Oracle® Retail Fiscal Management and Brazil Localization
Installation Guide
Release 13.2.2
E22640-02

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ORACLE®

Oracle® Retail Fiscal Management and Brazil Localization Installation Guide, Release 13.2.2

ORACLE®

Value-Added Reseller (VAR) Language

Oracle Retail VAR Applications

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Oracle Retail Fiscal Management and Brazil Localization, Installation Guide, Release 13.2.2

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- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

> **Note:** Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the Online Documentation available on the Oracle Technology Network Web site. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: retail-doc_us@oracle.com

Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

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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

This Installation Guide is written for the following audiences:

- Database administrators (DBA)
- System analysts and designers
- Integrators and implementation staff

Related Documents

You can find more information about this product in these resources:

- *Oracle Retail Merchandising System Release Notes*
- *Oracle Retail Merchandising System Installation Guide*
- *Oracle Retail Fiscal Management/RMS Brazil Localization Installation Guide*
- *Oracle Retail Merchandising System Operations Guide*
- *Oracle Retail Merchandising System User Guide and Online Help*
- *Oracle Retail Merchandising Data Conversion Operations Guide*
- *Oracle Retail Merchandising System Data Model*
- *Oracle Retail Fiscal Management Data Model*
- *Oracle Retail Merchandising Batch Schedule*
- *Oracle Retail Fiscal Management/RMS Brazil Localization Implementation Guide*
- *RMS-ReSA User Guide for Brazil Localization*

Also see the documentation library for Oracle Business Intelligence Enterprise Edition at this URL:

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

Customer Support

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

https://support.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 re-create
- Exact error message received
- Screen shots of each step you take

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 13.2) or a later patch release (for example, 13.2.2). If you are installing the base release and additional patch and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch and bundled hot fix releases can contain critical information related to the base release, as well as information about code changes since the base release.

Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:

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

(Data Model documents are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them through My Oracle Support.)

Documentation should be available on this Web site within a month after a product release.

Conventions

Navigate: This is a navigate statement. It tells you how to get to the start of the procedure and ends with a screen shot of the starting point and the statement "the Window Name window opens."

```
This is a code sample
    It is used to display examples of code
```

1

Preinstallation Tasks

> **Note:** The RMS installer provides the option to configure multiple application deployment methods. See Appendix H: Application Deployment Method in the 13.2.2 *Oracle Retail Merchandising System Installation Guide* to help determine your deployment approach.

Patch Contents

Patch releases include all defect fixes that have been released through bundled hot fix releases since the last patch release. Patch releases may also include new defect fixes and enhancements that have not previously been included in any bundled hot fix release.

Check for the Current Version of the Installation Guide

Corrected versions of Oracle Retail installation guides may be published whenever critical corrections are required. For critical corrections, the rerelease of an installation guide may not be attached to a release; the document will simply be replaced on the Oracle Technology Network Web site.

Before you begin installation, check to be sure that you have the most recent version of this installation guide. Oracle Retail installation guides are available on the Oracle Technology Network at the following URL:

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

An updated version of an installation guide is indicated by part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-**02** is an updated version of an installation guide with part number E123456-**01**.

If a more recent version of this installation guide is available, that version supersedes all previous versions. Only use the newest version for your installation.

Implementation Capacity Planning

There is significant complexity involved in the deployment of Oracle Retail applications, and capacity planning is site specific. Oracle Retail strongly suggests that before installation or implementation you engage your integrator (such as the Oracle Retail Consulting team) and hardware vendor to request a disk sizing and capacity planning effort.

Sizing estimates are based on a number of factors, including the following:

- Workload and peak concurrent users and batch transactions
- Hardware configuration and parameters
- Data sparcity
- Application features utilized
- Length of time history is retained

Additional considerations during this process include your high availability needs as well as your backup and recovery methods.

Check Database Server Requirements

ORFM requires that the RMS 13.2.2 database schema be installed. See the *Oracle Retail Merchandising System Installation Guide* for the supported database server requirements.

Check Supported Application Server Requirements

General requirements for an application server capable of running ORFM include the following.

> **Note:** Files required for Oracle Configuration Manager (OCM) are removed after OPatch is used to patch a WebLogic server. This will not cause the product installers to fail, but will cause OCM installation to fail. To work around this issue back up the content of the $ORACLE_HOME/utils/ccr/lib directory prior to applying a patch using OPatch, and recopy the content back after you apply any patches. ORACLE_HOME is the location where WebLogic has been installed.

Supported on	Versions Supported
Application Server OS	OS certified with Oracle Fusion Middleware 11g Release 1 (11.1.1.3). Options are: - Oracle Linux 5 Update 3 for x86-64 (Actual hardware or Oracle virtual machine). - Red Hat Enterprise Linux 5 Update 3 (RHEL 5.3) for x86-64 (Actual hardware or Oracle virtual machine). - AIX 6.1 (Actual hardware or LPARs) - Solaris 10 Sparc (Actual hardware or logical domains) - HP-UX 11.31 Integrity (Actual hardware or HPVM)

Supported on	Versions Supported
Application Server	Oracle Fusion Middleware 11g Release 1 (11.1.1.3) with the following one off patches. ▪ 6880880 – New Opatch version for Linux 64-bit (Required for Forms 11.1.1.3 component) ▪ 10065423 - MERGE REQUEST ON TOP OF 11.1.1.3.0 FOR BUGS 9891666 9891675 ▪ 9356983 - FORMS FAIL TO COMPILE WITH FRM-30312 WHEN NLS_LANG INCLUDES UTF8 CHARACTERSET **Note:** These patches are for Linux 64-bit only, for other OSes these patches are not required. Patch 10065423 must be applied before patch 9356983. **Components** ▪ Oracle WebLogic Server 11g Release 1 (10.3.3) ▪ Oracle Forms Services 11g Release 1 (11.1.1.3) **Other components** ▪ Oracle BI Publisher 10g (10.1.3.4) **Optional (SSO required)** ▪ Oracle Internet Directory 10g (10.1.4.3) ▪ Oracle WebTier 11g (11.1.1.3) – not required

Verify Single Sign-On

If a single sign-on is to be used, verify the Oracle Infrastructure Server 10g version 10.1.4.3 server has been installed. If applicable, verify the Oracle WebTier server hosting Oracle Forms is registered with the Infrastructure Oracle Internet Directory.

Check Supported Web Browser and Client Requirements

General requirements for client running RMS include the following.

Requirement	Version
Operating system	Windows XP
Display resolution	1024x768 or higher
Processor	2.6GHz or higher
Memory	1GByte or higher
Networking	intranet with at least 10Mbps data rate
Sun Java Runtime Environment	1.6.0_22+
Browser	Microsoft Internet Explorer version 7.0

> **Note:** Oracle Retail does not recommend or support installations of ORFM with less than 256 kb bandwidth available between the PC client location (store and warehouse locations) and the data center at which the application server resides. Attempting to utilize less than 256 kb total available bandwidth causes unpredictable network utilization spikes, and performance of the ORFM screens degrades below requirements established for the product. The 256 kb requirement provides reasonable, predictable performance and network utilization.

Supported Oracle Retail Products

Product	Version
Oracle Retail Merchandising System (RMS)	13.2.2
Oracle Retail Store Inventory Management (SIM)	13.2.1
Oracle Retail Warehouse Management System (RWMS)	13.2

Supported Oracle Retail Integration Technologies

Integration Technology	Version
Oracle Retail Integration Bus (RIB)	13.2.1

> **Note**: The following integration points are not supported for ORFM/RMS Brazil Localization, but they are supported with non-Brazil RMS:
>
> Oracle E-Business Suite integration using the Oracle Financial Operations Control Integration Pack for Oracle Retail Merchandising Suite and Oracle E-Business Suite Financials in Oracle Application Integration Architecture 2.5.
>
> PeopleSoft Enterprise Financials integration using the Oracle Retail Merchandising Integration Pack for PeopleSoft Enterprise Financials: Financial Operations Control in Oracle Application Integration Architecture 2.5.

2
RAC and Clustering

Oracle Retail Fiscal Management has been validated to run in two configurations on Linux:

- Standalone WebLogic Server and Database installations
- Real Application Cluster Database and Oracle Application Server Clustering

The Oracle Retail products have been validated against an 11.2.0.1 RAC database. When using a RAC database, all JDBC connections should be configured to use OCI connections rather than THIN connections. It is suggested that when using OCI connections, the Oracle Retail products database be configured in the tnsnames.ora file used by the WebLogic Server installations.

Clustering for WebLogic Server 10.3.3 is managed as an Active-Active cluster accessed through a Load Balancer. Validation has been completed utilizing a RAC 11.2.0.1 Oracle Internet Directory database with the WebLogic 10.3.3 cluster. It is suggested that a Web Tier 11.1.1.3 installation be configured to reflect all application server installations if SSO will be utilized.

References for Configuration:

- Oracle Fusion Middleware High Availability Guide 11g Release 1 (11.1.1) Part Number E10106-09
- Oracle Real Application Clusters Administration and Deployment Guide 11*g* Release 2 (11.2) Part Number E16795-08

Patch Installation

The database portion of ORFM can be upgraded from release 13.2. This guide details the steps needed to perform a patch installation of ORFM.

