Oracle® Retail Integration Bus

Installation Guide

Release 13.0.3

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ORACLE®

Oracle Retail Integration Bus Installation Guide, Release 13.0.3

Value-Added Reseller (VAR) Language

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Preface

Oracle Retail Installation Guides contain the requirements and procedures that are necessary for the retailer to install Oracle Retail products.

Audience

The Installation Guide is written for the following audiences:

- Database administrators (DBA)

- System analysts and designers

- Integrators and implementation staff

Related Documents

For more information, see the following documents in the Oracle Retail Integration Bus 13.0.3 documentation set:

- *Oracle Retail Integration Bus Implementation Guide*

- *Oracle Retail Integration Bus Integration Guide*

- *Oracle Retail Integration Bus Operations Guide*

- *Oracle Retail Integration Bus Release Notes*

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

- https://metalink.oracle.com

When contacting Customer Support, please provide the following:

- Product version and program/module name

- Functional and technical description of the problem (include business impact)

- Detailed step-by-step instructions to recreate

- Exact error message received

- Screen shots of each step you take

Review Patch Documentation

If you are installing the application for the first time, you install either a base release (for example, 13.0) or a later patch release (for example, 13.0.3). If you are installing a software version other than the base release, be sure to read the documentation for each patch release (since the base release) before you begin installation. Patch documentation can contain critical information related to the base release and code changes that have been made since the base release.

Oracle Retail Documentation on the Oracle Technology Network

In addition to being packaged with each product release (on the base or patch level), all Oracle Retail documentation is available on the following Web site (with the exception of the Data Model which is only available with the release packaged code):

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

Documentation should be available on this Web site within a month after a product release. Note that documentation is always available with the packaged code on the release date.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
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.

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Introduction

This manual details the installation of the Retail Integration Bus (RIB). Generally, a RIB installation contains the following components:

- An installation of RIB's Java EE applications (rib-<app>.ear) on Java EE 5 compliant application server.

- An installation of the Retail Integration RIB Hospital administration (RIHA) tool.

- An installation of the RIB Diagnostics and Monitoring tools.

It is important to also follow all installation steps of the Oracle Retail Applications that are being connected to the RIB. Failure to follow these may result in a faulty RIB installation. See the installation guides of the relevant Retail applications for more information.

> **Note:** The instructions provided in this guide apply to a full installation of the RIB. The RIB 13.0.3 application cannot be installed over an existing version, such as 13.0.2.

RIB Installation Master Checklist

This list covers all of the sequential steps required to perform a full installation of the RIB, using either the GUI RIB Installer (strongly recommended) or a command line installation.

Task	Notes
Prepare the Oracle Application Servers for installation of the RIB Components.	Prerequisite
Prepare the Oracle Database Schemas that the RIB will use.	Prerequisite
Prepare the JMS.	Prerequisite
Verify the Applications the RIB will be integrating to are configured appropriately.	
"Information to Gather for the Install"	During the prerequisites steps, there is information that should be noted that will be used to configure the RIB during the installation process.

Task	Notes
Installation the RIB using one of these methods: Installation using the RIB Installer GUI *Or* Installation using the RIB App Builder Command Line Tools.	It is strongly recommended that the RIB Installer GUI method be used.
Verify Application URL settings match RIB install.	RIB Functional Artifact URL JNDI URL
Complete the setup of RDMT using the same "Information to Gather for the Install" Verify the RIB installation using the RDMT tools.	During either of the installation methods, one of the manual steps will have extracted the RDMT tools to the appropriate directory.
Install RIHA.	The RIB Hospital maintenance tool

> **Note:** See Appendix C, "RIB Installation Checklists" while performing the installation to minimize the chance of a faulty RIB installation.

Technical Specifications

The RIB has several dependencies on Oracle Retail Application installations as well as the Oracle Application Servers. This section covers these requirements.

Supported Operating Systems

Supported On	Versions Supported
Database OS	OS certified with Oracle Database 10gR2 Enterprise Edition. Options are: ■ Oracle Enterprise Linux 4 Update 5 for x86-64 ■ HPIA 11.23, 11.31 (Itanium 64-bit) ■ Solaris 10 (SPARC) ■ AIX 5.3
Database Server	Oracle Database 10g (10.2.0.4) (with XA support installed and grants made) with the following patches and components: Patches: ■ 10.2.0.4 patchset: 6810189 ■ AIX one-off patch: 6154596 (PRO*C THROWS PCC-2014 WHEN DIAGNOSTIC DIRECTIVE #WARNING IS USED). RAC Only ■ 5721821 (ORA-7445[KGLOBCL] OCCURED AND INSTANCE WENT DOWN) Components: ■ Oracle Database 10g ■ Oracle Partitioning ■ Oracle Net Services ■ Oracle Call Interface (OCI) ■ Oracle Programmer ■ Oracle XML Development Kit Oracle XML Development Kit ■ ANSI compliant C compiler (certified with OS and database version) ■ Companion CD ■ Perl compiler 5.0 or later ■ X-Windows interface
AQ JMS Server	Oracle Database 10g (10.2.0.4)
Application Server OS	OS certified with Oracle Application Server 10g 10.1.3.3. Options are: ■ Oracle Enteprise Linux 4 Update 5 for Linux x86-64 ■ Solaris 10 (SPARC) ■ HP-UX 11.31 (Integrity) ■ AIX 5.3

Supported On	Versions Supported
Application Server	Oracle Application Server 10g 10.1.3.4 with the following patches:
	■ 5632264 (NEED UPDATED TIMEZONE FILES (VERSION 4) FOR MORE DST RULE CHANGES)

> **Note:** See also Oracle Database Administrator's Guide 10g Release 2 (10.2) and Oracle Application Developer's Guide - Fundamentals 10g Release 2 (10.2).

Supported Oracle Retail Products

Supported On	Version Supported
RWMS 13.0.3	RIB 13.0.3
RMS 13.0.3	RIB 13.0.3
RPM 13.0.3	RIB 13.0.3
SIM 13.0.3	RIB 13.0.3
AIP 13.0.2	RIB 13.0.3

> **WARNING:** For AIX, the IBM JDK located at ORACLE_HOME/jdk is not supported by the RIB. Make sure that IBM Java SDK 1.5.0 build pap32dev-20080315 (SR7) or newer is installed on the RIB system and configured as the JAVA_HOME for the RIB OC4J instances.

The RIB and Oracle Database Cluster (RAC)

In this release, rib-<app> uses Oracle Streams AQ as the JMS provider. Oracle Streams AQ is built on top of Oracle database system. Since AQ is hosted by Oracle database system the RIB can take advantage of database RAC capability for its JMS provider. By using RAC AQ as the RIB's JMS provider you can scale RIB's JMS server vertically and horizontally to meet any retailer's scalability and high availability need.

At runtime, rib-<app> uses the database for keeping track of its RIB Hospital records. These RIB Hospital tables can be hosted by an Oracle RAC database providing high availability and scalability for these RIB Hospital records.

All rib-<app>s use the Oracle type 4 Java Database Connectivity (JDBC) driver to connect to the RIB Hospital database and the AQ JMS server. When the RIB Hospital database and the AQ JMS servers are hosted by a Oracle RAC database, the only configuration change required in rib-<app> is the RAC JDBC connection URL.

The RIB and Oracle Application Server Cluster

The RIB uses JMS server for message transportation between the integrating retail applications. Since the RIB must preserve the message publication and subscription ordering, rib-<app>s deployed in Oracle Application Server cannot be configured in an active-active cluster mode. In active-active cluster mode, multiple subscribers and publishers will process messages simultaneously and there will be no way to preserve message ordering.

The rib-<app> can be deployed to a "single" oc4j instance of an Oracle Application Server that is clustered (active-passive). In this configuration, even though rib-<app> is deployed in an OAS cluster, multiple instance of same rib-<app> is not running at the same time as there is only one oc4j instance where the rib-<app> is deployed and so RIB can still preserve message ordering. The maximum number of JVM (Java Virtual Machine) hosting a rib-<app> oc4j instance must always be configured to be 1 for the same reason of preserving message ordering.

To truly configure rib-<app>s for high availability, the only option is to configure it in active-passive mode.

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Pre-Installation Tasks

Before you begin the installation process, read the RIB Implementation Guide for the considerations and planning steps needed for a RIB deployment.

Planning may include the decision to employ multiple JMS servers, which can isolate flows for performance and operationational QoS. For information, see "Pre-Installation Steps for Multiple JMS Server Setup" in Chapter 4.

Determine the UNIX User Account to Install the Software

The user account that installs the RIB is an important consideration. The options and pros and cons are discussed in the RIB Implementation Guide.

> **Note:** See "Pre-Implementation Considerations" in the *Oracle Retail Integration Bus Implementation Guide*.

The rib-home Directory

The RIB software components can be distributed across multiple application servers depending on the deployment option selected, but they are centrally configured and managed.

> **Note:** See "Recommended Deployment Options" in the *Oracle Retail Integration Bus Implementation Guide*.

The location from where all rib-<app> applications are managed is known as rib-home. This directory location (rib-home) contains all the tools and configurations to mange the life cycle and operations of the RIB installation across the enterprise. There must be one rib-home directory for each development, test and production environment. The rib-home directory is not a staging (throw away) directory. It must be available at all times to support the lifecycle management of the RIB system. After initial configuration of the Database server and the Java EE application server, all rib-<app> application level work must be done only from the rib-home directory location.

> **Note:** See "RIB Software Life Cycle" in the *Oracle Retail Integration Bus Implementation Guide*.

Prepare Oracle Application Server for RIB Components

This section describes the process of preparing the Oracle Application Server(s) to install the rib-<app> Java EE application.

Create the RIB OC4J Instances

All of the RIB components are Java EE and run in OC4J instances in the Oracle Application Server. The rib-<app> Java EE application runs in its own oc4j server instance called "rib-<app>-oc4j-instance". Each rib-<app> application requires a separate OC4J instance that is not shared with any other application.

Use the following steps to create a new oc4j instance for rib-<app> and configure it to rib's requirement.

> **Note:** For details on using commands to create an oc4j instance, see the Oracle Application Server Administrator's Guide 10g Release 3 (10.1.3.4).

1. Log in to the machine where OAS was installed with the operating system user that was used to install the Oracle Application Server (OAS).

   Make sure the OAS required environment variables are set. Read the OAS documentation for environment variables information.

2. Create the rib-<app>-oc4j-instance by executing the following command:

   ```
   $ORACLE_HOME/bin/createinstance -instanceName rib-<app>-oc4j-instance
   ```

   Replace <app> with the actual value of the RIB application for the associated retail application. Acceptable values for <app> are "rms", "rwms", "tafr", "sim", "rpm" and "aip".

   There is one RIB specific oc4j instance that must be created regardless of the other application deployment choices.

   - rib-func-artifact-oc4j-instance. (It is recommended, but not required, that this naming convention be followed.)

   There is one RIB specific oc4j instance that must be created depending on the deployment configuration. If RMS is installed with RWMS and/or SIM then the TAFR's must be installed.

   - rib-tafr-oc4j-instance. (It is recommended, but not required, that this naming convention be followed).

   These are the optional application instances depending on the deployment choices. It is recommended, but not required, that you use the following naming convention:

   - rib-rms-oc4j-instance

   - rib-rpm-oc4j-instance

   - rib-sim-oc4j-instance

   - rib-rwms-oc4j-instance

   - rib-aip-oc4j-instance

3. Enter "oc4jadmin" for the oc4j instance password when prompted. This password can be anything you like as long as it follows OAS standards.

> **Note:** For OAS to manage the oc4j instance it is required that all the passwords are the same for all oc4j instances managed by a single OAS instance. See OAS documentation for further details.

Configure the rib-<app>-oc4j-instance

Edit $ORACLE_HOME /j2ee/rib-<app>-oc4j-instance/config/server.xml and add the attribute:

```
global-jndi-lookup-enabled="true" to <application-server> element.
```

For example:

```
<application-server xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="http://xmlns.oracle.com/oracleas/schema/application
-server-10_1.xsd" application-directory="../applications"
check-for-updates="adminClientOnly"
deployment-directory="../application-deployments"
connector-directory="../connectors"
global-jndi-lookup-enabled="true"
schema-major-version="10" schema-minor-version="0" >
```

Edit $ORACLE_HOME/opmn/conf/opmn.xml file and add the following properties to the rib-<app>-oc4j-instance definition.

> **Note:** For details on OPMN usage and configuration, see the Oracle Process Manager and Notification Server Administrator's Guide 10g Release 3 (10.1.3.4).

> **Note:** All the properties below must be applied only to rib-<app>-oc4j-instance definition.

1. Specify the JVM's min and max heap size.

   ```
   -Xms500M -Xmx900M
   ```

   > **Note:** These are minimum values. Consult with the local system administrators for site values.

2. Set the JMX security to off:

   ```
   -Doc4j.jmx.security.proxy.off=true
   ```

3. Specify -userThreads to oc4j-options element.

   ```
   <data id="oc4j-options" value="-userThreads"/>
   ```

   Example: After updating the opmn.xml for rib-<app>-oc4j-instance definition, the xml section should look something like the following.

   ```
   <process-type id="rib-rpm-oc4j-instance" module-id="OC4J" status="enabled">
   <module-data>
   <category id="start-parameters">
   <data id="java-options" value="-server
   -Djava.security.policy=$ORACLEHOME/j2ee/rib-rms-oc4j-instance/config/java2.poli
   ```

```
cy
-Djava.awt.headless=true -Dhttp.webdir.enable=false
-Doc4j.jmx.security.proxy.off=true
-Dcom.sun.management.jmxremote -XX:MaxPermSize=128M -Xms512M -Xmx1024M
-XX:AppendRatio=3"/>
<data id="oc4j-options" value="-userThreads"/>
</category>
```

4. Make sure that numprocs attribute for the process-set element for rib-<app>-oc4j-instance is set to 1.

    ```
    <process-set id="default_group" numprocs="1"/>
    ```

5. Reload the new configuration by executing the following command:

    ```
    >$ORACLE_HOME/opmn/bin/opmnctl reload
    ```

6. Start the new rib-<app>-oc4j-instance by executing the following command:

    ```
    >$ORACLE_HOME/opmn/bin/opmnctl startproc
     process-type="rib-<app>-oc4j-instance"
    ```

7. Verify the oc4j instance status and make sure it starts properly by executing the command below. Make sure the status is "Alive" for the oc4j instance you configured.

