

Oracle Insurance

**Insbridge Enterprise
Rating**

**SoftRater for WebSphere
Installation Guide**

Release 5.5

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Oracle Insurance Insbridge Enterprise Rating SoftRater for WebSphere Installation Guide

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PREFACE

Welcome to the *Oracle Insurance Insbridge Enterprise Rating SoftRater for WebSphere Installation Guide*. SoftRater for WebSphere is an EJB application that can be installed on an IBM WebSphere Application Server. SoftRater is the multi-platform rating engine component within the Insbridge Enterprise Rating System (Insbridge) that executes the rating and underwriting instructions as defined by the user in RateManager.

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 WebSphere.

PLANNING YOUR INSBRIDGE 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 Enterprise Rating system (Insbridge) is expandable and can accommodate a few different configurations.

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

TYPES OF INSTALLATION

There are various types of installations:

RateManager Installation

- **RateManager for Windows** – Installs RateManager and the Insbridge Framework Administrator (IBFA) in a Windows environment and utilizes IBFA for local rating. This Windows only environment uses a SQL Server database.

SoftRater Installation

- **SoftRater for Java Installation** – Deploys Insbridge SoftRater Server (IBSS) to an application server; WebLogic, WebSphere or JBoss, using a SQL Server database, or an Oracle database, or a DB2 database.

- **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.

Upgrading a Current Installation

- **Upgrade** – This installation is for existing customers and will take their current version of Insbridge up to version 05.05.00.

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

Definitions

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

- **IBER** – Insbridge Enterprise Rating 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 Insbridge 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.
- **RM** – RateManager. RateManager is a component within Insbridge 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 Enterprise Rating Framework Administrator.
- The Oracle Insurance Insbridge Enterprise Rating SoftRater Server Guide.
- You can view these guides in-line at this address:

<http://www.oracle.com/technetwork/documentation/insurance-097481.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.
<i>Italic</i>	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 st Edition	P01-706-01			
2 nd Edition	P01-706-02	V 3.5		
3 rd Edition	P01-706-03	V 3.6	03/14/2006	Update 3.6
4 th Edition	P01-706-04	V 3.6	08/09/2006	Update logo
5 th Edition	P01-706-05	V 3.7	10/05/2006	Update to 3.7
6 th Edition	P01-706-06	V 3.8	7/19/2007	Update to 3.8
7 th Edition	P01-706-07	V 3.8.3	10/19/2007	Update to 3.8.3
8 th Edition	P01-706-08	V 3.8.5	November 2007	Update to 3.8.5
9 th Edition	P01-706-09	V 3.8.7	January 2008	Update to 3.8.7
10 th Edition	P01-706-10	V 3.8.8	March 2008	Update to 3.8.8
11 th Edition	P01-706-11	V 3.9	May 2008	Update to 3.9
12 th Edition	P01-706-12	V 3.10.0	September 2008	Update to 3.10
13 th Edition	P01-706-13	V 3.11	December 2008	Update to 3.11
14 th Edition	P01-706-14	V 3.12	July 2009	Update to 3.12
15 th Edition	P01-706-15	V 3.13	November 2009	Update to 3.13
16 th Edition	P01-706-16	R 4.0	April 2010	Update to 4.0
17 th Edition	P01-706-17	R 4.0.1	August 2010	Update Release
18 th Edition	P01-706-18	R 4.1	December 2010	Update Release
19 th Edition	P01-706-19	R 4.5	May 2011	Update Release
20 th Edition	P01-706-20	R 4.5.1	September 2011	Update Release
21 st Edition	P01-706-21	R 4.6	May 2012	Update Release
22 nd Edition	P01-706-22	R 4.6.1	November 2012	Update Release
23 rd Edition	P01-706-23	R 4.7	September 2013	Update Release
24 th Edition	P01-706-24	R 4.7.1	November 2013	Update Release
25 th Edition	P01-706-25	R 4.8	August 2014	Update Release
26 th Edition	P01-706-26	R 4.9	December 2014	Update Release
27 th Edition	P01-706-27	R 5.0	June 2015	Update Release
28 th Edition	P01-706-28	R 5.0.1	August 2015	Update Release
29 th Edition	P01-706-29	R 5.1	December 2015	Update Release
30 th Edition	P01-706-30	R 5.2	July 2016	Update Release
31 st Edition	P01-706-31	R 5.4	January 2017	Update Release
32 nd Edition	P01-706-32	R 5.5	September 2017	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 WebSphere installation**
- **Access to the server where WebSphere was installed**
- **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. SQL Server backups files are located in the Insbridge-Windows folder. DDLs and updates are located in the SoftRater file on the Install Server.**
- **If utilizing Oracle, you need: DB Catalog name, port number, DB Schema name**
- **If utilizing DB2, you need: DB Catalog name, port number, query block size (heap), DB Schema name**
- **Subscriber ID created in IBFA**
- **Access to the server where the Insbridge 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 WebSphere.

ORACLE SOFTWARE DELIVERY CLOUD

Prior to installation, please make sure the source machine(s) where Insbridge 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 Insbridge 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-Windows:** Required for all RateManager installations. The Insbridge installation is for a 64-bit system.
- **Insbridge-WebSphere:** Required if you are using WebSphere
- **Insbridge-WebLogic:** Required if you are using WebLogic
- **Insbridge-JBoss:** Required if you are using JBoss
- **Documentation:** It is recommended that you download the documentation. Installation guides and user guides are located here.

The Insbridge-Windows folder contents:

- **Databases**
 - ◆ SQL Server
 - **2008**
 - RateManager: IBRM
 - Latin1_General_BIN
 - DATABASE_BACKUP_IBRM_TEMPLATE.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
 - **2012**
 - 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
 - **2016**
 - 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
- **Oracle BI Publisher**
 - ◆ OBI_PUBLISHER.exe
- **Oracle Client**
 - ◆ ODAC121012_x64.zip
- **Oracle Insurance Insbridge Enterprise Rating (x64).exe**

The 05.05.00-Insbridge-jboss folder contents:

- IBSS.EAR
- Insbridge.net.softraterconfig.xml

The 05.05.00-Insbridge-was folder contents:

- IBSS.EAR
- Insbridge.net.softraterconfig.xml

The 05.05.00-Insbridge-wbl folder contents:

- IBSS.EAR
- 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 11.

SETTING UP WEBSPHERE

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\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.*

Application Server Permissions

The SoftRater Server (IBSS) application servers WebLogic, WebSphere, and JBoss require read/write permissions on the Insbridge.net.softmaterconfig.xml that resides in the shared directory for all nodes. Also required is full control on the SoftRater node instance directory creates the config files and log files for that JVM.

It is recommended that the databases be on separate machines from the applications due to performance and security issues. The Insbridge applications and databases can be tenants in an already existing setup. IBFA uses port 80 by default. Please check with your system administrator for port conflicts with the existing setup. The ports used by SoftRater for Java can be changed from the default to a fixed port if needed.

DATABASE USER ROLES AND PERMISSIONS

If a more granular approach is required for management of security of the Insbridge 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 Enterprise Rating 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.

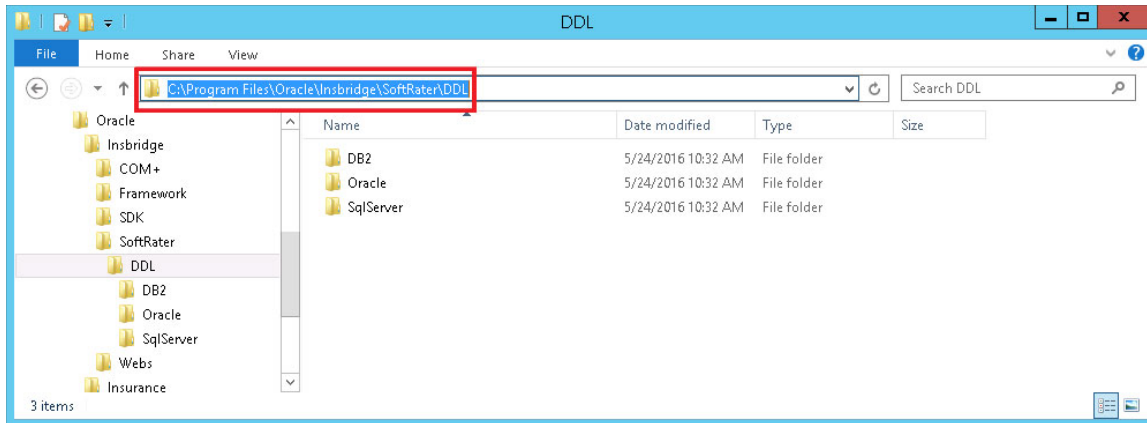
It is recommended that db_owner permissions be given to the Insbridge user. This will allow scripts to be run automatically when a new package is loaded for a new line of business. If this is not possible, DT scripts for each new line will have to be run manually before the package can be loaded.

Database File Location

In the event that db_owner permissions are not possible, scripts will have to be run to create the necessary tables. Tables are required for each Project and or Product. If the tables are not created, the packages cannot be loaded.

DDL scripts can be found on the server where Insbridge was installed in the `...//Oracle/Insbridge/SoftRater` folder.

For example: `C:\Program Files\Oracle\Insbridge\SoftRater\DDL`



For SQL Server, backup files are included in the Insbridge-Windows folder under databases.

- Databases

- ◆ SQL Server
 - **2008**
 - SoftRater: IBSR
 - Latin1_General_BIN
 - DATABASE_BACKUP_IBSR_TEMPLATE.bak
 - SQL_Latin1_General_CP1_CI_AS
 - DATABASE_BACKUP_IBSR_TEMPLATE.bak
 - **2012**
 - SoftRater: IBSR
 - Latin1_General_BIN
 - DATABASE_BACKUP_IBSR_TEMPLATE_CASE_SENSITIVE.bak
 - SQL_Latin1_General_CP1_CI_AS
 - DATABASE_BACKUP_IBSR_TEMPLATE.bak
 - **2016**
 - SoftRater: IBSR
 - Latin1_General_BIN
 - DATABASE_BACKUP_IBSR_TEMPLATE_CASE_SENSITIVE.bak
 - SQL_Latin1_General_CP1_CI_AS
 - DATABASE_BACKUP_IBSR_TEMPLATE.bak

If backup files cannot be used and DDL scripts are needed, SQL Server DDL scripts can be found on the server where Insbridge was installed in the ...//Oracle/Insbridge/SoftRater folder. For example:
C:\Program Files\Oracle\insbridge\SoftRater\DDL

SQL Server DDLs are not included in the Insbridge-Windows folder.

Microsoft SQL Server

SoftRater database schema supports MS SQL Server database platforms:

Versions – 2008 R2, 2012, and 2016

JDBC Driver Class

“com.microsoft.jdbc.sqlserver.SQLServerDriver”

User Account Requirements

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

Oracle

SoftRater database schema supports ORACLE database platforms.

Versions – 11g, 12c

JDBC Driver Class

“oracle.jdbc.driver.OracleDriver”
Using prefix jdbc:oracle:thin:

User Account Requirements

Create Table
Create Index
Query access to “SYS.OBJ\$”

IBM DB2

SoftRater database schema is supported on version 11.1.

Version – 11.1

JDBC Driver Class

“com.ibm.db2.jcc.DB2Driver”
For Native AS400 – “com.ibm.as400.access.AS400JDBCdriver”

User Account Requirements

Connect to database
Create Table
Create Packages
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.

SOFTRATER FOR WEBSPHERE INSTALLATION

Installing SoftRater for WebSphere will require that you:

1. Set up WebSphere and deploy the SoftRater for WebSphere .EAR file and config file. There are five steps in setting up WebSphere 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 WebSphere can utilize either database. The installation procedures are similar, but there are different procedures for each database type. Please follow the implementation for your database type.

Setting up and Deploying in WebSphere

- Step 1:** Delete the wscache file (optional)
- Step 2:** Placing the Configuration Files
- Step 3:** Create INSBRIDGE_APP_DIR in Name Space Bindings
- Step 4:** Installing the EAR File
- Step 5:** Test Connection

Implementing a SQL Server Database

- Step 1:** Restoring Insbridge Databases in SQL Server
- Step 2:** Setting up a WebSphere 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 WebSphere Environment in IBSS
- Step 3:** Installation of Oracle Client
- Step 4:** Entering your IBSS Instance in IBFA
- Step 5:** Reboot the machine where Insbridge is installed

Implementing an IBM DB2 Database

- Step 1:** Creating a DB2 Database
- Step 2:** Creating a Shared Library in WebSphere.
- Step 3:** Setting up a WebSphere Environment in IBSS
- Step 4:** Installation of DB2 Client
- Step 5:** Entering your IBSS Instance in IBFA

SOFTRATER FOR WEBSHERE INSTALLATION

WebSphere should be up and running prior to deploying the .EAR file. There are five steps that should be performed in WebSphere prior to implementing the database. All steps are required.

- **Step 1:** Delete the wscache file (optional)
- **Step 2:** The Configuration Files must be placed in a static location
- **Step 3:** Create INSBRIDGE_APP_DIR in Name Space Bindings
- **Step 4:** Installing the EAR File
- **Step 5:** Test Connection

Java Version

WebSphere requires Java 1.7. Failure for the .EAR file to deploy may be a result of the wrong Java version being used.

STEP 1: DELETE THE WSCACHE FILE (OPTIONAL)

An optional step is to delete the wscache folder under the server profile before deploying the .EAR file. This may help to prevent compatibility errors with the Oracle client.

The wscache is located in the temp directory under the server profile. For example:
`/opt/IBM/WebSphere/AppServer/profiles/AppSrv01/temp/wscache.`

STEP 2: PLACING THE CONFIGURATION FILES

We suggest creating an Insbridgeconfig folder but you may use any folder name you want and you can place the folder any where you want. This folder holds the necessary files for the SoftRater for WebSphere installation. Take note of the location and make sure you have created this folder prior to deploying the .EAR file.

- For a Windows environment, `C:\Insbridge\config`
- For a Linux environment, `home/Insbridge/config`

NOTE: *For the purposes of this guide, the location will be referred to as `C:\Insbridge\config`.*

An instance folder must be placed under the configuration folder. We suggest creating an Insbridge config instance folder but you may use any folder name you want. The folder must be under the config folder. Take note of the location and make sure you have created this folder prior to running the installation. This location serves as the instance application directory.

- For a Windows environment, C:\Insbridge\config\instance
- For a Linux environment, home/Insbridge/config/instance

NOTE: *For the purposes of this guide, the location will be referred to as C:\Insbridge\config\instance.*

Placing the Configuration Files

The SoftRater for WebSphere zip file should be downloaded to the WebSphere server prior to configuration. Unzip the file. The file contains an XML file and an .EAR file.

- **IBSS.ear**
- **Insbridge.net.softmaterconfig.xml**

Place these files in the C:\Insbridge\config folder.

The instance folder will not have any files placed in it.

NOTE: *The location of the .EAR file and configuration need to be specified in the Name Space Bindings. Once these files are place, do not move.*

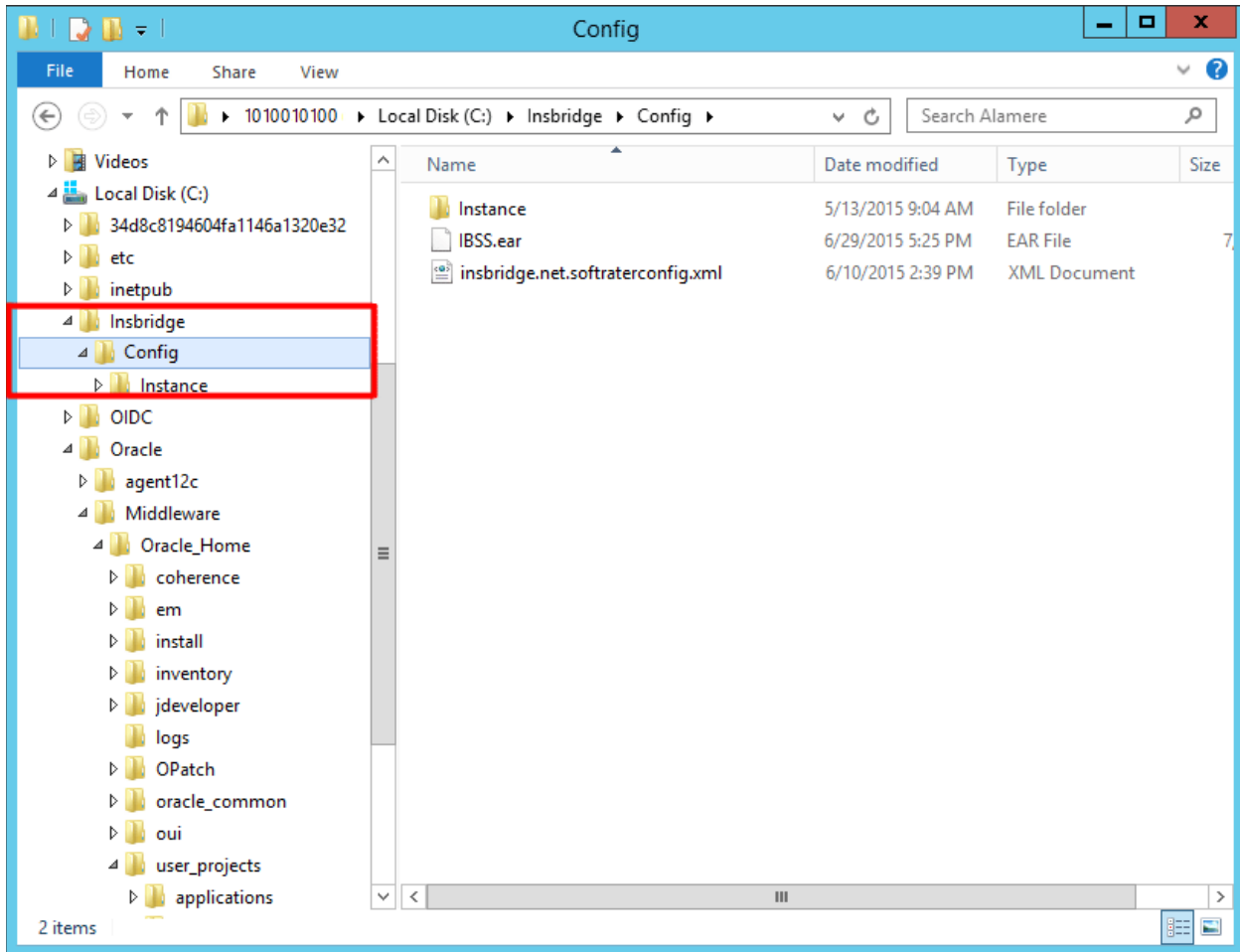


Figure 1 Location of Config and Instance Folders

Once you have these files in place, do not move them.

STEP 3: CREATE INSBRIDGE_APP_DIR IN NAME SPACE BINDINGS

SoftRater uses an XML configuration (`insbridge.net.softmaterconfig.xml`) file to store information in the configured rating environments. This file needs to be accessible to the Insbridge Enterprise Rating SoftRater Server (IBSS) in order to operate. The location to define where the config file is located is stored using a Name Space Binding string in the WebSphere server configuration.

1. To create the `INSBRIDGE_APP_DIR` string, from the WebSphere Admin console, browse to the following location:

Environment → Naming → Name Space Bindings

2. Change the scope to the **Server** level and click **Apply**.

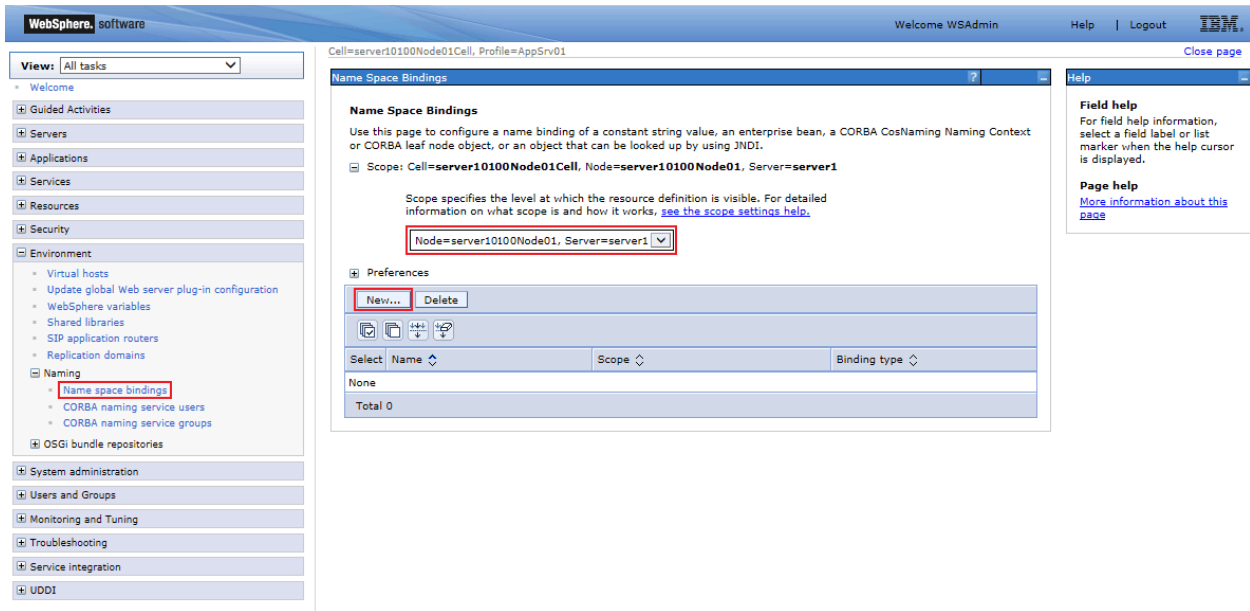


Figure 2 Changing Scope to Server

3. Once you have changed to the server level, click **New**.

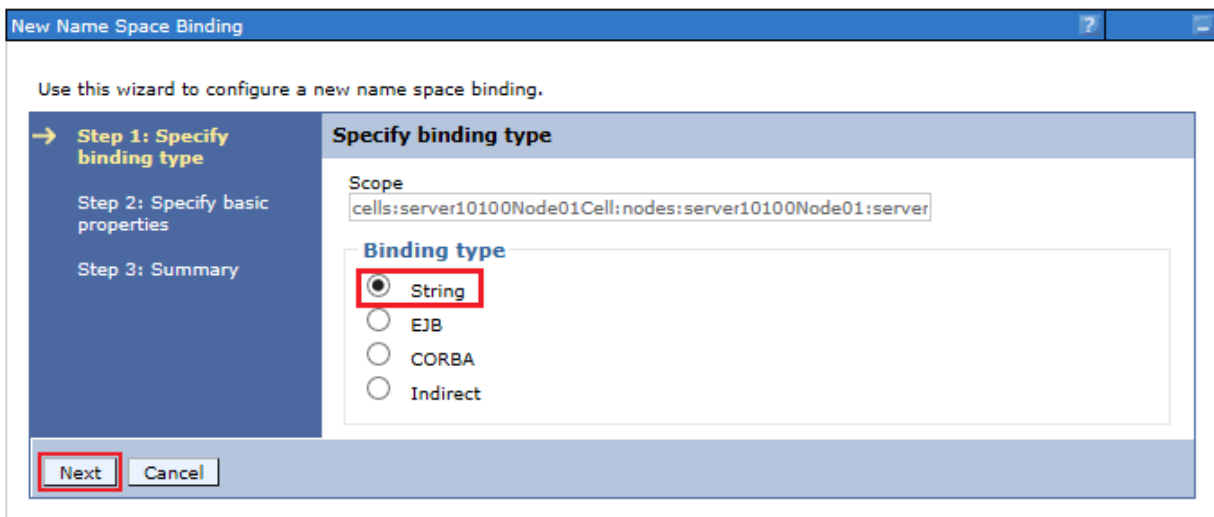


Figure 3 Creating a New Name Space

4. Select String and then click **Next**.

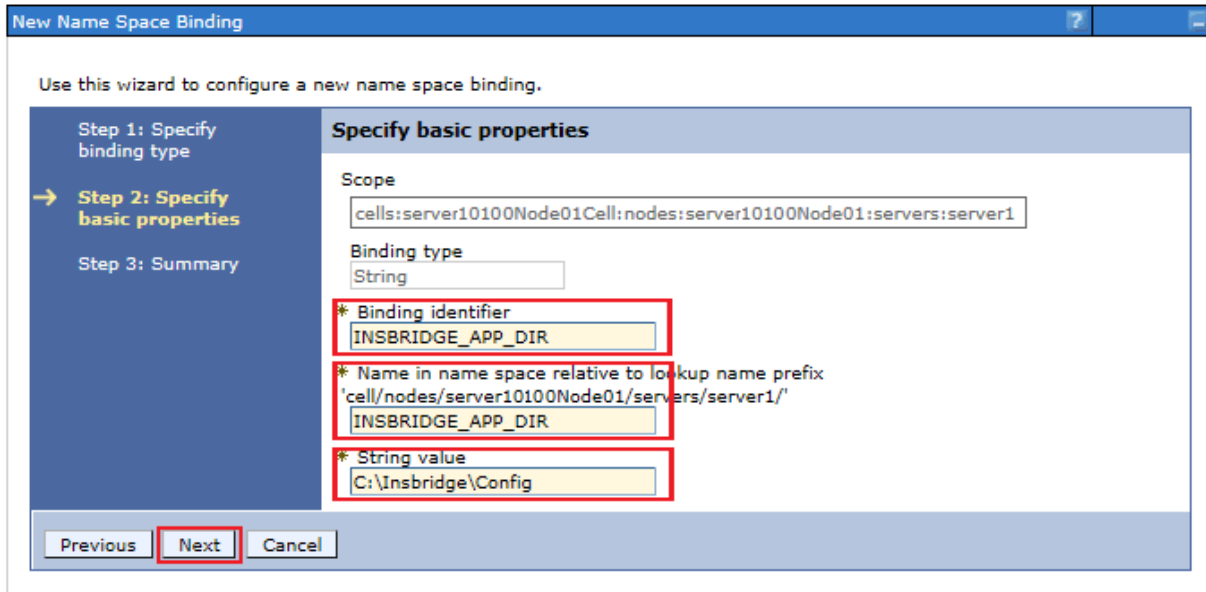


Figure 4 Create Name Space Binding

5. Create a Name Space Binding and Binding Identifier at the server level called INSBRIDGE_APP_DIR. The actual string value is the directory path location where the insbridge config file was placed for example, C:\Insbridge\config.
6. Then select **Next**

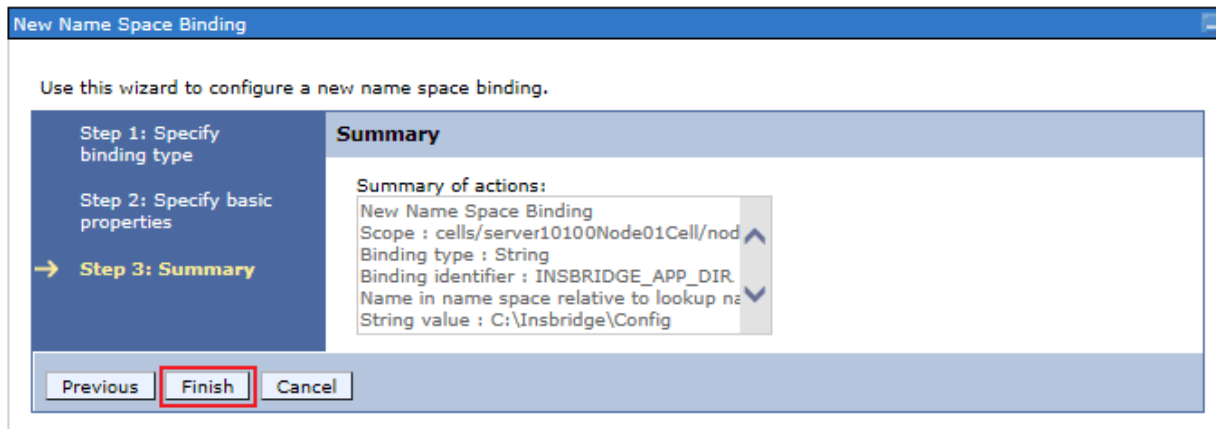


Figure 5 Finish Creating Name Space Binding

7. Click **Finish**.
8. Return to the Name Space Bindings page. A second string must be created, INSBRIDGE_INSTANCE_APP_DIR.
9. Change the scope to the **Server** level and click **Apply**.
10. Once you have changed to the server level, click **New**.

11. Select String and then click **Next**.
12. Create a Name Space Binding and Binding Identifier at the server level called `INSBRIDGE_INSTANCE_APP_DIR`. The actual string value is the directory path location where the Instance file was placed for example, `C:\lnsbridge\config\instance`.
13. Then select **Next**
14. Click **Finish**.
15. After creating both the Name Space Bindings, Save to the master configuration.