To succesfully complete the ORFM 13.2.2 patch, installers from the RMS 13.2, RMS 13.2.2 and ORFM 13.2.2 releases must be run in a specific sequence.
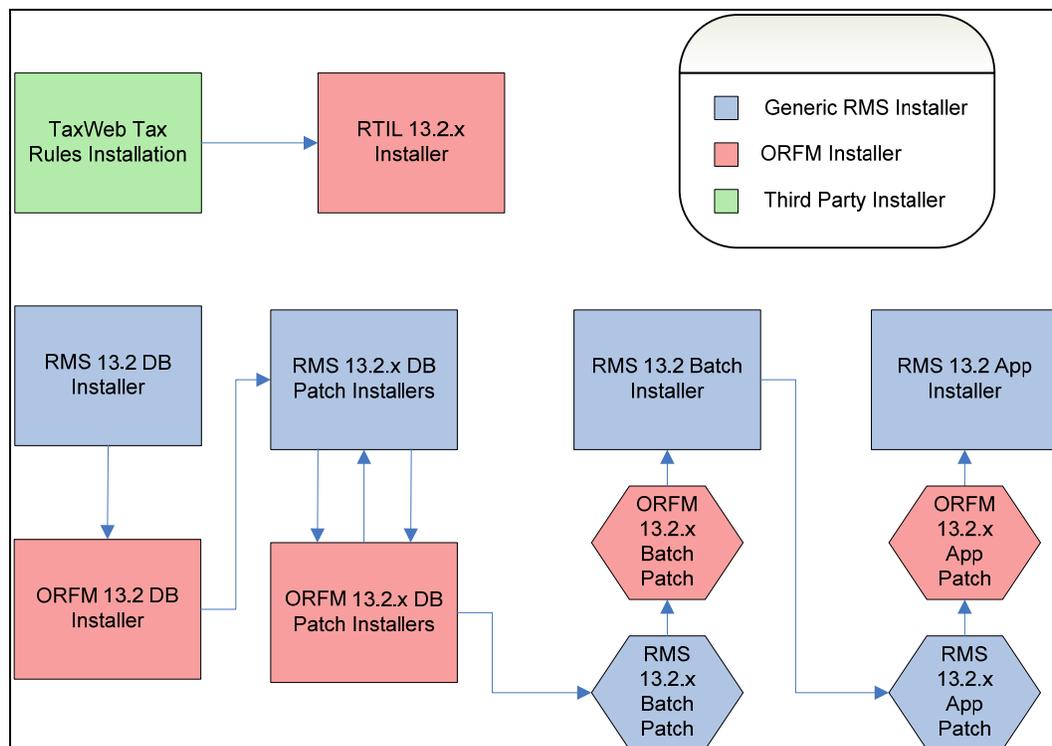
This guide explains the steps needed to perform an installation of RMS/ORFM. These chapters should be followed in order:

- Chapter 4 - RTIL Installation Tasks—Patch
- Chapter 5 - Database Installation Tasks—Patch
- Chapter 6 - Batch Installation Tasks—Patch
- Chapter 7 - Application Installation Tasks—Patch
- Chapter 8 - Reports Installation Tasks—Patch

RTIL Installation Tasks—Patch

Before proceeding, you must install Oracle WebLogic Server 11g Release 1 (10.3.3) and patches listed in Chapter 1, Preinstallation Tasks. The RTIL application is deployed to a WebLogic Managed server within the WebLogic installation.

Install Managed Server in WebLogic

Before running the application installer, you must install a managed server for the RTIL application in WebLogic if it was not created during the domain installation.

1. Log in to the Administration Console.
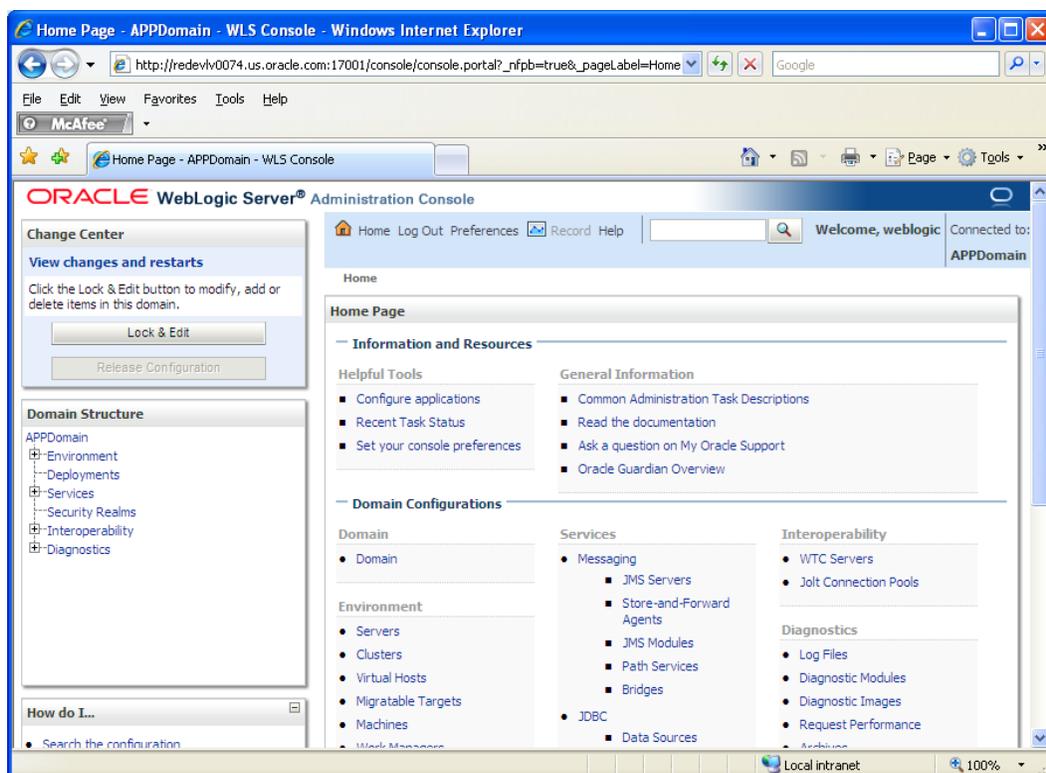
2. Click **Lock & Edit**.

3. Navigate to Environment > Servers. Select new tab of the servers on the right side.
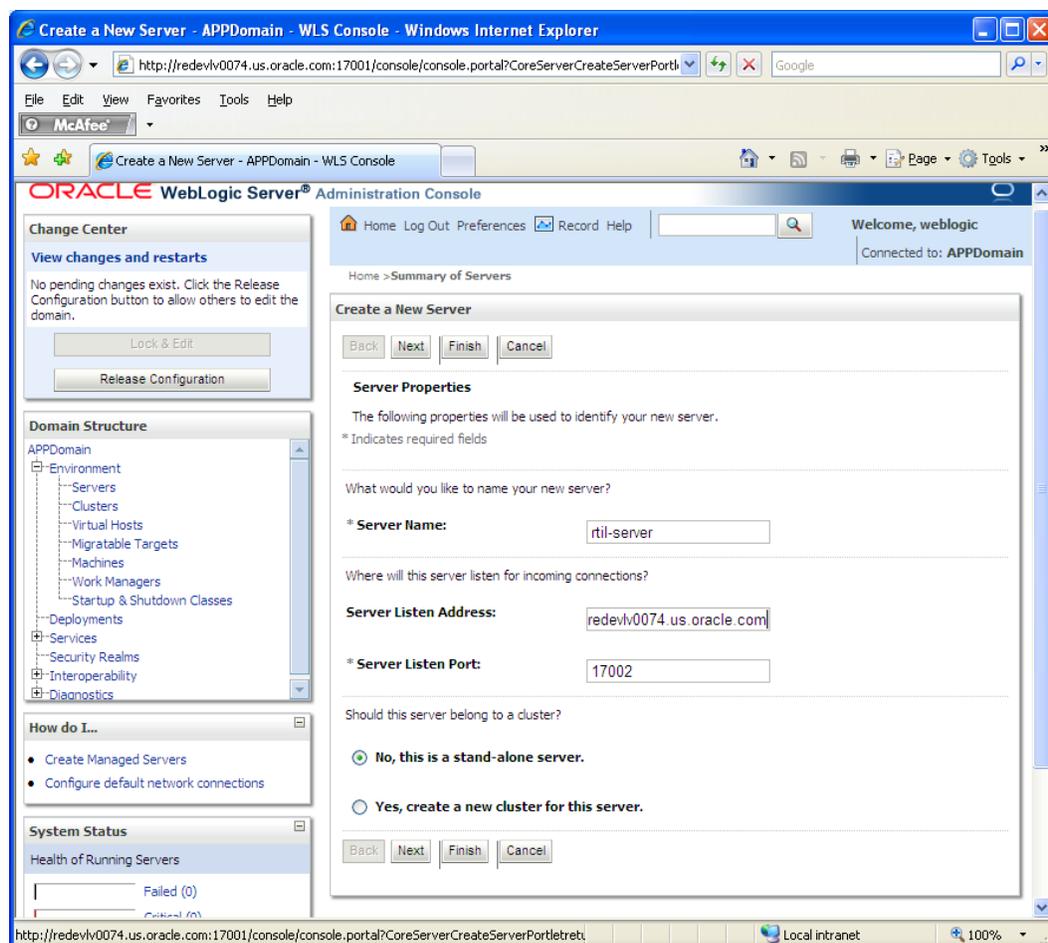
4. Set the following variables:

   - **Server Name**: This value should be specific to your targeted application (for example, rtil-server).

   - **Server Listen Address**: <weblogic server>
     (for example, redevlv0074.us.oracle.com)

   - **Server Listen Port**: A free port. Check for availability.

     A suggestion is to increment the AdminServer port by two and keep incrementing by two for each managed server (for example, 17003, 17005, 17007, and so on.)

