBSP.

2. Click the *new iWay connection* (the blue shield) button to define a connection.

3. Select *iWay Configuration* and click *Next*.

4. Name the connection.
   For Service Manager or Servlet iBSP, this is your choice.

5. Specify the *Connection Type*.
   For Service Manager or Servlet iBSP, choose HTTP Connection.

6. Click *Next*.

7. Enter the connection information if the default is not correct.
   - For Service Manager, the URL is the Service Manager hostname and SOAP port, for example:
     
     `http://hostname:9000`
     
     *where:*
     
     `hostname`

     Is the host name where iWay is installed. Use the actual host name and not localhost.

     If you changed the default SOAP port, substitute accordingly. You can click the *Local Connection* button to see the default.

     - For Servlet iBSP, the URL depends on your application server port and is normally:

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

hostname

Is the host name of the application server machine. Use the actual host name and not localhost.

port

Is the HTTP port for your application server.

8. Click Next.

9. Check or uncheck the adapters you wish to appear and click Finish.

Your connection appears in the iWay Explorer tab. You can expand it to see adapters and web services. Double-click Application Explorer to see service adapters and double-click Event Explorer to see event adapters. To configure an adapter, right-click and select Add Target.

The available adapters vary depending on which version of iWay you install and which files are in the iway8\lib directory. If your adapter requires third-party drivers or libraries, they must be in the lib directory or your adapter may not appear. See Preparing Adapters on page 57 for information on required files.

For more information on using Eclipse iWay Explorer, see the Eclipse documentation available from iWay Software.
Chapter 6

Configuring the iWay Repository

This section explains how to change the default database repository for iWay Service Manager. Information on how to migrate repositories is also provided.

In this chapter:

- Configuring and Creating the Repository
- Migrating Repositories

Configuring and Creating the Repository

iWay Service Manager and Servlet iBSP require repositories to store information about adapter targets, metadata, transactions, web services, and other data.

- For iWay Service Manager, an HSQL database is automatically installed and configured when you install Service Manager.

- For Servlet iBSP, a file-based repository is available by default. This is only supported in development environments. For production or test environments, you should set Servlet iBSP to use a RDBMS repository, as explained in this section.

Creating the Repository

Scripts to create repository tables are installed with iWay in the ibspsql.zip file, for example:

C:\Program Files\iway8\etc\setup\ibspsql.zip

You should extract the contents of this file to a temporary directory on the machine with your database server. To extract, you can use Winzip or the jar command (jar xvf ibspsql.zip).

Then follow the steps for your type of repository:

- For Microsoft SQL Server, see How to Configure a Microsoft SQL Server Repository on page 98.

- For Oracle, see How to Configure an Oracle Repository on page 99.

- For Sybase, see How to Configure a Sybase Repository on page 99.

- For DB2, see How to Configure a DB2 Repository on page 100.
Procedure: How to Configure a Microsoft SQL Server Repository

To configure a Microsoft SQL Server repository:

1. Ensure that SQL Server authentication is supported.
2. Create a SQL Server user ID.
3. Create a SQL Server database to use as the repository.
   To do this, you can use the Enterprise Manager to expand the servers and folders on the left, right-click the Databases folder, and choosing New Database. You can name the database anything you wish and can keep default settings.
4. Grant your SQL Server user ID db_owner rights to the repository database.
5. If you have not yet done so, extract the contents of the ibspsql.zip file, for example:
   \C:\Program Files\iway8\etc\setup\ibspsql.zip

   Extract the files to a directory on the machine running SQL Server. After extracting files, the SQL Server files are located in an mss directory.
6. Open a command prompt and navigate to the mss directory you extracted from ibspsql.zip. The following file contains SQL to create the repository tables:
   iwse.sql

   For Japanese users, the script is named Iwse-unicode.sql.
7. Issue the following command to create the repository tables:
   osql -S hostname -d databasename -U loginID -P password -i iwse.sql

   where:
   
   hostname
   Is the host name of the machine where SQL Server is running.

   databasename
   Is the database name you created.

   loginID
   Is the SQL Server ID with db_owner rights.

   password
   Is the password for the SQL Server ID.
The tables should be created in your database.

8. Proceed to *Installing the JDBC Driver* on page 101.

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

2. If you have not yet done so, extract the contents of the ibspsql.zip file, for example:

   ```
   C:\Program Files\iway8\etc\setup\ibspsql.zip
   ```

   Extract the files to a directory on the machine running Oracle. After extracting files, the Oracle files are in an oracle directory. This directory contains SQL to create the repository tables.

