

# **Oracle Insurance**

# Insbridge Enterprise Rating Using Batch Rating

Release 4.8

August 2014

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Oracle Insurance Insbridge Enterprise Rating Using Batch Rating

Release 4.8.0

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# **CONTENTS**

	PREFACE	. 5
	AUDIENCE	. 5
	RELATED DOCUMENTS	. 5
	CONVENTIONS	. 6
	Manual History	. 6
	BATCH OVERVIEW	. 7
	OPTIONS	. 7
	System Requirements	. 8
	DATABASE USER PERMISSIONS	. 8
	Oracle	. 8
	STEPS TO BE PERFORMED TO ALLOW FOR BATCH	. 9
	CONTROLLER ENVIRONMENT AND BATCH RATING	10
	ORACLE DATABASE UPDATES	11
_		
WEBSPHERE	1	_
	CONFIGURING PROCESS CONFIGURATION DETAILS	
	Troubleshooting	
	UPDATES TO IBSS	31
	CONFIGURING NOTIFICATION	33
WED OCIC		27
WEBLOGIC	CONFIGURING PROCESS CONFIGURATION DETAILS	
	STEPS FOR SETTING UP JMS QUEUE IN WEBLOGIC:	_
	UPDATES TO IBSS	
	CONFIGURING NOTIFICATION.	
	CONFIGURING NOTIFICATION	+0
JBoss		50
	CONFIGURING PROCESS CONFIGURATION DETAILS	50
	UPDATES TO IBSS	55
	CONFIGURING NOTIFICATION	57
Ватсн	(	31
	EXAMPLE STEPS FOR BATCH RATING	61
	Rate Normal: - Synchronous Processing	61
		61
	Rate Synchronous & Add Inputs/Results to DB	O I
	Rate Synchronous & Add Inputs/Results to DBRate Async – Show Items in the Queue	
	·	62
	Rate Async – Show Items in the Queue	62 62

SUPPORT		68
	CONTACTING SUPPORT	
INDEX		69

# **PREFACE**

Welcome to the *Oracle Insurance Insbridge Enterprise Rating Batch*. The Insbridge Enterprise Rating (IBRU) System is a browser-based, multiplatform insurance rating and underwriting technology solution that provides integrated management for every aspect of the rate definition and modification process. This guide assists with the setup of the IBSS component for batch rating.

In previous IBRU releases, batch rating was performed in a Windows environment where multiple XML files were rated at one time with rates returned in a result report. This meant Java users had to have a Windows environment to batch. With release 4.8, Java users now can use their Java production environments to batch including using multiple nodes. Batch rating rates all files in the SoftRater DBRuntime database and batch rates from database to database and not to and from files.

Batch is available for IBSS for WebSphere, IBSS for JBoss and IBSS for WebLogic application servers, but for release 4.8, only Oracle 11g database(s) can be used.

NOTE: For release 4.8, batch is not available for use with Microsoft SQL Server or IBM DB2 databases.

#### **AUDIENCE**

This guide is intended for system administrators, and others tasked with installing and configuring the IBRU system and associated databases.

# RELATED DOCUMENTS

For more information, refer to the following Oracle resources:

- The Oracle Insurance Insbridge Enterprise Rating Operating Environments for Hardware and Software.
- You can view this guide on-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 Version	Publication Date	Comment
1 <sup>st</sup> Edition	P01-794-01	R 4.8	August 2014	Introduced for release 4.8

# **BATCH OVERVIEW**

In previous IBRU releases, batch rating was performed in a Windows environment where multiple XML files were rated at one time with rates returned in a result report. This meant Java users had to have a Windows environment to batch. With release 4.8, Java users now can use their Java production environments to batch including using multiple nodes. Batch rating rates all files in the SoftRater DBRuntime database and batch rates from database to database and not to and from files.

Batch is available for IBSS for WebSphere, IBSS for JBoss and IBSS for WebLogic application servers, but for release 4.8, only Oracle 11g database(s) can be used.

NOTE: For release 4.8, batch is not available for use with Microsoft SQL Server or IBM DB2 database.

#### **OPTIONS**

Batch rating for Java offers multiple options when batching large volumes of policies.

**Option 1 – Transactional Batch.** (Production Option) There are times when you want to rate more than one policy at a time but the files do not exist on disk. Instead, these files exist in memory and you do not want to execute this unit of work serially. Using a configurable option on the SoftRater for Java WebService, you can rate these policies as a batch. We call this a Transactional Batch option. This option uses a configurable "max threads per job" setting via the IBSS.

**Option 2 – SoftRater Async Rating.** (Production Option) This option accepts a rate request via Web Services and processes the rate request asynchronously using JMS. The system created correlation ID returned is used to poll a Web Service for a response from rating.

Option 3 – SoftRater Node Batch Rating. (Development and Production Option) This option is the most familiar batch rating option offered by Insbridge. This option is available in SoftRater for Windows and will now be available (IBRU - 4.8) in SoftRater for Java. Using a configurable "max threads per job" setting via the IBSS, the SoftRater Engine processes a file from disk (or a directory of files /\*.xml) and place the results from rating on disk.

When Batch Rating from RateManager (Development Option), the Insbridge Framework Administrator (IBFA) calls the IBSS via a Web Service.

Option 4 – SoftRater Cluster Batch Rating. (Production Option) When it is essential to process large volumes of records, we suggest you choose the batch enterprise solution to rate your book of business. Unlike the SoftRater Node Batch Rating, which rates files from and to disk, this option utilizes your Oracle 11g (RAC) database as the store for the input files and the result files. After setting up your cluster on the enterprise application server of your choice (WebLogic, WebSphere, or JBoss), you can register each node on your Insbridge SoftRater Server (IBSS). The registered SoftRater Nodes (JVM(s)) can all be on one machine or spread out over multiple machines. This batch option requires that clusters with multiple machines use an NFS mount to point all nodes to a shared IBSS config file. When all nodes are registered (and the config settings shared), the system can now use every node in the cluster to satisfy the job. With the number of servers, threads and jobs being a configurable option, the solution has the ability to scale vertically and horizontally.

Option 5 – Insbridge ISoftServices Batch Execution. (Production Option) An IBSS SoftLibrary can now be executed as a job using SoftRater Batch. If there is a nightly process that you would like to run using a custom library, the SoftRater Batch for Java can make a call to any SoftLibrary configured as (JNDI

Lookup) library on the IBSS. This job can override the max number of threads, but the thread size cannot be higher than the maximum thread size configured on the IBSS Cluster.

# **System Requirements**

Administrators should be familiar with managing application servers and working with Domains.

- Access to the server where IBSS has been installed.
- Permissions to update files.
- Access to the server where the application server resides.

# **DATABASE USER 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.

Insbridge SoftRater Oracle Database.

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

It is recommended that the databases be on separate machines from the applications due to performance and security issues. The IBER applications and databases can be tenants in a larger setup.

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.

#### Oracle

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

#### **JDBC Driver Class**

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

Supported Versions – 10g, 11g

#### **User Account Requirements**

Create Table Create Index

# STEPS TO BE PERFORMED TO ALLOW FOR BATCH

There are multiple areas that require setup to allow for batch.

#### In Oracle Database:

- Update scripts must be run against an existing database or a new database can be created
  exclusively for batch. The update scripts add the required tables that allow for data to be stored in
  the database.
- A DBRuntime database for every schema you want to add DBruntime tables to.
- If you want to add results to a database, then you must run the DBruntime scripts.

#### In IBSS:

- A controller Oracle Database must be added. You can use a one controller to many DBruntime configuration.
- Email must be configured to accept and send success and failure messages.
- JMS properties must be entered.

#### In the Application Server:

The application server being used also has a setup.

- WebSphere:
  - Setup JMS Queue by creating:
    - Bus and Members
    - Destination
    - Queue Connection Factory
- WebLogic -
  - Setup JMS Queue by creating:
    - JMS Server
    - JMS Module
    - Subdeployments
    - Connection Factory
    - JMS Queue
- JBoss -
  - Setup JMS Queue by creating:
    - JMS Queue
    - Connection Factory

# CONTROLLER ENVIRONMENT AND BATCH RATING

Batch rating requires a Controller environment entry. The controller manages the requests from the system. This is not the controller used by the IBFA. For release 4.8, only Oracle database connections can be used.

#### Controller

The Controller environment is a SoftRater database. This can be a standalone database, used strictly for managing batch ratings, or it can be a shared SoftRater database. If the Controller environment is shared, an entry must be made as a regular environment as well.



No data directory is used for a Controller environment. The Controller environment cannot be default.

The controller connection must be on the same database server as the customer that you are running. The Subscriber will need to look at the controller. The controller connection handles the tasks and the services and logs.

When you batch rate from the database to the database, it must all be Oracle. The schemas can be different but it must be the same database. The controller must be Oracle.

# **ORACLE DATABASE UPDATES**

Log into databse as sysdba and create the user Controller. Then login as Controller and run the scripts.

- 1) Database Installation Requirements:
  - a. The Oracle 11G release 2 database instance must be up and running. This database does not have to be on the same system where you will execute the database schema scripts.
  - b. SQL Developer or equivalent tool for executing Oracle PL/SQL. The tool must be able to connect and authenticate with the appropriate user on the Oracle 11G release 2 database instance.
  - c. File system access to the provided installation SQL files:IBSS48B20.sql.
  - d. An Insbridge Oracle Database User satisfying the requirements specified in this document.
- 2) Insbridge Oracle Database User Requirements:
  - a. Password Authentication on the appropriate Oracle database
  - b. Be granted the CONNECT role
  - c. Be granted the RESOURCE role
  - d. Be granted the CREATE ANY VIEW system privilege
  - e. Must have sufficient or QUOTA UNLIMITED on the user's default tablespace, or the UNLIMITED TABLESPACE system privilege
- 3) Database Schema Creation steps:
  - a. If the target of this installation is an existing user/schema then perform a complete database backup.