5. Click **Next**.
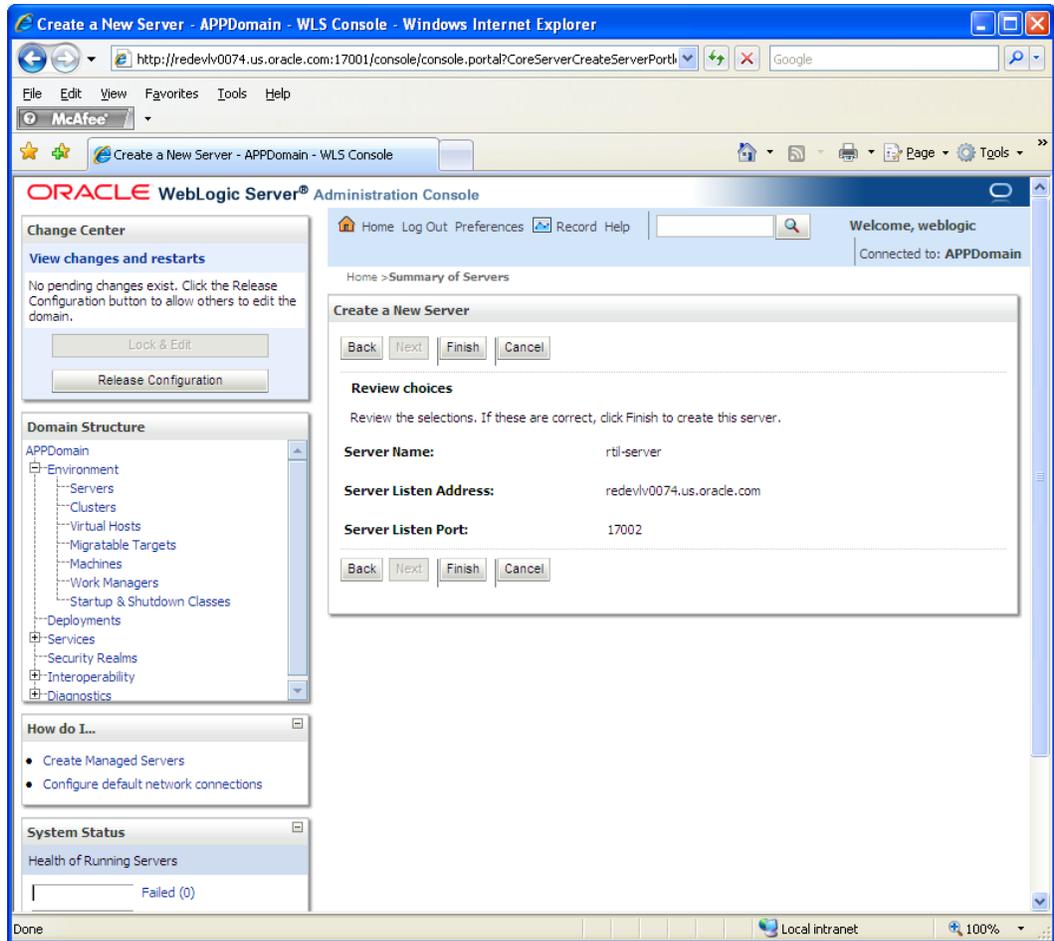
6. Click **Finish**.
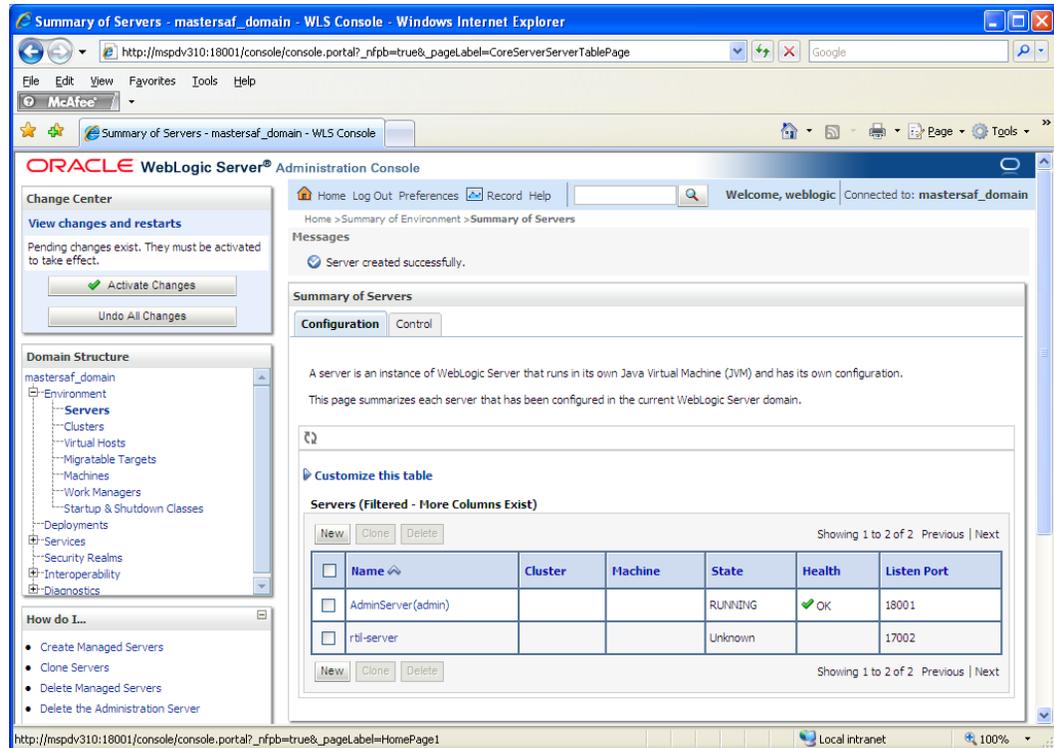
7. Click **Activate Changes** on the left side. Once the changes are activated, the State of the rtil-server should change to SHUTDOWN status.
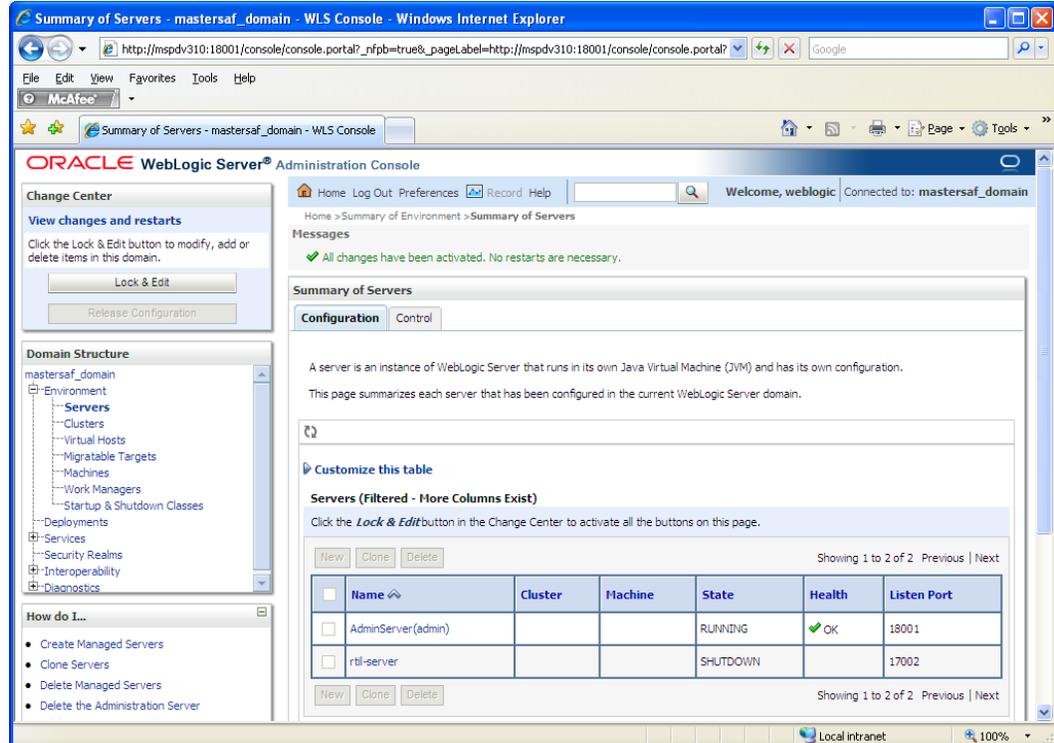
Install Node Manager

Install Node Manager if it was not created during domain install. The node manager is required so that the managed servers can be started and stopped through the admin console. Only one node manager is needed per WebLogic installation.

1. Log in to the Administration Console.

2. Click **Lock & Edit**. Navigate to Environments->Machines. Click **New**.

3. The following page is displayed. Set the following variables:
   - **Name**: Logical machine name
   - **Machine OS**: UNIX
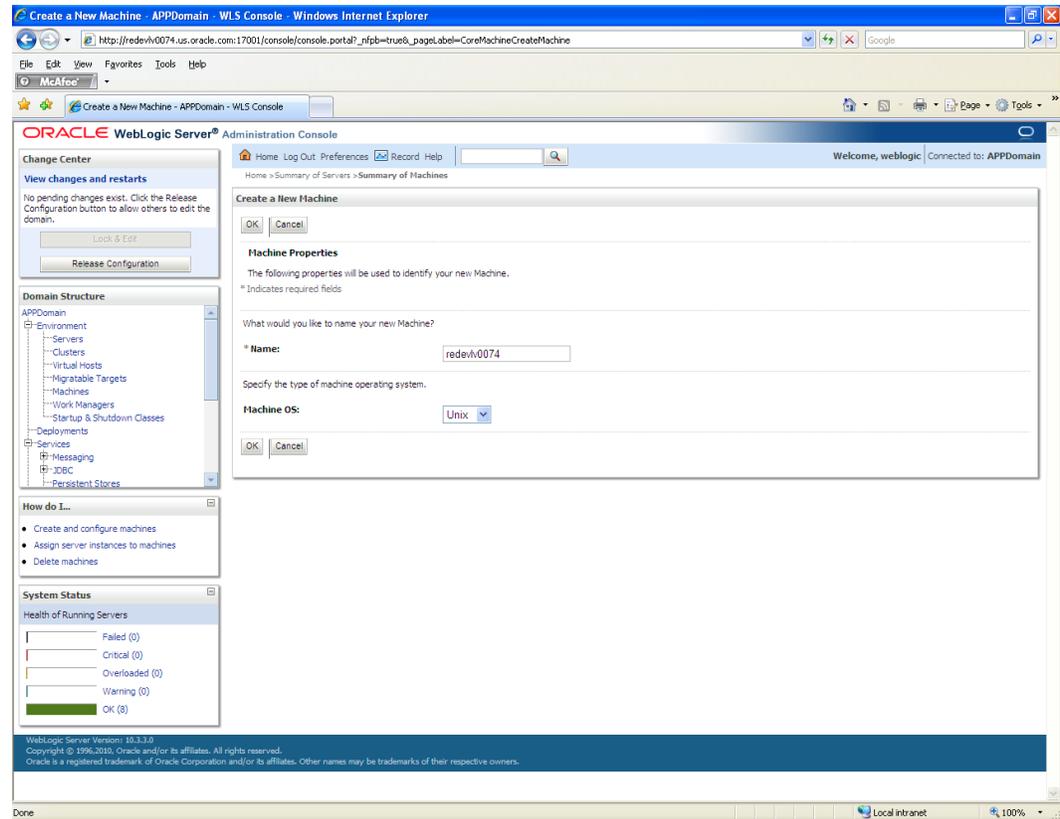
4. Click **OK** to activate the changes.

