

# **Oracle Insurance**

# Insbridge Rating and Underwriting SoftRater for JBoss Installation Guide

Release 4.6

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Oracle Insurance Insbridge Rating and Underwriting SoftRater for JBoss Installation Guide

Release 4.6

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# **PREFACE**

Welcome to the *Oracle Insurance Insbridge Rating and Underwriting SoftRater for JBoss Installation Guide*. This guide describes how to install and configure SoftRater for JBoss. SoftRater may be used in conjunction with the Oracle Insurance Insbridge Rating and Underwriting RateManager (RateManager) system to process rating requests or it may stand alone.

The Insbridge SoftRater Server (IBSS) is the container for all Insbridge web components including the SoftRater Engine. All independent Insbridge components will be contained in the IBSS.

NOTE: SoftRater for JBoss has been tested and certified on JBoss Version 4.2.3 GA utilizing MS Windows 2008 64-bit.

#### **AUDIENCE**

This guide is intended for technical personnel, such as installers, system administrators and others tasked with configuring SoftRater that would be involved in the maintenance and operation of SoftRater or RateManager. The audience for this guide should have a thorough knowledge of JBoss.

### PLANNING YOUR IBRU SYSTEM

Prior to installation, you should have an idea of the type of setup you want to create. What kind of equipment do you have available and how many environments do you need? If you do not have everything completely planned out, you can still proceed. Environments can be removed or added later on. The Oracle Insurance Insbridge Rating and Underwriting system (IBRU) is expandable and can accommodate a few different configurations.

For more on planning your IBRU system, please see the Insbridge Planning Guide.

# **TYPES OF INSTALLATION**

There are various types of installations:

#### RateManager Installation

• **Full RateManager** – This installation will install RateManager and the Insbridge Framework Administrator (IBFA). This is for a Windows only environment using a SQL Server database.

#### **SoftRater Installation**

- **Full SoftRater for Java Installation** This installation will deploy SoftRater to an application server; WebLogic, WebSphere or JBoss, using a SQL Server database or an Oracle database.
- Full SoftRater for Windows Node This installation is for existing environments that want to add a SoftRater for Windows node to an environment. This is for a Windows only environment using a SQL Server database, or an Oracle database.

#### **Upgrading a Current Installation**

• **Upgrade** – This installation is for existing customers and will take their current version of IBRU up to version 04.06.00.

This guide is for a Full SoftRater for Java Installation utilizing JBoss.

#### **Definitions**

Some commonly used terms when installing or using the Oracle Insurance Insbridge Rating and Underwriting system:

- **IBRU** Insbridge Rating and Underwriting System. This is the entire system.
- IBFA Insbridge Framework Administrator. IBFA is an administrative tool used to configure Insbridge applications and setup RateManager database connections. IBFA will be located on a Windows Server machine. IBFA/SR-WIN is an Insbridge Framework Administrator/SoftRater for Windows.
- IBSS Insbridge SoftRater Server. IBSS is the administrative tool for the SoftRater engine. The SoftRater engine is a multi-platform component within IBRU that executes the rules, rating and underwriting instructions as defined by the user in RateManager. IBSS is usually located on a Java machine. IBSS/SR-JAVA is an Insbridge SoftRater Server/SoftRater for Java.
- SoftRater Node A SoftRater node is either an IBFA (without RateManager) or IBSS instance on a physical environment.
- SoftRater Native SoftRater Native is a remote instance of SoftRater that can execute rules and rating logic in environments where access via the SoftRater web-services is not desired or possible.
- **RM** RateManager. RateManager is a component within IBRU that enables users to manage the product definition and modification process, including rating and underwriting logic.
- **SR** SoftRater. The engine that executes the rating, rules and underwriting instructions defined within RateManager. The rating environment for runtime execution and processing of business content. SoftRater can be further defined by the operating system where it has been loaded.
- SR-WIN SoftRater for Windows. This is also another name for IBFA.
- SR-JAVA SoftRater for Java. This is also another name for IBSS.

- **SRP** SoftRater Packages. A package that holds all the RateManager logic for a specific program and version.
- **VFS** Virtual File Servers. Virtual file server management allows you to access environments that are located on other machines in different locations where packages can be downloaded.
- Package Location A pointer to a location where SoftRater Packages (SRP's) are stored.
- **Physical Environment** A physical environment is generally referred to as a physical machine.
- Authoring Environment The physical machine where RateManager is installed.
- Rating Environment The physical machine(s) where SoftRater is installed. This is typically the same as a SoftRater node.
- Logical Environment An environment created for a subscriber in IBFA. It defines package
  location, engine location and database location in addition to several other supporting data items.
  This environment is used for rating and/or SRP management. Each database connection will
  have a logical environment.

#### **RELATED DOCUMENTS**

For more information, refer to the following Oracle resources:

- The Oracle Insurance Insbridge Rating and Underwriting Framework Administrator Guide.
- The Oracle Insurance Insbridge Rating and Underwriting SoftRater Server Guide.
- You can view these guides in-line at this address:

http://www.oracle.com/technology/documentation/insurance.html

# **CONVENTIONS**

The following text conventions are used in this document:

Convention	Description
bold	Boldface type indicates graphical user interface elements associated with an action.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# **Manual History**

New editions incorporate any updates issued since the previous edition.

Edition	Publication Number	Product Version	Publication Date	Comment
1 <sup>st</sup> Edition	P01-773-01	V 3.11.01	December 2008	Initial release
2 <sup>nd</sup> Edition	P01-773-02	V 3.12.0	July 2009	Update Version
3 <sup>rd</sup> Edition	P01-773-03	V 3.13.0	December 2009	Update to 3.13
4 <sup>th</sup> Edition	P01-773-04	R 4.0	April 2010	Update to 4.0
5 <sup>th</sup> Edition	P01-773-05	R 4.0.1	August 2010	Update Release
6 <sup>th</sup> Edition	P01-773-06	R 4.1	December 2010	Update Release
7 <sup>th</sup> Edition	P01-773-07	R 4.5	May 2011	Update Release
8 <sup>th</sup> Edition	P01-773-08	R 4.5.1	September 2011	Update Release
9 <sup>th</sup> Edition	P01-773-09	R 4.6	May 2012	Update Release

# SYSTEM REQUIREMENTS

For minimum operating system and hardware requirements, please see the Hardware Software requirements guide.

Prior to creating a new SoftRater environment, please have ready:

- Full JBoss installation
- Database name or Environment name
- Database login information
- Database server name, either IP or DNS
- Database DDL, updates or backup files for the database you want to utilize. These files are located in the 04.06.00 Insbridge IBRU folder.
- If utilizing Oracle, DB Catalog name, port number, DB Schema name
- If utilizing DB2, DB Catalog name, port number, query block size (heap), DB Schema name
- Subscriber ID created in IBFA
- Access to the server where the IBRU system was installed
- URL of the current IBFA
- Package location where you want the packages stored

These components will be needed at various times during the installation and implementation of SoftRater for JBoss.

### **Development Notes**

Please be aware of the following items:

1. SoftRater for JBoss has been tested and certified on:

**Version:** 4.2.3.GA (build: SVNTag=JBoss\_4\_2\_3\_GA date=200807181418)

Version Name: Trinity Built on: July 18 2008

Go to the JBoss server web-console to verify the version. I.e., http://<ServerName>:8080/web-console.

2. Please be aware that the deployment the EAR name will not be altered from release to release. JBoss adds the EAR filename as part of the EJB objects on deployment.

I.E. on JBoss EJB JNDI names are: "IBSS/SoftRaterEJB/local" and "IBSS/SoftRaterEJB/remote"

It is suggested that you use JDK 1.5 with JBoss 4.2.3GA. You can find the download for JDK 1.5 from Oracle Sun's website: <a href="http://java.sun.com/javase/downloads/index\_jdk5.jsp">http://java.sun.com/javase/downloads/index\_jdk5.jsp</a>, select Java Runtime Environment (JRE) 5.0 Update 22.

