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Insbridge Enterprise Rating SoftRater for WebLogic Installation Guide

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Oracle Insurance Insbridge Enterprise Rating SoftRater for WebLogic Installation Guide

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PREFACE

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

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

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 WebLogic.

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 Implementation 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** – Upgrades existing customers from their current version of Insbridge up to version 05.04.00.

This guide is for a SoftRater for Java Installation utilizing WebLogic.

Definitions

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

- **IBER** – Insbridge Enterprise Rating System. Referred to as Insbridge. 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.
- **SoftRater Native** – SoftRater Native is a remote instance of SoftRater that can execute rules and rating logic in environments where access via the SoftRater web-services is not desired or possible.
- **RM** – RateManager. RateManager is a component within 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.
Italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`Monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Manual History

New editions incorporate any updates issued since the previous edition.

Edition	Publication Number	Product Release	Publication Date	Comment
1st Edition	P01-762-01	V 3.8.9	April 2008	WebLogic 9.2
2nd Edition	P01-762-02	V 3.9.0	May 2008	WebLogic 9.2
3rd Edition	P01-762-03	V 3.10	September 2008	WebLogic 9.2
4th Edition	P01-762-04	V 3.11	December 2008	WebLogic 9.2
5th Edition	P01-762-05	V 3.12	July 2009	WebLogic 9.2
6th Edition	P01-762-06	V 3.13	December 2009	WebLogic 10.3
7th Edition	P01-762-07	R 4.0	April 2010	WebLogic 10.3
8th Edition	P01-762-08	R 4.0.1	August 2010	WebLogic 10.3
9th Edition	P01-762-09	R 4.1	December 2010	WebLogic 10.3
10th Edition	P01-762-10	R 4.5	May 2011	WebLogic 10.3
11th Edition	P01-762-11	R 4.5.1	September 2011	WebLogic 10.3
12th Edition	P01-762-12	R 4.6	May 2012	WebLogic 10.3
13th Edition	P01-762-13	R 4.6.1	November 2012	WebLogic 10.3
14th Edition	P01-762-14	R 4.7	September 2013	WebLogic 10.3
15th Edition	P01-762-15	R 4.7.1	November 2013	WebLogic 10.3
16th Edition	P01-762-16	R 4.8	August 2014	WebLogic 10.3
17th Edition	P01-762-17	R 4.9	December 2014	WebLogic 10.3 & 12.1
18th Edition	P01-762-18	R 5.0	June 2015	WebLogic 10.3 & 12.1
19th Edition	P01-762-19	R 5.0.1	August 2015	WebLogic 11g & 12c
20th Edition	P01-762-20	R 5.1	December 2015	WebLogic11g & 12c
21st Edition	P01-762-21	R 5.1.1	March 2016	WebLogic11g & 12c
22nd Edition	P01-762-22	R 5.2	July 2016	WebLogic11g & 12c
23rd Edition	P01-762-23	R 5.3	October 2016	WebLogic11g & 12c
24th Edition	P01-762-24	R 5.4	January 2017	WebLogic 11g & 12c

Chapter 1

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 WebLogic installation**
- **Access to the server where WebLogic 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 WebLogic.

Java Version

There are three .EAR files for WebLogic; one for 11g and two for 12c. The 11g .EAR file utilizes Java 1.6. The WebLogic 12c release 12.1.3.0 utilizes Java1.7 and the WebLogic 12c release 12.2.1.0 utilizes Java 1.8. You must use the .EAR file for the release of WebLogic you have. Failure for the .EAR file to deploy may be a result of the wrong .EAR file.

NOTE: *WebLogic 11c deployments utilizing Java version 1.6.0_29 may experience an "indefinite wait for a connection" issue when connecting with MS SQL Server databases using DNS type connection in IBSS. Users can update the Java version or create a JNDI connection to resolve this issue.*

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

- **Oracle BI Publisher**
    - OBI_PUBLISHER.exe

- **Oracle Client**
    - ODAC121012_x64.zip

- **Oracle Insurance Insbridge Enterprise Rating (x64).exe**

The 05.04.00-Insbridge-jboss folder contents:

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

The 05.04.00-Insbridge-was folder contents:

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

The 05.04.00-Insbridge-wbl folder contents:

- IBSS.EAR for 11g
- IBSS.EAR for 12c (12.1)
- IBSS.EAR for 12c (12.2)
- 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.

Chapter 2

SETTING UP WEBLOGIC

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.softraterconfig.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.

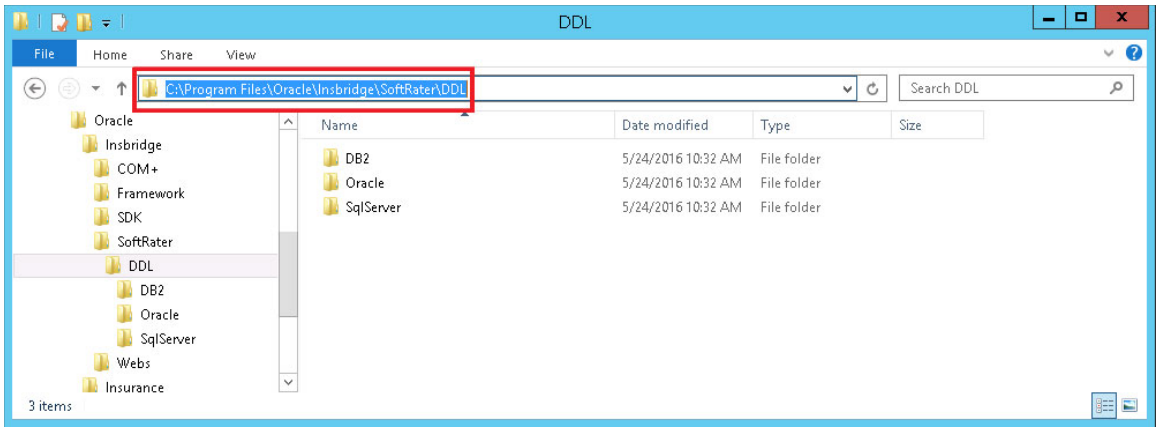
It is recommended that db_owner permissions be given to the Insbridge user. This will allow scripts to be run automatically when a new package is loaded for a new line of business. If this is not possible, DT scripts for each new line will have to be run manually before the package can be loaded.

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

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 and 2012

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 WEBLOGIC INSTALLATION

Installing SoftRater for WebLogic requires that you:

NOTE: *There is a new requirement for WebLogic 11g and 12c (12.1). A new library file, jersey-bundle-1.9.war (jax-rs(1.1, 1.9)) is required for Release 5.4*

Make sure you have deployed the new library prior to the .EAR file.

1. Set up WebLogic and deploy the SoftRater for WebLogic .EAR file and config file.
2. Implement the database and enter the configuration information in IBSS and IBFA. There are three database options:
    a. MS SQL Server
    b. Oracle
    c. IBM DB2

SoftRater for WebLogic can utilize any of the three databases. 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 WebLogic

Step 1: Creating a New Server Domain – Optional
Update to WebLogic 11g and 12c (12.1)
Step 2: Placing the Configuration Files
Step 3: Adding System Properties to WL Server
Step 4: Starting the WebLogic Server
Step 5: Installation of the .EAR File
Step 6: Test Connection

Implementing a SQL Server Database

Step 1: Restoring Insbridge Databases in SQL Server
Step 2: Setting up a WebLogic 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 WebLogic 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: Setting up a WebLogic Environment in IBSS
Step 3: Installation of DB2 Client
Step 4: Entering your IBSS Instance in IBFA

Chapter 3

SOFTRATER FOR WEBLOGIC INSTALLATION

WebLogic should be up and running prior to deploying the .EAR file. Listed are the steps that should be performed in WebLogic prior to implementing the database.

- **Step 1:** This is an optional step; however if needed, you can create a domain for Insbridge.
- **Update to WebLogic 11g and 12c (12.1)**
- **Step 2:** The Configuration Files must be placed in a static location. **This is a required step.**
- **Step 3:** Two System Properties must be added to the WebLogic Server. **This is a required step.**
- **Step 4:** Starting the WebLogic Server. **This is a required step.**
- **Step 5:** Installation of the .EAR File. **This is a required step.**

STEP 1: CREATING A NEW SERVER DOMAIN

In Windows

To create a new server domain:

Start Menu→Oracle→Configuration Wizard

In Linux

To create a new server domain:

Log in as any non-root installer and launch the Domain Creation Wizard for WebLogic. For example:

```
/scratch/Oracle/Middleware/Oracle_Home/wlserver/common/bin/qs_config.sh
```

Follow the wizard according to your company standards. In most cases, for the Insbridge application, a default basic configuration could be used.

NOTE: *This is a suggested domain setup. Your setup may vary.*

It is not required that you set up a separate domain. If you do create a separate Insbridge domain, please verify that there are no port issues. The Insbridge .EAR file can be installed on an already exiting domain.

CONFIGURATION WIZARD

The configuration of a domain begins with a Create Domain screen.

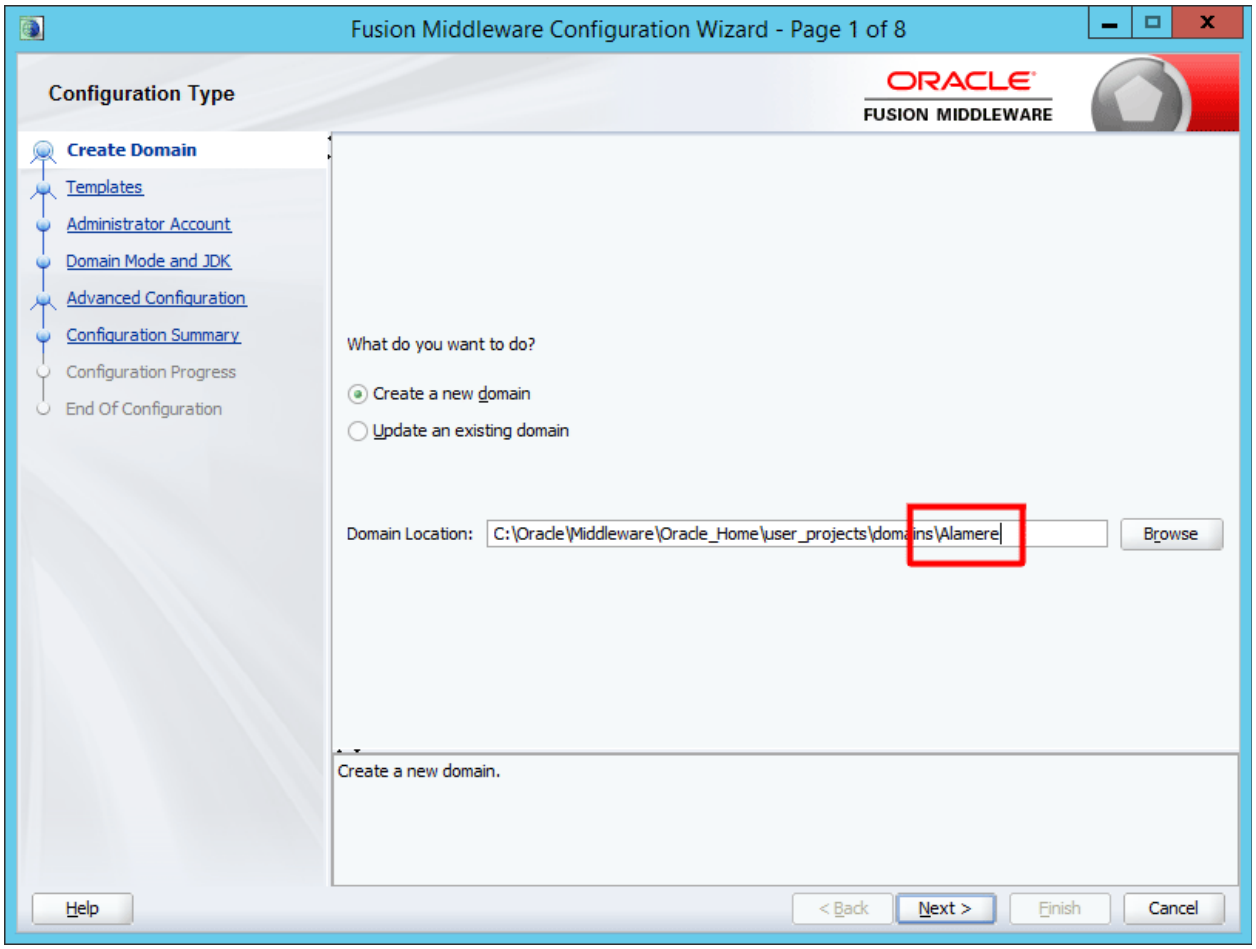


Figure 1 Creating New WebLogic Domain

1. Select **Create a New domain**.

2. If you want to update the domain name, edit the domain name at the end of the Domain Location. The domain name can be anything that meets your company standards. If the name is already in use, you will receive an error message to correct. You also have to option to select another domain location. It is recommended to leave the default location.

3. Click **Next** to advance to the next screen.

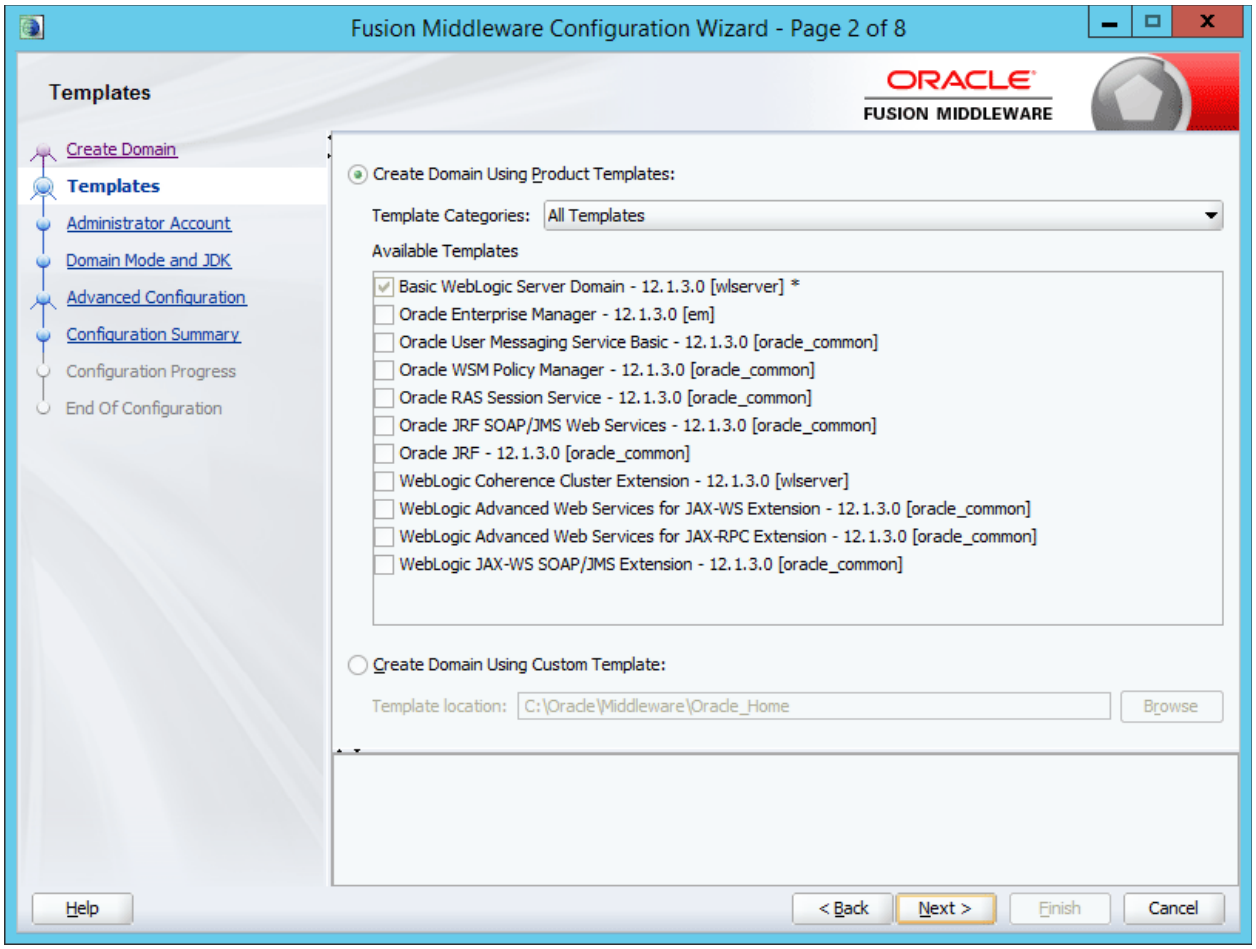


Figure 2 Selecting Domain Templates

4. For a basic installation, select **Create Domain Using Product Templates:** Basic **WebLogic Server** Domain s the only option that is needed.

5. Click **Next** to continue.

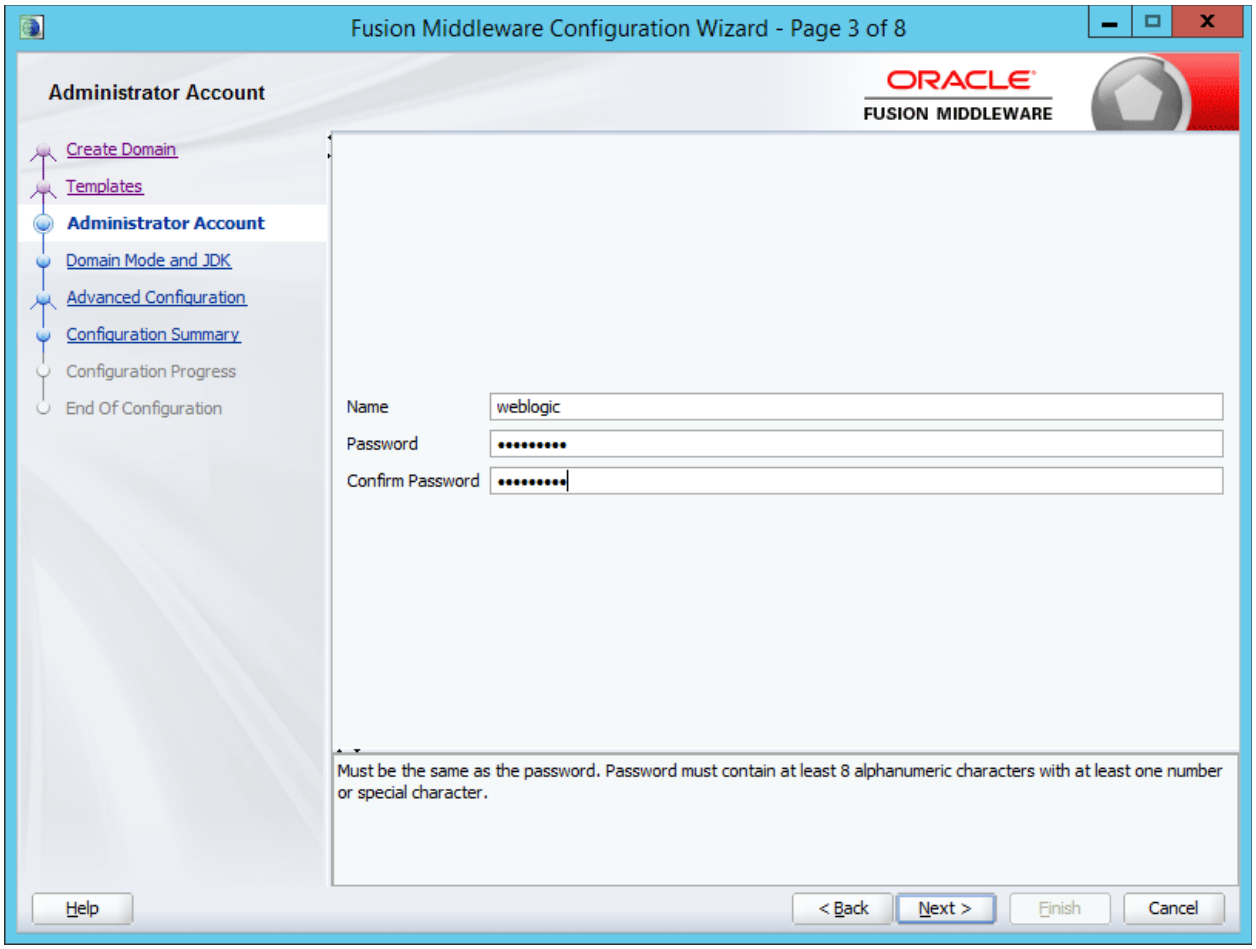


Figure 3 Creating User Name and Password

6. Next, configure the Administrator User name and password.

Certain WebLogic configurations, such as enterprise, may allow for an application setup at this point. That is not required for IBSS.

7. Click **Next** to continue.

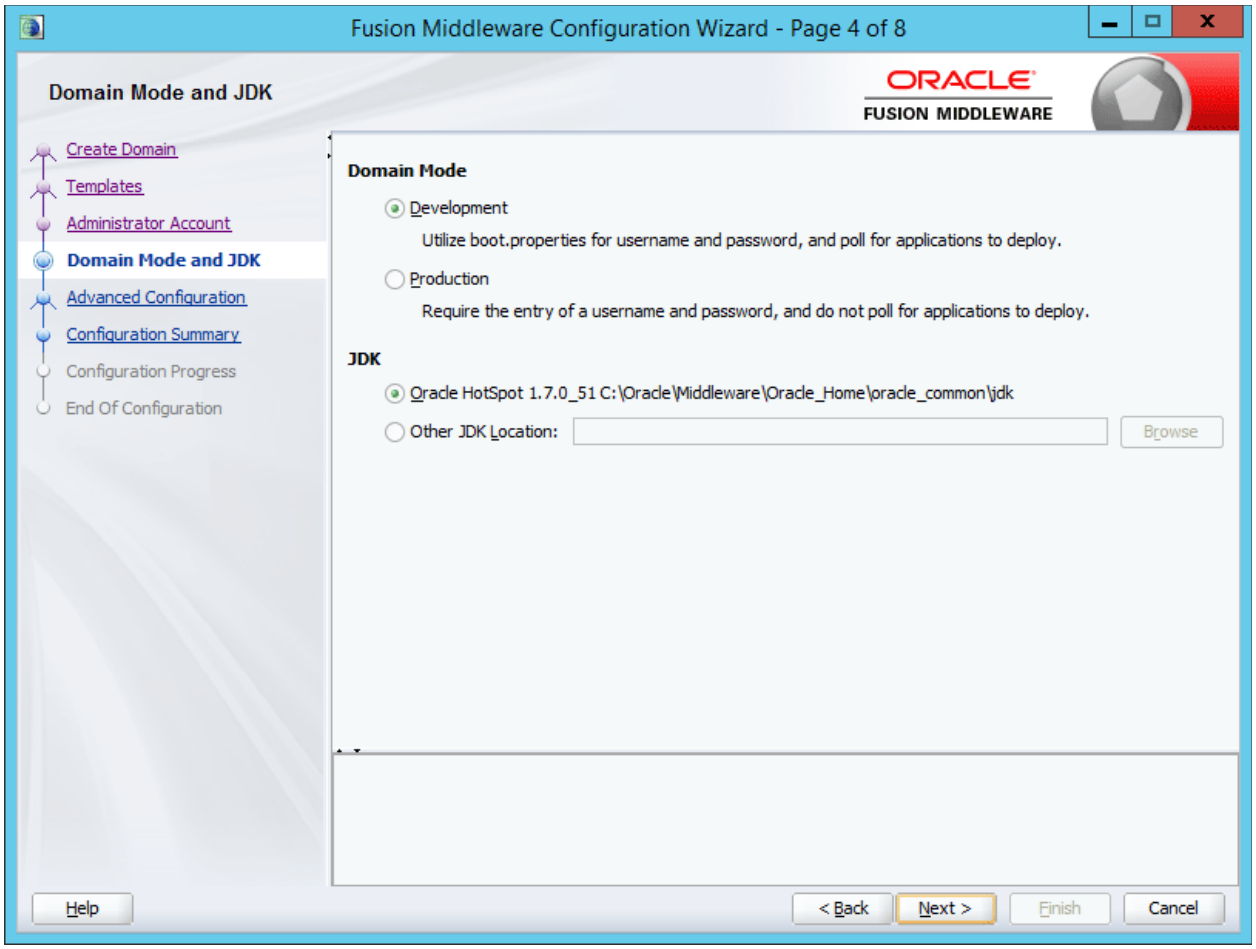


Figure 4 Configuring Server Start Mode and JDK

8. Select **Development Mode** for the Startup Mode and the JDK to be used. You can leave the defaults.

9. Click **Next** to continue.

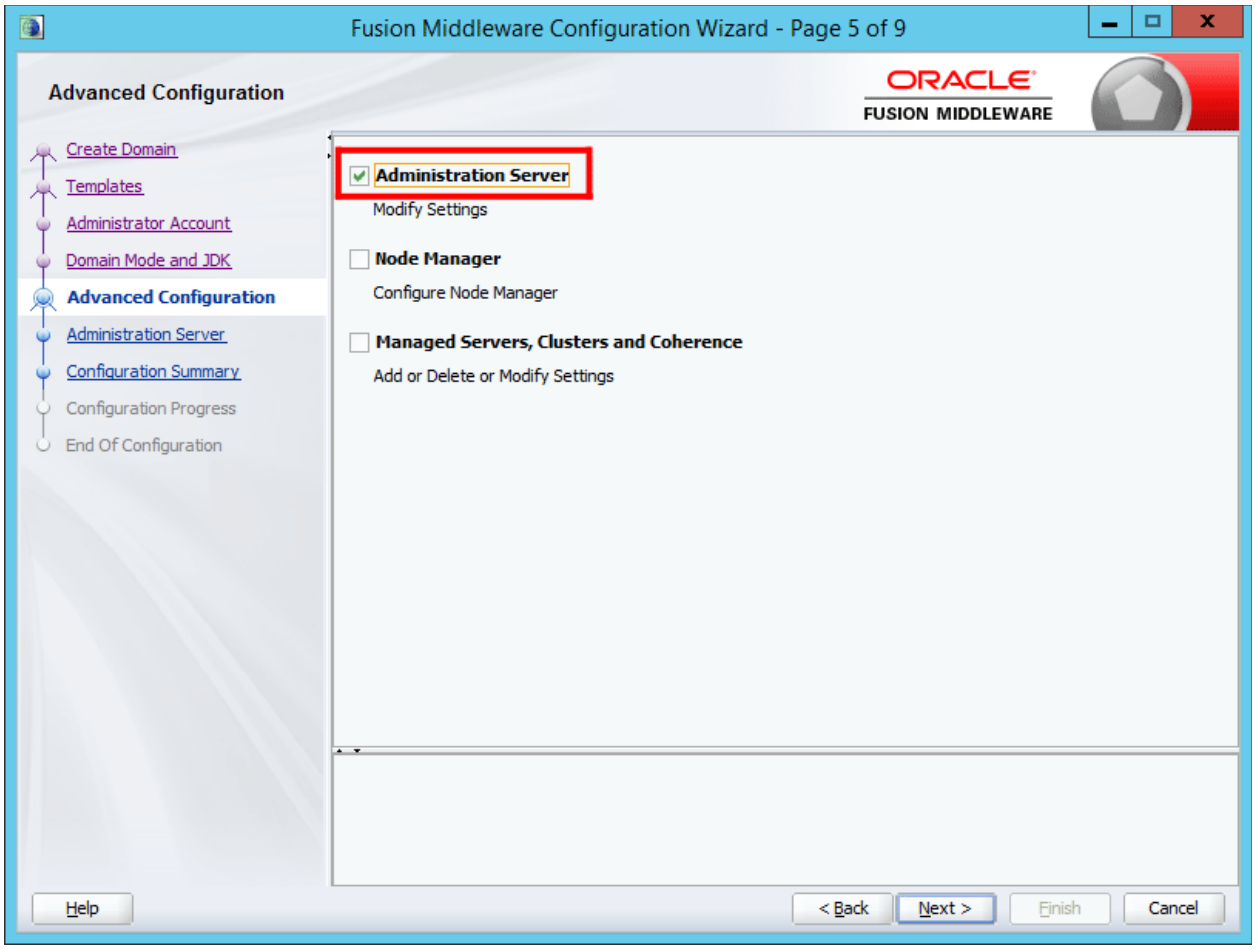


Figure 5 Customizing Environment and Service Settings

10. Modifications are not required for basic installation but you can modify your domain as needed. For example, if you want to create a dedicated port, select Administration Server.