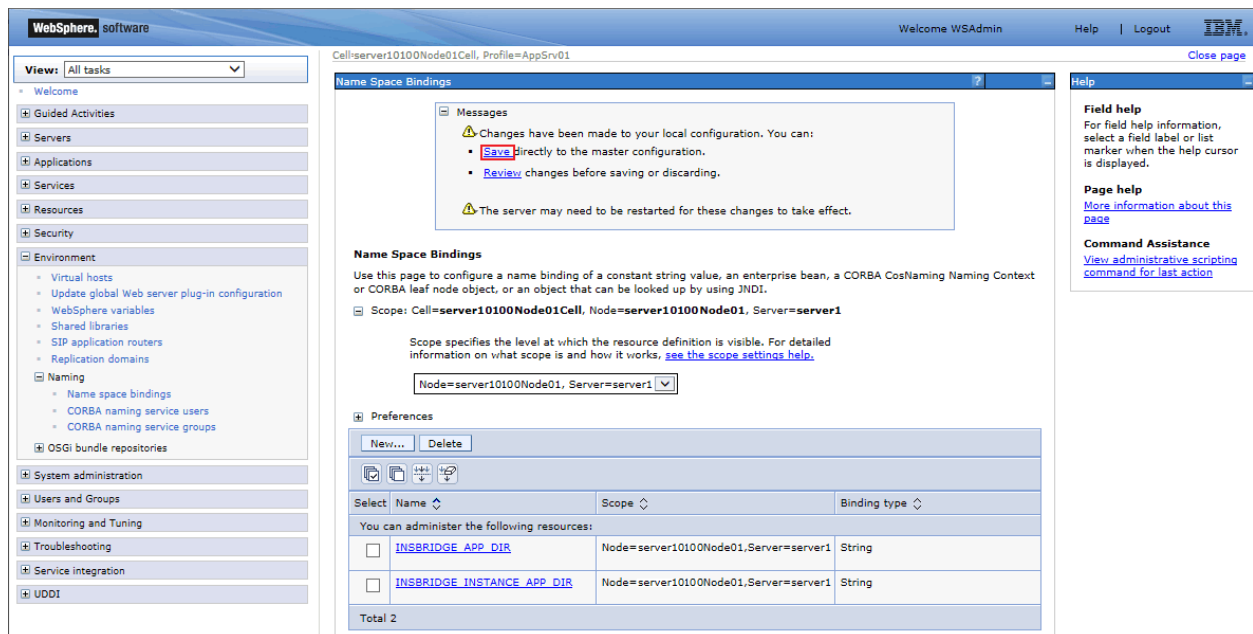


Figure 6 Saving to the Master File

If the application is being deployed to a cluster, the same procedure needs to be followed to create Name Space Binding for all the servers in the Cluster separately.

16. Once these changes are saved, restart all the servers in order for these to changes to take effect.

Optional – Adjusting Timeout Settings

For long running batch processes in java, timeout settings should be updated to avoid timeout errors.

For example, if connection to the engine (call to EJB) from clients is idle for more than configured then it throws an Inactivity timeout: (SocketTimeoutException - Async time out) error.

EJB Transaction timeout:

This time out issue occurs when an EJB transaction takes more than configured time.

This issue may be solved by the following setting on the admin console. Use for the port needed.

1. Navigate to Application Server>Server>Ports>WC_Defaulthost (this is for port 9080). Click View Associated Transports.
2. Click WCInboundDefault.
3. Click TCP inbound Channel (TCP 2)

The screenshot shows the 'Application servers' admin console. A breadcrumb trail at the top reads: **Application servers > server1 > Ports > Transport Chain > WCInboundDefault > TCP inbound channel (TCP_2)**. Below the breadcrumb, a message states: 'Transport Channel TCP_2 is shared between two or more transport chains. Changes to TCP_2 will affect multiple network protocol stacks.'

The configuration page is titled 'Configuration' and contains the following sections:

- General Properties:**
 - Transport channel name: TCP_2
 - Port: WC_defaulthost (*:9080)
 - Thread pool: WebContainer
 - Maximum open connections: 20000
 - Inactivity timeout: 600 seconds** (highlighted with a red box)
- Additional Properties:**
 - Custom properties
- Related Items:**
 - Ports
 - Thread pools

At the bottom of the configuration area, there are four buttons: **Apply** (highlighted with a red box), OK, Reset, and Cancel.

Figure 7 Setting Inactivity Timeout

4. Click Apply and Save your entry.

Update Total Transaction Setting

1. Navigate to Application Servers>Server.
2. Select Container Services from Container Settings.
3. Select Transaction Service.

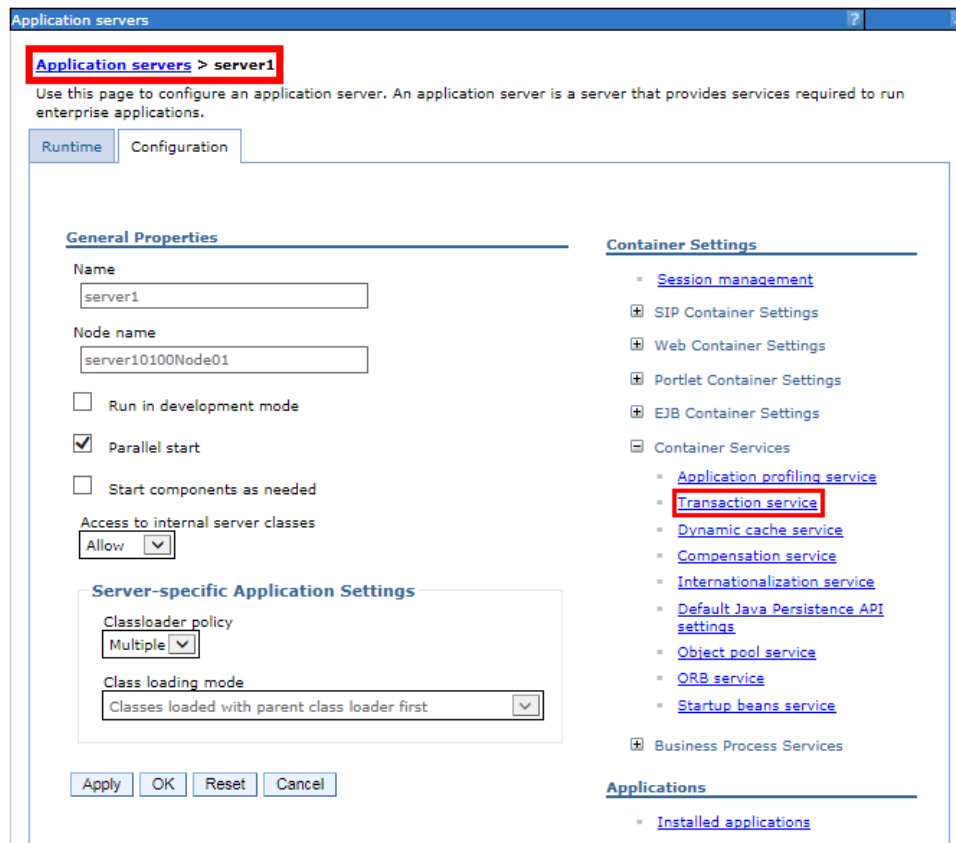


Figure 8 Updating Total Transaction Lifetime Timeout

4. Update the Total transaction lifetime timeout.

Application servers

Application servers > server1 > Transaction service

Use this page to specify settings for the transaction service. The transaction service is a server runtime component that can coordinate updates to multiple resource managers to ensure atomic updates of data. Transactions are started and ended by applications or the container in which the applications are deployed.

Runtime Configuration

General Properties

Transaction log directory

* Total transaction lifetime timeout
180 seconds

* Async response timeout
30 seconds

* Client inactivity timeout
60 seconds

* Maximum transaction timeout
300 seconds

Heuristic retry limit
0 retries

Heuristic retry wait
0 seconds

Enable logging for heuristic reporting

Heuristic completion direction
ROLLBACK

Accept heuristic hazard

Enable file locking

Enable transaction coordination authorization

Default WS-Transaction specification level
1.0

External WS-Transaction HTTP(S) URL prefix

Select prefix
 [Dropdown]

Specify custom prefix
 [Text Field]

Apply OK Reset Cancel

Additional Properties
- Custom properties

Figure 9 Saving Total Transaction Lifetime Timeout Settings

5. Click Apply and Save your entry.

NOTE: Depending on your setup, your console may differ and figures are for reference only.

STEP 4: INSTALLATION OF THE .EAR FILE

1. Log on to the Administrative Console, for example: http://WAS_SERVER:9080/admin/.
2. Select Applications > Application Types > WebSphere Enterprise Applications.
3. Click Install.
4. Select the location where you placed the .EAR file and select Next.

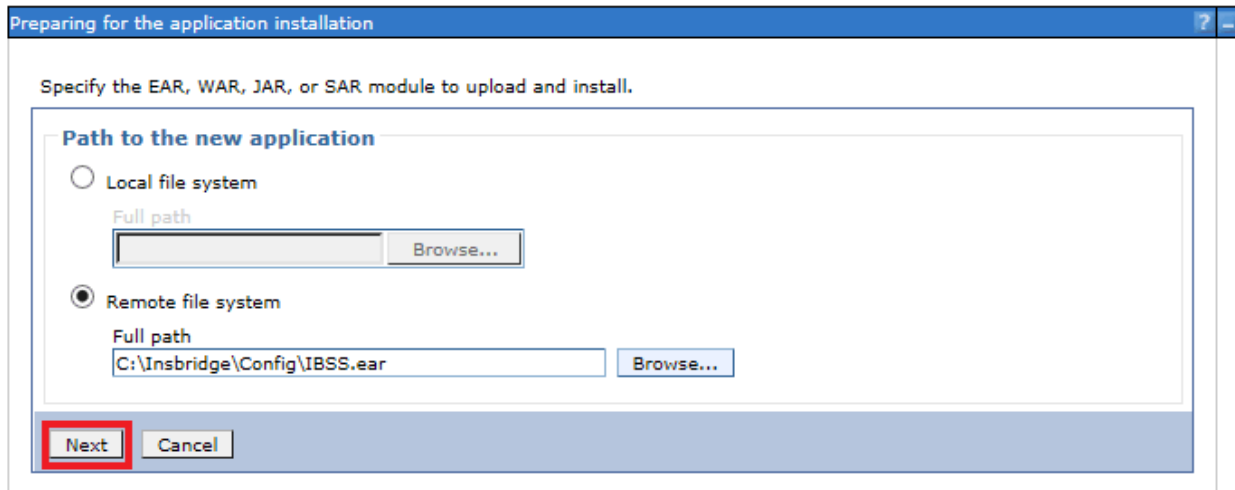


Figure 10 Installing the EAR File

5. Select Fast Path installation process.

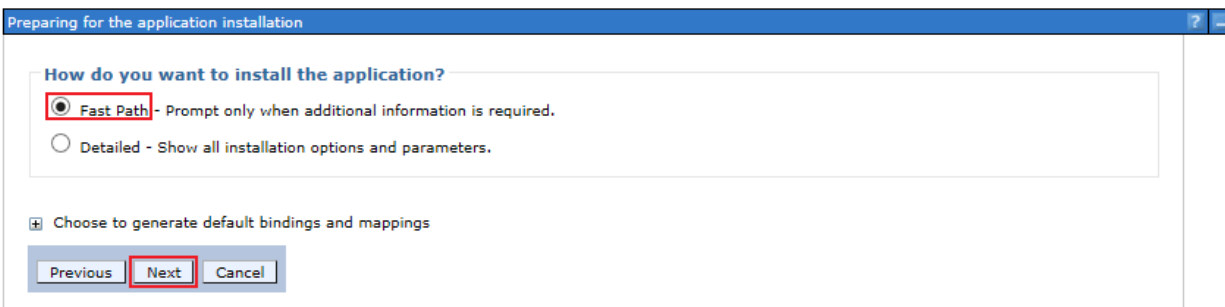


Figure 11 Selecting Fast Path Installation

6. Click Next.
7. Select the check boxes “Deploy Enterprise Beans” and “Deploy Web services”.

Install New Application

Specify options for installing enterprise applications and modules.

→ **Step 1: Select installation options**

[Step 2 Map modules to servers](#)

✦ [Step 3 Map virtual hosts for Web modules](#)

✦ [Step 4 Metadata for modules](#)

[Step 5 Summary](#)

Select installation options

Specify the various options that are available for your application.

Precompile JavaServer Pages files

Directory to install application

Distribute application

Use Binary Configuration

Deploy enterprise beans

Application name

Create MBeans for resources

Override class reloading settings for Web and EJB modules

Reload interval in seconds

Deploy Web services

Validate Input off/warn/fail

Process embedded configuration

File Permission

Allow all files to be read but not written to
 Allow executables to execute
 Allow HTML and image files to be read by everyone

Application Build ID

Allow dispatching includes to remote resources

Allow servicing includes from remote resources

Business level application name

Asynchronous Request Dispatch Type

Allow EJB reference targets to resolve automatically

Deploy client modules
 Client deployment mode

Validate schema

Figure 12 Selecting Install Options

8. Click Next.
9. Select the servers where the IBSS application needs to be deployed from the dropdown and map both the modules to it.

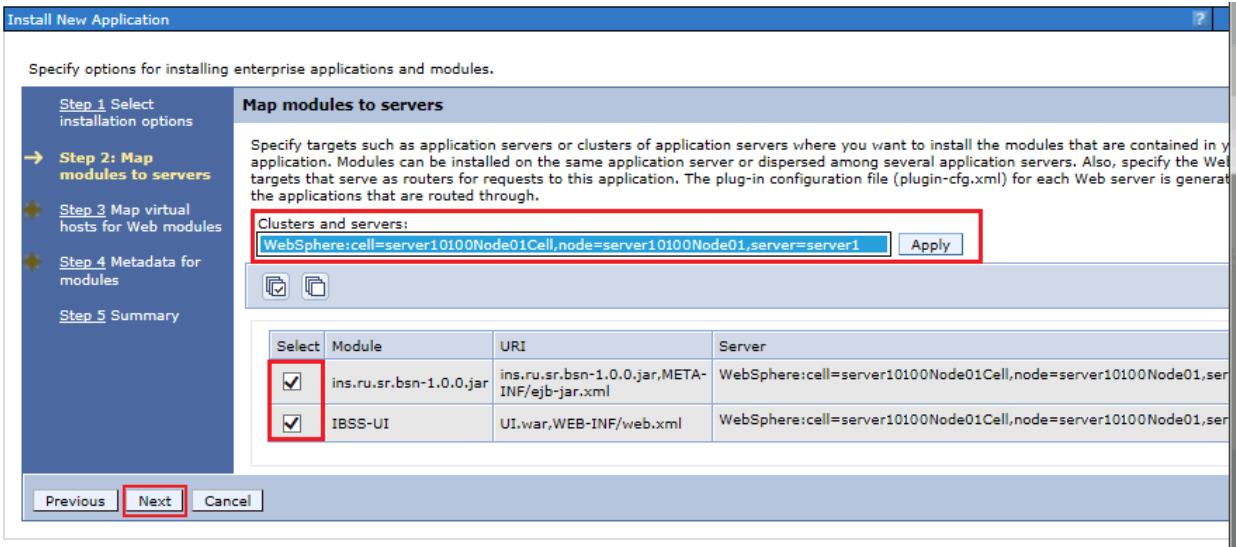


Figure 13 Selecting Map Modules to Server

10. Click Apply.
11. Click Next.
12. Leave defaults for step 3 and step 4. Click Finish.
13. Save to Master Configuration.
14. Select the IBSS application and click Start.

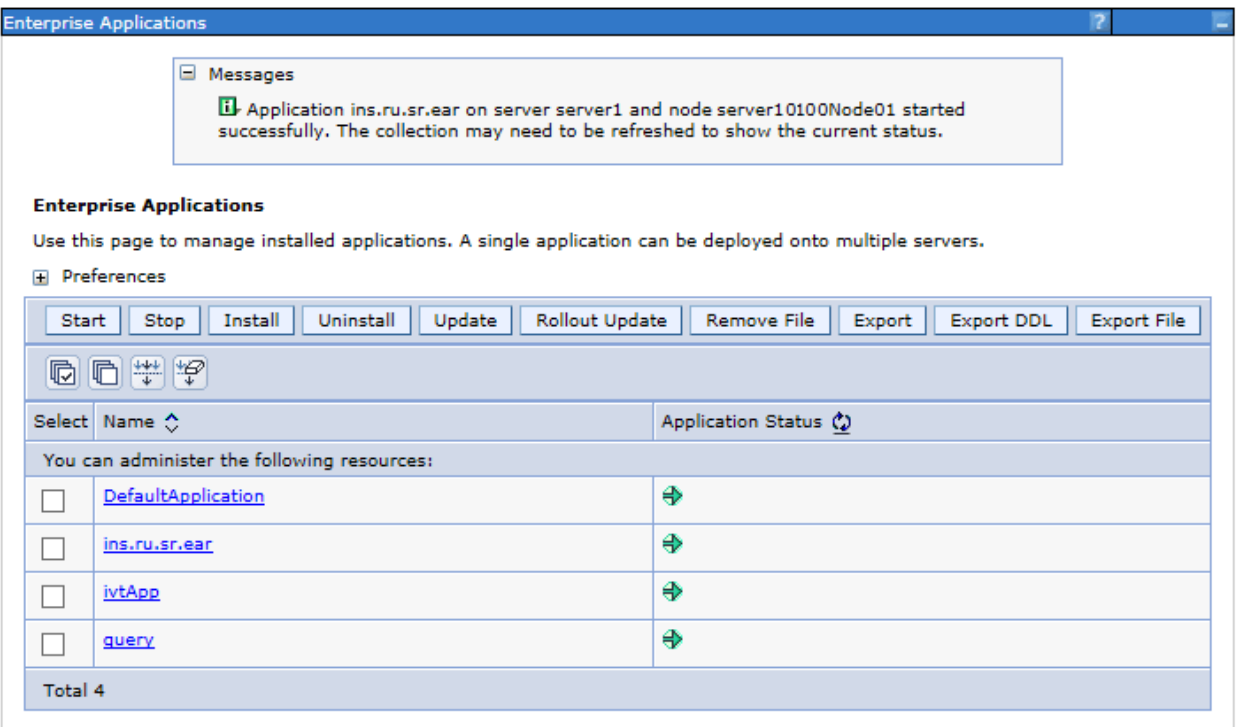


Figure 14 Starting the Application

STEP 5: TEST CONNECTION

Test the application on URL: <http://<ServerName>:9080/IBSS>.

Where: ServerName is the name of the server where WebSphere resides.

The port can be changed, please verify the port number if the application fails to launch.

NOTE: *Port 9080 is the most commonly used port. The port number may have been changed when the instance was created.*

Stopping and Starting WebSphere

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

INSTALLATION PROCEDURES – UTILIZING A SQL SERVER DATABASE

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

1. Creation of the IBSR databases.
2. Create a WebSphere entry in IBSS.
3. Create a WebSphere entry in IBFA.

STEP 1: RESTORING INSBRIDGE 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 download:
 - ◆ SQL Server
 - **2008**
 - SoftRater: IBSR
 - Latin1_General_BIN
 - DATABASE_BACKUP_IBSR_TEMPLATE.bak
 - SQL_Latin1_General_CP1_CI_AS
 - DATABASE_BACKUP_IBSR_TEMPLATE.bak
 - **2012**
 - SoftRater: IBSR
 - Latin1_General_BIN
 - DATABASE_BACKUP_IBSR_TEMPLATE_CASE_SENSITIVE.bak
 - SQL_Latin1_General_CP1_CI_AS

- DATABASE_BACKUP_IBSR_TEMPLATE.bak
 - **2016**
 - SoftRater: IBSR
 - Latin1_General_BIN
 - DATABASE_BACKUP_IBSR_TEMPLATE_CASE_SENSITIVE.bak
 - SQL_Latin1_General_CP1_CI_AS
 - DATABASE_BACKUP_IBSR_TEMPLATE.bak
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\Inbridge\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.*

6. Go to **Databases**.

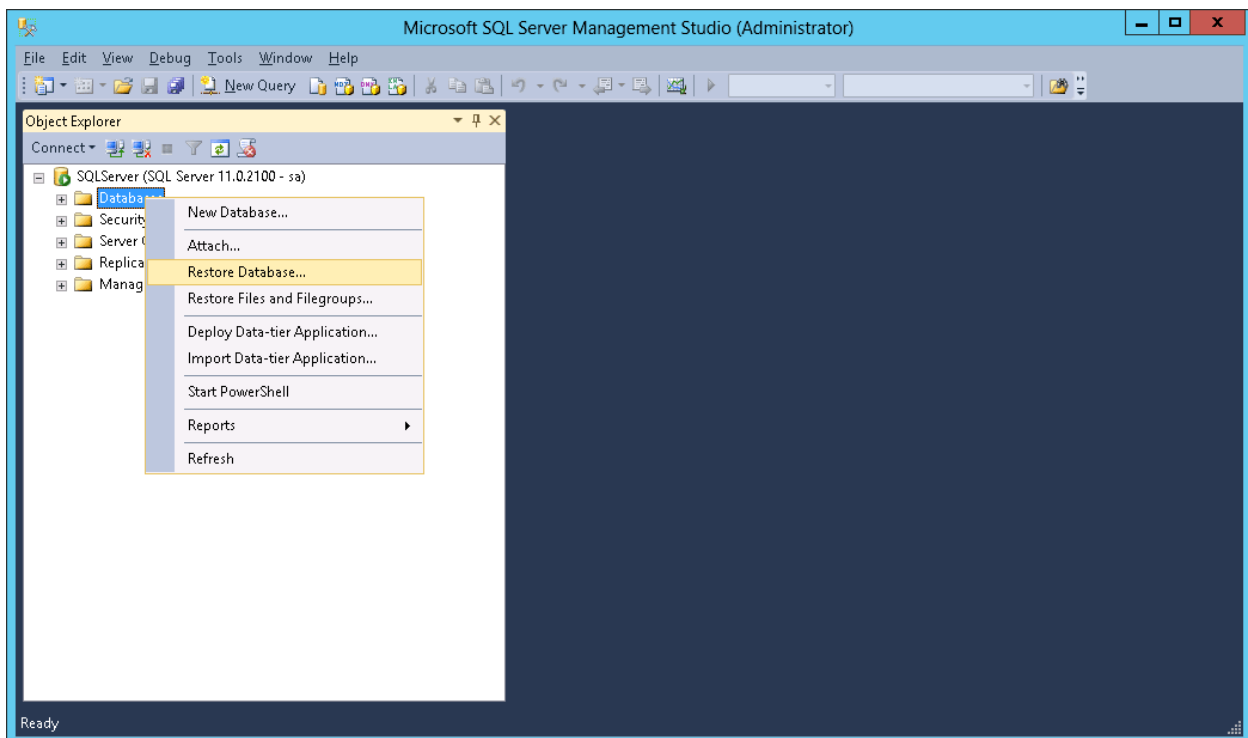


Figure 15 Right Click to Restore Database

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

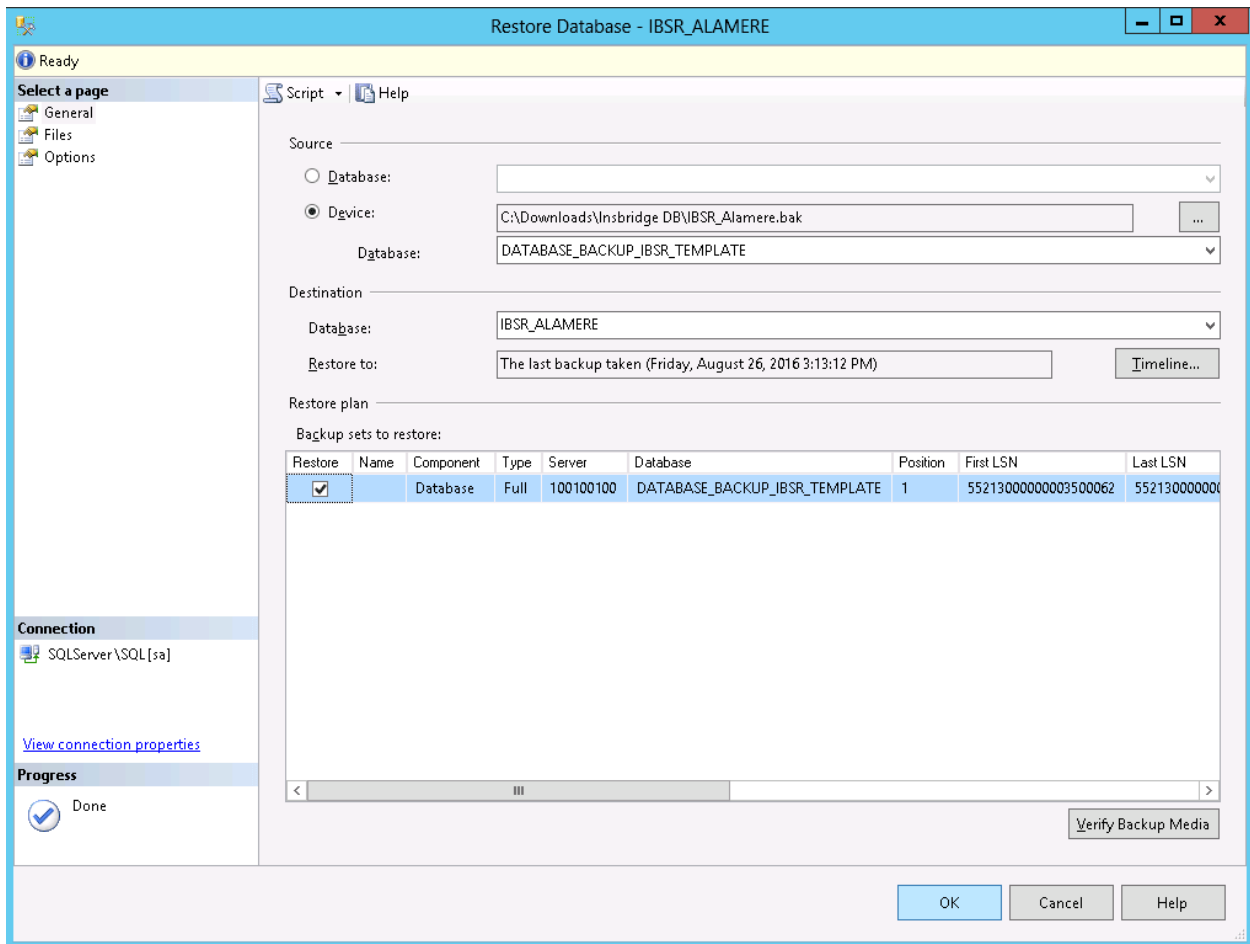


Figure 16 Restoring a Database

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.

SQL Server DDL File Location

For SQL Server, backup files are included in the Insbridge-Windows folder under databases.

If backup files cannot be used and DDL scripts are needed, SQL Server DDL scripts can be found on the server where Insbridge was installed in the ...//Oracle/Insbridge/SoftRater folder. For example:
C:\Program Files\Oracle\Insbridge\SoftRater\DDL

SQL Server DDLs are not included in the Insbridge-Windows folder.

STEP 2: SETTING UP A WEBSHERE ENVIRONMENT IN IBSS

There are three steps that will need to be done in IBSS:

- **Step 1: Creating a New Subscriber**
- **Step 2: Creating a SoftRater Environment**
- **Step 3: Adding a Node**

Open an Internet Explorer web browser and browse to the following location, replacing ServerName with the actual server name where WebSphere resides:

<http://<ServerName or IP Address>:9080/IBSS>

Security Enabled

Security is enabled by default; users are presented with a login screen. A user name and password must be entered to gain access. Information regarding the status of the system is presented but will not be accessible. The default is for security to be enabled.