**NOTE:** Proceeding without a database recovery method for an existing user/schema is not recommended.

- b. Connect to the chosen database using the appropriate user.
- c. Locate and execute the file IBSS48B20.sql.
- d. If no errors are logged then continue to the next step, otherwise proceed to Error handling.

#### **Error Handling**

- e. Evaluate any errors.
- f. Correct the errors where possible.
- g. If all errors are correctable then proceed to Error Recovery.

#### **Error Recovery**

Since the Database User's schema has been left in an unknown state, follow these recovery steps:

- h. Restore the database to a state prior to this installation.
- i. Ensure that the Oracle Database User satisfies the Insbridge Database User Requirements portion of this document.

**NOTE:** Prior Insbridge user installation did not require the CREATE ANY VIEW system privilege. *Confirm that this system privilege requirement is met.* 

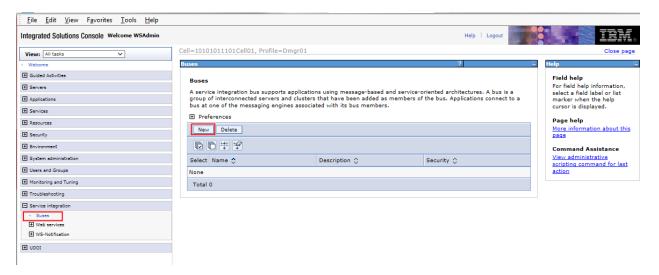
j. Start the Database Schema Creation process over and repeat this process until all correctable errors have been cleared

# **CONFIGURING PROCESS CONFIGURATION DETAILS**

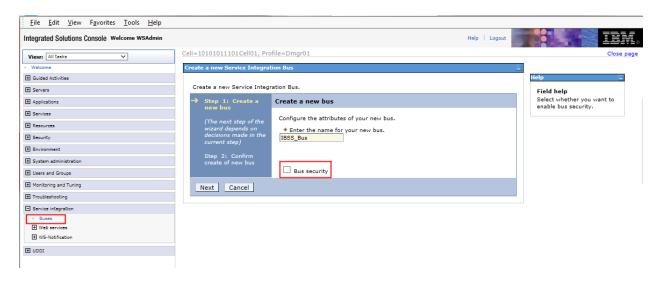
The first step is setting up a JMS Queue. In order to create a JMS Queue in WebSphere, Bus and members, a Destination, and a Queue Destination Factory must be created.

#### **Create Bus and Members:**

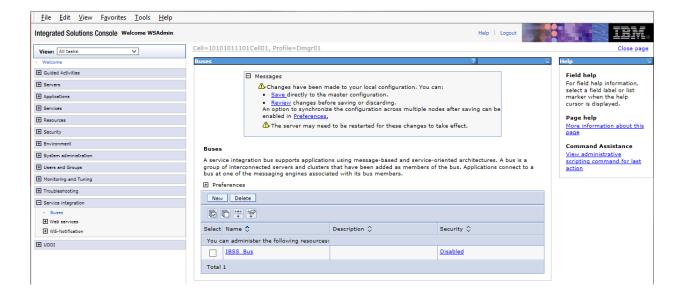
1. Navigate to Service integration > Buses



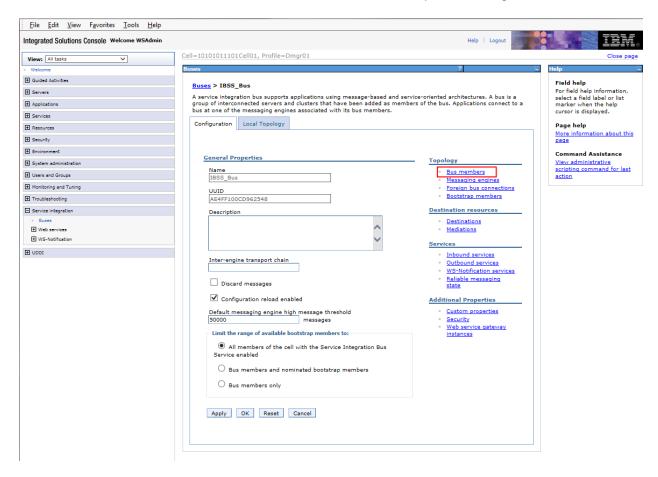
- 2. Click **New**. A separate screen is displayed.
- 3. Enter a Bus name of your choice, for example IBSS\_Bus. Do not check the Security, it is not required.



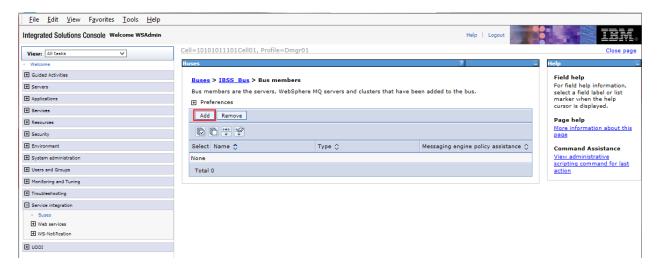
4. Click Next and Finish.



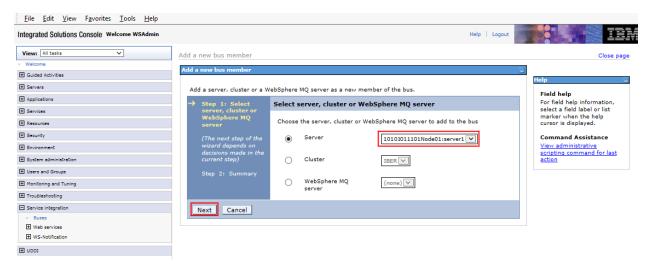
- 5. Save the Changes.
- 6. Bus members must be entered next. Click the Bus name to open the configuration screen.



7. Click on the Bus members. A separate screen is displayed.



8. Click Add. A separate screen is displayed.

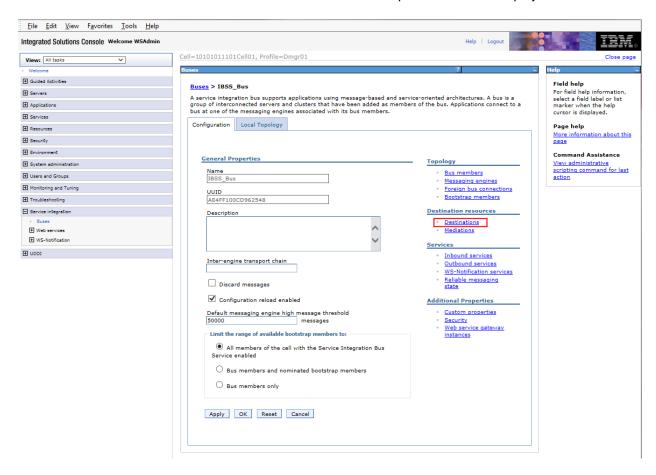


- 9. Select the server where you want to add the bus and click **Next**.
- 10. Leave all the values as default in the steps that follow.
- 11. On the Summary screen, click Finish.
- 12. Save the changes.

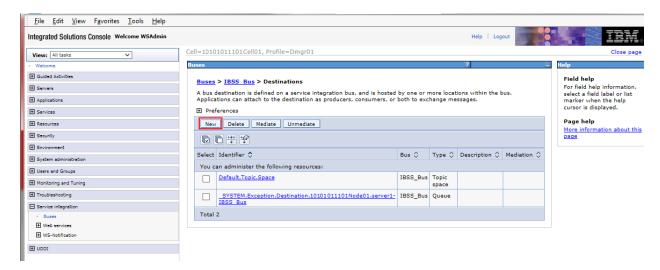
#### **Create Destination:**

A JMS Destination is created next. There should always be a destination Queue for every JMS queue.

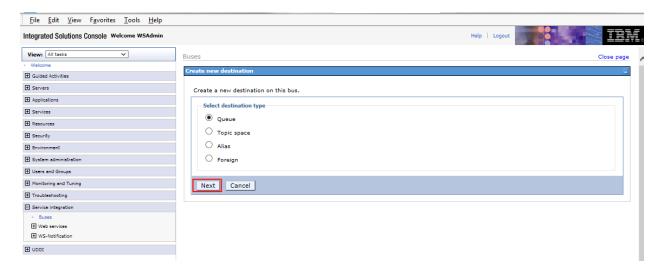
- 1. Click the Bus name to open the configuration screen.
- 2. Click on Destinations under Destination Resources. A separate screen is displayed.



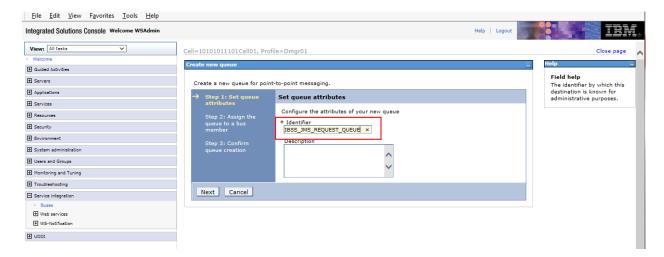
3. On the Destination Screen, click New.



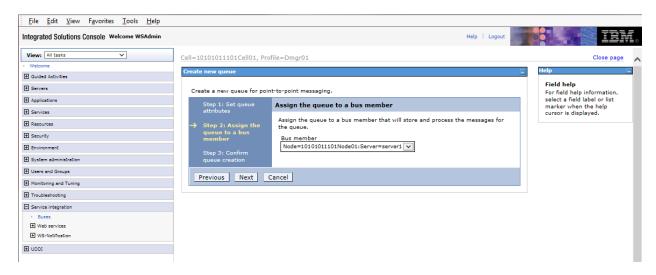
4. Select Destination Type -> Queue and click Next.