5. Click the machine created.
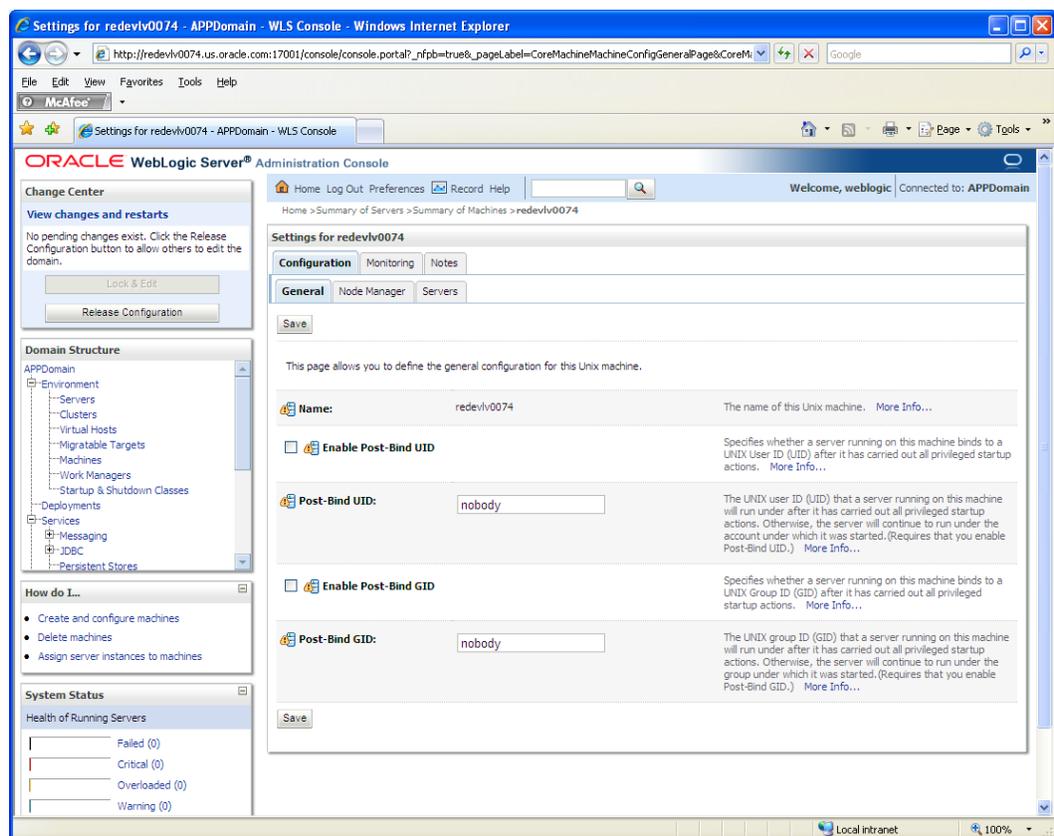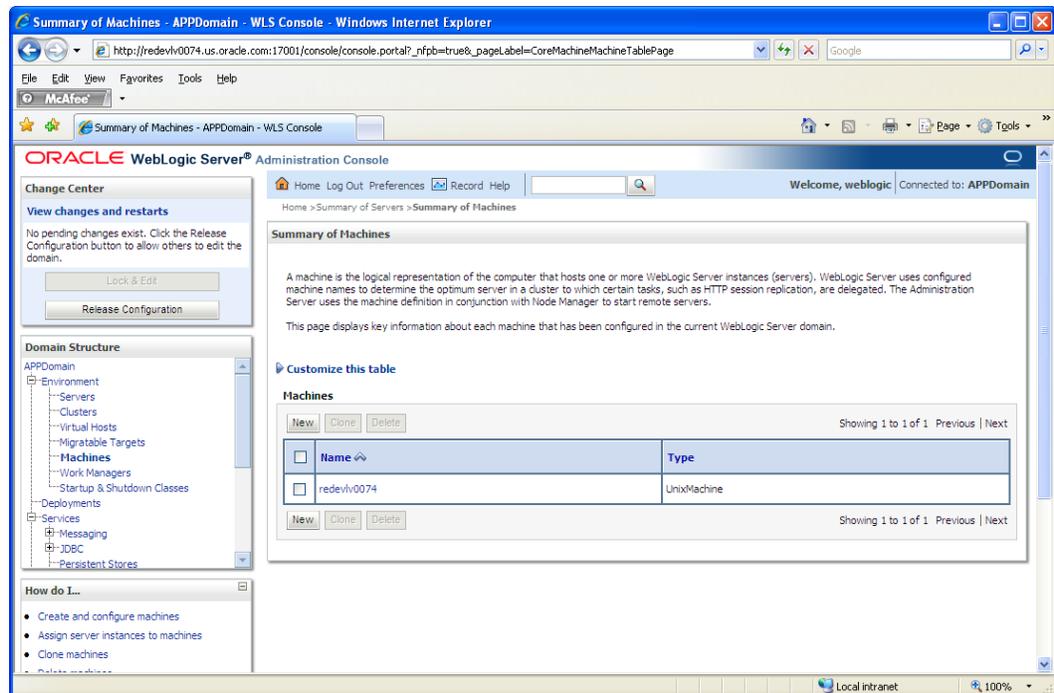
6. Click the Node Manager tab and update the details below.

- **Type**: Plain
- **Listen Address**: <weblogic server> (for example, redevlv0074.us.oracle.com)
- **Listen Port**: Assign a port number. The default port is 5556.
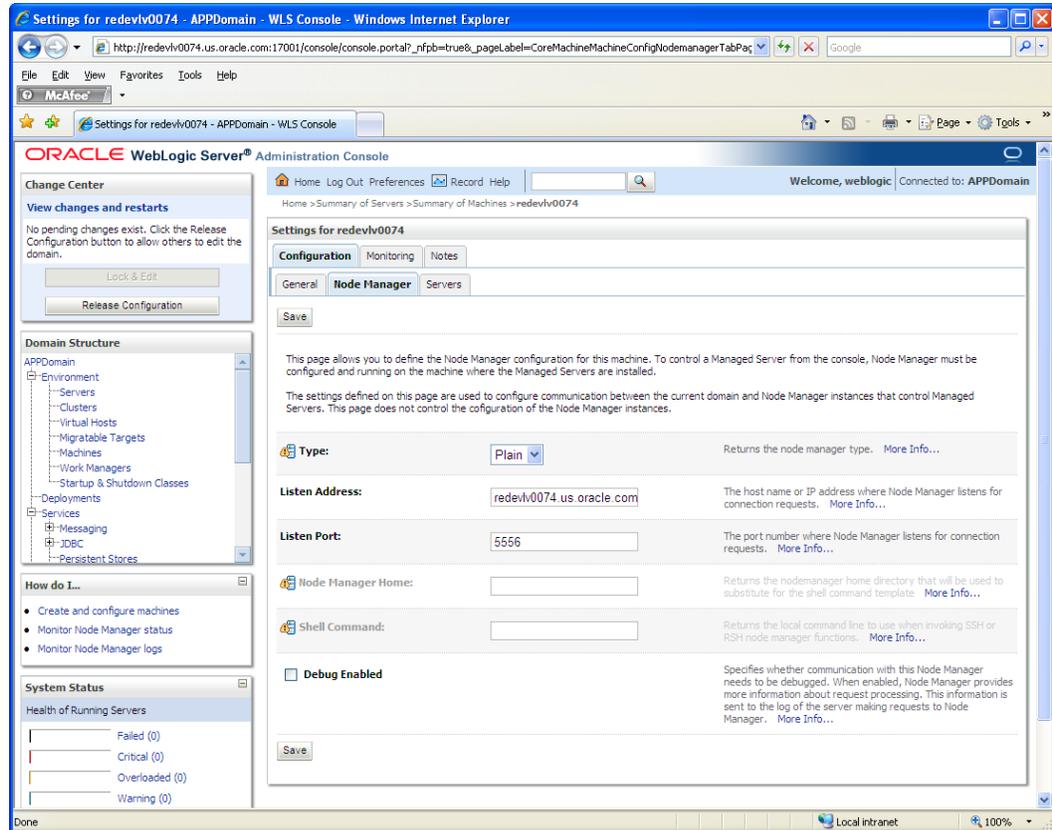
7. Click **Save**.

8. Click **Activate Changes**.

9. Click **Lock & Edit**.

10. Navigate to Environments > machines. Click the machine name. Select the **Servers** tab. Click **Add**.
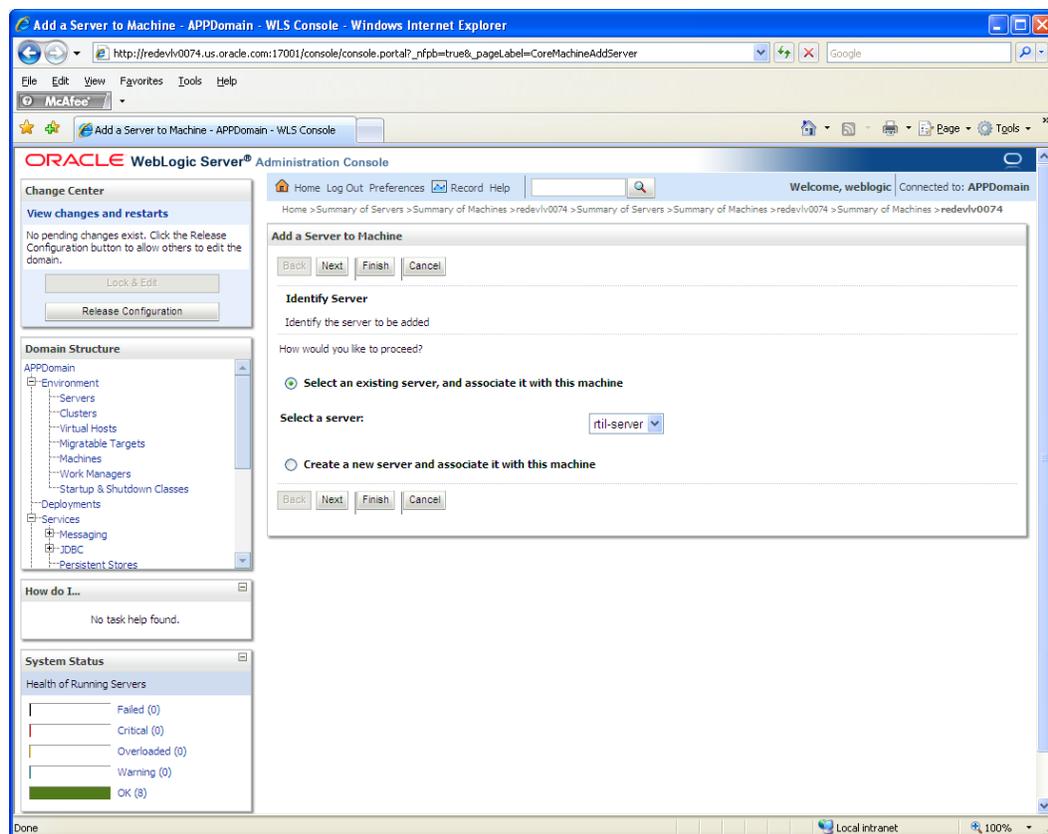
11. Add the managed servers that need to be configured with the Nodemanager. Save changes.