<table>
<thead>
<tr>
<th>For Oracle 8i</th>
<th>iwse.ora</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Oracle 9i and higher</td>
<td>iwse.ora9</td>
</tr>
</tbody>
</table>

   **Note:** For Oracle version 9i and higher, only the ojdbc14.jar driver is supported. In addition, you must use the iwse.ora9 script file when configuring repositories for Oracle version 9i and higher.

3. Issue the following command while logged on as a user ID with the correct environment settings:

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

   or

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

4. Proceed to *Installing the JDBC Driver* on page 101.

**Procedure: How to Configure a Sybase Repository**

To configure a Sybase repository:

1. Extract the contents of the ibspsql.zip file to the Sybase machine.
   
   The file is located in the following directory:
C:\Program Files\iway8\etc\setup\ibspsql.zip

The ibspsql.zip file contains the SQL that is required to create the repository. The sybase directory you extract contains the following file to create the repository tables:

sybase-iwse.sql

2. Submit this SQL to create the repository tables and structure.
   **Note:** This step should be performed by a Sybase DBA.

3. Proceed to *Installing the JDBC Driver* on page 101.

**Procedure:** How to Configure a DB2 Repository

To configure a DB2 repository:

1. Extract the contents of the ibspsql.zip file to the DB2 machine, which is located in the following directory:

C:\Program Files\iway8\etc\setup\ibspsql.zip

The DB2 directory you extract contains the following file to create the repository tables:

db2-iwse.sql

**Note:** For z/OS systems, contact an iWay Software representative to obtain the correct scripts.

2. Submit this SQL to create the repository tables and structure. However, for OS/400 use db2-400-iwse.sql.
   
   **Note:** This step should be performed by a DB2 DBA.

3. Proceed to *Installing the JDBC Driver* on page 101.

**Procedure:** How to Configure a MaxDB Repository

1. Contact an iWay Software representative to obtain the SQL needed for a MaxDB repository. There are several files in maxdb-ibse-install.zip. The .bat files are used for Windows and the .sh files are used for UNIX.

2. Open install.bat (or install.sh) in a text editor and edit it so that it contains a valid MaxDB username and password. You can optionally change the database name (iwse):

   dbmcli db_create iwse username,password
   dbmcli -d iwse -u username,password -i install-maxdb-instance.txt

3. Execute install.bat.

   The database should be created.
4. Open load-tables-maxdb-iwse.bat (or load-tables-maxdb-iwse.sh) in a text editor and edit it so that it contains a MaxDB administrator username and password, not necessarily the same logon as in install.bat. In addition, make sure it contains the same database name as install.bat (iwse by default):

   loadercli -d iwse -u dba_username,dba_password -b maxdb-iwse3.sql


   The tables should be loaded.

   **Note:** If you need to drop the tables and start over, edit and submit maxdb-iwse-droptables.bat (or maxdb-iwse-droptables.sh).

**Installing the JDBC Driver**

iWay components communicate with the repository using JDBC. Therefore, a JDBC driver must be available.

**Procedure:** How to Install the JDBC Driver

1. Determine the JDBC driver for your repository.

   The required driver files depend on your database and driver type, for example:

<table>
<thead>
<tr>
<th>Database Driver</th>
<th>Required Driver Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQL Server 2012</td>
<td>sqljdbc42.jar</td>
</tr>
<tr>
<td>Oracle 8i</td>
<td>classes12.jar</td>
</tr>
<tr>
<td>Oracle 9i and higher</td>
<td>ojdbc14.jar</td>
</tr>
<tr>
<td>MaxDB</td>
<td>sapdb7_5_0_5.jar</td>
</tr>
<tr>
<td>Sybase</td>
<td>jconn2.jar</td>
</tr>
<tr>
<td>DB2 Type 4 Universal JDBC</td>
<td>db2jcc.jar, db2jcc_license_cisuz.jar</td>
</tr>
</tbody>
</table>
### Database Driver

<table>
<thead>
<tr>
<th>Database Driver</th>
<th>Required Driver Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2 Type 2 Legacy App</td>
<td>db2java.zip</td>
</tr>
</tbody>
</table>

See your driver documentation for more information. If both iBSP and DB2 are on z/OS or OS/400, refer to the IBM driver documentation.

2. Copy the required JDBC .jar file(s) into the iway8\lib directory, for example:

   `C:\Program Files\iway8\lib`

   For information about third-party driver files, see *Preparing Adapters* on page 57.