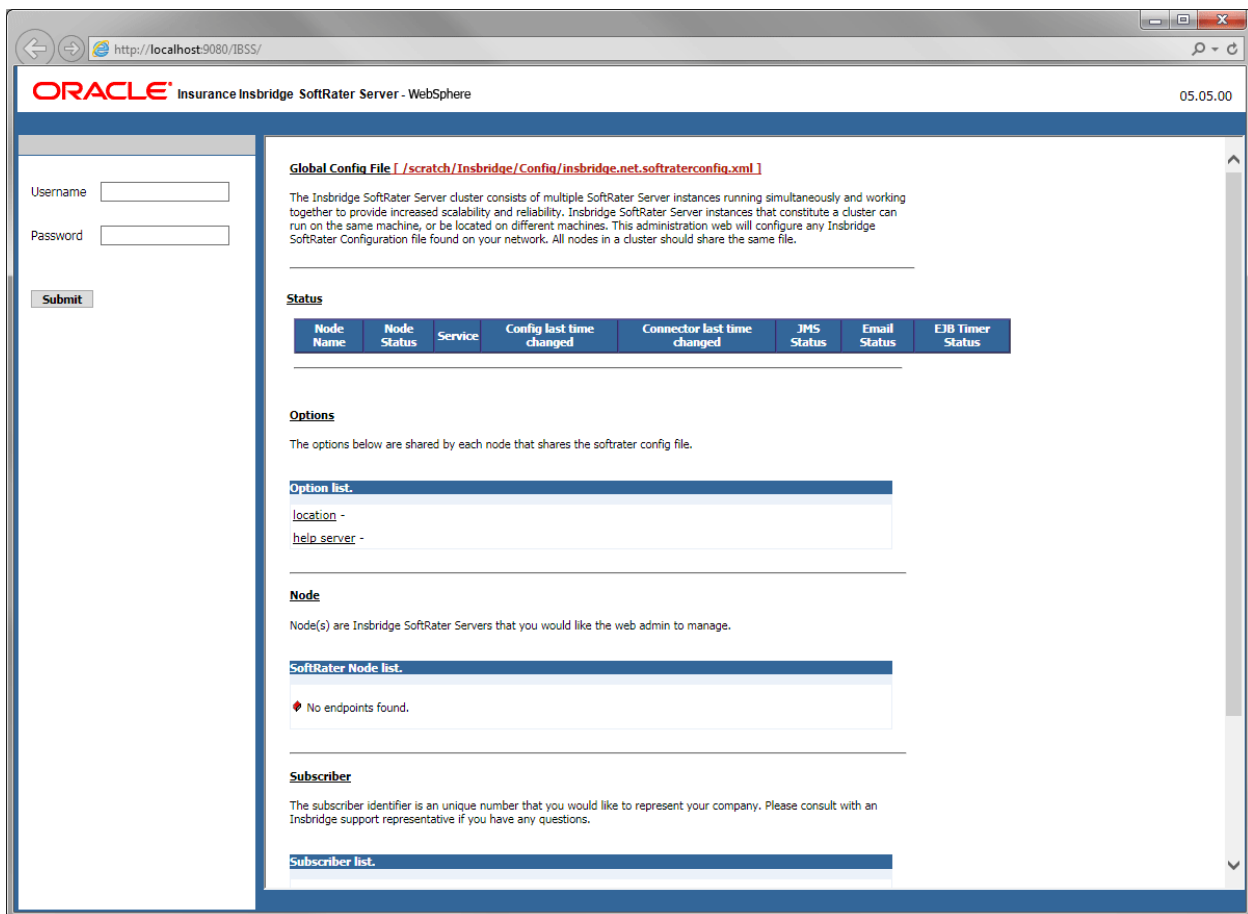


Figure 17 Security Enabled in IBSS

When Security is enabled, a default user “admin” with a default password of “insbridge” is assigned. This is the user name and password to be used the first time you enter IBSS. It is strongly recommended that the password be updated at the first log in.

IBSS Home Page

A successful log in places you on the Home page.

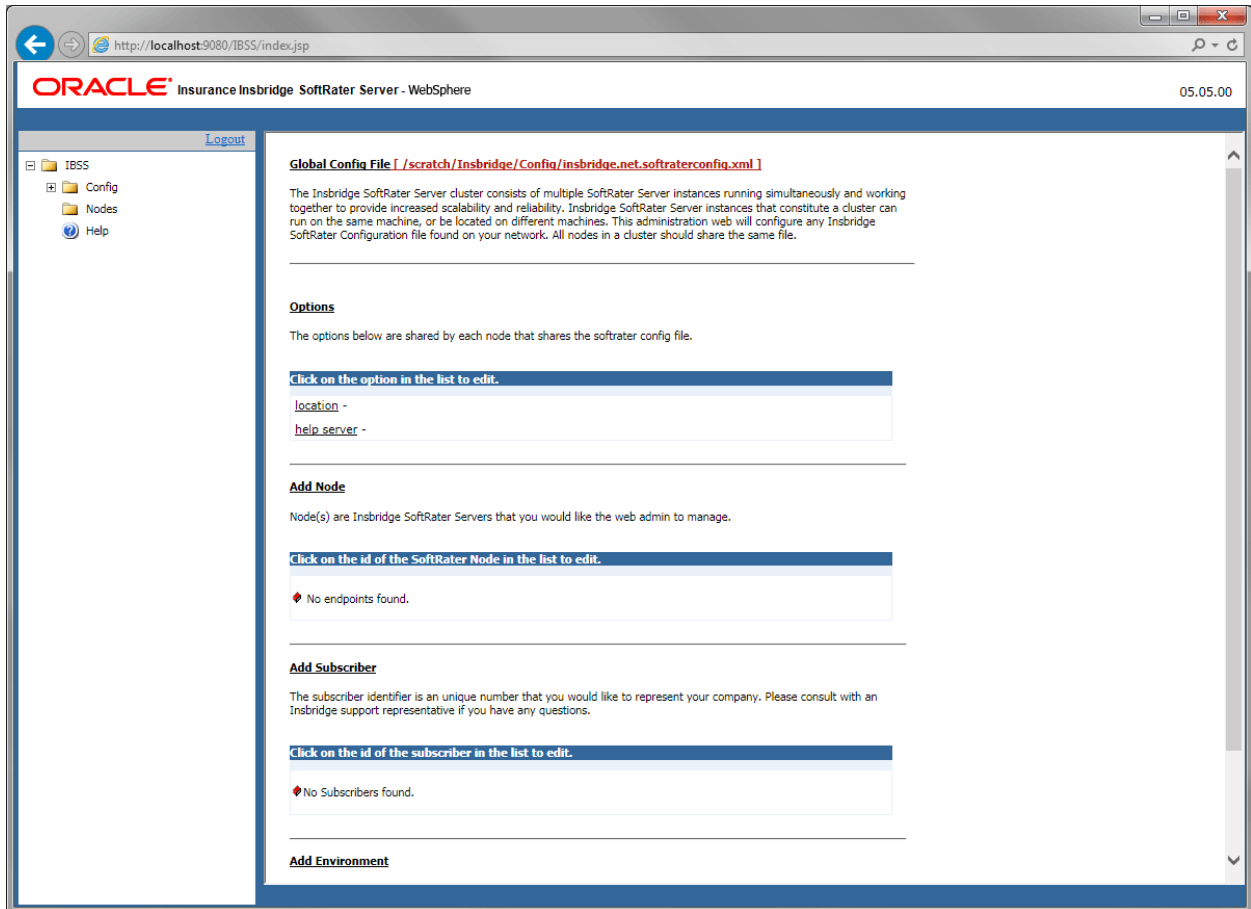


Figure 18 IBSS WebSphere Main Page

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

Step 1: Creating a Subscriber:

A *subscriber* is a group or collective of users and environments under a single identity. This identity is used to manage and configure the group's activities and databases. A subscriber may be a single company, a group within a company, or a single person.

The ID and Name must match across all environments. If you have created a subscriber in IBFA, use the same ID and Name here. If you have not created a subscriber, you can create them here and then use the same information in other environments. The ID and Name are fixed after the first time you save. These entries cannot be edited.

1. Click on **Add Subscriber**. A separate screen is displayed.

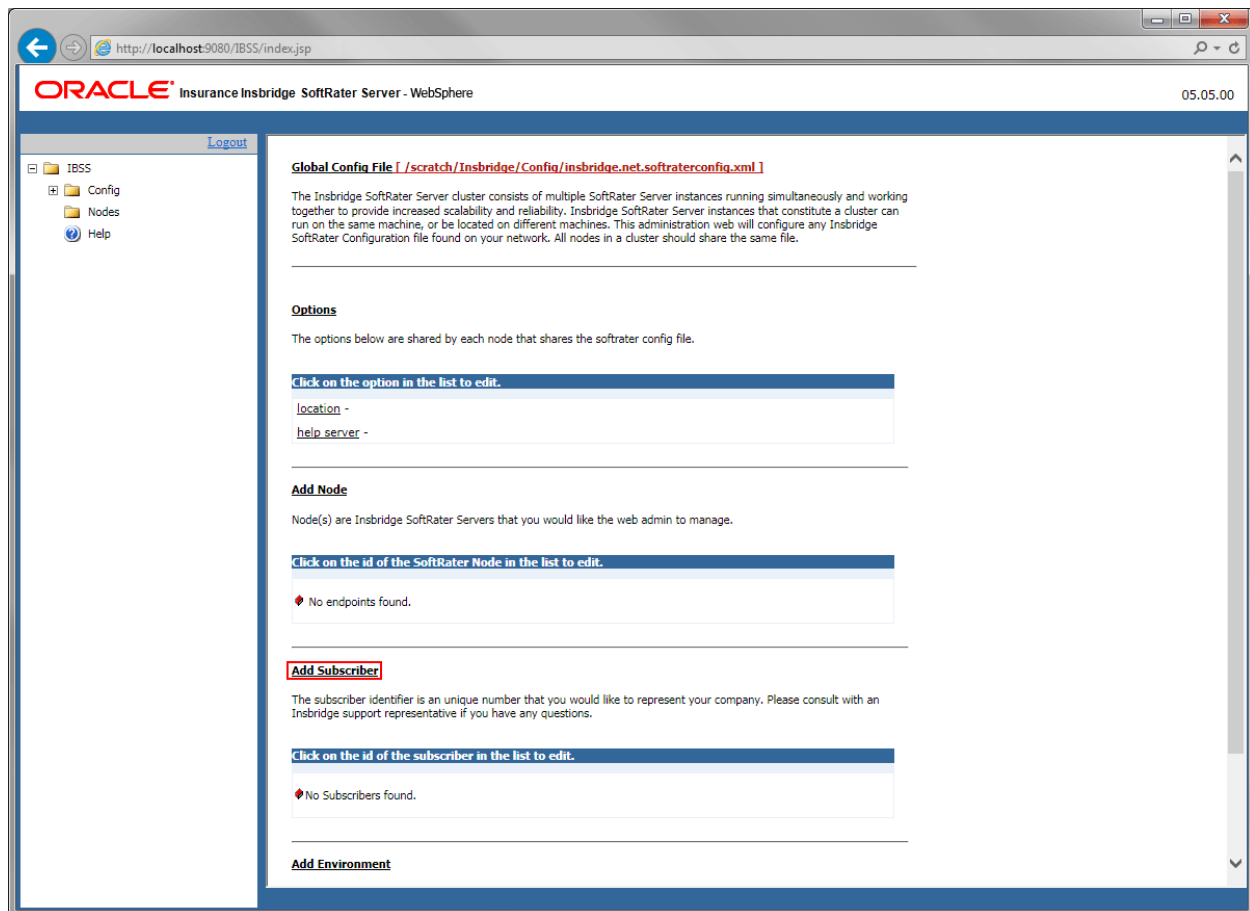


Figure 19 Adding a Subscriber

2. Enter the **ID**, and **Name** for your subscriber.

The Subscriber ID can be a 1-5 digit number and must be unique for each subscriber. For example, if you have an instance of IBFA on machine A, you can create a subscriber with an ID of 100. On machine A, if you create another subscriber, you must give that subscriber a different ID number, say 200. If you also have an instance of IBFA on a different machine, B for example, you should duplicate the same subscribers with the same ID numbers on machine B.

If you require assistance or are unsure of what action to take, please log a Service Request using My Oracle Support at <https://support.oracle.com/>.

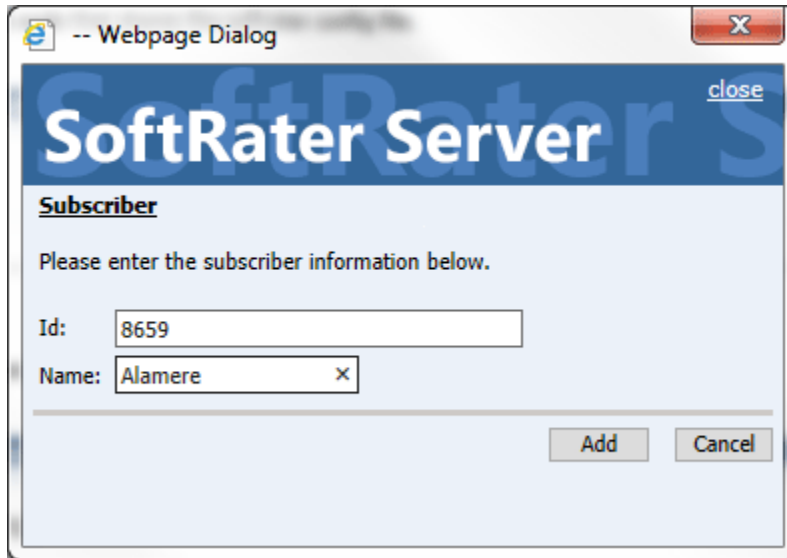


Figure 20 Enter ID

3. When you finish entering the information, click **Save**. The new subscriber will now be displayed in the list of subscribers.

NOTE: Make note of the subscriber ID number. You may need to enter this on another IBFA or IBSS environment.

Step 2: Creating a SoftRater Environment:

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.

1. Select **Add Environment** from the IBSS Main page. You will be placed on the environment window.

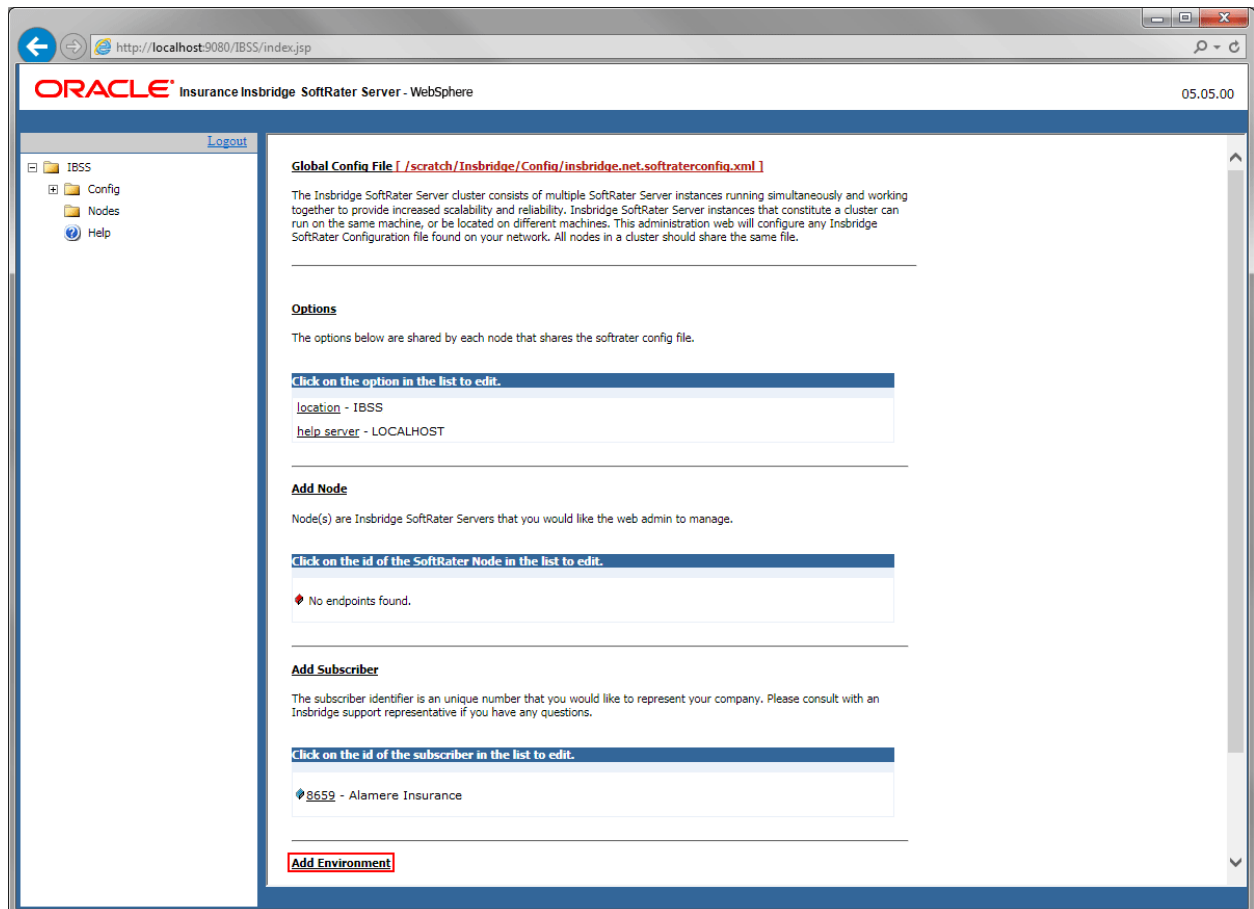


Figure 21 Creating an Environment

2. A separate screen is displayed. Enter the following information:

For DSN Entries

Subscriber: Select the name of the subscriber from the menu.

Environment Name: A name for the environment. This is the friendly name.

Environment Type: Select the type of connection:

- **DSN** – The connection information is held by the Insbridge system.

- **JNDI** – The connection is an EJB Lookup and information is not held by the Insbridge system.

Database Server: The name or IP address of the server where packages are loaded.

Database Port: Listening port for 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.

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

Schema Name: The schema name for the database. Schema Name is not needed for SQL connections.

Database User Id: The username to access the database.

Database Password: The password for the username entered.


Provider Type: The type of the database

- **ORACLE**
- **ORACLE (BINARY_CI)**
- **DB2**
- **DB2(AS400)**
- **MS SQL SERVER**

Database Type: The type of database being accessed:

- **SoftRater – The default. This option should be used for most installations.**
- **RateManager** – Supported for selected installations. Please contact Support.
- **OTHER** – Not used at this time.

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

Default Environment: Select if this is to be used as the default environment. The default environment is used when no environment is specified. There can be only one default environment. The default environment is indicated with a red icon. 

3. When you are finished entering information, click **Save**.



Figure 22 Environment Setup

4. Before you can use the new or edited environment for rating, you need to reload the configuration XML file. This is done by resetting the environments. On the left hand side of the IBSS home page, expand Nodes and select the Reset Environments option. You will be placed on the Reset Environment Configuration page. Click **Execute**. The screen refreshes and each node will be reset. Click IBSS to return to the home page.

For JNDI Entries

Subscriber: Select the name of the subscriber from the menu.

Environment Name: A name for the environment. This is the friendly name.

Environment Type: Select the type of connection:

- **DSN** – The connection information is held by the Insbridge system.
- **JNDI** – The connection is an EJB Lookup and information is not held by the Insbridge system.

Name: The name of the data source.

Context Factory: A *URL context factory* is a special object factory that creates contexts for resolving URL strings.

RMI: The Java Remote Method Invocation used.

URL Host: The name or IP of the host server.

URL Port: The port number used by the host server.


Provider Type: The type of the database

- **ORACLE**
- **ORACLE (BINARY_CI)**
- **DB2**
- **DB2(AS400)**
- **MS SQL SERVER**

Database Type: The type of database being accessed:

- **SoftRater** – The default. This option should be used for most installations.
- **RateManager** – Supported for selected installations. Please contact Support.
- **OTHER** – Not used at this time.

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

Default Environment: Select if this is to be used as the default environment. The default environment is used when no environment is specified. There can be only one default environment. The default environment is indicated with a red icon. 

5. When you are finished entering information, click **Save**.

Options
Please enter/update your IBSS Option information.

Subscriber: Alamere

Environment Name: BATCH

Environment Type: JNDI

Name: jdbc/batchDB

Context Factory: weblogic.jndi.WLInitialContextFactory

RMI: t3

Url Host: localhost

Url Port: 7001

Provider Type: ORACLE

Database Type: SoftRater

Data Dir:

Default Environment: False

Save Delete Test Connection! Close

Figure 23 Creating a JNDI Environment

Before you can use the new or edited environment for rating, you need to reload the configuration XML file. This is done by resetting the environments. On the left hand side of the IBSS home page, expand Nodes and select the Reset Environments option. You will be placed on the Reset Environment Configuration page. Click **Execute**. The screen refreshes and each node will be reset. Click IBSS to return to the home page.

Step 3: Adding a Node:

Every IBSS instance requires a node. Nodes allow for the management of multiple environments from one location. Nodes contain cache and log information for each environment as well as a reset option.

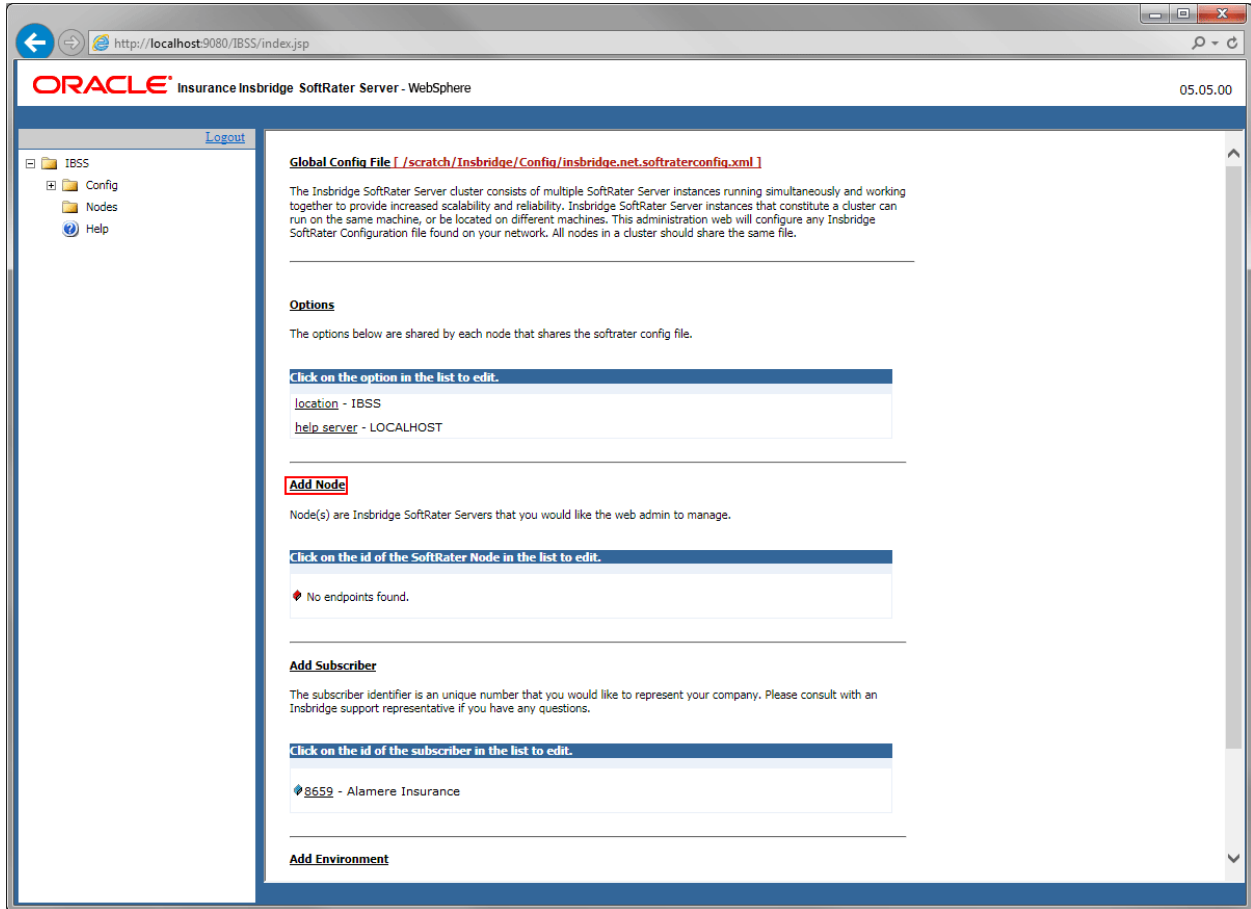


Figure 24 Adding a Node

NOTE: To utilize a secure environment, please contact Oracle Support.

To create a node, server information is needed:

- **Server OS**
- **Server Name or IP Address**
- **Port Used**

1. From the IBSS home page, click the **Add Node** link.
2. This opens the **SoftRater Server Node Instance** window.

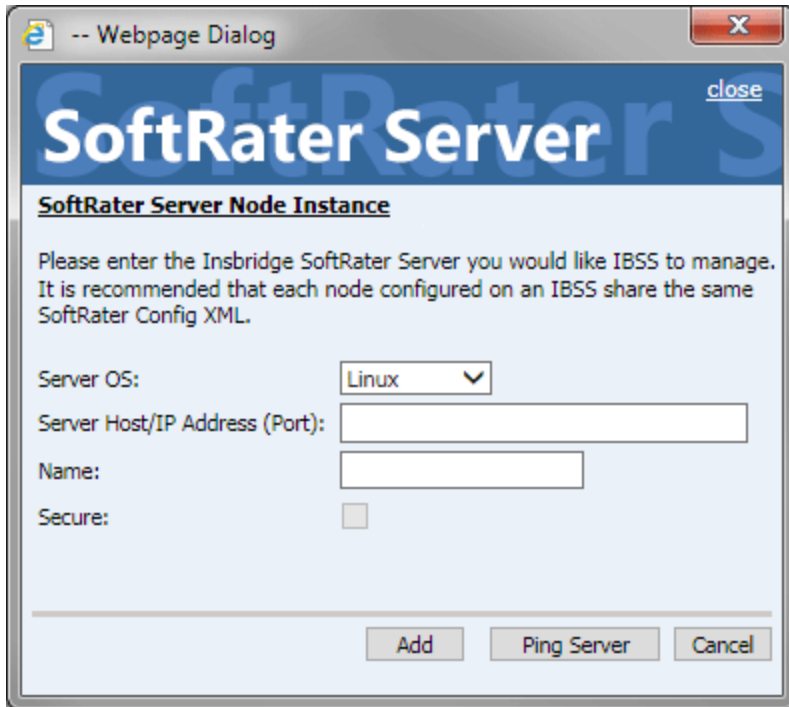


Figure 25 Adding a Node

3. Select the server operating system from the drop down. There are three choices, Linux, Mainframe and Windows.
4. Enter the server host name or IP address and port. The default ports:
 - **WebLogic:** Port 7001
 - **WebSphere:** Port 9080
 - **JBoss:** Port 8080

The format for this is: [SERVER NAME]:[PORT NUMBER]

5. Enter a friendly name. This is the name displayed for the node.
6. It is recommended that the Ping Server option be used to test the connection. This is an optional step but can be helpful. If a connection cannot be made, the node cannot be saved.
7. Click **Add** to add the node. If a node cannot be added, an error message is displayed. Please correct the error and try again.

NOTE: *It is recommended that server names or IP addresses be used over localhost.*

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 WebSphere. 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 **Type**. For example, you can create a Production environment with a type of Production.
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.