    ```
    >$ORACLE_HOME/opmn/bin/opmnctl status -l
    ```

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Database Installation Tasks

There are several tasks that need to be performed for the RIB and verified in the participating applications.

Oracle Database Schemas

Each Oracle Retail Application has an associated set of RIB Artifacts that must be installed as part of the RIB integration, e.g. the RIB Hospital Tables, CLOB API libraries, and Oracle Objects.

- Ensure that these have been installed appropriately per the individual applications

- Ensure that the TAFR Hospital user and objects exist

- Ensure that the RIB user has appropriate access and permissions

Verify that Correct RIB Hospital Database Objects are Installed in the Retail Application's Schema

Every rib-<app> application needs a database schema that contains the RIB Hospital tables. In previous releases, rib-<app> used the respective retail application database schema for its location of the RIB Hospital tables. In this release, externalizing the RIB Hospital tables from the application database schema is supported.

There are two options:

- rib-<app> can use the respective application database schema to host the RIB hospital tables.

- rib-<app> can have a separate database or a separate schema to host the RIB hosptial tables.

> **Note:** The RIB Hospital schema must not be shared across retail applications. Each rib-<app> should have its own RIB hospital tables in both of the options listed above.

These RIB Hospital tables are not installed as part of hte RIB installation, but they are installed as part of hte Retail applicaitons database schema installation. Verify that the four RIB Hospital tables are already installed in the respective database schema.

> **Note:** See "RIB Installation Checklists" in this guide.

The database schema for all retail applications must have the database objects defined in the RIB delivered kernel SQL script called 1_KERNEL_CREATE_OBJECTS.SQL.

> **Note:** The 1_KERNEL_CREATE_OBJECTS.SQL script is available in rib-private-kernel-database-library.zip file. The rib-private-kernel-database-library.zip can be found in the rib-home directory structure.

> **Note:** See "RIB App Builder rib-home" in the *Oracle Retail Integration Bus Operations Guide*.

Because these database objects should have already been installed as part of the retail application's installation process, at this point just verify that the four hospital tables and the sequence exist in each application's database schema. Make sure that they have the correct columns to match this release of the RIB.

It is strongly recommended that all applications have a separate RIB Hospital and that they be logically and operationally associated with that application.

> **Note:** See "RIB Software Life Cycle" in the *Oracle Retail Integration Bus Implementation Guide*.

Verify that Database XA Resources are Configured for RIB

RIB uses two phase commit transaction protocol (XA) to maintain consistency between the RIB Hospital database, application database and the JMS server. The Oracle database XA resources must be configured in order to participate in XA transaction. Check to see that the XA scripts have been run on the database to make it XA transaction aware. The initXA.sql script needs to be run before XA transactions will work. These are usually installed by default in 10gR2. Use the grants shown below to enable XA transaction for the RIB database user.

grant select on v$xatrans$ to public;

grant select on pending_trans$ to public;

grant select on dba_2pc_pending to public;

grant select on dba_pending_transactions to public;

grant execute on dbms_system to public;

Verify that Correct RIB Functional Artifacts Database Objects Are Installed in PL/SQL Applications Database Schema

This section applies to PL/SQL application only, RMS and RWMS.

There are two ways to for PL/SQL applications to exchange payload data with RIB:

- Oracle Objects payloads
- CLOB xml parsing and building library

RMS uses both mechanism, whereas RWMS uses only Oracle Objects to communicate with RIB.

1. Verify that the RMS and RWMS database schema has the RIB delivered Oracle Objects installed. Oracle Objects are not installed as part of RIB installation; they are installed as part of the retail application database schema installation.

2. Verify that the PL/SQL retail application's database schema already have the database objects defined equivalent to the ones defined in the RIB delivered script called InstallAndCompileAllRibOracleObjects.sql.

   > **Note:** See the *Oracle Retail Integration Bus Operations Guide*.

3. Verify that RMS (not RWMS) database schema has the RIB CLOB XML parsing and building library code installed. These CLOB XML libraries are not installed as part of RIB installation; they are installed as part of the retail application database schema installation.

4. Verify that the RMS retail application's database schema has all the database objects defined equivalent to the once defined in the RIB delivered script called 1_CLOB_CREATE_OBJECTS.SQL.

   > **Note:** See the *Oracle Retail Integration Bus Operations Guide*.

5. Update the RIB functional artifact URL in the RMS table RIB_OPTIONS to point to the location where rib-func-artifact.war will be deployed.

   XML_SCHEMA_BASE_URL_DEFAULT = http://<hostname>:<port>/rib-func-artifact/payload/xsd

   Where:

   - hostname is the host name where rib-func-artifact.war will be deployed.
   - port is the http port of the OAS server where rib-func-artifact.war will be deployed.

Create RIB TAFR RIB Hospital

In RIB 13, there is a separate RIB Hospital for the rib-tafr application.

1. Created a database user for the rib application rib-tafr.

2. Make sure that the TAFR Hospital user has the proper database permission.

Example TAFR User Create SQL:

CREATE USER "TAFRHOSP"

IDENTIFIED BY "TAFRHOSP"

DEFAULT TABLESPACE "USERS" TEMPORARY TABLESPACE "TEMP";

GRANT "CONNECT" TO " TAFRHOSP ";

GRANT "RESOURCE" TO " TAFRHOSP ";

The rib-tafr application's database user must have the RIB Hospital tables. To create the RIB Hospital tables, run the 1_KERNEL_CREATE_OBJECTS.SQL script.

> **Note:** The 1_KERNEL_CREATE_OBJECTS.SQL script is available in rib-private-kernel-database-library.zip file. The rib-private-kernel-database-library.zip can be found in the rib-home directory structure.

Prepare Oracle AQ JMS Provider

Oracle Streams AQ is the JMS provider that RIB uses for a synchronous communication. AQ requires Oracle RDBMS Enterprise Edition.

It is strongly recommended that the Oracle Database instance configured as the JMS provider is not shared with any other applications and not be on the same host (physical or logical) with any other applications. The steps included here are those needed to prepare for the installation, there are many architectural issues and operational parameters that must be considered before the install. These are covered in other RIB documents.

> **Note:** See "Deployment Architectures" in the *Oracle Retail Integration Bus Implementation Guide*. See also "JMS Provider Management, the RIB on AQ JMS" in the *Oracle Retail Integration Bus Operations Guide.*

Create the RIB AQ JMS user with the appropriate access and permissions to the Oracle Streams AQ packages. This user must have at least the following database permissions:

- CONNECT
- RESOURCE
- CREATE SESSION
- EXECUTE ON SYS.DBMS_AQ
- EXECUTE ON SYS.DBMS_AQADM
- EXECUTE ON SYS.DBMS_AQIN
- EXECUTE ON SYS.DBMS_AQJMS

Example SQL:

CREATE USER "RIBAQ" IDENTIFIED BY "RIBAQ"

DEFAULT TABLESPACE "AQJMS"

TEMPORARY TABLESPACE "TEMP";

GRANT "CONNECT" TO "RIBAQ";

GRANT "RESOURCE" TO "RIBAQ";

GRANT CREATE SESSION TO "RIBAQ";

GRANT EXECUTE ON "SYS"."DBMS_AQ" TO "RIBAQ";

GRANT EXECUTE ON "SYS"."DBMS_AQADM" TO "RIBAQ";

GRANT EXECUTE ON "SYS"."DBMS_AQIN" TO "RIBAQ";

GRANT EXECUTE ON "SYS"."DBMS_AQJMS" TO "RIBAQ";

GRANT "AQ_ADMINISTRATOR_ROLE" TO "RIBAQ";

> **Note:** See also:
>
> Oracle Database Administrator's Guide 10g Release 2 (10.2)
>
> Oracle Streams Advance Queuing User's Guide and Reference 10g Release 2 (10.2)

4

Run the RIB Application Installer

RIB Application Installer Tasks

The RIB application installer can be used to perform any of the tasks below. For a new install, all tasks are recommended.

- Run the Preparation Phase to unpack files, prepare the workspace, and perform pre-installation verifications.

- Generate the rib-deployment-env-info.xml file, which configures the RIB install.

- Run the Assembly Phase to build the EAR and WAR files for the rib-<app> applications.

- Configure the Advanced Queuing JMS topics for RIB.

- Run the Deployment Phase to deploy the EAR and WAR files to the Application Server(s).

For more information about the Preparation, Assembly and Deployment Phases, see the *Oracle Retail Integration Bus Operations Guide*.

Expand the RIB Kernel Distribution

1. Log in to the UNIX server as the user who will own the RIB development workspace. Create a new directory for the workspace. There should be a minimum of 800 MB of disk space available.

2. Copy the RIB Kernel package (RibKernel13.0.2ForAll13.x.xApps_eng_ga.tar) into the workspace and extract its contents.

3. Change directories to Rib1301ForAll13xxApps/rib-home. This location will be referred to as <RIB_HOME> for the remainder of this chapter.

Pre-Installation Steps for Multiple JMS Server Setup

> **Note:** Using multiple JMS servers allows for the isolation of flows for performance and operational QoS. For more information, see "JMS Provider Management" in the *Oracle Retail Integration Bus Operations Guide*.

If your RIB installation will include multiple JMS servers, additional steps are required before you can run the installer.

> **Note:** Do not follow these steps if you will be using only one JMS server.

1. Change directories to <RIB_HOME>/download-home/bin, and run the check-version-and-unpack.sh script.

2. Determine the family that needs to be configured for multiple JMS.

3. Examine the rib-integration-flows.xml to identify all the RIB applications in the full integration flow.

4. Ensure that a new AQ JMS database server (not a schema) is set up. (For information on how to set up a new AQ JMS, see "Prepare Oracle AQ JMS Provider" in this guide.)

5. Ensure that any additional AQ JMS are not in the same database server. Each new AQ JMS requires a new database server.

> **Note:** If this is a first-time installation--or if you are using the installer to rewrite the rib-deployment-env-info.xml--you do not need to complete Step 6.

6. Add one or more JMS server(s) by updating rib-deployment-env-info.xml,

7. In the rib-home, modify the appropriate files for each of the rib-<apps> that participate in the integration flow. Point the adapters to the right JMS server. The following apply to this step:

   ■ rib-<app>-adapters.xml

   ■ rib-<app>-adapter-resources.properties

   For more information on this step, see the *Oracle Retail Integration Bus Operations Guide*.

8. Once Step 7 is finished, the installer tool does the following to complete pre-installation activities:

   ■ Compiles all the rib apps (%$RIB_HOME/application-assembly-home/bin/rib-app-compiler.sh).

   ■ Runs prepare-jms for the newly-created JMS server ($RIB_HOME/deployment-home/bin/rib-app-deployer.sh -prepare-jms<mjs2>. This step configures additional JMS servers.

   ■ Deploys ($RIB_HOME/deployment-home/bin/rib-app-deployer.sh rib-<app>).

How to Run the RIB Application Installer

1. Expand the RIB Kernel distribution as described above.

2. Download the RIB Functional Artifacts distribution (RibFuncArtifact13.0.2ForAll13.0.2Apps_eng_ga.tar), and copy it into the <RIB_HOME>/download-home/rib-func-artifacts directory. Do not untar the file.

3. Download the tar file distributions for each rib-<app> application that you will install. Copy the files into the <RIB_HOME>/download-home/all-rib-apps directory. Do not untar the files.

4. Download the RIB Diagnostic and Monitoring Tools (RDMT) package (Rdmt13.0.3ForAll13.x.xApps_eng_ga.tar) and untar it into the <RIB_HOME>/tools-home directory. Several files will be placed under the rdmt directory when you untar the package. This will allow the installer to run the <RIB_HOME>/tools-home/rdmt/configbuilder.sh script as part of the RIB installation.

5. For multiple JMS servers only: If your RIB installation will include more than one JMS server, you must complete the additional pre-installation steps listed above.

6. Set the JAVA_HOME environment variable. The JAVA_HOME must be set to a Java 1..5 JDK. If the <RIB_HOME> workspace is located on the same server as the Application Server, then it is recommended to set the JAVA_HOME to $ORACLE_HOME/jdk.

7. If you are using an X server, such as Exceed, set the DISPLAY environment variable so that you can run the installer in GUI mode (recommended). If you are not using an X server, or the GUI is too slow over your network, unset DISPLAY for text mode.

8. Make sure that all OC4J instances that you intend to deploy to are currently running.

9. Change directories to the <RIB_HOME> directory.

10. Run the rib-installer.sh script. The RIB installer appears.

> **Note:** Appendix A contains details on every screen and input field in the installer.

11. After the RIB installation is complete, it will launch the Oracle Configuration Manager (OCM) installer if possible.

> **Note:** The Oracle Retail OCM Installer packaged with this release does not install the latest version of OCM. Oracle Retail recommends that retailers upgrade to the latest version of OCM from ARU. For more information, see Metalink Note ID # 559539.1. See also the Oracle Configuration Manager Installer Guide, which describes the procedures and interface of the Oracle Retail Oracle Configuration Manager Installer that retailers run near the completion of the installation process:
> http://www.oracle.com/technology/documentation/ocm.html

12. Restart the rib-<app>-oc4j-instances. During the installation process a shared library is created that contains the JDBC Driver update. For PL/SQL applications, it is necessary to bounce the oc4j instance.

13. If the installer finds the configbuilder.sh script, it will attempt to run it. However, if the installer is unable to run the RDMT script or if the RDMT setsup failed for some reason, then you should manually run the RDMT at this time to verify the installation.

Run RDMT to Verify the Installation

The RIB Diagnostic and Monitoring Tools (RDMT) should be used at this time to verify the RIB installation. Please refer to the RIB Operations Guide - Diagnostic and Monitoring Tools for instructions to configure and use the RDMT tools.

Backups and Logs Created by the Installer

The RIB application installer creates the following backup and log files:

- Each time the installer is used to generate a new rib-deployment-env-info.xml, a backup of the existing file will be created in: <RIB_HOME>/deployment-home/conf/archive/rib-deployment-env-info.xml.<timestamp>

- Each time the installer is run, the output of the installer script will be written to a log file. The installer's log file will be located in: <RIB_HOME/.retail-installer/rib/log/rib-install-app.<timestamp>.log.