3. Restart iWay Service Manager from outside the iWay Service Manager Administration Console. On Windows platforms, you can restart it from the Services window.

4. For Servlet iBSP, add the JDBC driver to your application server CLASSPATH. See *Configuring iWay Components* on page 77 and refer to your application server documentation for information on setting CLASSPATH.

   **Tip:** Depending on your application server, you may find it easier to add the driver into the ibse\WEB-INF\lib directory of the iBSP web application (ibse.war or ibse.ear).

5. Restart iWay Service Manager.

### Connecting iWay to the Repository

After you create the repository tables and install the JDBC driver, restart iWay Service Manager or your application server. Then, configure iWay components to access the new repository.

- For iWay Service Manager, see *How to Enter Connection Information for Service Manager* on page 102.
- For Servlet iBSP, see *How to Enter Connection Information for Servlet iBSP* on page 105.

**Procedure:** How to Enter Connection Information for Service Manager

1. Open the iWay Service Manager Administration Console and log on:

   `http://hostname:9999`

   where:

   `hostname`

   Is the host name where you installed iWay.
2. In the left pane, click Services Provider.
3. Next to the Data Provider Name drop-down list, click the Add hyperlink.
   A form appears for defining the database.
4. Complete the fields as explained in the following table:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter a name that you will use to refer to the connection.</td>
</tr>
<tr>
<td>Driver Class</td>
<td>Use the drop-down menu or manually enter the JDBC Class.</td>
</tr>
<tr>
<td>Connection URL</td>
<td>Use the drop-down menu and edit the default URL. You can also manually enter the URL. Examples are shown after this table.</td>
</tr>
<tr>
<td>User</td>
<td>Provide the user ID to access the repository database.</td>
</tr>
<tr>
<td>Password</td>
<td>Provide the password to access the repository database.</td>
</tr>
</tbody>
</table>

The repository URLs have the forms listed in the following table.

<table>
<thead>
<tr>
<th>Database</th>
<th>JDBC URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQL Server 2012</td>
<td>jdbc:sqlserver://hostname:port;databaseName=dbname</td>
</tr>
<tr>
<td>Oracle</td>
<td>jdbc:oracle:thin:@hostname:port:SID</td>
</tr>
<tr>
<td>MaxDB</td>
<td>jdbc:sapdb://hostname[:port]/DatabaseName[options]</td>
</tr>
<tr>
<td>Sybase</td>
<td>jdbc:sybase:Tds:hostname:port</td>
</tr>
</tbody>
</table>
### Database URL

<table>
<thead>
<tr>
<th>Database</th>
<th>JDBC URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2</td>
<td>For DB2 Type 4 Universal JDBC driver:</td>
</tr>
<tr>
<td></td>
<td><code>jdbc:db2://hostname:port/dbname</code></td>
</tr>
<tr>
<td></td>
<td>For DB2 Type2 App driver:</td>
</tr>
<tr>
<td></td>
<td><code>jdbc:db2:dbname</code></td>
</tr>
<tr>
<td></td>
<td>See your driver documentation for more information. If both iBSP and</td>
</tr>
<tr>
<td></td>
<td>DB2 are on z/OS or OS/400, refer to the IBM driver documentation.</td>
</tr>
</tbody>
</table>

where:

- `hostname`  
  Is the host name of the database server machine.

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

- `dbname`  
  Is the database name or DB2 database alias or location name.

- `SID`  
  Is the ORACLE SID.

5. Click **Test**.  
   You should receive a response that says:  
   
   The JDBC data provider test completed successfully.  
   
   If you receive an error, troubleshoot accordingly. Ensure that the driver is in the `iway8\lib` directory as explained in *How to Install the JDBC Driver* on page 101.

6. Click **Add** if the test is successful.  
   Your connection appears on the Data Provider page. If you need to change its parameters, you can click its link.

7. Click **Services Provider** on the left.

8. Change the **Data Store Type** to the type of repository you wish to use.
9. Set the connection you just defined as the *Data Provider Name*.

10. Click *Update*.

11. Restart Service Manager from outside of the iWay Service Manager Administration Console to ensure it completely restarts. On Windows platforms, use the services Window.

   When Service Manager restarts, you should reverify iBSP using the sample web service at:

   \[http://hostname:9000\]

**Note:** Use iWay Service Monitor to monitor iWay Service Manager events. Monitoring is implemented using AmberPoint components and can be enabled through the iWay Service Manager Administration Console. For details, see the *iWay Service Manager User's Guide*.