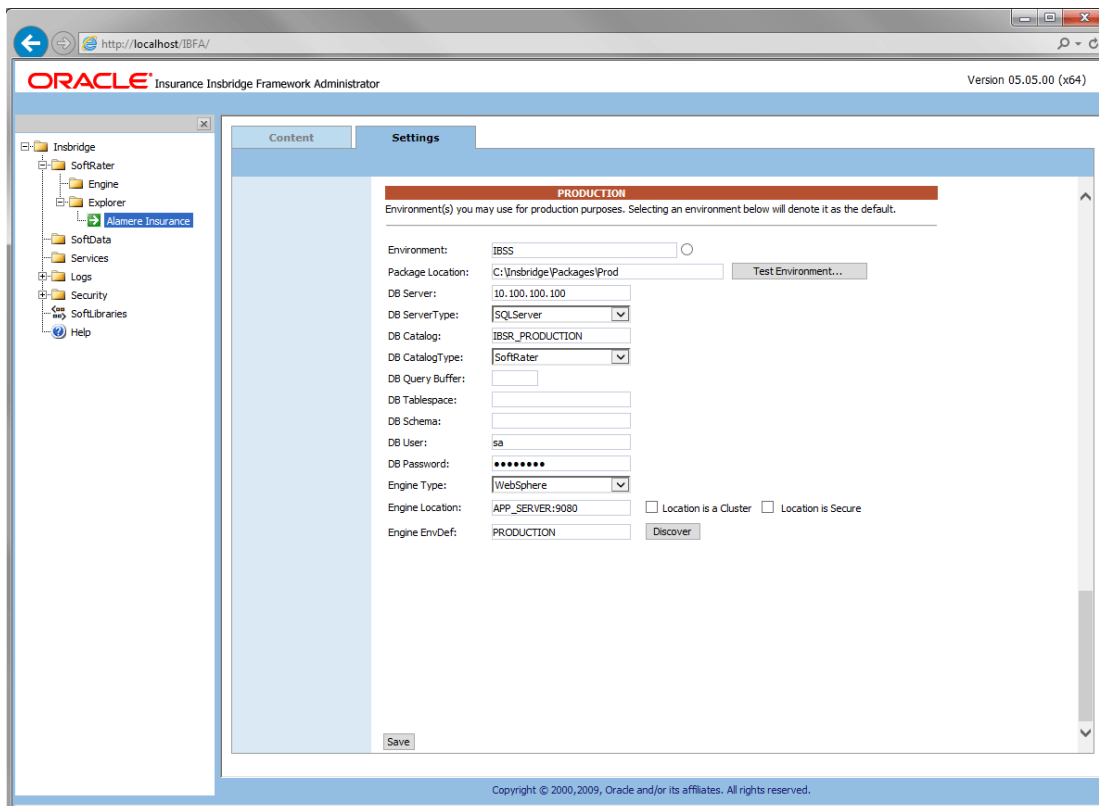


Figure 26 Editing Environment

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. For DB2 servers, this is the DB2 Registered Alias Name. For Oracle servers, this is the server name; either IP or DNS will work. The default port used is 1521. The Database listener port number can be appended to the server name if it is something other than the default port. The format for this is: [SERVER NAME]:[PORT NUMBER]

NOTE: If a specific instance of SQL Server is required, for example if a shared MS SQL Server is being utilized, the format for this is: [SERVER NAME\INSTANCE NAME]:[PORT NUMBER]

9. Select the **DB Server Type** that you are using.
10. 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 WebSphere server may have “WBServerName:9080” 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.

Checking a SoftRater Database for Updates

All SoftRater databases can be checked for updates in IBFA.

1. SoftRater->Explorer->Subscriber->Settings->Environments.
2. Select the SoftRater environment with the database where you want to check for updates.
3. Click Test Environment.

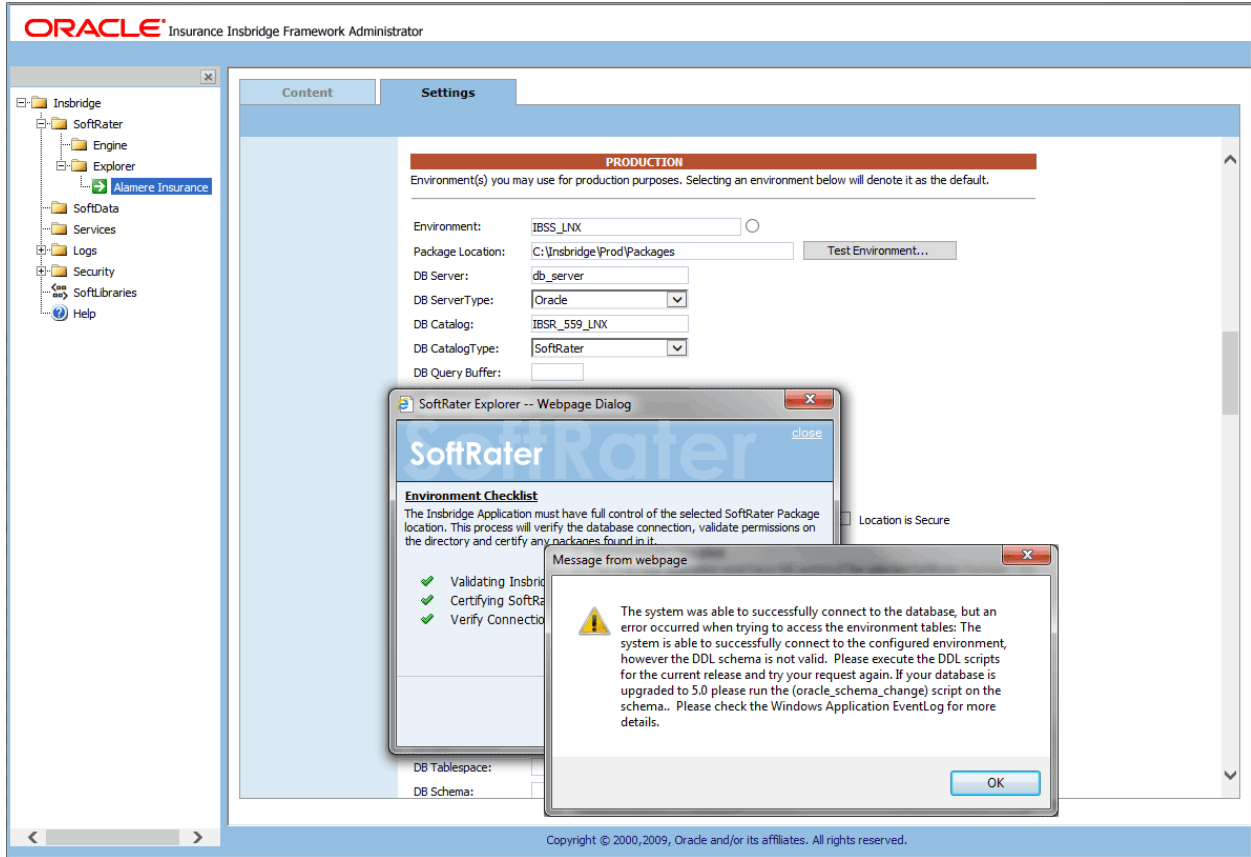


Figure 27 Checking for Database Updates

When the database is being validated, either a green checkmark is presented or an error message. The error message will indicate if an update must be run. For example, when validating a SQL Server environment:

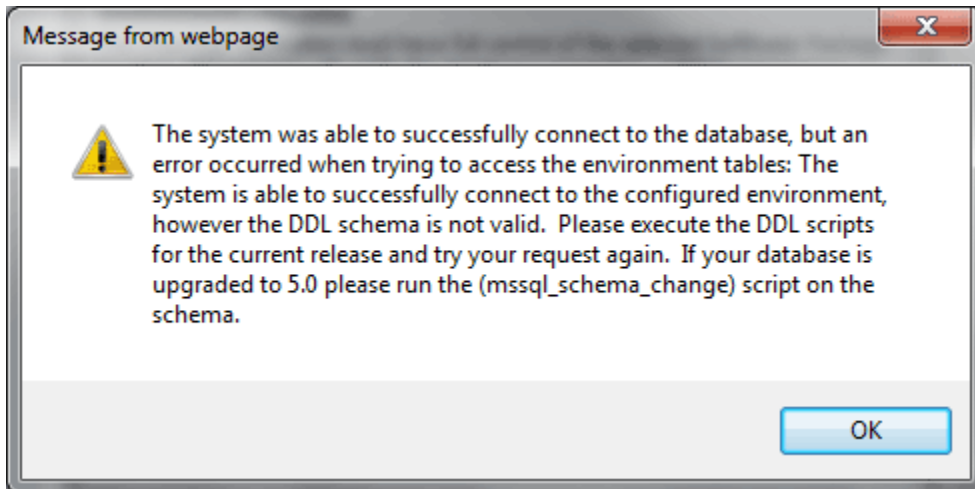


Figure 28 SQL Server Database Update Required Message

DDL scripts for updates also can be found on the server where Insubridge was installed in the ...\\Oracle\Insubridge\SoftRater\DDL folder.

For example: C:\Program Files\Oracle\Insbridge\SoftRater\DDL\Oracle\Update

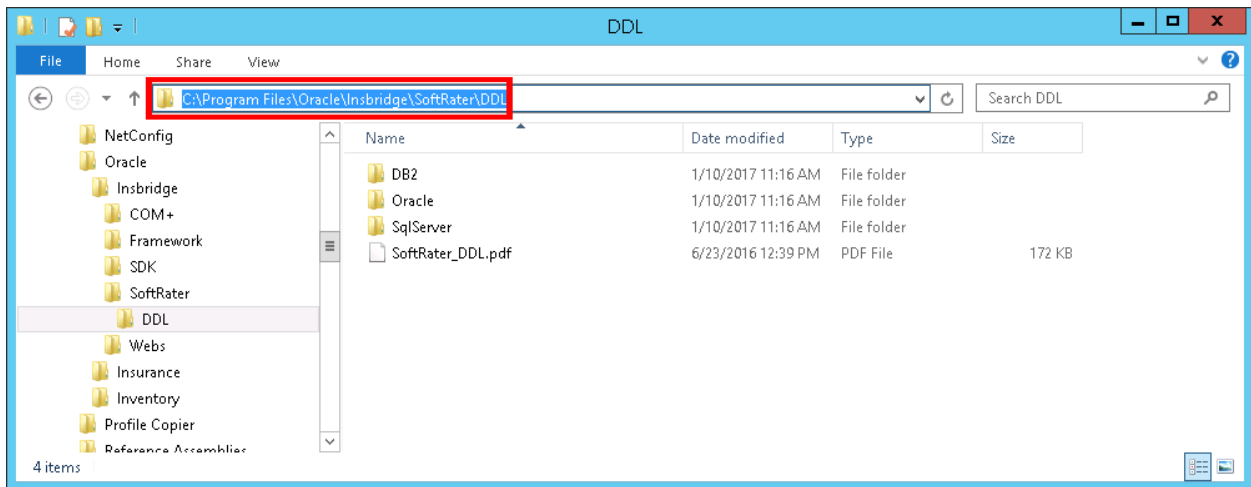


Figure 29 Location of Database Update Scripts

INSTALLATION PROCEDURES – UTILIZING AN ORACLE DATABASE

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

1. Create Oracle database.
2. Create a WebSphere entry in IBSS.
3. Run the Oracle Client on the machine where the Insbridge system was installed.
4. Create a WebSphere entry in IBFA.
5. Reboot the machine where Insbridge was installed.

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.

Before proceeding, please have ready:

- The Project/Products you want to use.
- Your subscriber ID
- Location of the Insbridge files.

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.*

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.

Using the Default Optimizer Features Enable

Performance may be impacted if using the default optimizer_features_enable setting on Oracle 12c. For optimal performance, Insbridge recommends setting the optimizer_features_enable parameter to 11.2.0.4.

The command to set optimizer feature enabled on Oracle 12c is:

```
alter system set optimizer_features_enable = '11.2.0.4';
```

Ref Url: <https://docs.oracle.com/database/121/REFRN/GUID-E193EC9E-B642-4C01-99EC-24E04AEA1A2C.htm#REFRN10141>

Creating an Oracle Database

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

1. On your Oracle database.

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.
 - The DDLs are located in the IBFA Installation Directory under the SoftRater/DDDL folder. I.e. [INSTALL_DIR]/Insbridge/SoftRater/DDDL.
 - You 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 Project/Product. An example of the format is in the comments of the script. It requires the Project/Product ID number and the customer number.
 - b) Create user IBSR and assign basic connect and resource grants.
2. On your Oracle database, you need to run a DT table script for each Project/Product.
 3. After all DT tables have been created, please make note of:
 - Schema
 - Instance
 - User name
 - Password

This information needs to be passed along to the Insbridge 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 a Project/Product and receive missing table errors. Creating tables in Oracle should be performed by a qualified DBA.

STEP 2: SETTING UP A WEBSPHERE ENVIRONMENT IN IBSS

There are three steps that will need to be done in IBSS:

- **Step 1: Creating a New Subscriber**
- **Step 2: Creating a SoftRater Environment**
- **Step 3: Adding a Node**

Open an Internet Explorer web browser and browse to the following location, replacing ServerName with the actual server name where WebSphere resides:

<http://<ServerName or IP Address>:9080/IBSS>

Security Enabled

Security is enabled by default; users are presented with a login screen. A user name and password must be entered to gain access. Information regarding the status of the system is presented but will not be accessible. The default is for security to be enabled.

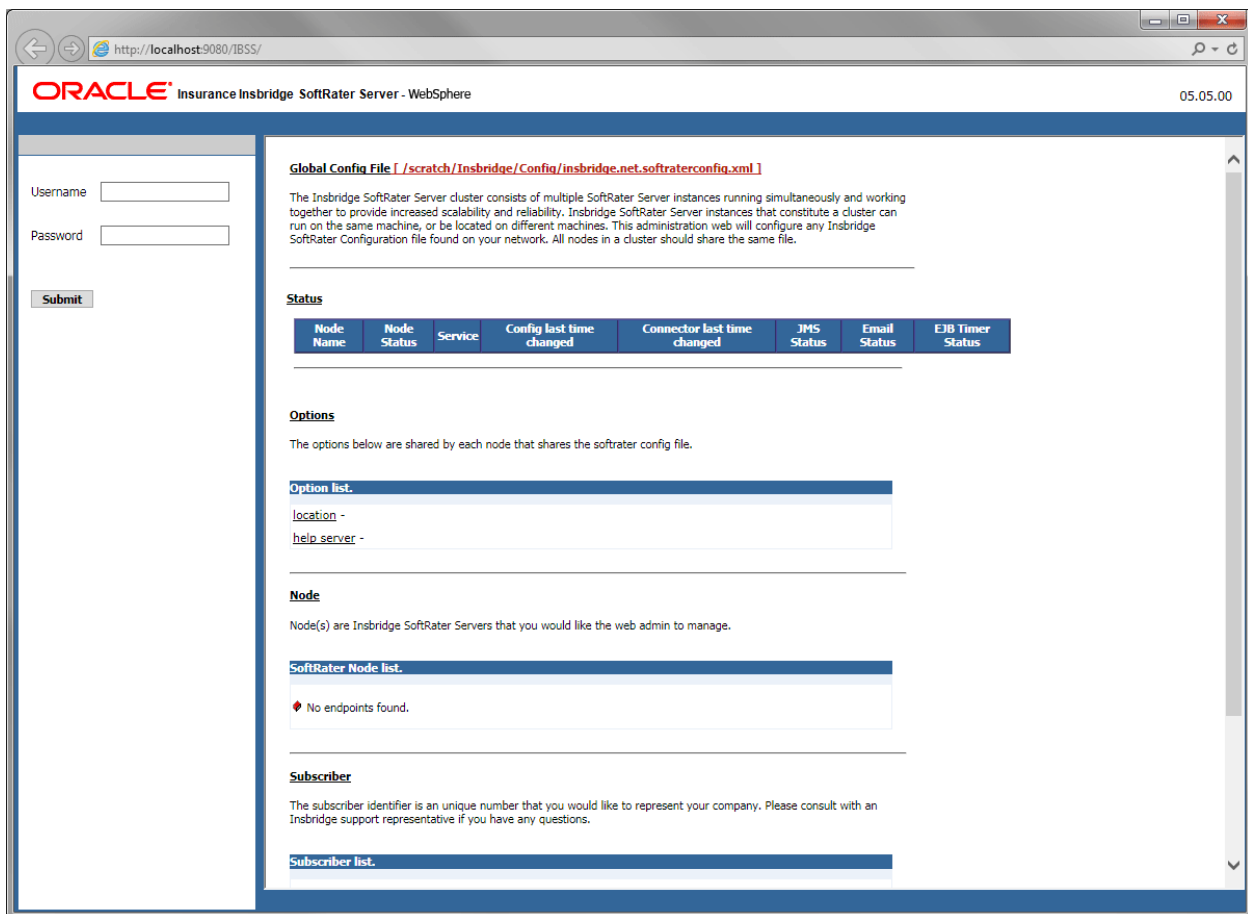


Figure 30 Security Enabled in IBSS

When Security is enabled, a default user “admin” with a default password of “insbridge” is assigned. This is the user name and password to be used the first time you enter IBSS. It is strongly recommended that the password be updated at the first log in.

IBSS Home Page

A successful log in places you on the Home page.

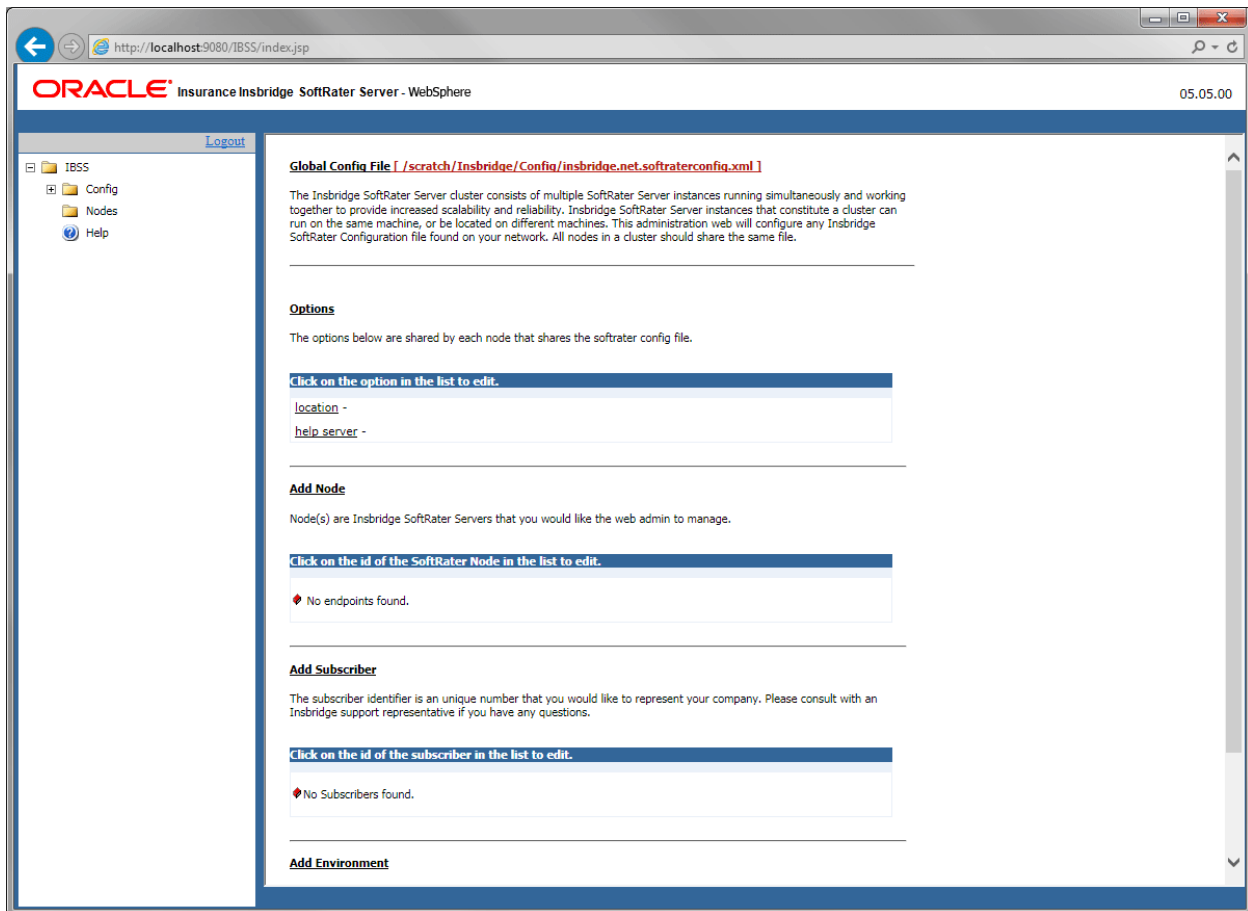


Figure 31 IBSS WebSphere Main Page

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

Step 1: Creating a Subscriber:

A *subscriber* is a group or collective of users and environments under a single identity. This identity is used to manage and configure the group's activities and databases. A subscriber may be a single company, a group within a company, or a single person.

The ID and Name must match across all environments. If you have created a subscriber in IBFA, use the same ID and Name here. If you have not created a subscriber, you can create them here and then use the same information in other environments. The ID and Name are fixed after the first time you save. These entries cannot be edited.

4. Click on **Add Subscriber**. A separate screen is displayed.

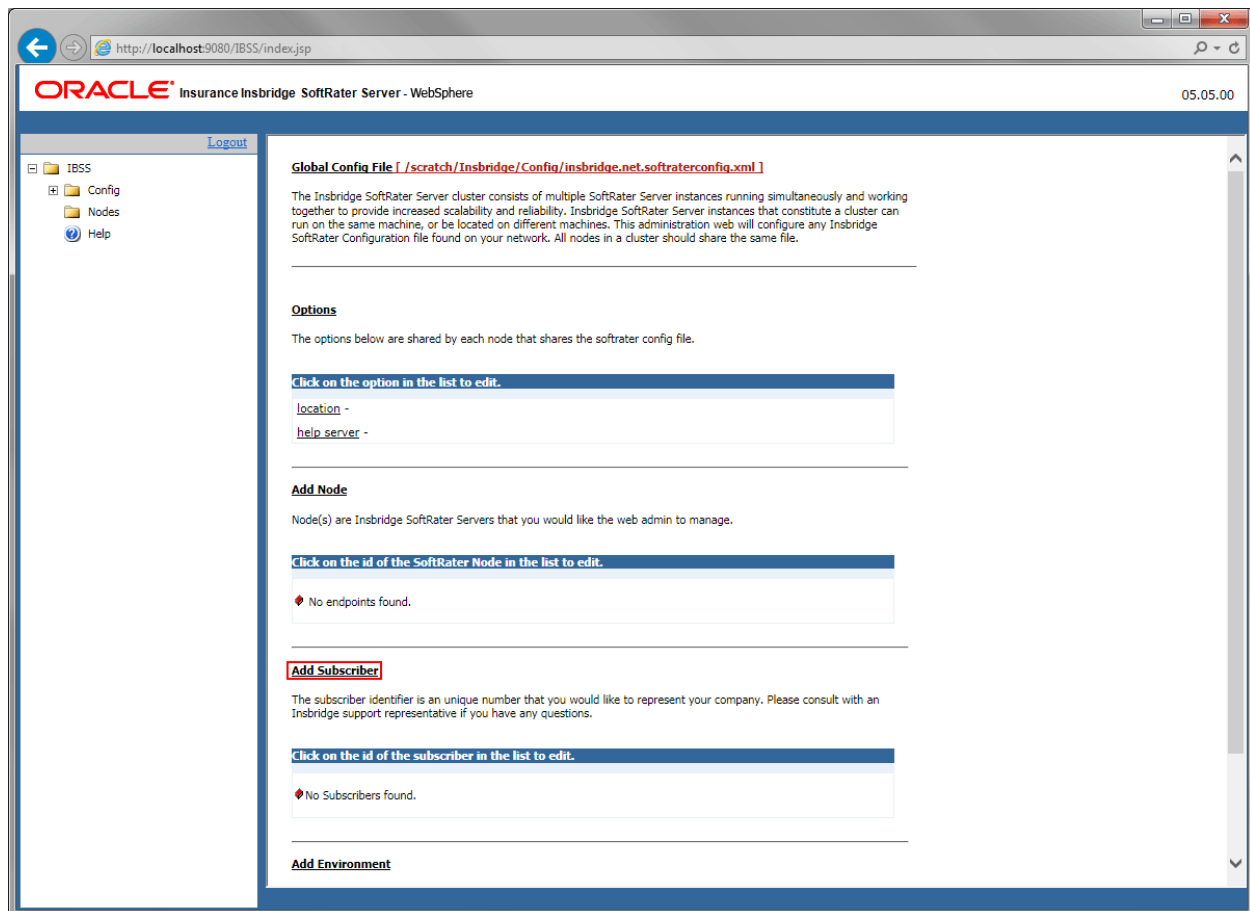


Figure 32 Adding a Subscriber

5. Enter the **ID**, and **Name** for your subscriber.

The Subscriber ID can be a 1-5 digit number and must be unique for each subscriber. For example, if you have an instance of IBFA on machine A, you can create a subscriber with an ID of 100. On machine A, if you create another subscriber, you must give that subscriber a different ID number, say 200. If you also have an instance of IBFA on a different machine, B for example, you should duplicate the same subscribers with the same ID numbers on machine B.

If you require assistance or are unsure of what action to take, please log a Service Request using My Oracle Support at <https://support.oracle.com/>.

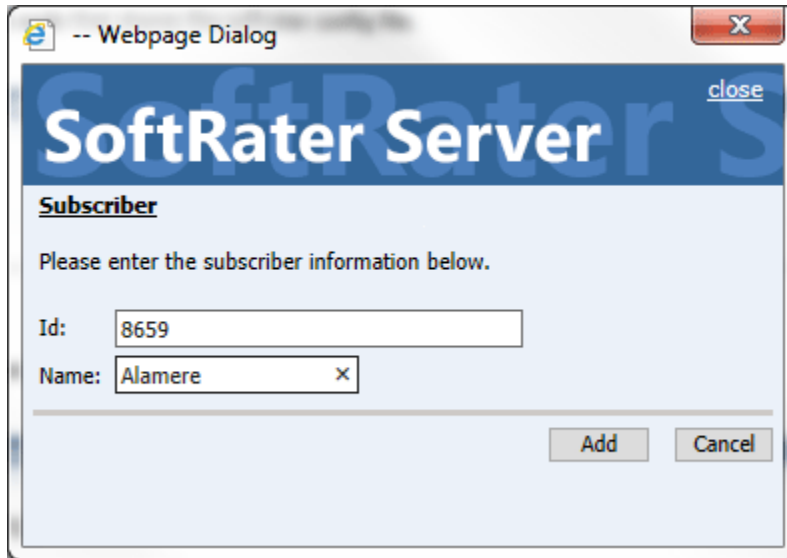


Figure 33 Enter ID

6. When you finish entering the information, click **Save**. The new subscriber will now be displayed in the list of subscribers.

NOTE: Make note of the subscriber ID number. You may need to enter this on another IBFA or IBSS environment.

Step 2: Creating a SoftRater Environment:

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.

1. Select **Add Environment** from the IBSS Main page. You will be placed on the environment window.

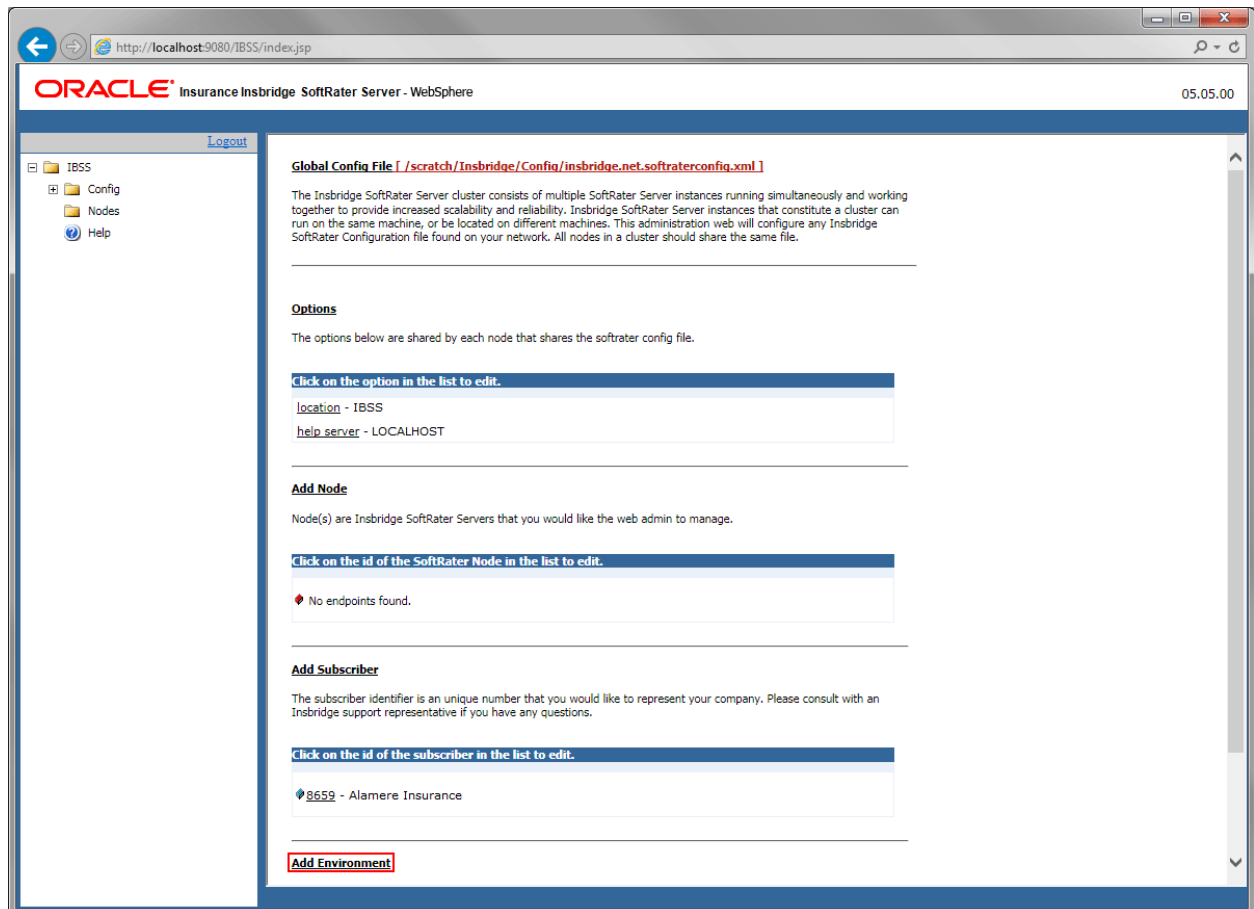


Figure 34 Creating an Environment

2. A separate screen is displayed. Enter the following information:

For DSN Entries

Subscriber: Select the name of the subscriber from the menu.