**IMPORTANT:** JDK 1.5 is required if you are connecting to SQL Server.

#### ORACLE SOFTWARE DELIVERY CLOUD

Prior to installation, please make sure the source machine(s) where IBRU will be loaded has an unzip utility. An unzip utility for most platforms is available on the Oracle Software Delivery Cloud download page.

Documentation from Oracle Software Delivery Cloud is in PDF format. Prior to installation, please make sure the source machine(s) where IBRU documentation will be loaded has a PDF reader.

Files are downloaded with part numbers as file names. Please make note of the part numbers you have downloaded and the corresponding file name. You may be asked to provide the part numbers or the filename if you contact Oracle Insurance Support.

The installation downloads you can select are:

- Insbridge IBRU Install This is required for all RateManager installations
- SoftRater for WebSphere This is required if you are using WebSphere
- SoftRater for WebLogic This is required if you are using WebLogic
- SoftRater for JBoss This is required if you are using JBoss
- **Documentation** It is recommended that you download the documentation. Installation guides and user guides are located here.

#### The 04.06.00-Insbridge-IBRU folder contents:

- Databases
  - DB2
    - SoftRater IBSR
      - DDL
  - Oracle
    - SoftRater IBSR
      - o DDL
    - Update:Usp IBSR v04.05.01.oracle
  - SQL Server
    - RateManager IBRM
      - Latin1 General BIN
        - DATABASE\_BACKUP\_IBRM\_TEMPLATE\_CASE\_SENSITIVE.bak

- SQL\_Latin1\_General\_CP1\_CI\_AS
  - DATABASE\_BACKUP\_IBRM\_TEMPLATE.bak
- Security IB CLIENT
  - SQL\_Latin1\_General\_CP1\_CI\_AS
    - DATABASE\_BACKUP\_IB\_CLIENT\_TEMPLATE.bak
- SoftRater IBSR
  - Latin1 General BIN
    - DATABASE\_BACKUP\_IBSR\_TEMPLATE\_CASE\_SENSITIVE.bak
  - SQL\_Latin1\_General\_CP1\_CI\_AS
    - DATABASE\_BACKUP\_IBSR\_TEMPLATE.bak
  - Update:Usp\_IBSR\_v04.05.01.sql
- IE7 IE8 Users
  - Insbridge IE7 Active X Control Update PDF
  - RateManager IE7 IE8.exe
- Oracle BI Publisher
  - ♦ OBI\_PUBLISHER.exe
- Oracle Client
  - Oracle\_client.exe
- Oracle Insurance Insbridge Rating and Underwriting.exe

The SoftRater for JBoss version 04.06.00 zip file will contain:

- The 04.06.00-insbridge-jboss-eng Folder, which contains:
  - IBSS JBoss.ear file
  - Insbridge.net.softraterconfig.xml

No license file is required.

SoftRater can be installed any time after the Insbridge Framework Administrator and RateManager have been installed. SoftRater must be installed prior to any users creating packages. Please note, all folders and files may not be needed, depending upon the kind of setup you want.

#### **Internet Explorer**

IBSS and IBFA are accessed via web browser. Please verify that you are using Internet Explorer 7.0 or 8.0 (32-bit). As of release 4.6, Internet Explorer 8.0 (64-bit) is not supported.

# SOFTRATER FOR JBOSS INSTALLATION

Installing SoftRater for JBoss will require that you:

- 1. Set up JBoss and deploy the SoftRater for JBoss .EAR file and config file. There are seven steps in setting up JBoss and deploying SoftRater.
- 2. Implement the database and enter the configuration information in IBSS and IBFA.
  - a. Oracle Database
  - b. SQL Server Database
  - c. IBM DB2

SoftRater for JBoss can utilize either database. The installation procedures are similar, but there are different procedures for each database type. Please follow the installation for your database type.

#### **Setting up and Deploying in JBoss**

- Step 1: Start JBoss Server
- Step 2: Creating a New Server Configuration
- Step 3: Modifying JBoss Classpath
- Step 4: Editing the JNDI Properties
- Step 5: Copy SoftRater Configuration Files
- Step 6: Deploy IBSS\_JBoss.EAR
- Step 7: Test Connection

#### Implementing a SQL Server Database

- Step 1: Restoring IBRU Databases in SQL Serve
- Step 2: Setting up a JBoss Environment in IBSS
- Step 3: Entering your IBSS Instance in IBFA

#### Implementing an Oracle Database

- Step 1: Creating an Oracle Database
- Step 2: Setting up a JBoss Environment in IBSS
- Step 3: Installation of Oracle Client
- Step 4: Entering your IBSS Instance in IBFA

#### Implementing an IBM DB2 Database

- Step 1: Creating a DB2 Database
- Step 2: Setting up a JBoss Environment in IBSS
- Step 3: Installation of DB2 Client
- Step 4: Entering your IBSS Instance in IBFA

# **SETTING UP JBOSS**

JBoss should be up and running prior to deploying the .EAR file. There are seven steps that should be performed in JBoss prior to deploying the .EAR file. **All steps are required.** 

- Step 1: Start JBoss Server
- Step 2: Creating a New Server Configuration
- Step 3: Modifying JBoss Classpath
- Step 4: Editing the JNDI Properties
- Step 5: Copy SoftRater Configuration Files
- Step 6: Deploy IBSS\_JBoss.EAR
- Step 7: Test Connection

# **STEP 1: START JBOSS SERVER**

Start the JBoss server. If there are any error messages, please correct them before continuing. For example:

#### Windows:

Run -b <Host\_IP\_Address>

#### Linux:

Run.sh -b <Host\_IP\_Address>

# **STEP 2: CREATING A NEW SERVER CONFIGURATION**

To create a new server configuration go to "<JBoss\_Installation\_Home>/server", copy the default folder, and rename it to "SR\_Server".



Figure 1 JBoss Server Folder

You also should create a Configuration File. We suggest creating an Insbridge config folder but you may use any folder name you want and you can place the folder any where you want. This folder will hold the necessary files for the SoftRater for JBoss installation. Take note of the location and make sure you have created this folder prior to deploying the installation.

- For a Windows environment, C:\Insbridge\config
- For a Linux environment, /Users/Administrator/Desktop/config

**NOTE:** For the purposes of this guide, the Configuration File location will be referred to as /Users/Administrator/Desktop/config.

# STEP 3: MODIFYING JBOSS CLASSPATH

In order to successfully run the SoftRater application you'll need to make the following modification to the JBoss server classpath:

Download the jdom-1.1.zip from the following URL: <a href="http://www.jdom.org/dist/binary/archive">http://www.jdom.org/dist/binary/archive</a>.

- Unzip to a location where you can access easily.
- Delete jaxen.jar file from <JBoss Installation Home>/server/SR Server/lib/ folder.
- Copy jdom-1.1/jaxen-core.jar to the same location as the jaxen.jar, for example <JBoss\_Installation\_Home>/server/SR\_Server/lib/ folder.

### STEP 4: EDITING THE JNDI PROPERTIES

To create a new JNDI property:

- 1. Go to <JBoss Installation Home>/SR Server/conf folder.
- 2. Edit the indi.properties file.
- Add INSBRIDGE\_APP\_DIR=<Path\_Of\_Configuration\_File> below the last line.

The file should look like this:

# DO NOT EDIT THIS FILE UNLESS YOU KNOW WHAT YOU ARE DOING

java.naming.factory.initial=org.jnp.interfaces.NamingContextFactory java.naming.factory.url.pkgs=org.jboss.naming:org.jnp.interfaces

INSBRIDGE\_APP\_DIR=<Path Of Configuration File>

For example - INSBRIDGE\_APP\_DIR=/Users/Administrator/Desktop/config

# STEP 5: COPY SOFTRATER CONFIGURATION FILES

The configuration files must be in place prior to the SoftRater installation.