- Each time the installer is run, the user inputs will be recorded in: <RIB_HOME/.retail-installer/rib/log/ant.install.properties.<timestamp>. This file should only be used during troubleshooting to verify the exact inputs that were given to the installer. It is not recommended to modify this file as it is a record of the inputs at the time the installer was run.

Resolving Installation Errors

If an error is encountered while running the installer, the cause of the error must be corrected before making another attempt to run the installer. The installer's log file may contain helpful information for determining the cause of the error. After you have examined the log files, please refer to the troubleshooting guide in Appendix D for a list of commonly encountered errors.

When you are ready to attempt another installation, keep in mind that you may be able to avoid re-entering all your inputs if the previous installation process was far enough along to configure the rib-deployment-env-info.xml. If the installer has already generated the rib-deployment-env-info.xml file, or if you have manually edited the rib-deployment-env-info.xml file, then it is not necessary to re-enter all the inputs in the installer. Verify that the rib-deployment-env-info.xml contains the correct settings, and run the installer with the "Use existing rib-deployment-env-info.xml" option.

5

Post-Installation Tasks

Oracle Application Tasks

Verify that correct URL's to the RIB Functional Artifacts are configured in the Java EE Applications.

- Functional Artifact URL
- JNDI URL

RDMT Installation

The RIB Diagnostic and Monitoring Tool (RDMT) kit is a collection of command line tools, written in Unix shell script along with supporting Java classes packaged in jar files. There are various tools to address these areas:

- Installation Verification (reports)
- Operations (scanning and monitoring)
- Production (scanning and quick triage)
- Test and Support (scanning and fine grain control)
- AQ JMS support and tools

Installation Steps

1. The RDMT Java support classes require Java 5.0. Installation will perform a check and fail if the path is not correct. Before you begin the installation process, verify that your Java version is corrrect.

2. Determine the location for installation. The recommended location is to put it in rib-home/tools-home directory. There is an empty rdmt subdirectory already there. This is only a placeholder. However, RDMT can be installed under any user in any directory.

3. Download the tar file (Rdmt13.0.3ForAll13.x.xApps_eng_ga.tar) and extract it. >tar svf Rdmt13.0.3ForAll13.x.xApps_eng_ga.tar.

4. cd to the rdmt directory and execute the configbuilder.sh script supplied with the toolkit. >./ configbuilder.sh

5. Once executed, it checks if the rdmt has been extracted under rib-home/tools-home directory. If so, it fetches all the necessary configuration information from rib-deployment-env-info.xml present under rib-home/deployment-home/conf directory and it automatically completes the RDMT installation.

   If rdmt was extracted under some other directory with rib-home present on the same server, it prompts for the rib-home path. Provide the same and it fetches all the necessary configuration information from rib-deployment-env-info.xml present under specified rib-home/deployment-home/conf directory and it automatically completes the RDMT installation.

   If rdmt was extracted in a remote server, it prompts for RIB configuration values during setup. The installation script will prompt for the configuration settings need to run the tools in the toolkit.

6. The installation will automatically configure for all the rib-<apps>s depending upon the applications in scope as defined in rib-deployment-env-info.xml. In case of remote installation, answer yes to configure additional rib<-ap>s. It is recommended that you configure all the rib-apps that have been installed in the RIB Installation.

7. Run the RibConfigReport. This report will run a battery of tests that will validate the RIB components installed.

Information to Gather for Installation in Remote Server

The following are necessary directory parameters.

Parameters	Setting
RDMT Home Directory	Rib1301ForAll13xxApps/rib-home/tools-home/rdmt/
RDMTLOGS Directory	Rib1301ForAll13xxApps/rib-home/tools-home/rdmt /RDMTLOGS
Temp Files Directory	Rib1301ForAll13xxApps/rib-home/tools-home/rdmt /RDMTLOGS/tmp
RIB App Builder rib-home Directory	/u00/Rib1301ForAll13xxApps/rib-home

The following are parameters for the JMS provider.

Parameter	Setting
AQ JMS User ID	ribaq
AQ JMS Password	retek
JMS Connection URL	jdbc:oracle:thin:@host-name:port:sid

The following are OC4J parameters for JMX functions:

Parameter	Setting
OC4J/JMX Host	mspdev72
JMX Req Port	6003
OC4J Instance name	rib-rms-oc4j-instance

Parameter	Setting
OC4J App Name	rib-rms
OC4J User Name	oc4jadmin
OC4J Password	welcome1

The following are parameters for each hospital (RMS, RWMS, SIM, and others).

Parameter	Setting
User Name	rms
Password	retek
Database URL	jdbc:oracle:thin:@host-name:port:sid

RIB Hospital Administration Tool

The RIB Hospital Administration Tool (RIHA) is a Java executable/application provided to perform RIB administration functions in the RIB Hospital database.

Prerequisites

The minimum and preferred Java Runtime Engine (JRE) version to use with RIHA is 1.5 This JRE must be installed on the host where RIHA will be installed prior to running the configuration script.

Installation Steps

RIHA can be installed on either a PC running a Windows operating system or in a UNIX environment. It is suggested, but not required, that it be installed where RIB13 has already been installed and configured.

1. Copy the Riha13.0.3ForAll13.x.xApps_eng_ga.tar file to the location where RIHA will be installed.

Windows	C:\RIB_Tools\RIHA
UNIX	$RIB_HOME/tools-home/riha

2. Decompress the tar file with an archive utility (e.g.: WinZip for windows or unzip for UNIX). This will extract all RIHA files into a directory named Riha13.0.3ForAll13.x.xApps_eng_ga.

3. Downloading Hibernate.

   RIHA uses Open Source O-R mapping tool called Hibernate (http://www.hibernate.org). Due to licensing limitation RIHA cannot ship Hibernate along with its package, so hibernate 2.1.8 has to be download by the person installing RIHA. RIHA has been certified with only hibernate 2.1.8, do not download any other Hibernate version.

   Download Hibernate (hibernate-2.1.8.zip) and extract the hibernate2.jar file from inside the zip file. Copy the hibernate2.jar to appropriate directory shown in the table below.

Windows	C:\RIB_Tools\RIHA\Riha13.0.3ForAll13.x.xApps_eng_ga\external-lib
UNIX	$RIB_HOME/tools-home/riha/Riha13.0.3ForAll13.x.xApps_eng_ga/external-lib

4. Go to the appropriate "bin" directory and execute the RIHA configuration executable file. This script, located in the path displayed in the table below, will run the rest of the installation and configuration process.

Windows	C:\RIB_Tools\RIHA\Riha13.0.3ForAll13.x.xApps_eng_ga\bin\riha-config.bat
UNIX	$RIB_HOME/tools-home/riha/Riha13.0.3ForAll13.x.xApps_eng_ga/bin/riha-config.sh

Create a user login. RIHA provides users with access to information contained in the applications RIB Hospital database. Users can view and modify this data and control the variables that make possible the feedback of messages into the system. Because of this, limiting the accessibility to this tool is imperative. RIHA supports the creation of user logins to guarantee that only designated users can execute this tool.

The following prompts ask the user to enter the credentials to create a new user login for RIHA. More than one user can be created.

```
Starting RIHA configuration utility...

Create a new user login:

Enter User Id: dannich

Enter User First Name: Daniel

Enter User Last Name: Nicholson

Enter password: <password not shown>

Verify password: <password not shown>

User dannich created.

Do you want to create another user? (y/n): n

Creating hibernate configuration files...

You can access multiple Error Hospital databases by setting multiple
configuration files (even for the same product). Select [D]one when
finished.
```

After creating the user, it checks if RIHA has been extracted under
rib-home/tools-home directory. If so, it fetches all the necessary configuration
information from rib-deployment-env-info.xml present under
rib-home/deployment-home/conf directory. It configures for RIB hospital for the
<app>s depending upon the applications in scope as defined in
rib-deployment-env-info.xml.

```
User dannich created.


Do you want to create another user? (y/n): n


rib home path is detected:\dannich\rib-home\


Application (rib-rms) is in scope. Generating  hibernate configuration file
....
Loaded the rib-deployment-env-info.xml file successfully.
Configuration file is  generated successfully


Application (rib-rwms) is in scope. Generating  hibernate configuration file
....
Loaded the rib-deployment-env-info.xml file successfully.
Configuration file is  generated successfully


Application (rib-rpm) is in scope. Generating  hibernate configuration file
....
Loaded the rib-deployment-env-info.xml file successfully.
Configuration file is  generated successfully


Application (rib-sim) is in scope. Generating  hibernate configuration file
....
Loaded the rib-deployment-env-info.xml file successfully.
Configuration file is  generated successfully


Application (rib-tafr) is in scope. Generating  hibernate configuration file
....
Loaded the rib-deployment-env-info.xml file successfully.
Configuration file is  generated successfully


 Application (rib-aip) is not in scope. Hence hibernate configuration file is
not generated.
```

If RIHA is extracted under some other directory with rib-home present on the
same server, it prompts for the rib-home path. Provide the same and it fetches all
the necessary configuration information from rib-deployment-env-info.xml
present under specfied rib-home/deployment-home/conf directory. It configures
for RIB hospital for the <app>s depending upon the applications in scope as
defined in rib-deployment-env-info.xml

```
Do you want to create another user? (y/n): n
Rib home is not detected.


Is  there rib-home directory structure in the system?N/Y: y
Enter the path of the rib-home directory: \dannich\rib-home\


Application (rib-rms) is in scope. Generating  hibernate configuration file
....
Loaded the rib-deployment-env-info.xml file successfully.
Configuration file is  generated successfully


Application (rib-rwms) is in scope. Generating  hibernate configuration file
....
Loaded the rib-deployment-env-info.xml file successfully.
Configuration file is  generated successfully


Application (rib-rpm) is in scope. Generating  hibernate configuration file
....
Loaded the rib-deployment-env-info.xml file successfully.
Configuration file is  generated successfully


Application (rib-sim) is in scope. Generating  hibernate configuration file
....
Loaded the rib-deployment-env-info.xml file successfully.
Configuration file is  generated successfully


Application (rib-tafr) is in scope. Generating  hibernate configuration file
....
Loaded the rib-deployment-env-info.xml file successfully.
Configuration file is  generated successfully


 Application (rib-aip) is not in scope. Hence hibernate configuration file is
not generated.
```

If RIHA was extracted in a remote server, the user is presented with a list of standard Retail applications to choose from and configure the database connection where the RIB Hospital of each application resides. It also prompts the user for the server hosting the XSD files for the RIB messages. Once the necessary information is entered, the user is returned to the Retail applications list to either configure a new connection or complete this process. Version 13.0.3 of the RIHA allows users to either enter a standard database JDBC connection string or a RAC database JDBC connection URL.

a. Standard database connection string setup process:

```
Please choose a product for configuring database information:

1) AIP  - Advanced Inventory Planning
2) SIM  - Store Inventory Management
3) RMS  - Retail Merchandising System
4) RPM  - Retail Price Management
5) RWMS - Retail Warehouse Management System
6) TAFR - TAFR Hospital Tables
```

```
([1], [2], [3], [4], [5], [6], [D]one): 3

Please choose the type of database for configuring database information:

(1)RAC Database

(2)Non-RAC Database

([1], [2]:2

Enter the connection URL [E.g: jdbc:oracle:thin:@mspdev57:1521:orcl ] :
  jdbc:oracle:thin:@mspdev94:1521:dvolr051

Enter user name: rmsseint121user

Enter password: <password not shown>

Verify password: <password not shown>

Enter name of server hosting xsd files (e.g.: mspdev05.retek.int):
http://mspdev85

Enter port number of server hosting xsd files (e.g.: 8080): 7777

Please choose a product for configuring database information:

1) AIP  - Advanced Inventory Planning
2) SIM  - Store Inventory Management
3) RMS  - Retail Merchandising System
4) RPM  - Retail Price Management
5) RWMS - Retail Warehouse Management System
6) TAFR - TAFR Hospital Tables

([1], [2], [3], [4], [5], [6], [D]one): D
```

b. RAC compatible database connection URL setup process:

```
Please choose a product for configuring database information:

1) AIP  - Advanced Inventory Planning
2) SIM  - Store Inventory Management
3) RMS  - Retail Merchandising System
4) RPM  - Retail Price Management
5) RWMS - Retail Warehouse Management System
6) TAFR - TAFR Hospital Tables

([1], [2], [3], [4], [5], [6], [D]one): 3

Please choose the type of database for configuring database information:

(1)RAC Database

(2)Non-RAC Database

([1], [2]:1

Enter the connection URL [E.g:
jdbc:oracle:thin:@(DESCRIPTION =(ADDRESS_LIST =
(ADDRESS = (PROTOCOL = TCP)(HOST = mspvip72)(PORT = 1521))
```

```
(ADDRESS = (PROTOCOL = TCP)(HOST = mspvip73)(PORT = 1521))
(LOAD_BALANCE = yes))(CONNECT_DATA =(SERVICE_NAME = dvolr02))) ] :

jdbc:oracle:thin:@(DESCRIPTION =(ADDRESS_LIST =(ADDR
ESS = (PROTOCOL= TCP)(HOST = mspvip94) (PORT = 1521))(ADDRESS = (PROTOCOL =
TCP)(HOST = mspvip95)(PORT = 1521))(LOAD_BAL
ANCE = yes))(CONNECT_DATA = (SERVICE_NAME = dvolr05)))

Enter user name: rmsseint121user

Enter password: <password not shown>

Verify password: <password not shown>

Enter name of server hosting xsd files (e.g.: mspdev05.retek.int):
http://mspdev85

Enter port number of server hosting xsd files (e.g.: 8080): 7777

Please choose a product for configuring database information:

1) AIP  - Advanced Inventory Planning
2) SIM  - Store Inventory Management
3) RMS  - Retail Merchandising System
4) RPM  - Retail Price Management
5) RWMS - Retail Warehouse Management System
6) TAFR - TAFR Hospital Tables

([1], [2], [3], [4], [5], [6], [D]one): D
```

5. Finally the user is prompted to enter the full path for the Web browser to use when displaying the online help.

6. RIHA is configured and ready. Execute the RIHA start executable file to start using the RIB Hospital Administration tool.

Windows	C:\RIB_Tools\RIHA\Riha13.0.3ForAll13.x.xApps_eng_ga\bin\riha.bat
UNIX	$RIB_HOME/tools-home/riha/Riha13.0.3ForAll13.x.xApps_eng_ga/bin/riha.sh

A

RIB Application Installer Screens

You will need the following details about your environment for the installer to successfully deploy the RIB applications. Depending on the options you select, you may not see some screens.