Environment Name: A name for the environment. This is the friendly name.

Environment Type: Select the type of connection:

- **DSN** – The connection information is held by the Insbridge system.

- **JNDI** – The connection is an EJB Lookup and information is not held by the Insbridge system.

Database Server: The name or IP address of the server where packages are loaded.

Database Port: Listening port for 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.

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

Schema Name: The schema name for the database. Schema Name is not needed for SQL connections.

Database User Id: The username to access the database.

Database Password: The password for the username entered.


Provider Type: The type of the database

- **ORACLE**
- **ORACLE (BINARY_CI)**
- **DB2**
- **DB2(AS400)**
- **MS SQL SERVER**

Database Type: The type of database being accessed:

- **SoftRater – The default. This option should be used for most installations.**
- **RateManager** – Supported for selected installations. Please contact Support.
- **OTHER** – Not used at this time.

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

Default Environment: Select if this is to be used as the default environment. The default environment is used when no environment is specified. There can be only one default environment. The default environment is indicated with a red icon. 

Connection to an Oracle RAC

When connecting to an Oracle RAC, you can use SID. For example:

Database Name: sid (Connection usingSID)

Or use the Service name. To connect to the service name, a slash has to be added in front of the database name. For example:

Database Name: /servicename (Connection using SERVICE)

When using SID, do not use the slash before the name

3. When you are finished entering information, click **Save**.



Figure 35 Environment Setup

4. Before you can use the new or edited environment for rating, you need to reload the configuration XML file. This is done by resetting the environments. On the left hand side of the IBSS home page, expand Nodes and select the Reset Environments option. You will be placed on the Reset Environment Configuration page. Click **Execute**. The screen refreshes and each node will be reset. Click IBSS to return to the home page.

For JNDI Entries

Subscriber: Select the name of the subscriber from the menu.

Environment Name: A name for the environment. This is the friendly name.

Environment Type: Select the type of connection:

- **DSN** – The connection information is held by the Insbridge system.
- **JNDI** – The connection is an EJB Lookup and information is not held by the Insbridge system.

Name: The name of the data source.

Context Factory: A *URL context factory* is a special object factory that creates contexts for resolving URL strings.

RMI: The Java Remote Method Invocation used.

URL Host: The name or IP of the host server.

URL Port: The port number used by the host server.


Provider Type: The type of the database

- **ORACLE**
- **ORACLE (BINARY_CI)**
- **DB2**
- **DB2(AS400)**
- **MS SQL SERVER**

Database Type: The type of database being accessed:

- **SoftRater** – **The default. This option should be used for most installations.**
- **RateManager** – Supported for selected installations. Please contact Support.
- **OTHER** – Not used at this time.

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

Default Environment: Select if this is to be used as the default environment. The default environment is used when no environment is specified. There can be only one default environment. The default environment is indicated with a red icon. 

5. When you are finished entering information, click **Save**.

Options
Please enter/update your IBSS Option information.

Subscriber: Alamere

Environment Name: BATCH

Environment Type: JNDI

Name: jdbc/batchDB

Context Factory: weblogic.jndi.WLInitialContextFactory

RMI: t3

Url Host: localhost

Url Port: 7001

Provider Type: ORACLE

Database Type: SoftRater

Data Dir:

Default Environment: False

Save Delete Test Connection! Close

Figure 36 Creating a JNDI Environment

Before you can use the new or edited environment for rating, you need to reload the configuration XML file. This is done by resetting the environments. On the left hand side of the IBSS home page, expand Nodes and select the Reset Environments option. You will be placed on the Reset Environment Configuration page. Click **Execute**. The screen refreshes and each node will be reset. Click IBSS to return to the home page.

Step 3: Adding a Node:

Every IBSS instance requires a node. Nodes allow for the management of multiple environments from one location. Nodes contain cache and log information for each environment as well as a reset option.

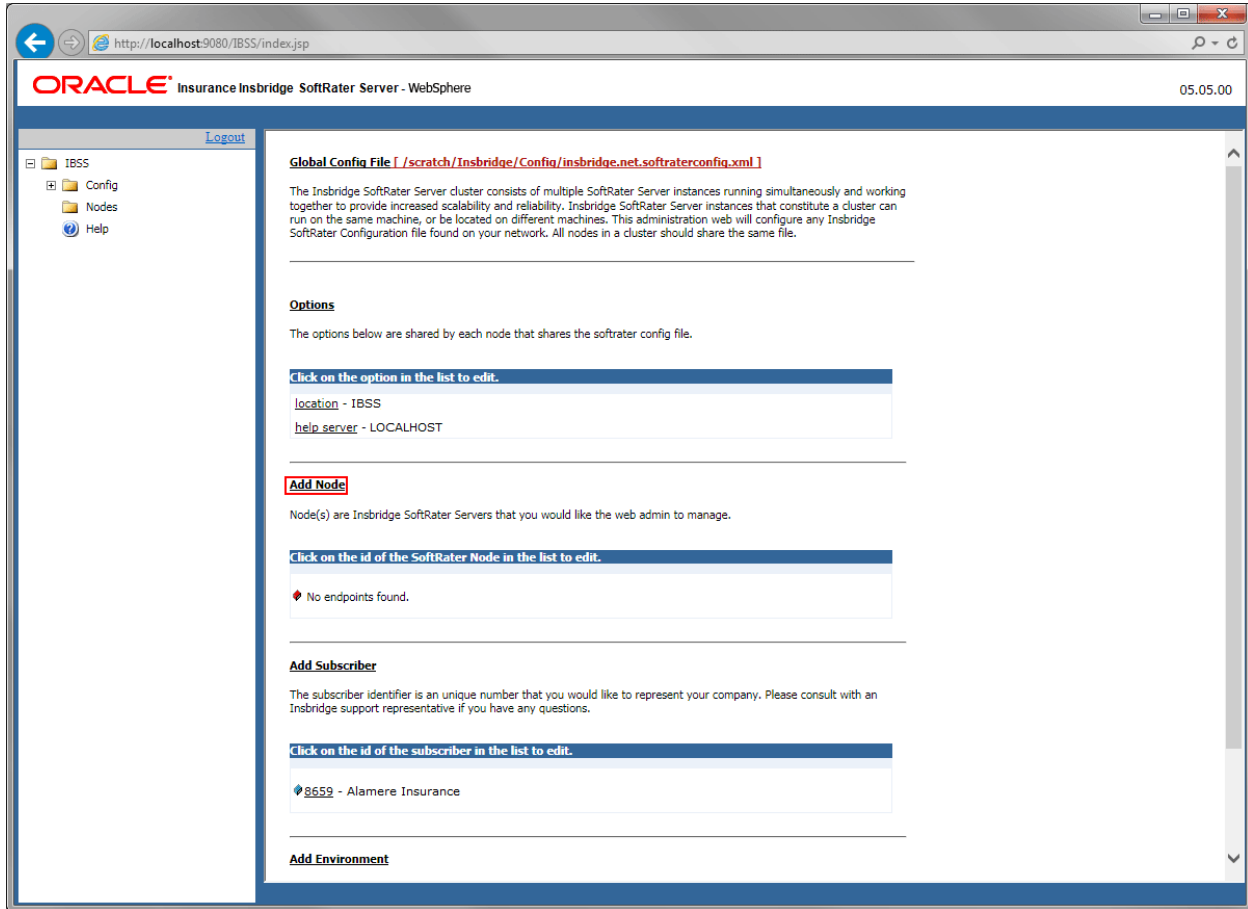


Figure 37 Adding a Node

NOTE: To utilize a secure environment, please contact Oracle Support.

To create a node, server information is needed:

- **Server OS**
- **Server Name or IP Address**
- **Port Used**

1. From the IBSS home page, click the **Add Node** link.
2. This opens the **SoftRater Server Node Instance** window.

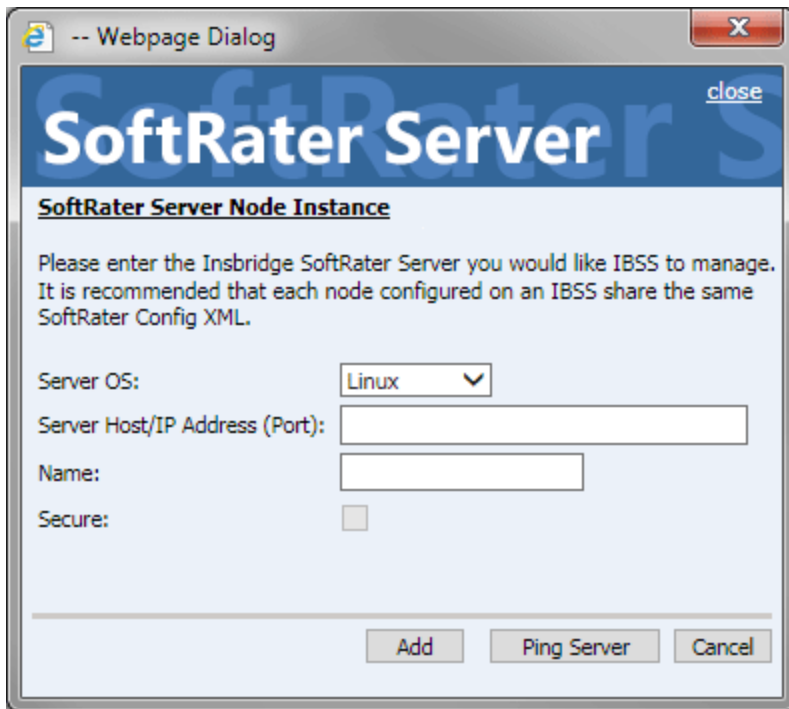


Figure 38 Adding a Node

3. Select the server operating system from the drop down. There are three choices, Linux, Mainframe and Windows.
4. Enter the server host name or IP address and port. The default ports:
 - **WebLogic:** Port 7001
 - **WebSphere:** Port 9080
 - **JBoss:** Port 8080

The format for this is: [SERVER NAME]:[PORT NUMBER]

5. Enter a friendly name. This is the name displayed for the node.
6. It is recommended that the Ping Server option be used to test the connection. This is an optional step but can be helpful. If a connection cannot be made, the node cannot be saved.
7. Click **Add** to add the node. If a node cannot be added, an error message is displayed. Please correct the error and try again.

NOTE: *It is recommended that server names or IP addresses be used over localhost.*

STEP 3: INSTALLATION OF ORACLE CLIENT

The required Oracle Client is located in the Oracle Data Access Components (ODAC) install. If an Oracle Client has already been installed and configured, you can skip this step. Return to the machine where the Insbridge 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 only need to run the Oracle client once.

Running the Oracle Client

On the machine where the Insbridge system was installed, you will need to run the Oracle Data Access Components (ODAC) install to install the Oracle client. Oracle client allows IBFA to communicate with the Oracle database. A reboot is required after the installation.

The Oracle Data Access Components (ODAC) install for Oracle12c is in the Insbridge-Windows file: ODAC121012_x64.zip.

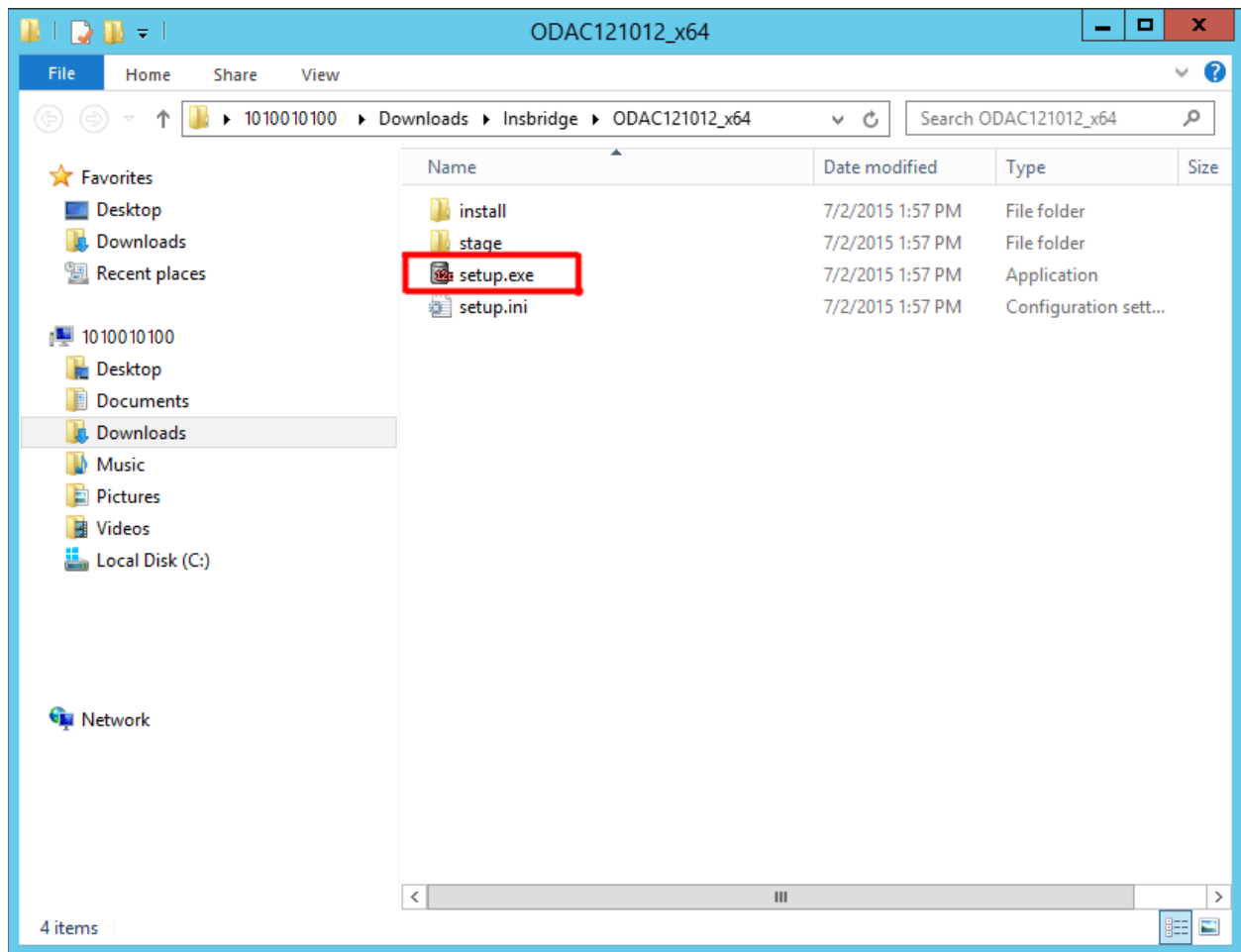


Figure 39 Locating the Oracle Client for 64-bit Installs

NOTE: The Oracle Client must be installed on the machine where IBFA is installed.

1. In the 05.05.00-insbridge-Insbridge folder, locate the Oracle Client folder.
2. Up zip the ODAC121012_x64.zip file in a location you can access.
3. Double click the setup.exe. The ODAC installation will begin.

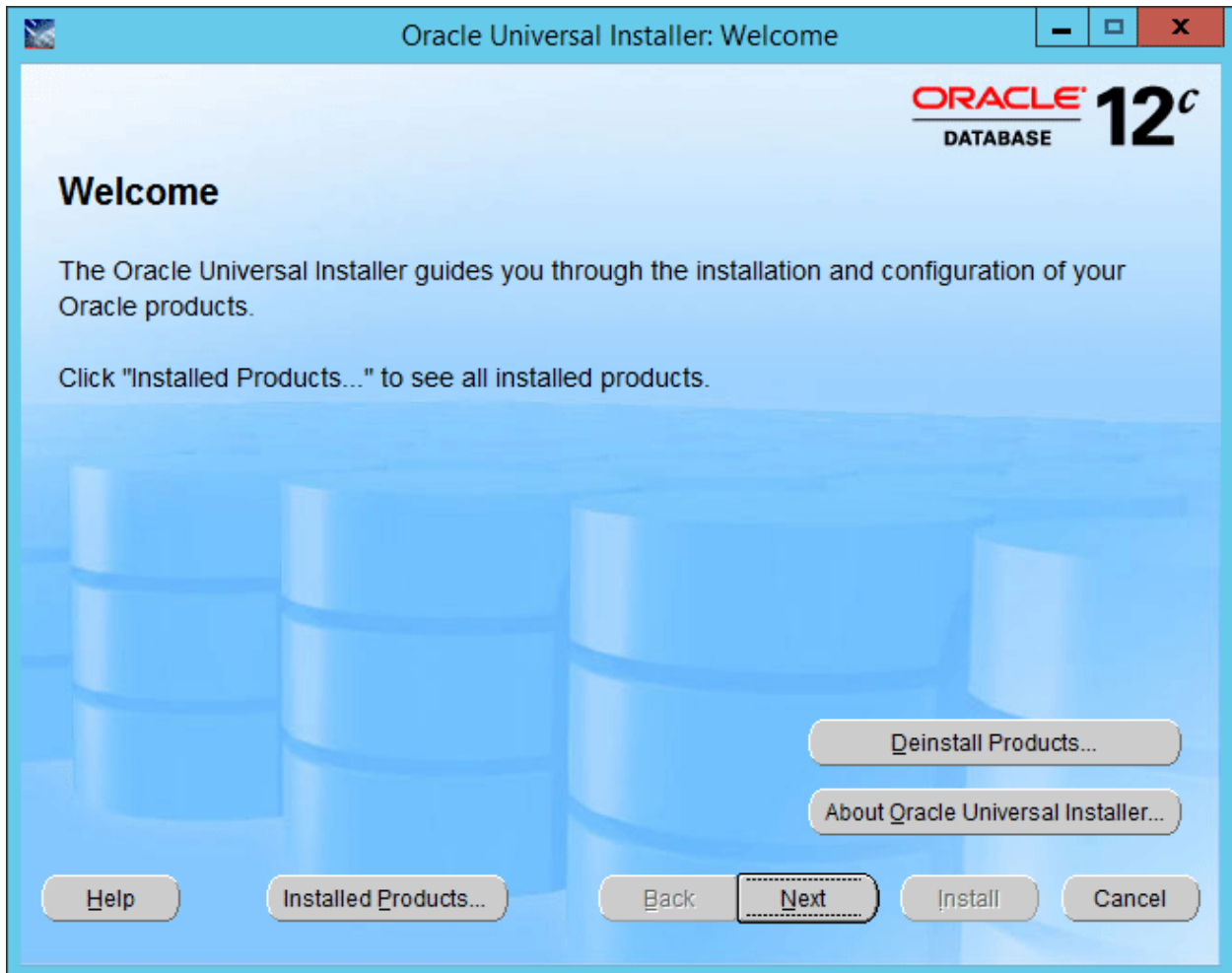


Figure 40 Running ODAC for the Oracle Client

4. Click Next.



Figure 41 Selecting the ODAC

5. Select **Oracle Data Access Components for Oracle Client** as the Installation Type. For Oracle 11, select Runtime.
6. Click **NEXT**.



Figure 42 Selecting the ODAC Installation Directory

7. You can leave the defaults or select the base location.

NOTE: For Oracle 11, the Summary – Inside Oracle Providers for .NET, the Oracle Client, you must use a LOCAL DRIVE, i.e. C:\app\oracle-insbridge.

8. Click **NEXT**.

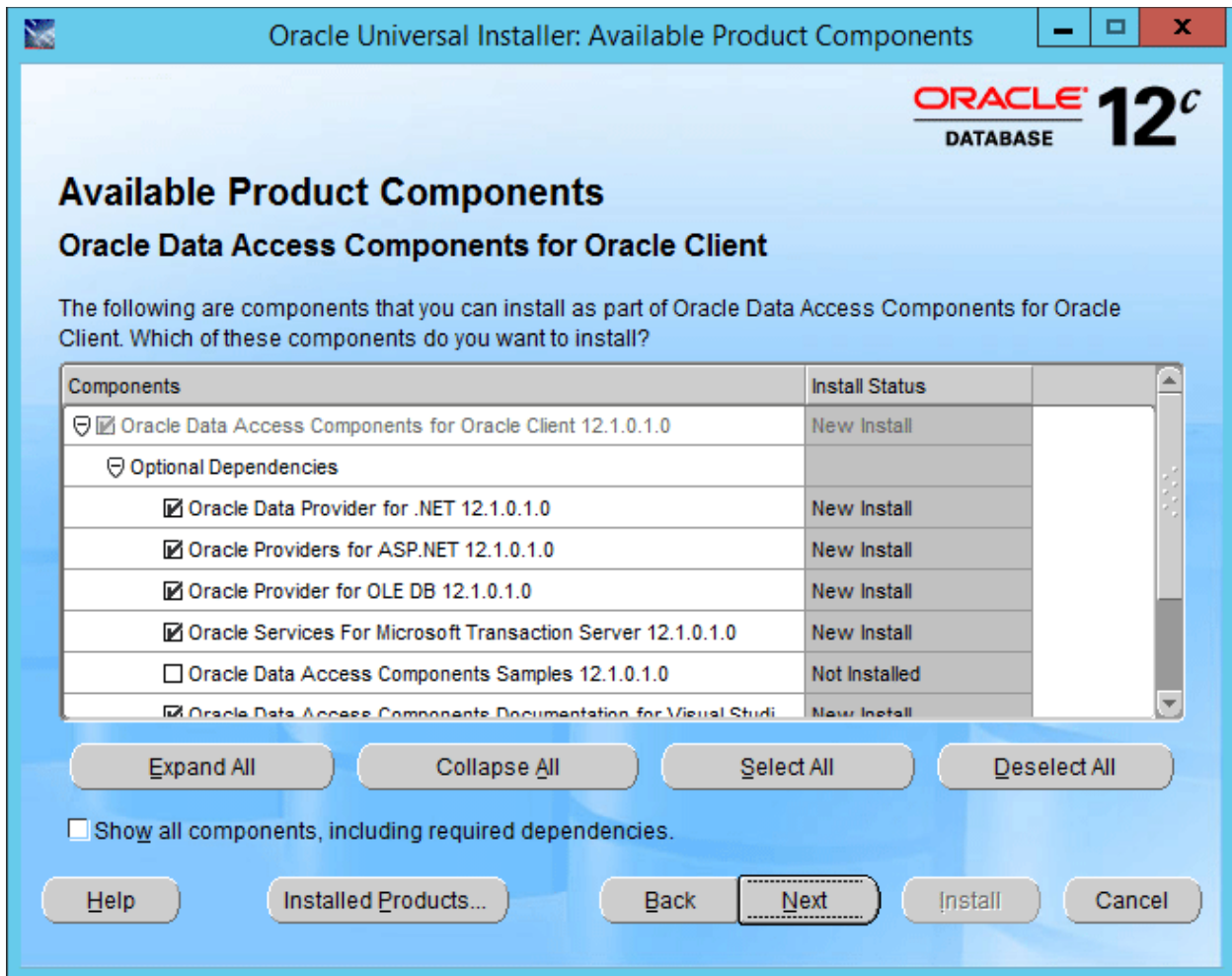


Figure 43 Installing the Oracle Client

9. Click Next. No changes are needed.

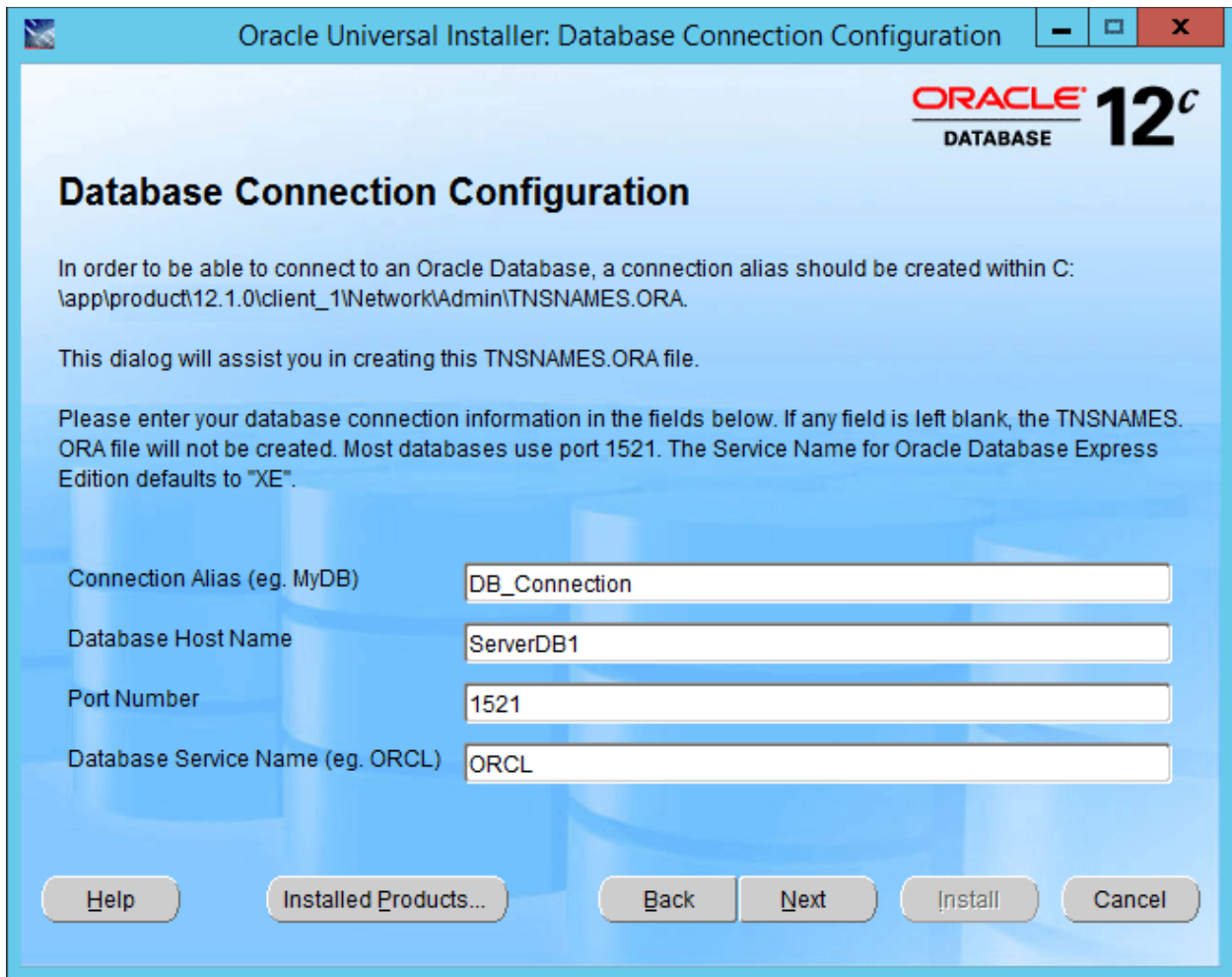


Figure 44 Entering Database Connection Information

10. Enter in Database Connection Information. If you do not have this, you can leave blank.

NOTE: *If you are upgrading an existing Oracle Client, this screen is not presented.*