The SoftRater for JBoss zip file should be downloaded to the JBoss server prior to configuration. Unzip the file. There will be an XML file and an .EAR file inside.

- IBSS\_JB.ear
- Insbridge.net.softraterconfig.xml

Place these files in the /Users/Administrator/Desktop/config location.

If you have copied the files to a different location than location you will need to copy the SoftRater configuration file, insbridge.net.softraterconfig.xml, to the INSBRIDGE APP DIR=<Path Of Configuration File> path created in Step 2.

# STEP 6: DEPLOY IBSS\_JBOSS.EAR

Deploying the IBSS\_JBoss.ear file on JBoss is a one step procedure, copy the provided file (IBSS\_JBoss.ear) to the following location: <JBoss\_Installation\_Home>/server/SR\_Server/deploy.

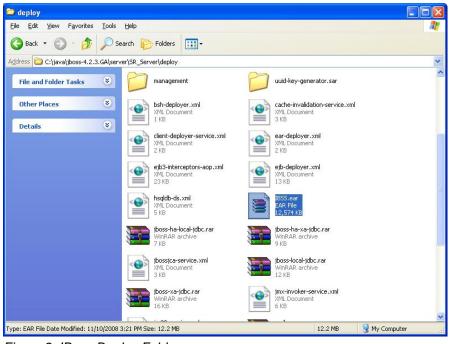


Figure 2 JBoss Deploy Folder

# **STEP 7: TEST CONNECTION**

Test the application using the following URL: <a href="http://<ServerName>:8080/IBSS">http://<ServerName>:8080/IBSS</a>. This is assuming the default port has been used. The port can be changed, please verify the port number if the application fails to launch.

#### **Stopping and Starting JBoss**

If the application fails to launch and the port and server name are correct, you may need to stop and start JBoss.

To start the JBoss server open a console (Windows) or shell (Linux) and access the <JBoss\_Installation\_Home>/bin folder, on this location type the following command:

Windows:
Run -c SR\_Server -b <Host\_IP\_Address>

Linux:
Run.sh -c SR\_Server -b <Host\_IP\_Address>

# INSTALLATION PROCEDURES – UTILIZING A SQL SERVER DATABASE

The following is a check list of the installation steps needed to perform a NEW SoftRater for JBoss Installation:

- 1. Creation of the IBSR databases is next.
- 2. Create a JBoss entry in IBSS.
- 3. Create a JBoss entry in IBFA

For the Insbridge 4.6 release:

 The IBSR database has been tested and certified on MS SQL Server 2008 R2 on MS Windows 2008 64-bit.

### STEP 1: RESTORING IBRU DATABASES IN SQL SERVER

Because many corporate environments have a separation between the system administrator and the database administrator, the following process may require both administrators' access and permissions. Make sure you have a SQL Server account called **ibru**.

**NOTE:** If you do not have database permissions, you will not be able to perform the following database procedures.

**NOTE:** If you are unsure how to perform a database restore, please consult with your database administrator.

Currently supported is the default SQL Server collation using SQL\_Latin1\_General\_CP1\_CI\_AS and sort order plus case sensitivity using Latin1\_General\_BIN as the server collation. The security database (IB\_CLIENT) supports the default SQL Server collation using SQL\_Latin1\_General\_CP1\_CI\_AS. The RateManager and SoftRater databases can use either case sensitive or non-case sensitive. Please check with Oracle Insurance for any questions regarding database server sort orders or collations.

- 1. Located in the Insbridge Installation Directory:
  - ♦ SoftRater IBSR
    - Latin1 General BIN
      - DATABASE\_BACKUP\_IBSR\_TEMPLATE\_CASE\_SENSITIVE.bak
    - SQL\_Latin1\_General\_CP1\_CI\_AS
      - DATABASE\_BACKUP\_IBSR\_TEMPLATE.bak
    - Update:Usp IBSR v04.05.01.sql

- 2. Select the SoftRater backup file you want to use, case sensitive or non-case sensitive.
- 3. **Copy the file** to an appropriate database folder on the machine where SQL Server is installed. For example, [Drive]:\Program Files\Insbridge\Databases. If you are unsure of a location, please consult with your database administrator.
- 4. **Rename the file**. It is not required but it is strongly suggested that the database file name be changed from TEMPLATE to something that defines the databases more accurately. At a minimum, it is recommended that you remove "\_TEMPLATE" from the name. You can change the name after it has been restored also.
- 5. **Open the SQL Server Management Studio** either on the server or remotely using either an administrative account with sa privileges or as the sa account.

**NOTE:** If you do not have SQL Server Management Studio, check to see that the SQL Server Client has been installed. For a SQL Server install, you must have the SQL Server Client installed.

Go to Databases.

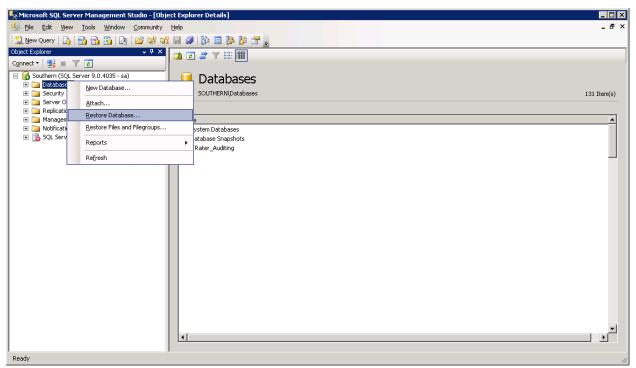


Figure 3 Right Click to Restore Database

- Right click on **Databases**.
- 8. Select **Restore Database...** A separate screen will be displayed.

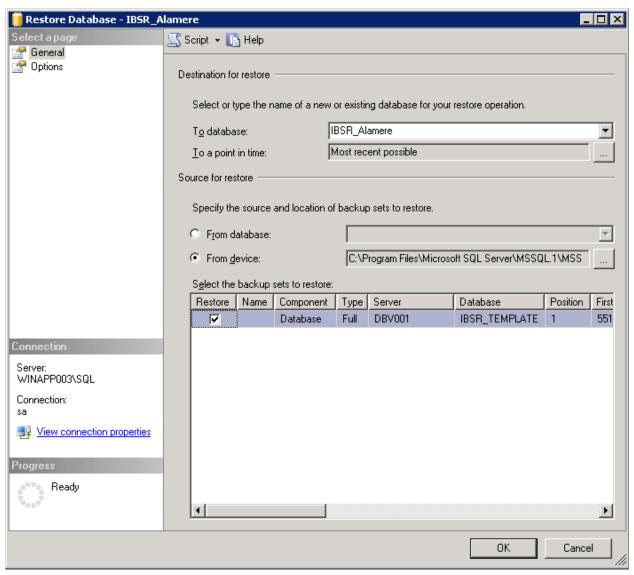


Figure 4 Restoring a Database

- 9. Enter your IBSR database name in To Database:.
- 10. Select **From Device**. Click ... to browse to the location where the database files were placed in step 3.
- 11. Select your database IBSR\_xxxx.BAK, where xxxx equals the renamed file from step 4.
- 12. Click **OK**. Your database will be populated.
- 13. Verify your information. Check the **Restore** box.
- 14. Click OK.
- 15. If the database was restored successfully, it will be displayed in the database folder. If not, please correct any errors and try again.

16. Once the databases are restored to SQL Server, you will need to create or assign a SQL Server user account for the application. This user will be used for the connection to the databases when setting up the connections from the Insbridge Framework Administrator. Make note of the account you want to use. This information will be entered into the Insbridge Framework Administrator.