11. Click **Next**.

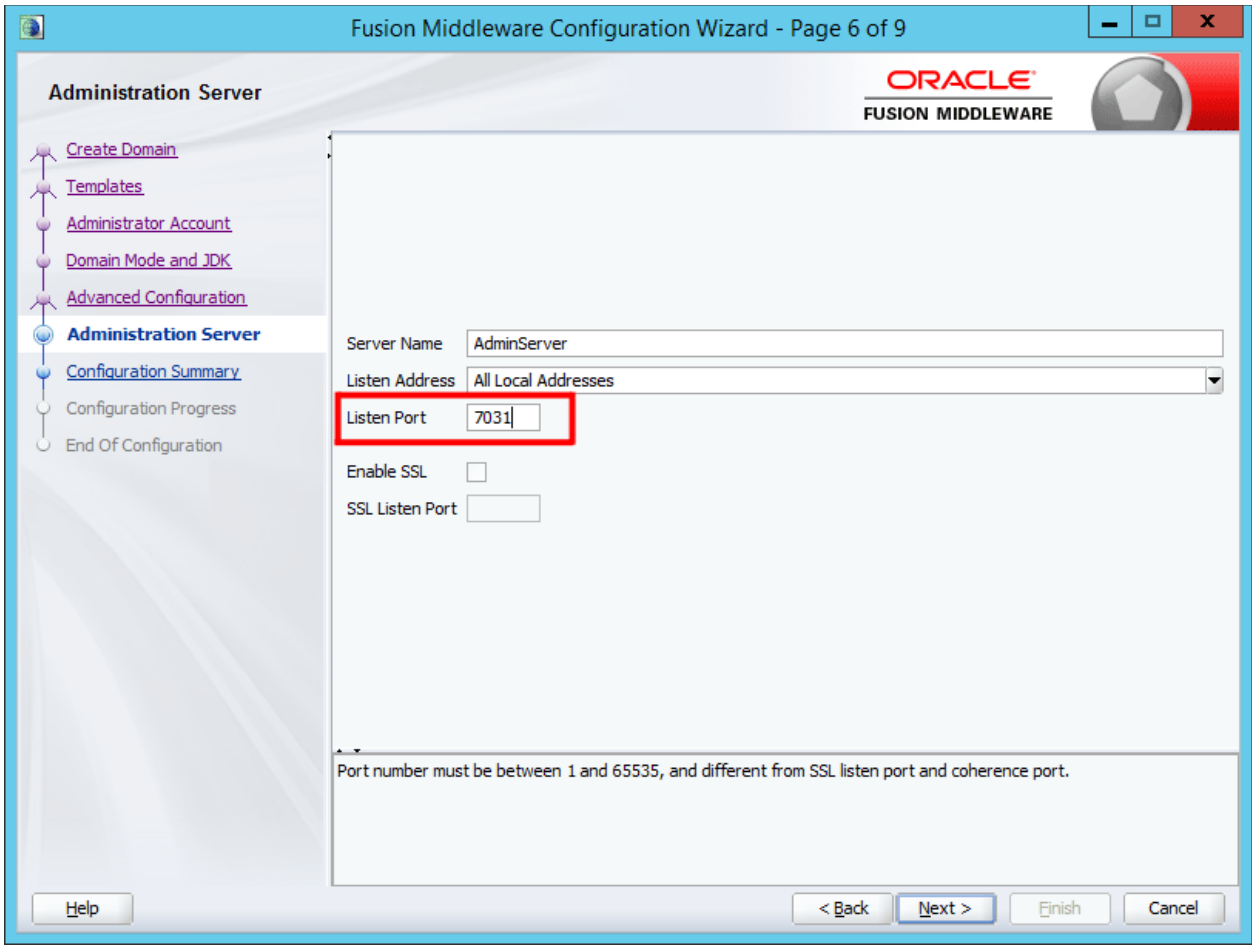


Figure 6 Editing the Administrator Server Settings

12. Set the port that you want to use and make any other changes that you want. Make note of the port number you choose. The port number is required for further installation instructions. If you did not opt to modify the domain, this screen is not presented.

13. Click **Next**.

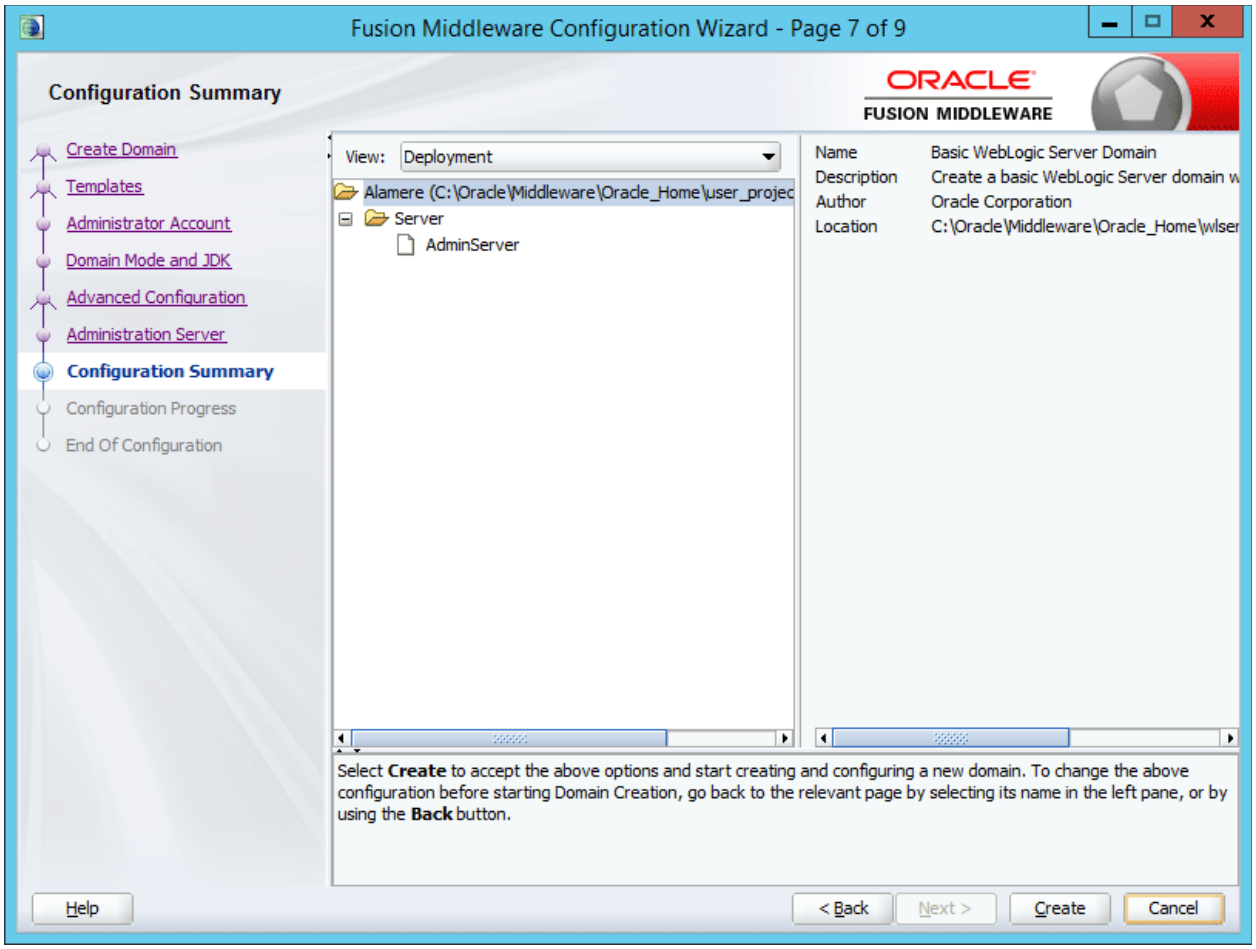


Figure 7 Creating WebLogic Domain

14. A configuration summary is presented. No other changes are necessary. Click **Create**.

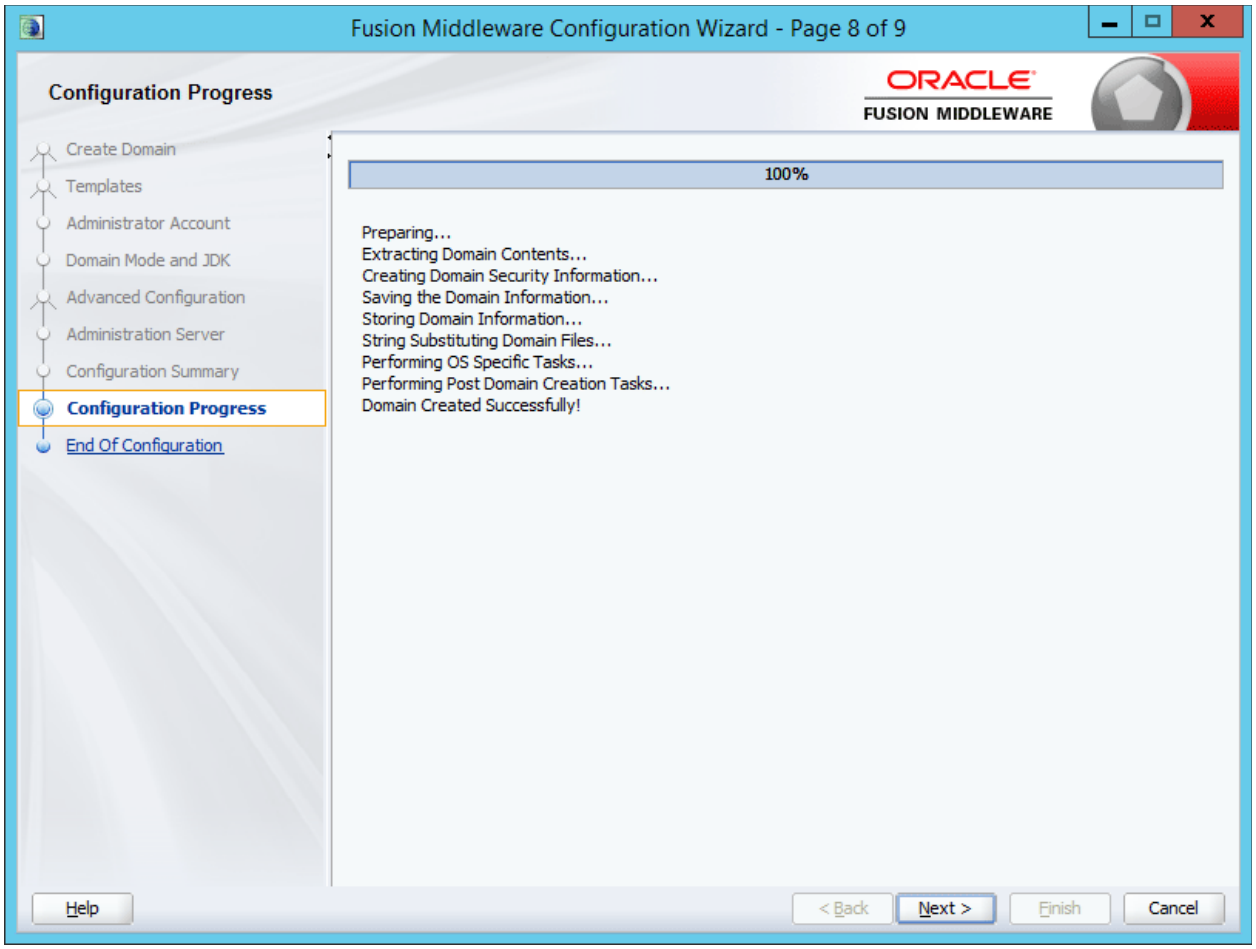


Figure 8 Start Menu

15. WebLogic begins the creation of the Domain. The progress bar displays 100% when complete.
16. When the progress is at 100%, click Next.

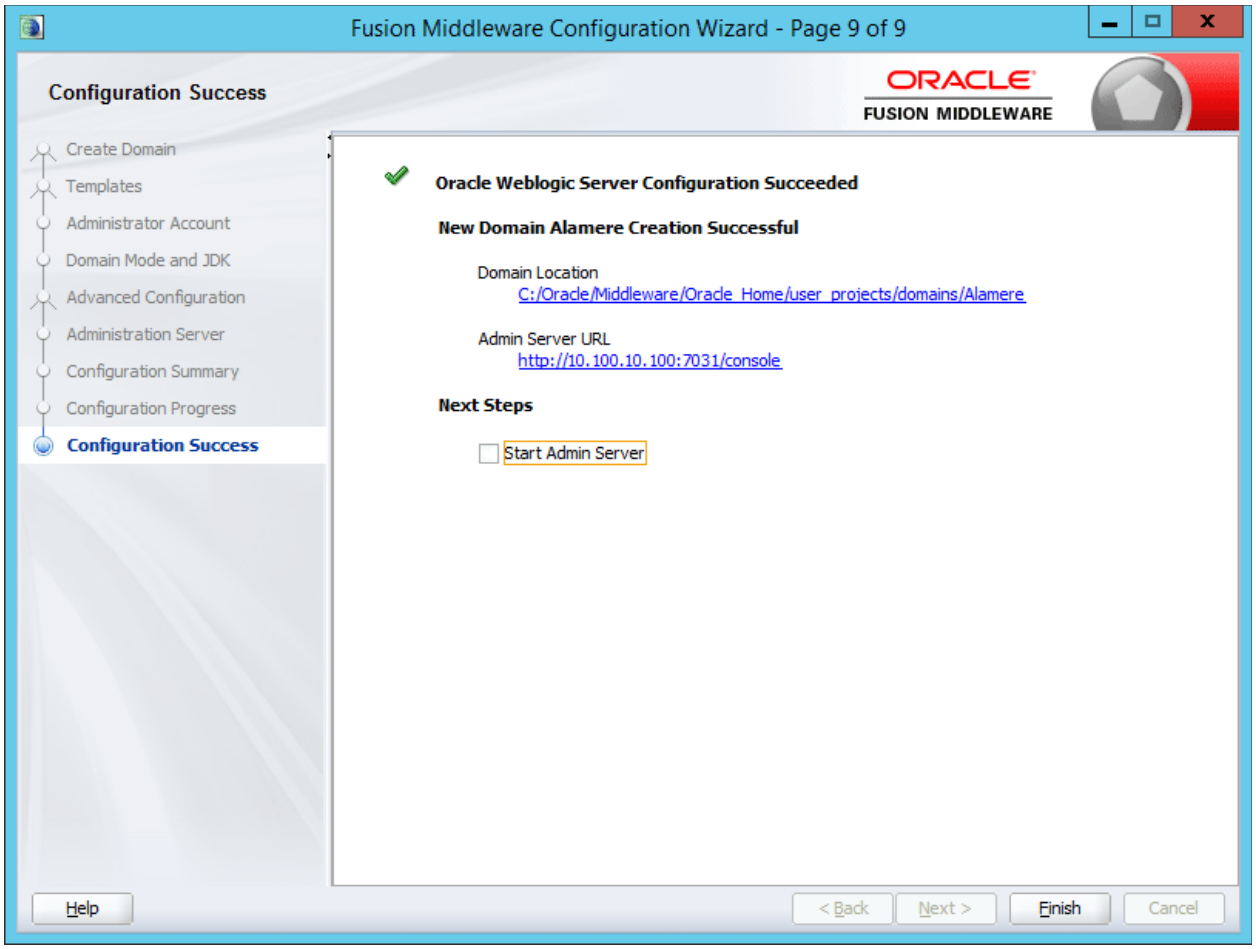


Figure 9 Completed Domain Creation

17. Click Finish to close the Wizard. The domain is ready to use. Do not start the domain until you have made the required start up modifications.

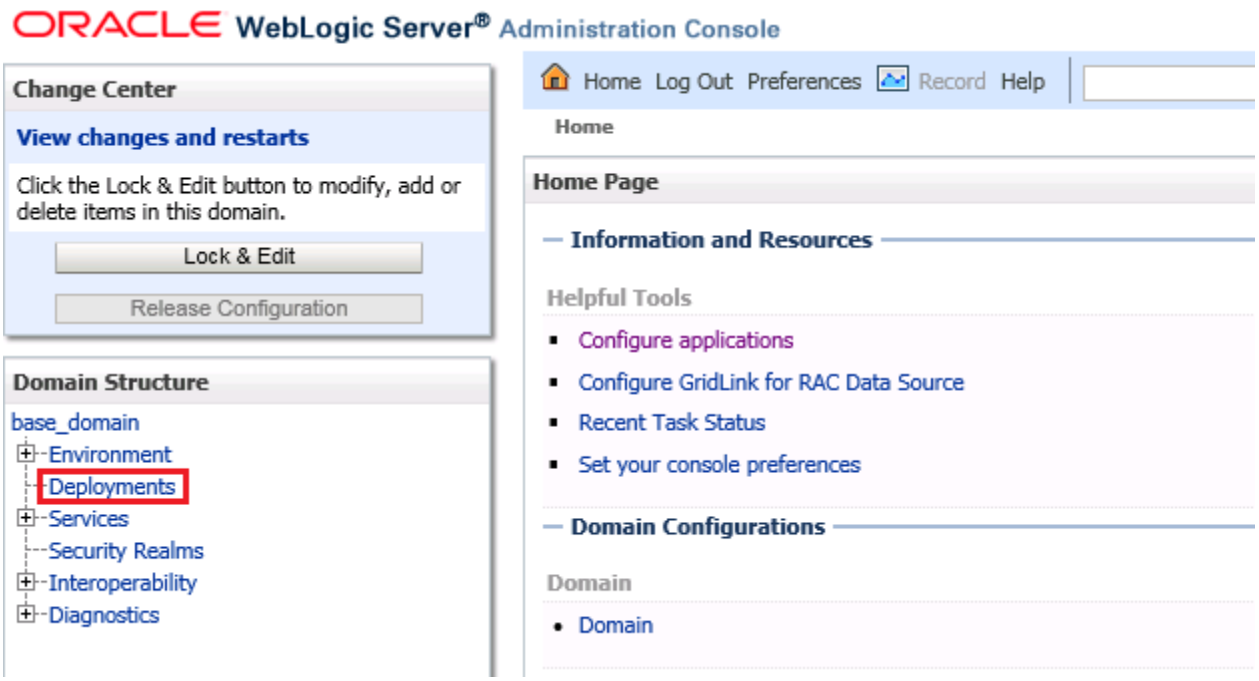
New Requirement for WebLogic 11g and 12c (Release 12.1.3.0)

Prior to doing any upgrade, a new library file is required for WebLogic 11g (Release 10.3.6.0) and WebLogic 12c (Release 12.1.3.0).

WebLogic 12c (Release 12.2.1.0) does not require this library.

IBSS release 5.4 has a JERSEY REST web services feature, which the Insbridge supported WebLogic servers 11g (10.3.6) and WebLogic 12c (12.1) do not have automatically deployed. Prior to deploying the IBSS .EAR file, the JERSYE REST library must be deployed and the server restarted.

Step 1: Go to “Deployments” screen.



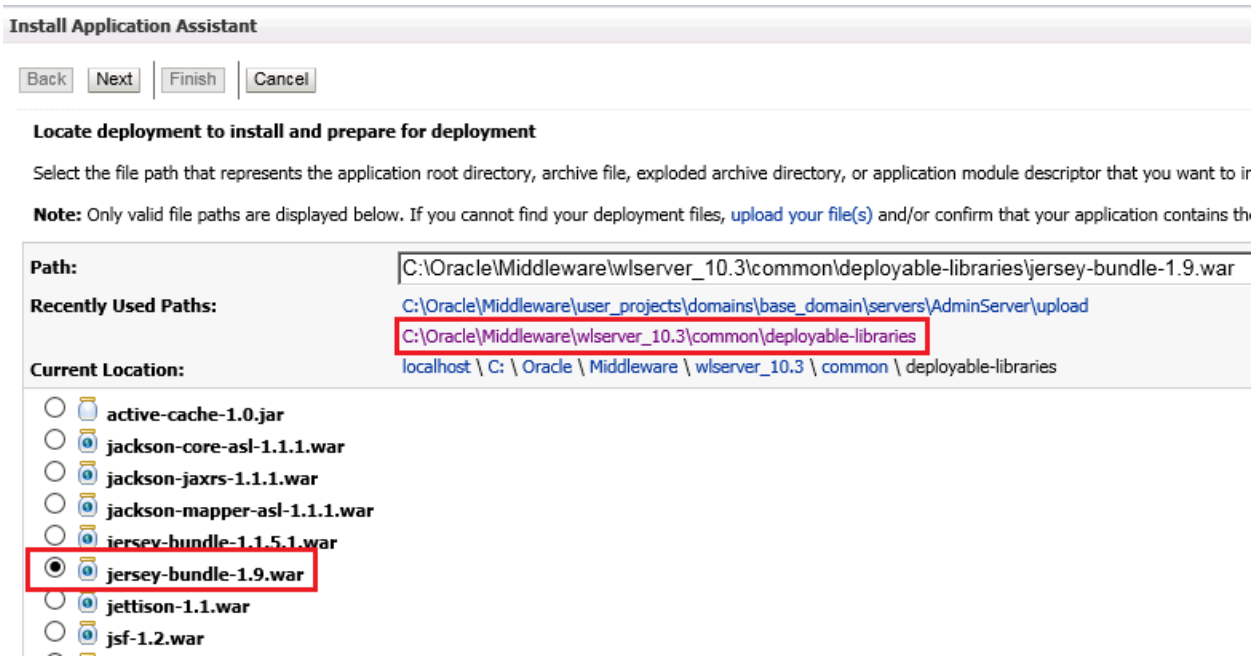
Step 2: Click on “Install” to install new deployable application.

Step 3: Navigate to the deployable-libraries directory of WEBLOGIC.

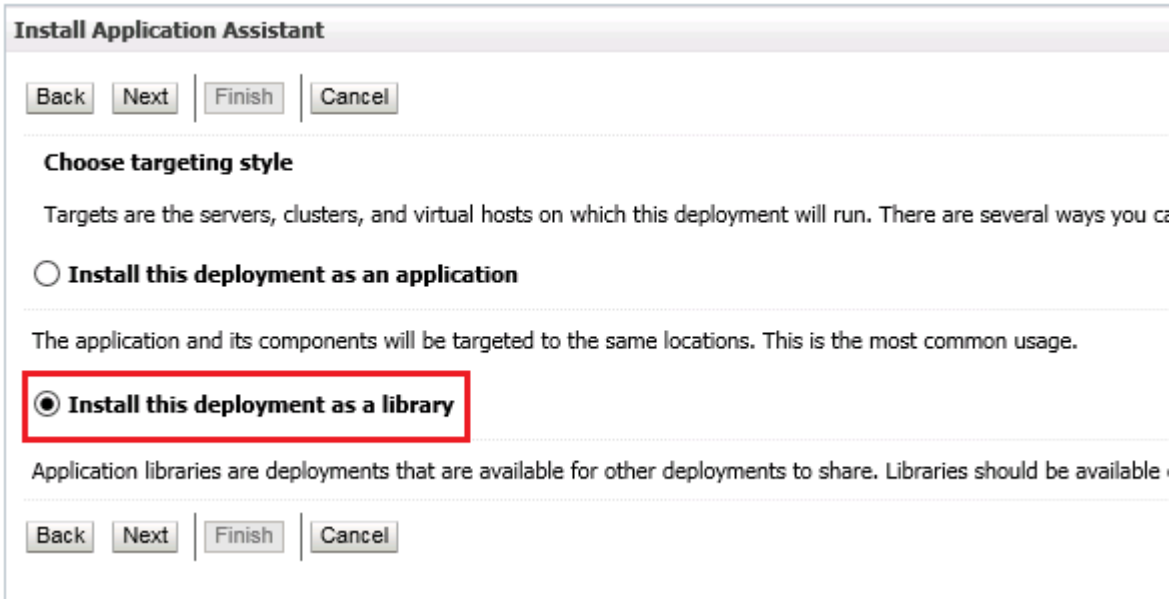
For example, on WebLogic 12c (12.1): C:\Oracle\Middleware\Oracle_Home\wlserver\common\deployable-libraries.

For example, on WebLogic 11g: C:\Oracle\Middleware\wlserver_10.3\common\deployable-libraries.

Step 4: choose “jersey-bundle-1.9.war” and click “Next”.



Step 5: Choose “Install this deployment as library” and click “Next”.



Step 6: On the next screens, leave the defaults and click “Finish” on the last page.

Step 7: Restart the WebLogic server. Re-enter WebLogic and deploy the IBSS.EAR file. Make sure the library is listed prior to deploying the .EAR file.

This action is not needed for WebLogic 12c (Release 12.2.1.0).

Error Messages

If the library is not deployed prior to the .EAR file, errors are presented.

An error occurred during activation of changes, please see the log for details.
Failed to load webapp: '/IBSS'
Error: Unresolved Webapp Library references for "ServletContext@1421931[app:IBSS module:/IBSS path:/IBSS spec-version:2.5]", defined in weblogic.xml [Extension-Name: jax-rs, Specification-Version: 1.1, Implementation-Version: 1.9, exact-match: false]
The deployment has been successfully installed.

If you try to start, another error message is presented.

weblogic.management.DeploymentException: Error: Unresolved Webapp Library references for "ServletContext@23346789[app:IBSS module:/IBSS path:/IBSS spec-version:2.5]", defined in weblogic.xml [Extension-Name: jax-rs, Specification-Version: 1.1, Implementation-Version: 1.9, exact-match: false]
Errors were encountered while performing this operation.

STEP 2: PLACING THE CONFIGURATION FILES

This is a required step.

In this step, two folders must be created and the application file and configuration file must be placed in one of the folders. The configuration file must be in place prior to the SoftRater installation.