11. Click Next.

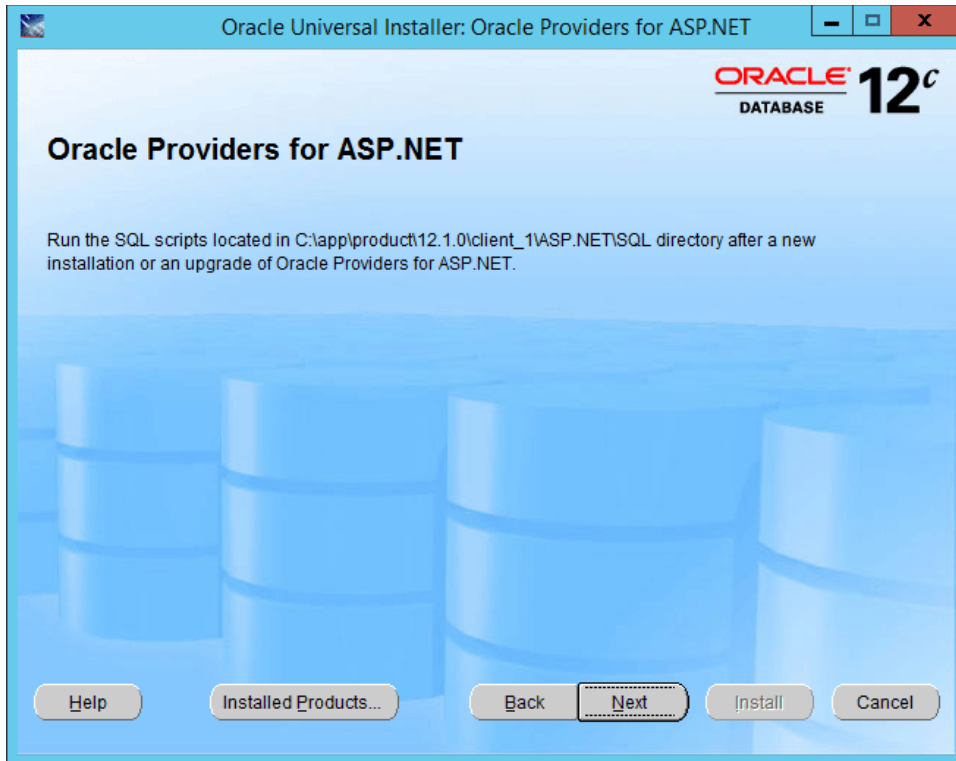


Figure 45 Information Screen

12. This is an information screen. Click Next.

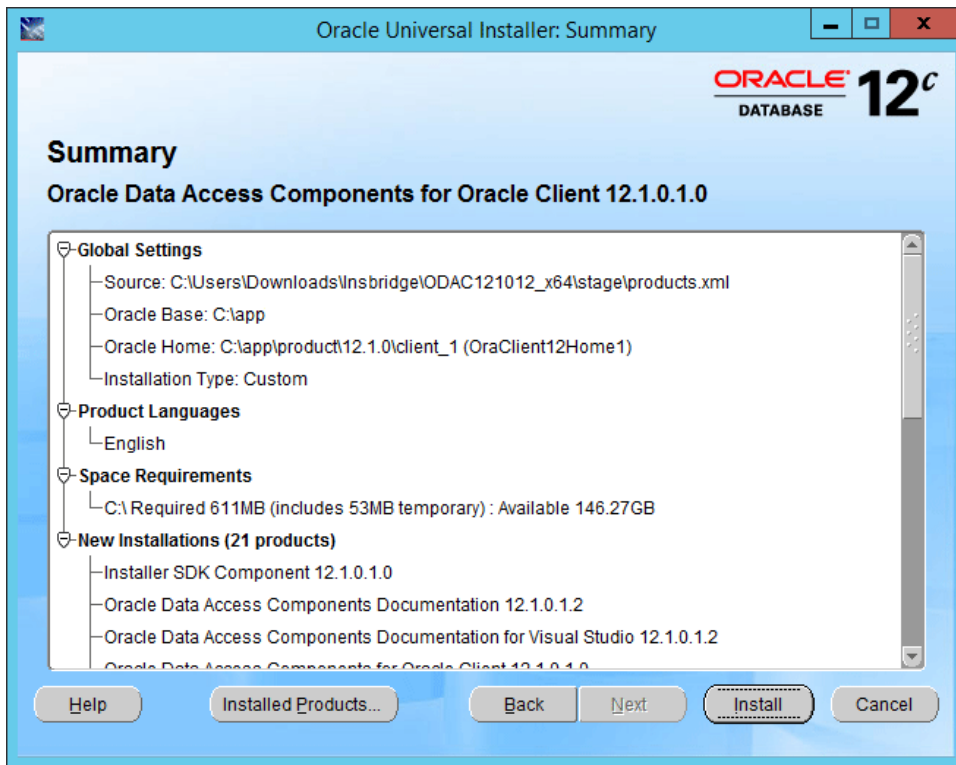


Figure 46 Summary of Items to be installed

13. Review the items to be installed and click Install. The installation progress is displayed.

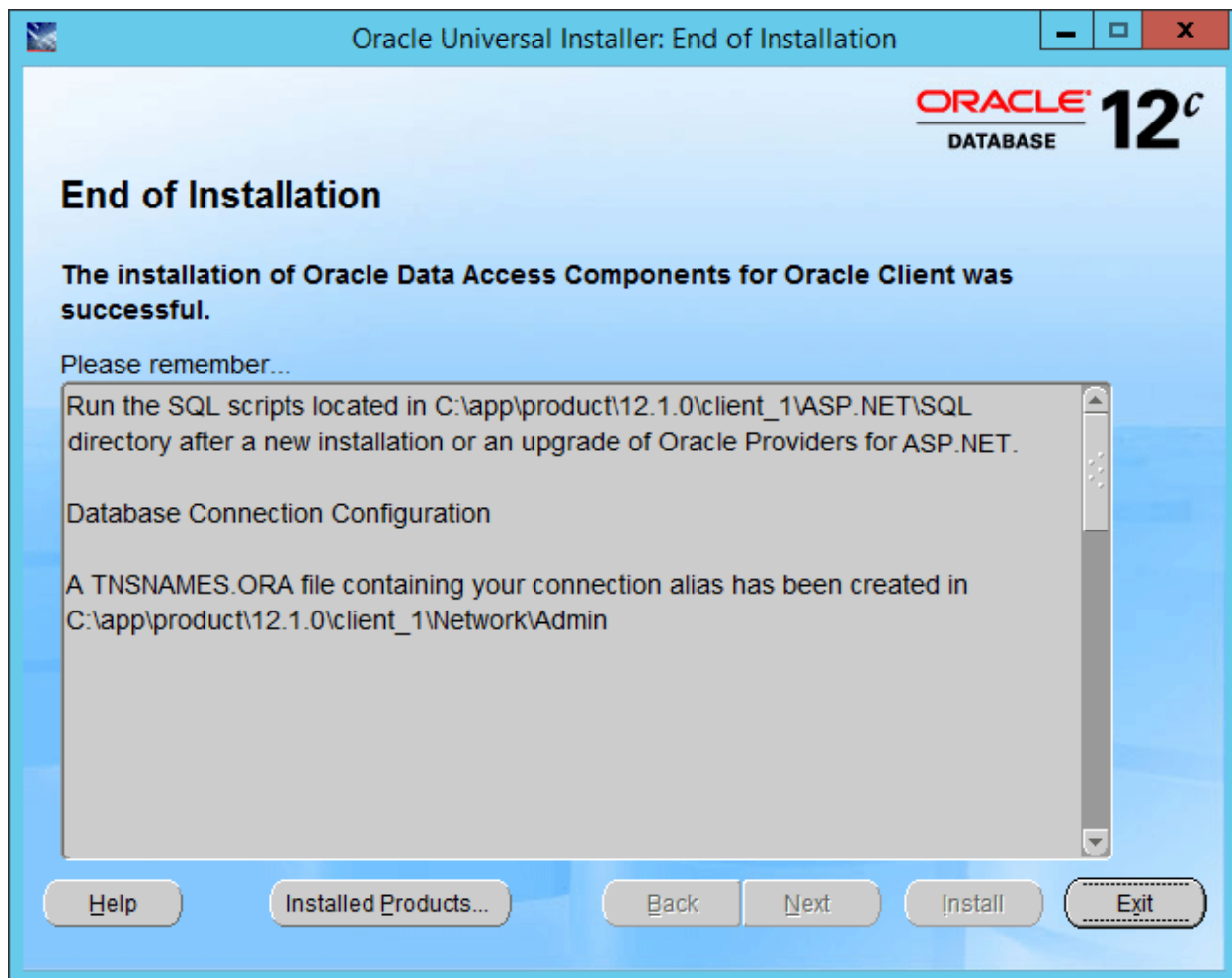


Figure 47 Successful Installation

- 14. The End of Installation will display a success or fail message.
- 15. Click Exit to close the install.
- 16. Reboot the machine. If you do not reboot, .NET errors may be presented.

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 WebSphere. 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 **Type**. For example, you can create a Production environment with a type of Production.
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.

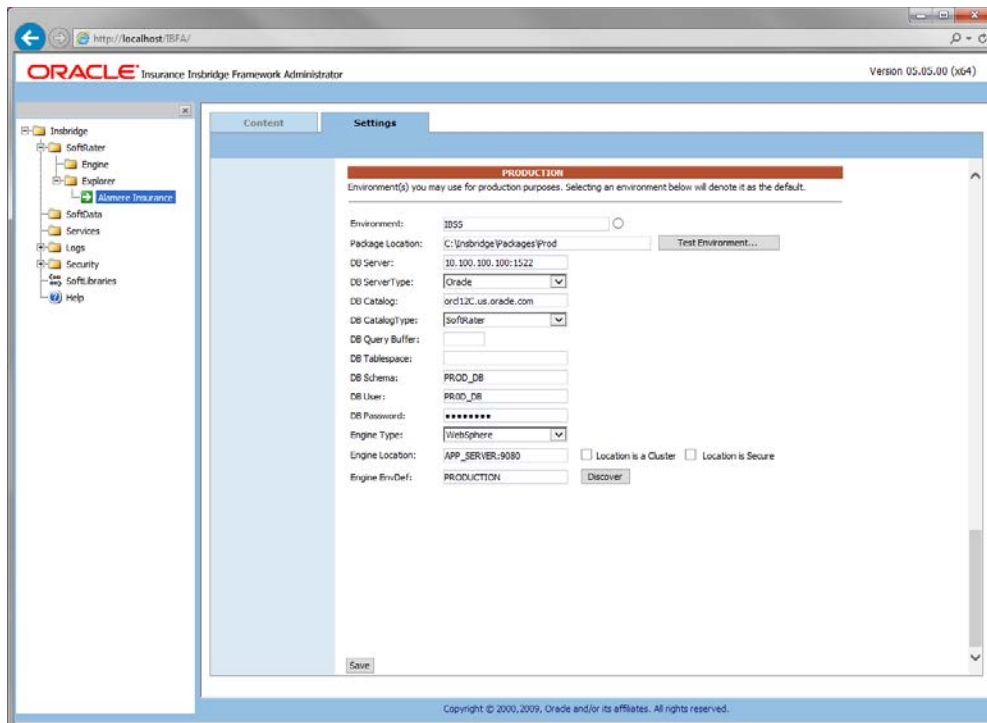


Figure 48 Editing Environment

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. For DB2 servers, this is the DB2 Registered Alias Name. For Oracle servers, this is the server name; either IP or DNS will work. The default port used is 1521. The Database listener port number can be appended to the server name if it is something other than the default port. The format for this is: [SERVER NAME]:[PORT NUMBER]
9. Select the **DB Server Type** that you are using.
10. 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 name of the schema that defines the structure of the database. This information may be obtained from the DBA.
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 WebSphere server may have "WBServerName:9080" 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.

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

Checking a SoftRater Database for Updates

All SoftRater databases can be checked for updates in IBFA.

1. SoftRater->Explorer->Subscriber->Settings->Environments.
2. Select the SoftRater environment with the database where you want to check for updates.
3. Click Test Environment.

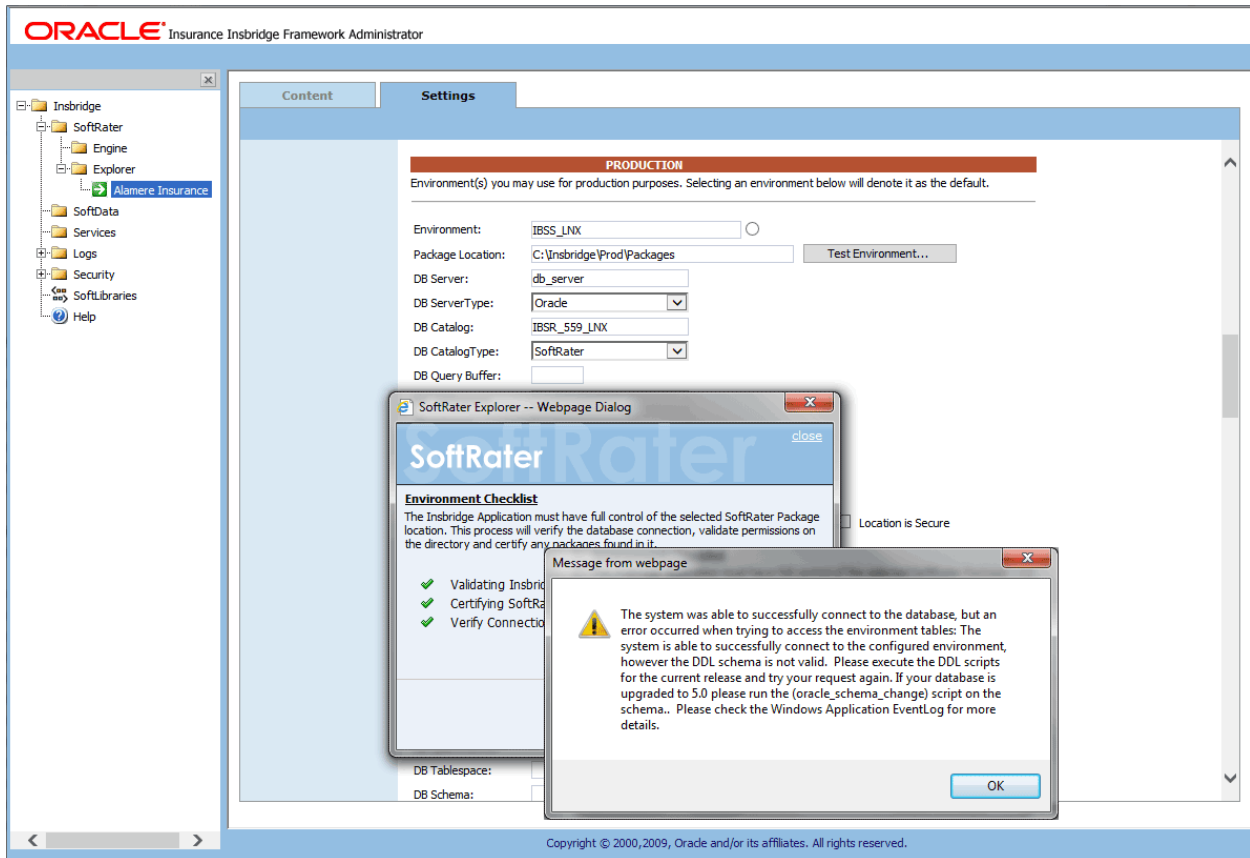


Figure 49 Checking for Database Updates

When the database is being validated, either a green checkmark is presented or an error message. The error message will indicate if an update must be run. For example, when validating an Oracle environment:

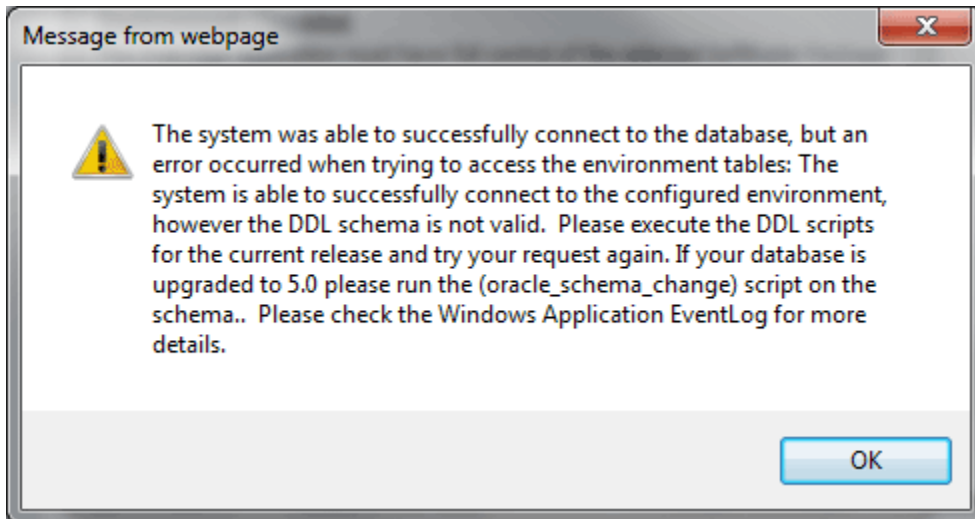


Figure 50 Oracle Database Update Required Message

DDL scripts for updates also can be found on the server where Inbridge was installed in the ...\\Oracle\Inbridge\SoftRater\DDL folder.

For example: C:\Program Files\Oracle\Insbridge\SoftRater\DDL\Oracle\Update

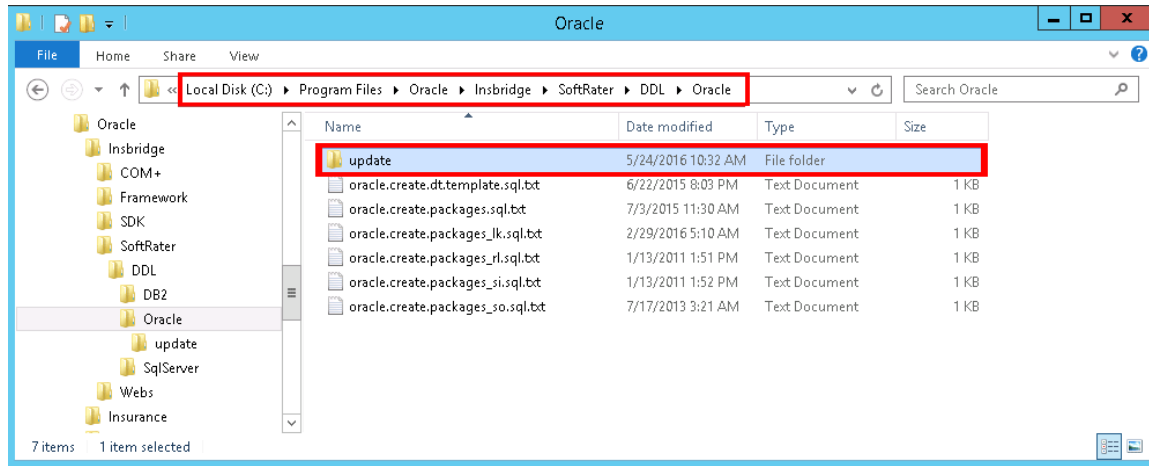


Figure 51 Location of Database Update Scripts

STEP 5: REBOOTING THE INSBRIDGE SERVER

To assure that the Oracle client is available, reboot the server where Insbridge is installed.

INSTALLATION PROCEDURES – UTILIZING AN IBM DB2 DATABASE

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

1. Create a DB2 database.
2. Create a shared library in WebSphere.
3. Create a WebSphere entry in IBSS.
4. Run the DB2 Client on the machine where the Insbridge system was installed.
5. Create a WebSphere entry in IBFA

Required DB2.Jar File

A db2jcc.jar file is required to be added as a shared library after the IBSS deployment.

The db2jcc.jar can be found in <WAS_HOME>\Program Files (x86)\IBM\WebSphere\AppServer\deploytool\itp\plugins\com.ibm.datatools.db2_2.1.110.v20121008_1514\driver\db2jcc.jar

If the db2 jar cannot be found in the above location, download this jar from the location <http://www.java2s.com/Code/Jar/d/Downloaddb2jccjar.htm>

Save the db2jcc.jar file to a location on your machine <db2_location>.

Required DB2 Client

To obtain the DB2 client, please visit the IBM website and download the Client for IBM Data Server Runtime Client, Version 11.1.

For example:

<https://www-01.ibm.com/marketing/iwm/iwm/web/preLogin.do?source=swg-idsdpds>

You also can perform a search for “IBM Data Server Runtime Client, Version 11.1”

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

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 Project/Products that your company uses. You will need the ID number for each.
- 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.