Field Title	Which installation phases do you wish to run?
Field Description	Used by the installer's build.xml to determine which phases to run during the install. Each installation phase will run a different command-line tool.
	Preparation Phase:
	check-version-and-unpack.sh
	Assembly Phase:
	rib-app-compiler.sh
	Deployment Phase:
	rib-app-deployer.sh -deploy-rib-func-artifact-war
	and/or
	rib-app-deployer.sh -deploy-rib-app-ear rib-<app>
Destination	

Field Title	Which installation phases do you wish to run?
Example	
Notes	

Field Title	Configure JMS topics for RIB?
Field Description	Used by the installer's build.xml to determine whether to configure the JMS topics.
	Will run the command-line tool:
	rib-app-deployer.sh -prepare-jms
Destination	
Example	
Notes	

Screen: Provide Inputs to Installer?

Fields on this screen

Field Title	Generate new config file?
Field Description	Used by the installer to determine whether to prompt user for inputs needed to generate the rib-deployment-env-info.xml file. Also used by the installer's build.xml to determine whether or not to actually generate the new file.
Destination	
Example	
Note	

Screen: JMS Server Configuration

Fields on this screen:

Field Title	JMS Server Configuration
Field Description	Used by the installer to determine how many sets of JMS server inputs should be collected from the user.
Destination	
Example	
Notes	

Screen: Number of JMS Servers

Fields on this screen:

Field Title	Total Number of JMS Servers
Field Description	Used by the installer to determine how many sets of JMS server inputs should be collected from the user.
Destination	
Example	2
Notes	

Screen: JMS Server 1

> **Note:** The installer will request inputs for as many JMS servers as were chosen on the previous screen. There will be one input screen for each JMS server.

Fields on this screen:

Field Title	JMS Server ID
Field Description	The name of the JMS server.
Destination	rib-deployment-env-info.xml
Example	jms1
Notes	

Screen: JMS Server 1 Details

> **Note:** The installer will request inputs for as many JMS Servers as were chosen on the previous screen. There will be one input screen for each JMS server.

Fields on this screen:

Field Title	AQ1 JMS Server Home
Field Description	
Destination	rib-deployment-env-info.xml
Example	oracle@myhost:/u01/oradata
Notes	

Field Title	AQ1 JMS URL
Field Description	
Destination	rib-deployment-env-info.xml
Example	single instance thin client: jdbc:oracle:thin:@myhost:1521:mydb
Notes	

Field Title	AQ1 JMS Port
Field Description	
Destination	rib-deployment-env-info.xml
Example	1521
Notes	

Field Title	AQ1 JMS User
Field Description	
Destination	rib-deployment-env-info.xml
Example	RIB_AQ
Notes	

Field Title	AQ1 JMS Password
Field Description	
Destination	rib-deployment-env-info.xml
Example	
Notes	

Screen: Number of Oracle AS Installations

Fields on this screen:

Field Title	Total Number of Application Server Installations
Field Description	How many different Oracle Application Servers will your rib-<app> applications be installed to? The installer uses this information to determine how many App Servers it needs to request inputs for.
Destination	
Example	1
Notes	

Screen: App Server <X> Details

Note: The installer will request inputs for as many Application Servers as were chosen on the previous screen. There will be one input screen for each App Server.

Fields on this screen:

Field Title	App Server Instance Name
Field Description	Your App Server's instance name can be found in this file:
	$ORACLE_HOME/config/ias.properties
	In the ias.properties file, it is called "IASname."
Destination	rib-deployment-env-info.xml
Example	1013AS_1.my_server.my_domain.com
Notes	

Field Title	App Server Home
Field Description	The format should be: <user>@<host>:<ORACLE_HOME> where <user> is the user who owns the files in the ORACLE_HOME <host> is the name or IP address of the server where the App Server is installed <ORACLE_HOME> is the filesystem path to the ORACLE_HOME
Destination	rib-deployment-env-info.xml
Example	myuser@myhost:/path/to/oracle/home
Notes	

Field Title	OPMN Request Port
Field Description	The request port can be found in this file: $ORACLE_HOME/opmn/conf/opmn.xml <port local="6100" remote="6200" request="6003"/>
Destination	rib-deployment-env-info.xml
Example	6003
Notes	

Field Title	OHS HTTP Port
Field Description	The HTTP port can be found in this file: $ORACLE_HOME/Apache/Apache/conf/httpd.conf
Destination	rib-deployment-env-info.xml
Example	7777
Notes	

Field Title	Java Home
Field Description	The JDK in the ORACLE_HOME. It can be found here: $ORACLE_HOME/jdk
Destination	rib-deployment-env-info.xml
Example	/path/to/oracle/home/jdk
Notes	

Screen: Choose Apps to Install

Fields on this screen:

Field Title	Install rib-<app>
Field Description	Used by the installer's build.xml to determine which applications to deploy during the Deployment Phase. This screen may also be shown if you have chosen not to run the Deployment Phase, but have chosen to generate a new rib-deployment-env-info.xml file. In this case, it is used by the installer to determine which inputs to request from the user to create the rib-deployment-env-info.xml file.
Destination	rib-deployment-env-info.xml
Example	
Notes	

Screen: Choose App Server for rib-<app>

> **Note:**   The screenshot above is for rib-sim. There will be a similar screen for rib-func-artifacts and for each other rib-<app> that you have chosen to install.

Fields on this screen:

Field Title	Select the App Server where rib-<app> will be installed
Field Description	Used by the installer's build.xml to determine which application server to associate the rib-<app>'s OC4J instance with.
	Note: The installer will request this information for rib-func-artifact, even if you have chosen not to install rib-func-artifact at this time. The reason is because the rib-func-artifact inputs are required to exist in the rib-deployment-env-info.xml file in order to deploy any rib-<app>.
Destination	rib-deployment-env-info.xml
Example	
Notes	

Screen: Set Email Defaults
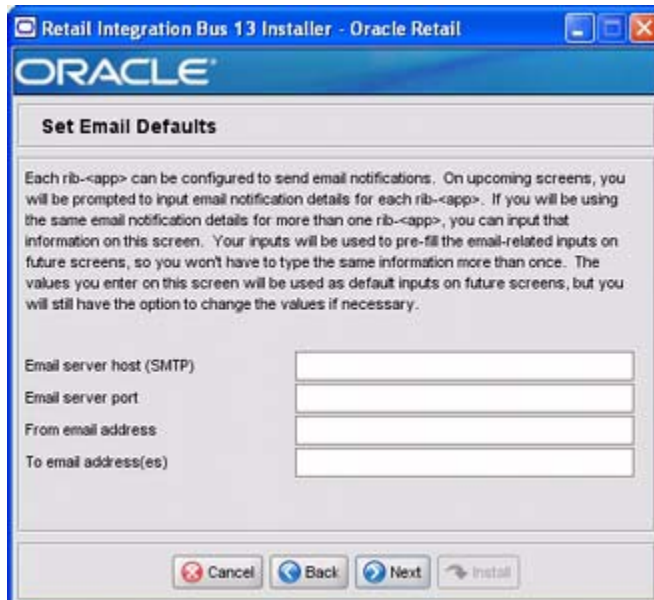
Fields on this screen:

Field Title	Email server host (SMTP)
Field Description	If you are going to use the same email host for multiple rib-<app> applications you can enter it here.
Destination	
Example	smtp.mycompany.com
Notes	

Field Title	Email server port
Field Description	If you are going to use the same email port for multiple rib-<app> applications you can enter it here.
Destination	
Example	25
Notes	

Field Title	From email address
Field Description	If you are going to use the same email originator address for multiple rib-<app> applications you can enter it here.
Destination	
Example	rib@mycompany.com
Notes	

Field Title	To email address(es)
Field Description	If you are going to use the same email recipients list for multiple rib-<app> applications you can enter it here.
Destination	
Example	name1@mycompany.com, name2@mycompany.com
Notes	

Screen: rib-<app> OC4J Details
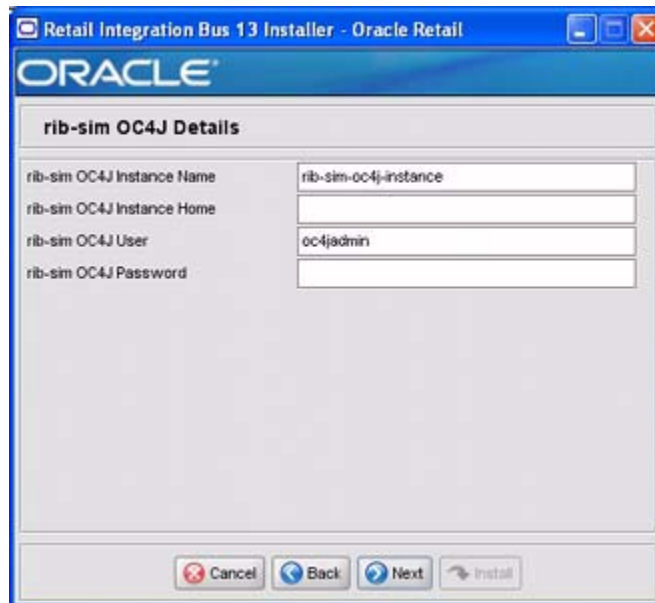
Note: The screenshot above shows the OC4J details input screen for rib-sim. Depending on which rib-<app> applications you are installing, the installer may display one or more input screens for each rib-<app>.

Fields on this screen:

Field Title	rib-<app> OC4J Instance Name
Field Description	The name of the OC4J instance where the rib-<app> will be deployed.
Destination	rib-deployment-env-info.xml
Example	rib-sim-oc4j-instance
Notes	

Field Title	rib-<app> OC4J Instance Home
Field Description	The format should be as follows:
	<user>@<host>:<ORACLE_HOME>/j2ee/<oc4j-instance>
	where:
	<user> is the user who owns the files in the ORACLE_HOME
	<host> is the name or IP address of the server where the App Server is installed
	<ORACLE_HOME> is the filesystem path to the ORACLE_HOME
	<oc4j-instance> is the OC4J instance name
Destination	rib-deployment-env-info.xml
Example	myuser@myhost:/path/to/oracle/home/j2ee/rib-sim-oc4j-instance
Notes	

Field Title	rib-<app> OC4J User
Field Description	
Destination	rib-deployment-env-info.xml
Example	oc4jadmin
Notes	

Field Title	rib-<app> OC4J Password
Field Description	
Destination	rib-deployment-env-info.xml
Example	
Notes	

Screen: <app> Details

> **Note:** The screenshot above shows the Details screen for SIM.
> Depending on which rib-<app> applications you are installing, you
> will see different details input screens. For some of the Oracle Retail
> applications, these inputs may appear on separate installer screens
> rather than all on one screen.

Fields on this screen:

Field Title	<app> database URL
Field Description	JDBC URL for the database
Destination	rib-deployment-env-info.xml
Example	single instance thin client: jdbc:oracle:thin:@myhost:1521:mydb

Field Title	<app> database schema User
Field Description	Database user where the <app> database schema was installed
Destination	rib-deployment-env-info.xml
Example	SIM_USER
Notes	

Field Title	**\<app\> database schema password**
Field Description	Password for the \<app\> database schema user
Destination	rib-deployment-env-info.xml
Example	
Notes	

Field Title	**\<app\> JNDI URL**
Field Description	URL which will be used by rib-\<app\> to connect to the \<app\> application.
Destination	rib-deployment-env-info.xml
Example	opmn:ormi://myhost:6003:sim-oc4j-instance/sim
Notes	

Field Title	**\<app\> JAAS User**
Field Description	When rib-\<app\> authenticates to the \<app\> JNDI naming service through the URL in the previous field, it will provide this user name.
Destination	rib-deployment-env-info.xml
Example	oc4jadmin
Notes	

Field Title	**\<app\> JAAS Password**
Field Description	The password for the \<app\> JAAS user
Destination	rib-deployment-env-info.xml
Example	
Notes	

Screen: rib-<app> Email Notification Details

> **Note:** The screenshot above shows the Email Notification Details screen for rib-sim. The installer may show similar screens for other rib-<app>, depending on which rib-<app> applications you are currently installing.

Fields on this screen:

Field Title	Email server host (SMTP)
Field Description	The SMTP server that will be used to send notification emails from the RIB
Destination	rib-deployment-env-info.xml
Example	smtp.mycompany.com
Notes	

Field Title	Email server port
Field Description	The port for outgoing emails
Destination	rib-deployment-env-info.xml
Example	25
Notes	

Field Title	From address
Field Description	The email address that the rib-<app> email notifications will originate from.
Destination	rib-deployment-env-info.xml

Field Title	From address
Example	rib@mycompany.com
Notes	

Field Title	To address(es)
Field Description	List of recipients for rib-<app> email notifications
Destination	rib-deployment-env-info.xml
Example	name1@mycompany.com, name2@mycompany.com
Notes	

B

RIB Installer Common Errors

This section provides some common errors encountered during installation to aid in troubleshooting.

Unreadable Buttons in the Installer

If you are unable to read the text within the installer buttons, it could mean that your JAVA_HOME is pointed to an older version of the JDK than is supported by the installer. Set JAVA_HOME to a Java 1.5 JDK and run the installer again.

"Could not create system preferences directory" Warning

Symptom:

The following text appears in the installer Errors tab:

```
May 22, 2006 11:16:39 AM java.util.prefs.FileSystemPreferences$3 run
WARNING: Could not create system preferences directory. System preferences are
unusable.
May 22, 2006 11:17:09 AM java.util.prefs.FileSystemPreferences
checkLockFile0ErrorCode
WARNING: Could not lock System prefs. Unix error code -264946424.
```

Solution:

This is related to Java bug 4838770. The /etc/.java/.systemPrefs directory may not have been created on your system. See http://bugs.sun.com for details.

This is an issue with your installation of Java and does not affect the Oracle Retail product installation.

ConcurrentModificationException in Installer GUI

Symptom:

In GUI mode, the Errors tab shows the following error:

```
java.util.ConcurrentModificationException
........at
 java.util.AbstractList$Itr.checkForComodification(AbstractList.java:448)
........at java.util.AbstractList$Itr.next(AbstractList.java:419)
........etc.
```

Solution:

You can ignore this error. It is related to third-party Java Swing code for rendering of the installer GUI and does not affect the retail product installation.