Creating Necessary Folders

We suggest creating an Insbridge config folder but you may use any folder name you want and you can place the folder any where you want. This folder holds the necessary files for the SoftRater for WebLogic installation. Take note of the location and make sure you have created this folder prior to running the installation. This location serves as the application directory.

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

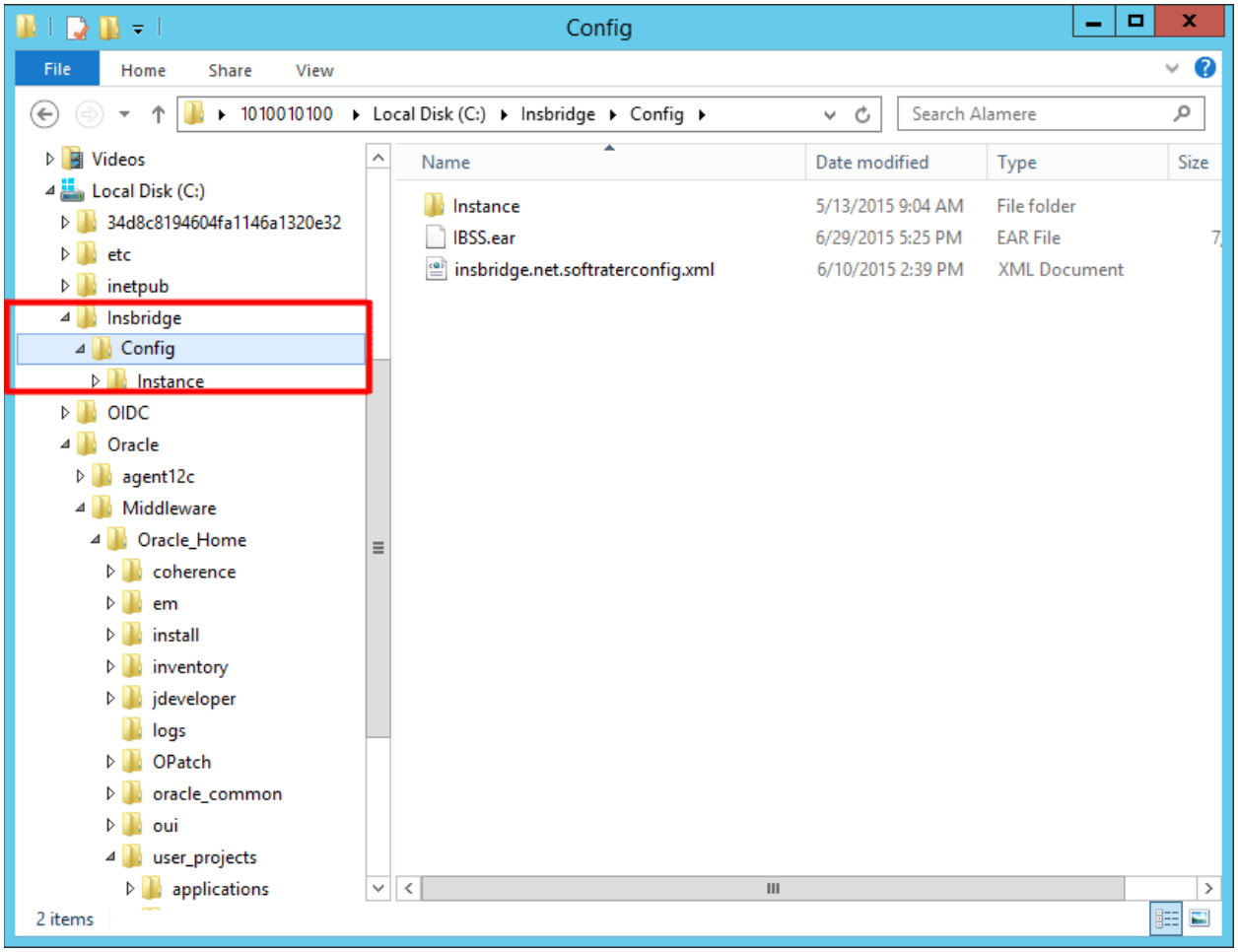


Figure 10 Location of Config and Instance Folders

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

An instance folder also must be in place. 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 deploying the .EAR file. 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 WebLogic zip file should be downloaded to the WebLogic server prior to configuration. Unzip the file. There will be an XML file and an .EAR file inside.

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

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

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

NOTE: *It is important that the configuration path specified in the section Step 3: Adding a System Property to WL Server of this document contain both the application and configuration files. These files need to be placed where you specify in the startWebLogic.cmd file.*

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

STEP 3: ADDING A SYSTEM PROPERTY TO WL SERVER

This is a required step. The system properties must be configured prior to SoftRater being installed.

The Insbridge application requires a shared variable on the WebLogic Server that points to the location of the configuration files and to the location of the instance files.

In WebLogic, it is not possible to define variables as part of the Server JNDI. For this reason, you must create a Java System property in the server initialization that can be used by the application to retrieve the path that accesses the system configuration files.

NOTE: *If the server domain was running during these modifications, you will need to restart the server before proceeding.*

Adding to the WebLogic Server – Windows

1. In a Windows Explorer window, enter the server domain location, i.e. %Domain=Home%.

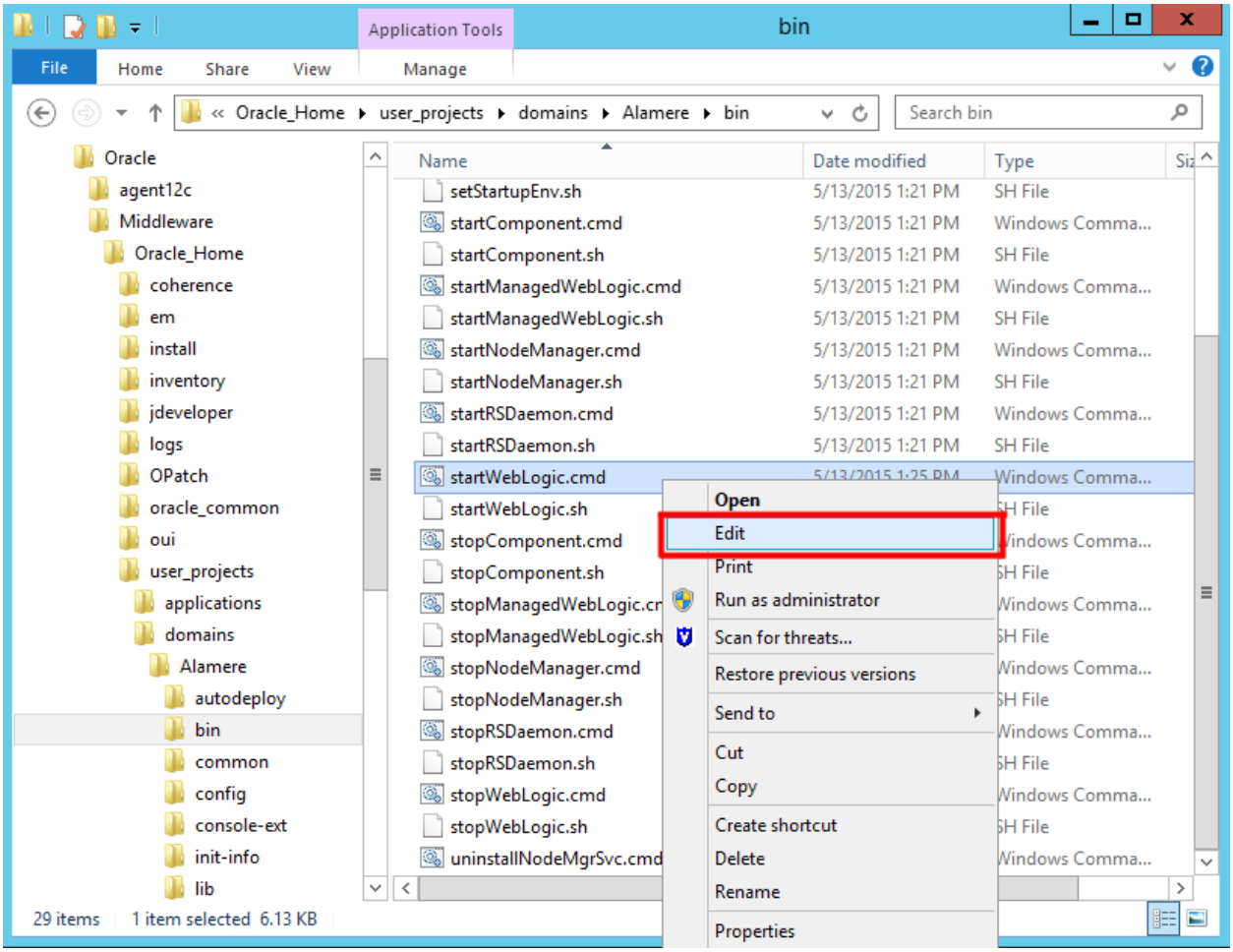


Figure 11 startWebLogic.cmd File

2. In the "**bin**" folder locate the "**startWebLogic.cmd**" file. Make a backup of the "**startWebLogic.cmd**" file.

3. Open the "**startWebLogic.cmd**"file and right click to **Edit**. Scroll to the JAVA_OPTIONS portion of the file.

Figure 12 – Editing startWebLogic.cmd File

4. Locate the **DOS if instruction** that looks similar to the one in Figure 10. Your exact file may have slight variations.

5. In both conditions of this instruction you will need to insert the following system property declarations:

   - `-DINSBRIDGE_APP_DIR="C:\Insbridge\Config". If you copy, please verify valid characters have been entered.`

     In this declaration, add a system property for the application directory location to the Java Virtual Machine using the "**-D**" parameter, then specify "**INSBRIDGE_APP_DIR**" as the name of the new variable.

     You must also specify the path where the configuration file will be located. i.e. "**C:\Insbridge\Config**". Where **C:\Insbridge\config** is the folder you created earlier.

   - `-DINSBRIDGE_INSTANCE_APP_DIR="C:\Insbridge\Config\Instance ". If you copy, please verify valid characters have been entered.`

     In this declaration, add a system property for the instance application directory to the Java Virtual Machine using the "**-D**" parameter, then specify "**INSBRIDGE_INSTANCE_APP_DIR**" as the name of the new variable.

     You must also specify the path where the configuration file will be located. i.e. "**C:\Insbridge\Config\Instance**". Where **C:\Insbridge\config\Instance** is the folder you created earlier.

NOTE: *If WebLogic does not enter running mode, please check the start dialogue. If your system property is not recognized, please verify that valid characters have been entered.*

6. **Save** your changes. The variable will be added to the Server the next time it is started.

Adding to the WebLogic Server – Linux

The procedure is similar in Linux. Locate the "**startWebLogic.sh**" file. In many instances, the file will be located in: `../Oracle/Middleware/user_projects/domains/insbridge/bin`. Open the file and right click to **Edit**. Scroll to the JAVA_OPTIONS portion of the file and make the necessary changes, for example:

```
-DINSBRIDGE_APP_DIR="/home/INSTALLDIR/Insbridge/Config"

-DINSBRIDGE_INSTANCE_APP_DIR="/home/INSTALLDIR/Insbridge/Config/
Instance"
```

For ManagedServer of Cluster

If deploying to a cluster, the same path details should be added to the ManagedServer that are a part of the cluster.

1. Go to <MIDDLEWARE_HOME>\user_projects\domains*domain name*\bin

   Where domain name = your domain

   For example: C:\Oracle\Middleware\Oracle_Home\user_projects\domains\Alamere\bin

2. Locate the "**startManagedWebLogic.cmd**" file. Add the following piece of code as below:

3. In the **startManagedWebLogic.cmd** file, locate the following piece of code towards the end:

   "%JAVA_HOME%\bin\java" %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%

4. Add the path details of INSBRIDGE_APP_DIR, INSBRIDGE_INSTANCE_APP_DIR to this code as:

   -DINSBRIDGE_APP_DIR="`C:\Insbridge\Config`"
   -DINSBRIDGE_INSTANCE_APP_DIR=" `C:\Insbridge\Config\Instance` \logs\%SERVER_NAME%"

   Where **C:\Insbridge\config** is the folder you created earlier.

   Each value must be inside double quotes (") and allow a single space between the –D parameter you are adding the previous value.

5. **Save** your changes

Same as editing the Weblogic.cmd file, these changes should be made **before starting the Managed Server using the startManagedWebLogic.cmd file.**

Making changes to a server that is already running does not allow for the changes to be dynamically loaded and the values would not work. If you update a server that is running, a server restart is compulsory.

To test if the latest config file has been picked up, click on the "**Global Config File**" in the IBSS home page.

STEP 4: STARTING THE WEBLOGIC SERVER

In Windows

To start the WebLogic server:

Start Menu→Oracle→Middleware→Oracle_Home→user_projects→domains→<Your Server Domain>→bin→startWebLogic.cmd.

In Linux

To start the WebLogic server, open up a Terminal and navigate to the WebLogic installation directory, for example:

```
cd /scratch/Oracle/Middleware/Oracle_Home/user_projects/domains/xxxx/bin/
nohup ./startWeblogic.sh &
```

Where xxxx equals the domain name

NOTE: *Please do not close the command prompt window that starts the service. Closing the command prompt window will stop the webserver instance.*

Accessing the WebLogic Main Console

The WebLogic Main Console can be accessed once the WebLogic server domain is running by typing http://<ServerName or IP Address>:<Port>/console on your browser. i.e. http://localhost:7001/console

You will need the administrator username and password for the server domain where you want to install SoftRater.

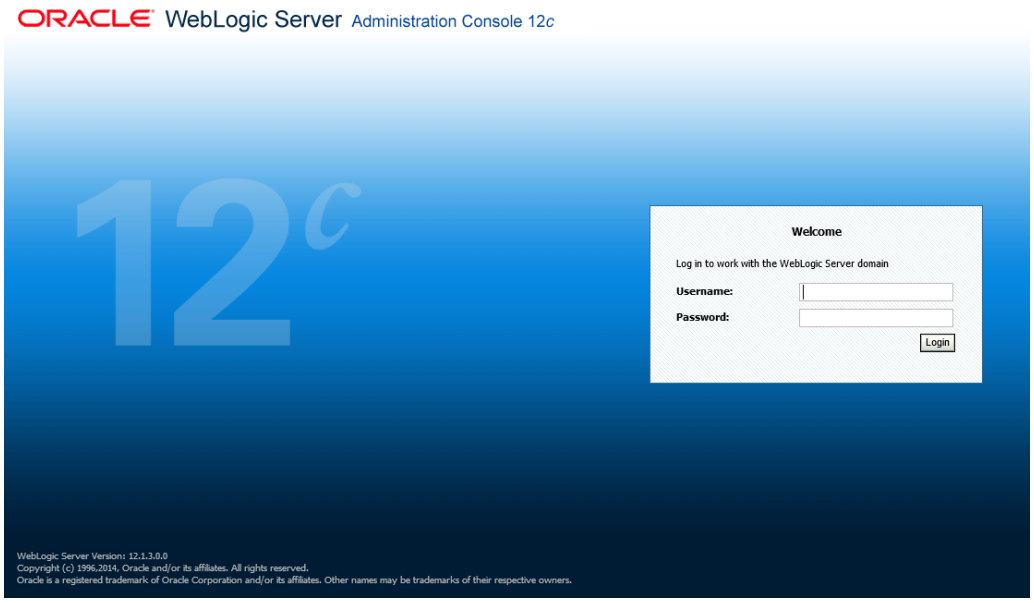


Figure 13 Logging into WebLogic Server

Optional – EJB Transaction Time Out Settings

For long running batch processes in java, timeout settings should be updated to avoid timeout errors. For example, IBSS throws transaction time out errors in these 2 following scenarios.

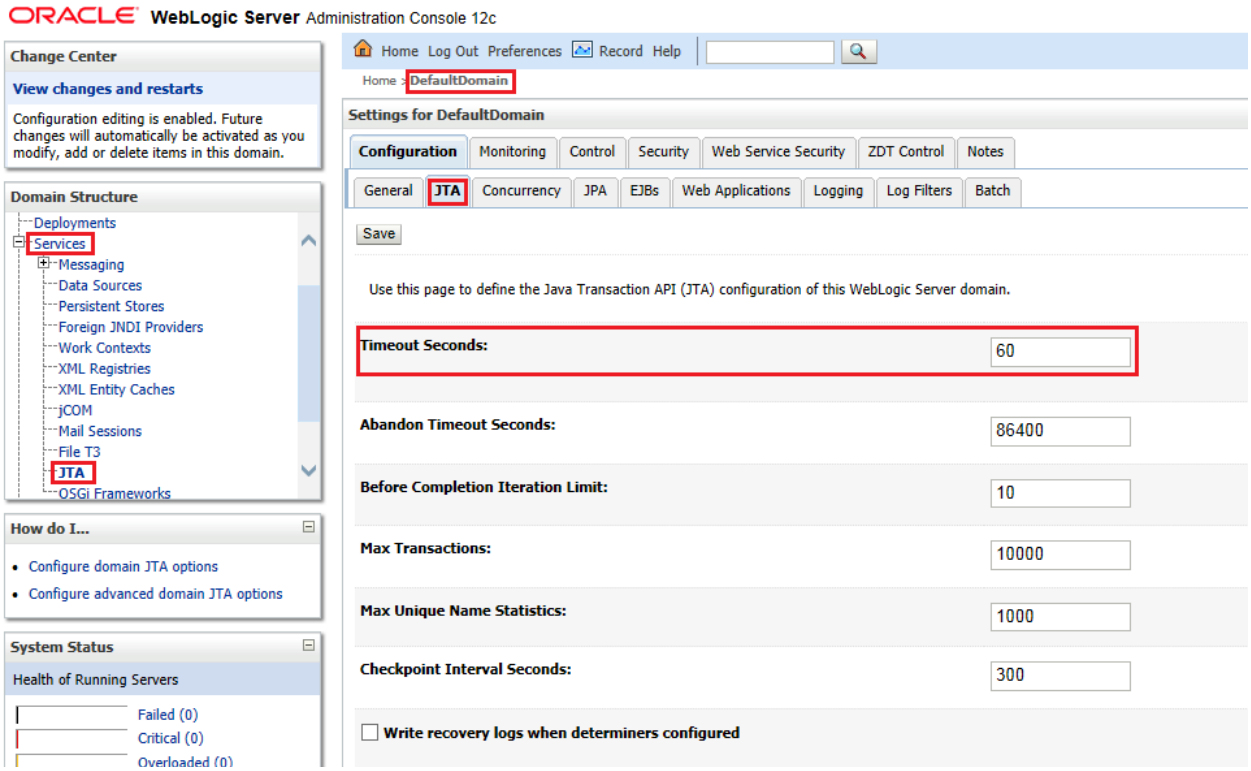
Scenario 1: When SoftRater engine transaction takes more than configured time

This may occur in sync calls (UI >> WS >> EJB engine) or when a non-type 1 request which needs wm threads, comes. (WM thread >> EJB engine)

Scenario 2: When EJB timer task transaction takes more than configured time

This may occur when async type 1 request comes from EJB timer. (EJB Timer >> WS >> EJB engine) Here as it rolls back the transaction and EJB timer re runs the task again. On each re run, if it takes more than configured then it may re run the same task in a loop.

This setting can be adjusted on the WebLogic Server (12c) Admin console.

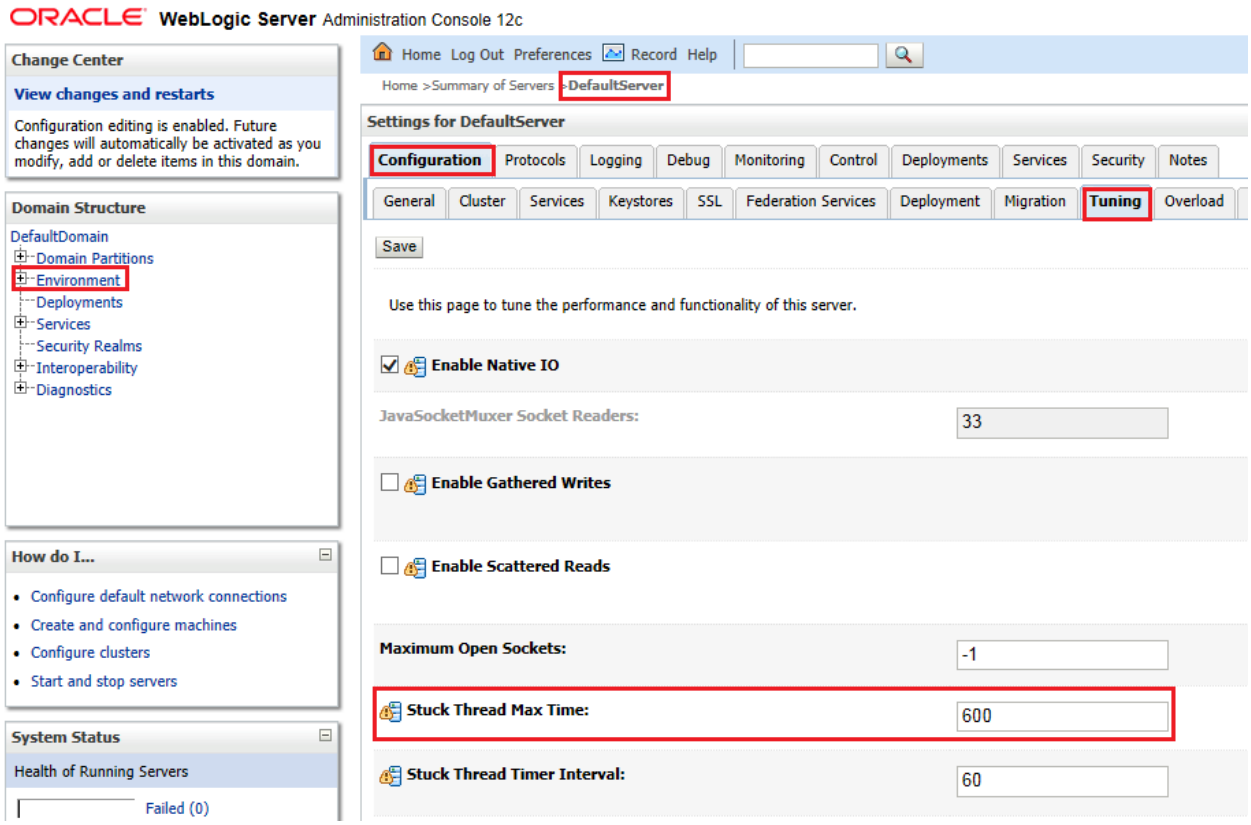


Optional – Setting the Stuck Thread Max Time

The StuckThreadMaxTime error occurs when a container thread (web/ejb container) takes more than configured time (default 600 sec) for processing a request or being stuck.

Error message:
weblogic.kernel.Default (self-tuning)' has been busy for "605" seconds working on the request…which is more than the configured time (StuckThreadMaxTime) of "600" seconds….
Normally this kind of error may need to settings tweaking as 600 sec is more than enough.

This setting can be adjusted on the WebLogic Server (12c) Admin console.



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

STEP 5: INSTALLATION OF THE .EAR FILE

The installation of the Insbridge .EAR File begins in the same way as the installation of the WebLogic library.

1. From the Summary of Deployments Page, click the **Install** button. The screen will refresh to the Install Application Assistant page.
2. The list of Locations will be displayed. Click the location you need to reach the .EAR file.
3. Select the **.EAR** file.

Figure 14 Select the Application .EAR

4. Click **Next**.
5. On the **Install Application Assistant** page, select to **Install this deployment as an application**. Click **Next**.

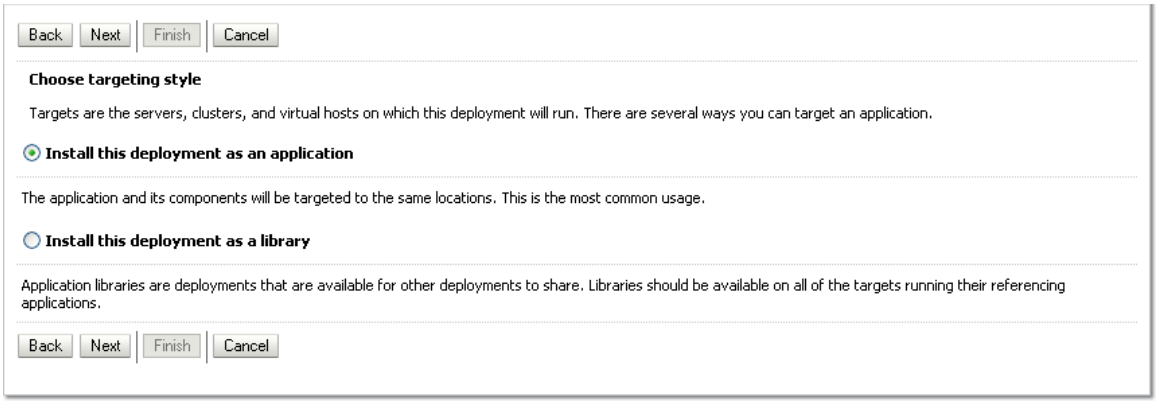


Figure 15 – Verify Application Installation

6. On the **Optional Settings** page, it is recommended that you keep the default values. The deployment name should appear as IBSS.

7. Click **Finish**.

8. After the .EAR File has been added, you will be placed on the Summary of Deployments page. The .EAR File you added will be listed. Read the messages at the top of the screen and correct any error messages.