Enter IBSS\_JMS\_RESPONSE\_QUEUE for the Destination in the Identifier field and click Next.



6. Select the Bus Member that was created earlier from the dropdown and click Next.



- 7. Click Finish.
- 8. Back on the Destination Screen, click New. A gueue must be created for reply.
- 9. Select Destination Type -> Queue and click Next.
- 10. Enter IBSS JMS REPLYTO QUEUE for the Destination in the Identifier field and click Next.
- 11. Select the Bus Member that was created earlier from the dropdown and click Next.
- 12. Click Finish.
- 13. Save the changes.

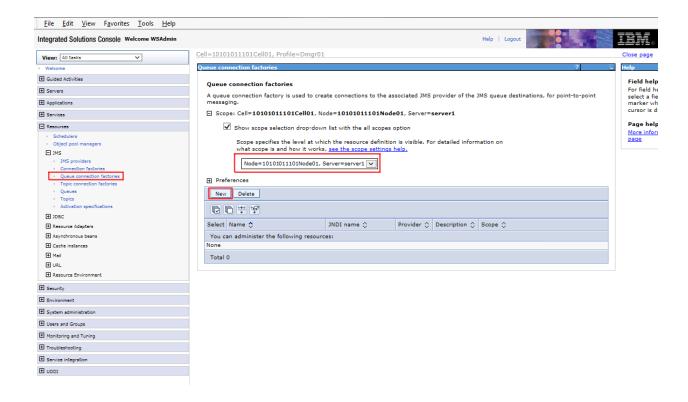
The two IBSS Queue Destinations should be listed.

#### **Create Queue Connection Factory:**

- 1. Navigate to Resources -> JMS -> Queue connection factories.
- 2. On the Queue Connection factories screen, select the Server that was used in the creation of the bus member.

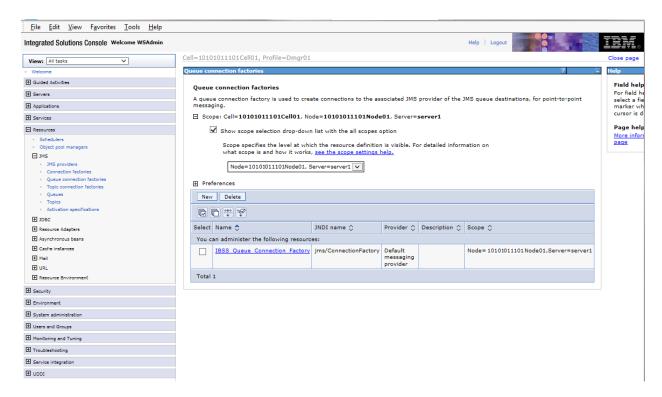
**NOTE:** If the application is to be deployed to a cluster, select the 'Node' in the dropdown when creating a Queue Connection Factory.

A Queue Connection Factory should be created for a server per node in the cluster in order for the Queue Connection Factory to be available across the cluster. By creating it in the Node level, the Queue Connection Factory will be shared across all the other Nodes in the Cluster.



3. Click New. A separate screen is displayed.

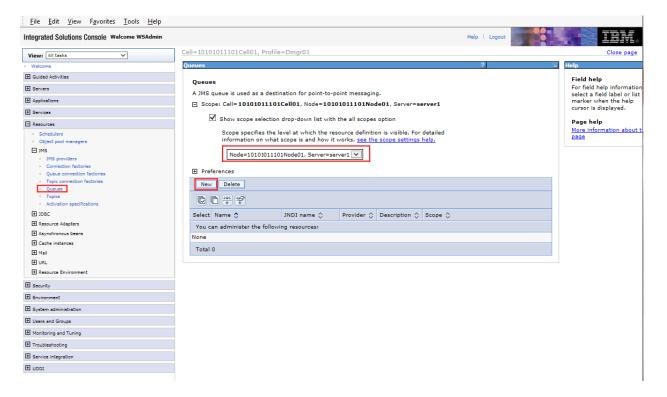
4. Select **Default Messaging Provider** and click OK. On the Queue Connection Factories screen, the new connection will be listed.



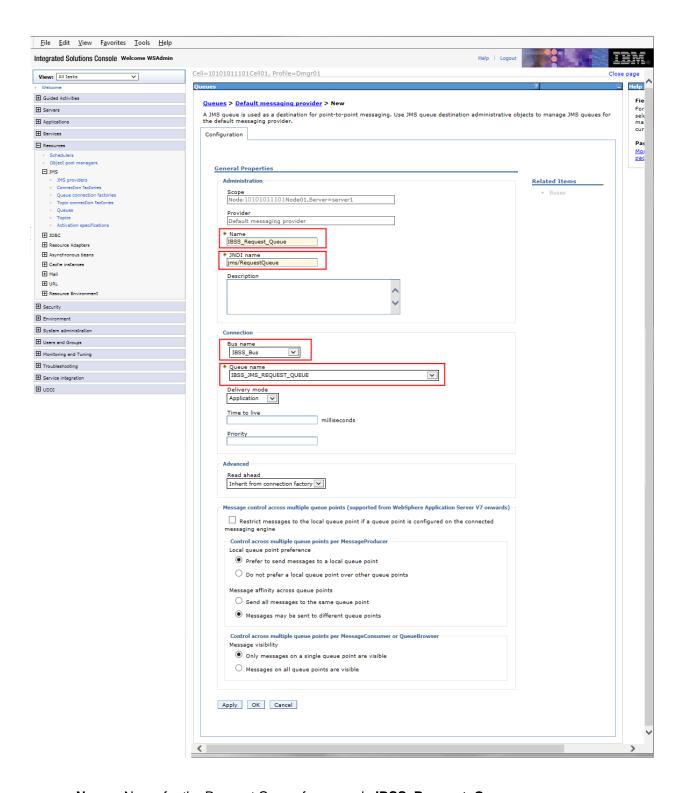
## **Creating Queues:**

After creating Queue Connection Factory, there are two queues that need to be created.

- Request Queue
- ReplyToQueue
- 1. Navigate to Resources -> JMS -> Queues.
- 2. On the Queues screen, select the Server that was used in the creation of the Queue Connection Factory.



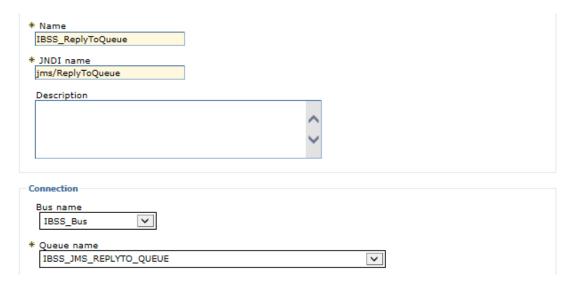
- 3. Click New. A separate screen is displayed.
- 4. Select Default messaging provider and click OK.
- 5. On the Configuration Screen, enter the details of the gueue.



- Name Name for the Request Queue for example IBSS\_Request\_Queue
- JNDI Name jms/RequestQueue. The exactJNDI Name should be same as entered here.
- Bus name Select the Bus name that was used for the Queue Connection.
- Queue name Select the destination that was created for the Queue Connection Factory.

The rest of the fields can be left to defaults.

- 6. Click Apply.
- 7. **Save** the changes.
- 8. Repeat the same steps for creating a **jms/ReplyToQueue**, with the values:

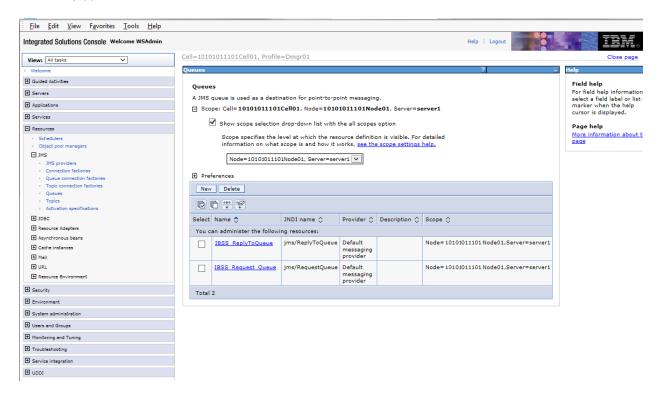


- Name Name for the Request Queue for example IBSS\_ReplyToQueue
- JNDI Name jms/ReplyToQueue. The exactJNDI Name should be same as entered here.
- Bus name Select the Bus name that was used for the Queue Connection.
- Queue name Select the destination that was created for the Queue Connection Factory.

The rest of the fields can be left to defaults.

- 9. Click Apply.
- 10. Save the changes.

11. After successfully creating the Request Queue and the Reply to Queue, the Queues list will be listed.



# **Troubleshooting**

If you encounter issues while deploying the .EAR file you may want to try these measures to correct the problem.

# **Increase WebSphere JVM Memory:**

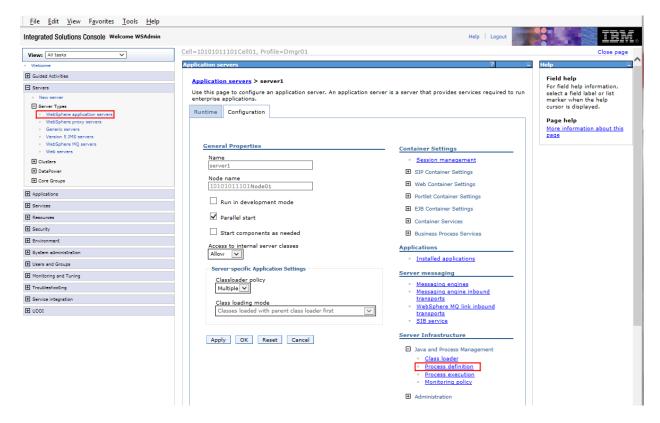
The default WebSphere's Java Virtual Machine memory may not be enough. To avoid a "java.lang.OutOfMemory" exception, the JVM memory can be expanded on the WebSphere Application Server.