"Couldn't find X Input Context" Warnings

Symptom:

The following text appears in the console window during execution of the installer in GUI mode:

```
Couldn't find X Input Context
```

Solution:

This message is harmless and can be ignored.

Error While Unpacking the EAR file

Symptom:

The following text appears in the console window during execution of the installer:

```
07/12/19 10:53:17 Notification ==>Error while unpacking <app>.ear
java.util.zip.ZipException: error in opening zip file
```

Solution:

This is a known bug (BugID 6330834) related to Solaris and NFS in Oracle Application Server 10.1.3.3. Follow the workaround documented for this bug: in the opmn.xml file in $ORACLE_HOME/opmn/conf add the following parameter to the java-options for the instance you are installing.

Solution:

```
-Doc4j.autoUnpackLockCount=-1
```

After making this change you should reload OPMN, restart the affected OC4J instance(s), and retry the retail application installation.

"Problem occurred during parsing input xml files" Message

Symptom:

The following text appears in the console window during execution of the installer:

```
ERROR oracle.retail.rib.compiler.Main - Problem occurred during parsing input xml
files. Please check the log file(../../../rib-home/application-assembly-home/log)
for more details.
.....
Caused by: ValidationException:
.....
```

Solution:

The rib-deployment-env-info.xml file is validated during the Assembly Phase using stricter criteria than is enforced by the installer input screens. If the validation fails, the installer will print an error message to help you determine the cause of the validation failure. It is recommended that you fix the rib-deployment-env-info.xml file manually, and then re-run the installer with the "Use existing rib-deployment-env-info.xml" option.

C

RIB Installation Checklists

These notes are intended as an aid in the installation of RIB. They are not intended to replace the detailed description of each of the process steps and prerequisites, but to act as a companion to those steps. For a successful installation, a methodical reading and understanding of each step of this installation guide is strongly recommended.

RIB Installation Master Checklist

This checklist covers all of the sequential steps required to perform a full installation of the RIB, using either the GUI RIB Installer (strongly recommended) or a command line installation.

Task	Notes
Prepare the Oracle Application Servers for installation of the RIB Components	Prerequisite
Prepare the Oracle Database Schemas that the RIB will use.	Prerequisite
Prepare the Oracle AQ JMS	Prerequisite
Verify the Applications the RIB will be integrating to are configured appropriately.	See documentation regarding integration with the RIB in the documentation for each Oracle Retail application.
"Information to Gather for the Install"	During the prerequisites steps there is information that should be note that will be used to configure the RIB during the installation process.
Install the RIB using one of these methods: ■ Installation using the RIB Installer GUI ■ Installation using the RIB App Builder Command Line Tools.	It is strongly recommended that the Installation Using the RIB Installer GUI method be used.
Verify Application URL settings match RIB install.	RIB Functional Artifact URL JNDI URL

Task	Notes
Complete the setup of RDMT using the same "Information to Gather for the Install"	During either of the installation methods, one of the manual steps will have extracted the rdmt tools to the appropriate directory.
Verify the RIB installation using the RDMT tools.	
Install RIHA.	The RIB Hospital maintenance tool

Prerequisite - Prepare OracleAS for RIB Components

Task	Notes
Install Oracle Application Server 10.1.3.x.	See Release Notes for the certifications and the *Oracle Retail Integration Bus Implementation Guide* for deployment Architectures.
Ensure that Java 1.5 JDK is installed on the OracleAS host and accessible.	
Create the RIB OC4J instances.	Replace <app> with the actual value of the RIB application for the associated retail application.
Warning: Each rib-<app> application requires a separate OC4J instance that is not shared with any other application.	There are two RIB specific oc4j instances that must be created regardless of the other application deployment choices.
$ORACLE_HOME/bin/createinstance -instanceName rib-<app>-oc4j-instance	rib-func-artifact-oc4j-instance. (It is recommended, but not required, that this naming convention be followed.) These are the optional application instances depending on the deployment choices. It is recommended, but not required that this naming convention be followed:
Note: For details on opmn usage and configuration details, see the Oracle Process Manager and Notification Server Administrator's Guide 10g Release 3 (10.1.3.3).	- rib-rms-oc4j-instance - rib-tafr-co4j-instance - rib-rpm-oc4j-instance - rib-sim-oc4j-instance - rib-rwms-oc4j-instance - rib-aip-oc4j-instance

Task	Notes

Edit the $ORACLE_HOME/ j2ee/rib-<app>-oc4j-instanc e/config/server.xml
 	
Add attribute global-jndi-lookup-enabled ="true" to <application-server> element.
	Example :
	
	`<application-server`
	`xmlns:xsi="http://www.w3.org/2001/XMLSchema-insta`
	`nce"`
	`xsi:noNamespaceSchemaLocation="http://xmlns.oracl`
	`e.com/oracleas/schema/application-server-10_`
	`1.xsd"`
	`application-directory="../applications"`
	
	`check-for-updates="adminClientOnly"`
	
	`deployment-directory="../application-deployments"`
	
	`connector-directory="../connectors"`
	
	`global-jndi-lookup-enabled="true"`
	
	`schema-major-version="10"`
	
	`schema-minor-version="0" >`

Edit the $ORACLE_ HOME/opmn/conf/opmn. xml file and add the following properties to the rib-<app>-oc4j-instance definition.	Make a backup copy of opmn.xml before you edit.

Locate the section of the xml file that relates to each of the rib-<app> instances.
 	
Note: The properties below must be applied ONLY to rib-<app>-oc4j-instance definition.
	`<process-type id="rib-rms-oc4j-instance"`
	`module-id="OC4J" status="enabled">`
	`    <module-data>`
	`        <category id="start-parameters">`
	`            Default stuff….`
	`        </category>`
	`        <category id="stop-parameters">`
	`            Default stuff….`
	`        </category>`
	`        </module-data>`
	`            Port stuff….`
	`</process-type>`

Update the java-options section to add the following JVM properties:
 	
■ Specify the JVM's min and max heap size.
 	
■ Xms500M -XmSwitch off JMX security. x900M
 	
Note: These are minimum values. Consult with the local sysadmin's for site values.
 	
■ Doc4j.jmx.security.proxy.off =true
	`<data id="java-options" value="-server`
	`-Doc4j.jmx.security.proxy.off=true -Xms500M`
	`-Xmx900M`
	`-Djava.security.policy=$ORACLE_`
	`HOME/j2ee/rib-rms-oc4j-instance/config/java2.poli`
	`cy`
	`-Djava.awt.headless=true`
	`-Dhttp.webdir.enable=false"/>`

Specify -userThreads to oc4j-options element.	`<data id="oc4j-options" value="-userThreads"/>`

Task	Notes
Make sure that numprocs attribute for the process-set element for rib-\<app\>-oc4j-instance is set to 1.	`<process-set id="default_group" numprocs="1"/>`

Edit the "orion-ejb-jar.xml" present under \<oc4j-instance-home\>/application-deployments/admin_ejb directory of the oc4j instance.
 	
Make sure to create a backup of the file before editing.
	Add the "rib-oc4j-administrator" role as follows:
	
	`<security-role-mapping name="jmxAdministrator">`
	`    <group name="oc4j-administrators" />`
	`    <group name="ascontrol_admin" />`
	`    <group name="rib-oc4j-administrators" />`
	`</security-role-mapping>`
	`<security-role-mapping name="jmxusers">`
	`    <group name="oc4j-app-administrators" />`
	`    <group name="ascontrol_appadmin" />`
	`    <group name="rib-oc4j-administrators" />`
	`</security-role-mapping>`

This completes the creation and mapping of the user and role. Restart the oc4j instance.	

Prerequisite - Oracle Database Schemas

Task	Notes
Each Oracle Retail Application has an associated set of RIB Artifacts that must be installed as part of the RIB integration, e.g. the RIB Hospital Tables, CLOB API libraries, and Oracle Objects.	Each Application packages the RIB artifact creation scripts and they are installed at the time of the application's installation. It is critical to Insure that they have been installed and are the correct version. The TAFR Hospital is independent of any of the applications and should have a separate user/schema created for it.
■ Ensure that these have been installed appropriately per the individual applications. ■ Ensure that the TAFR Hospital user and objects exist. ■ Ensure that the RIB user has appropriate access and permissions.	It is recommended that all applications have a separate Hospital and that they be logically and operationally associated with that application.
Ensure that each PL/SQL application schema has run the RIB supplied scripts to create the RIB Artifacts: ■ 1_KERNEL_CREATE_OBJECTS.SQL script. ■ InstallAndCompileAllRibOracleObjects.sql ■ 1_CLOB_CREATE_OBJECTS.SQL (RMS Only)	Verify the XML Developer's Kit for PL/SQL is installed.

Task	Notes
RMS Application- verify that the row in the RIB_OPTIONS table has correct values to match the RIB deployment environment. Ensure that each Java EE application schema has run the RIB supplied scripts to create the RIB Artifacts: ■ 1_KERNEL_CREATE_OBJECTS.SQL script.	XML_SCHEMA_BASE_URL_DEFAULT = http://<hostname>:<port>/rib-func-artifact;
RIB TAFR RIB Hospital Ensure that the schema exists and has run the RIB supplied script to create the RIB Hospital. ■ 1_KERNEL_CREATE_OBJECTS.SQL script.	In RIB 13, there is a separate Hospital for all RIB TAFRs. Ensure that there is a user created for the RIB components and the scripts that create the hospital objects have been run. The TAFR Hospital user requires no special permissions. CREATE USER "TAFRHOSP" IDENTIFIED BY "TAFRHOSP" DEFAULT TABLESPACE "USERS" TEMPORARY TABLESPACE "TEMP"; GRANT "CONNECT" TO " TAFRHOSP "; GRANT "RESOURCE" TO " TAFRHOSP ";
Ensure that the XA grants are made appropriately. Note: For details, see the Oracle Database Administrator Guide 10g Release 2 (10.2.0.3),	grant select on v$xatrans$ to public; grant select on pending_trans$ to public; Verify that the XA scripts have been run on the database.grant select on dba_2pc_pending to public; grant select on dba_pending_transactions to public; grant execute on dbms_system to public;

Prerequisite - Prepare Oracle AQ JMS Provider

Task	Notes
Create the Oracle RDBMS instance that will be the JMS Provider.	Oracle Streams AQ is provided by the Oracle RDBMS Enterprise Edition install. Warning: It is strongly recommended that the Oracle Database Instance that is configured to be the JMS provider is not shared with any other applications and not be on the same host (physical or logical) with any other applications. See "Deployment Architectures" in the *Oracle Retail Integration Bus Implementation Guide*.

Create the AQ JMS user with the appropriate access and permissions to the Oracle Streams AQ packages. This user must have at least the following database permissions.
 	
■ CONNECT
■ RESOURCE
■ CREATE SESSION
■ EXECUTE ON SYS.DBMS_AQ
■ EXECUTE ON SYS.DBMS_AQADM
■ EXECUTE ON SYS.DBMS_AQIN
■ EXECUTE ON SYS.DBMS_AQJMS
	Example script:
	`CREATE USER "RIBAQ" IDENTIFIED BY "RIBAQ"`
	`DEFAULT TABLESPACE "AQJMS"`
	`TEMPORARY TABLESPACE "TEMP";`
	`GRANT "CONNECT" TO "RIBAQ";`
	`GRANT "RESOURCE" TO "RIBAQ";`
	`GRANT CREATE SESSION TO "RIBAQ";`
	`GRANT EXECUTE ON "SYS"."DBMS_AQ" TO "RIBAQ";`
	`GRANT EXECUTE ON "SYS"."DBMS_AQADM" TO "RIBAQ";`
	`GRANT EXECUTE ON "SYS"."DBMS_AQIN" TO "RIBAQ";`
	`GRANT EXECUTE ON "SYS"."DBMS_AQJMS" TO "RIBAQ";`
	`GRANT "AQ_ADMINISTRATOR_ROLE" TO "RIBAQ";`

Information	Notes
jms-server-home	JMS Provider for RIB 13.0.3 is AQ.
jms-url jms-port jms-user jms-password	■ jms-server-home: The server home must be in the format OsUser@AqHostName:/AqHomeDirectory. E.g. ribaq@ribaq-lnx-host:/u00/db "jms-url : AQ thin JDBC connection URL. E.g. jdbc:oracle:thin:@ribaq-lnx-host:1521:orcl On AQ on RAC database use the long JDBC URL E.g. jdbc:oracle:thin:@(DESCRIPTION =(ADDRESS_LIST =(ADDRESS = (PROTOCOL = TCP)(HOST = ribaq-lnx-virtual-host-1)(PORT = 1521))(ADDRESS = (PROTOCOL = TCP)(HOST = ribaq-lnx-virtual-host-2)(PORT = 1521))(LOAD_ BALANCE = yes))(CONNECT_DATA =(SERVICE_ NAME = orcl))) ■ jms-port : AQ JMS server listener port. This is same as the AQ JDBC listener port. E.g. 1521 ■ jms-user : AQ JMS user. This is the database user which can ■ connect to jms-url (see above). ■ jms-password : AQ JMS password. This is the database password which can connect to jms-url.
oas-instance-name oas-instance-home oas-opmn-request-port oas-ohs-port java-home	For each of the Oracle Application Servers that the RIB components will be deployed to. ■ oas-instance-name: Your OAS instance name. E.g. oas_ instance_1.ribapp-lnx-host ■ oas-instance-home: The format of the home must follow the format OsUser@OasHostName:/OasHomePath. E.g. ribapp@ribapp-lnx-host:/home/oracle/oracle/product/ 10.1.3.1/OracleAS_2 ■ oas-opmn-request-port: The OPMN request port E.g. 6003 ■ oas-ohs-port: The Oracle Http Server port that is configured for this OAS instance. E.g. 8889 ■ java-home : Java Home directory of the remote OAS server. E.g. /usr/java/jdk1.5.0_10
oc4j-instance-name oc4j-instance-home oc4j-user oc4j-password	The oc4j instances for each of your rib-<app> applications that are in-scope. ■ oc4j-instance-name: The oc4j instance name. For example: rib-rms will be deployed in rib-rms-oc4j-instance. ■ oc4j-instance-home: The oc4j home information. E.g. ribapp@ribapp-lnx-host:/home/oracle/oracle/product/ 10.1.3.1/OracleAS_2/j2ee/rib-rms-oc4j-instance ■ oc4j-user: Oc4j user name (for example, oc4jadmin) ■ oc4j-password: Oc4j password (for example, oc4jadmin)
To configure each rib-<app> this information is needed for each.	■ The application server where it will be deployed. ■ The RIB Hospital database information. ■ PL/SQL application database information. ■ E-mail notification information. ■ jndi information for javaee applications