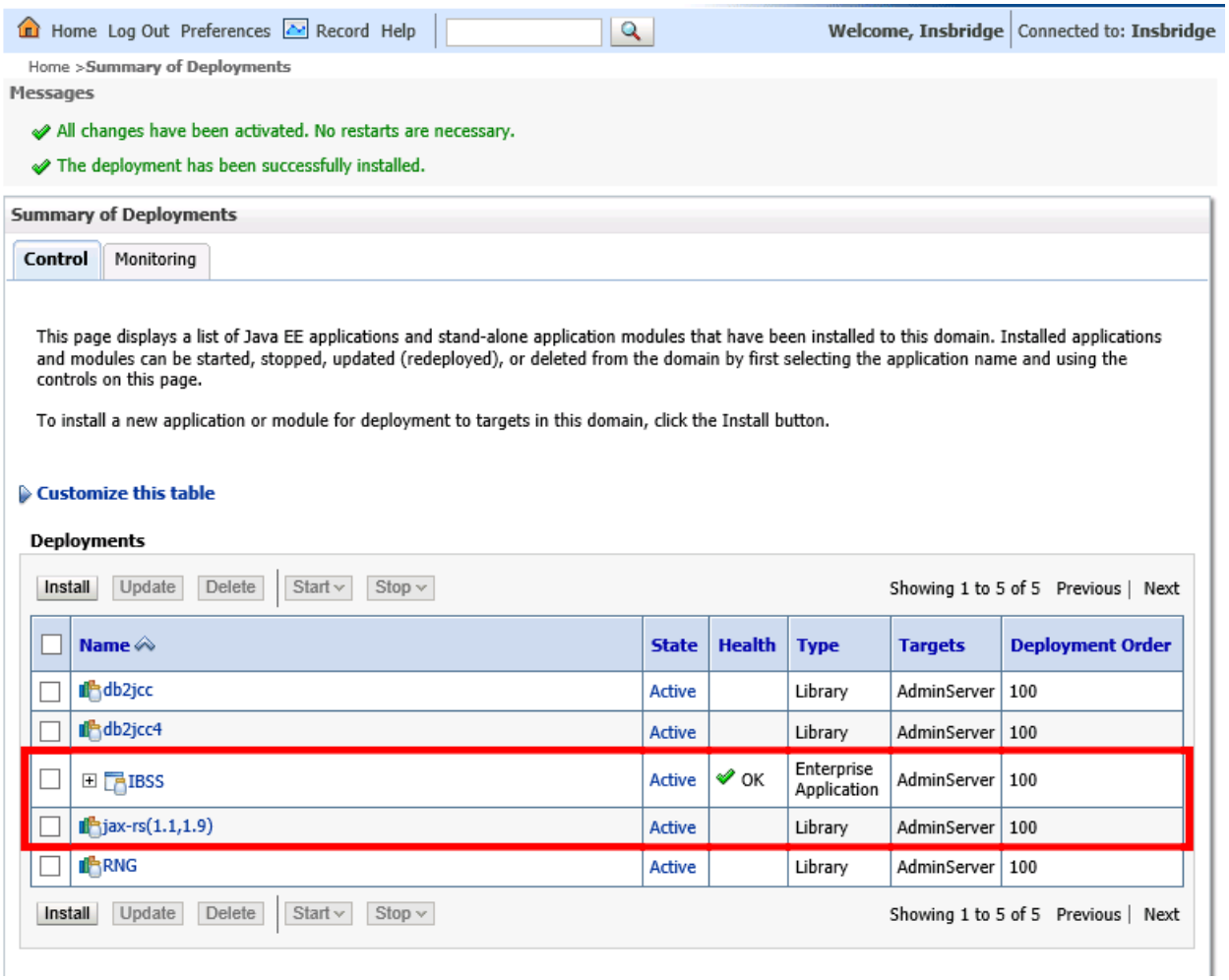


Figure 16 – Successful Installation

STEP 6: TEST CONNECTION

Test the application on URL: http://<ServerName>:7001/IBSS.

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

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

NOTE: *Port 7001 is the most commonly used port. The port number may have been changed when the instance was created.*

Stopping and Starting WebLogic

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

Chapter 4

INSTALLATION PROCEDURES – UTILIZING A SQL SERVER DATABASE

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

1. Creation of the IBSR databases is next.
2. Create a WebLogic entry in IBSS.
3. Create a WebLogic 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 Installation Directory:

    - 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

2. Select the SoftRater backup file you want to use, case sensitive or non-case sensitive.

3. **Copy the file** to an appropriate database folder on the machine where SQL Server is installed. For example, [Drive]:\Program Files\Insbridge\Databases. If you are unsure of a location, please consult with your database administrator.

4. **Rename the file**. It is not required but it is strongly suggested that the database file name be changed from TEMPLATE to something that defines the databases more accurately. At a minimum, it is recommended that you remove "_TEMPLATE" from the name. You can change the name after it has been restored also.

5. **Open the SQL Server Management Studio** either on the server or remotely using either an administrative account with sa privileges or as the sa account.

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

6. Go to **Databases**.

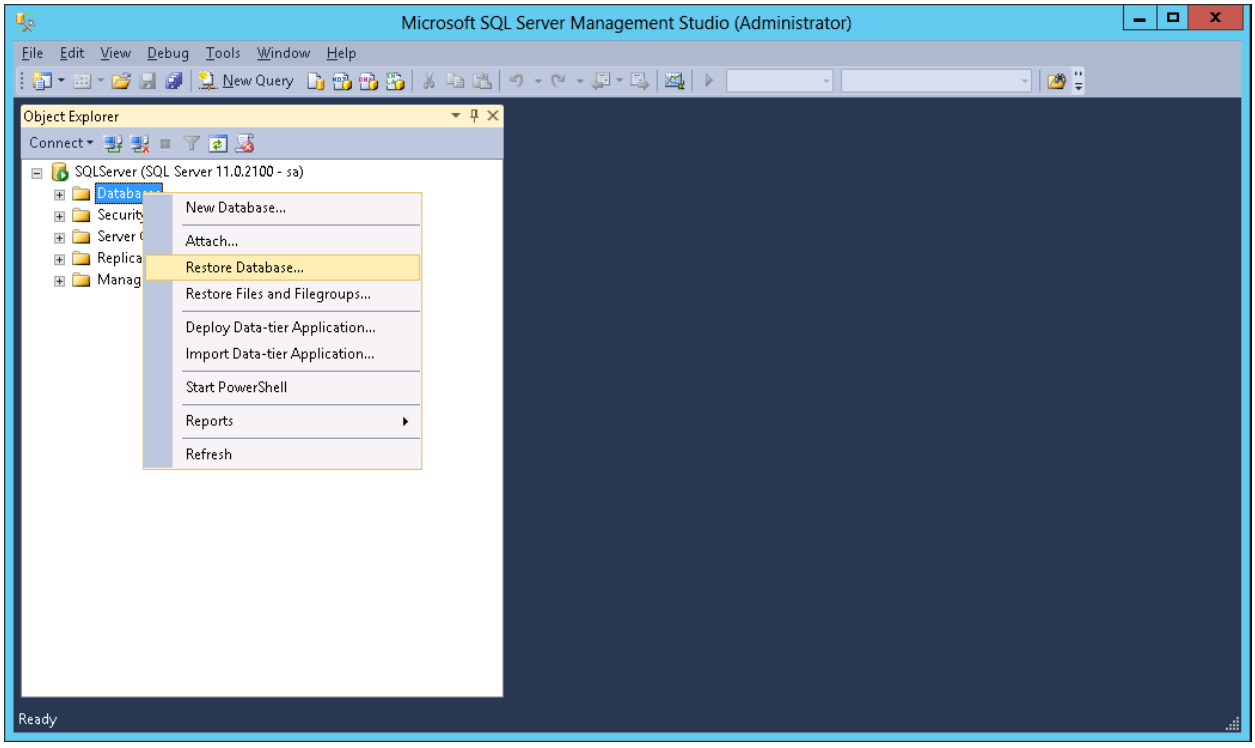


Figure 17 Right Click to Restore Database

7. Right click on **Databases**.

8. Select **Restore Database…** A separate screen is displayed.

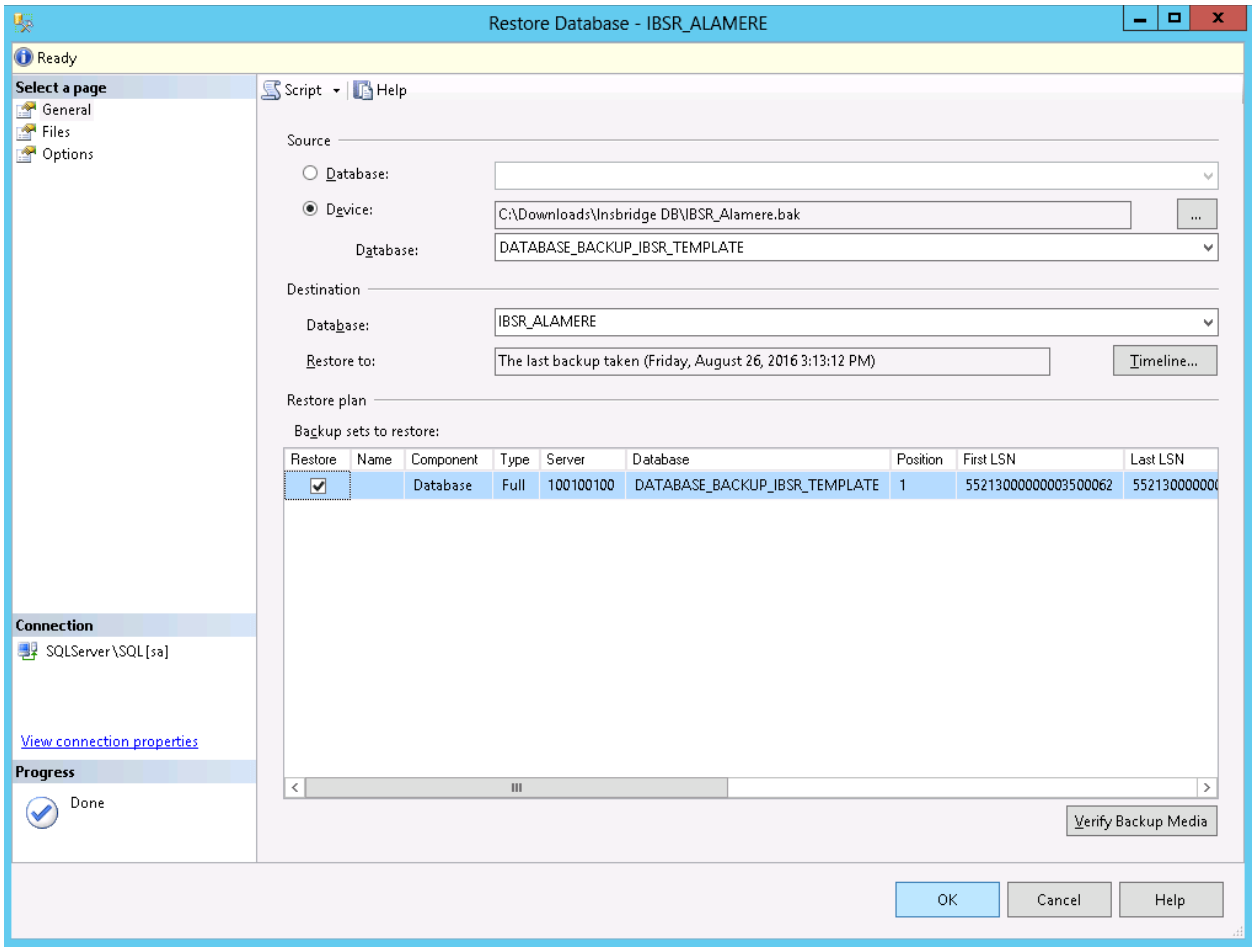


Figure 18 Restoring a Database

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\DDL\SQL folder. For example: C:\Program Files\Oracle\Insbridge\SoftRater\DDL\SQL

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

STEP 2: SETTING UP A WEBLOGIC 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 WebLogic resides:

http://<ServerName or IP Address>:7001/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.

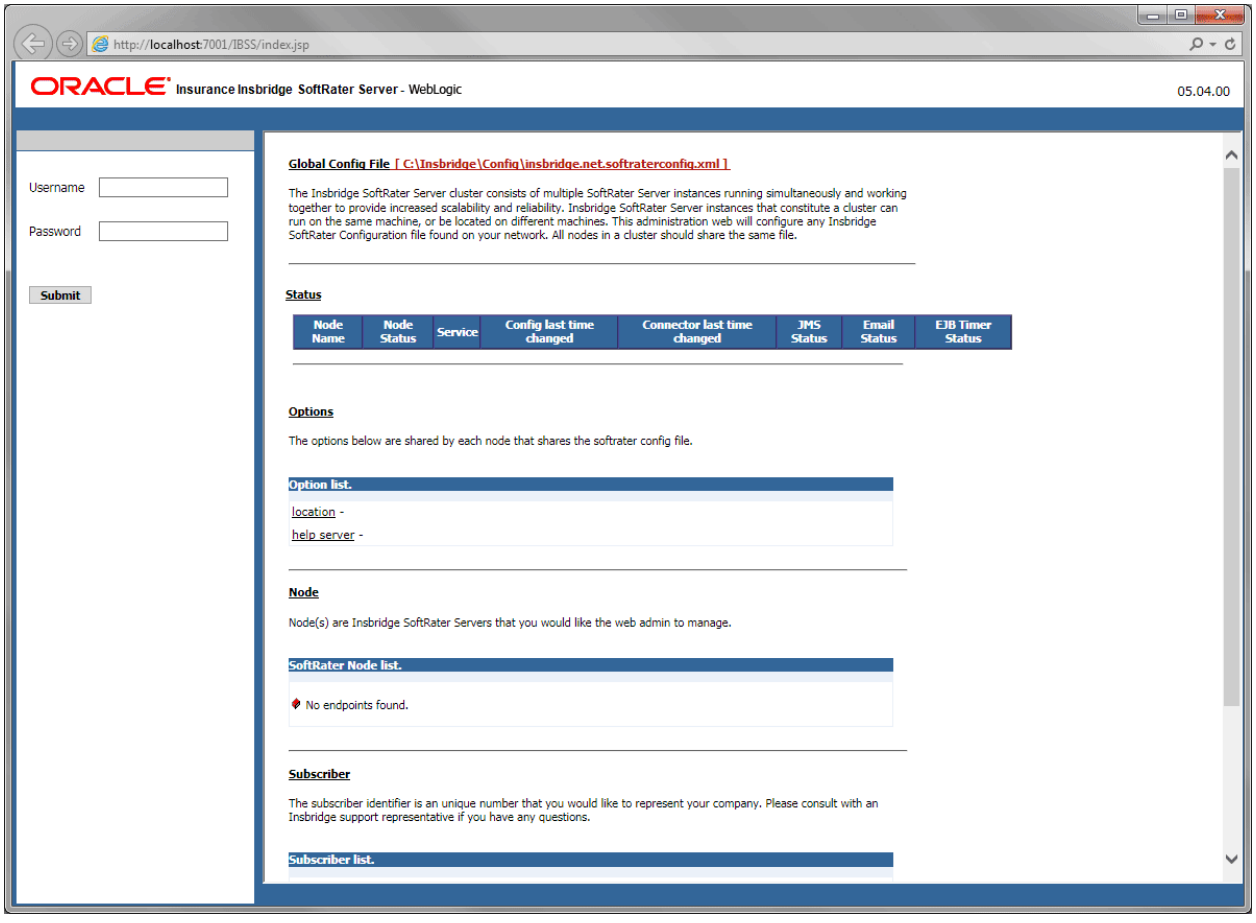


Figure 19 Security Enabled in IBSS

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

A successful log in places you on the Home page.

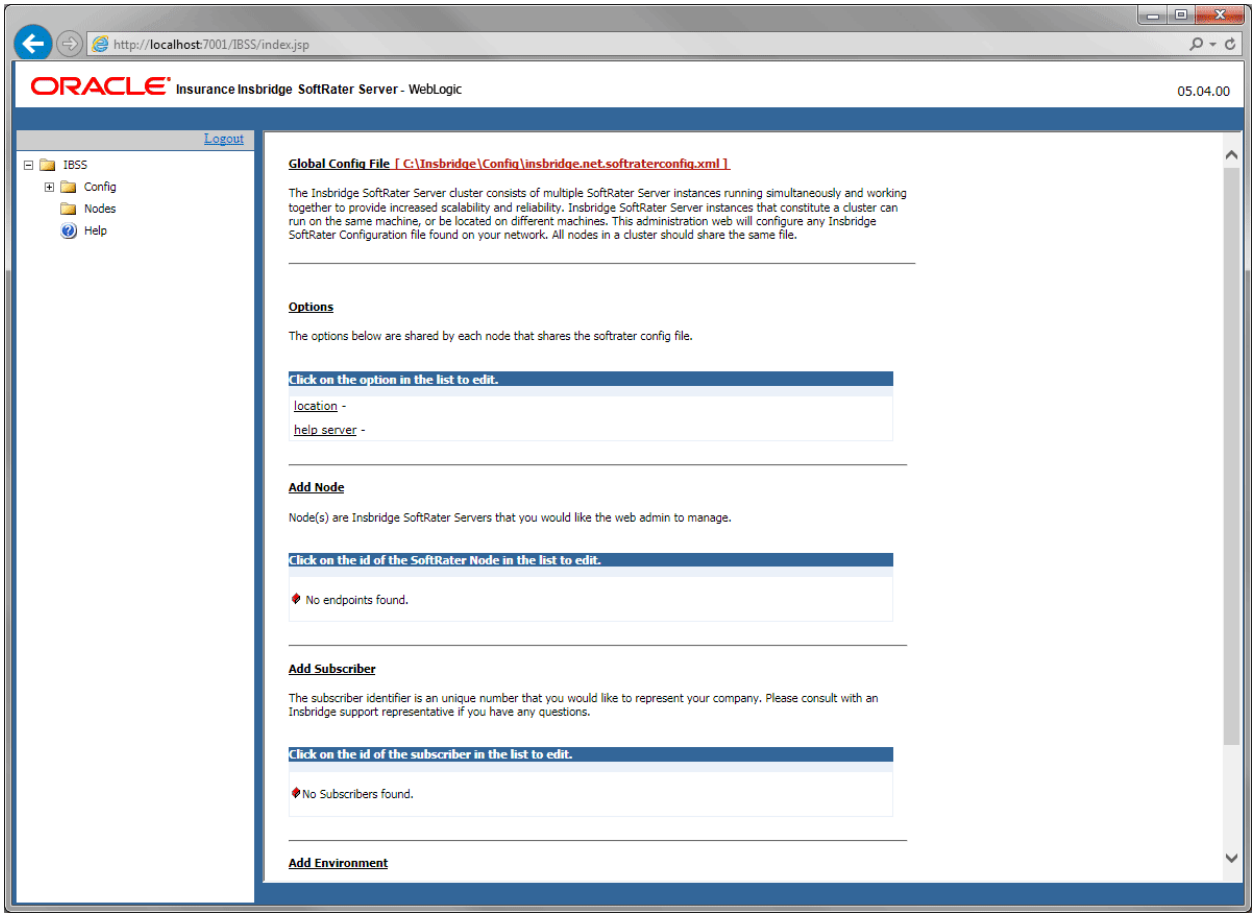


Figure 20 IBSS WebLogic Main Page

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.

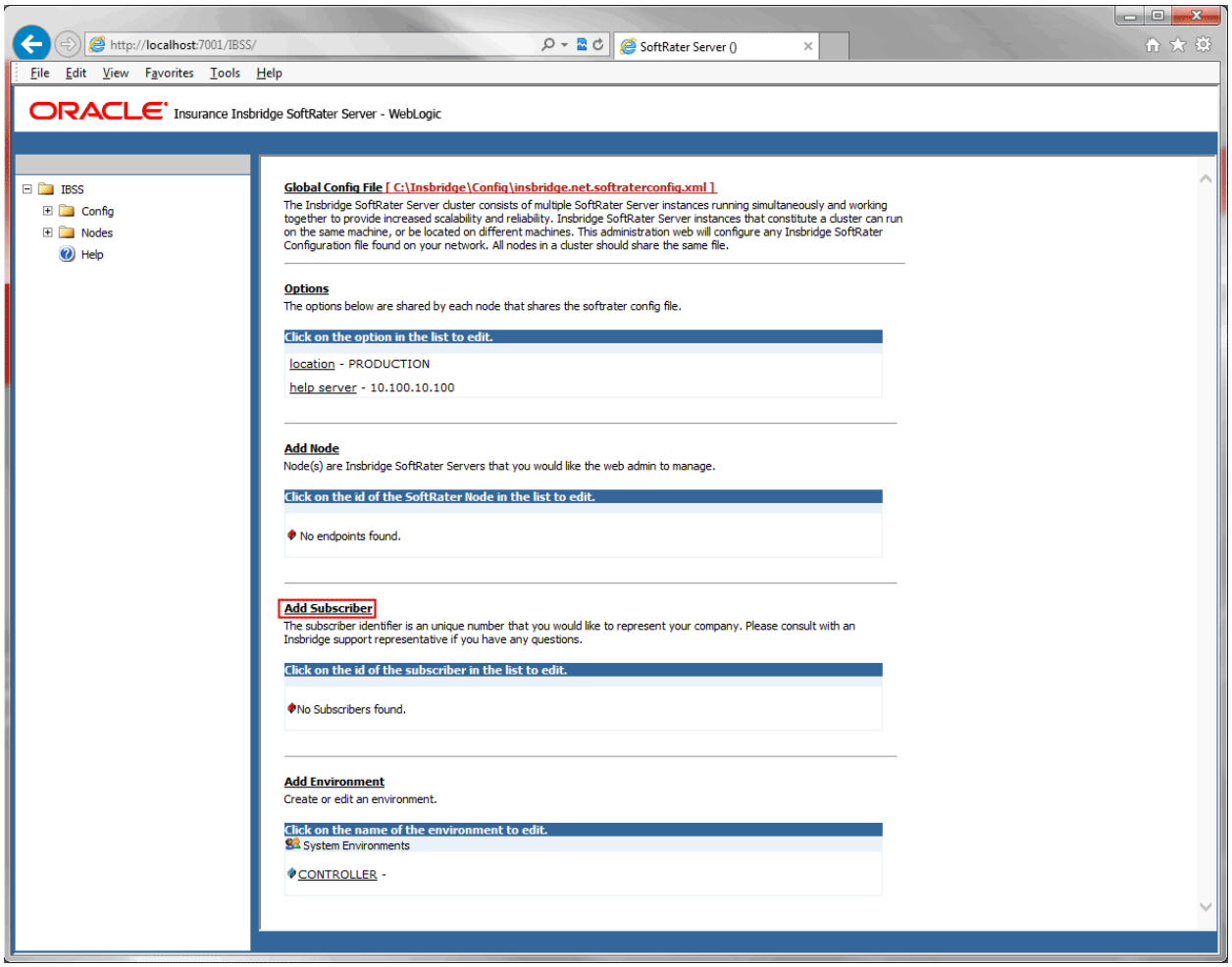


Figure 21 Adding a Subscriber

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

   The Subscriber ID can be a 1-5 digit number and must 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/.

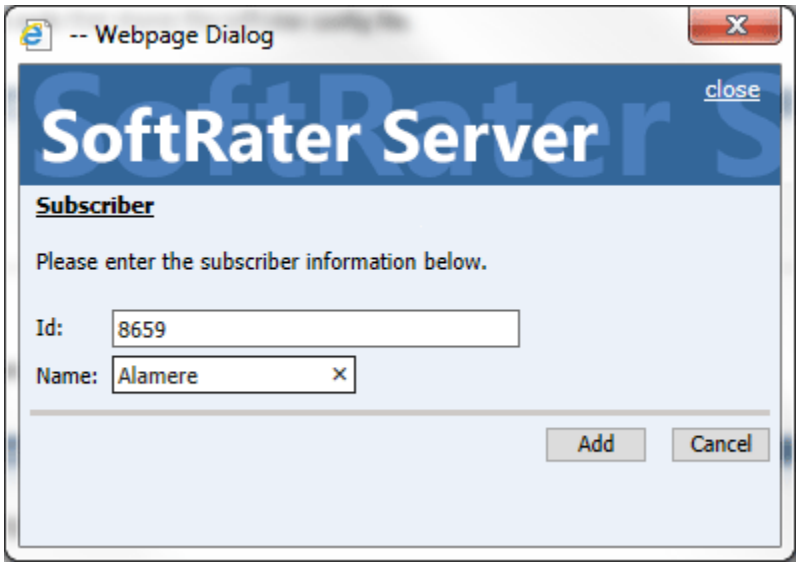


Figure 22 Enter ID

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.

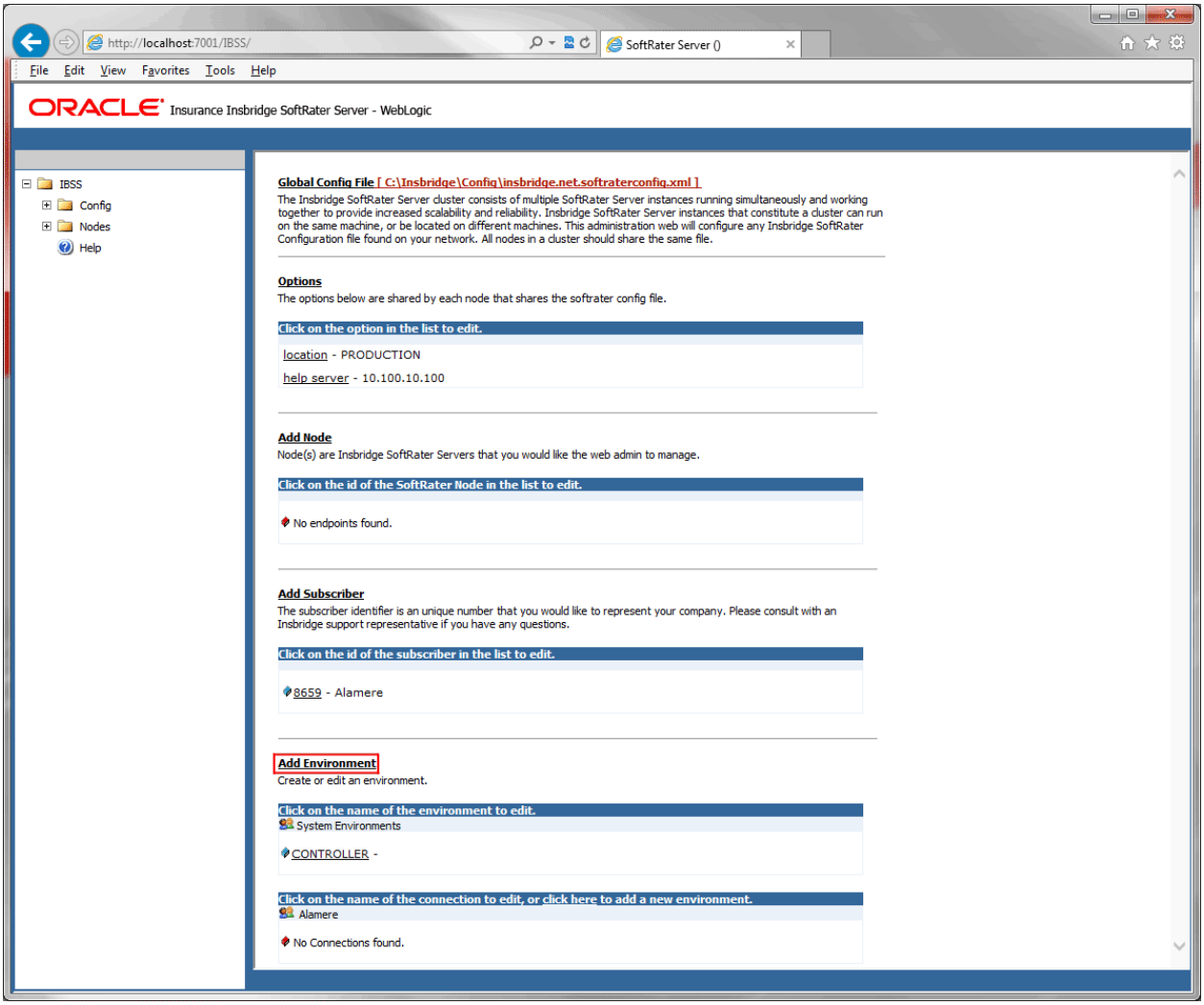


Figure 23 Adding an Environment

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 24 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**.

Figure 25 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.