# STEP 2: SETTING UP A JBOSS ENVIRONMENT IN IBSS

You will be able to access the application by typing http://<ServerName or IP Address>:8080/IBSS

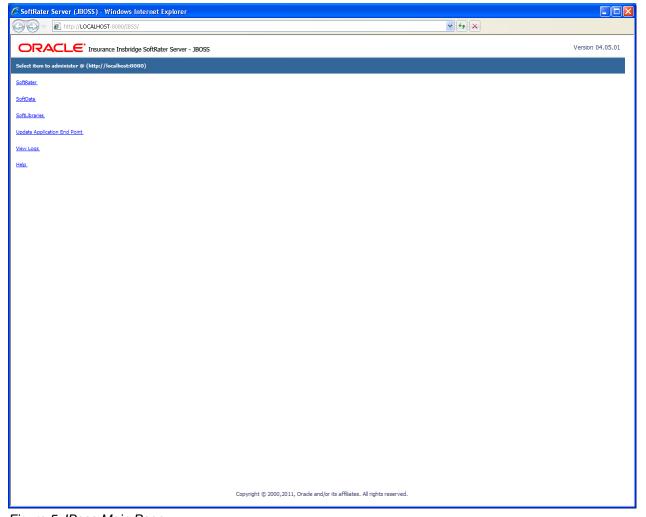


Figure 5 JBoss Main Page

**NOTE:** If you changed the JBoss default port (8080) during the Server creation, you should change the default application port on the "<u>Update Application End Point</u>" option located in the IBSS main page before accessing the application WebServices and methods.

NOTE: The IBSS parameter in the application URL must be capitalized.

#### To Create/Edit an Environment

\* Environment Setup

- 1. Select **SoftRater** from the JBoss Main page. You will be placed on the SoftRater page.
- 2. Select the **Environment Setup** link.

The **Environment Setup** section allows you to configure rating environments. An environment is a pointer to a location where SoftRater Packages (SRP's) are stored and loaded. There is no limit to the number of environments you may have. Required fields will be marked with an asterisk (\*).

Status:					
SELECT ENVIRONMENT	>> Add New Environment <<	<b>∨</b> Go!			
Environment Name*	SR_JBOSS				
Database Server*	APP003	Por	t* 1433	Query Block	
Database Name*	IBSR_JB	Schema name	**		
Database User Id*	sa				
Database Password*	•••••				
Provider Type	MS SQL Server				
Database Type	SoftRater 💌				
Data Dir	C:\Insbridge\SR_Packages\				
* Fields are required. ** Fields required for an 0	Dracle DB connection.				
Save Exit			Test Connection!	Delete!	

Figure 6 Environment Setup

- 3. To create a new environment, use the drop down text box next to **SELECT ENVIRONMENT** and select **>> Add New Environment <<.** If the page does not automatically refresh, click **GO**.
- 4. When the page refreshes, enter the following information:

Environment Name: A name for the environment.

**Database Server:** The name of the server that houses the database that packages are loaded to.

Database Name: The name of the database that packages are loaded to.

Database User Id: The username to access the database.

**Database Password:** The password for the username entered.

**Provider Type:** The provider of the database. Options are **DB2**, **DB2**(**AS400**), **ORACLE** and **MS SQL SERVER**.

**Database Type:** The type of database being accessed. Options are **SoftRater** and **RateManager**.

Data Dir: The location of the SoftRater Packages (SRP's).

Port: Listening port to the target Database Management System.

#### Default port numbers:

SQL Server – 1433 Oracle – 1521 DB2 – 50000

**Query Block:** For certain Database Management Systems (DBMS), system batch query optimization is required for performance and/or because of limits on/in the system. This value will control the maximum number of batch query operations that can be submitted to the target DBMS in any one transaction.

For DB2, enter a query size that is relative to the SQL statement heap size. For example, if your SQL statement heap size is 2048, you may want to enter a query size of 5. The larger the heap size, the larger the query size can be.

You may also need to increase the application heap size.

Query block is not needed for SQL Server or Oracle databases.

Schema Name: The schema name for the database.

- 5. When you are finished entering information, click **SAVE**. The environment will be saved and the **Status** field will update.
- 6. Before you can use the new environment for rating, you will need to reload the configuration XML file. This is done by resetting the environments. On the left hand side of the environment page, select the Reset Environments options. You will be placed on the environments page.



To activate changes to an environment, the SoftRater configuration XML file must be reloaded by clicking **EXECUTE**. The screen will refresh and the environment will be reset. Click **EXIT** to return to the SoftRater Administrator menu.

# \* Reset Environment Configuration Select this method to re-load the SoftRater configuration xml file making any changes to the environment settings now active. NOTE: If program caching is enabled the ALL items currently in the cache will be purged. Note: Transactions currently in process could be made invalid. Execute Exit

Figure 7 Resetting the Environment

**NOTE:** All information in the cache will be purged and any transactions currently processing could be made invalid.

# STEP 3: ENTERING YOUR IBSS INSTANCE IN IBFA

IBFA will need to communicate with the IBSS environment. This will allow for packages to be loaded. There are two parts that will need to be completed:

- 1. Create an environment.
- 2. Configure the environment.

A SoftRater environment may be completed at installation or can be added at a later time. A SoftRater environment can be on a Windows machine or a Java machine running an application server, such as JBoss. There is no limit to the number of SoftRater environments that you can have.

- 1. Enter IBFA.
- 2. Browse to SoftRater→Explorer→Subscriber name.
- 3. Click on Add Environment.
- 4. Enter a **Name** and select a **Typ**e. For example, you can create a Quality Control environment with a type of Quality Assurance.
- 5. Select the **Environments** link under the Configuration header on the left hand side to enter the configuration information for the newly created logical environment. You will be placed on the Environments screen. The environments you previously setup will be listed. If an environment is missing, you must return to the Configuration subtab and add it.

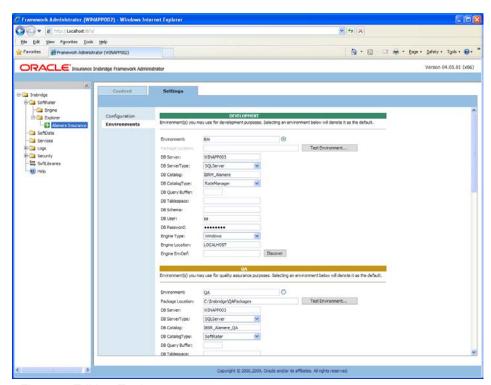


Figure 8 Editing Environment

- 6. The **Environment Name** will be complete. No changes are needed.
- 7. Enter in the file path where you want packages stored in the **Package Location**. Use the Test Environment option to have the location created for you.
- 8. Enter in the **DBServer** name or IP address. This is the database server where the SoftRater database was restored or created.
- 9. Select the **DB Server Type** that you are using.
- The **DB Catalog** is the name of the SoftRater database restored in SQL Server. For example, IBSR QA.
- 11. The **DB Catalog Type** is **SoftRater**.
- 12. **DB Query Buffer** is the Query Block entry from IBSS. An entry is required if you are using a DB2 database. For SQL or Oracle, no entry is needed.
- 13. **DB Tablespace** is not required for a SoftRater environment
- 14. The **DB Schema** is the name of the schema that defines the structure of the database. This information may be obtained from the DBA.
- 15. Enter the **DB User** name and **Password**.
- 16. Select the **Engine Type**.
- 17. The **Engine Location** is the location of where you installed the SoftRater engine. You can use the machine name or IP address. For WebSphere, WebLogic or JBoss, you must also include the port. For example, a JBoss server may have "WBServerName:8080" as the entry.
- 18. The **Engine EnvDef** is the machine name if the engine is located on a different server. You can use the machine name or IP address.
- 19. Click **SAVE** to save your entries.

NOTE: If the JBoss environment is not responding, you may need to stop and start the JBoss service.