Information	Notes
For RIB Hospital Database: database/url database/user database/password	■ database/url: rib-<app> error hospital thin JDBC connection URL. For example, jdbc:oracle:thin:@ribapp-lnx-host:1521:orcl If RIB Hospital tables are running on RAC database use the long JDBC url format. For example, jdbc:oracle:thin:@(DESCRIPTION =(ADDRESS_LIST =(ADDRESS = (PROTOCOL = TCP)(HOST = ribapp-lnx-virtual-host-1)(PORT = 1521))(ADDRESS = (PROTOCOL = TCP)(HOST = ribapp-lnx-virtual-host-2)(PORT = 1521))(LOAD_ BALANCE = yes))(CONNECT_DATA =(SERVICE_ NAME = orcl))) ■ database/user: This is the database user which will be used to connect to rib-<app> error hospital tables (for example, rms13user). ■ database/password: This is the database password which will be used to connect to rib-<app> error hospital tables (for example, rms13password).
For PL/SQL application database: database/url database/user database/password	See samples in row above for RIB Hospital Database.
For email notifications: email-server-host email-server-port from-address to-address-list	■ email/email-server-host: The SMPT mail server (for example, mail.yourcompany.com) ■ email/email-server-port: The SMTP mail server port. (for example, 25) ■ email/from-address: The email address from where the RIB notifications will originate (for example, ribadmin@yourcompany.com) ■ email/to-address-list: Comma separated list of destination email address where RIB notifications with be sent (for example,ribappsadmin1@yourcompany.com, ribappsadmin2@yourcompany2.com)

Information	Notes
joined information for jayvee applications: jndi/url jndi/factory jndi/user jndi/password	■ "jndi/url: The JNDI url for the retail <app> that this rib-<app> is connecting to. The URLs must use the following format. ■ OAS URL format: ■ opmn:ormi://opmnHost:opmnPort:oc4jInstanceName/applicationName ■ OAS factory: oracle.j2ee.rmi.RMIInitialContextFactory ■ For example,opmn:ormi://mspdev40.us.oracle.com:6007:rpm-oc4j-instance/rpm ■ jndi/factory: The JNDI provider factory class name. The factory must be one of the following. ■ OAS URL format: opmn:ormi://opmnHost:opmnPort:oc4jInstanceName/applicationName ■ OAS factory: oracle.j2ee.rmi.RMIInitialContextFactory ■ For example, oracle.j2ee.rmi.RMIInitialContextFactory ■ jndi/user: The retail <app> JNDI user name. This is same as the retail <app>'s oc4j instance user name. ■ For example, oc4jadmin ■ jndi/password: The retail <app> JNDI password. This is same as the retail <app>'s oc4j instance password. ■ For example, oc4jadmin

Installation Using the RIB Installer GUI

Task	Notes
Make sure that the JAVA_HOME environment variable is set for the user that will be performing these tasks. > echo $JAVA_HOME /usr/bin/java/jdk1.5.0_09	Example: export JAVA_HOME=/usr/bin/java/jdk1.5.0_09
Make sure that all RIB OC4J instance that are to deployed to are running.	
Determine the host and file system to create the rib-app-builder home directory on. > mkdir rib-app-builder	See the *Oracle Retail Integration Bus Implementation Guide* for guidelines and deployment approaches. This is an important strategic decision since all RIB configurations and management for a given deployment will be from this single, central location.

Task	Notes
Download and extract the RibKernel<RIB_MAJOR_VERSION>ForAll<RETAIL_APP_VERSION>Apps_eng_ga.tar. > tar xvf RibKernel13.0.3ForAll13.0.3Apps_eng_ga.tar	Copy the latest version to the rib-app-builder and then extract it to build your "rib-home". This "rib-home" will be the directory from where you will perform "all" the rib-<app> related tasks from now on.
Download the RibFuncArtifact<RIB_{MAJOR|MINOR}_VERSION>ForAll<RETAIL_APP_VERSION>Apps_eng_ga.tar and put it in rib-home/download-home/rib-func-artifacts directory.	Do "not" extract the tar file. This will be done by the check-version-and-unpack tool.
Download all the RibPak<RIB_{MAJOR|MINOR}_VERSION>For<RETAIL_APP_NAME><RETAIL_APP_VERSION>_eng_ga.tar and put it in rib-home/download-home/all-rib-apps directory. Return to the root rib-home directory.	Do **not** extract the tar file. This will be done by the check-version-and-unpack tool.
Execute rib-installer.sh >./rib-installer.sh This will start the x-term GUI.	For installs using a remote client (x-term) set the DISPLAY variable appropriately first. > export DISPLAY=141.144.112.189:0.0 Make sure that your local machine has an X-server (such as Exceed) running.
Verify Application URL settings match RIB install.	RIB Functional Artifact URL JNDI URL
Bounce all of the rib-<app>-oc4j-instances.	During the installation a shared library is created that contains the JDBC Driver update. It is necessary to bounce the oc4j instance.
Verify the installation using RDMT.	

Installation Using the RIB App Builder Command Line Tools

Task	Notes
Make sure that the JAVA_HOME environment variable is set for the user that will be performing these tasks. > echo $JAVA_HOME /usr/bin/java/jdk1.5.0_09	Example: export JAVA_HOME=/usr/bin/java/jdk1.5.0_09
Make sure that all RIB OC4J instance that are to deployed to are running.	
Determine the host and file system to create the rib-app-builder home directory on. > mkdir rib-app-builder	See the *Oracle Retail Integration Bus Implementatoin Guide* for guidelines and deployment approaches. This is an important strategic decision since all RIB configurations and management for a given deployment will be from this single, central location.
Download and extract the RibKernel<RIB_MAJOR_VERSION>ForAll<RETAIL_APP_VERSION>Apps_eng_ga.tar. > tar xvf RibKernel13.0.3ForAll13.0.3Apps_eng_ga.tar	Copy the latest version to the rib-app-builder and then extract it to build your "rib-home." This "rib-home" will be the directory from where you will perform "all" the rib-<app> related tasks from now on.
Download the RibFuncArtifact<RIB_MAJOR_VERSION>ForAll<RETAIL_APP_VERSION>Apps_eng_ga.tar and put it in rib-home/download-home/rib-func-artifacts directory.	Do **not** extract the tar file. This will be done by the check-version-and-unpack tool.
Download all the RibPak<RIB_MAJOR_VERSION>For<RETAIL_APP_NAME><RETAIL_APP_VERSION>_eng_ga.tar and put it in rib-home/download-home/all-rib-apps directory.	Do **not** extract the tar file. This will be done by the check-version-and-unpack tool.
Run the rib-home/download-home/bin/check-version-and-unpack.sh script from rib-home/download-home/bin directory.	This script will verify the version compatibility between the paks and extract the files if they are compatible.

Task	Notes
Edit rib-home/deployment-home/conf/rib-deployment-env-info.xml file to specify the deployment environment information. See the section, "Information to Gather for Installation in Remote Server", before starting the edit.	This file (rib-deployment-env-info.xml) is the ONLY file that the user has to edit. See "RIB-app-builder" in the *Oracle Retail Integration Bus Operations Guide* for details and examples. The xml file is divided in 4 major sections. 1. app-in-scope-for-integration section: In this section you define what application are in scope for this environment. 2. rib-jms-server section: In this section you define the JMS server information. See also "Pre-Installation Steps for Multiple JMS Server Setup" in Chapter 4. 3. rib-javaee-containers section: In this section you define the "Java EE container information" for each of the rib-\<app\> that are in scope. 4. rib-applications section: In this section you define the rib-\<app\> specific information for each of the rib-\<app\> that are in scope. ▪ "For plsql applications you will need to define RIB RIB Hospital connection and email notification information. ▪ "For javaee applications you will need to define RIB Hospital connection, email notification information and the connecting retail application's (i.e. \<app\>) JNDI information.
Edit the app-in-scope-for-integration section to match the desired deployment.	Define what application are in scope for this environment. <pre><app-in-scope-for-integration>\n <app id="rms" type="plsql-app"/>\n <app id="tafr" type="tafr-app"/>\n <app id="sim" type="javaee-app"/>\n <app id="rwms" type="plsql-app"/>\n <app id="rpm" type="javaee-app"/>\n <app id="aip" type="javaee-app"/>\n</app-in-scope-for-integration></pre>
Edit the rib-jms-server section. See "Pre-Installation Steps for Multiple JMS Server Setup" in Chapter 4.	For AQ: <pre><jms-server-home>linux1@linux1:/home/oracle/oracle/product/10.2.0/db_1</jms-server-home>\n\n<jms-url>jdbc:oracle:thin:@linux1:1521:ora10g</jms-url>\n <jms-port>1521</jms-port>\n <jms-user>ribaq</jms-user>\n <jms-password>ribaq</jms-password></pre>