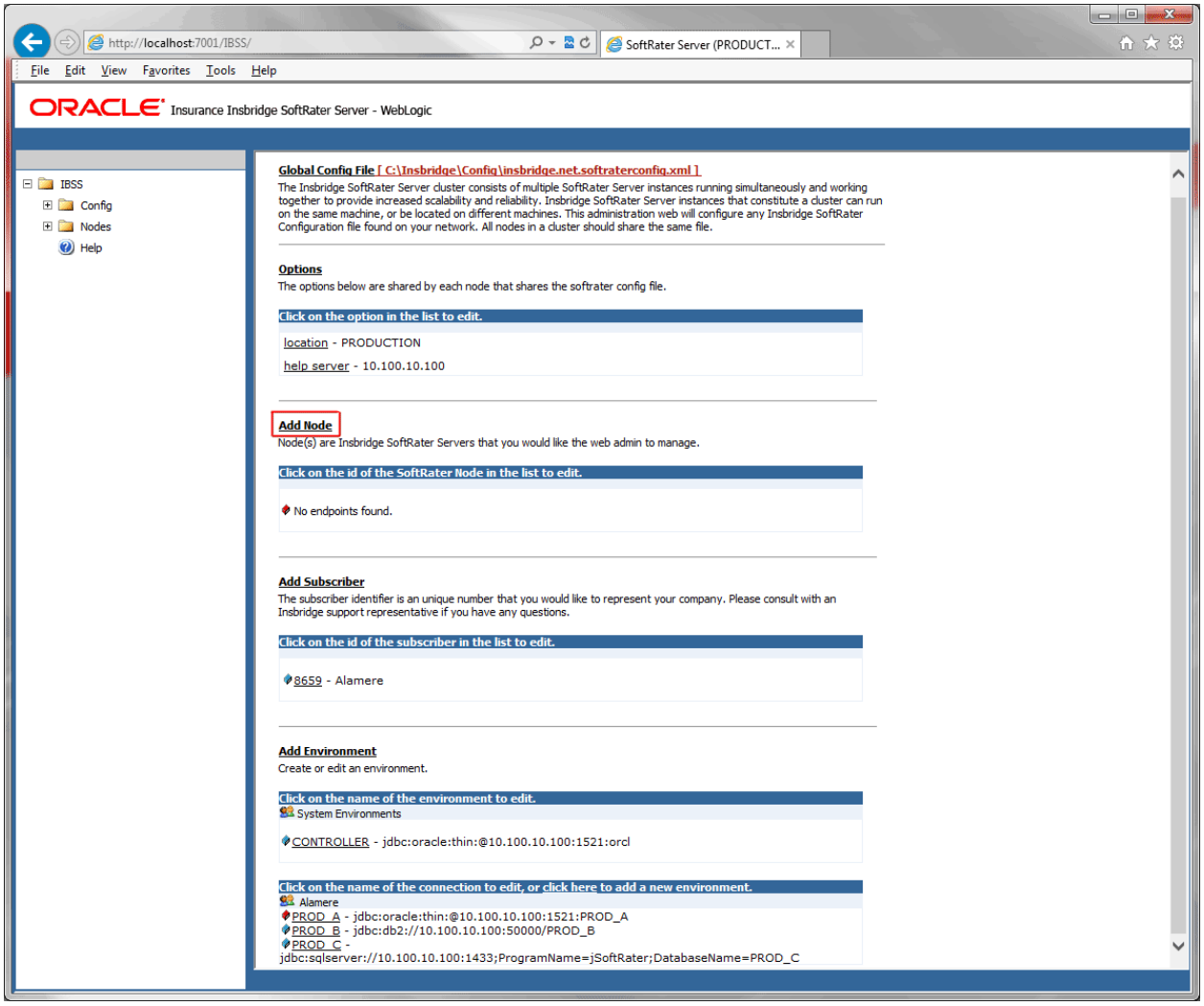


Figure 26 Adding a Node

To create a node, server information is needed:

- **Server OS**
- **Server Name or IP Address**
- **Port Used**
- **Is security enabled (HTTPS)**

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

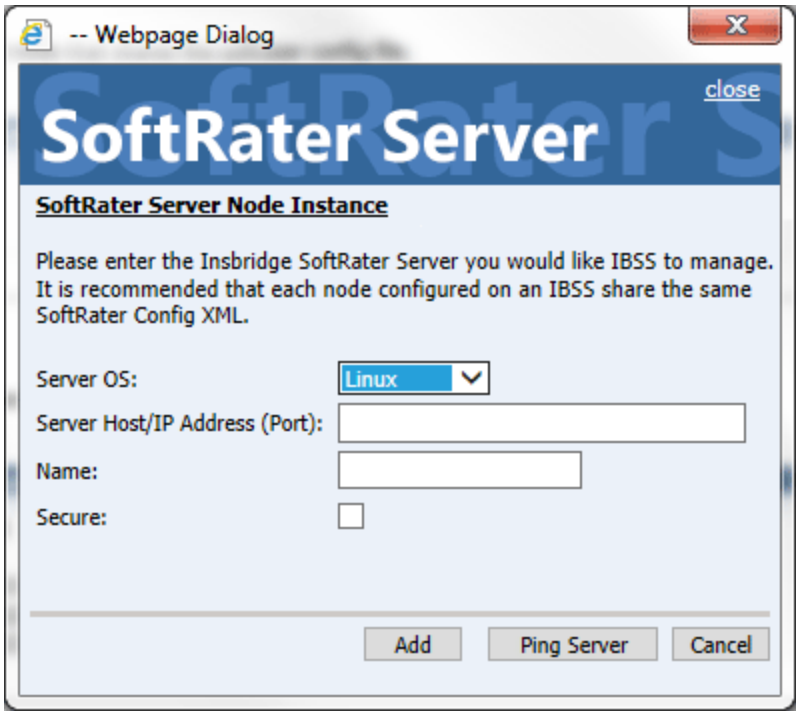


Figure 27 Adding a Node

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. Check if this is a secure environment. A secure environment connects using HTTPS.

7. 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.

8. 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 WebLogic. 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 Quality Control environment with a type of Quality Assurance.
5. Select the **Environments** link under the Configuration header on the left hand side to enter the configuration information for the newly created logical environment. You will be placed on the Environments screen. The environments you previously setup will be listed. If an environment is missing, you must return to the Configuration subtab and add it.

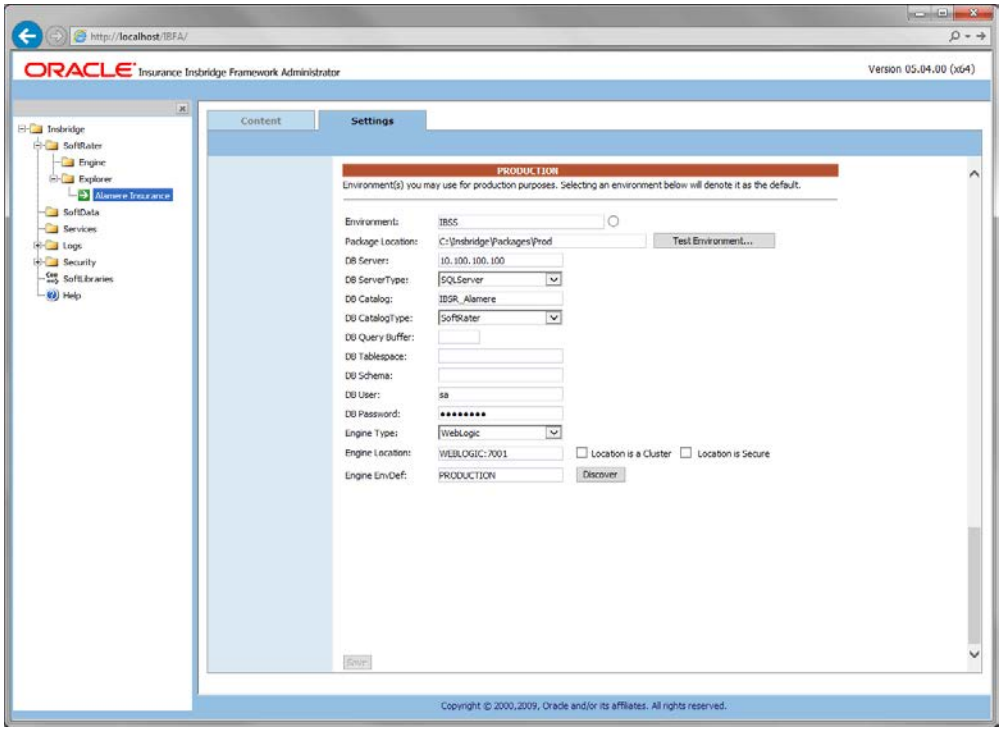


Figure 28 Editing Environment

6. The **Environment Name** will be complete. No changes are needed.

7. Enter in the file path where you want packages stored in the **Package Location**. Use the Test Environment option to have the location created for you.

8. Enter in the **DBServer** name or IP address. This is the database server where the SoftRater database was restored or created.

9. Select the **DB Server Type** that you are using.

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 WebLogic server may have “WBServerName:7001” 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.

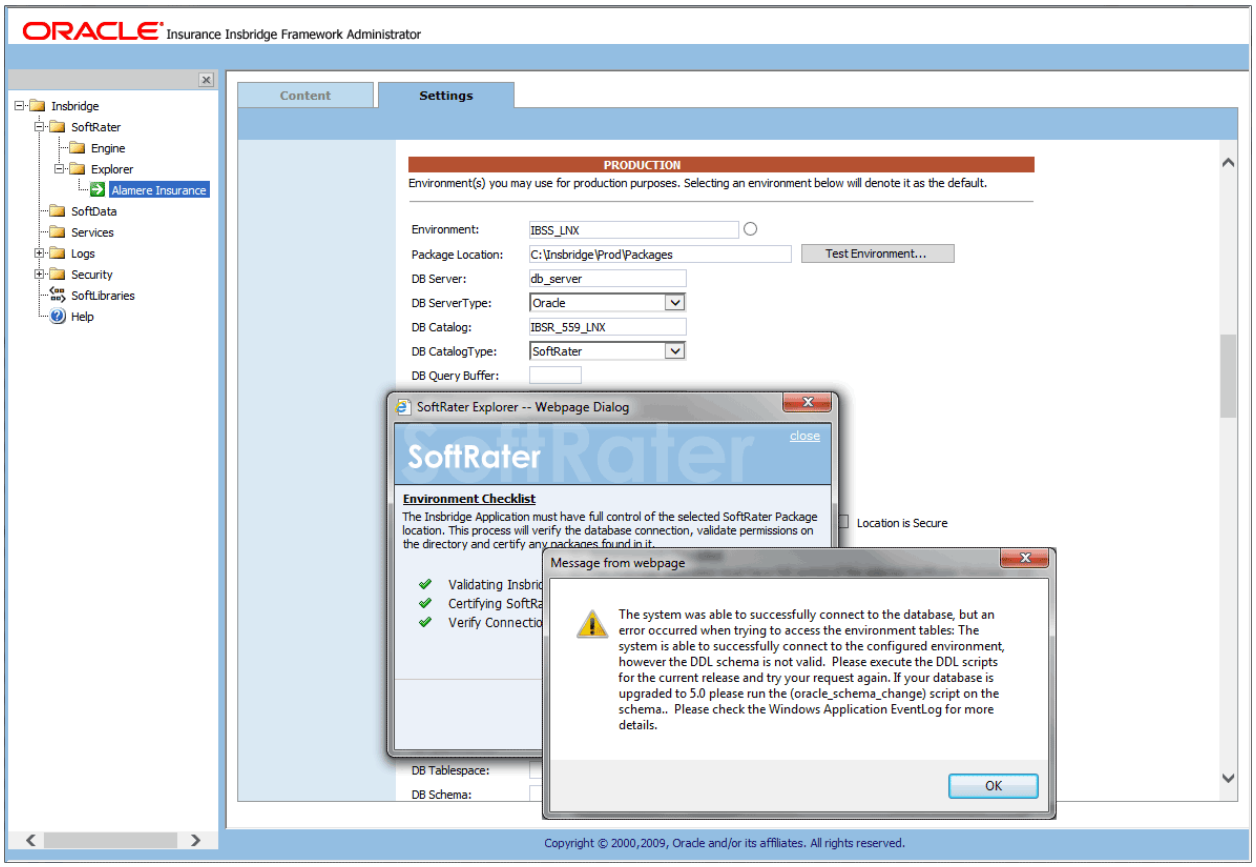


Figure 29 Checking for Database Updates

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:

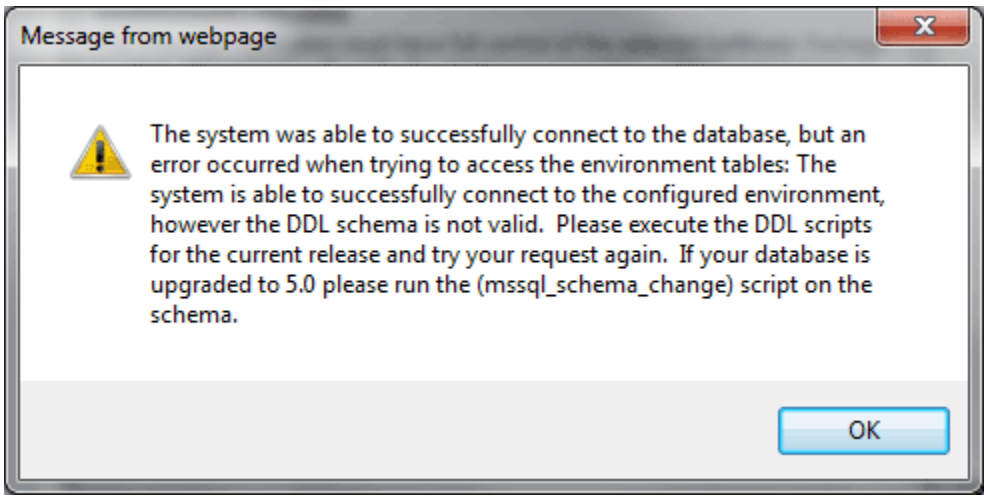


Figure 30 SQL Server Database Update Required Message

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

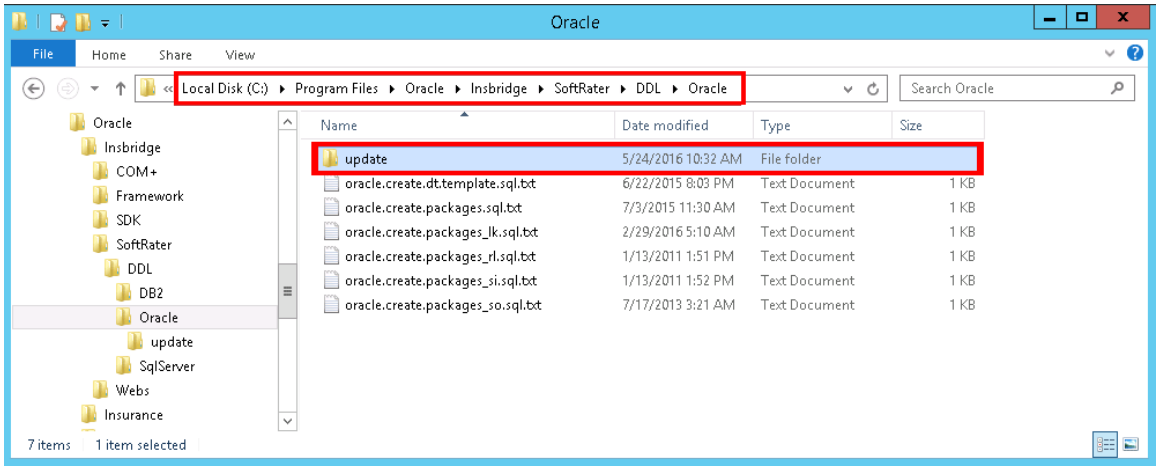


Figure 31 Location of Database Update Scripts

Chapter 5

INSTALLATION PROCEDURES – UTILIZING AN ORACLE DATABASE

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

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

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 Projects and Products that your company uses. You will need the ID number for each.
- Your customer or subscriber number.
- 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.*

When connecting to the Oracle RAC, customers 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)

To continue using SID, do not use the slash before the name.

Creating an Oracle Database

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

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

1. On your Oracle database.

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/DDL folder. I.e. [INSTALL_DIR]/Insbridge/SoftRater/DDL.
   - 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 WEBLOGIC 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 WebLogic resides:

http://<ServerName or IP Address>:7001/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.

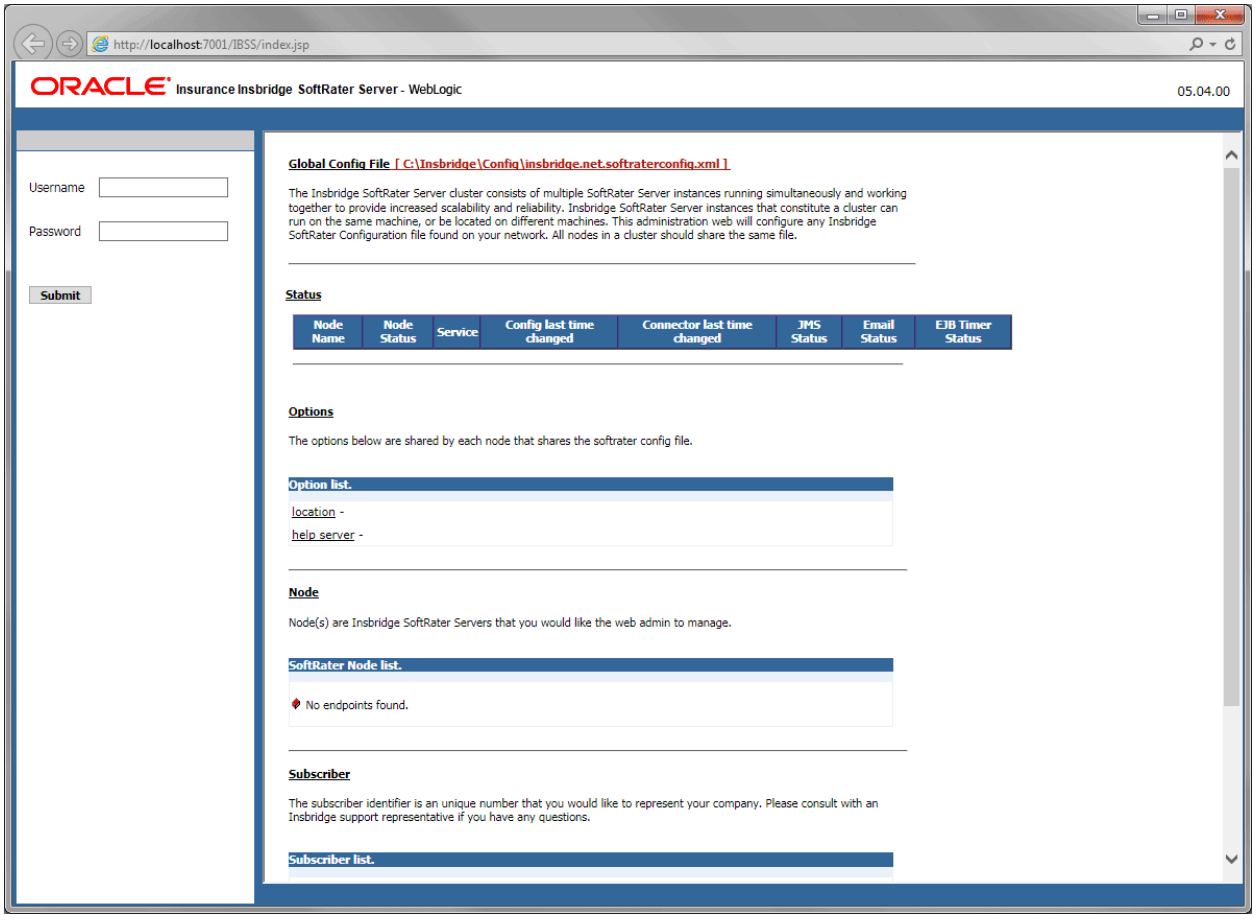


Figure 32 Security Enabled in IBSS

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

A successful log in places you on the Home page.

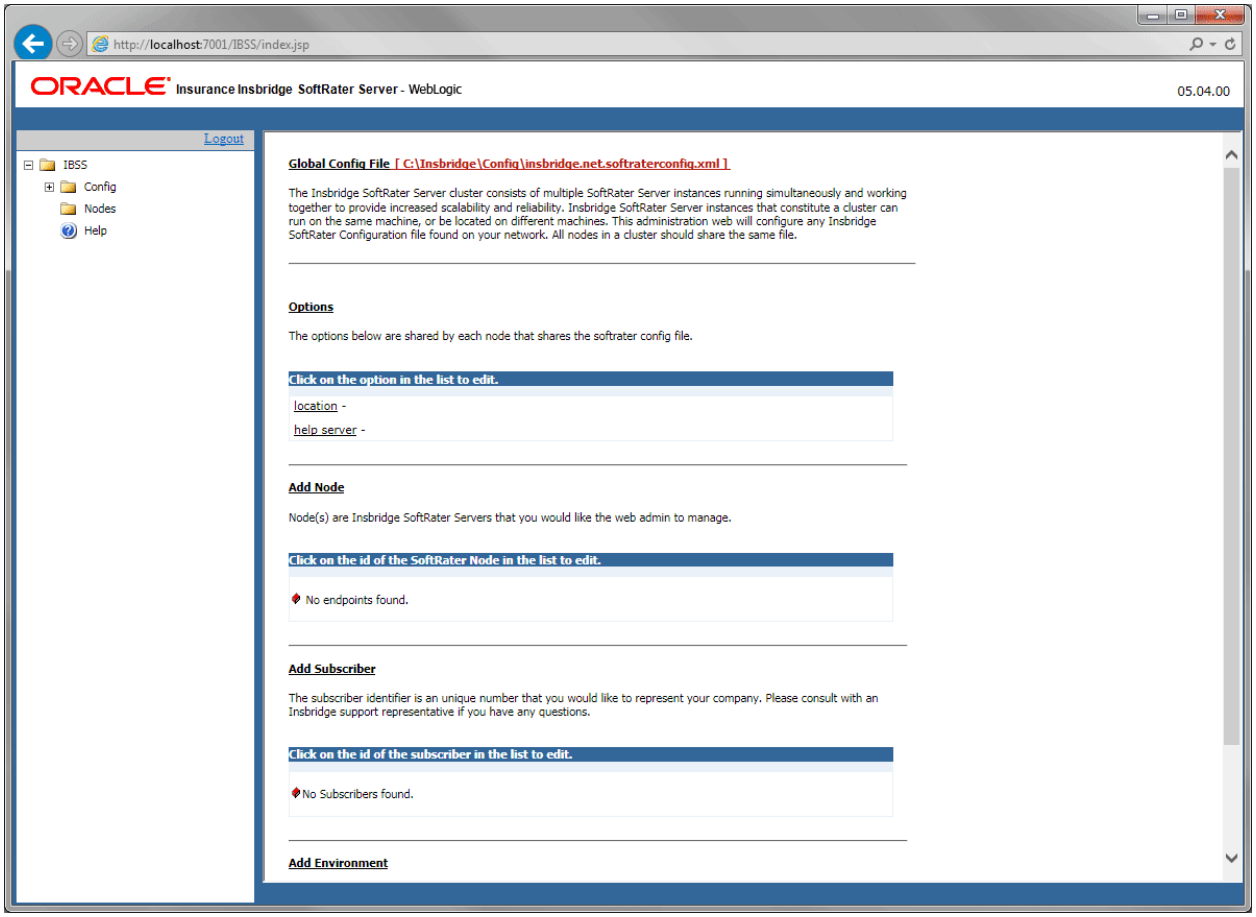


Figure 33 IBSS WebLogic Main Page

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.

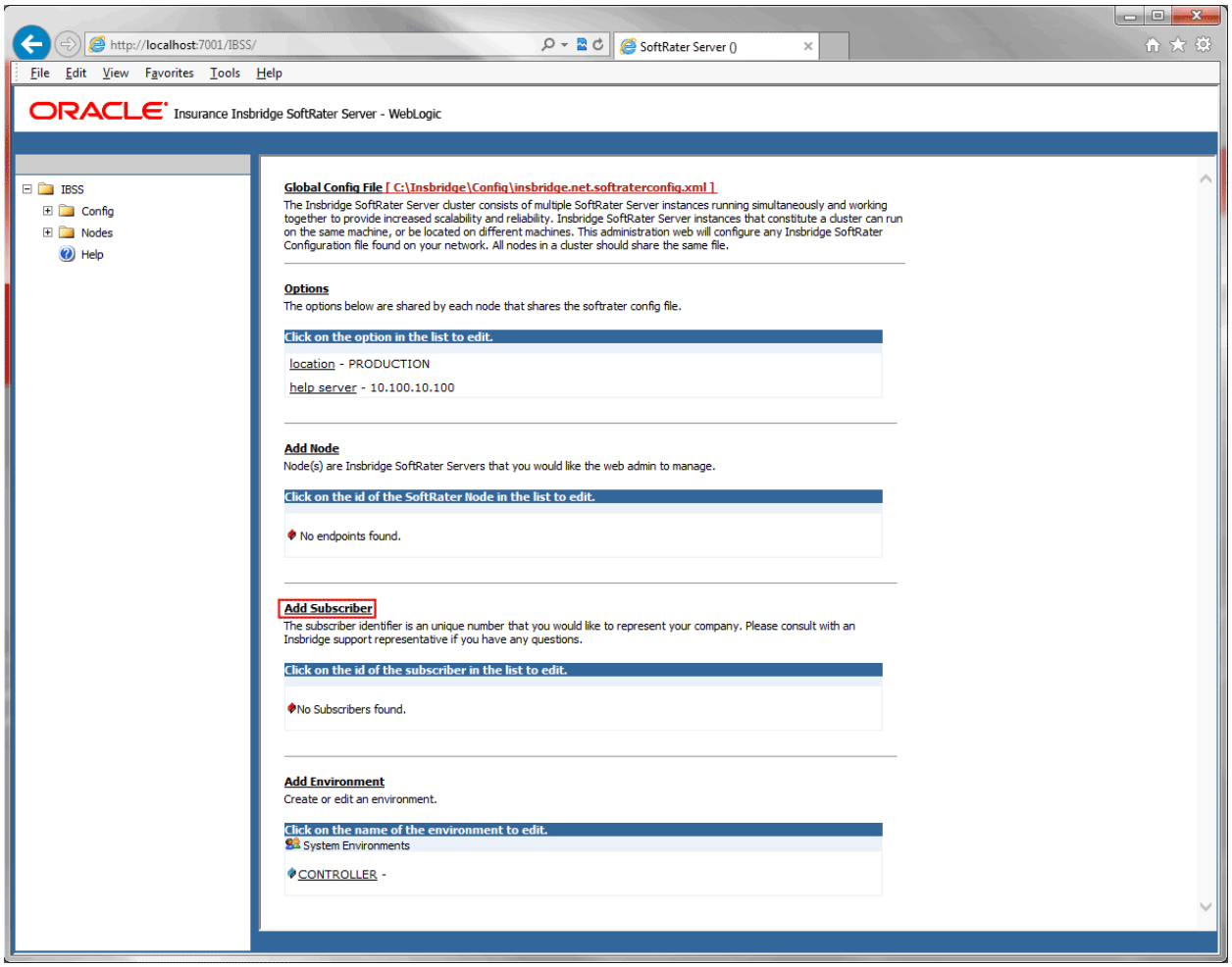


Figure 34 Adding a Subscriber

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

   The Subscriber ID can be a 1-5 digit number and must 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/.