# INSTALLATION PROCEDURES – UTILIZING AN ORACLE DATABASE

The following is a check list of the installation steps needed to perform a NEW SoftRater for JBoss Installation:

- 1. Create Oracle database.
- 2. Create a JBoss entry in IBSS.
- 3. Run the Oracle Client on the machine where the IBRU system was installed.
- 4. Create a JBoss entry in IBFA

#### For the Insbridge 4.6 release:

 The IBRU application has tested and certified Oracle 11g Release 2 (11.2.0.1.0) utilizing Oracle Enterprise Linux 5.3.

# **STEP 1: CREATING AN ORACLE DATABASE**

Because many corporate environments have a separation between the system administrator and the database administrator, the following process may require both administrators' access and permissions.

IMPORTANT: It is strongly recommended that any database modification be performed by a qualified database administrator (DBA). The database setup procedures and tasks require the skill set of a database administrator. If you are not a database administrator, please stop. Improper setup may result in unwelcome changes to the database. Please consult with a qualified database administrator before proceeding.

Before proceeding, please have ready:

- The LOBs that your company uses. You will need the ID number for each LOB.
- Your subscriber number.
- Location of the Insbridge files.

Oracle Insurance does not have specific requirements, whatever requirements are deemed necessary by your company's internal standards will work. It is recommended that you included the version number or environment name if you are planning on creating more than one instance.

These instructions are high level and require that the setup person be a DBA.

1. On your Oracle database, run all DDLs.

**NOTE:** If you do not have database permissions, you will not be able to perform the following database procedures.

- a) Create default tablespace for the Soft Rater database.
  - If a database table needs to be added, the DDLs are located in the IBFA Installation Directory under the SoftRater/DDL folder. I.e. [INSTALL\_DIR]/Insbridge/SoftRater/DDL.
  - You will have to replace the TABLESPACE name in the scripts with the tablespace name you used when you created the database.
  - On the DT tables, you will need to create one for every LOB. An example of the format is
    in the comments of the script. It requires the LOB ID number and the customer number.
- b) Create user IBSR and assign basic connect and resource grants.
- 2. On your Oracle database, you will need to run a DT table script for each LOB.
- 3. After all DT tables have been created, please make note of:
  - Schema
  - Instance
  - User name
  - Password

This information will need to be passed along to the IBRU installer. This information is needed to create a logical environment.

# **Location of Oracle DDL Directory**

If a database table needs to be added in SoftRater, the DDLs are located in the IBFA Installation Directory under the SoftRater/DDL folder. I.e. [INSTALL\_DIR]/Insbridge/SoftRater/DDL.

oracle.create.dt.template.sql.txt oracle.create.packages.sql.txt oracle.create.packages\_lk.sql.txt oracle.create.packages\_rl.sql.txt oracle.create.packages\_si.sql.txt oracle.create.packages\_so.sql.txt

This information may be needed if you are attempting to add an LOB and receive missing table errors. Creating tables in Oracle should be performed by a qualified DBA.

# STEP 2: SETTING UP A JBOSS ENVIRONMENT IN IBSS

You will be able to access the application by typing <a href="http://cserverName.or-IP-Address">http://cserverName.or-IP-Address</a>>:8080/IBSS

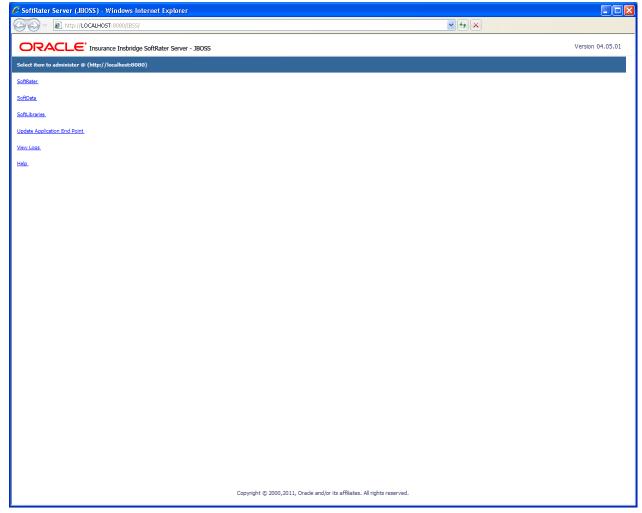


Figure 9 IBSS JBoss Main Page

**NOTE:** If you changed the JBoss default port (8080) during the Server creation, you should change the default application port on the "<u>Update Application End Point</u>" option located in the IBSS main page before accessing the application WebServices and methods.

NOTE: The IBSS parameter in the application URL must be capitalized.

#### To Create/Edit an Environment

- 1. Select **SoftRater** from the JBoss Main page. You will be placed on the SoftRater page.
- 2. Select the Environment Setup link.

The **Environment Setup** section allows you to configure rating environments. An environment is a pointer to a location where SoftRater Packages (SRP's) are stored and loaded. There is no limit to the number of environments you may have. Required fields will be marked with an asterisk (\*).

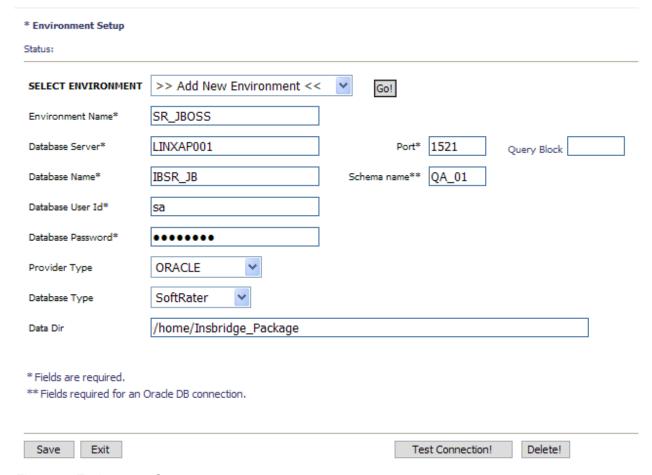


Figure 10 Environment Setup

- To create a new environment, use the drop down text box next to SELECT ENVIRONMENT and select >> Add New Environment <<. If the page does not automatically refresh, click GO.</li>
- 4. When the page refreshes, enter the following information:

Environment Name: A name for the environment.

**Database Server:** The name of the server that houses the database that packages are loaded to.

**Database Name:** The name of the database that packages are loaded to.

Database User Id: The username to access the database.

**Database Password:** The password for the username entered.

**Provider Type:** The provider of the database. Options are **DB2**, **DB2(AS400)**, **ORACLE** and **MS SQL SERVER**.

**Database Type:** The type of database being accessed. Options are **SoftRater** and **RateManager**.

Data Dir: The location of the SoftRater Packages (SRP's).

Port: Listening port to the target Database Management System.

#### Default port numbers:

SQL Server – 1433 Oracle – 1521 DB2 – 50000

**Query Block:** (Optional) For certain Database Management Systems (DBMS), system batch query optimization is required for performance and/or because of limits on/in the system. This value will control the maximum number of batch query operations that can be submitted to the target DBMS in any one transaction.

For DB2, enter a query size that is relative to the SQL statement heap size. For example, if your SQL statement heap size is 2048, you may want to enter a query size of 5. The larger the heap size, the larger the query size can be.

You may also need to increase the application heap size.

Query block is not needed for SQL Server or Oracle databases.

Schema Name: The schema name for the database.

- 5. When you are finished entering information, click **SAVE**. The environment will be saved and the **Status** field will update.
- 6. Before you can use the new environment for rating, you will need to reload the configuration XML file. This is done by resetting the environments. On the left hand side of the environment page, select the Reset Environments options. You will be placed on the environments page.



To activate changes to an environment, the SoftRater configuration XML file must be reloaded by clicking **EXECUTE**. The screen will refresh and the environment will be reset. Click **EXIT** to return to the SoftRater Administrator menu.