**Note:** Before modifying the heap size, ensure that the system has enough physical memory to support a Java Virtual Machine (JVM). The recommendation is for 1024 for "Initial heap size" and 2048 for "Maximum heap size."

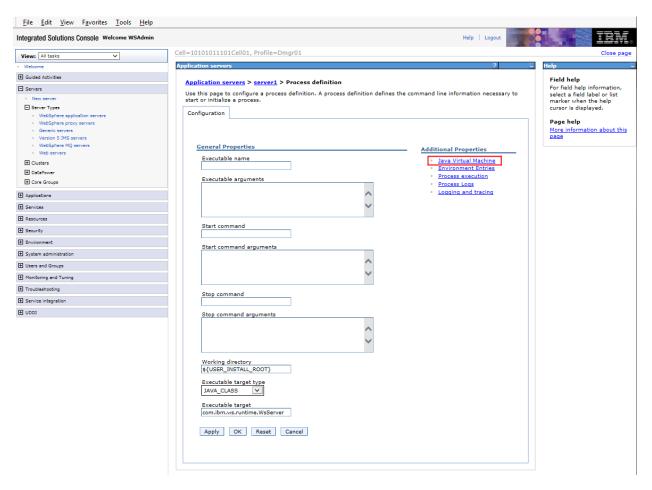
#### For Application Server:

On WebSphere web console, select Servers -> Server Types -> WebSphere application servers -> YOUR SERVER -> Java and Process Management -> Process definition.

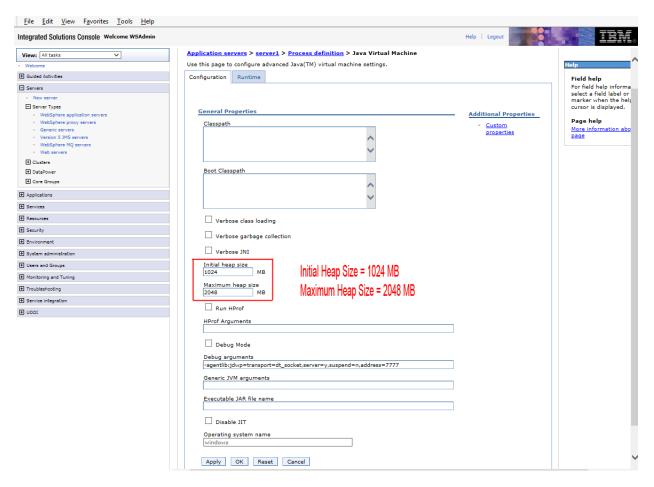
Java and Process Management is an expandable side menu.



2. In the Additional Properties section, select Java Virtual Machine



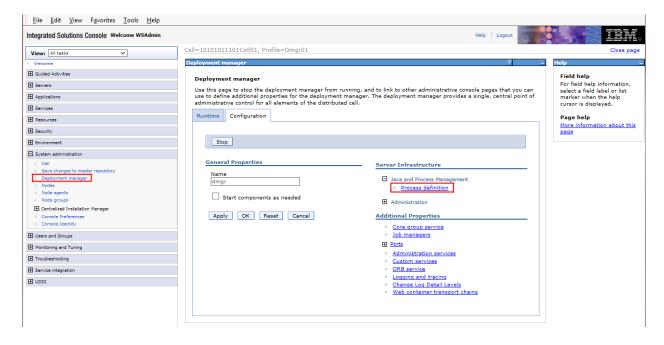
3. In General Properties section, enter **1024** for "Initial heap size" and **2048** for "Maximum heap size".



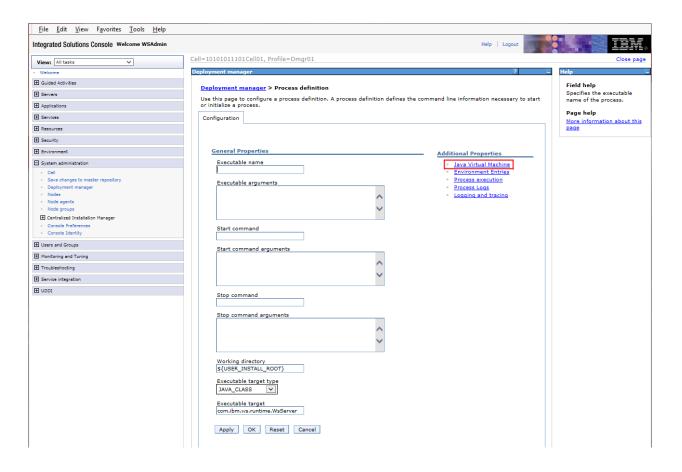
- 4. Click Apply and OK.
- 5. Make the same changes in all the servers that are a part of the cluster in which the application is to be deployed.
- 6. When completed, restart the WebSphere service.

## For Deployment Manager:

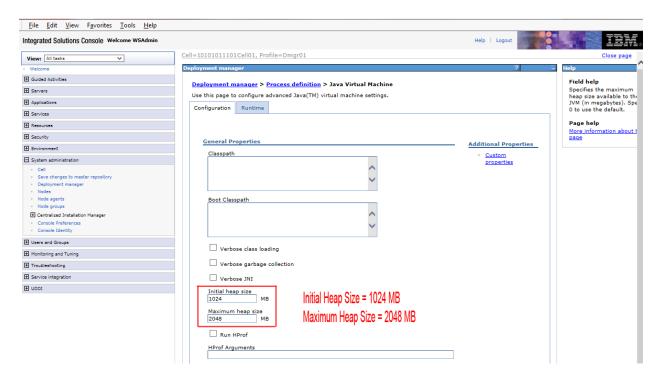
1. On WebSphere web console, select System administration -> Deployment manager -> Java and Process Management -> Process definition.



2. In Additional Properties section, select Java Virtual Machine.



3. In General Properties section, enter **1024** for "Initial heap size" and **2048** for "Maximum heap size".



- 4. Click Apply and OK.
- 5. Save the configuration changes.
- 6. When complete, restart the Deployment Manager.

#### WebSphere Temp Directory Clean Up:

When upgrading from a previous version, the contents from **temp** directory and **wstemp** directory under the AppServer folder in WebSphere should be deleted before installing the application in WebSphere. This is to avoid any conflicts that may exist between any cached WSDL and the Service Endpoint Interface of the Webservice classes in the application.

You must have access to the server where WebSphere has been installed.

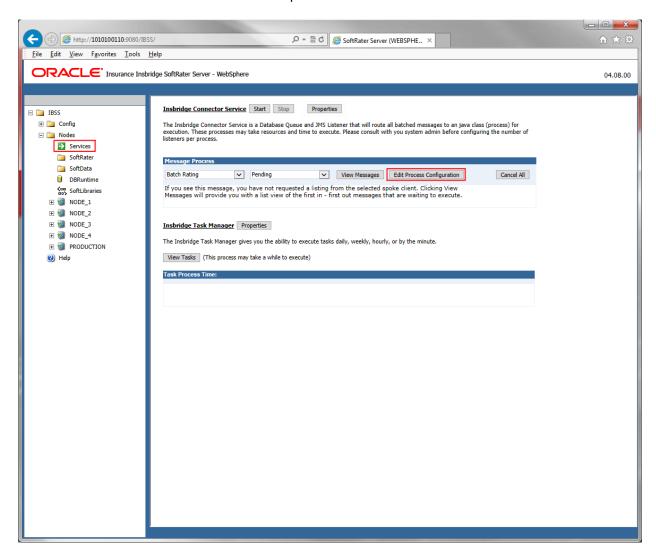
- 1. On the server where WebSphere was installed locate: **WAS\_HOME=<Websphere Installed Directory>\WebSphere\AppServer**.
- 2. Remove the contents from the following directories:
  - i. <WAS\_HOME>\profiles\temp
  - ii. <WAS\_HOME>\profiles\wstemp
- 3. A make sure no cached content is used, restart the server. Otherwise, start the DeploymentManager/CellManager, NodeManager and the required Servers of WebSphere.
- 4. The new IBSS .EAR file can be deployed.

NOTE: If you are not installing a new IBSS .EAR file, you do not need to clear the temp files.

# **UPDATES TO IBSS**

Open the IBSS application screen.

1. Locate the Services screen under the Nodes options. IBSS > Nodes > Services.



- 2. Click Edit Process Configuration. A separate screen is displayed.
- 3. Enter values for the Insbridge Connector Service.



4. Click Save.

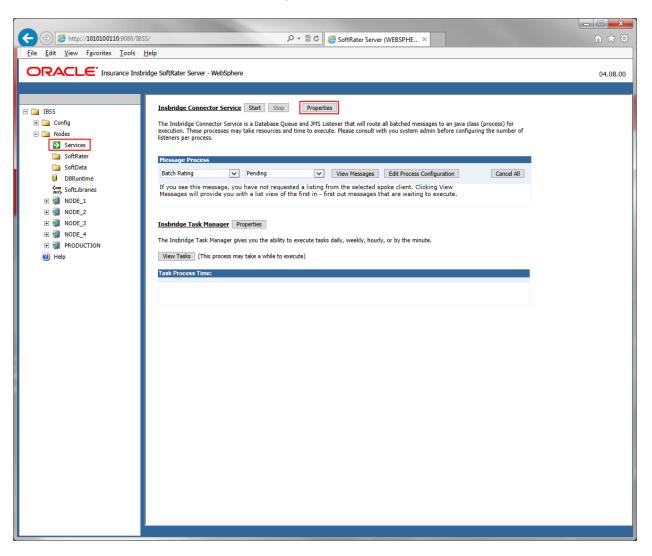
# **CONFIGURING NOTIFICATION**

Notification details need to be configured in order to receive the email response for successful/failed transactions.