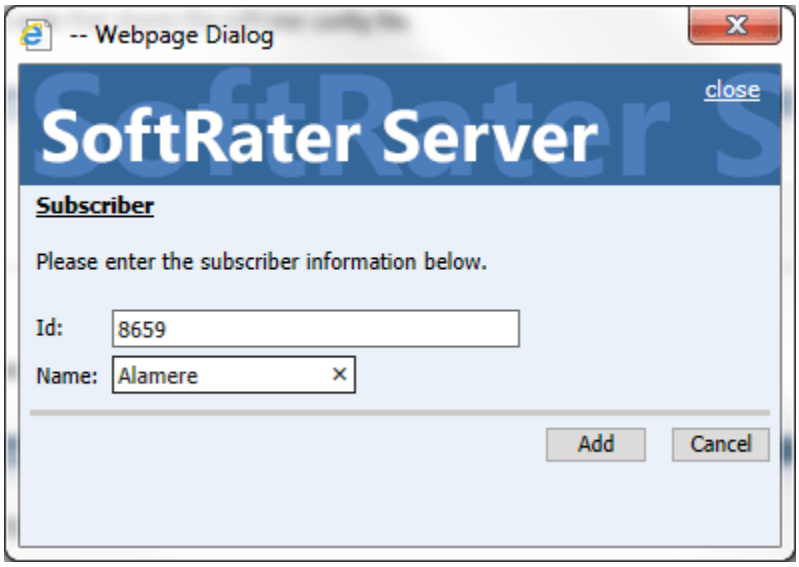


Figure 35 Enter ID

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.

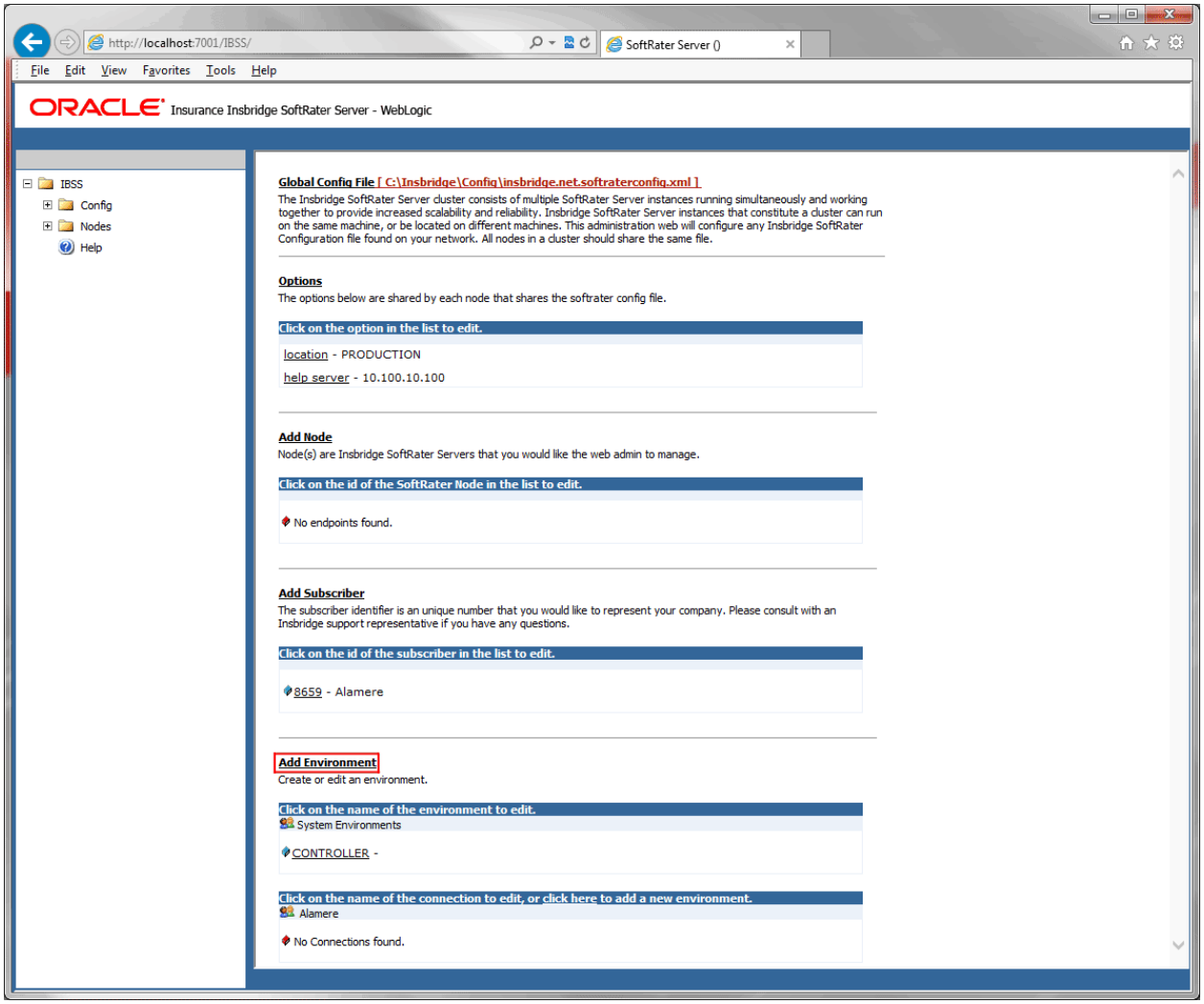


Figure 36 Creating Environments

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 37 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**.

Figure 38 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.

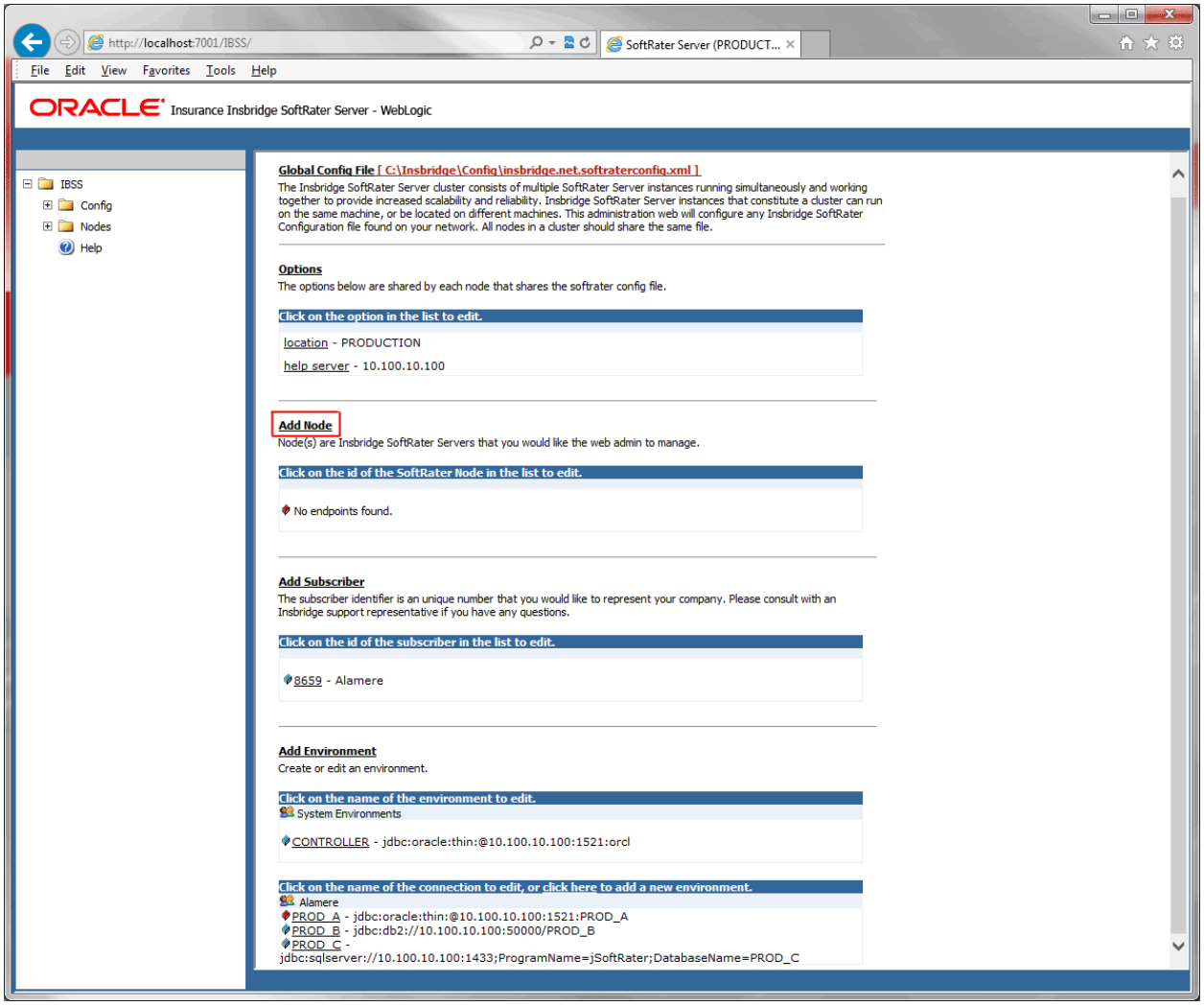


Figure 39 Adding a Node

To create a node, server information is needed:

- **Server OS**
- **Server Name or IP Address**
- **Port Used**
- **Is security enabled (HTTPS)**

1. From the IBSS home page, click the **Add Node** link.

2. This opens the **Add Subscriber** window.

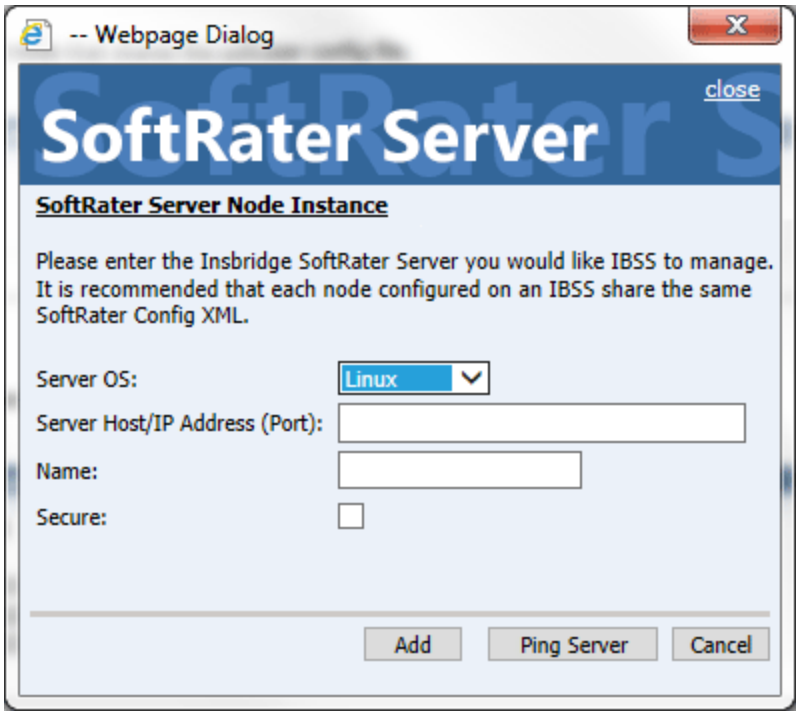


Figure 40 Adding a Node

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. Check if this is a secure environment. A secure environment connects using HTTPS.

7. 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.

8. 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.

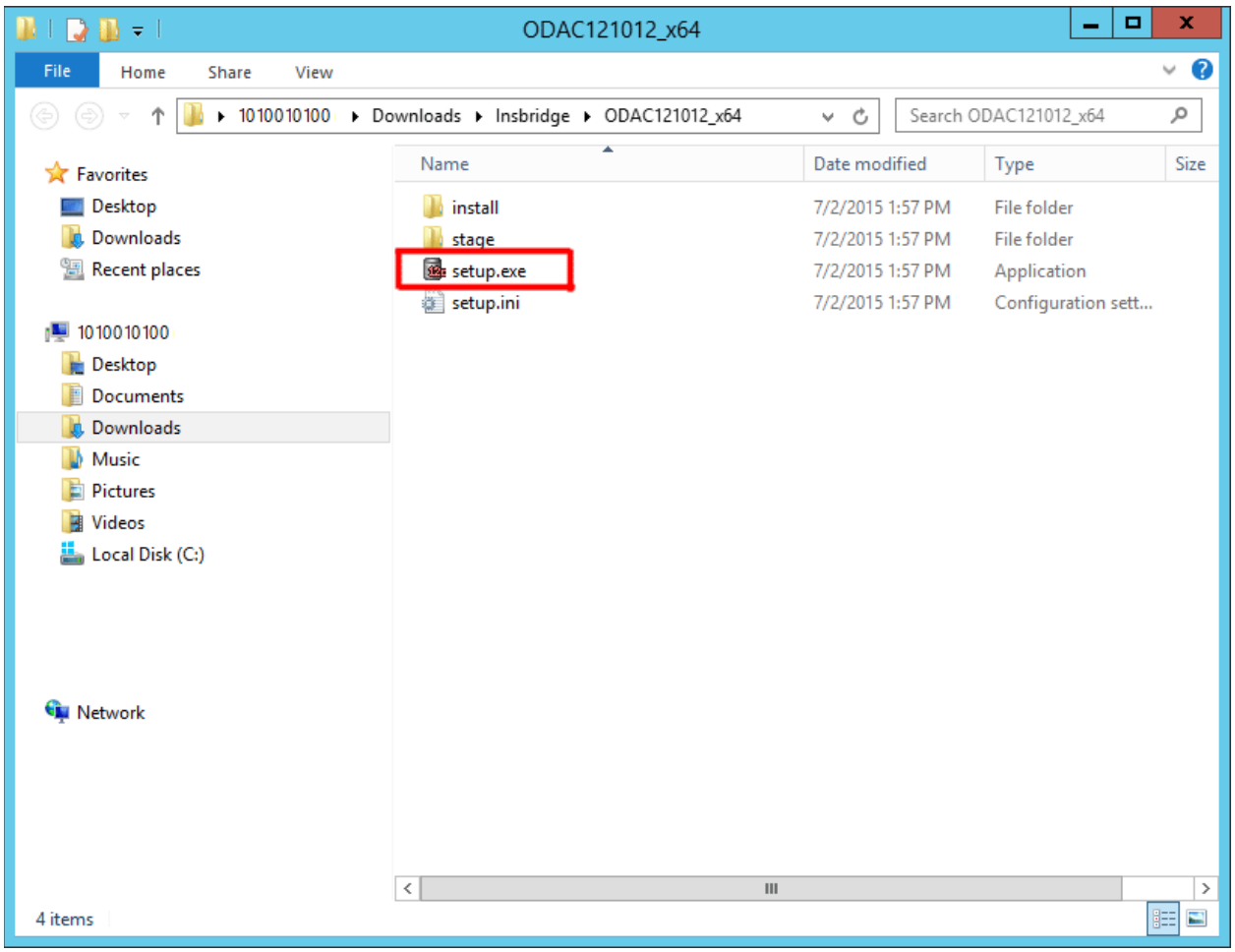


Figure 41 Locating the Oracle Client for 64-bit Installs

1. In the 05.03.00-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 42 Running ODAC for the Oracle Client

4. Click Next.

Figure 43 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 44 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**.

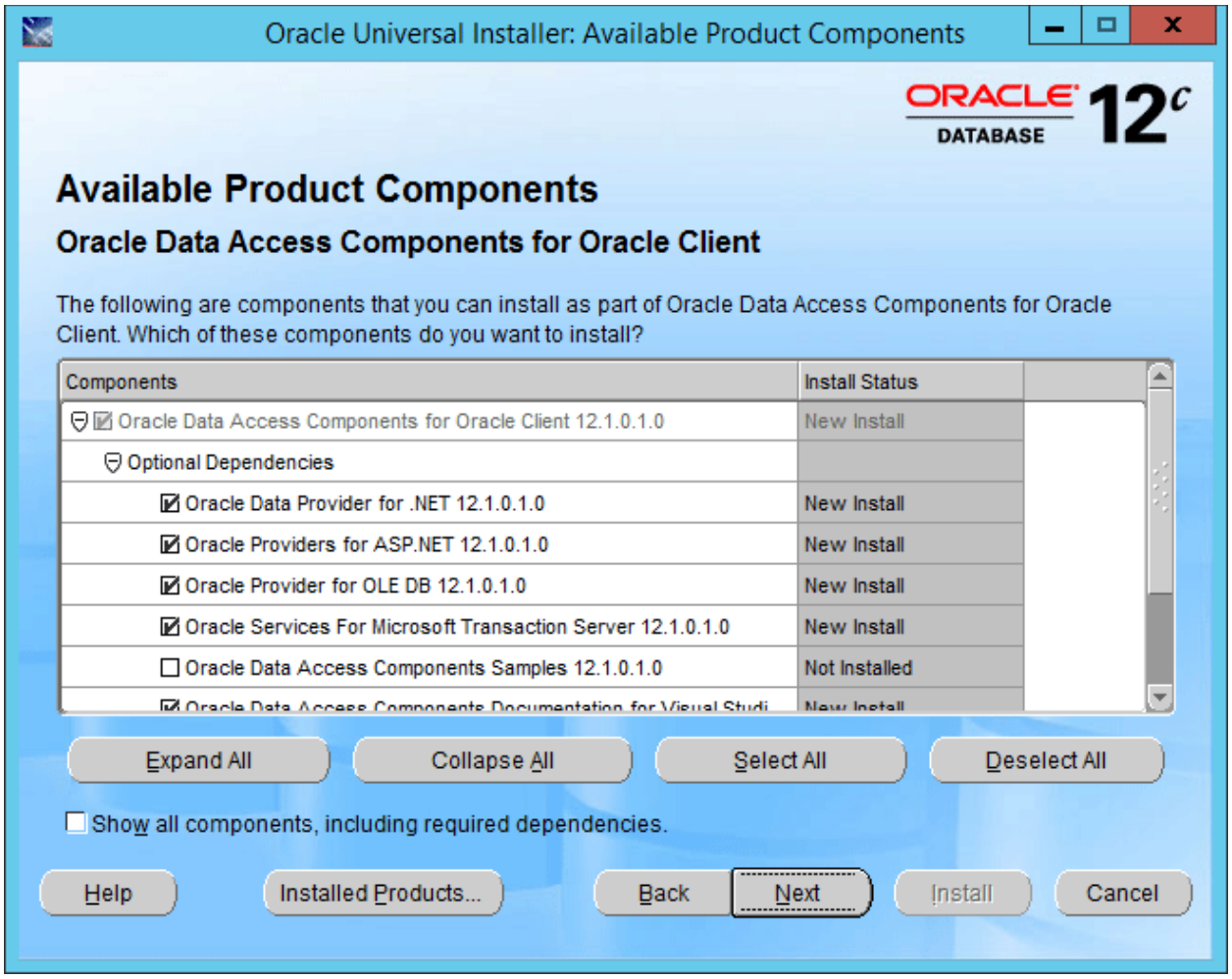


Figure 45 Installing the Oracle Client

9. Click Next. No changes are needed.

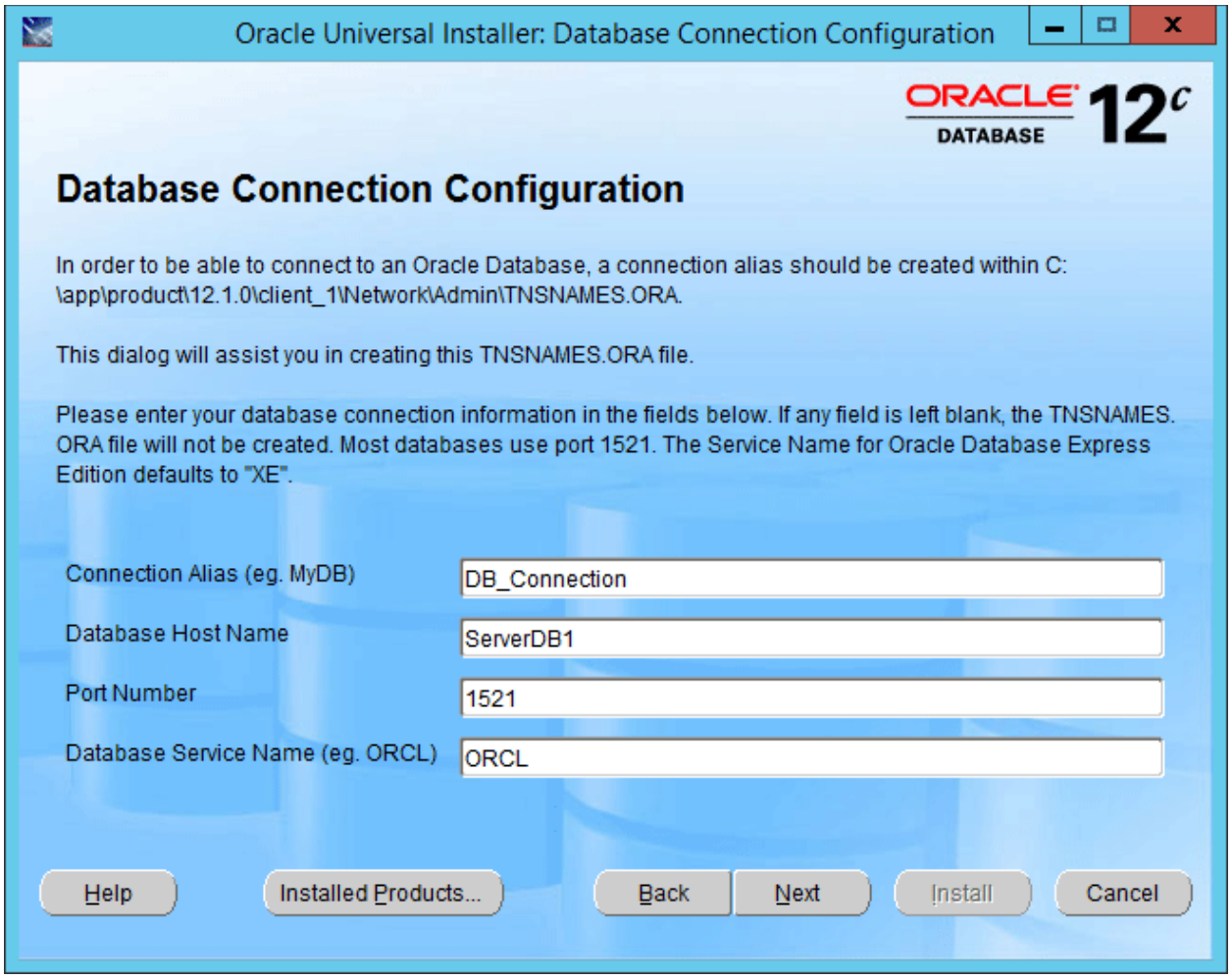


Figure 46 Entering Database Connection Information

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 47 Information Screen

12. This is an information screen. Click Next.

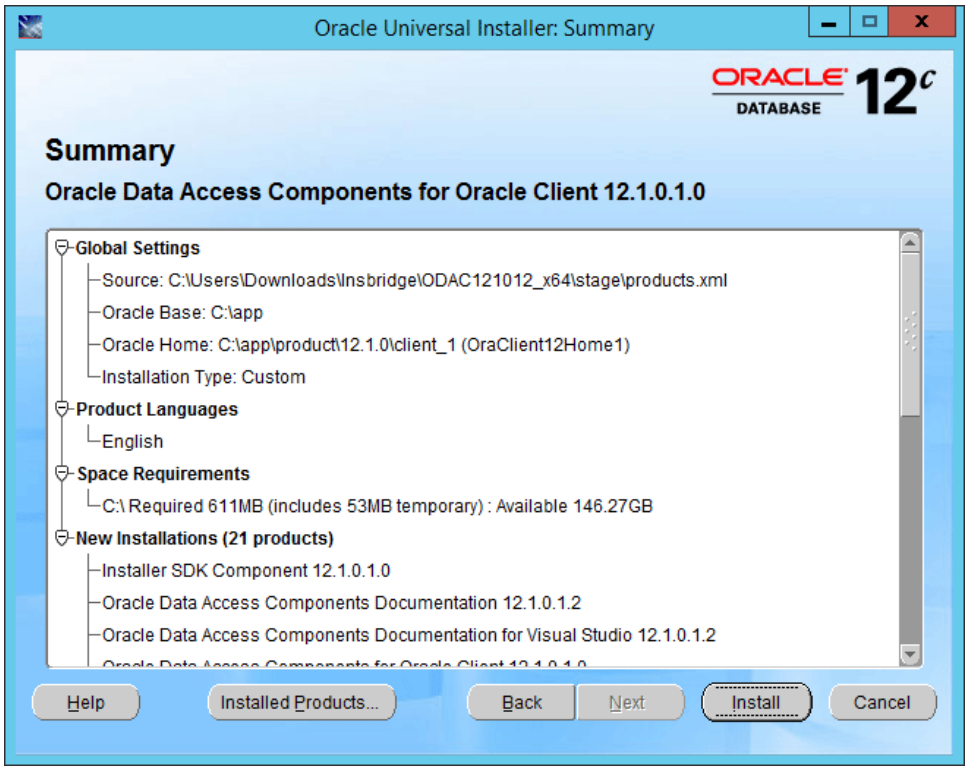


Figure 48 Summary of Items to be installed

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

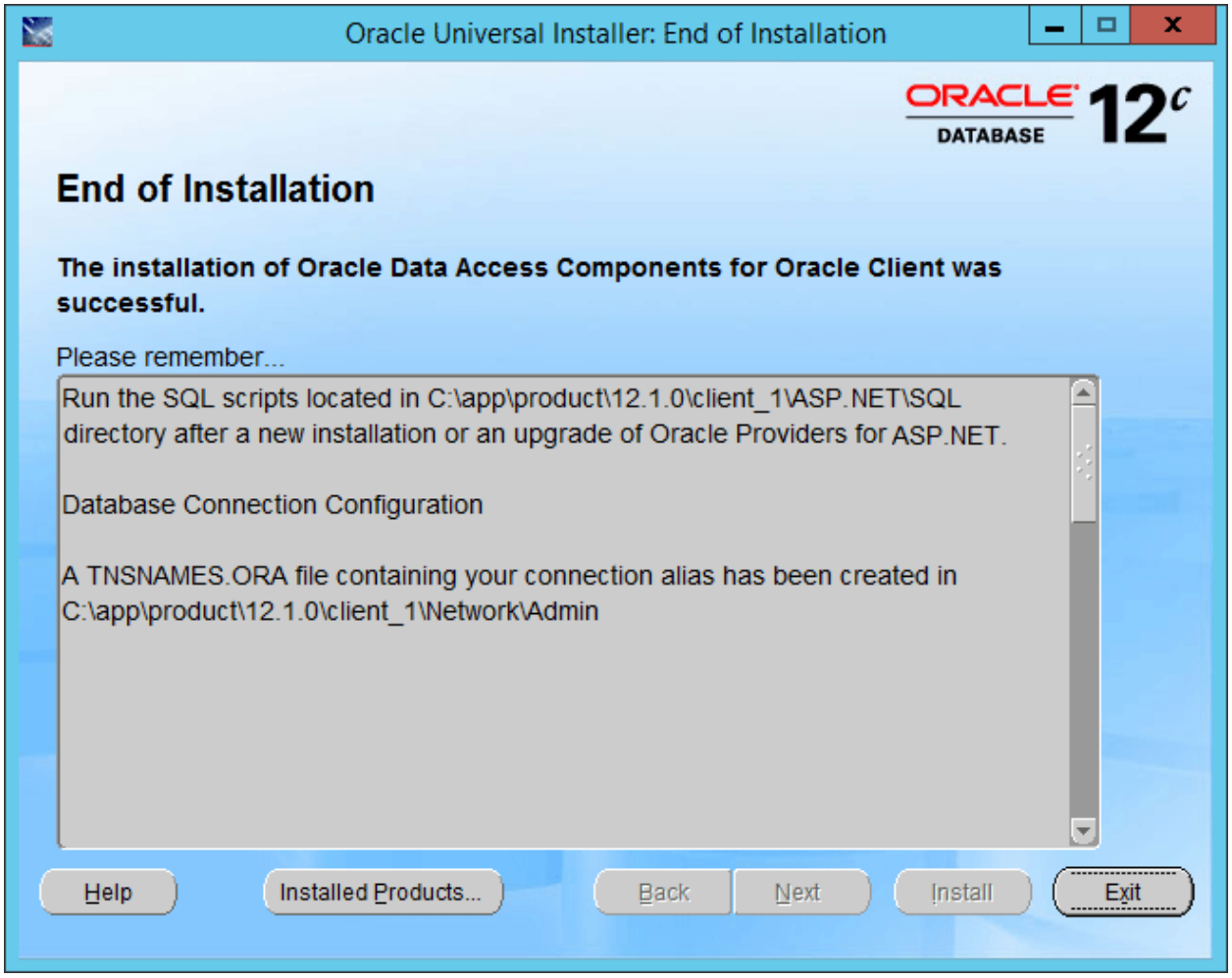


Figure 49 Successful Installation

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 WebLogic. 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 Quality Control environment with a type of Quality Assurance.
5. Select the **Environments** link under the Configuration header on the left hand side to enter the configuration information for the newly created logical environment. You will be placed on the Environments screen. The environments you previously setup will be listed. If an environment is missing, you must return to the Configuration subtab and add it.