# \* Reset Environment Configuration Select this method to re-load the SoftRater configuration xml file making any changes to the environment settings now active. NOTE: If program caching is enabled the ALL items currently in the cache will be purged. Note: Transactions currently in process could be made invalid. Execute Exit

Figure 11 Resetting the Environment

**NOTE:** All information in the cache will be purged and any transactions currently processing could be made invalid.

### STEP 3: INSTALLATION OF ORACLE CLIENT

If the Oracle Client has already been installed and configured, you can skip this step. Return to the machine where the IBRU system was installed. One instance of the Oracle client is all that is required. If you have more than one Oracle environment that you want to connect, for example a QA environment and a Production environment, you will only need to run the Oracle client once.

# **Running the Oracle Client**

**Run the Oracle Client.** On the machine where the IBRU system was installed, you will need to run the Oracle client. This will allow IBFA to communicate with the Oracle database.

For a 64-bit environment, please make sure you have the 64-bit Oracle Client.

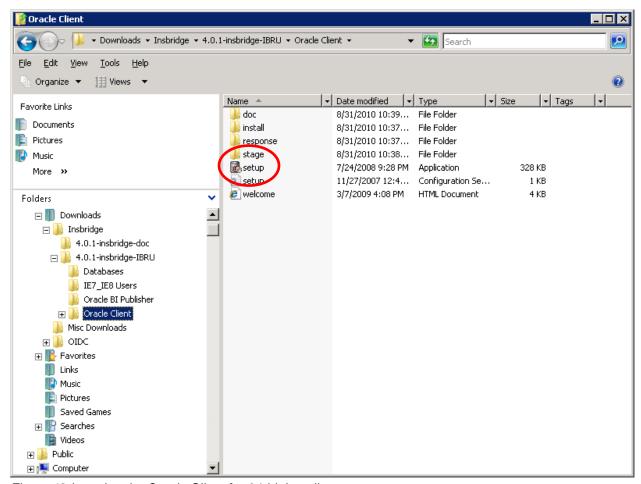


Figure 12 Locating the Oracle Client for 64-bit Installs

- 1. In the 04.06.00-insbridge-IBRU folder, locate the Oracle Client folder.
- 2. Select the setup application. The Oracle client installation will begin.



Figure 13 Running the Oracle Client

- 3. Select **RUNTIME** as the Installation Type.
- 4. Click **NEXT**.
- 5. For the Summary Inside Oracle Providers for .NET, the Oracle Client, you must use a LOCAL DRIVE, i.e. C:\app\oracle-insbridge.
- 6. Click NEXT.
- 7. You can leave the defaults and INSTALL.

# STEP 4: ENTERING YOUR IBSS INSTANCE IN IBFA

IBFA will need to communicate with the IBSS environment. This will allow for packages to be loaded. There are two parts that will need to be completed:

- 1. Create an environment.
- 2. Configure the environment.

A SoftRater environment may be completed at installation or can be added at a later time. A SoftRater environment can be on a Windows machine or a Java machine running an application server, such as JBoss. There is no limit to the number of SoftRater environments that you can have.

- 1. Enter IBFA.
- 2. Browse to SoftRater→Explorer→Subscriber name.
- 3. Click on Add Environment.
- 4. Enter a **Name** and select a **Typ**e. For example, you can create a Quality Control environment with a type of Quality Assurance.
- 5. Select the **Environments** link under the Configuration header on the left hand side to enter the configuration information for the newly created logical environment. You will be placed on the Environments screen. The environments you previously setup will be listed. If an environment is missing, you must return to the Configuration subtab and add it.

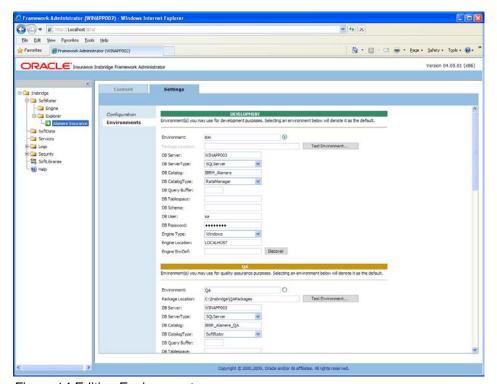


Figure 14 Editing Environment

- 6. The **Environment Name** will be complete. No changes are needed.
- 7. Enter in the file path where you want packages stored in the **Package Location**. Use the Test Environment option to have the location created for you.
- 8. Enter in the **DBServer** name or IP address. This is the database server where the SoftRater database was restored or created.
- 9. Select the **DB Server Type** that you are using.
- The **DB Catalog** is the name of the SoftRater database restored in SQL Server. For example, IBSR QA.
- 11. The **DB Catalog Type** is **SoftRater**.
- 12. **DB Query Buffer** is the Query Block entry from IBSS. An entry is required if you are using a DB2 database. For SQL or Oracle, no entry is needed.
- 13. **DB Tablespace** is not required for a SoftRater environment
- 14. The **DB Schema** is the name of the schema that defines the structure of the database. This information may be obtained from the DBA.
- 15. Enter the **DB User** name and **Password**.
- 16. Select the **Engine Type**.
- 17. The **Engine Location** is the location of where you installed the SoftRater engine. You can use the machine name or IP address. For WebSphere, WebLogic or JBoss, you must also include the port. For example, a JBoss server may have "WBServerName:8080" as the entry.
- 18. The **Engine EnvDef** is the machine name if the engine is located on a different server. You can use the machine name or IP address.
- 19. Click **SAVE** to save your entries.

NOTE: If the JBoss environment is not responding, you may need to stop and start the JBoss service.

For more information on setting up environments, please see the Insbridge Framework Administrator User Guide.

# INSTALLATION PROCEDURES – UTILIZING AN IBM DB2 DATABASE

The following is a check list of the installation steps needed to perform a NEW SoftRater for JBoss Installation utilizing an IBM DB2 (DB2) database:

- 1. Create a DB2 database.
- 2. Create a JBoss entry in IBSS.
- 3. Run the DB2 Client on the machine where the IBRU system was installed.
- 4. Create a JBoss entry in IBFA

# **Required DB2 Client**

To obtain the DB2 client, please visit the IBM website and download the Client for IBM Data Server Runtime Client, Version 9.5 with fix pack 8.

You also can perform a search for "IBM Data Server Runtime Client, Version 9.5 with fix pack 8"

**NOTE:** You may need to create a free user account to download materials.

NOTE: Release 4.6 was tested on IBM DB2 v9.5.

# STEP 1: CREATING A DB2 DATABASE

Because many corporate environments have a separation between the system administrator and the database administrator, the following process may require both administrators' access and permissions.

IMPORTANT: It is strongly recommended that any database modification be performed by a qualified database administrator (DBA). The database setup procedures and tasks require the skill set of a database administrator. If you are not a database administrator, please stop. Improper setup may result in unwelcome changes to the database. Please consult with a qualified database administrator before proceeding.

Before proceeding, please have ready:

- The LOBs that your company uses. You will need the ID number for each LOB.
- Your subscriber number.
- Location of the Insbridge files.

Oracle Insurance does not have specific requirements, whatever requirements are deemed necessary by your company's internal standards will work. It is recommended that you included the version number or environment name if you are planning on creating more than one instance.

These instructions are high level and require that the setup person be a DBA.

1. On your DB2 database, run all **DDLs**.

**NOTE:** If you do not have database permissions, you will not be able to perform the following database procedures. The Insbridge user must be granted "Connect to database". "Create Tables", and "Create packages" authorities.

- a) Create default tablespace for the Soft Rater database.
  - If a database table needs to be added, the DDLs are located in the IBFA Installation Directory under the SoftRater/DDL folder. I.e. [INSTALL\_DIR]/Insbridge/SoftRater/DDL.
  - You will have to replace the TABLESPACE name in the scripts with the tablespace name you used when you created the database.
  - On the DT tables, you will need to create one for every LOB. An example of the format is in the comments of the script. It requires the LOB ID number and the customer number.
- b) Create user IBSR and assign Connect to database, Create Tables and Create packages authorities.
- 2. On your Oracle database, you will need to run a DT table script for each LOB.
- 3. After all DT tables have been created, please make note of:
  - Schema
  - Instance
  - User name
  - Password

This information will need to be passed along to the IBRU installer. This information is needed to create a logical environment.