Task	Notes
Edit the Application Server section	`<oas-instance-name> AS4.linux1.localdomain </oas-instance-name>`
	`<oas-instance-home>soa1@linux1:/home/soa1/product/10.1.3.1/OracleAS_6</oas-instance-home>`
	`<oas-opmn-request-port>6003</oas-opmn-request-port>`
	`<oas-ohs-port protocol="http" >7777</oas-ohs-port>`
	`<java-home>/usr/java/jdk1.5.0_01</java-home>`
Configure the oc4j instances for each of your rib-<app> applications that are in-scope.	`<oc4j id="rib-rms-app-server-instance">`
	`<oc4j-instance-name>rib-rms-oc4j-instance</oc4j-instance-name>`
	```<oc4j-instance-home>soa1@linux1:/home/soa1/product/10.1.3.1/OracleAS_4/j2ee/rib-rms-oc4j-instance</oc4j-instance-home> <oc4j-user>riboc4jadmin</oc4j-user> <oc4j-password>riboc4jadmin</oc4j-password></oc4j>```
Configure the rib-applications section: In this section you define the rib-<app> specific information for each rib-<app> that in scope.	For plsql applications you will need to define RIB Hospital connection, application database connections, and email notification information.
	```<rib-app id="rib-rms" type="plsql-app"><deploy-in refid="rib-rms-app-server-instance" /> <error-hospital-database> <hospurl>jdbc:oracle:thin:@10.141.27.136: 1521:orcl </hosp-url> <hosp-user>hospuser</hosp-user> <hosp-password>hosppwd</hosp-password> </error-hospital-database> <app-database> <app-db-url>jdbc:oracle:thin:@10.141.27.136: 1521:orcl </app-db-url> <app-db-user>rmsuser</app-db-user> <app-db-password>rmspwd</app-db-password> </app-database> <notifications> <email>```
	```<email-server-host>mail.oracle.com</email-server-host><email-server-port>25</email-server-port><from-address>david.burch@oracle.com</from-address><to-address-list>david.burch@oracle.com</to-address-list> </email> <jmx/></notifications>```
	For javaee applications, you will need to define RIB Hospital connection, email notification information and the connecting retail application's (i.e. <app>) JNDI information.

Task	Notes
Run the rib-home/application-assembly-home/bin/rib-app-compiler.sh script from rib-home/application-assembly-home/bin directory.	This will generate/assemble a rib-<app> and make it ready for deployment.
The RIB apps are now ready to deploy.	This script is located in the rib-home/deployment-home/bin directory.
Execute the rib-home/deployment-home/bin/rib-app-deployer.sh script with the appropriate command line parameter.	
> rib-app-deployer.sh -prepare-jms	This creates a new JMS server with all RIB configured topics.
>rib-app-deployer.sh -verify-error-hospital rib-<app>	This verfies: 1. Error-hospital database configurations by testing the connection to the database. 2. If the error-hospital tables are created in the schema. Note: Database must be already running.
> rib-app-deployer.sh -deploy-rib-func-artifact-war	This deploys the rib-func-artifact.war to the Java EE container.
> rib-app-deployer.sh -deploy-rib-app-ear rib-<app>	This deploys the rib-<app> to the javaee container. Repeat this step for all rib-<app> that is in scope for this integration environment. Note: <app> must be one of rms, rwms, tafr, sim, aip or rpm
Bounce all of the rib-<app>-oc4j-instances.	During the installation a shared library is created that contains the JDBC Driver update. It is necessary to bounce the oc4j instance.
Verify Application URL settings match RIB install.	RIB Functional Artifact URL JNDI URL
Verify the installation using RDMT	

RDMT - Information to Gather

The following are necessary directory parameters.

RDMT Home Directory	Rib1301ForAll13xxApps/rib-home/tools-home/rdmt/
RDMTLOGS Directory	Rib1301ForAll13xxApps/rib-home/tools-home/rdmt/RDMTLOGS
Temp Files Directory	Rib1301ForAll13xxApps/rib-home/tools-home/rdmt/RDMTLOGS/tmp
RIB App Builder rib-home Directory	/u00/Rib1301ForAll13xxApps/rib-home

The following are parameters for JMS Provider.

AQ JMS User ID	ribaq
AQ JMS Password	retek
AQ JMS Database Name	soa1
JMS HOST	mspdev38
JMS PORT	1521

The following are OC4J parameters for JMX functions.

OC4J/JMX Host	mspdev72
JMX Req Port	6003
OC4J Instance name	rib-rms-oc4j-instance
OC4J App Name	rib-rms
OC4J User Name	oc4jadmin
OC4J Password	welcome1

The following are parameters for each hospital (RMS, RWMS, SIM, and others).

User Name	rms
Password	retek
Database (SID)	orcl
Database Host	mspdev68
Listener Port	1521

The following are the steps required to complete RDMT installation.

Task	Notes
Make sure that the Java path is set Java 5.0. > java -version	The RDMT Java support classes require Java 5.0, and installation will perform a check and fail if the path is not correct. Prior to the install, verify that your Java version is correct.
Download the Rdmt13.0.3ForAll13.x.xApps_eng_ga.tar.	The recommended location is to put it in rib-home/tools-home directory. There is an empty rdmt subdirectory already there. This is only a placeholder. RDMT can be installed under any user in any directory.
Extract the tar file. > tar xvf Rdmt13.0.3ForAll13.x.xApps_eng_ga.tar	Extract the tar file. It will create or over-write a directory call rdmt.
Execute the configbuilder.sh script. > ./setup.sh	cd to the rdmt directory and execute the configbuilder.sh script supplied with the toolkit.

Task	Notes
If rdmt is extracted under rib-home, it updates the necessary rdmt configuration files if installed under rib-home/tools-home/rdmt directory.	The configbuilder.sh script checks if rdmt is installed under rib-home. If so, it fetches and updates all the necessary configuration information from rib-deployment-env-info.xml present under rib-home/deployment-home/conf directory. Also, it configures for all the rib-<app>s depending upon the applications in scope as defined in rib-deployment-env-info.xml.
If rdmt is extracted in some other directory outside rib-home, it updates the necessary rdmt configuration files if installed in some other directory with rib-home present on same server.	Once prompted for rib-home path, provide the same and it fetches and updates all the necessary configuration information from rib-deployment-env-info.xml present under specified rib-home/deployment-home/conf directory. Also, it configures for all the rib-<app>s depending upon the applications in scope as defined in rib-deployment-env-info.xml.
If rdmt is extracted in a remote server with no rib-home present, answer prompts for RIB configuration values during Setup if installed in a remote server with no rib-home present on that server.	The installation script will prompt for the configuration settings need to run the tools in the toolkit (See "Information to Gather for Installation in Remote Server" in this manual.) Note: After the installation, these configurations can be changed at any time via any text editor in the appropriate configuration file.
Answer prompts the for additional JMX configurations. Answer yes to configure additional rib-apps in case of remote installation.	After prompting for the necessary configuration parameters, the setup script updates the various configuration files and then prompts the user for additional JMX configurations that the user will be interested in. It is recommended that you configure all the rib-apps that have been installed in the RIB Installation process and then run the RibConfigReport. This report will run a battery of tests that will validate the RIB components installed.
The configbuilder.sh script will set the permissions to 700 (-rwx------) on all tools and files within the rdmt directory structure.	There are configurations that contain passwords.
Run Configuration Report	This report will execute using all of the configuration parameter that have been supplied and will verify them against the RIB installation
Installation is complete.	

The following is a checklist for Oracle Retail RIHA installation.

Task	Notes
Pre-Installation	
Verify the JRE Installed on server/PC where RIHA will be installed.	The minimum and preferred Java Runtime Engine (JRE) version to use with RIHA is 1.5.
The RIB XSDs must be made network-accessible in order for RIHA to properly display RIB messages.	The RIB Functional Artifact URL (e.g. http://mspdev85:7777/rib-func-artifact/payload/xsd/) should be accessible to all RIHA users.

Task	Notes
Verify RIHA Version is compatible with RIB version.	Due to changes in the underlying RIB architecture RIHA13.0.3 is only compatible with RIB13.0.X and will not work with RIB12.0.X and lower.
Copy the Riha13.0.3ForAll13.x.xApps _eng_ga.tar archive file to the location where RIHA will be installed.	■ Windows: C:\RIB_Tools\RIHA ■ UNIX: $RIB_HOME/tools-home/riha
Decompress the tar file with an archive utility.	■ Windows: e.g. WinZip ■ UNIX: e.g. unzip
Download hibernate-2.1.8.zip archive file, extract the hibernate2.jar and put it in external-lib directory.	URL: http://prdownloads.sourceforge.net/hibernate/hibernate-2.1.8.zip
Execute the RIHA configuration executable file. Follow instructions, this script will drive the rest of the installation and configuration process.	■ Windows: riha-setup.bat ■ UNIX: riha-setup.sh
If riha is extracted under rib-home, it updates the necessary riha configuration files if installed under rib-home/tools-home/riha directory.	It fetches and updates all the necessary configuration information from rib-deployment-env-info.xml present under rib-home/deployment-home/conf directory. It configures for RIB hospital for the <app>s depending upon the applications in scope as defined in rib-deployment-env-info.xml.
If riha is extracted in some other directory outside rib-home, it updates the necessary rdmt configuration files if installed in some other directory with rib-home present on same server.	It fetches and updates all the necessary configuration information from rib-deployment-env-info.xml present under specified rib-home/deployment-home/conf directory. It configures for RIB hospital for the <app>s depending upon the applications in scope as defined in rib-deployment-env-info.xml.
If reha is extracted in a remote server with no rib-home present.	Follow instructions, this script will drive the rest of the installation and configuration process.
Verify RIHA is configured and ready. Execute the appropriate file to start RIHA.	■ Windows: riha.bat ■ UNIX: riha.sh

D
Creating an OC4J RIB Admin Role

This section details the process of creating a separate RIB related OC4J admin role and user. This is an optional, but recommended step that will allow the RIB installation and administration by a user other that the oc4jadmin.

General steps to create the roles and user:

- Create a role (rib-oc4j-administrators) specific to rib.

- Create a user (riboc4jadmin) with password.

- Add the previously created user to this role.

- Assign privileges and permissions to the created role. This will assign the "deployment-role" with the required permissions.

- Create security mappings to this role.

These steps have to be performed on each rib-<app>-oc4j-instance where a RIB (rib-app>) will be deployed.

Role and User Creation

This section describes how the Oracle Application Server Enterprise Manager can be used to create the role and users.

> **Note:** For details on security and information on creation of roles and users refer to the Oracle Application Server Administrator's Guide 10g Release 3 (10.1.3.3).

These steps require a user that has ascontrol_admin role. By default this is the oc4jadmin user and role.

1. Open a browser and go to the Oracle Application asconsole url:

    http://<hostname>:<port>/em

    where hostname - is the hostname on which the OAS is running.

    port - is the port in which the OAS is listening for http request.

    e.g: http://localhost:7777/em

    e.g: http://localhost:7777/em

2. Make sure that the rib-<app>-oc4j-instance is up and running.

3. Select the oc4j instance for which the role and user needs to be created.

   e.g. rib-rms-oc4j-instance
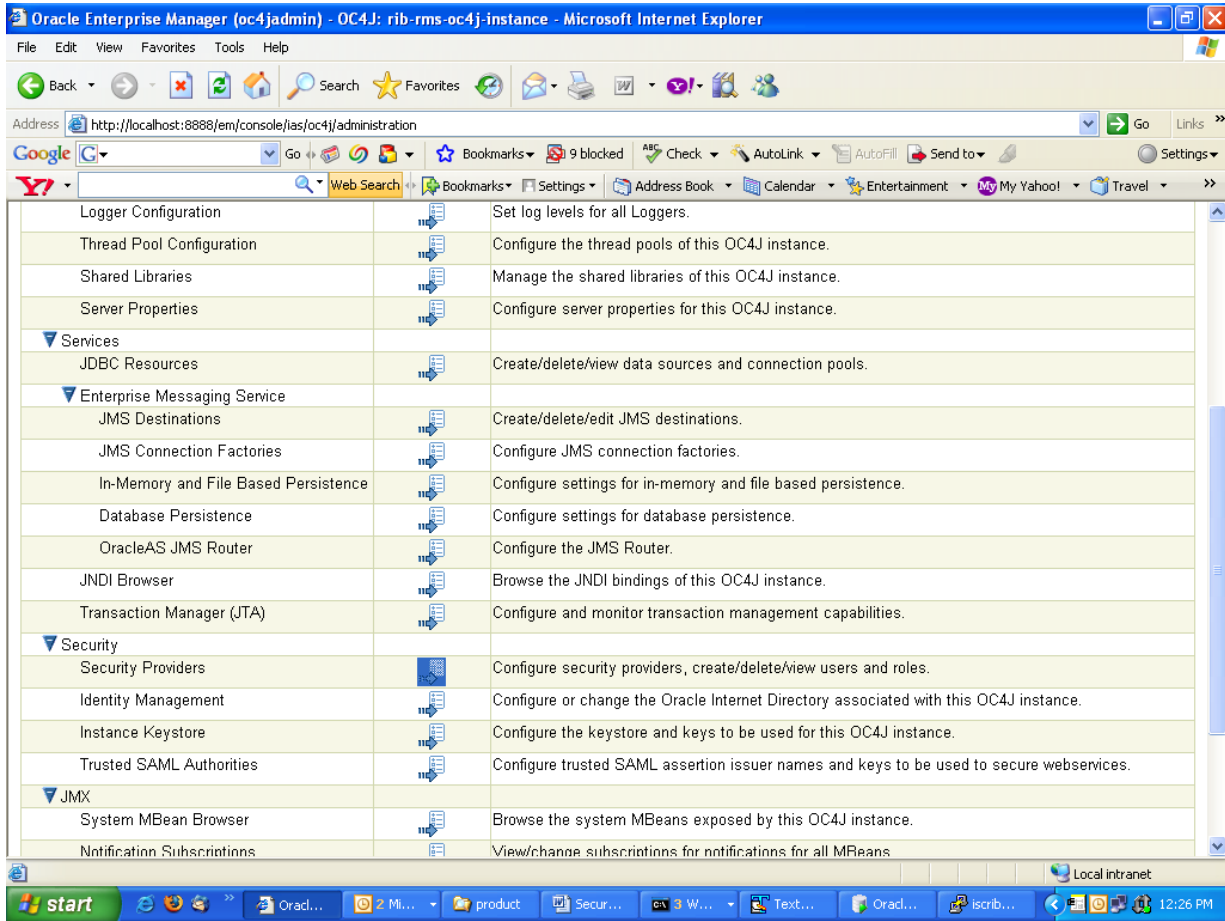
4. Select the **Administration** tab.
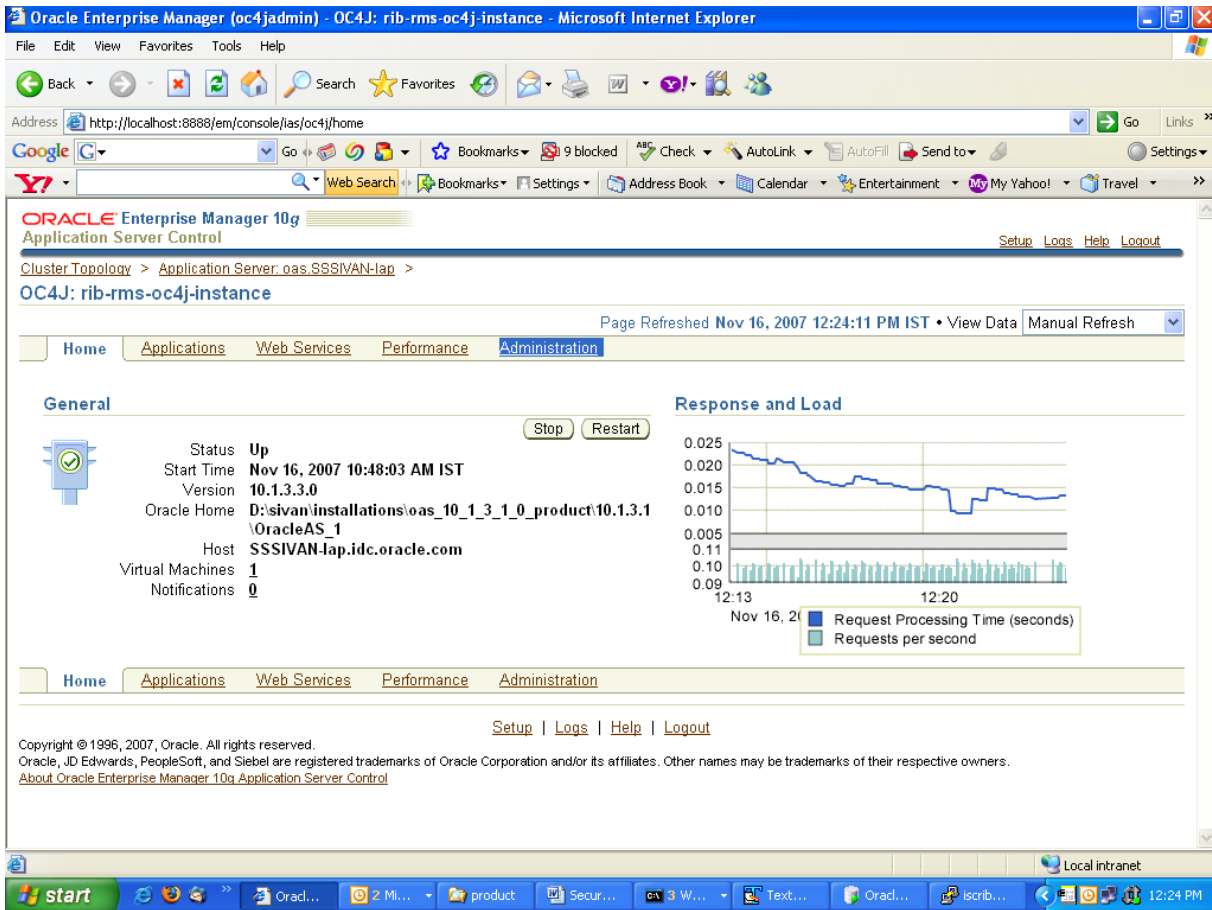
This displays a page with Administration tasks like "Properties", "Services", "Security," etc.

5. Under "Security" option, choose **Security Providers** and select the icon present under the **Go to task** column of the table.
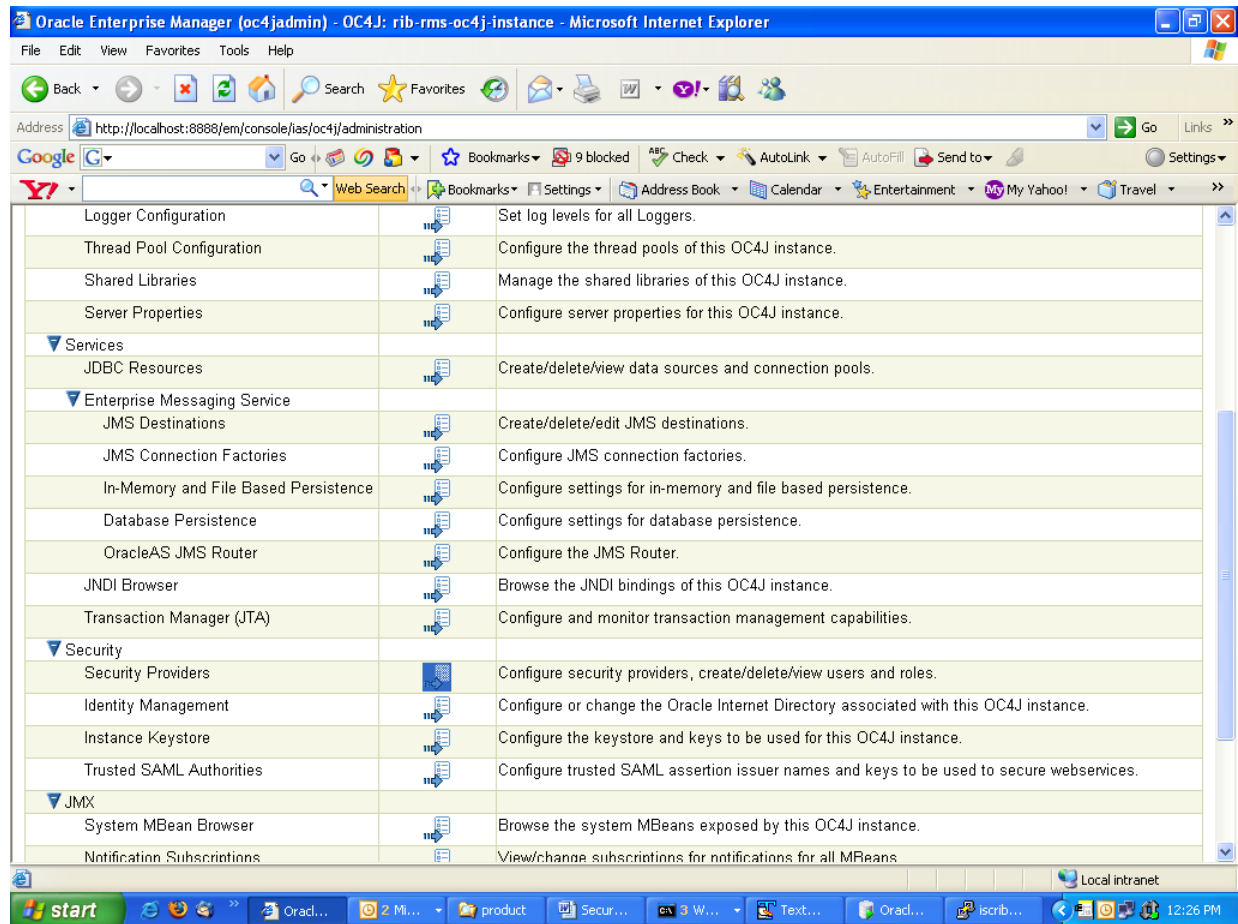
On the Security Providers screen, select the **Instance Level Security**.

6. Select the **Realms** tab on the Instance Level Security.

7. Choose the jazn.com realm and click the number in **roles** column to create roles.

8. Select **Create**.

9. Provide the name of the role as "rib-oc4j-administrators" and choose **Grant RMI login Permissions** check box option and create the role.
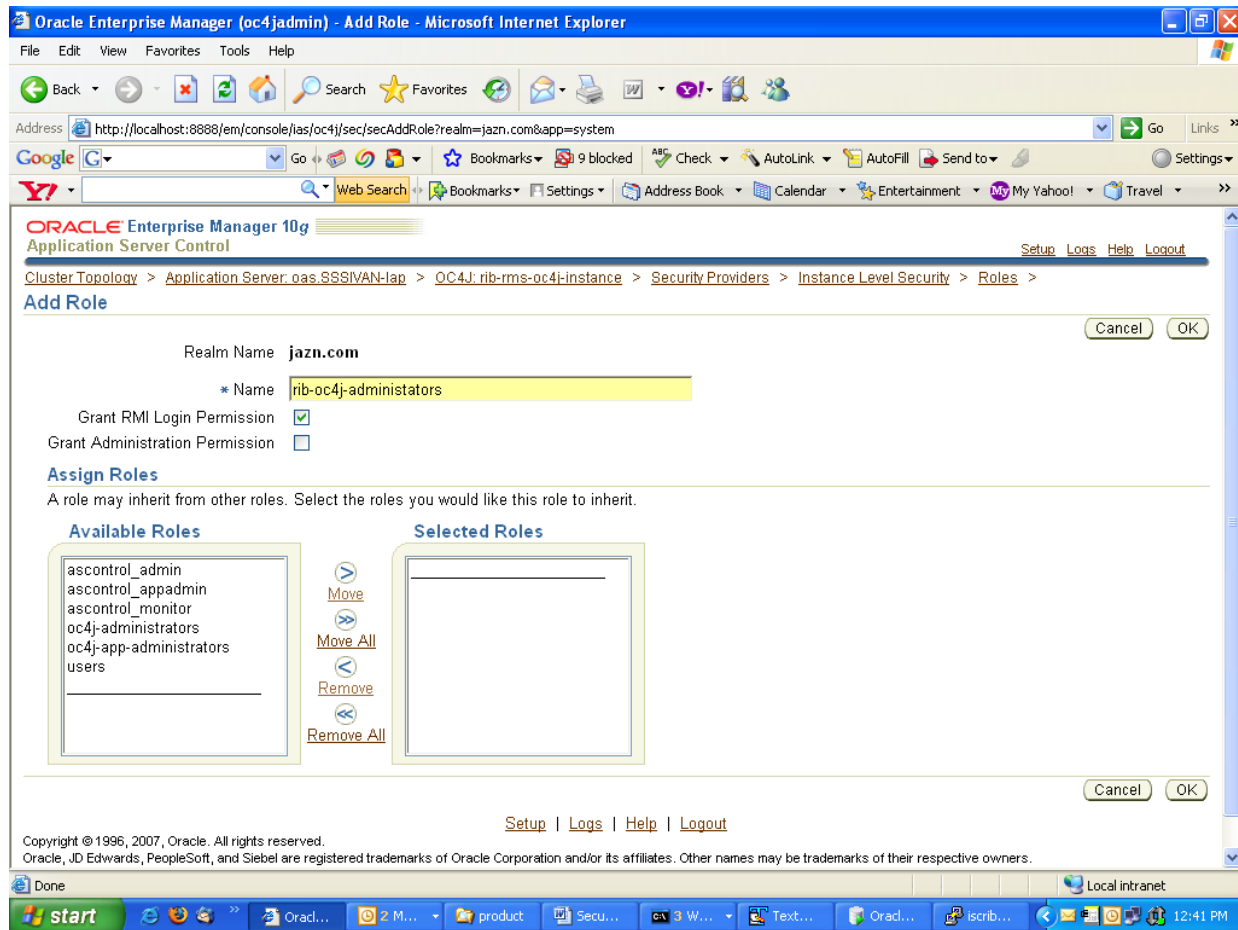
10. Return to the "Instance Level Security" screen and select **Users** column to display the "Users" page.

11. On the "Users" page, use the **Create** button to create a user with name "riboc4jadmin" and a suitable password. Move the previously created role "rib-oc4j-administrators" to the "Selected Roles" text selection box.
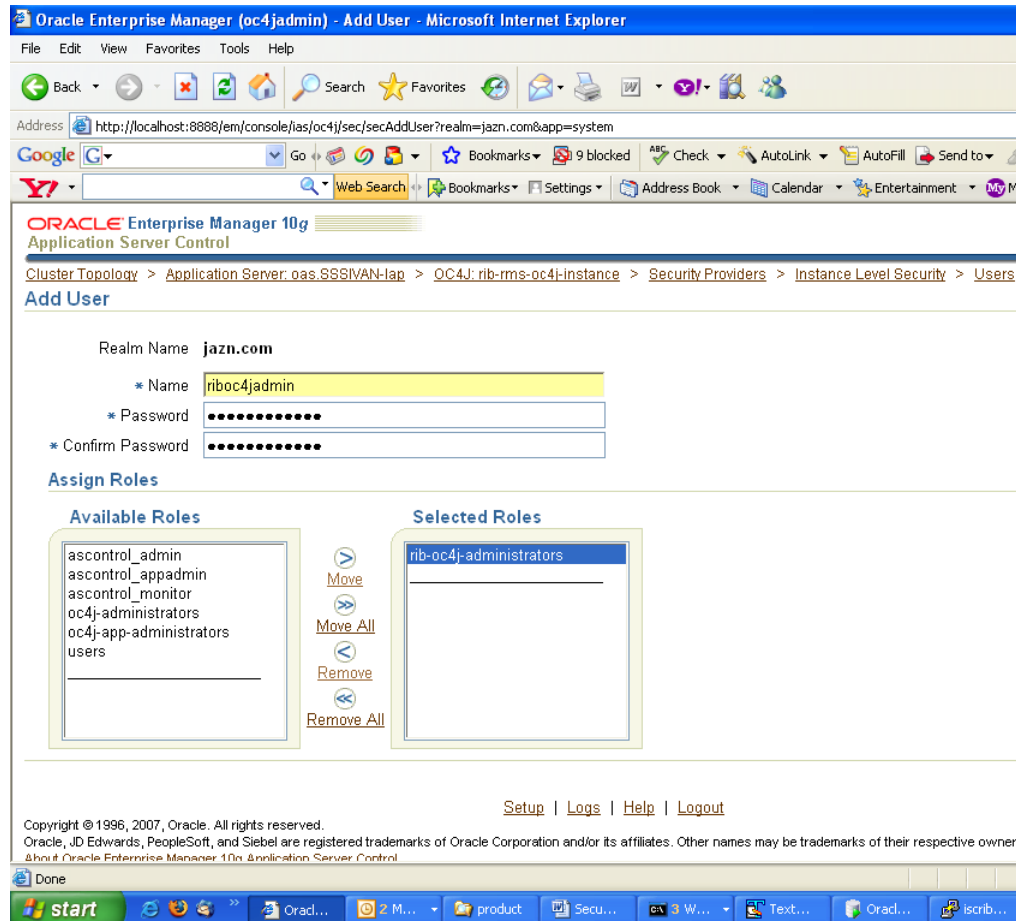
Security Role Mapping

The new "rib-oc4j-administrators" role has to be added to the <security-role-mapping> in the appropriate oc4j-instance XML files. This requires using a text editor to directly edit the content of these files.

> **Note:** Create a backup of the files before editing.

All of the files are located in the <rib-app-oc4j-instance> home directory in the $ORACLE_HOME/j2ee sub-directories.

e.g. /home/wsadmin/product/10.1.3.3/OracleAS_6/j2ee/rib-rms-oc4j-instance

system-application.xml

In the system-application.xml file under the <oc4j-instance-home>/config directory, the role has to be added in the <security-role-mapping> node.

e.g. /home/wsadmin/product/10.1.3.3/OracleAS_6/j2ee/
rib-rms-oc4j-instance/config