   - From the drop down select the managed server to be added to nodemanager
   - Server: <app-server> (for example: rtil-server)

12. Click **Next.** Click **Finish**.

13. To activate changes the server must be stopped as follows:

    <WLS_HOME>/user_projects/domains/<domain name>/bin/
    stopManagedWebLogic.sh rtil-server ${server_name}:${server_port}

14. Go to each managed server that is being added to the machine and click the Server Start tab. In the Class Path box, add the following:

    `$CLASSPATH:<full-path-to-domain>/servers/<managed-server>`

    For example: `$CLASSPATH:/u00/webadmin/product/10.3.3`
    `/WLS/user_projects/domains/rtil_domain/servers/rtil-server`

15. Click **Save**.

16. Click **Activate Changes**.

Start the Managed Servers

To start the managed servers, complete the following steps.

1. Start the Node Manager from the command line.

    `<WLS_HOME>/wlserver_10.3/server/bin startNodeManager.sh`

    After the Node Manager is started, the managed servers can be started through the admin console.

2. Update weblogic console->servers-><app>-server->server start tab->Classpath with the following:

    CLASSPATH: <WLS_HOME>/modules/com.bea.core.apache.log4j_1.2.13.jar
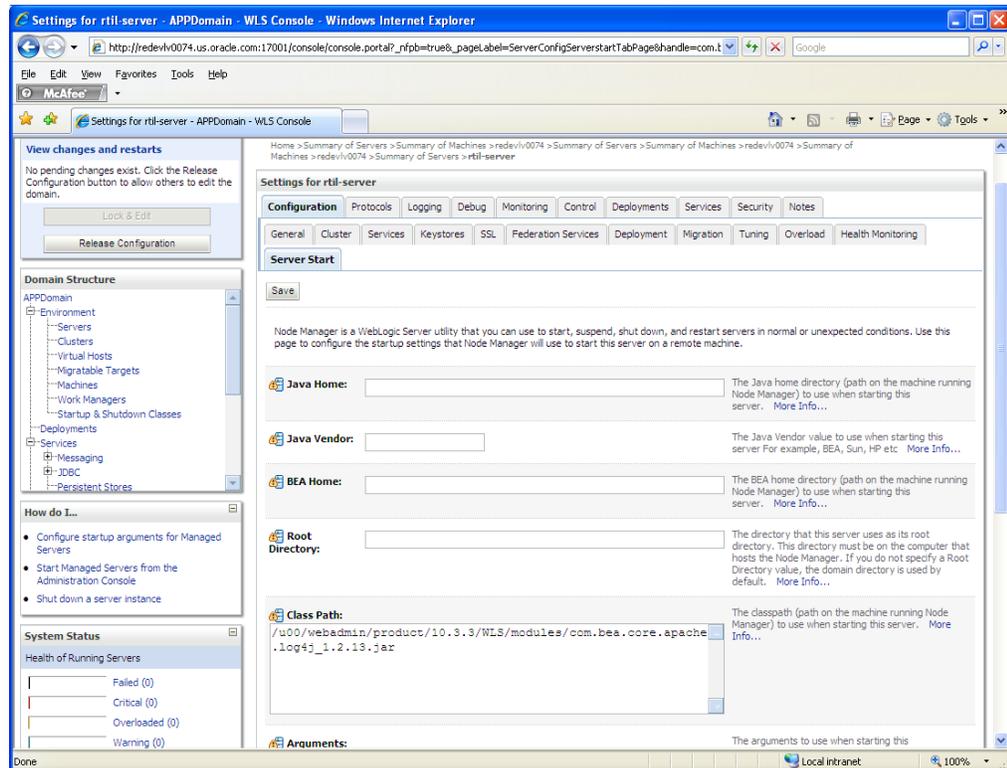
3. Navigate to Environments > Servers. Select <app-server> (for example, rtil-server server managed server). Click the Control tab.

4. Click **Start** to start the managed server.

Install TaxWeb Tax Rules

> **Important Note:** The TaxWeb installation instructions provided in this chapter are for reference only and are subject to change per TaxWeb requirements. In all cases, the installation guide provided by TaxWeb is considered the master document.

TaxWeb Tax Rules is a third party tax rules engine that is actively used within the Brazilian market. TaxWeb Tax Rules is a Java application. The binary distribution is made available as a set of Java Archive (jar) files.

Within the Oracle Retail suite, TaxWeb Tax Rules is integrated with RMS and ORFM through RTIL. To install TaxWeb Tax Rules so that it integrates with Oracle Retail applications, complete the following steps.

1. Be sure Oracle Database 11g Release 2 is installed, as TaxWeb Tax Rules requires it for its application schema installation and configuration.

2. Install the jar files in the lib folder of the WebLogic domain in which RTIL will be deployed.

3. Install the data source configuration file (taxcomponent.conf) in the config folder of the WebLogic domain in which RTIL will be deployed.

4. Configure the data source in the WebLogic domain.

For detailed information about installation and how to configure the Tax Rules application and data source, refer to the installation guide provided by TaxWeb Tax Rules.

> **Important Note:** If there is an existing Tax Rules database user from a previously installed release, it should not be used. Drop and recreate the user with scripts from the Tax Rules release supported for 13.2.2.

Install TaxWeb Tax Rules .jar Files

Copy the list of mentioned jars from the TaxWeb Tax Rules bundle delivered by TaxWeb to the lib folder of the Weblogic domain in which RTIL will be deployed.

- commons-logging-api.jar
- taxinterfaces.jar
- commons-logging-1.1.1.jar
- commons-pool-1.5.5.jar
- commons-dbcp-1.3.jar
- commons-io-2.0.1.jar
- commons-beanutils-1.7.jar
- commons-beanutils-1.8.3.jar
- commons-lang-2.4.jar
- log4j.jar
- commons-collections-3.2.1.jar
- javaee-api-5.0-1.jar
- ojdbc5.jar
- taxrules.jar

> **Note :** All the above mentioned jars are used and owned by the TaxWeb Tax Rules application. In subsequent releases, jars may be added or removed by TaxWeb. See the *Oracle Retail Fiscal Management/RMS Brazil Localization Implementation Guide* for details on redeploying your .jar files.

Install Datasource Configuration File

The prerequisite for this step is the availability of a TaxWeb Tax Rules schema which should be installed based on the TaxWeb Tax Rules installation guide.   The datasource should be created in the WebLogic domain in which RTIL will be installed.   Please refer to the TaxWeb Tax Rules installation guide for data source creation details.

The configured datasource name should be included in the taxcomponent.conf file supplied in the TaxWeb Tax Rules distribution and placed in the config folder of the Weblogic domain in which RTIL will be deployed.

Expand the RTIL Application Distribution

To expand the RTIL application distribution, complete the following steps.

1. Create a new staging directory for the RTIL application distribution (rtil13application.zip). There should be a minimum of 40 MB disk space available for the application installation files.

   Example:
   <WLS_HOME> /user_projects/domain/<domain_name>/ servers/<rtil-server>/rtil-staging

   This location is referred to as STAGING_DIR for the remainder of this chapter.

2. Copy rtil13application.zip to STAGING_DIR and extract its contents.

Run the RTIL Application Installer

Once you have a WebLogic instance that is configured and started, you can run the RTIL application installer. This installer configures and deploys the RTIL application.

   Note: See Appendix: ORFM RTIL Installer Screens for details on every screen and field in the RTIL application installer.

   Note: It is recommended that the installer be run as the same UNIX account that owns the WebLogic application server ORACLE_HOME files. This method takes full advantage of the installer's capabilities. If the installer is run as a different user, the Manual Deployment Option must be selected.

1. Change directories to STAGING_DIR/rtil/application. This directory was created when the rtil13application.zip file was expanded under STAGING_DIR.

2. Set and export the following environment variables.

Variable	Description	Example
ORACLE_HOME	The location where Weblogic has been installed	ORACLE_HOME= /u00/webadmin/product/10.3.3/WLS export ORACLE_HOME
WEBLOGIC_DOMAIN_HOME	The location where the Weblogic domain has been installed	WEBLOGIC_DOMAIN_HOME=$ORACLE_HOME/user_projects/domains/adf_domain/ Export WEBLOGIC_DOMAIN_HOME

Variable	Description	Example
JAVA_HOME	Location of a Java 6.0 (1.6.0) JDK	JAVA_HOME= /u00/webadmin/java/jdk1.6.0_12 Export JAVA_HOME
DISPLAY	Address and port of X server on desktop system of user running installation. Optional for RTIL application installer.	DISPLAY=<IP address>:0 export DISPLAY

3. 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, do not set DISPLAY for text mode.

4. Run the install.sh script. This launches the installer. After installation is complete, a detailed installation log file is created (rtil13install.<timestamp>.log).

> **Note:** The typical usage for GUI mode is no arguments.
>
> ./install.sh [text | silent]

5. The installer leaves behind the ant.install.properties file for future reference and repeat installations. This file contains inputs you provided. As a security precaution, make sure that the file has restrictive permissions.