To migrate a repository, see *Migrating Repositories* on page 108.

**Procedure:** \:**How to Enter Connection Information for Servlet iBSP**

To enter connection information for Servlet iBSP:

1. Ensure you have added your JDBC driver to your application server CLASSPATH as explained in *How to Install the JDBC Driver* on page 101.

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

   \[http://hostname:port/ibse\]

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

   The following table lists and describes the fields.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repository Type</td>
<td>Specify the type of repository you are using.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> <em>Data Source</em> is not supported.</td>
</tr>
<tr>
<td>Repository URL</td>
<td>Edit the provide JDBC URL to connect to the database. Examples follow this table.</td>
</tr>
</tbody>
</table>
## Field Description

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repository Driver</td>
<td>Provide the JDBC Class to connect to the database.</td>
</tr>
<tr>
<td></td>
<td>For SQL Server 2012:</td>
</tr>
<tr>
<td></td>
<td>com.microsoft.sqlserver.jdbc.SQLServerDriver</td>
</tr>
<tr>
<td></td>
<td>For MaxDB:</td>
</tr>
<tr>
<td></td>
<td>com.sap.dbtech.jdbc.DriverSapDB</td>
</tr>
<tr>
<td></td>
<td>For Oracle:</td>
</tr>
<tr>
<td></td>
<td>oracle.jdbc.driver.OracleDriver</td>
</tr>
<tr>
<td></td>
<td>For Sybase:</td>
</tr>
<tr>
<td></td>
<td>com.sybase.jdbc2.jdbc.SybDriver</td>
</tr>
<tr>
<td></td>
<td>For DB2 Type 4 Universal JDBC driver:</td>
</tr>
<tr>
<td></td>
<td>com.ibm.db2.jcc.DB2Driver</td>
</tr>
<tr>
<td></td>
<td>For DB2 Type2 App driver:</td>
</tr>
<tr>
<td></td>
<td>COM.ibm.db2.app.DB2Driver</td>
</tr>
<tr>
<td></td>
<td>See your driver documentation for more information. If both iBSP and DB2</td>
</tr>
<tr>
<td></td>
<td>are on z/OS or OS/400, refer to IBM driver documentation.</td>
</tr>
<tr>
<td>Repository User</td>
<td>Provide the user ID to access the repository database.</td>
</tr>
<tr>
<td>Repository Password</td>
<td>Provide the password to access the repository database.</td>
</tr>
</tbody>
</table>

The repository URLs have the forms listed in the following table.

<table>
<thead>
<tr>
<th>Database</th>
<th>JDBC URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQL Server 2012</td>
<td>jdbc:sqlserver://hostname:port;databaseName=dbname</td>
</tr>
<tr>
<td>Oracle</td>
<td>jdbc:oracle:thin:@hostname:port:SID</td>
</tr>
<tr>
<td>MaxDB</td>
<td>jdbc:sapdb://hostname[:port]/DatabaseName[options]</td>
</tr>
<tr>
<td>Database</td>
<td>JDBC URL</td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Sybase</td>
<td>jdbc:sysbase:Tds:hostname:port</td>
</tr>
</tbody>
</table>
| DB2      | For DB2 Type 4 Universal JDBC driver: jdbc:db2://hostname:port/dbname  
          | For DB2 Type2 App driver: jdbc:db2:dbname  
          | See your driver documentation for more information. If both iBSP and DB2 are on z/OS or OS/400, refer to IBM driver documentation. |

where:

hostname
Is the host name of the database server machine.

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

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

SID
Is the ORACLE SID.

4. Click Save.

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

5. Restart the application server.

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

http://hostname:port/ibse/IBSEServlet

If you receive an error, confirm the settings at the configuration page:

http://hostname:port/ibse
If you receive an error, ensure CLASSPATH is properly set and redeploy the iBSP web application.

File System Repositories

When Servlet iBSP is installed, it is configured to use a file system repository, so no additional steps are required. If you do not have access to a database, you can continue to store the Servlet iBSP repository information in XML files on your local machine. However, file system repositories are less secure and less efficient than using a database. In addition, file system repositories for iBSP are not supported in production environments.

For Servlet iBSP, the default location is either the root directory of the iBSP web application under the application server or a directory under iway8, for example:

C:\Program Files\iway8\config\base\ibserepo.xml

Migrating Repositories

You can migrate repositories using the iWay Service Manager Administration Console. They can be repositories for iWay Service Manager, the older iWay Adapter Manager, or Servlet iBSP. The structure of the repository has not changed.