# **Location of DB2 DDL Directory**

If a database table needs to be added in SoftRater, the DDLs are located in the IBFA Installation Directory under the SoftRater/DDL folder. I.e. [INSTALL\_DIR]/Insbridge/SoftRater/DDL.

db2.create.dt.template.sql.txt db2.create.packages.sql.txt db2.create.packages\_lk.sql.txt db2.create.packages\_rl.sql.txt db2.create.packages\_si.sql.txt db2.create.packages\_so.sql.txt

This information may be needed if you are attempting to add an LOB and receive missing table errors. Creating tables in DB2 should be performed by a qualified DBA.

# STEP 2: SETTING UP A JBOSS ENVIRONMENT IN IBSS

You will be able to access the application by typing <a href="http://cserverName.or-IP-Address">http://cserverName.or-IP-Address</a>>:8080/IBSS

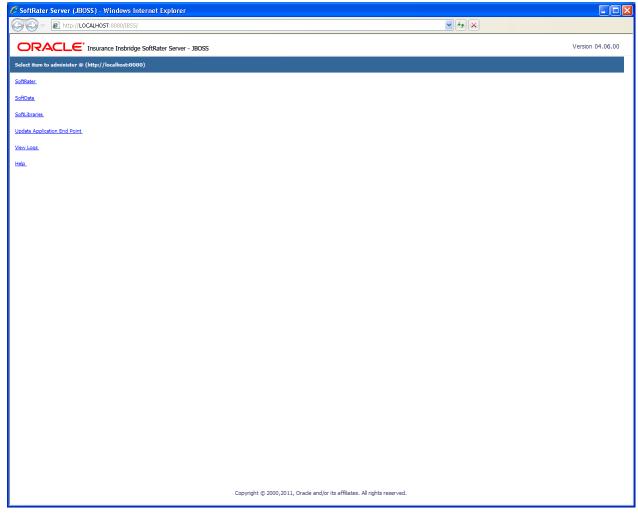


Figure 15 IBSS JBoss Main Page

**NOTE:** If you changed the JBoss default port (8080) during the Server creation, you should change the default application port on the "<u>Update Application End Point</u>" option located in the IBSS main page before accessing the application WebServices and methods.

NOTE: The IBSS parameter in the application URL must be capitalized.

#### To Create/Edit an Environment

\* Environment Setup

- 1. Select **SoftRater** from the JBoss Main page. You will be placed on the SoftRater page.
- 2. Select the **Environment Setup** link.

The **Environment Setup** section allows you to configure rating environments. An environment is a pointer to a location where SoftRater Packages (SRP's) are stored and loaded. There is no limit to the number of environments you may have. Required fields will be marked with an asterisk (\*).

Status:					
SELECT ENVIRONMENT	>> Add New Environment <<	<b>✓</b> Go!	]		
Environment Name*	SR_JBOSS				
Database Server*	APP004		Port* 50000	Query Block 5	
Database Name*	IBSR_AlamerJB	Schema na	ame** prod_1		
Database User Id*	sa				
Database Password*	•••••				
Provider Type	DB2				
Database Type	SoftRater 💌				
Data Dir	home/insbridge/sr_packages				
* Fields are required.  ** Fields required for an Oracle DB connection.					
Save Exit			Test Connection!	Delete!	

Figure 16 Environment Setup

- 3. To create a new environment, use the drop down text box next to **SELECT ENVIRONMENT** and select **>> Add New Environment <<.** If the page does not automatically refresh, click **GO**.
- 4. When the page refreshes, enter the following information:

**Environment Name:** A name for the environment.

**Database Server:** The name of the server that houses the database that packages are loaded to.

**Database Name:** The name of the database that packages are loaded to.

Database User Id: The username to access the database.

**Database Password:** The password for the username entered.

**Provider Type:** The provider of the database. Options are **DB2**, **DB2**(**AS400**), **ORACLE** and **MS SQL SERVER**.

**Database Type:** The type of database being accessed. Options are **SoftRater** and **RateManager**.

Data Dir: The location of the SoftRater Packages (SRP's).

Port: Listening port to the target Database Management System.

#### **Default port numbers:**

SQL Server – 1433 Oracle – 1521 DB2 – 50000

**Query Block:** (Optional) For certain Database Management Systems (DBMS), system batch query optimization is required for performance and/or because of limits on/in the system. This value will control the maximum number of batch query operations that can be submitted to the target DBMS in any one transaction.

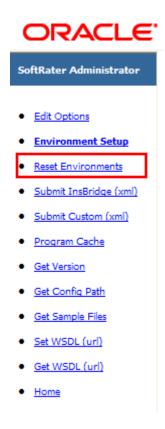
For DB2, enter a query size that is relative to the SQL statement heap size. For example, if your SQL statement heap size is 2048, you may want to enter a query size of 5. The larger the heap size, the larger the query size can be.

You may also need to increase the application heap size.

Query block is not needed for SQL Server or Oracle databases.

Schema Name: The schema name for the database.

- 5. When you are finished entering information, click **SAVE**. The environment will be saved and the **Status** field will update.
- 6. Before you can use the new environment for rating, you will need to reload the configuration XML file. This is done by resetting the environments. On the left hand side of the environment page, select the Reset Environments options. You will be placed on the environments page.



To activate changes to an environment, the SoftRater configuration XML file must be reloaded by clicking **EXECUTE**. The screen will refresh and the environment will be reset. Click **EXIT** to return to the SoftRater Administrator menu.

# \* Reset Environment Configuration Select this method to re-load the SoftRater configuration xml file making any changes to the environment settings now active. NOTE: If program caching is enabled the ALL items currently in the cache will be purged. Note: Transactions currently in process could be made invalid. Execute Exit

Figure 17 Resetting the Environment

**NOTE:** All information in the cache will be purged and any transactions currently processing could be made invalid.

#### STEP 3: INSTALLATION OF DB2 CLIENT

If the DB2 Client has already been installed and configured, you can skip this step. Return to the machine where the IBRU system was installed. One instance of the DB2 client is all that is required. If you have more than one DB2 environment that you want to connect, for example a QA environment and a Production environment, you will only need to run the DB2 client once.

# **Running the DB Client**

**Run the DB2 Client.** On the machine where the IBRU system was installed, you will need to run the DB2 client for the version you have. This will allow IBFA to communicate with the DB2 database.

For a 64-bit environment, please make sure you have the 64-bit DB2 Client.



Figure 18 Installing DB2 Client and Fix Pack

1. Select the setup application. The DB2 client installation will begin.

- 2. Leave all the defaults and click **NEXT**. The installation will begin.
- 3. Click **NEXT** as the installation continues.
- 4. Click **Finish** to complete the installation.

# STEP 4: ENTERING YOUR IBSS INSTANCE IN IBFA

IBFA will need to communicate with the IBSS environment. This will allow for packages to be loaded. There are two parts that need to be completed:

- 1. Create an environment.
- 2. Configure the environment.

A SoftRater environment may be completed at installation or can be added at a later time. A SoftRater environment can be on a Windows machine or a Java machine running an application server, such as JBoss. There is no limit to the number of SoftRater environments that you can have.

- 1. Enter IBFA.
- 2. Browse to SoftRater→Explorer→Subscriber name.
- 3. Click on Add Environment.
- 4. Enter a **Name** and select a **Typ**e. For example, you can create a Quality Control environment with a type of Quality Assurance.
- 5. Select the **Environments** link under the Configuration header on the left hand side to enter the configuration information for the newly created logical environment. You will be placed on the Environments screen. The environments you previously setup will be listed. If an environment is missing, you must return to the Configuration subtab and add it.