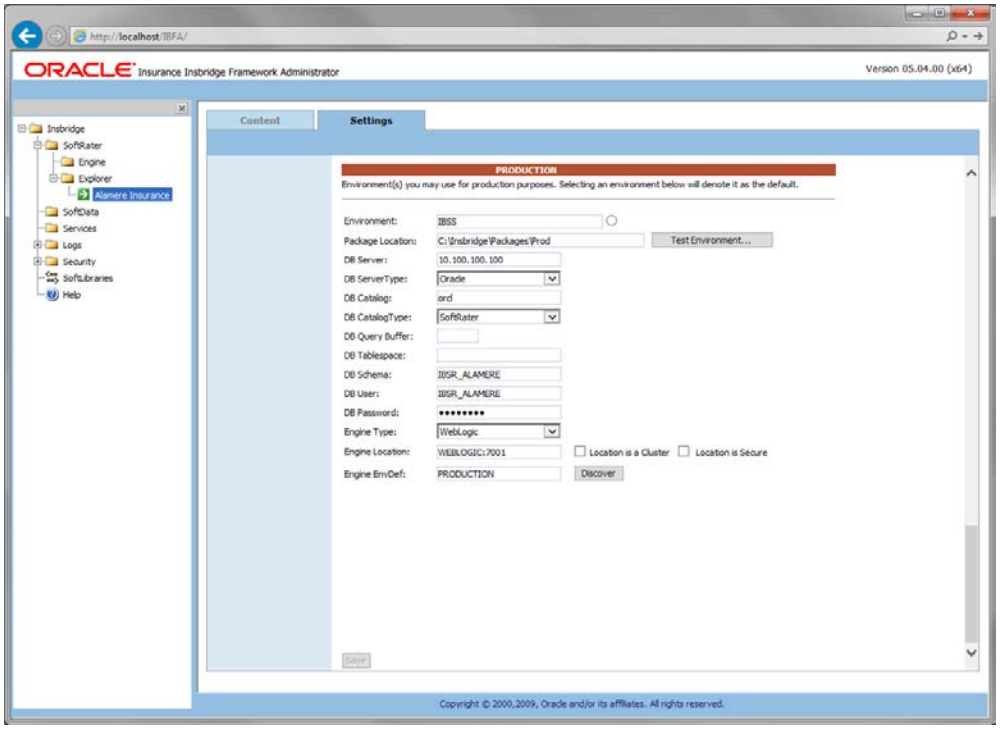


Figure 50 Editing Environment

6. The **Environment Name** will be complete. No changes are needed.

7. Enter in the file path where you want packages stored in the **Package Location**. Use the Test Environment option to have the location created for you.

8. Enter in the **DBServer** name or IP address. This is the database server where the SoftRater database was restored or created.

9. Select the **DB Server Type** that you are using.

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 WebLogic server may have “WBServerName:7001” 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.

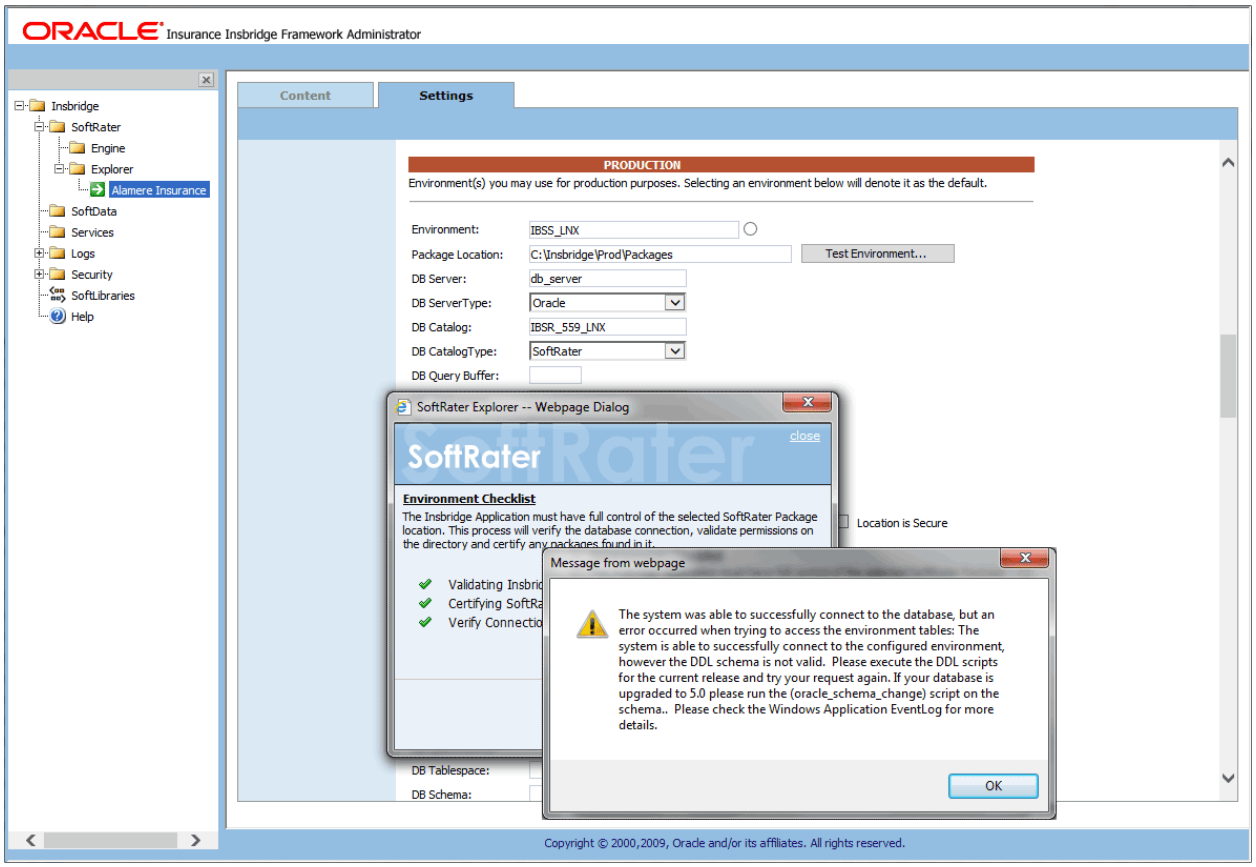


Figure 51 Checking for Database Updates

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:

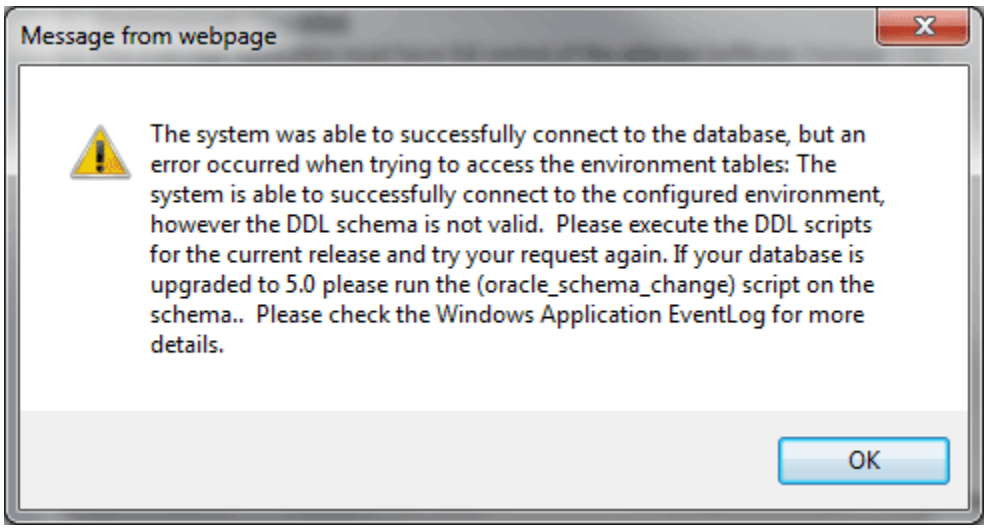


Figure 52 Oracle Database Update Required Message

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

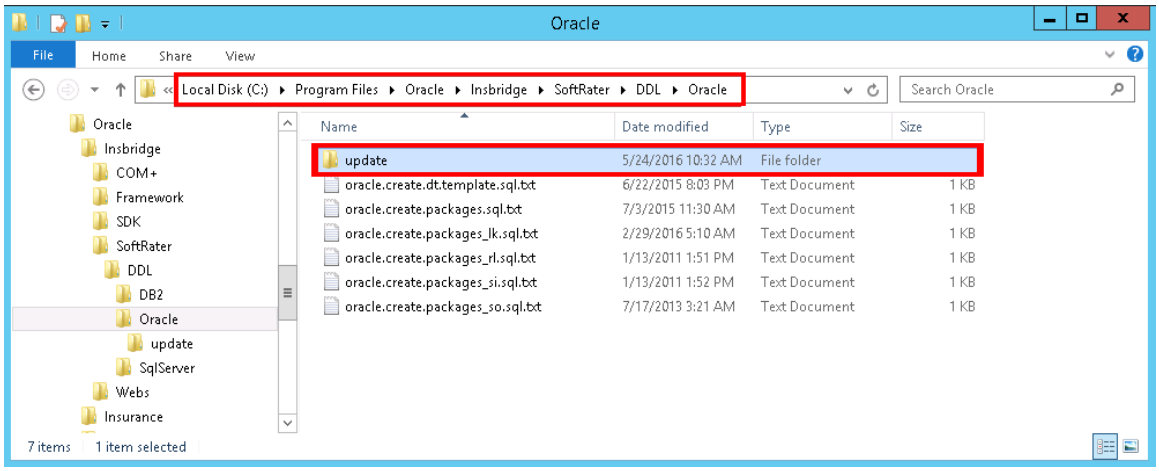


Figure 53 Location of Database Update Scripts

STEP 5: REBOOTING THE INSBRIDGE SERVER

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

Chapter 6

INSTALLATION PROCEDURES – UTILIZING AN IBM DB2 DATABASE

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

1. Create a DB2 database.
2. Adding DB2.jar File.
3. Create a WebLogic entry in IBSS.
4. Run the DB2 Client on the machine where the Insbridge system was installed.
5. Create a WebLogic entry in IBFA

Required DB2.Jar File

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

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/DDL folder. I.e. [INSTALL_DIR]/Insbridge/SoftRater/DDL.
      - You will have to replace the TABLESPACE name in the scripts with the tablespace name you used when you created the database.
      - On the DT tables, you will need to create one for every 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 DB2 database, you will 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/DDL folder. I.e. [INSTALL_DIR]/Insbridge/SoftRater/DDL.

db2.create.dt.template.sql.txt
db2.create.packages.sql.txt
db2.create.packages_lk.sql.txt
db2.create.packages_rl.sql.txt
db2.create.packages_si.sql.txt
db2.create.packages_so.sql.txt

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

STEP 2: ADDING DB2.JAR FILE

In order to establish a connection to DB2, the jar file **db2jcc** needs to be added to as a library. The required DB2.jar file is not a part of the Insbridge application installation.

Steps to Add the DB2. Jar as a library:

1. Download the db2jcc.jar file from http://www.java2s.com/Code/Jar/d/Downloaddb2jccjar.htm
2. Save the db2jcc.jar file to some location in your machine, for example *<db2_location>.*
3. On the deployments page, click Install.
4. Find the location where the db2jcc.jar file is located.
5. Select the file. Click Next.
6. Deploy as a library.
7. Click Finish. The db2jcc.jar file will be listed as a library on the deployment screen.

STEP 3: SETTING UP A WEBLOGIC 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 WebLogic resides:

http://<ServerName or IP Address>:7001/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.

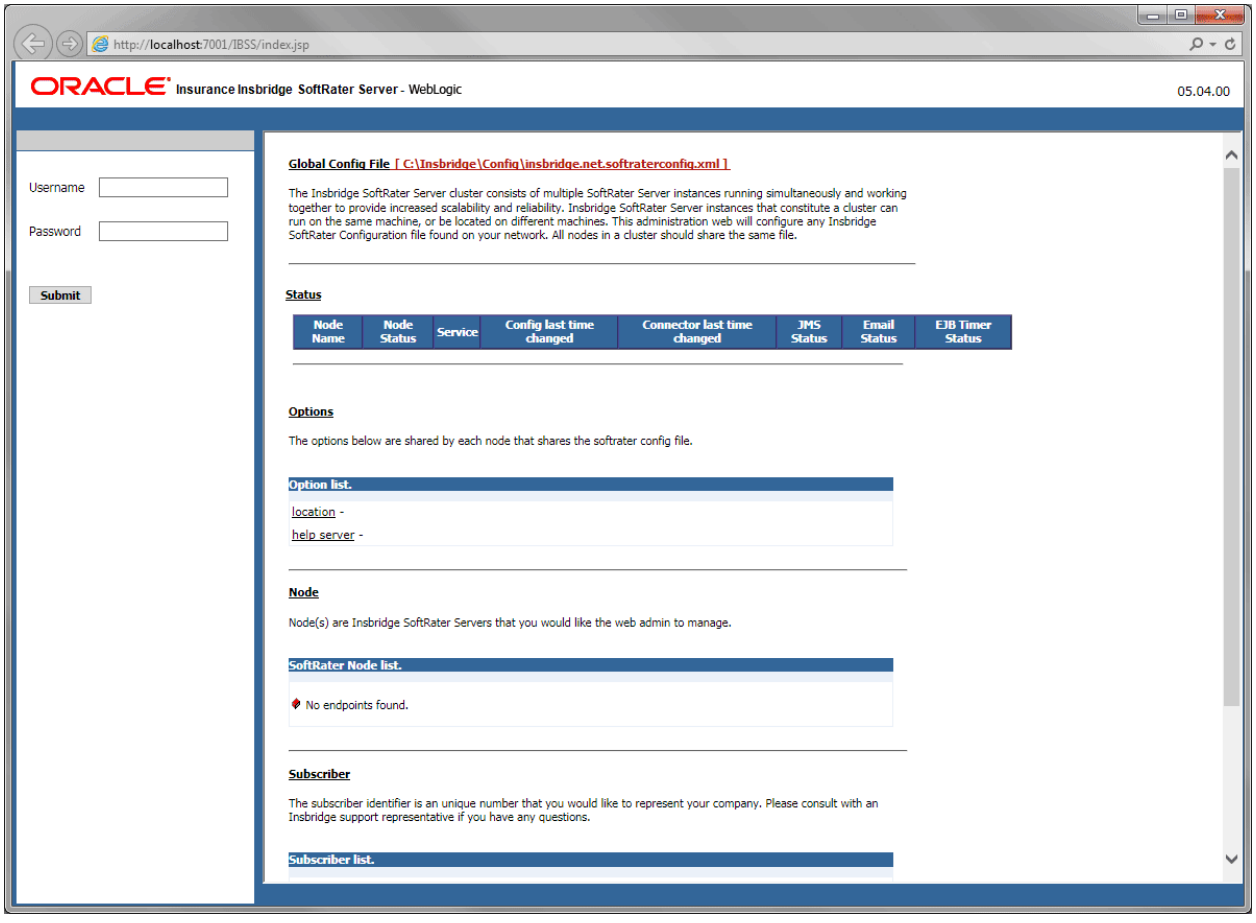


Figure 54 Security Enabled in IBSS

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

A successful log in places you on the Home page.

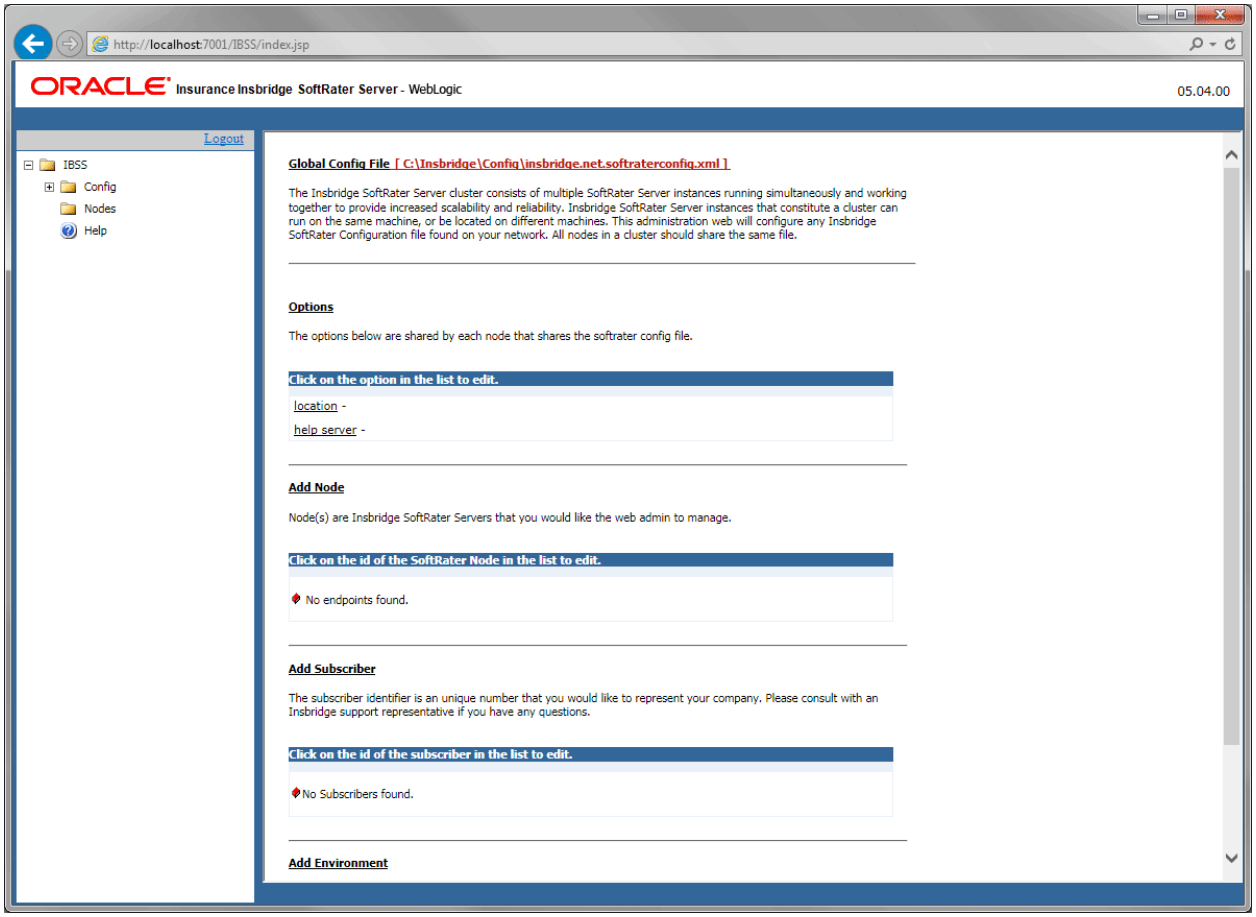


Figure 55 IBSS WebLogic Main Page

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.

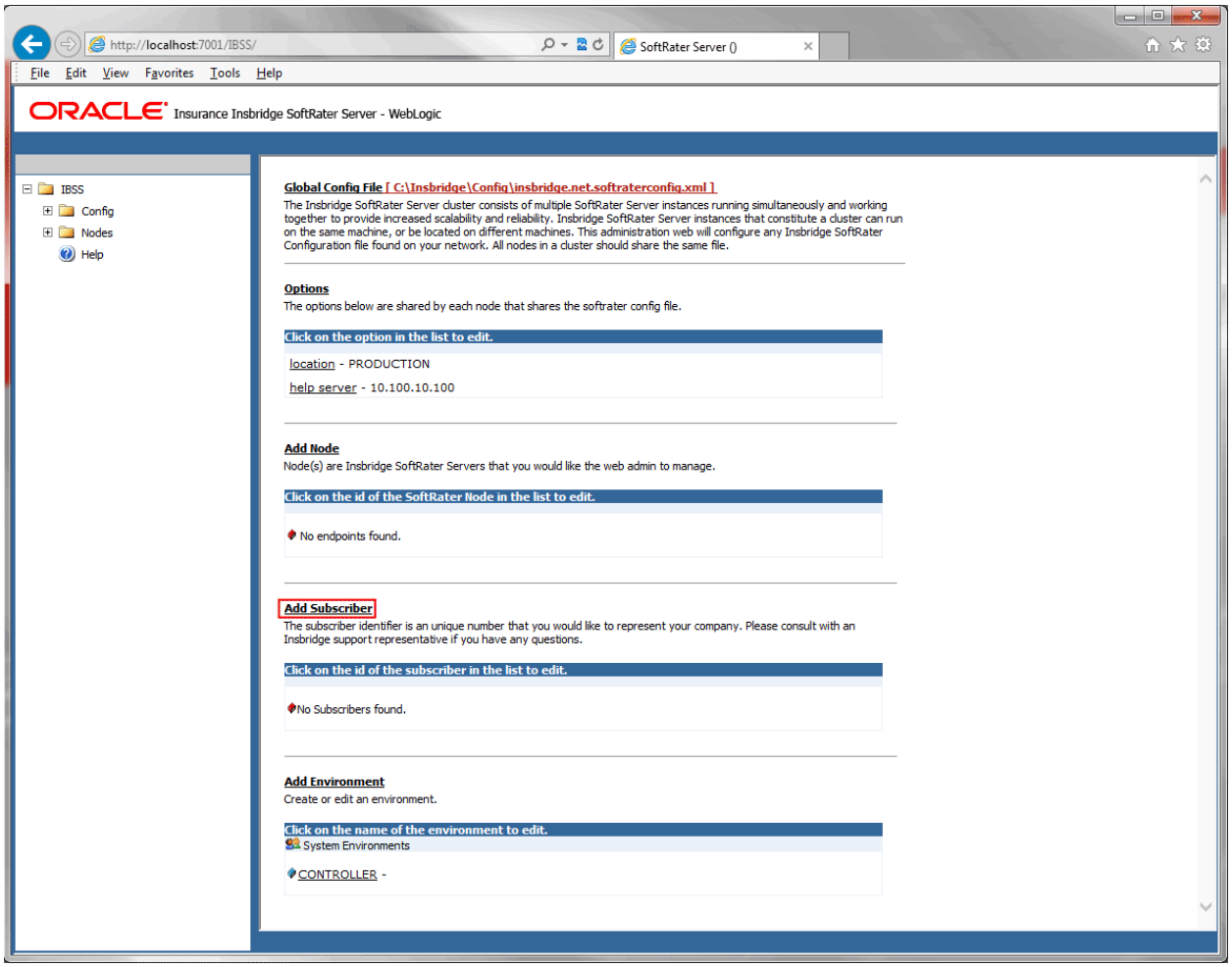


Figure 56 Adding a Subscriber

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

   The Subscriber ID can be a 1-5 digit number and must 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/.

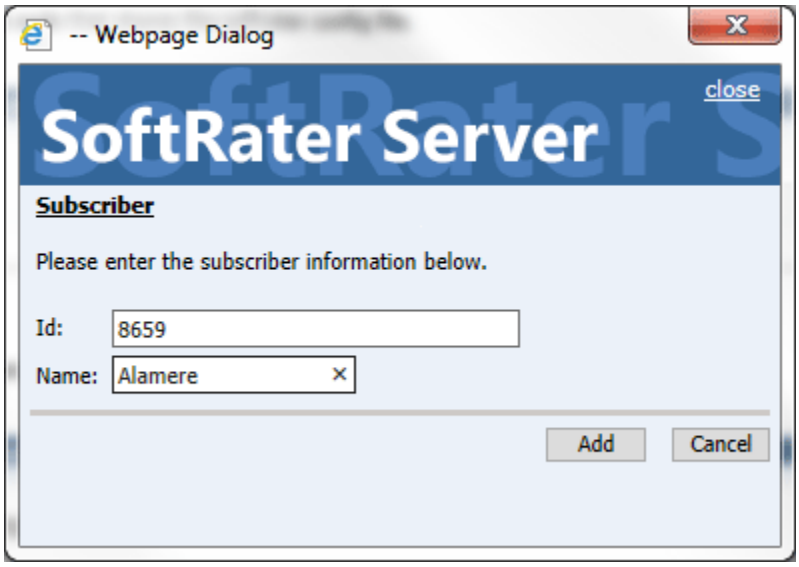


Figure 57 Enter ID

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.