Some of the things you can migrate include:

- Migrate the data in the default iWay SM HSQL database to another database repository.
- Migrate an older iWay Adapter Manager repository into the default iWay SM HSQL database.
- Migrate a Servlet iBSP database repository.

In this section:

- Source repository refers to the older existing repository you want to migrate.
- Target repository refers to the new repository you want to use.

Migration Steps

To migrate a repository, perform the following steps.

- Ensure you have created the new repository tables, as explained in Creating the Repository on page 97.

- Ensure the JDBC driver for both your target and source repositories are in the iway8/lib directory. See Installing the JDBC Driver on page 101 for more information.
- Define the source and target repositories as Data Providers through the iWay Service Manager Administration Console, as explained in *How to Define the Source and Target Repositories* on page 109.

- Start the migration, as explained in *How to Start the Migration* on page 110.

**Procedure: How to Define the Source and Target Repositories**

You should perform this procedure if you did not yet define the target repository or if you are migrating from a different source repository than the default HSQL repository.

If you are migrating the default HSQL repository into a new repository, the source repository is already defined for you. If you performed the steps in *How to Enter Connection Information for Service Manager* on page 102, then you probably already defined the target repository. If you do not need to define the source or the target, proceed to *How to Start the Migration* on page 110.

To define the source and target repositories as Data Providers:

1. Open the iWay Service Manager Administration Console and log on:
   ```
   http://hostname:9999
   ```
   where:
   ```
   hostname
   ```
   Is the host name where you installed iWay.

2. In the left pane, click *Data Provider*.

3. Click *Add* under the JDBC Connections box.

   A form appears for defining the database. Define the source or target repository.

4. Complete the fields as explained in the following table:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter a name that you will use to refer to the connection.</td>
</tr>
<tr>
<td>Driver Class</td>
<td>Use the drop-down menu or manually enter the JDBC Class.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Connection URL</td>
<td>Use the drop-down menu and edit the default URL. You can also manually enter the URL. For examples, see How to Enter Connection Information for Service Manager on page 102. For SQL Server 2000, ensure the URL ends with the following: ;SelectMethod=cursor</td>
</tr>
<tr>
<td>User</td>
<td>Provide the user ID to access the repository database.</td>
</tr>
<tr>
<td>Password</td>
<td>Provide the password to access the repository database.</td>
</tr>
</tbody>
</table>

5. Click Test.

You should receive a response that says:

**The JDBC data provider test completed successfully.**

If you receive an error, troubleshoot accordingly. Ensure the driver is in the iway8\lib directory, as explained in How to Install the JDBC Driver on page 101.

6. Click Add if the test is successful.

You connection appears on the Data Provider page. If you need to change its parameters, you can click its link.

7. If you need to define both the target and source repositories, repeat this procedure to define another repository.

**Procedure:** How to Start the Migration

1. If it is not open, open the iWay Service Manager Administration Console and log on.
2. In the left pane, click Services Provider.
   
   The currently selected Data Store Type and Data Provider Name determines the source repository.
3. If it is not already selected, set the source repository by changing the Data Store Type and Data Provider Name and clicking Update. The Data Provider Name is the name you used when you defined the source repository.
4. Set the target repository by changing the Data Store Type and Data Provider Name.
5. Then click the Migrate hyperlink.
A page displays information about the migration. If the source and destination (target) are not correct, click Services Provider on the left to correct them. If your new database has data in it that you wish to delete, you can select the Reset/Clean Destination option.

6. Click Migrate if the source and destination (target) are correct.

Information about the migration appears. Ensure that there are no critical errors.

After the migration completes, iBSP is set to use the source repository. You should set it to use the target repository instead.

7. Click Services Provider on the left.

8. Change the Data Store Type to the type of repository you wish to use.

9. Set the connection you just defined as the Data Provider Name.

10. Restart iWay Service Manager.
Feedback

Customer success is our top priority. Connect with us today!

Information Builders Technical Content Management team is comprised of many talented individuals who work together to design and deliver quality technical documentation products. Your feedback supports our ongoing efforts!

You can also preview new innovations to get an early look at new content products and services. Your participation helps us create great experiences for every customer.

To send us feedback or make a connection, contact Sarah Buccellato, Technical Editor, Technical Content Management at Sarah_Buccellato@ibi.com.

To request permission to repurpose copyrighted material, please contact Frances Gambino, Vice President, Technical Content Management at Frances_Gambino@ibi.com.