> **Example:** `chmod 600 ant.install.properties`

6. Once the installer is finished, open a web browser and navigate to the URL reported at the end if the installer logs. You should see this text, which indicates RTIL was installed succesfully:

   `E|invocationKey not present`

7. Once RTIL installation is complete, set the JTA transaction timeout to 1000 seconds in the WebLogic Admin console.
   - To override the default JTA timeout, log in to the WebLogic admin console. Navigate to Services > JTA link to go to the Configuration section.
   - Replace the default timeout of 30 seconds with 1000.
   - For the changes to take effect, bounce the WebLogic Server (for the domain).
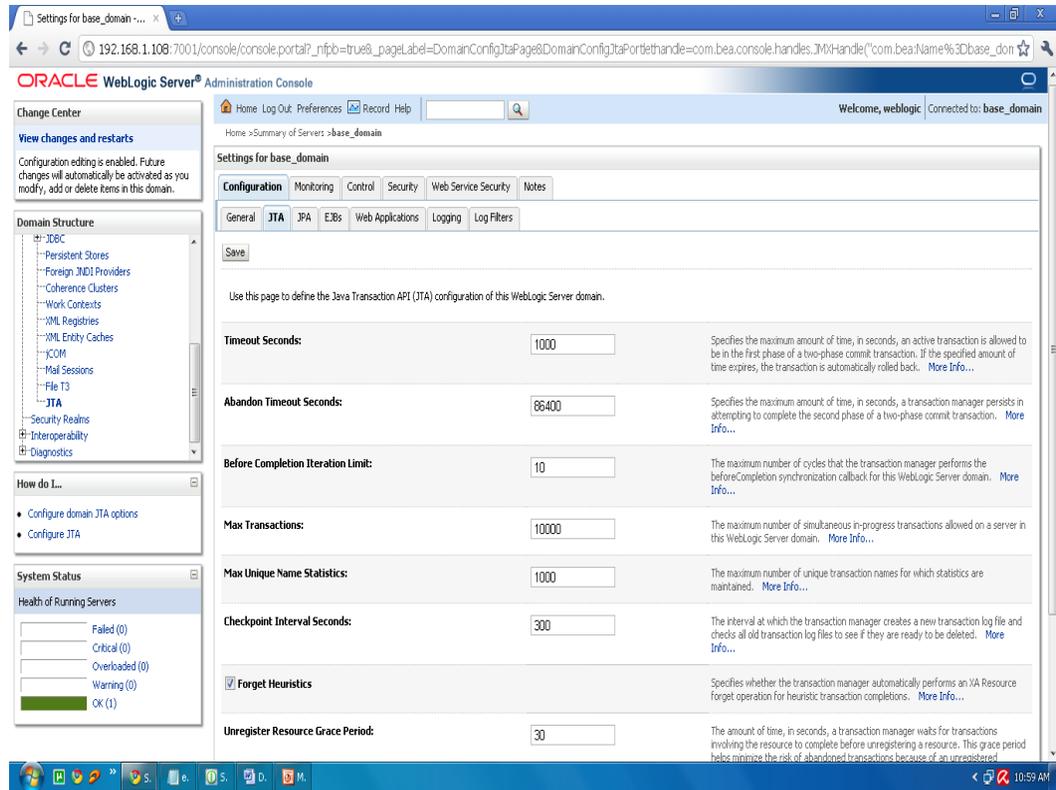
8. Once RTIL installation is complete, configure Xmx and Xms values in the WebLogic Admin console.

   a. Log in to the **admin console**.
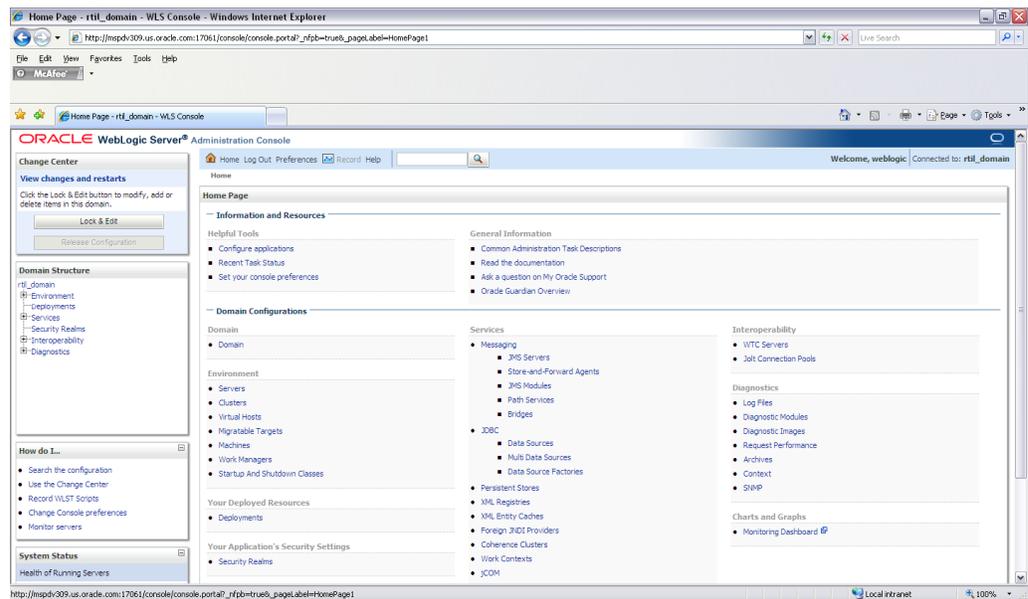
   b. Click **Lock & Edit**.

   c. Navigate to Servers -> RTIL Managed Server (for example, rtil-server).
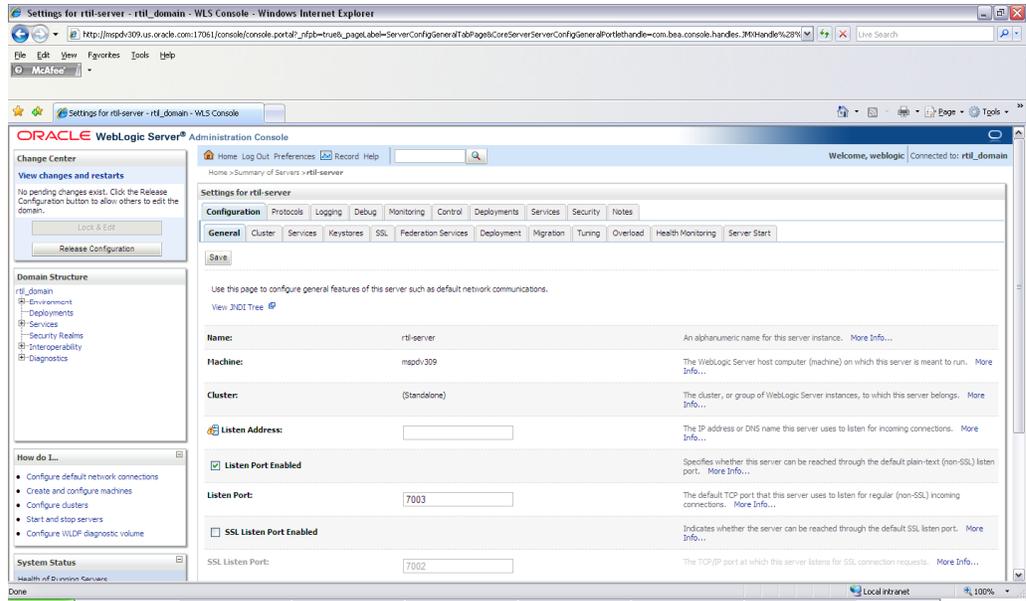
d. Click the Server Start tab under configuration.
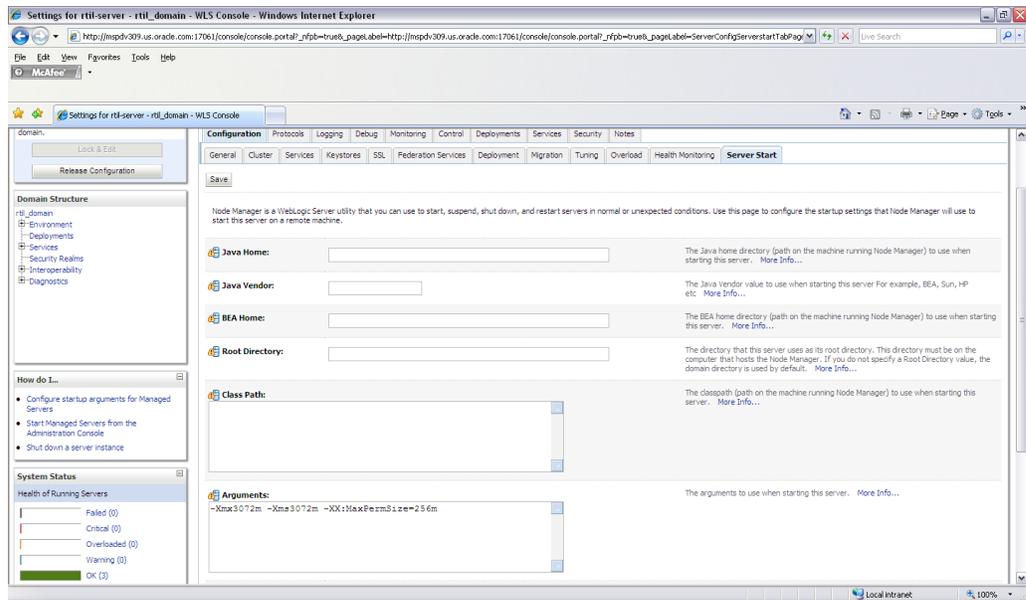
e. Change the **Xmx** and **Xms** values to 3072m.
Example: **-Xmx3072m -Xms3072m** -XX:MaxPermSize=256m

f. Save the configuration.

g. Click **Activate Changes**.
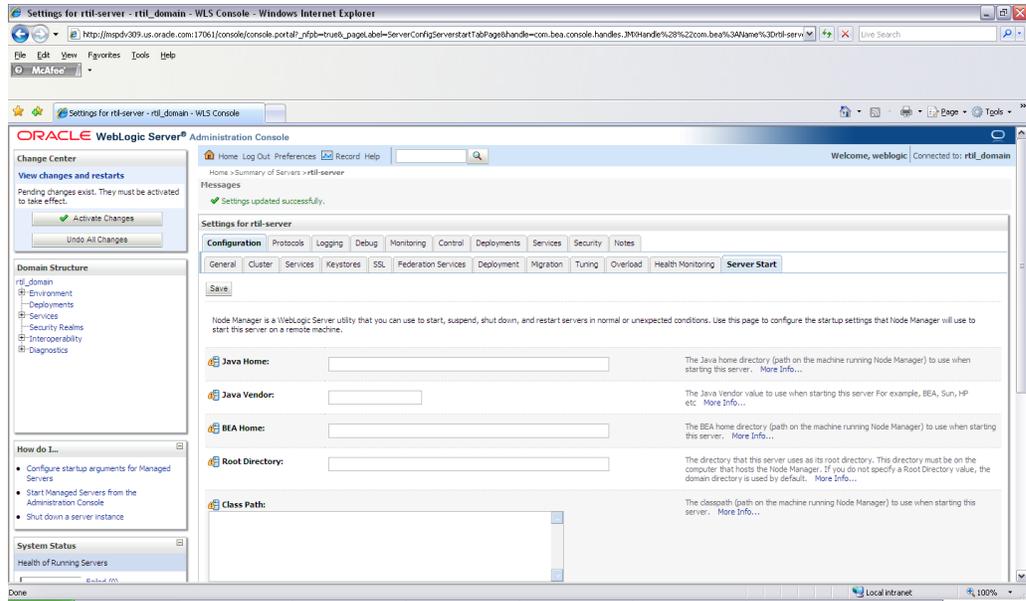
h. Navigate to Environment → Servers