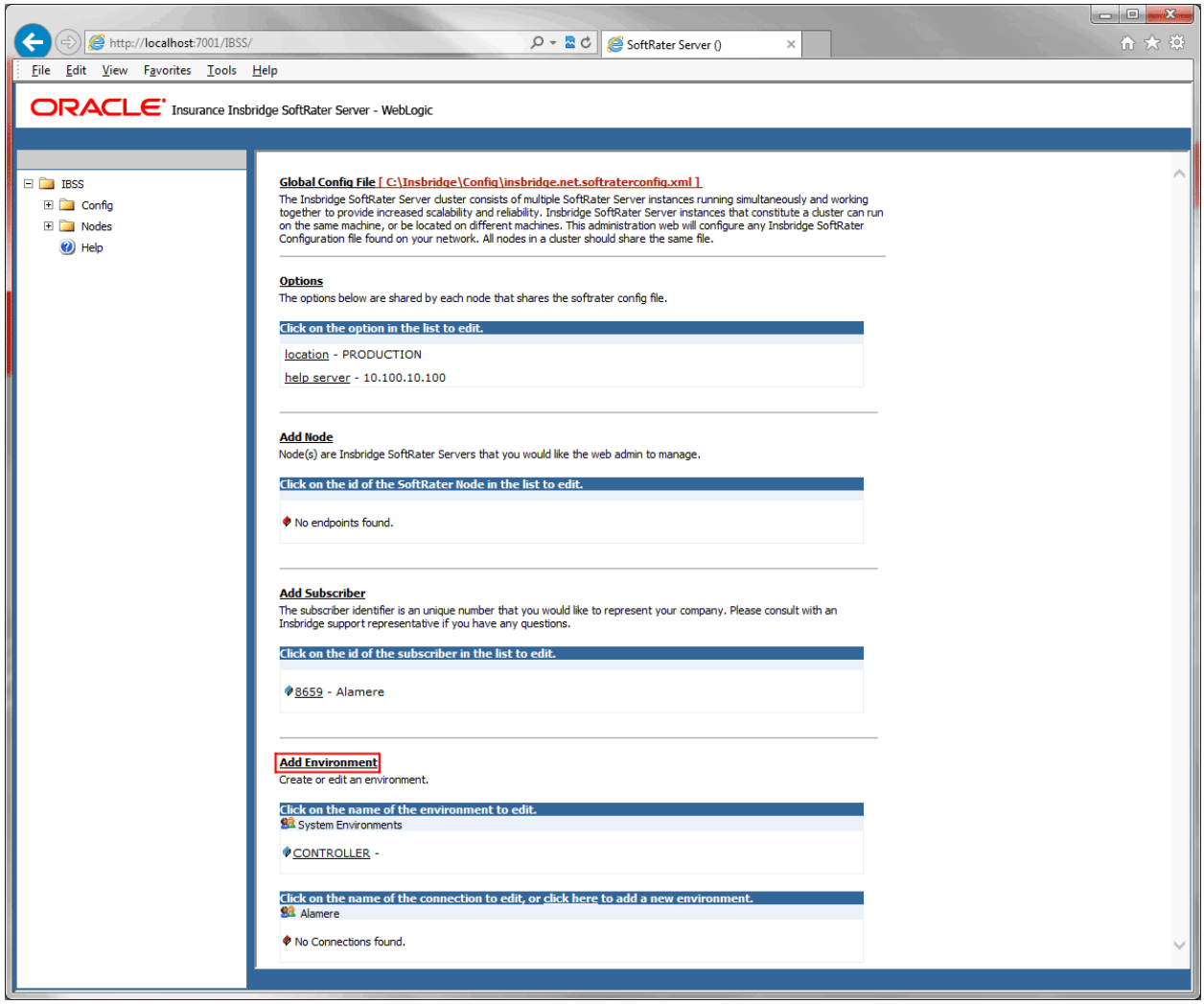


Figure 58 Creating WebLogic Environment

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 59 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**.

Figure 60 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.

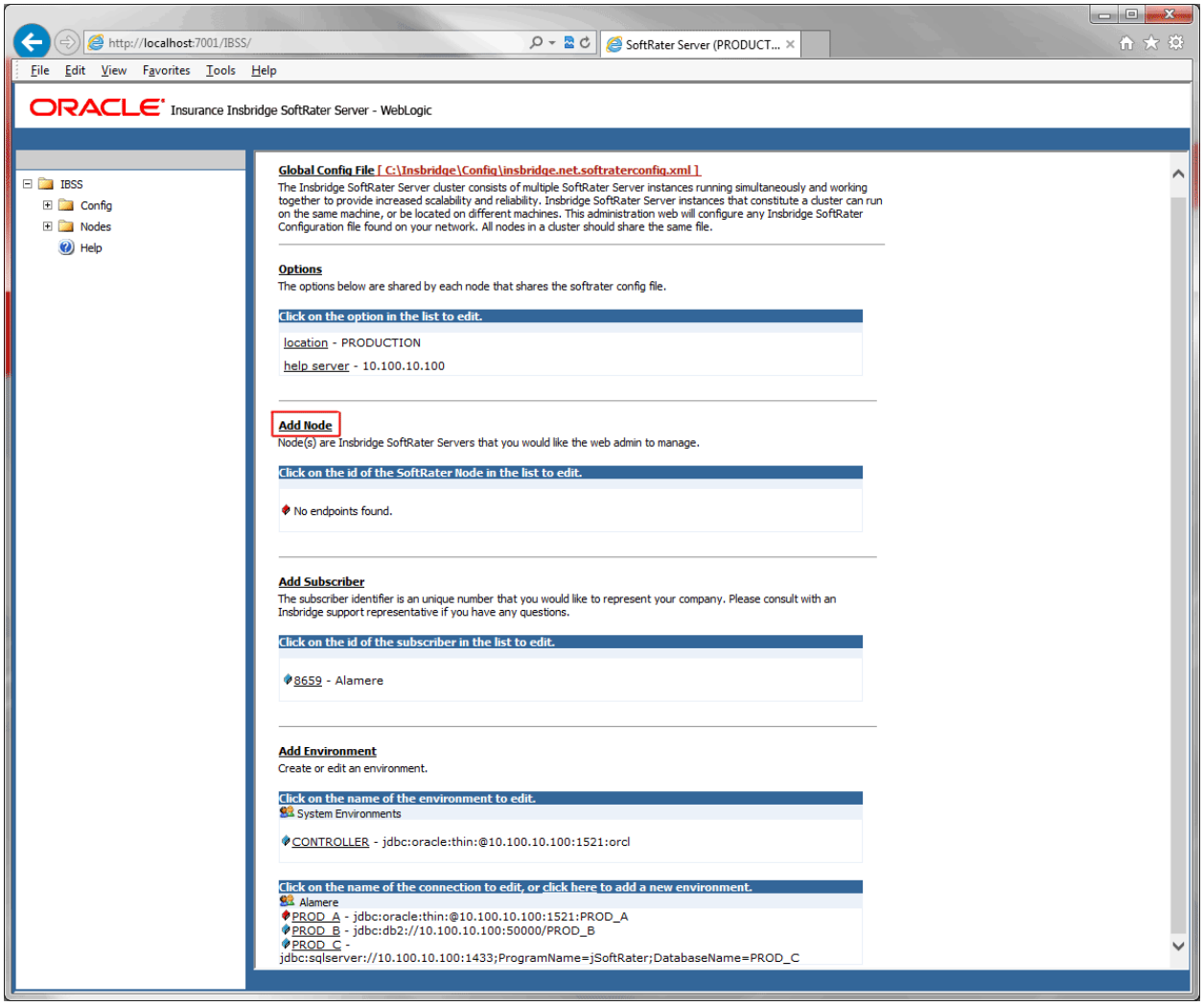


Figure 61 Adding a Node

To create a node, server information is needed:

- **Server OS**
- **Server Name or IP Address**
- **Port Used**
- **Is security enabled (HTTPS)**

1. From the IBSS home page, click the **Add Node** link.

2. This opens the **Add Subscriber** window.

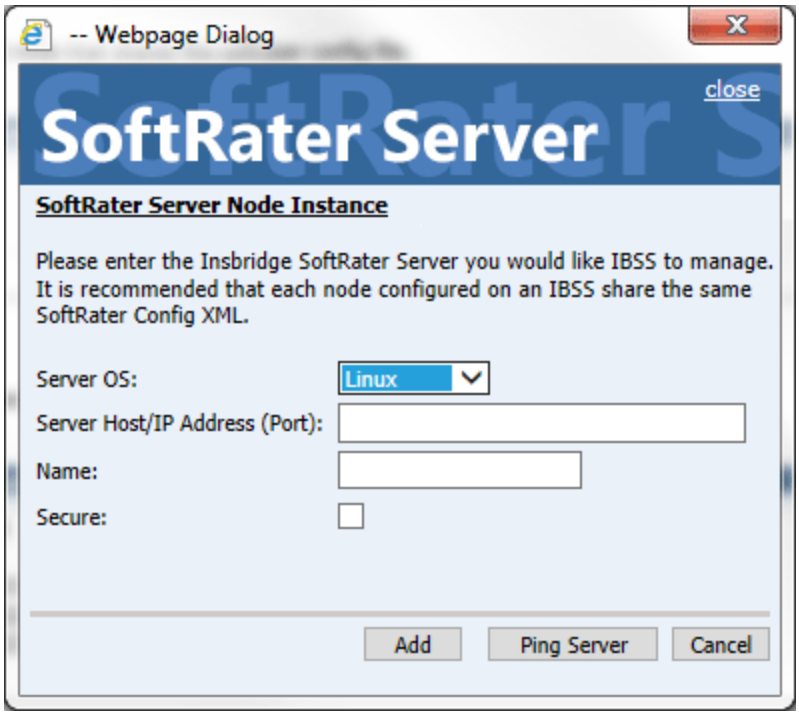


Figure 62 Adding a Node

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. Check if this is a secure environment. A secure environment connects using HTTPS.

7. 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.

8. 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.

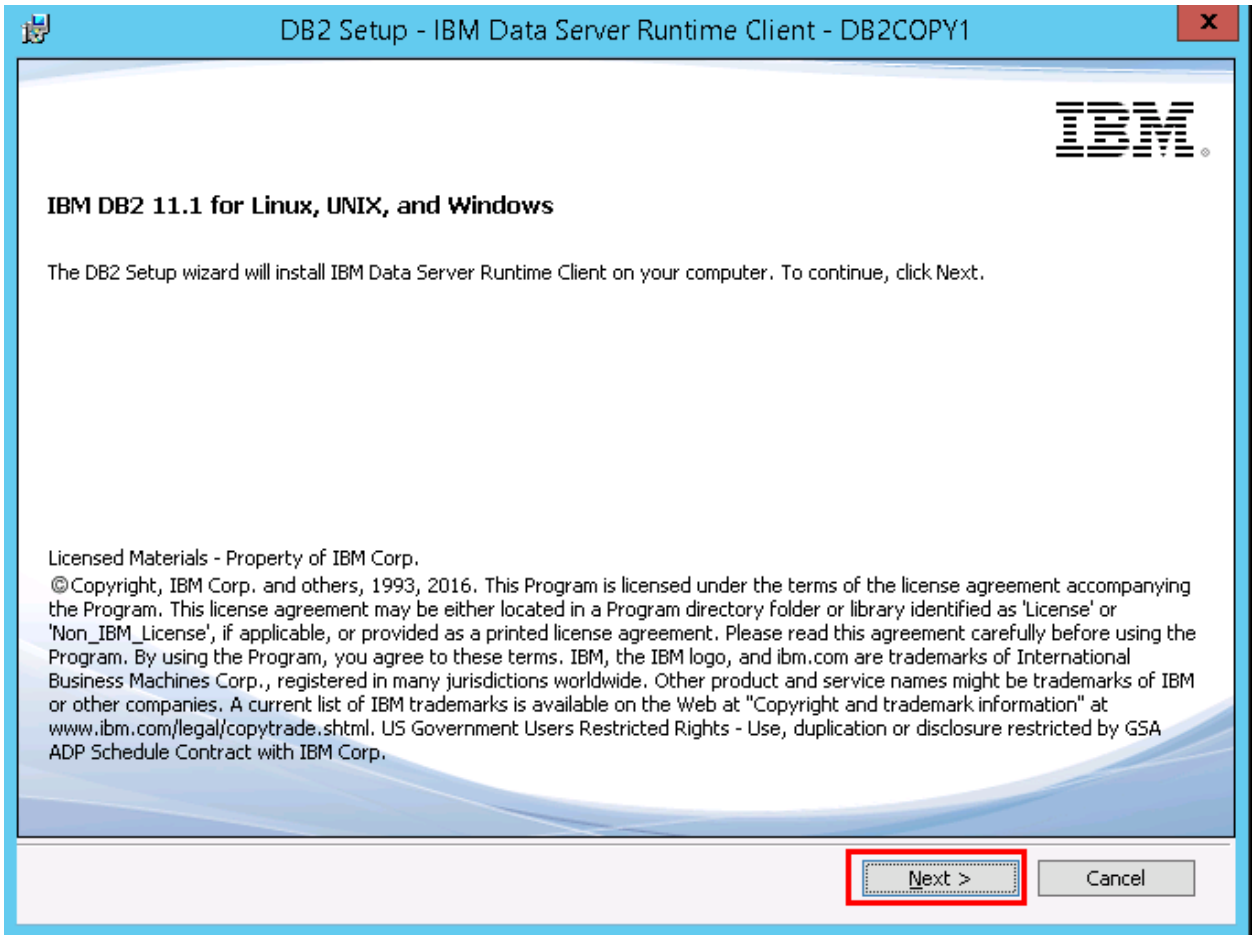


Figure 63 Installing DB2 Client and Fix Pack

2. Click Next for the introduction and terms.

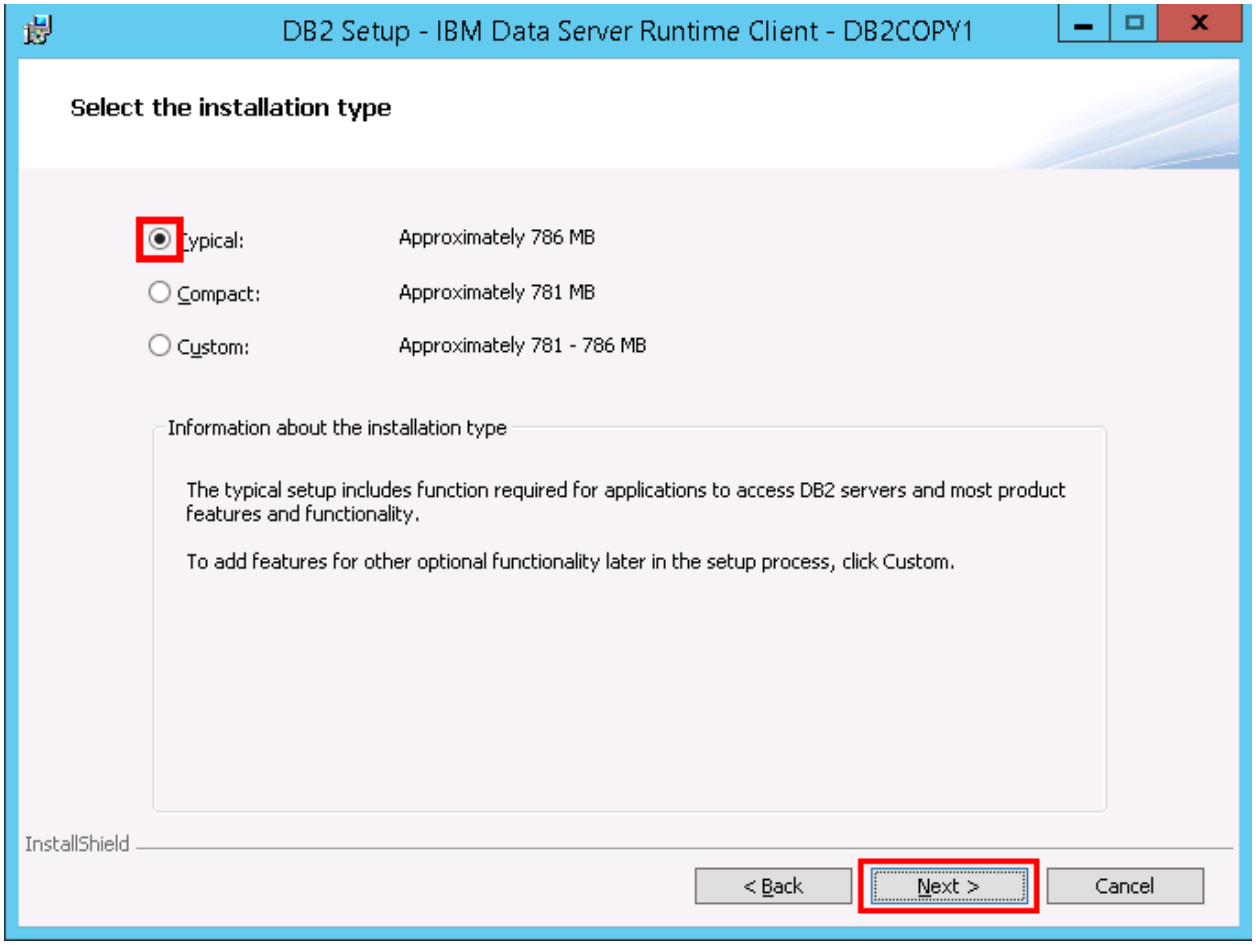


Figure 64 DB2 Client Install

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 WebLogic. 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 Quality Control environment with a type of Quality Assurance.
5. Select the **Environments** link under the Configuration header on the left hand side to enter the configuration information for the newly created logical environment. You will be placed on the Environments screen. The environments you previously setup will be listed. If an environment is missing, you must return to the Configuration subtab and add it.

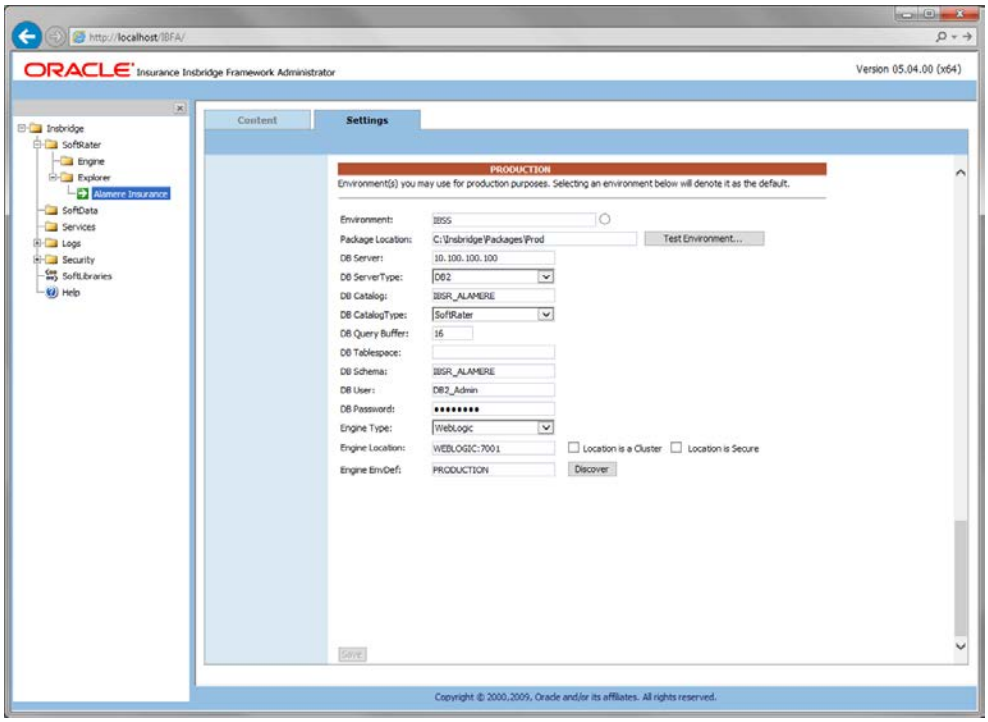


Figure 65 Editing Environment

6. The **Environment Name** will be complete. No changes are needed.

7. Enter in the file path where you want packages stored in the **Package Location**. Use the Test Environment option to have the location created for you.

8. Enter in the **DBServer** name or IP address. This is the database server where the SoftRater database was restored or created.

9. Select the **DB Server Type** that you are using.

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 WebLogic server may have “WBServerName:7001” 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.

I

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

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.

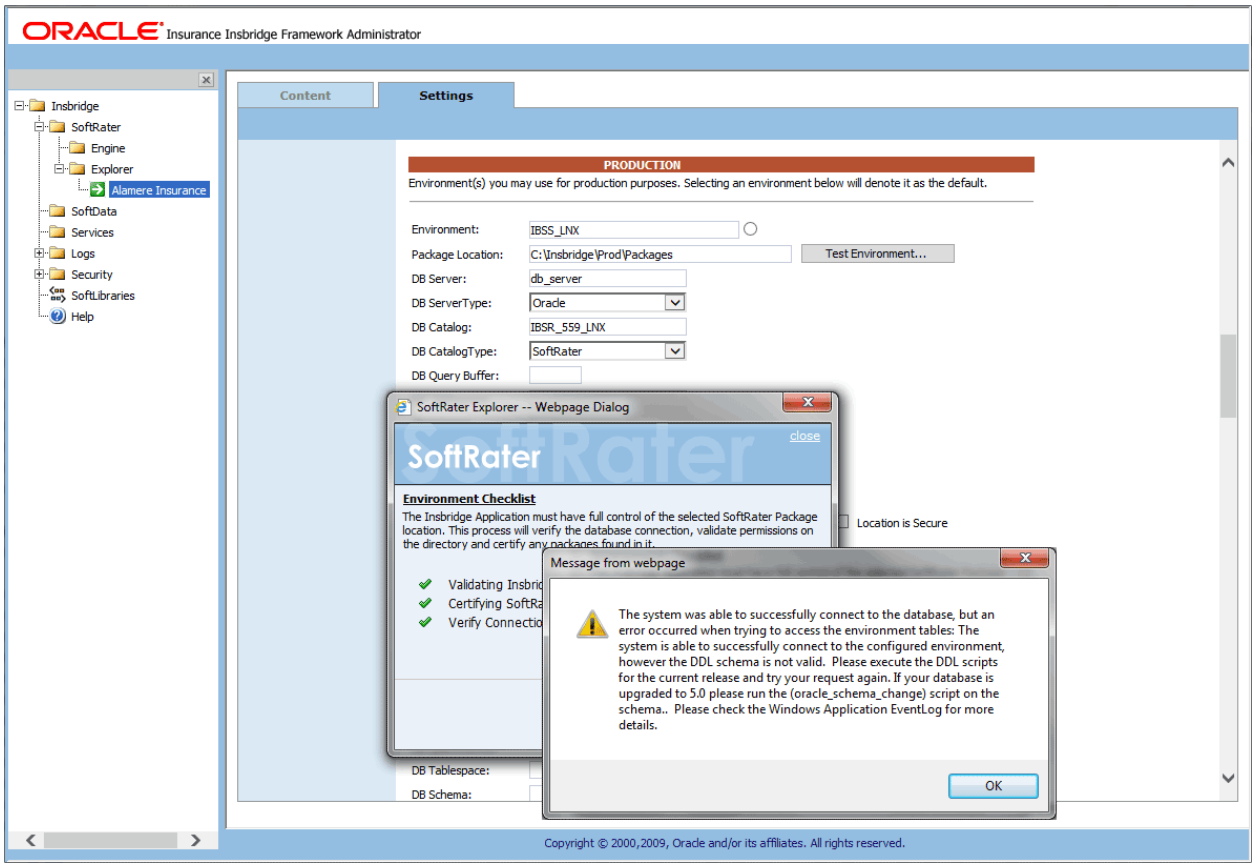


Figure 66 Checking for Database Updates

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:

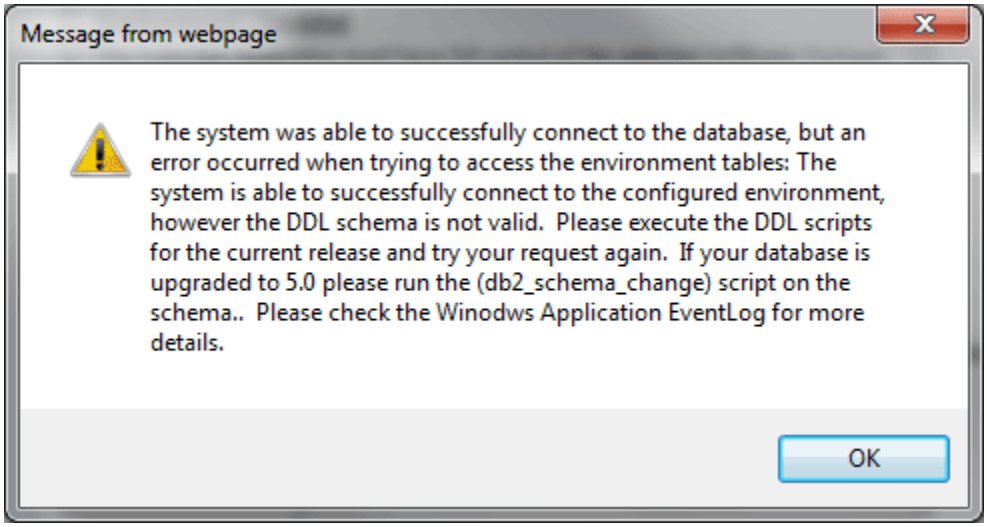


Figure 67 DB2 Database Update Required Message

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

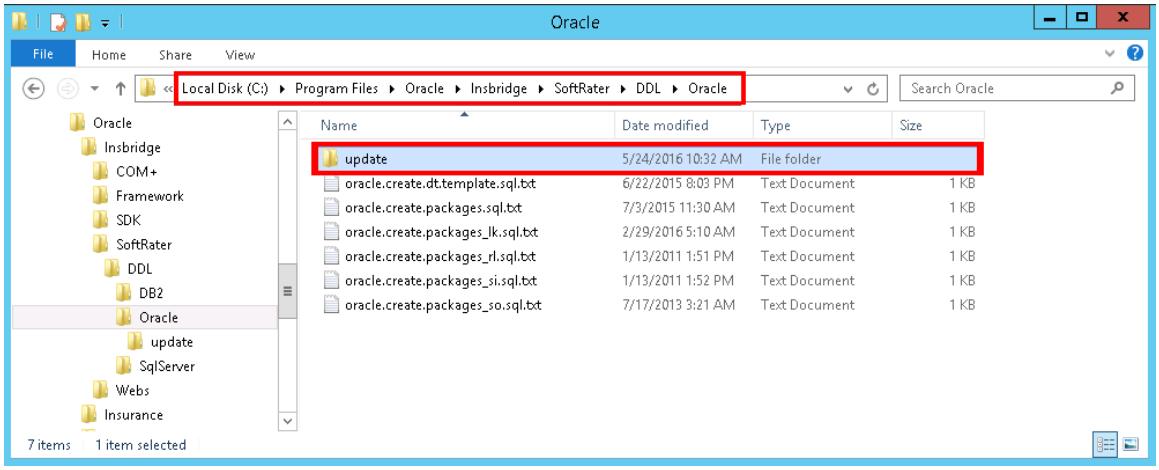


Figure 68 Location of Database Update Scripts

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

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:

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