```
<namespace-access>
    <read-access>
      <namespace-resource root="">
        <security-role-mapping>
         <group name="administrators" />
         <group name="oc4j-administrators"/>
         <group name="ascontrol_admin"/>
         <group name="rib-oc4j-administrators"/>
         <group name="users"/>
        </security-role-mapping>
      </namespace-resource>
   </read-access>
   <write-access>
     <namespace-resource root="">
       <security-role-mapping>
         <group name="administrators" />
         <group name="oc4j-administrators"/>
         <group name="ascontrol_admin"/>
         <group name="rib-oc4j-administrators"/>
         <group name="users"/>
       </security-role-mapping>
     </namespace-resource>
   </write-access>
 </namespace-access>
```

orion-application.xml

In the orion-application.xml file under the
<oc4j-instance-home>/application-deployment/ascontrol directory, the role has to be
added in the <security-role-mapping> node.

e.g. /home/wsadmin/product/10.1.3.3/OracleAS_
6/j2ee/rib-rms-oc4j-instance/>/application-deployment/ascontrol

```
<security-role-mapping name="rib-oc4j-administrators">
    <group name="rib-oc4j-administrators" />
</security-role-mapping>
```

This step maps the deployment role to the J2EE role.

orion-ejb-jar.xml

To allow the J2EE role to be used inside the application, edit the orion-ejb-jar.xml file present under <oc4j-instance-home>/application-deployments/admin_ejb directory.

e.g. /home/wsadmin/product/10.1.3.3/OracleAS_ 6/j2ee/rib-rms-oc4j-instance/>/application-deployment/ admin_ejb

This completes the creation and mapping of the users and roles. Restart the oc4j instance after these changes.

E

Installation Order

This appendix provides a guideline for the order in which the Oracle Retail applications should be installed. If a retailer has chosen to use only some of the applications, the order is still valid--less the applications not being installed.

Enterprise Installation Order

1. Oracle Retail Merchandising System (RMS), Oracle Retail Trade Management (RTM), Oracle Retail Sales Audit (ReSA)

2. Oracle Retail Service Layer (RSL)

3. Oracle Retail Extract, Transform, Load (RETL)

4. Oracle Retail Active Retail Intelligence (ARI)

5. Oracle Retail Warehouse Management System (RWMS)

6. Oracle Retail Allocation

7. Oracle Retail Invoice Matching (ReIM)

8. Oracle Retail Price Management (RPM)

> **Note:** During installation of RPM, you are asked for the RIBforRPM provider URL. Because RIB is installed after RPM, make a note of the URL you enter. If you need to change the RIBforRPM provider URL after you install RIB, you can do so by editing the jndi_provider.xml file.

9. Oracle Retail Central Office (ORCO)

10. Oracle Retail Back Office (ORBO) or Back Office with Labels and Tags (ORLAT)

11. Oracle Retail Store Inventory Management (SIM)

> **Note:** During installation of SIM, you are asked for the AIP provider URL. BecauseAIP is installed after SIM, make a note of the URL you enter. If you need to change the AIP provider URL after you install AIP, you can do so by editing the jndi_providers_ribclient.xml file.

12. Oracle Retail Predictive Application Server (RPAS)

13. Oracle Retail Merchandise Financial Planning (MFP)

14. Oracle Retail Size Profile Optimization (SPO)

15. Oracle Retail Assortment Planning (AP)

16. Oracle Retail Item Planning (IP)

17. Oracle Retail Item Planning configured for COE (IPCOE)

18. Oracle Retail Advanced Inventory Planning (AIP)

19. Oracle Retail Integration Bus (RIB)

20. Oracle Retail Point-of-Service (ORPOS)

21. Orace Retail Mobile Point-of-Service (ORMPOS)

22. Oracle Retail Analytics Applications

23. Oracle Retail Data Warehouse (RDW)

24. Oracle Retail Workspace (ORW)