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.
 - The DDLs are located in the IBFA Installation Directory under the SoftRater/DDDL folder. I.e. [INSTALL_DIR]/Insbridge/SoftRater/DDDL.
 - You 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 Project/Product. An example of the format is in the comments of the script. It requires the Project/Product ID number and the customer number.
 - b) Create user IBSR and assign Connect to database, Create Tables and Create packages authorities.
2. On your DB database, you need to run a DT table script for each Project/Product.
 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 Insbridge 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/DDDL folder. I.e. [INSTALL_DIR]/Insbridge/SoftRater/DDDL.

```
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 a Project/Product and receive missing table errors. Creating tables in DB2 should be performed by a qualified DBA.

STEP 2: ASSIGNING THE SHARED INSBRIDGE LIBRARIES

1. Open the WebSphere Administrative console, and navigate to **Environment > Shared libraries**.

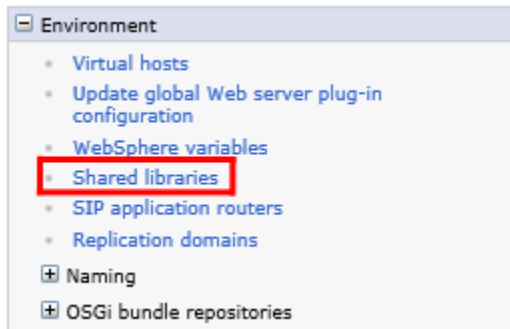


Figure 52 Selecting Shared Libraries

2. On the Shared Libraries screen, select the Scope of the shared library to be created and click **New**.

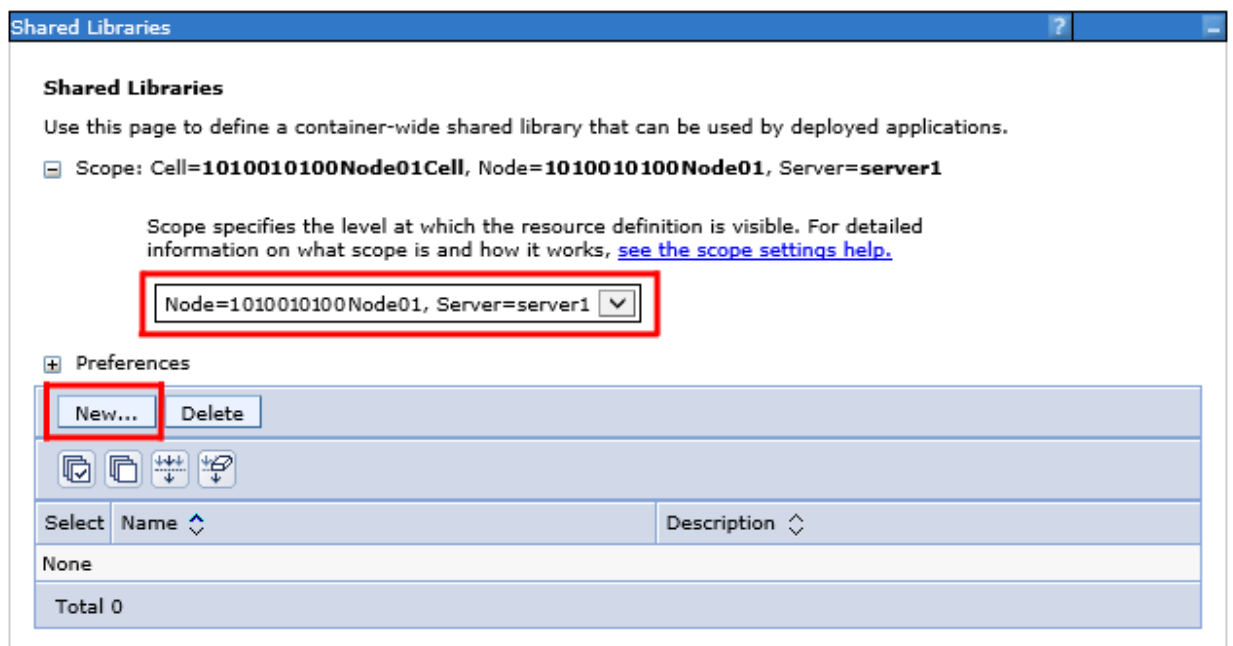


Figure 53 Creating a New Shared Library

3. On the Configuration Screen, enter the following details:

Name - <Any appropriate name>
 Classpath - <db2_location>

This is the location of the db2jcc.jar. Please see Figure 45 Entering Shared Library Information.

Shared Libraries

[Shared Libraries](#) > **New...**

Use this page to define a container-wide shared library that can be used by deployed applications.

Configuration

General Properties

* Scope
cells:1010010100Node01Cell:nodes:1010010100Node01:servers:server1

* Name
db2_jar

Description
DB2 Jar File

* Classpath
C:\DB2_Location\com.ibm.datatools.db2_2.1.110.v20121008_1514

Native Library Path

Class Loading
 Use an isolated class loader for this shared library

Apply OK Reset Cancel

Figure 54 Entering Shared Library Information

4. Click **Apply**.
5. **Save** the configuration.

- Navigate to **WebSphere Enterprise Applications**
Applications > Application Types > WebSphere enterprise applications.

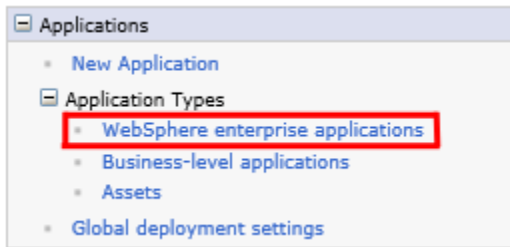


Figure 55 Selecting WebSphere Enterprise Applications

- In the Enterprise Applications screen, click on the application name **ins.ru.sr.ear**.

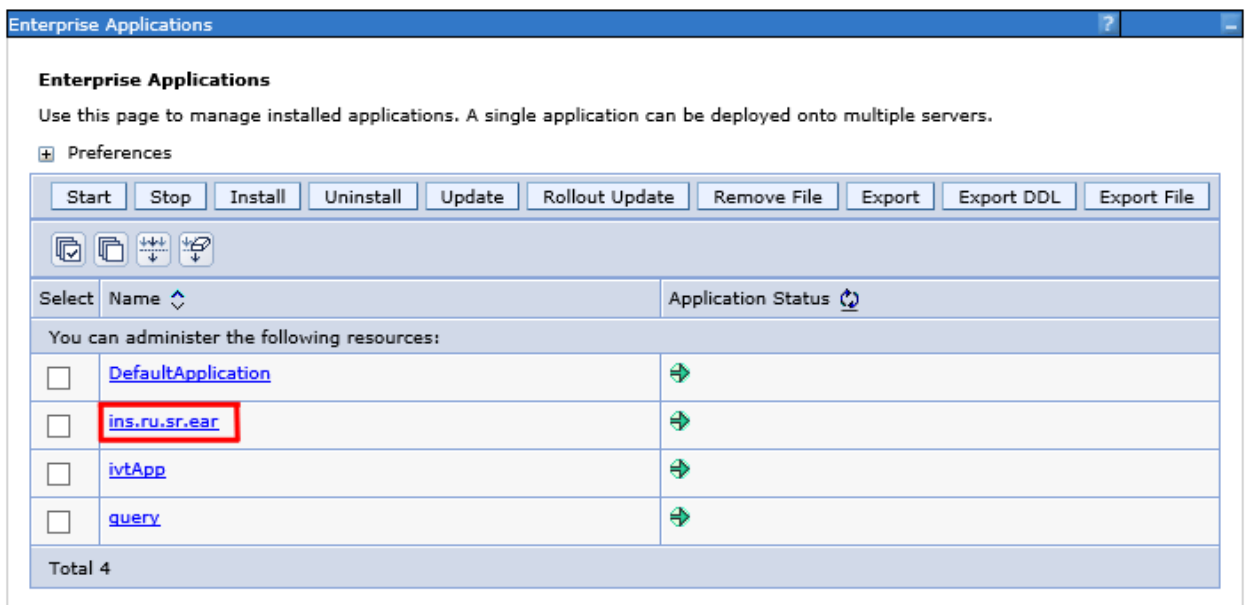


Figure 56 Selecting the Insbridge Application

8. In the application Configuration screen, click on **Shared library references**

Enterprise Applications > ins.ru.sr.ear

Use this page to configure an enterprise application. Click the links to access pages for further configuring of the application or its modules.

Configuration

General Properties

Name: ins.ru.sr.ear

Application reference validation: Issue warnings

Detail Properties

- Target specific application status
- Startup behavior
- Application binaries
- Class loading and update detection
- Request dispatcher properties
- JASPI provider
- Custom properties
- View Deployment Descriptor
- Last participant support extension

References

- Resource references
- Shared library references**
- Shared library relationships

Apply OK Reset Cancel

Modules

- Manage Modules
- Metadata for modules
- Display module build Ids

Web Module Properties

- Session management
- Context Root For Web Modules
- JSP and JSF options
- Virtual hosts

Enterprise Java Bean Properties

- Default messaging provider references
- Application profiles
- Bind EJB Business
- EJB JNDI names

Client Module Properties

- Client module deployment mode

Web Services Properties

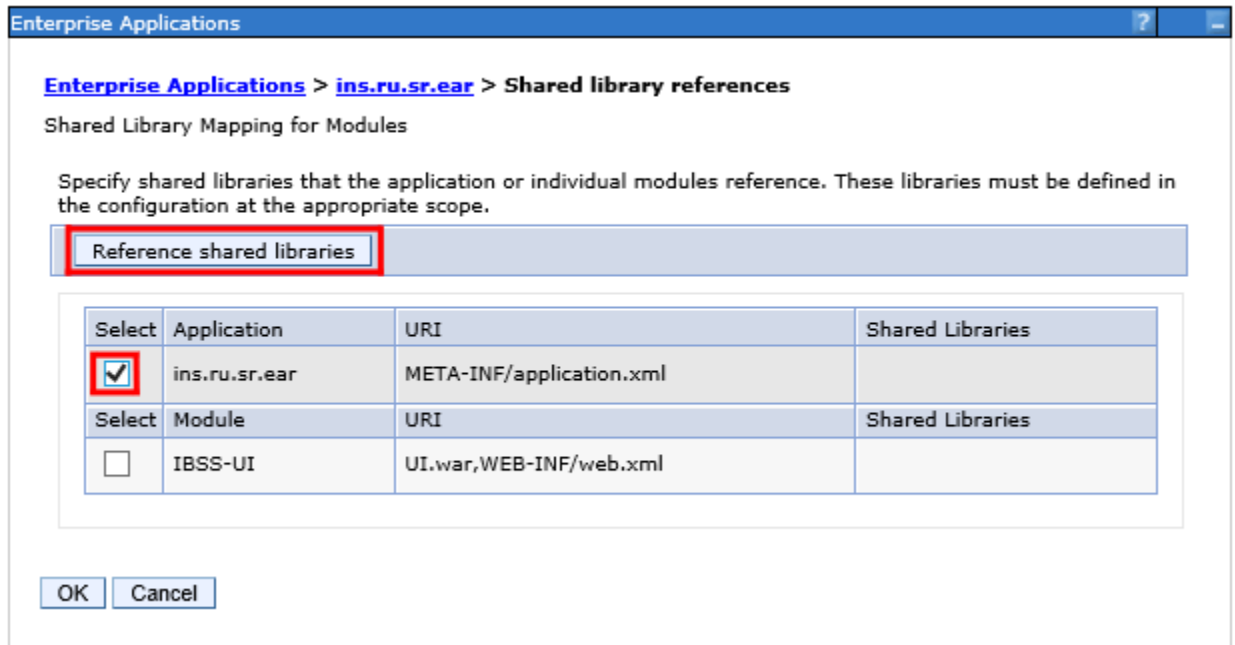
- Provide JMS and EJB endpoint URL information
- Publish WSDL files
- Provide HTTP endpoint URL information

Database Profiles

- SQLJ profiles and pureQuery bind files

Figure 57 Shared Library Reference

- In the Shared library references screen, select the application check box and click on **Reference shared libraries**



- Select the DB2 Shared Library name in the Available list and click on the arrow -> to add it to the Selected list.

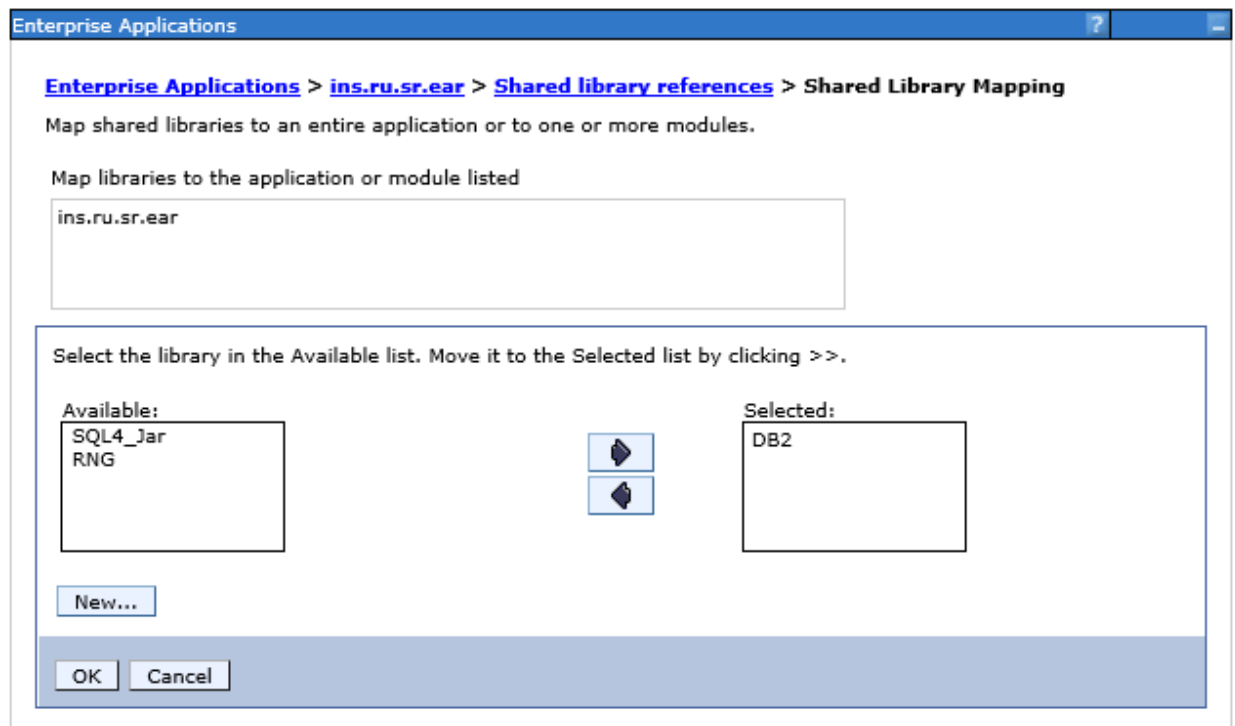


Figure 58 Adding the DB2.jar

11. Make sure the DB2 library name appears in the Selected list. Click **OK**. This will return you to the Shared Library Reference screen.
12. The DB2.jar must be shared with the Module also. Select the Module from the list and follow the same process as above.

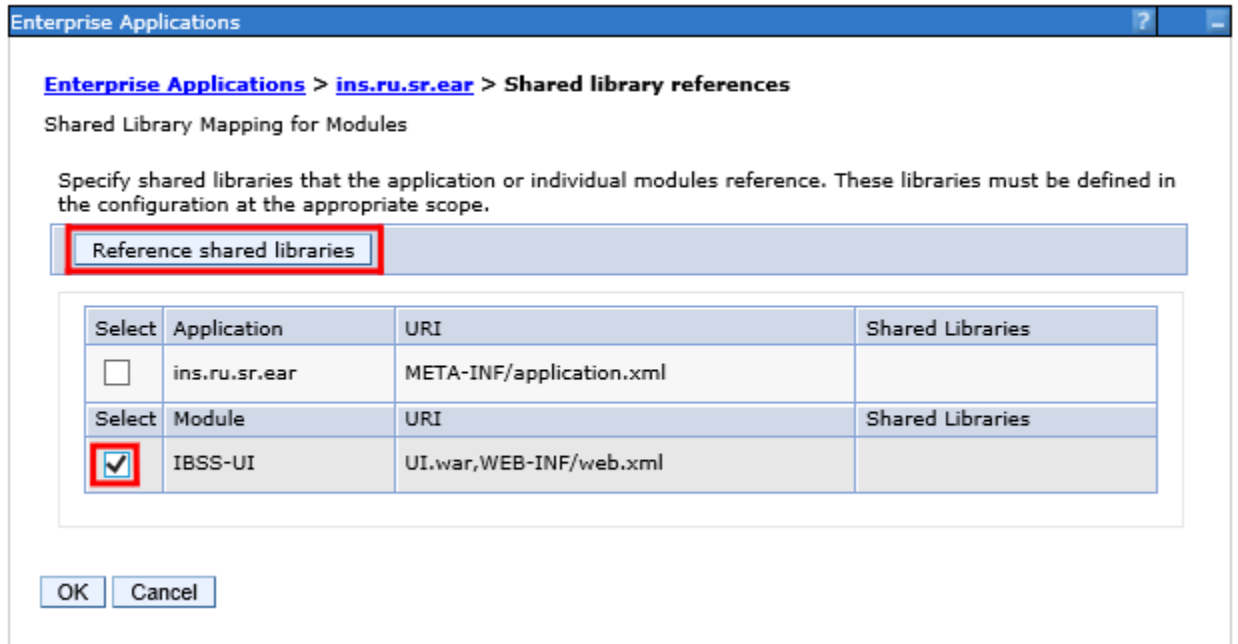


Figure 59 Adding the Shared Library to the Module

- The DB2 library name must appear for both the Application and Module.

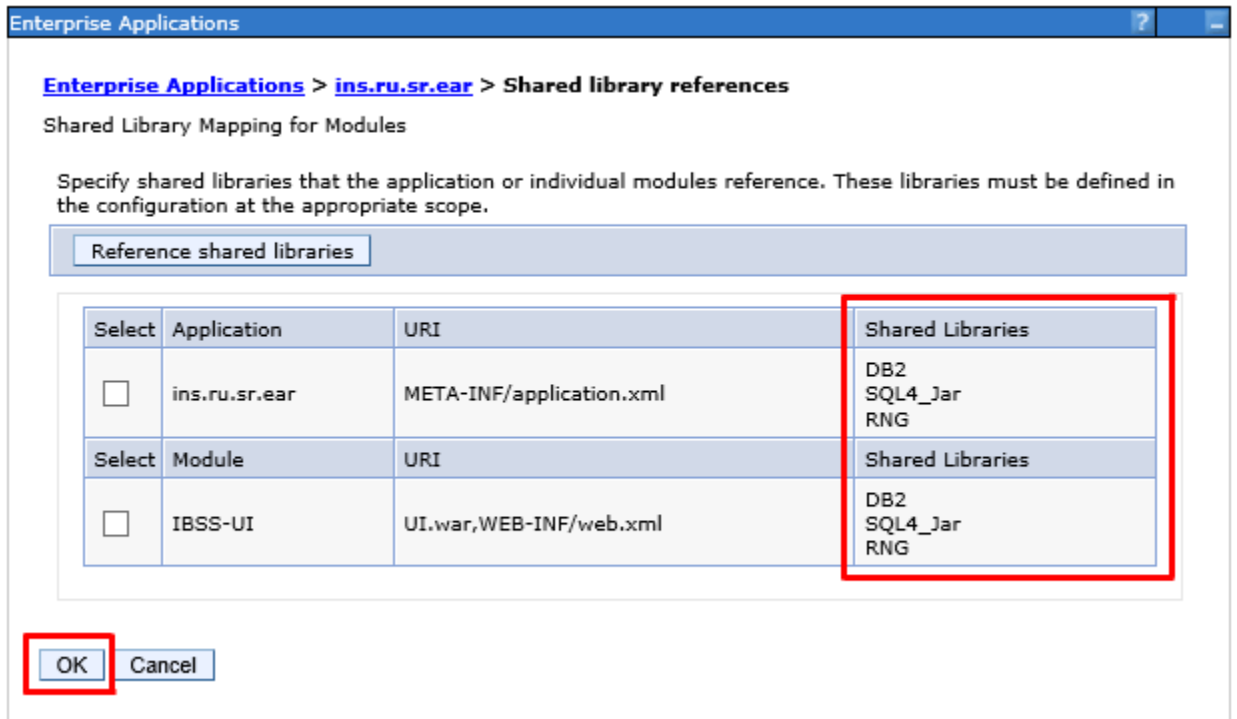


Figure 60 DB2.jar Shared with Application and Module

NOTE: Other shared library references can be added at the same time.

- Click **OK**.
- Save** the configuration.
- Restart WebSphere for the changes to take effect.

STEP 3: SETTING UP A WEBSHERE ENVIRONMENT IN IBSS

There are three steps that will need to be done in IBSS:

- **Step 1: Creating a New Subscriber**
- **Step 2: Creating a SoftRater Environment**
- **Step 3: Adding a Node**

Open an Internet Explorer web browser and browse to the following location, replacing ServerName with the actual server name where WebSphere resides:

<http://<ServerName or IP Address>:9080/IBSS>

Security Enabled

Security is enabled by default; users are presented with a login screen. A user name and password must be entered to gain access. Information regarding the status of the system is presented but will not be accessible. The default is for security to be enabled.

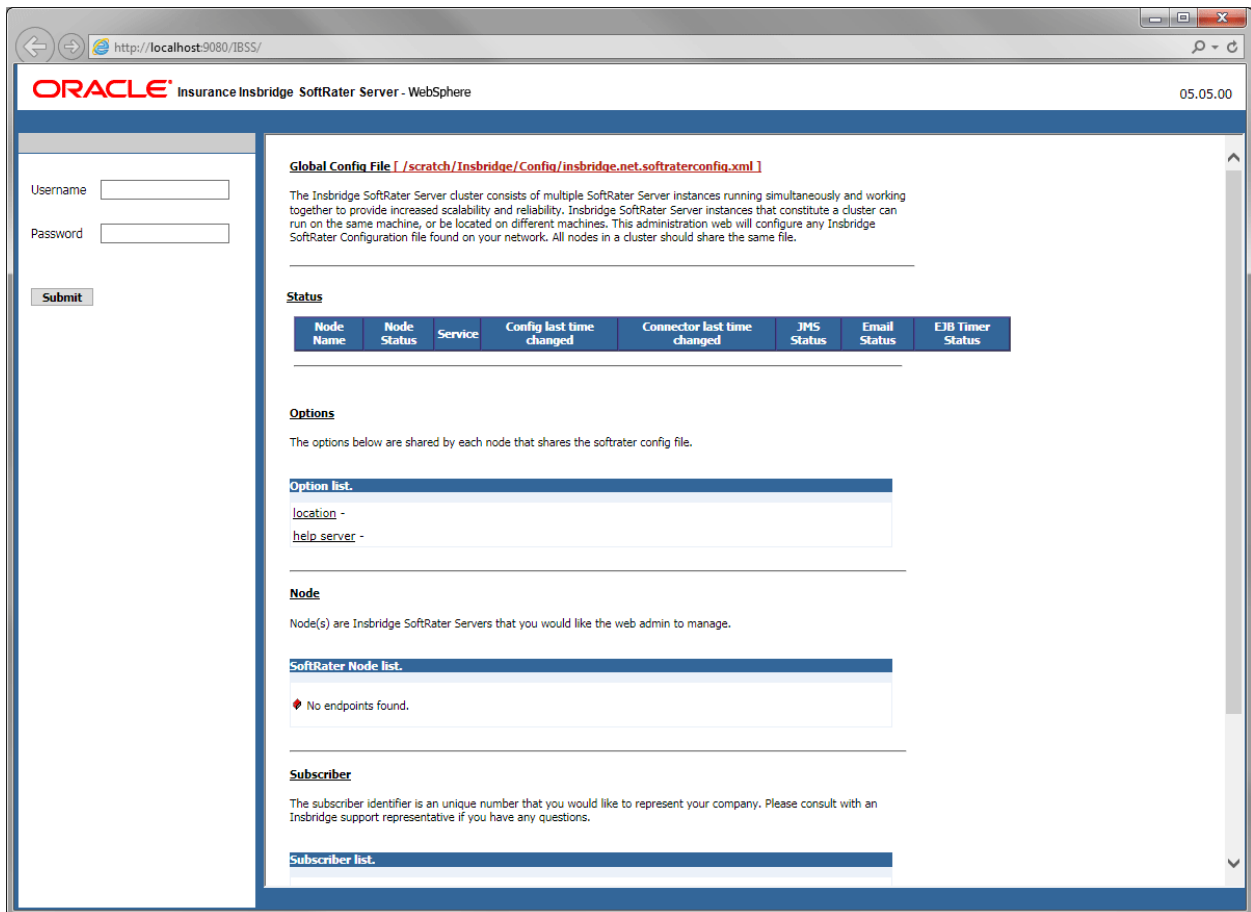


Figure 61 Security Enabled in IBSS

When Security is enabled, a default user “admin” with a default password of “insbridge” is assigned. This is the user name and password to be used the first time you enter IBSS. It is strongly recommended that the password be updated at the first log in.

IBSS Home Page

A successful log in places you on the Home page.

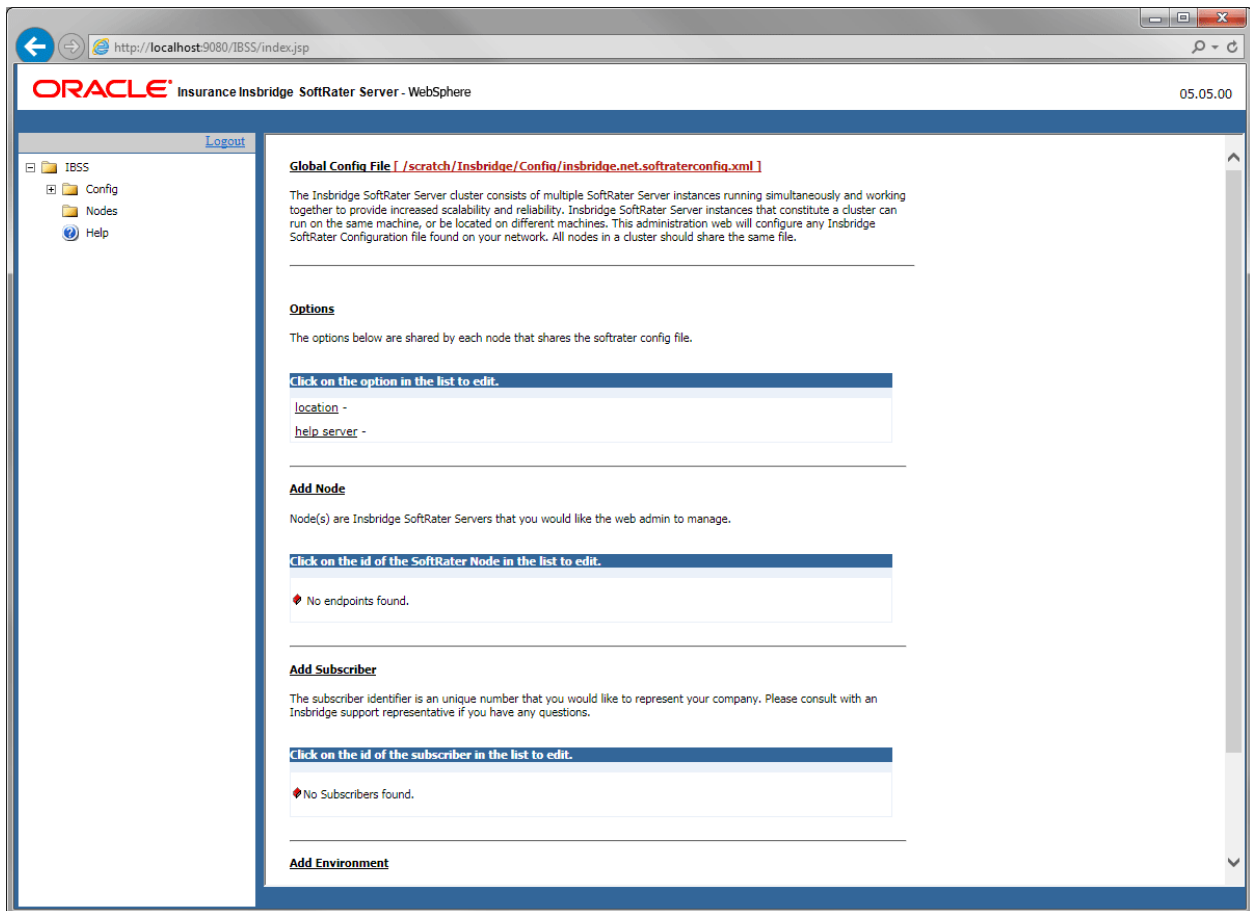


Figure 62 IBSS WebSphere Main Page

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

Step 1: Creating a Subscriber:

A *subscriber* is a group or collective of users and environments under a single identity. This identity is used to manage and configure the group's activities and databases. A subscriber may be a single company, a group within a company, or a single person.

The ID and Name must match across all environments. If you have created a subscriber in IBFA, use the same ID and Name here. If you have not created a subscriber, you can create them here and then use the same information in other environments. The ID and Name are fixed after the first time you save. These entries cannot be edited.

1. Click on **Add Subscriber**. A separate screen is displayed.

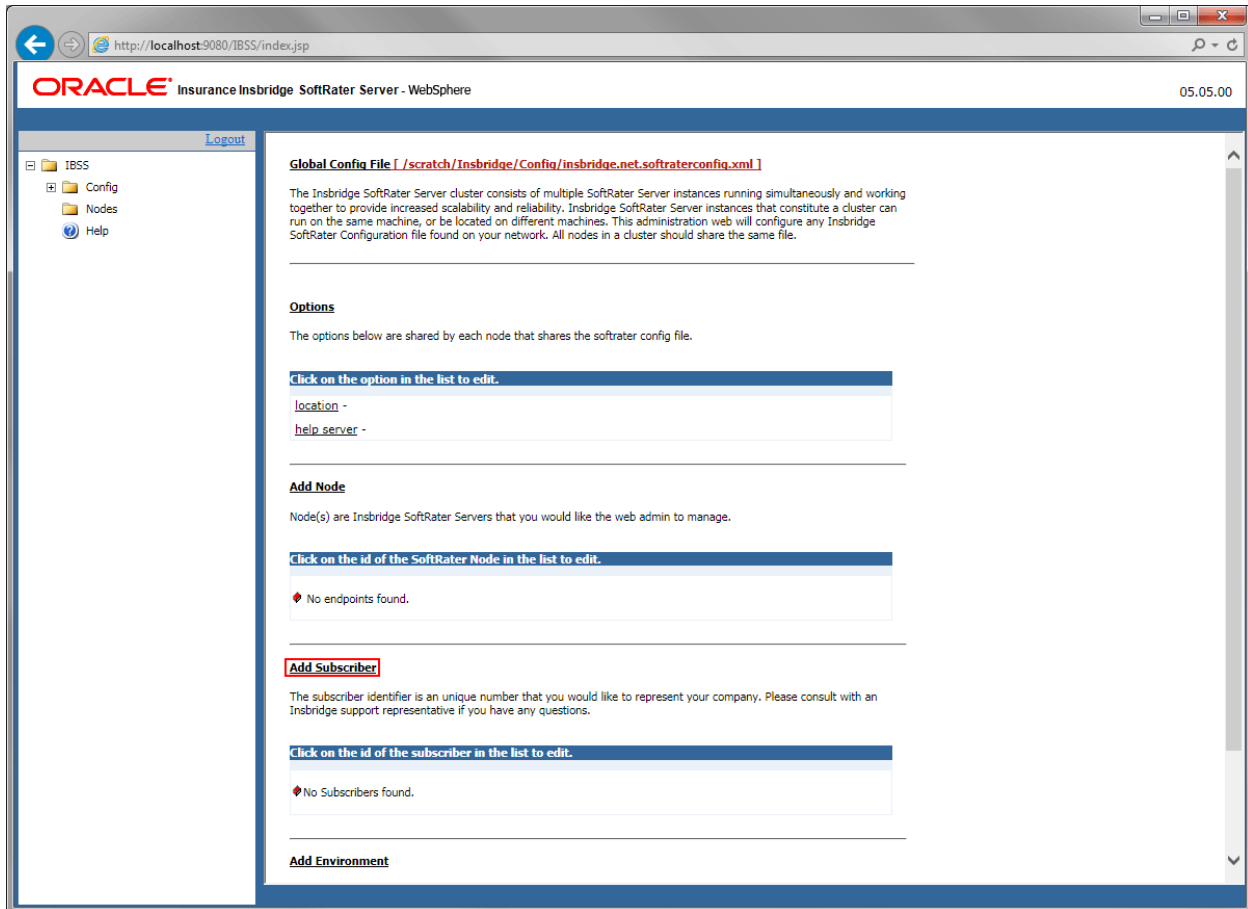


Figure 63 Adding a Subscriber

2. Enter the **ID**, and **Name** for your subscriber.

The Subscriber ID can be a 1-5 digit number and must be unique for each subscriber. For example, if you have an instance of IBFA on machine A, you can create a subscriber with an ID of 100. On machine A, if you create another subscriber, you must give that subscriber a different ID number, say 200. If you also have an instance of IBFA on a different machine, B for example, you should duplicate the same subscribers with the same ID numbers on machine B.

If you require assistance or are unsure of what action to take, please log a Service Request using My Oracle Support at <https://support.oracle.com/>.

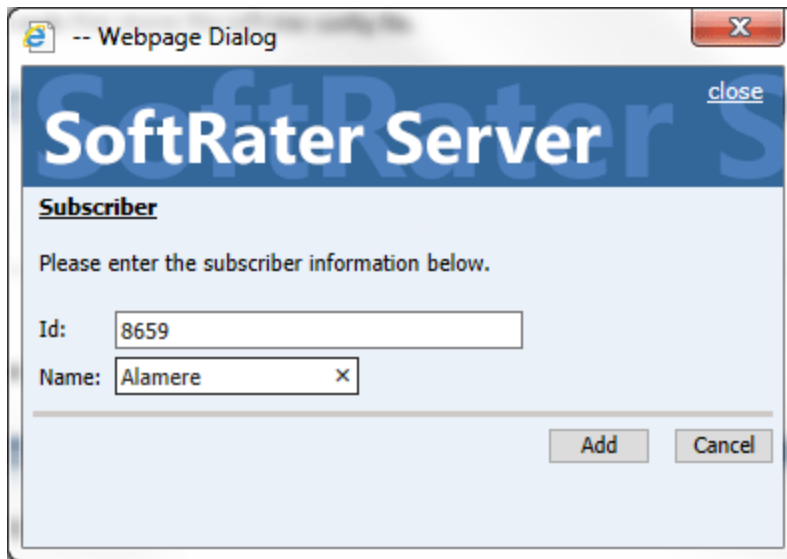


Figure 64 Enter ID

3. When you finish entering the information, click **Save**. The new subscriber will now be displayed in the list of subscribers.

NOTE: Make note of the subscriber ID number. You may need to enter this on another IBFA or IBSS environment.

Step 2: Creating a SoftRater Environment:

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.

1. Select **Add Environment** from the IBSS Main page. You will be placed on the environment window.

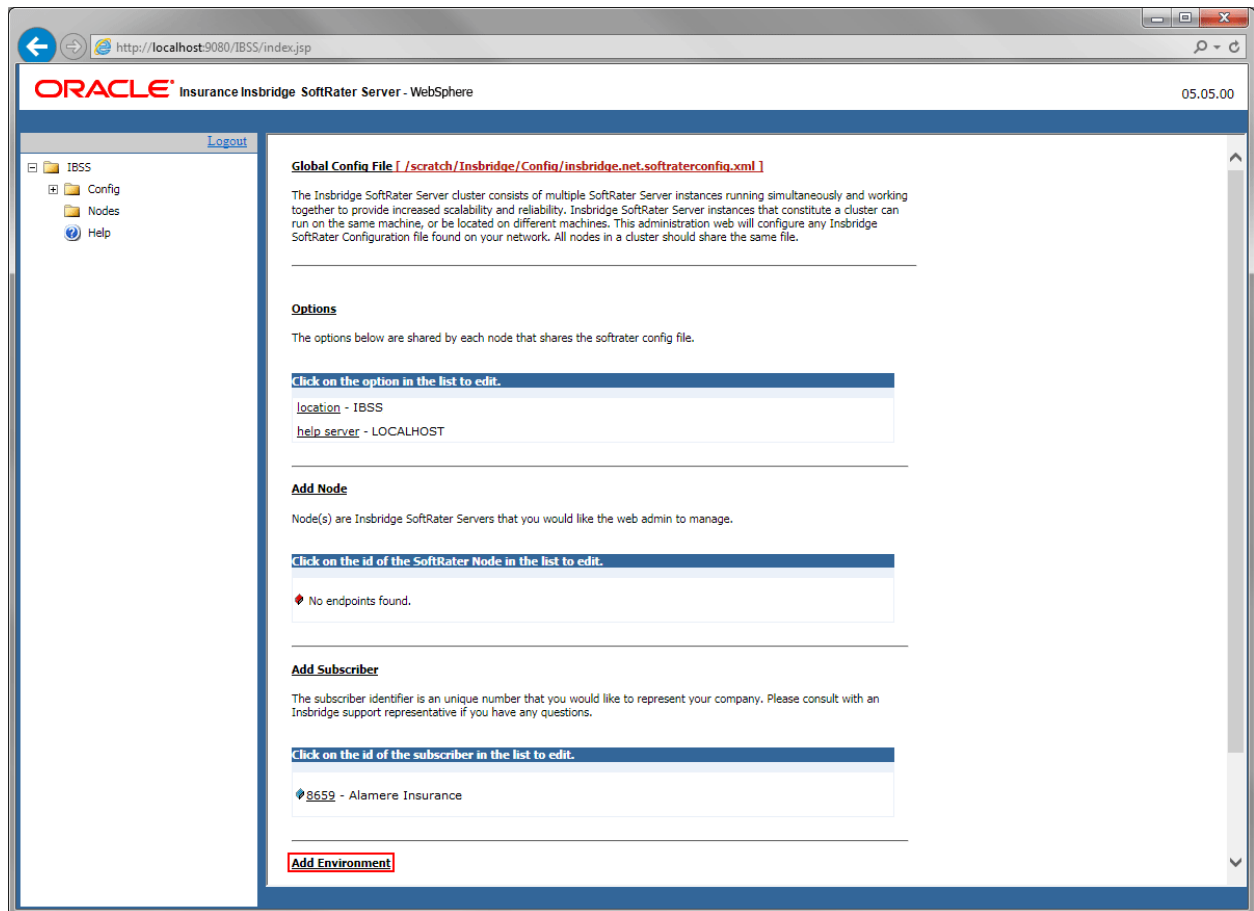


Figure 65 Creating an Environment

2. A separate screen is displayed. Enter the following information:

For DSN Entries

Subscriber: Select the name of the subscriber from the menu.

Environment Name: A name for the environment. This is the friendly name.

Environment Type: Select the type of connection:

- **DSN** – The connection information is held by the Insbridge system.

- **JNDI** – The connection is an EJB Lookup and information is not held by the Insbridge system.

Database Server: The name or IP address of the server where packages are loaded.

Database Port: Listening port for 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.