## **Configuring Email on IBSS:**

Open the IBSS application screen.

1. Locate the Services screen under the Nodes options. IBSS > Nodes > Services.



- 2. Click Properties. A separate screen is displayed.
- 3. Enter values for the Insbridge Connector Service.



- Protocol SMTP or SMTPS
- Host email host
- Port port used
- User Login id
- Password Password

#### 4. Click Save.

You can use the Test Connector Properties! Options to verify your entry.

#### **Configuring Queue Entries in IBSS:**

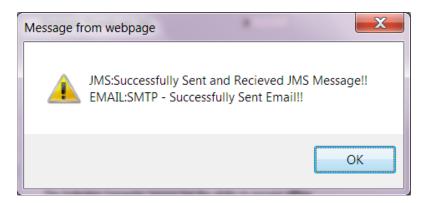
JMS must be setup prior to entering queue details. Stay on the Connector Properties.



- 1. All fields are required in order to configure queues:
  - Queue Location JNDI Name of the Request Queue
  - ReplyTo Location JNDI Name of the Reply To Queue
  - Connection Factory JNDI Name of the Queue Connection Factory
  - Context Factory com.ibm.websphere.naming.WsnInitialContextFactory
  - Provider URL iiop://<machine\_ip\_address>:<server\_bootstrap\_address>

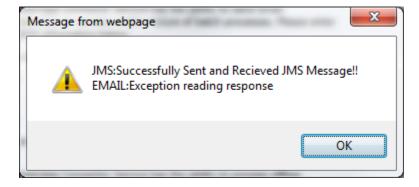
- 2. Click Save
- 3. Click **Test Connector Properties!** to verify your entries.

A successful setup returns a success message.



This message means that the JMS Connection was successful, and a sample mail will be sent to the email id that is configured in the properties.

A message failure indicates where the message failed.



In this example, SMTP server was not available on the server.

## **CONFIGURING PROCESS CONFIGURATION DETAILS**

A JMS queue in WebLogic Server is associated with a number of additional resources:

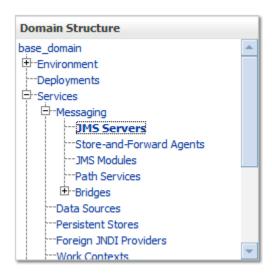
- JMS Server: A JMS server acts as a management container for resources within JMS modules. Some of its responsibilities include the maintenance of persistence and state of messages and subscribers. A JMS server is required in order to create a JMS module.
- JMS Module: A JMS module is a definition which contains JMS resources such as queues and topics. A JMS module is required in order to create a JMS queue.
- Subdeployment: JMS modules are targeted to one or more WLS instances or a cluster.
  Resources within a JMS module, such as queues and topics are also targeted to a JMS
  server or WLS server instances. A subdeployment is a grouping of targets. It is also
  known as advanced targeting.
- Connection Factory: A connection factory is a resource that enables JMS clients to create connections to JMS destinations.
- **JMS Queue:** A JMS queue (as opposed to a JMS topic) is a point-to-point destination type. A message is written to a specific queue or received from a specific queue.

## STEPS FOR SETTING UP JMS QUEUE IN WEBLOGIC:

The following are the steps to setup JMS for WebLogic Server.

#### Create a JMS Server

1. Start the WebLogic server and Login to WebLogic console. (e.g. http://10.100.10.100:7001/console).

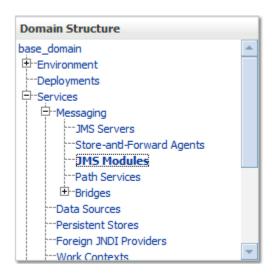


- 2. Go to Services > Messaging > JMS Servers (left-hand navigation menu of server console).
- 3. Select New.
- 4. Name: JMSServer-0 & Persistent Store: (none).
- 5. Click next.
- 6. Target: AdminServer (or choose an available server).
- 7. Click Finish.
- 8. The JMS server should now be visible in the list with Health OK.



### Create a JMS Module

1. Go to Services > Messaging > JMS Modules (left-hand navigation menu of server console).



- 2. Select New.
- 3. Name: SystemModule-0.
- 4. Click Next.
- 5. Leave the other options empty.
- 6. Targets: AdminServer (or choose the same one as the JMS server.
- 7. Click Next.
- 8. Leave "Would you like to add resources to this JMS system module" unchecked.
- 9. Click Finish.

### Create a SubDeployment

A subdeployment is not necessary for the JMS queue to work, but it allows you to easily target subcomponents of the JMS module to a single target or group of targets. We will use the subdeployment in this example to target the following connection factory and JMS queue to the JMS server we created earlier.

- 1. Go to Services > Messaging > JMS Modules.
- 2. Select SystemModule-0.
- 3. Select the Subdeployments tab and New.



- 4. Subdeployment Name: Subdeployment-0.
- 5. Click Next.

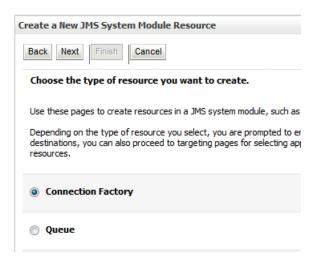
Here you can select the target(s) for the subdeployment. You can choose either Servers (i.e. WebLogic Admin server, such as the Admin Server) or JMS Servers such as the

JMS Server created earlier. As the purpose of our subdeployment is to target a specific JMS server, choose the JMS Server option.

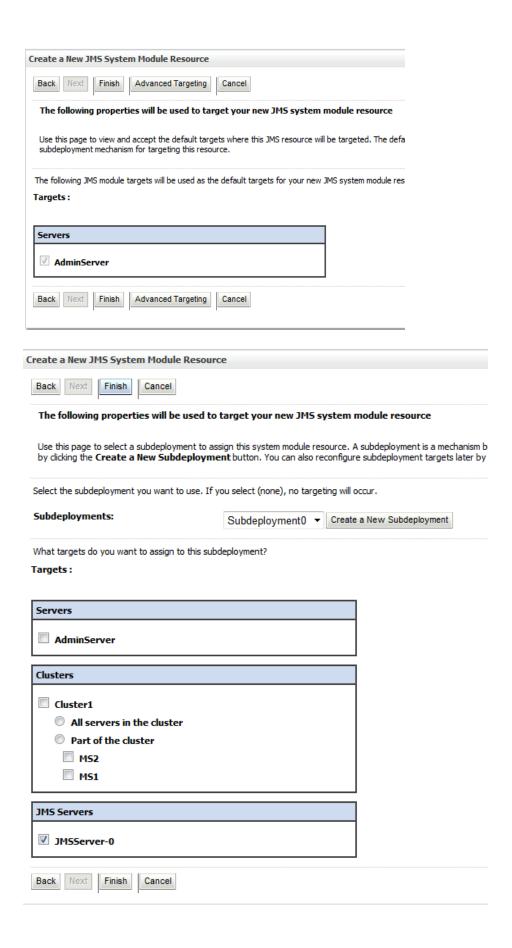
- 6. Select the JMSServer-0 created earlier.
- 7. Click Finish.

### **Create a Connection Factory**

- 1. Services > Messaging > JMS Modules
- 2. Select SystemModule-0 and press New
- 3. Select Connection Factory.
- 4. Click Next.



- 5. Name: ConnectionFactory-0
- 6. JNDI Name: jms/ConnectionFactory
- 7. Leave the other values at default
- 8. On the Targets page, select the Advanced Targeting button and select Subdeployment-0

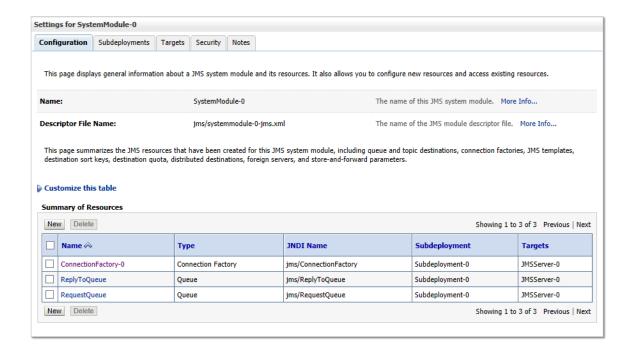


- 9. Click Finish
- 10. The connection factory should be listed on the following page with SystemModule-0 and JMSServer-0 as the target.

### **Creating JMS Queues**

- 1. Services > Messaging > JMS Modules.
- 2. Select SystemModule-0 and press New.
- 3. Select Queue and Next.
- 4. Name: ReplyToQueue
- 5. JNDI Name: jms/ReplyToQueue
- 6. Template: None
- 7. Click Next
- 8. Subdeployments: Subdeployment-0
- 9. Finish. The ReplyToQueue should be listed on the following page with Subdeployment-0 and JMSServer-0.
- 10. Select SystemModule-0 and press New.
- 11. Select Queue and Next.
- 12. Name: RequestQueue.
- 13. JNDI Name: jms/RequestQueue.
- 14. Template: None.
- 15. Click Next.
- 16. Subdeployments: Subdeployment-0.
- 17. Finish. The RequestQueue should be listed on the following page with Subdeployment-0 and JMSServer-0.

The JMS setup is now complete and can be accessed using the JNDI names: Jms/connectionFactory, jms/ReplyToQueue and jms/RequestQueue.