i. Click the Control Tab, under Summary of Servers.
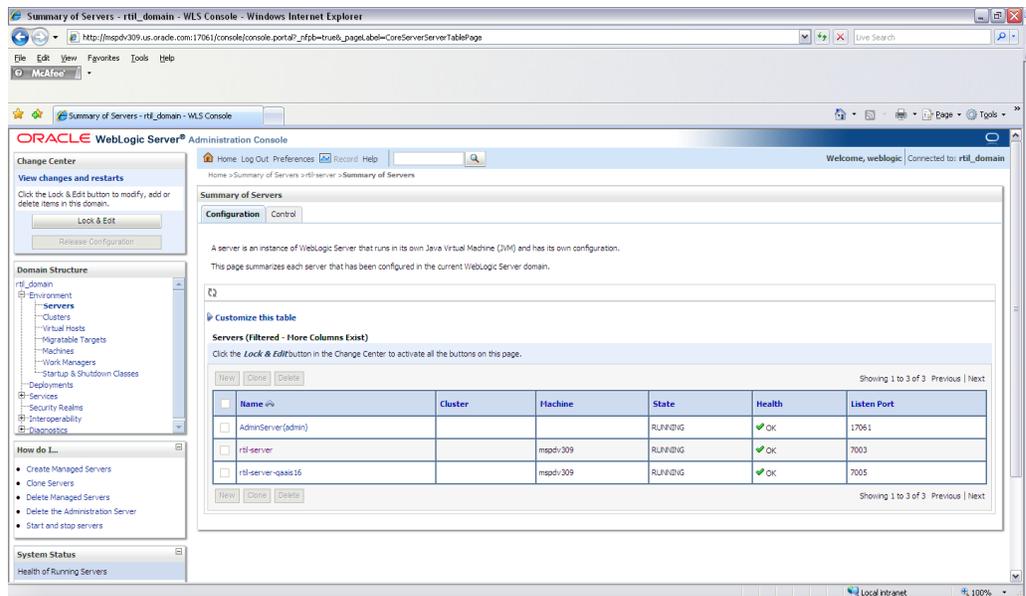
j. Restart Rtil Managed Server.

Resolving Errors Encountered During Application Installation

If the application installer encounters any errors, execution is halted immediately. You can run the installer in silent mode so that you do not have to retype the settings for your environment. See Appendix: Installer Silent Mode for silent mode instructions.

See Appendix: Common Installation Errors for common installation errors.

Because full application installation is required every time, any previous partial installations are overwritten by the successful installation.

Troubleshooting RTIL Deployment

Confirm the following details are in the RTIL database. If they are not, complete the following steps to configure the RTIL URL in the WebService Consumer.

Log in to the RMS database schema as an RMS user.

Add a record in the retail_service_report_url table with the following column values.

Column Name	Value
RS_CODE	RTIL
RS_NAME	Retail Tax Integration Layer
RS_TYPE	S
URL	<RTIL URL> (for example, http://<rtilhostname:port>/rtil-web/invokeApp
SERVER	<RTIL_SERVER_NAME>
PORT	<PORT_NUMBER> (for example, 17002)

Database Installation Tasks—Patch

There are two different methods to use for installing the ORFM 13.2.2 database schema patch. Option 1 uses the installer to apply the patch. Option 2 uses the patch controller scripts directly.

> **Note:** If any ORFM hotfixes have been applied to the schema after 13.2, be aware that using the installer or controller scripts to apply the 13.2.2 patch can have unexpected results. You will need to decide if it is safe to run all the scripts in the patch, or if the scripts need to be selectively run.

> **Note:** If you have manually applied the required hotfix 11071552, you will hit errors when running the ORFM 13.2.1 database schema patch. See Appendix G: Common Installation Errors for the workaround and more details.

> **Note:** Shutdown any applications that may be using the RMS schema (for example RIB) before applying a schema patch.

RMS/ORFM Database Patch Sequence

It is very important that the RMS and ORFM database patches are run in the correct sequence. Use the following sequence to determine the order to apply RMS and ORFM patches. Running patches out of sequence can cause installation errors.

1. RMS 13.2 DB Upgrade
2. ORFM 13.2 DB Install
3. RMS 13.2.1 DB Patch
4. ORFM 13.2.1 DB Patch
5. RMS 13.2.2 DB Patch
6. ORFM 13.2.2 DB Patch

Option 1: Patch ORFM Database using the Patch Installer

The ORFM 13.2.2 database schema patch installer may be used to apply the ORFM 13.2.2 patch to a schema from 13.2. The installer should only be used to apply the patch if the schema being patched does not contain customizations or hotfixes. The patch may also be applied outside of the installer by calling the controller scripts directly. See Option 2: Patch ORFM Database using Controller Scripts later in this chapter for details on this method.

Before you apply the ORFM 13.2.2 patch:

- Make a backup of all your objects and database schema.
- Determine which patches and hotfix bundles have already been installed.

- Make sure the required RMS and ORFM schema patches have been applied. Refer to the section **RMS/ORFM Database Patch Sequence** for details.
- Review the enclosed 13.2.2 Release Notes (rms-1322-rn.pdf).

Create Staging Directory for ORFM Database Schema Files

To create a staging directory for ORFM database schema files, complete the following steps.

1. Log into the database server as a user that can connect to the RMS database.
2. Create a staging directory for the ORFM 13.2.2 Patch. There should be a minimum of 40 MB disk space available in this location.
3. Copy the orfm1322dbpatch.zip file from the ORFM 13.2.2 release to the staging directory. This is referred to as DB_PATCH_DIR when patching a database schema.
4. Change directories to DB_PATCH_DIR and extract the orfm1322dbpatch.zip. This creates a orfm/dbschemapatch subdirectory under DB_PATCH_DIR

Run the ORFM Database Schema Patch Installer

To run the ORFM database schema patch installer, complete the following steps.

> **Note:** See Appendix: ORFM Database Patch Installer Screens for details about the screens and fields in the ORFM database schema patch installer.

1. Change directories to DB_PATCH_DIR/orfm/dbschemapatch.
2. Source the oraenv script to set up the Oracle environment variables (ORACLE_HOME, ORACLE_SID, PATH, etc)

> **Example:** prompt$. oraenv
> ORACLE_SID = [] ? mydb
> prompt$

Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

> **Example:** prompt$ echo $ORACLE_HOME
> /u00/oracle/product/mydbversion
> prompt$ echo $ORACLE_SID
> mydb

3. Set and export the following environment variables. These variables are needed in addition to the environment variables set by the oraenv script above.

Variable	Description	Example
NLS_LANG	Locale setting for Oracle database client	NLS_LANG=AMERICAN_AMERICA.UTF8 export NLS_LANG
DISPLAY	Address and port of X server on desktop system of user running install. Optional for dbschema installer	DISPLAY=<IP address>:0 export DISPLAY

4. If you are going to run the installer in GUI mode using an X server, you need to have the XTEST extension enabled. This setting is not always enabled by default in your X server. See Appendix: Common Installation Errors for details.

5. If the patch installer has already been run in this location you may wish to back up the ant.install.properties file. The settings from the ORFM 13.2.2 patch install will be refreshed with the latest input every time the installer runs.

6. Run the install.sh script to start the installer.

> **Note:** Below are the usage details for install.sh. The typical usage for GUI mode is no arguments.
>
> install.sh [text | silent]

7. On the Apply a Patch page for each product, provide the path to the corresponding controller ksh script. This path will be DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/<version>/orfm. This directory should contain a orfm_controller.ksh file, which the installer runs to apply the ORFM 13.2.2 Patch.

8. The installer leaves behind the ant.install.properties file for future reference and repeat installations. This file contains inputs you provided. As a security precaution, make sure that the file has restrictive permissions.

> **Example:** `chmod 600 ant.install.properties`

Option 2: Patch ORFM Database using Controller Scripts

While the installer can be used to apply the entire ORFM database patch, there are situations in which it is better to run the patch directly with the scripts released in the patch. The installer calls start-all ksh scripts named orfm_controller.ksh which run all of the files in the patch. If there are any customizations or hotfixes in the schema then certain statements in the patch may result in errors. In this situation it is better to investigate where the conflicts are and fix the SQL scripts accordingly.

Before you apply the ORFM 13.2.2 patch:

- Make a backup of all your objects and database schema.
- Determine which patches and hotfix bundles have already been installed
- Make sure the required RMS and ORFM schema patches have been applied. Refer to the section **RMS/ORFM Database Patch Sequence** for details.
- Review the enclosed 13.2.2 Patch Release Notes (rms-1322-rn.pdf).

Create Staging Directory for RMS Database Schema Files

To create a staging directory for RMS database schema files, complete the following steps.

1. Log into the database server as a user that can connect to the RMS database.

2. Create a staging directory for the ORFM 13.2.2 Patch. There should be a minimum of 40 MB disk space available in this location.

3. Copy the orfm1322dbpatch.zip file from the ORFM 13.2.2 release to the staging directory. This is referred to as DB_PATCH_DIR when patching a database schema.

4. Change directories to DB_PATCH_DIR and extract the orfm1322dbpatch.zip. This creates a orfm/dbschemapatch subdirectory under DB_PATCH_DIR

Run the RMS Database Controller Scripts

To run the RMS database controller scripts, complete the following steps.