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

Schema Name: The schema name for the database. Schema Name is not needed for SQL connections.

Database User Id: The username to access the database.

Database Password: The password for the username entered.


Provider Type: The type of the database

- **ORACLE**
- **ORACLE (BINARY_CI)**
- **DB2**
- **DB2(AS400)**
- **MS SQL SERVER**

Database Type: The type of database being accessed:

- **SoftRater – The default. This option should be used for most installations.**
- **RateManager** – Supported for selected installations. Please contact Support.
- **OTHER** – Not used at this time.

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

Default Environment: Select if this is to be used as the default environment. The default environment is used when no environment is specified. There can be only one default environment. The default environment is indicated with a red icon. 

- When you are finished entering information, click **Save**.

Options
Please enter/update your IBSS Option information.

Subscriber: Alamere

Environment Name: PROD_B

Environment Type: DSN

Database Server: localhost

Database Port: 1433

Query Block:

Database Name: IBSR_Production_B

Schema name:

Database User Id: sa

Database Password:

Provider Type: MS SQL Server

Database Type: SoftRater

Data Dir: C:\Inbridge\Production_B

Default Environment: True

Buttons: Save, Delete, Test Connection!, Close

Figure 66 Environment Setup

- Before you can use the new or edited environment for rating, you need to reload the configuration XML file. This is done by resetting the environments. On the left hand side of the IBSS home page, expand Nodes and select the Reset Environments option. You will be placed on the Reset Environment Configuration page. Click **Execute**. The screen refreshes and each node will be reset. Click IBSS to return to the home page.

For JNDI Entries

Subscriber: Select the name of the subscriber from the menu.

Environment Name: A name for the environment. This is the friendly name.

Environment Type: Select the type of connection:

- **DSN** – The connection information is held by the Insbridge system.
- **JNDI** – The connection is an EJB Lookup and information is not held by the Insbridge system.

Name: The name of the data source.

Context Factory: A *URL context factory* is a special object factory that creates contexts for resolving URL strings.

RMI: The Java Remote Method Invocation used.

URL Host: The name or IP of the host server.

URL Port: The port number used by the host server.


Provider Type: The type of the database

- **ORACLE**
- **ORACLE (BINARY_CI)**
- **DB2**
- **DB2(AS400)**
- **MS SQL SERVER**

Database Type: The type of database being accessed:

- **SoftRater** – The default. This option should be used for most installations.
- **RateManager** – Supported for selected installations. Please contact Support.
- **OTHER** – Not used at this time.

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

Default Environment: Select if this is to be used as the default environment. The default environment is used when no environment is specified. There can be only one default environment. The default environment is indicated with a red icon. 

5. When you are finished entering information, click **Save**.

Options
Please enter/update your IBSS Option information.

Subscriber: Alamere

Environment Name: BATCH

Environment Type: JNDI

Name: jdbc/batchDB

Context Factory: weblogic.jndi.WLInitialContextFactory

RMI: t3

Url Host: localhost

Url Port: 7001

Provider Type: ORACLE

Database Type: SoftRater

Data Dir:

Default Environment: False

Save Delete Test Connection! Close

Figure 67 Creating a JNDI Environment

Before you can use the new or edited environment for rating, you need to reload the configuration XML file. This is done by resetting the environments. On the left hand side of the IBSS home page, expand Nodes and select the Reset Environments option. You will be placed on the Reset Environment Configuration page. Click **Execute**. The screen refreshes and each node will be reset. Click IBSS to return to the home page.

Step 3: Adding a Node:

Every IBSS instance requires a node. Nodes allow for the management of multiple environments from one location. Nodes contain cache and log information for each environment as well as a reset option.

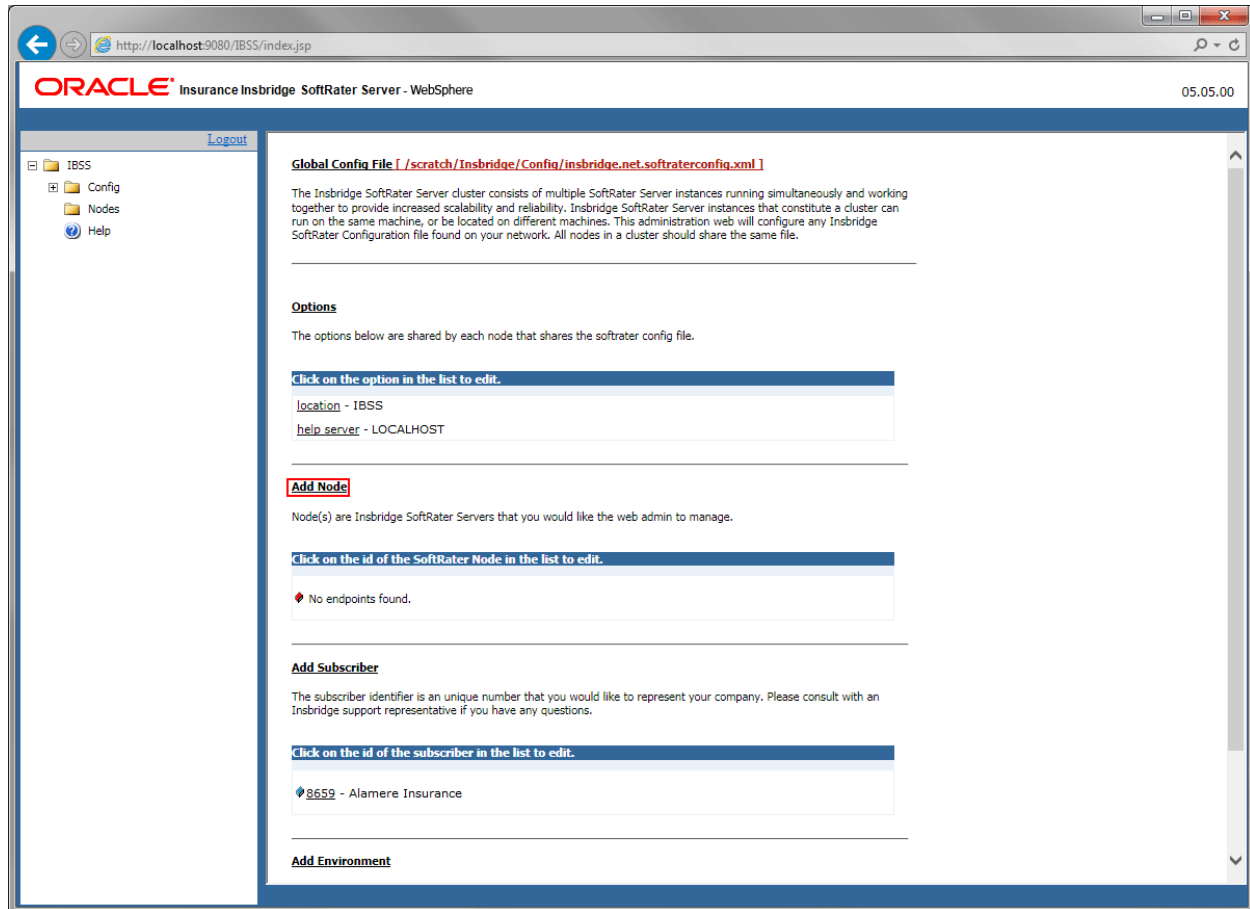


Figure 68 Adding a Node

NOTE: To utilize a secure environment, please contact Oracle Support.

To create a node, server information is needed:

- **Server OS**
- **Server Name or IP Address**
- **Port Used**

1. From the IBSS home page, click the **Add Node** link.
2. This opens the **SoftRater Server Node Instance** window.



Figure 69 Adding a Node

3. Select the server operating system from the drop down. There are three choices, Linux, Mainframe and Windows.
4. Enter the server host name or IP address and port. The default ports:
 - **WebLogic:** Port 7001
 - **WebSphere:** Port 9080
 - **JBoss:** Port 8080

The format for this is: [SERVER NAME]:[PORT NUMBER]

5. Enter a friendly name. This is the name displayed for the node.
6. It is recommended that the Ping Server option be used to test the connection. This is an optional step but can be helpful. If a connection cannot be made, the node cannot be saved.
7. Click **Add** to add the node. If a node cannot be added, an error message is displayed. Please correct the error and try again.

NOTE: *It is recommended that server names or IP addresses be used over localhost.*

STEP 4: 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 Insbridge 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 Insbridge 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.

1. Select the setup application. The DB2 client installation will begin. Select the language to be used. The installation prepares to launch.

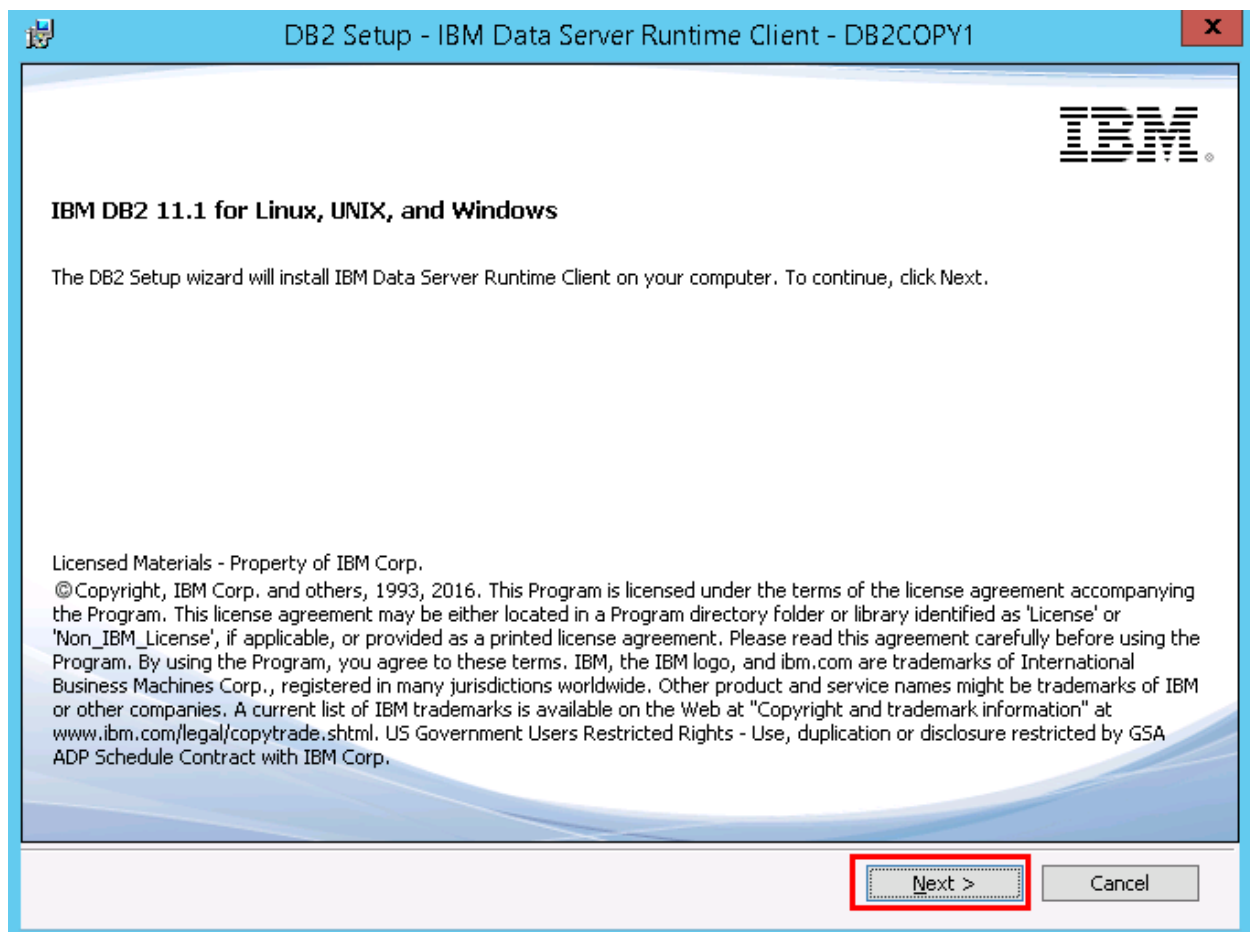


Figure 70 Installing DB2 Client and Fix Pack

2. Click Next for the introduction and terms.

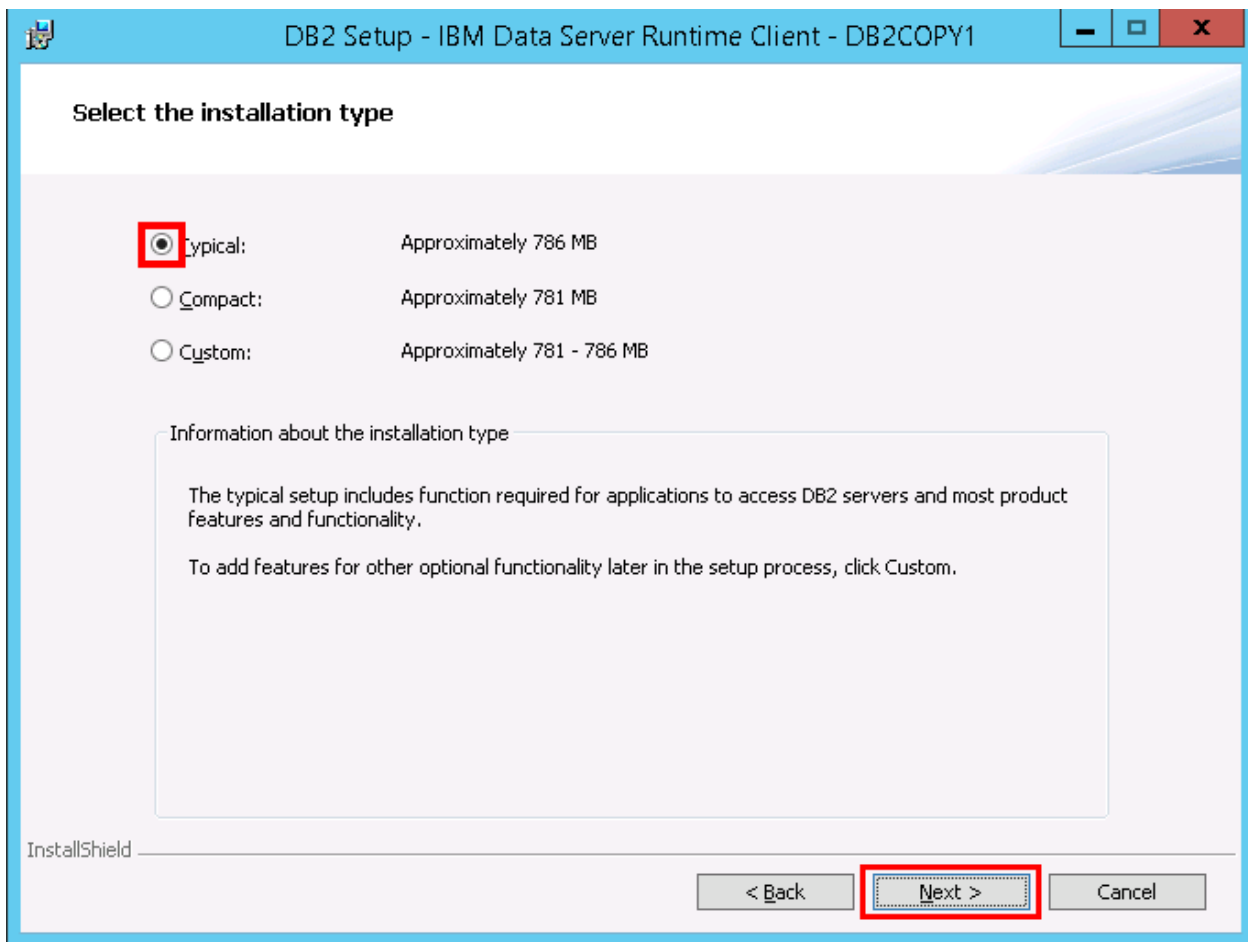


Figure 71 DB2 Client Install

3. A Typical installation is recommended. Leave all the defaults and click **NEXT**. The installation will begin.
4. Click **NEXT** as the installation continues.

Click **Finish** to complete the installation.

STEP 5: 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 WebSphere. 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 **Type**. For example, you can create a Production environment with a type of Production.
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.

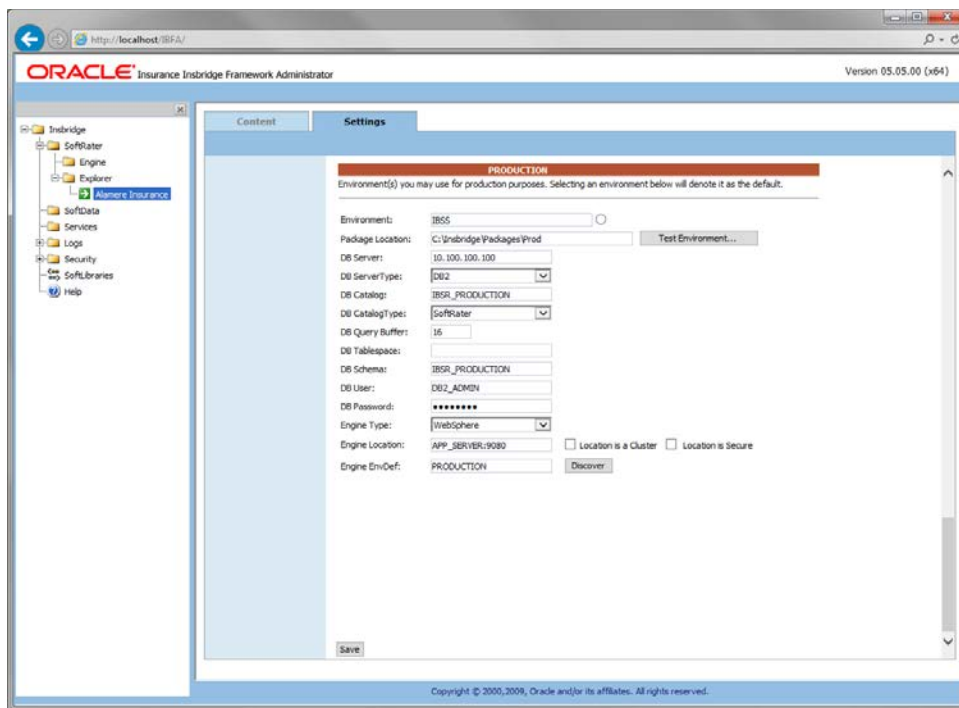


Figure 72 Editing Environment

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. For DB2 servers, this is the DB2 Registered Alias Name. For Oracle servers, this is the server name; either IP or DNS will work. The default port used is 1521. The Database listener port number can be appended to the server name if it is something other than the default port. The format for this is: [SERVER NAME];[PORT NUMBER]
9. Select the **DB Server Type** that you are using.
10. 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 WebSphere server may have “WBServerName:9080” 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 WebSphere environment is not responding, you may need to stop and start the WebSphere service.*

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

Checking a SoftRater Database for Updates

All SoftRater databases can be checked for updates in IBFA.

1. SoftRater->Explorer->Subscriber->Settings->Environments.

2. Select the SoftRater environment with the database where you want to check for updates.
3. Click Test Environment.

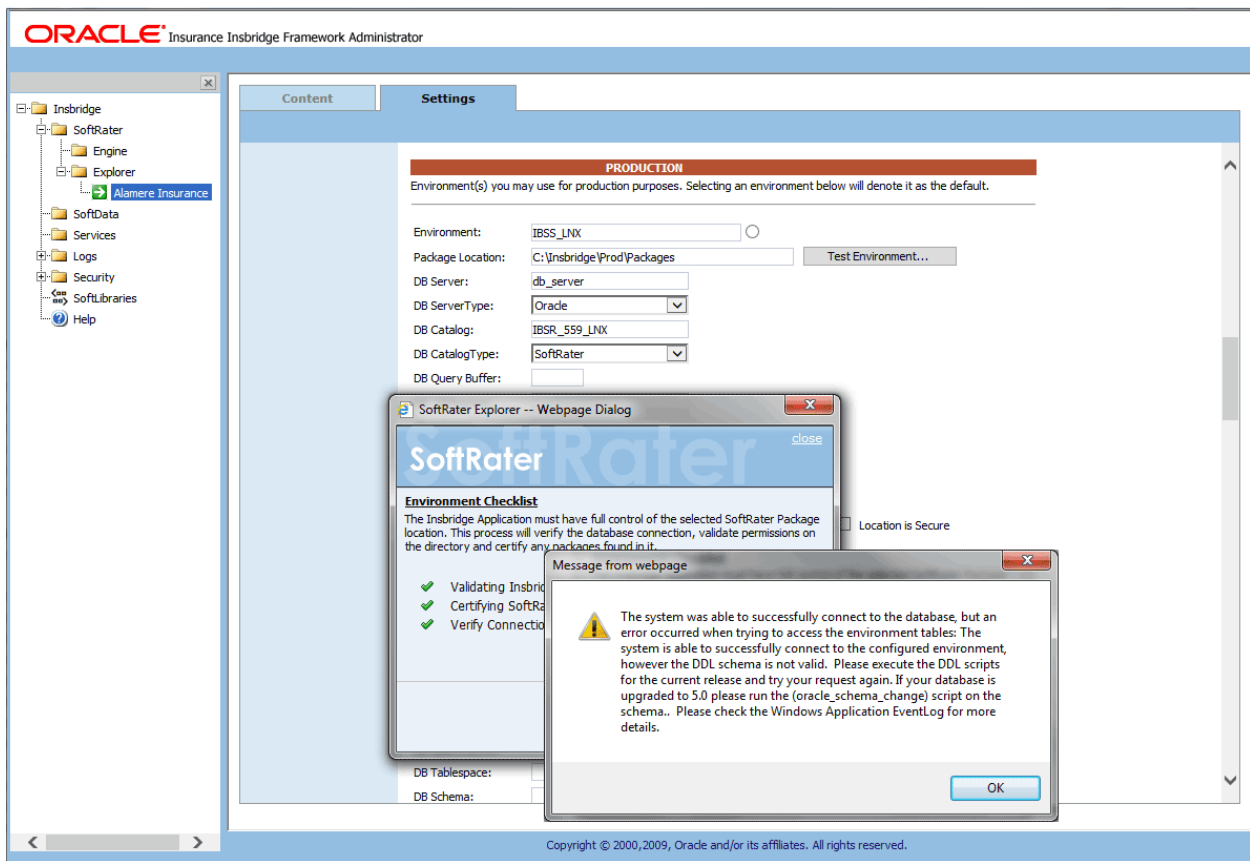


Figure 73 Checking for Database Updates

When the database is being validated, either a green checkmark is presented or an error message. The error message will indicate if an update must be run. For example, when validating a DB2 environment:

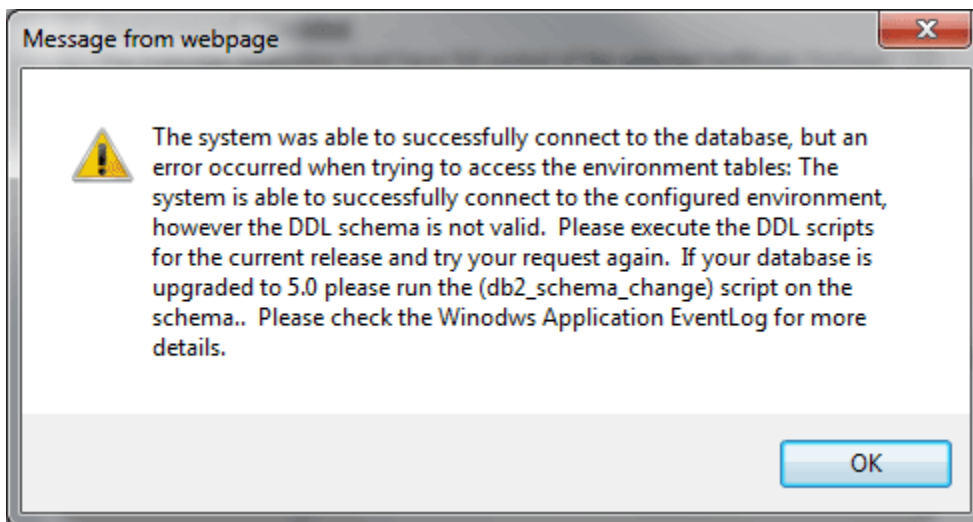


Figure 74 DB2 Database Update Required Message

DDL scripts for updates also can be found on the server where Insbridge was installed in the ...\\Oracle\Insbridge\SoftRater\DDL folder.

For example: C:\Program Files\Oracle\Insbridge\SoftRater\DDL\Oracle\Update

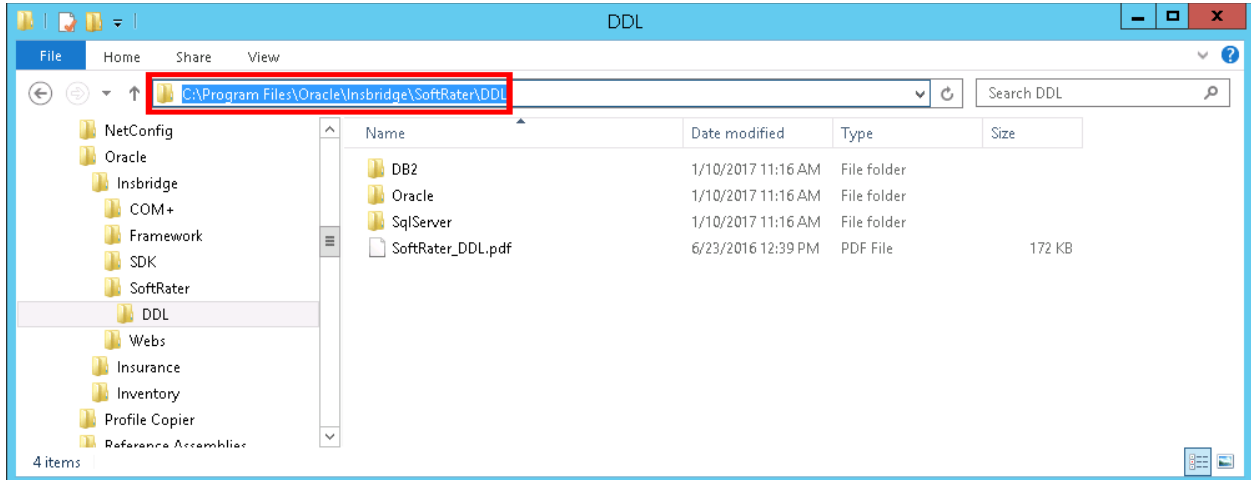


Figure 75 Location of Database Update Scripts

CONTACTING SUPPORT

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

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Address any additional inquiries to:

Oracle Corporation
World Headquarters
500 Oracle Parkway
Redwood Shores, CA 94065
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Worldwide Inquiries:
Phone: +1.650.506.7000
Fax: +1.650.506.7200
oracle.com

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