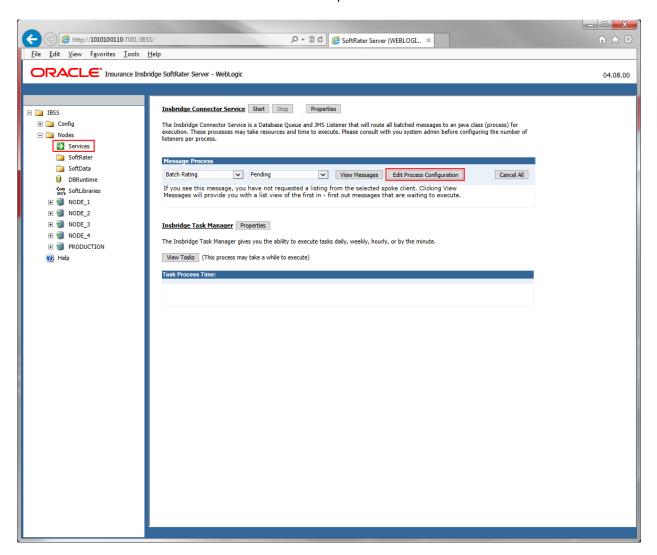


## **UPDATES TO IBSS**

The Notification details need to be configured in order to receive the email response for successful/failed transactions.

Open the IBSS application screen.

1. Locate the Services screen under the Nodes options. IBSS > Nodes > Services.



- 2. Click Edit Process Configuration. A separate screen is displayed.
- 3. Enter values for the Insbridge Connector Service.



4. Click Save.

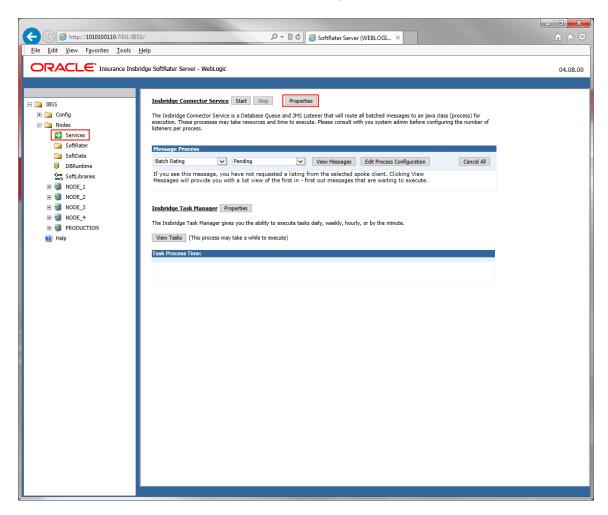
## **CONFIGURING NOTIFICATION**

Notification details need to be configured in order to receive the email response for successful/failed transactions.

### **Configuring Email on IBSS:**

Open the IBSS application screen.

1. Locate the Services screen under the Nodes options. IBSS > Nodes > Services.



- 2. Click Properties. A separate screen is displayed.
- 3. Enter values for the Insbridge Connector Service.



- Protocol SMTP or SMTPS
- Host email host
- Port port used
- User Login id
- Password Password

#### 4. Click Save.

You can use the Test Connector Properties! Options to verify your entry.

### **Configuring Queue Entries in IBSS:**

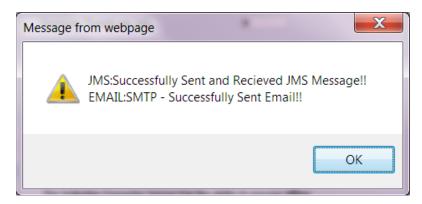
JMS must be setup prior to entering queue details. Stay on the Connector Properties.



- 4. All fields are required in order to configure queues:
  - Queue Location JNDI Name of the Request Queue
  - ReplyTo Location JNDI Name of the Reply To Queue
  - Connection Factory JNDI Name of the Queue Connection Factory
  - Context Factory weblogic.jndi.WLInitialContextFactory
  - Provider URL t3://localhost:7001

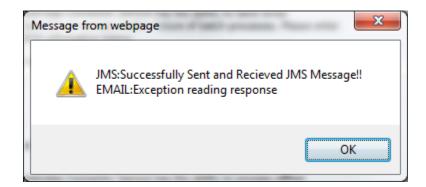
- 5. Click Save
- 6. Click **Test Connector Properties!** to verify your entries.

A successful setup returns a success message.



This message means that the JMS Connection was successful, and a sample mail will be sent to the email id that is configured in the properties.

A message failure indicates where the message failed.



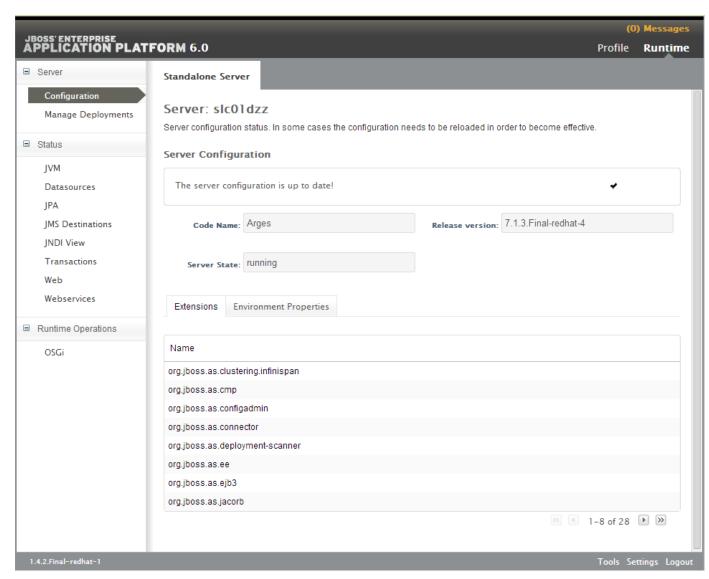
In this example, SMTP server was not available on the server.

## **CONFIGURING PROCESS CONFIGURATION DETAILS**

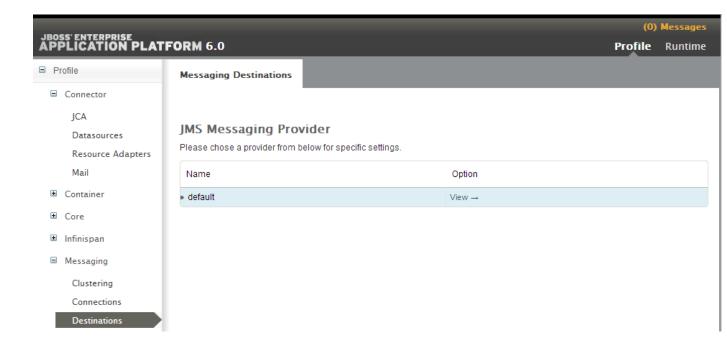
The first step is to create and configure JMS queues and connection factory.

### **JMS Queue:**

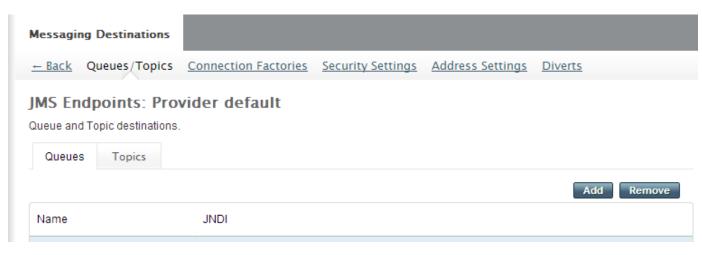
- Start the Jboss server.( run the standalone.bat file for windows and standalone.sh for linux machine.)
- 2. Open up a web browser and go to http://localhost:9990/ to open the management console. (e.g, <a href="http://10.100.10.100:9990/console">http://10.100.10.100:9990/console</a>)



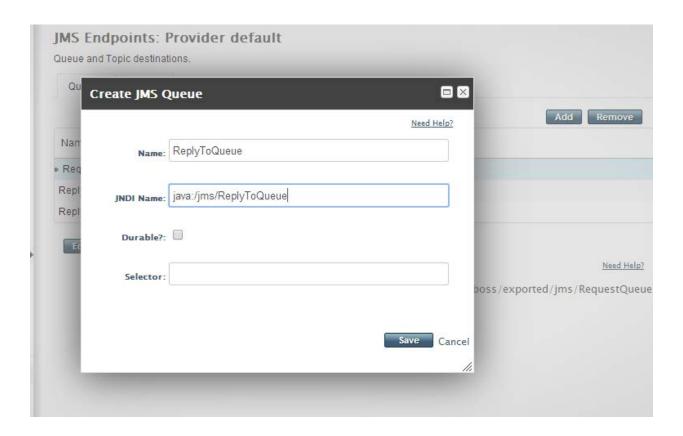
3. Go to Profile -> Messaging -> Destinations -> view (default). The Queues/Topics should be displayed.



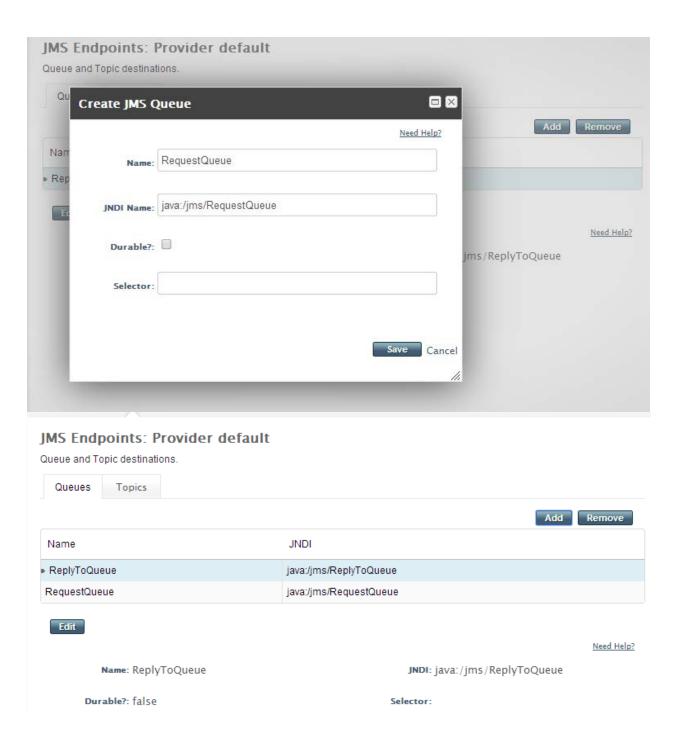
4. Click the Add button to add a new Queue.