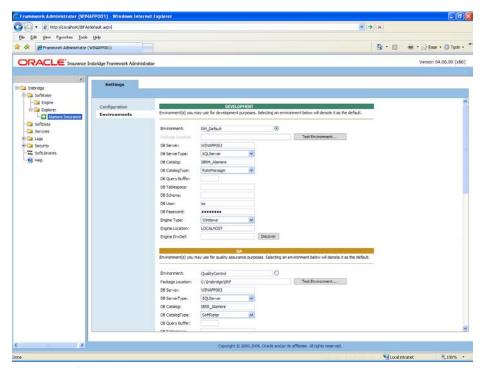


Figure 19 Editing Environment

- 6. The **Environment Name** will be complete. No changes are needed.
- 7. Enter in the file path where you want packages stored in the **Package Location**. Use the Test Environment option to have the location created for you.
- Enter in the **DBServer** name or IP address. This is the database server where the SoftRater database was restored or created.
- 9. Select the **DB Server Type** that you are using.
- The **DB Catalog** is the name of the SoftRater database restored in SQL Server. For example, IBSR QA.
- 11. The **DB Catalog Type** is **SoftRater**.
- 12. **DB Query Buffer** is the Query Block entry from IBSS. An entry is required if you are using a DB2 database. For SQL or Oracle, no entry is needed.
- 13. **DB Tablespace** is not required for a SoftRater environment
- 14. The **DB Schema** is the name of the schema that defines the structure of the database. This information may be obtained from the DBA.
- 15. Enter the **DB User** name and **Password**.
- 16. Select the **Engine Type**.
- 17. The **Engine Location** is the location of where you installed the SoftRater engine. You can use the machine name or IP address. For WebSphere, WebLogic or JBoss, you must also include the port. For example, a JBoss server may have "WBServerName:8080" as the entry.
- 18. The **Engine EnvDef** is the machine name if the engine is located on a different server. You can use the machine name or IP address.
- 19. Click **SAVE** to save your entries.

NOTE: If the JBoss environment is not responding, you may need to stop and start the JBoss service.

For more information on setting up environments, please see the Insbridge Framework Administrator User Guide.

# **CREATING A SOFTRATER DATABASE**

The Insbridge Framework Application container for the SoftRater J2EE EJB contains the JDBC connection drivers that support operational connectivity to the DBMS system listed before. It also contains vendor specific DDLs for the SoftRater operations database schema creation which can be altered by DBA's for setup compliance for varying corporate environments, i.e. TABLESPACE and SCHEMA target definitions.

To obtain Database Definition Language (DDL) scripts for a target DBMS type view the "SoftRater\DDL" subdirectory in the Insbridge IBFA installation directory.

i.e. C:\Program Files\Oracle\IGBU\Insbridge\SoftRater\DDL

Please allow the DBA to review the scripts before attempting to create a SoftRater database schema.

The SoftRater EJB data access system contains all the required JDBC drivers for connectivity to the support DBMS's. TCP/IP connection visibility to the DB Platform is required along with the database server system configured connection PORT for operational use of the SoftRater system. No other supplemental drivers or libraries are needed to establish a connection.

#### **IMPORTANT:**

It is strongly recommended that any database modification be performed by a qualified database administrator (DBA). The database setup procedures and tasks require the skill set of a database administrator. If you are not a database administrator, please stop. Improper setup may result in unwelcome changes to the database. Please consult with a qualified database administrator before proceeding.

# **DATABASE USER ROLES AND PERMISSIONS**

If a more granular approach is required for management of security of the IBRU databases, then the following guidelines can be used to set permissions.

**NOTE:** These are only guidelines. If not properly configured, certain processes within the Insbridge Rating and Underwriting System will fail. An experienced database administrator's expertise is highly recommended before making any security changes.

#### **Recommended SoftRater Permissions:**

The recommended permissions are required for new tables to be created in the SoftRater (IBSR) database dynamically when or if a new line of business SRP (SoftRater Package) is loaded to the SoftRater system. If the recommended permissions are not possible, manual steps will need to be performed that will allow for packages to be loaded.

SoftRater can utilize three database types, SQL Server, DB2 and Oracle.

#### Insbridge SoftRater SQL Server Database.

It is recommended that the Insbridge login be granted permission to connect to the database engine and be enabled. It is also recommended that the Insbridge login be mapped to the Insbridge database with the db\_owner role checked.

#### Insbridge SoftRater Oracle Database.

It is recommended that the Insbridge user be granted, as defaults, the "CONNECT" and "RESOURCE" Roles.

#### Insbridge SoftRater DB2 Database.

It is recommended that the Insbridge user be granted, as defaults, the "Connect to database", "Create Tables", and "Create packages" authorities.

It is recommended that the databases be on separate machines from the applications due to performance and security issues. The IBRU applications and databases can be tenants in a larger setup. No known conflicts exist between IBRU and other applications or required server settings.

It is recommended that db\_owner permissions be given to the Insbridge user. This will allow scripts to be run automatically when a new package is loaded for a new line of business. If this is not possible, DT scripts for each new line will have to be run manually before the package can be loaded.

#### Microsoft SQL Server

#### **JDBC Driver Class**

"com.microsoft.jdbc.sqlserver.SQLServerDriver"

#### Supported Versions – 2005 SP/2 and 2008 R2

#### **User Account Requirements**

Create Table
Create Index
Execute on the SoftRater User Defined Stored Procedures

#### **Oracle**

SoftRater database schema is support by all available ORACLE database platforms.

#### **JDBC Driver Class**

"oracle.jdbc.driver.OracleDriver" Using prefix jdbc:oracle:thin:

#### Supported Versions - 10g, 11g

#### **User Account Requirements**

Create Table
Create Index
Query access to "SYS.OBJ\$"

#### **IBM DB2**

SoftRater database schema is supported on all available DB2 database platforms.

#### **JDBC Driver Class**

"com.ibm.db2.jcc.DB2Driver"
For Native AS400 – "com.ibm.as400.access.AS400JDBCDriver"

#### Supported Version – 9.1

#### **User Account Requirements**

Connect to database Create Table Create Index Query access to "SYSIBM.SYSTABLES"

#### **Configuration Settings**

#### Required

The query dynamics of the SoftRater system requires some modification to Configuration settings. The following Performance Configurations parameters required to the target SoftRater database.

Instance Level – ASLHEAPSZ >= 1024 Instance Level – QUERY\_HEAP\_SZ => 10240 Database Level – APPLHEAPSZ >= 1024

#### Recommended

The query dynamics of the SoftRater system will benefit from the following modification to Configuration settings.

Instance Level – INTRA PARRALLEL (Yes) – For Symmetrical Processing Machines (CPU >=2)

Database Level – DFT\_DEGREE (-1) – For Symmetrical Processing Machines (CPU >=2). Allow the optimizer to determine the degree of intra-partition parallelism based on the number of processors and the type of query.

#### Native z/OS

Support for IBM DB2 for native z/OS requires a specific set of the DDL scripts. They are labeled in the ddls\db2 directory with the ZOS DB2.ZOS prefix. DBA's should review these scripts, starting with the DB2.ZOS.SETUP.sql file that contains create templates for default; STORAGE GROUP, DATABASE, default TABLESPACE. All other table create scripts can be reviewed, altered and executed in any other to be consistent with chosen database standards.

# **CONTACTING SUPPORT**

If you need assistance with an Oracle Insurance Insbridge Rating and Underwriting System product, please log a Service Request using My Oracle Support at <a href="https://support.oracle.com/">https://support.oracle.com/</a>.

#### Address any additional inquiries to:

Oracle Corporation World Headquarters 500 Oracle Parkway Redwood Shores, CA 94065 U.S.A.

Worldwide Inquiries: Phone: +1.650.506.7000 Fax: +1.650.506.7200 oracle.com

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