5. Enter ReplyToQueue as Name and java:/jms/ReplyToQueue for the JNDI Name.

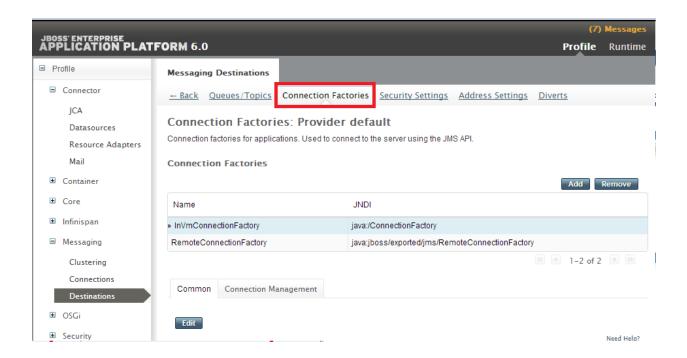


- 6. Click save and verify. You now have a non-durable queue.
- 7. To add the Request Queue, click the Add button.
- 8. Enter RequestQueue as Name and java:/jms/RequestQueue for the JNDI Name.
- 9. Click save and verify. You now have a second non-durable queue.

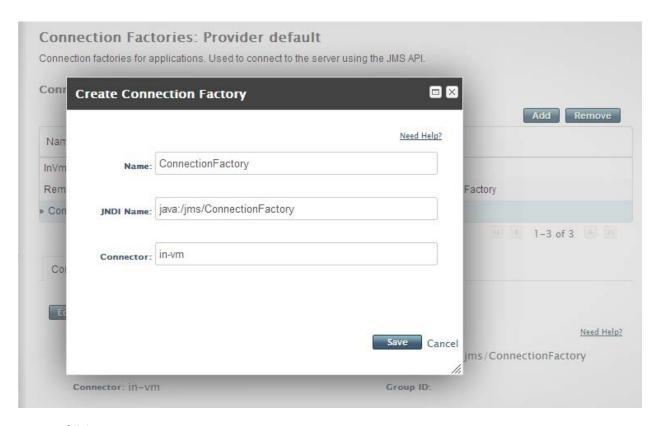


## **Connection Factory:**

 Go to Profile -> Messaging -> Destinations -> view (default), select the Connection Factories tab.



- 2. Click the Add button to add a new Connection Factory.
- 3. Enter ConnectionFactory as Name , java:/jms/ConnectionFactory for the JNDI Name and in-vm for the Connector.



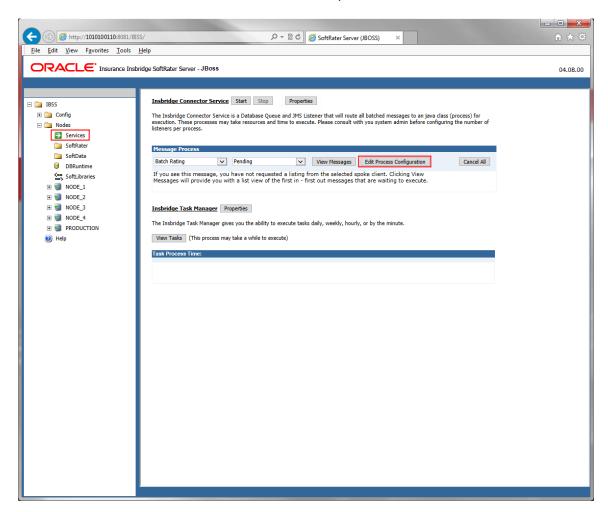
4. Click save to save your entry.

## **UPDATES TO IBSS**

The Notification details need to be configured in order to receive the email response for successful/failed transactions.

Open the IBSS application screen.

1. Locate the Services screen under the Nodes options. IBSS > Nodes > Services.



- 2. Click Edit Process Configuration. A separate screen is displayed.
- 3. Enter values for the Insbridge Connector Service.



4. Click Save.

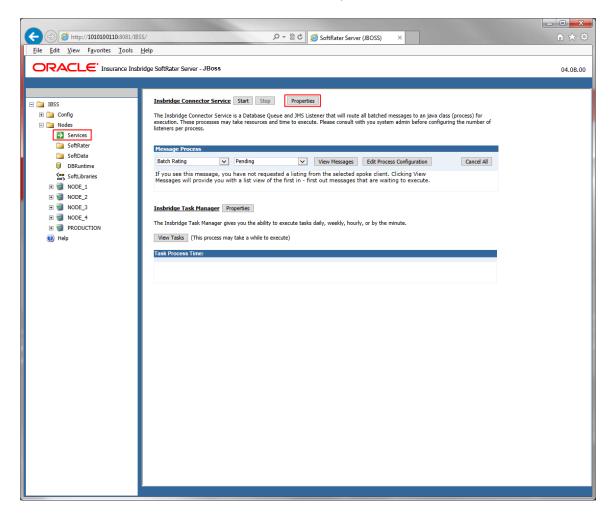
## **CONFIGURING NOTIFICATION**

Notification details need to be configured in order to receive the email response for successful/failed transactions.

### **Configuring Email on IBSS:**

Open the IBSS application screen.

5. Locate the Services screen under the Nodes options. IBSS > Nodes > Services.



- 6. Click Properties. A separate screen is displayed.
- 7. Enter values for the Insbridge Connector Service.



- Protocol SMTP or SMTPS
- Host email host
- Port port used
- User Login id
- Password Password

#### 8. Click Save.

You can use the Test Connector Properties! Options to verify your entry.

### **Configuring Queue Entries in IBSS:**

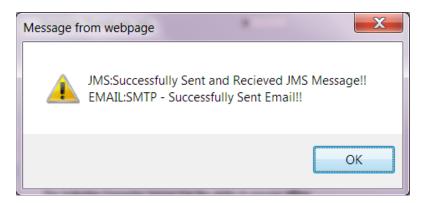
JMS must be setup prior to entering queue details. Stay on the Connector Properties.



- 7. All fields are required in order to configure queues:
  - Queue Location JNDI Name of the Request Queue
  - ReplyTo Location JNDI Name of the Reply To Queue
  - Connection Factory JNDI Name of the Queue Connection Factory
  - Context Factory org.jboss.naming.remote.client.InitialContextFactory
  - Provider URL REMOTE:// (URL):4447

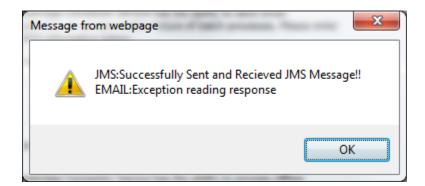
- 8. Click Save
- 9. Click **Test Connector Properties!** to verify your entries.

A successful setup returns a success message.



This message means that the JMS Connection was successful, and a sample mail will be sent to the email id that is configured in the properties.

A message failure indicates where the message failed.



In this example, SMTP server was not available on the server.

## **EXAMPLE STEPS FOR BATCH RATING**

These examples show batch rating in various ways.

## Rate Normal: - Synchronous Processing

- 1. Navigate to IBSS -> Nodes -> SoftRater.
- 2. Select the Node from the dropdown.
- 3. In "Enter Request XML text or file path below:", Select XML and paste the rateDoc in the text field.
- 4. Under ProcessAsync, select Async Processing as "Off"
- 5. Under Optional Rate Operators, type the Environment Name in the text box.
- 6. Click Execute!
- 7. The Result Information text area should be populated with the result xml.
- 8. Click on ViewXmI and find TOTALPOLICYPREMIUM\_R. Note down the value.

## Rate Synchronous & Add Inputs/Results to DB

- 1. Navigate to IBSS -> Nodes -> SoftRater.
- 2. Select the Node from the dropdown.
- In "Enter Request XML text or file path below:", Select XML and paste the rateDoc in the text field.
- 4. Under ProcessAsync, select Async Processing as "Off"
- 5. Under Optional Rate Operators, type the Environment Name in the text box.
- 6. Under Rate Operators, select the checkbox for **Add Input data to the DB** and **Add Result data to the DB**
- 7. Click Execute!
- 8. The Result Information text area should be populated with the result xml.
- Click on ViewXml and get the 'db\_\_\_rt\_INPUT\_BATCH\_ID',
   'db\_\_\_rt\_INPUT\_FILE\_ID', 'db\_\_\_rt\_RESULT\_BATCH\_ID ', 'parent\_id' values from the resultXML.
- 10. Leave the current window as such and open IBSS application in a new window.
- 11. Navigate to IBSS -> Nodes -> DBRuntime
- 12. Select Node value as the node that was earlier selected while executing the rateDoc.
- 13. In the method, select 'GetInputXML'.
- 14. Enter 'Input Batch Id' with **db\_\_\_rt\_INPUT\_BATCH\_ID** and 'File Id' with **db\_\_\_rt\_INPUT\_FILE\_ID** with the values noted down from the resultXML.
- 15. Enter **parent\_id** value for 'Subscriber Id'.
- 16. Environment value should be the same as we entered in SoftRater screen.
- 17. After entering all the required values, click Execute!
- 18. The Result Information text area should be populated with the xml having **complete="no"** as below
  - <rate lob="1" env\_def="oracle\_dr" PolicyNumber="XMLInput\_ChangeAutoComplex\_127"
    complete="no" ><heading>rogram parent\_id="1" program\_id="318" program\_ver="1"
    ></program></heading></rate>
- 19. Now open IBSS application in another window.

- Navigate to IBSS-> Nodes -> <Node\_Name>(Node which was selected to execute)-> Services
- 21. Now, Start the Insbridge Connector Service by clicking Start.
- 22. Now go to the window where the DBRuntime screen is open.
- 23. Clear the Result Information.
- 24. With the previously entered values, click Execute!
- 25. The Result Information should display the complete Request XML.
- 26. Now from the Request Information, select **GetResultXML** from the dropdown for Method.
- 27. Enter the **db\_\_\_rt\_RESULT\_BATCH\_ID** value in the text box for Result Batch Id, **db\_\_\_rt\_INPUT\_FILE\_ID** value for File Id, and other values as previously entered.
- 28. Clear result information.
- 29. Click Execute!
- 30. The Result information text area gets populated with the Result XML.

## Rate Async - Show Items in the Queue

- 1. Navigate to IBSS -> Nodes -> SoftRater.
- 2. Select the Node from the dropdown.
- 3. In "Enter Request XML text or file path below:", Select XML and paste the rateDoc in the text field.
- 4. Under ProcessAsync, select Async Processing as "Off"
- 5. Under Optional Rate Operators, type the Environment Name in the text box.
- Under Rate Operators, select the checkbox for Add Input data to the DB and Add Result data to the DB
- 7. Click Execute!
- 8. The Result Information text area should be populated with the result xml.
- 9. Now open IBSS application in another window.
- Navigate to IBSS-> Nodes -> <Node\_Name>(Node which was selected to execute)-> Services
- 11. In the Services screen, select **Broker Request** from the first dropdown, the second dropdown defaults to **pending.**
- 12. Click on View Messages.
- 13. The table should display the request that was just submitted to db.
- 14. Now, Start the Insbridge Connector Service by clicking **Start**.
- Then clicking on the View Messages for Broker Request should return "No Messages found".
  - This means that the request has been picked up by the Timer service that was just started and the request has been stored to the Database.
- 16. Now select **Broker Response** from the first dropdown
- 17. Click View Messages
- 18. The table should display the result.

## Rate Using ESI Tester

- 1. Store the all the rateDoc input files to a directory. Eg. D:\ReqFiles
- In the IBSS application, navigate to IBSS-> Nodes -> <Node\_Name>(Node which was selected to execute)-> Services
- 3. Make sure the Insbridge Connector Service is **Stopped**.
- 4. Open ESI Tester using 7-zip

- 5. Edit the resource.properties file to point to the correct hostname and contextRoot.
- 6. Double clicking on the ESI-Tester.jar should open a UI, select Test IBSS
- This will open a new screen where to the right top corner, Assembly Process and Soft Service should be Online. This shows that the value in the resource.properties file is correct.
- 8. Now click on the InsbridgeXML tab.
- 9. Select XML Type as **File**.
- 10. In the text area select the directory in which the rate request files are stored.

#### <directory\_name>\\*.xml

- 11. Enter the subscriber id and Environment name in the respective text fields below.
- 12. Click Submit to Runtime DB
- 13. The system returns a Batch Id. Make a note of it.
- 14. Now open the IBSS application, Services screen.
- 15. Select **Broker Request** from the dropdown, click **View Messages.**
- 16. A complete list of the requests is displayed.
- 17. Start Insbridge Connector Service.
- 18. Upon checking the **Broker Request**, we could notice that the requests are picked up one after the other for every specified interval.
- 19. When there are no more Requests to display in the **Broker Request, Stop** the Insbridge Connector Service.
- 20. Open the ESI-Tester screen.
- 21. Click on the Submit Batch tab.
- 22. Enter the Batch Id, which we got from the system while submitting to Runtime DB in Step 12.
- 23. Enter the Subscriber Id and Environment Id.
- 24. Check the **Read Write Option** box.
- 25. Enable Email Notification by checking the Email Notification.
- 26. Enter the email id to which the response should be sent. Separate the email ids with ";"
- 27. Click Start Batch.
- 28. This will return a message saying "Successfully Submitted Batch" and a batch Id.
- 29. Now open the IBSS application, Services screen.
- 30. Select Batch Rating from the dropdown. Click View Messages.
- 31. The Batch Request that we submitted through the ESI-Tester will be displayed.
- 32. Start the Insbridge Connector Service.
- 33. Select **Batch Rating** from the first dropdown, select **Processing** from the next dropdown.
- 34. Click View Messages.
- 35. This shows that the request is being processed by the Worker Manager.
- 36. If this doesn't show up any records in the **processing**, select **Completed** and verify if the request is completed.

Upon completion of rating, the response will be sent to the email which was entered in the ESI-Tester screen.

## STATUS TABLE DEFINITIONS

The status table present the current information regarding the node.

## **Getting Status**

- 1. Navigate to IBSS -> Nodes.
- 2. Click on the GET STATUS button.
- 3. Get Status table contains seven columns which are Node name, Node Status, Service Status, Config last time Changed, Connector last time Changed, JMS Status, Email Status.

#### **Node Name**

- This column shows all the registered node names.
- If Node is Active (or up) then the node name appears as a hyperlink.
- When you click on the hyperlink of any node, a new IBSS page of that node opens in separate browser window.
- If Node is Inactive (or down) then only node name will appear in the table.

#### **Node Status**

- This column shows the Node status as **Active / Inactive** of all the registered nodes.
- If Node is up then the node status cell value is Active.
- If Node is down then the node status cell value is Inactive.

#### **Service Status**

- This column shows the Service status as ON / OFF / Unknown of all the registered nodes.
- If Node is Active and Connector Service is in running state then the service status cell value will be ON.
- If Node is Active and Connector Service is stopped then the service status cell value will be OFF.
- If Node is Inactive then the service status cell value will be Unknown.

#### **Config Last Time Changed**

- This column shows the Softrater Config last time changed of all the registered nodes in the date format: YYYY-MM-DD HH: MM:SS PM/AM.
- New Config properties values of each node are reflected after Starting the connector service of all the nodes and after resetting the Environments of all the nodes.

After this Config last time changed cell has the exact last date changed.

- Start All Service:
  - Go to IBSS -> Nodes -> Services to start the connector services of all the nodes.
  - Click on Start button of Insbridge Connector Service.
- Reset All Environment:
  - Go to IBSS -> Nodes to Reset the Environment of all the nodes.
  - Click on Start button of Insbridge Connector Service.
- If Node is Inactive (or down) then Config last time changed status cell value is '-' (dash).

### **Connector Last Time Changed**

- This column shows the Connector properties last time changed of all the registered nodes in the date format: yyyy-MM-DD HH: MM:SS PM/AM.
- New Connector properties values of each node are reflected after Starting the connector service of all the nodes and after resetting the Environments of all the nodes.

After this connector last time changed cell has the exact last date changed.

- Start All Service:
  - Go to IBSS -> Nodes -> Services to start the connector services of all the nodes.
  - Click on Start button of Insbridge Connector Service.
- Reset All Environment:
  - Go to IBSS -> Nodes to Reset the Environment of all the nodes.
  - Click on Start button of Insbridge Connector Service.
- If Node is Inactive (or down) then Connector last time changed status cell value is '-' (dash).

#### JMS Status

- This column shows the JMS status as Success / Error of all the registered nodes.
- Check the JMS configuration set up values in Connector properties section:
  - Go to IBSS -> Nodes -> Services
  - Click Properties button of on Insbridge Connector Services.
  - For Success status values must be:
    - Websphere
      - Context Factory: com.ibm.websphere.naming.WsnInitialContextFactory

- **Provider URL:** iiop://<ip address>:<port> [e.g: iiop://localhost:9817]
- Weblogic
  - **Context Factory:** weblogic.jndi.WLInitialContextFactory
  - **Provider URL:** t3://<ip address>:<port> [e.g: t3://localhost:7001]
- JBoss
  - **Context Factory:** org.jnp.interfaces.NamingContextFactory
  - Provider URL: jnp://<ip address>:<port> [e.g: jnp://localhost:1099]
- If above fields have wrong data then JMS status cell value will be Error.
- New JMS properties values of each node are reflected after Starting the connector service of all the nodes.

After this JMS status cell shows proper status.

- Start All Service:
  - Go to IBSS -> Nodes -> Services to start the connector services of all the nodes.
  - Click on Start button of Insbridge Connector Service.
- If Node is Inactive (or down) then JMS status cell value is '-' (dash).

### **Email Status**

- This column shows the Email status as Success / Error of all the registered nodes.
- Check the SMTP configuration set up values in Connector properties section:
  - Go to IBSS -> Nodes -> Services
  - Click Properties button of on Insbridge Connector Services.
  - For Success status values must be:
    - SMTP
    - JNDI
  - If above fields have wrong data then Email status cell value will be Error.
- New Email properties values of each node are reflected after Starting the connector service of all the nodes.

After this Email status cell shows proper status.

Start All Service:

- Go to IBSS -> Nodes -> Services to start the connector services of all the nodes.
- Click on Start button of Insbridge Connector Service.
- If Node is Inactive (or down) then Email status cell value is '-' (dash).

# **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 <a href="http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info">http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info</a> or visit <a href="http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs">http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs</a> if you are hearing impaired.

### Address any additional inquiries to:

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

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

# Index

D Database	SoftRater Database Schema 8 ORACLE Database Supported Version
ORACLE Support8	$\overline{R}$
E Edition Notice	Requirements ORACLE Database
I	S
IBRU5	SoftRater IBSR
0	Support 68
ORACLE	