1. Change directories to DB_PATCH_DIR/orfm/dbschemapatch/orfm-dbpatch/.

2. Source the oraenv script to set up the Oracle environment variables (ORACLE_HOME, ORACLE_SID, PATH, etc)

Example:	prompt$. oraenv
	ORACLE_SID = [] ? mydb
	prompt$

3. Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

Example:	prompt$ echo $ORACLE_HOME
	/u00/oracle/product/mydbversion
	prompt$ echo $ORACLE_SID
	mydb

4. Set and export the NLS_LANG environment variable.

Example:	NLS_LANG=AMERICAN_AMERICA.UTF8
	export NLS_LANG

5. For each version you want to patch, configure the individual controller.cfg files. To do this:

   - Copy DB_PATCH_DIR/orfm/dbschemapatch/orfm-dbpatch /<version>/orfm/templates/controller.cfg to DB_PATCH_DIR/orfm/dbschemapatch/orfm-dbpatch /<version>/orfm/controller.cfg

   - Open the controller.cfg file you just created and replace the tokens for the following variables with the appropriate values:

     i. Export PATCH_DIR= DB_PATCH_DIR/orfm/dbschemapatch/orfm-dbpatch/<version>/orfm

     ii. export SCHEMA_OWNER=<The name of the RMS schema>

     iii. export MMUSER=< The name of the RMS schema >

     iv. export ORACLE_SID=<SID for the database the MMUSER schema resides in>

     v. export TNS_ADMIN=/path/to/wallet/files/dir/

     vi. export UP=/@<Schema Owner Wallet Alias>

       > **Note:** See Appendix: Setting Up Password Stores with Oracle Wallet for instructions to set up the database wallet.

6. For each version you wish to patch, cd to DB_PATCH_DIR/orfm/dbschemapatch/orfm-dbpatch/<version>/orfm and run the following commands:

   ```
   $ ./orfm_controller.ksh DBO Y
   ```

7. If the installation fails for any of the patches before completion, look at the logs in the DB_PATCH_DIR/orfm/dbschemapatch/orfm-dbpatch/<version>/orfm/error and DB_PATCH_DIR/orfm/dbschemapatch/orfm-dbpatch/<version>/orfm/log directories to determine the source of the error. You can continue the patch by rerunning the orfm_controller.ksh file, but only if the files generated in the DB_PATCH_DIR/orfm/dbschemapatch/orfm-dbpatch/<version>/orfm/processed directory from the last patch attempt are still there. Any scripts that ran previously will be skipped. If you wish to start a new patch, delete all files in the DB_PATCH_DIR/orfm/dbschemapatch/orfm-dbpatch/<version>/orfm/processed directory.

6

Batch Installation Tasks—Patch

There are two different methods to use for installing the ORFM 13.2.2 Batch Patch. Option 1 uses the RMS installer to apply patch. Option 2 compiles the batch directly.

Option 1: Use RMS Batch Installer to Patch

> **Note:** If using the RMS Batch Installer to apply the ORFM 13.2.2 patch, the RMS 13.2.2 and ORFM 13.2.2 Batch patches should be applied at the same time. This section provides instructions on how to do this.

As shipped, the RMS 13.2 Batch installer will install and compile the batch programs for version 13.2. Patches for ORFM batch may be applied by copying the new source files and recompiling in place in the environment using the profile scripts created by the installer. This is the method to use if there is already an environment at the previous patch level. Go to the section "Option 2: Compile ORFM Batch Directly" for these instructions.

The installer method is only intended for new environments. Do not use the installer patching utility to attempt patching of batch in existing environments with the installer. If the patch is applied to customizations, they will be overwritten.

In this section, STAGING_DIR refers to the location where the RMS 13.2 Batch installer was originally expanded. The installer files from the original RMS 13.2 installation can be re-used or a new directory can be created with a fresh copy of the RMS 13.2 application installer.

Before you apply the RMS and ORFM 13.2.2 Batch patches:

- Make a backup of all your Batch files.
- Review the enclosed 13.2.2 Patch Release Notes (rms-1322-rn.pdf).

Before copying over any files:

- Note whether customizations have been made to the module. If so, then the customizations must be reapplied over the new version of the file (or the fix may need to be applied to the custom version of the code).
- Copy the original files to a different directory before copying over them in case they need to be referred to at a later date.

Create Staging Directory for RMS and ORFM Batch Patch Files

To create a staging directory for RMS and ORFM batch patch files, complete the following steps.

1. Log into the database server as a user that can connect to the RMS database.
2. Create a staging directory for the RMS 13.2.2 Batch Patch. There should be a minimum of 20 MB disk space available in this location.
3. Copy the rms1322batchpatch.zip file from the RMS 13.2.2 release to the staging directory. This is referred to as RMS_BATCH_PATCH_DIR when patching a database schema.

4. Change directories to RMS_BATCH_PATCH_DIR and extract the
   rms1322batchpatch.zip file. This creates a batch-patch subdirectory under
   RMS_BATCH_PATCH_DIR.

5. Create a staging directory for the ORFM 13.2.2 Batch Patch. There should be a
   minimum of 5 MB disk space available in this location. This should be a different
   directory than RMS_BATCH_PATCH_DIR.

6. Copy the orfm1322batchpatch.zip file from the ORFM 13.2.2 release to the staging
   directory. This is referred to as ORFM_BATCH_PATCH_DIR when patching a
   database schema.

7. Change directories to ORFM_BATCH_PATCH_DIR and extract the
   orfm1322batchpatch.zip file. This creates a batch-patch subdirectory under
   ORFM_BATCH_PATCH_DIR.

8. If you do not already have one, create a staging directory for the RMS batch
   installation software or use the same staging directory as created in the database
   schema step above. There should be a minimum of 35 MB disk space available in
   this location.

9. Copy the **rms13batch.zip** file from the RMS 13. 2 release to the staging directory. This
   is referred to as STAGING_DIR when installing the RMS batch software.

10. Change directories to STAGING_DIR and extract the rms13batch.zip file. This creates
    an rms/batch subdirectory under STAGING_DIR.

Copy Batch Files

For new environments, the installer can be used to install and compile the batch
programs at the latest patch level using the installer patching utility included with RMS
and ORFM batch patches. The utility is located under
RMS_BATCH_PATCH_DIR/batch-patch/patch-util and
ORFM_BATCH_PATCH_DIR/batch-patch/patch-util. This utility will accept as input
the RMS and ORFM patch files and add them to the RMS 13.2 Batch installer package.
After running this utility, the RMS Batch installer can be used to install the environment,
and they will install the latest version of each batch module.

Custom Modules

Custom source can be provided by the user in a folder named
RMS_BATCH_PATCH_DIR/batch-patch/patch-util/custom and
ORFM_BATCH_PATCH_DIR/batch-patch/patch-util/custom. The source code in this
folder is applied last, after all patches have been applied.

Run the Installer Patching Utility

To run the installer patching utility, complete the following steps.

1. Set the JAVA_HOME environment variable to point to a JDK.

2. Set the ANT_HOME environment variable to point to an Ant installation. There is
   one included with the RMS installer that can be used to do this.

   ANT_HOME=STAGING_DIR/rms/batch/ant

   export ANT_HOME

3. Change directories to RMS_BATCH_PATCH_DIR/batch-patch/patch-util/

4. Modify the patch.properties file. Set the staging.dir and patch.to.version properties.

Property Name	Description
installer.dir	The directory where the RMS installer files are located under STAGING_DIR. Example: /opt/rms/batch
patch.to.version	The version you want to patch to Example: 13.2.2

5. Run the patch.sh script. This script will copy the RMS files from each patch from 13.2.2 up to the patch specified in the **patch.to.version** property. These files are copied into the RMS installer package.

6. Change directories to ORFM_BATCH_PATCH_DIR/batch-patch/patch-util/

7. Modify the patch.properties file. Set the staging.dir and patch.to.version properties.

Property Name	Description
installer.dir	The directory where the RMS installer files are located under STAGING_DIR. Example: /opt/rms/batch
patch.to.version	The version want to patch to Example: 13.2.2

8. Run the patch.sh script. This script will copy the ORFM files from each patch from 13.2.2 up to the patch specified in the **patch.to.version** property. These files are copied into the RMS installer package.

Run RMS Batch Installer

To run the RMS batch installer, complete the following steps.

> **Note:** See Appendix: RMS Batch Installer Screens for details on every screen and field in the batch installer.

1. Change directories to STAGING_DIR/rms/batch. This directory was created when the rms13batch.zip file was expanded under STAGING_DIR.

2. Source the oraenv script to set up the Oracle environment variables (ORACLE_HOME, ORACLE_SID, PATH, etc)

> **Example:** prompt$. oraenv
> ORACLE_SID = [] ? mydb
> prompt$

Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

> **Example:** prompt$ echo $ORACLE_HOME
> /u00/oracle/product/mydbversion
> prompt$ echo $ORACLE_SID
> mydb

3. Verify that the following executables are available from PATH: make, makedepend, cc, ar.

> **Example:** Here are some locations where makedepend is commonly found:
> Linux: /usr/X11R6/bin
> SUN: /usr/openwin/bin
> AIX: /usr/X11R6/bin
> HP-UX: /opt/imak/bin

4. Set and export the following environment variables. These variables are needed in addition to the environment variables set by the oraenv script above.

Property Name	Description	Example
DISPLAY	Address and port of X server on desktop system of user running install. Optional for batch installer	DISPLAY=<IP address>:0 export DISPLAY

5. If you are going to run the installer in GUI mode using an X server, you need to have the XTEST extension enabled. This setting is not always enabled by default in your X server. See Appendix G: Common Installation Errors for more details.

6. Run the install.sh script to start the installer.

> **Note:** Below are the usage details for install.sh. The typical usage for GUI mode is no arguments.
>
> ./install.sh [text | silent]

Depending on system resources, a typical RMS batch installation takes anywhere from 20 to 60 minutes.

The installer will ask for an installation directory. This is the destination directory for the RMS files. This directory is referred to as INSTALL_DIR for the remainder of this chapter. Do not provide an INSTALL_DIR that is located at or underneath STAGING_DIR.

7. After the installer is complete, you can check its log file: rms.batch.install.<timestamp>.log.

8. The installer leaves behind the ant.install.properties file for future reference and repeat installations. This file contains inputs you provided. As a security precaution, make sure that the file has restrictive permissions.

> **Example:** `chmod 600 ant.install.properties`

> **Note:** The object counts performed by the installer may be off due to the patch adding or removing modules. The installer warnings about this can be ignored

Resolving Errors Encountered During Batch Installation

The RMS batch installer is a full install that starts from the beginning each time it is run. If you encounter errors in your environment, after resolving the issue you can safely run the batch installer again to attempt another installation.

RETL

The RMS batch installer installs the RETL files under INSTALL_DIR /RETLfor<product>/rfx.

See Appendix: RMS RETL Instructions of this document for more information about RETL.

Data Conversion Scripts

The RMS batch installer installs the data conversion scripts under INSTALL_DIR /external/scripts. To complete the setup of these files, perform the following steps.

1. Create the following new directories:

    INSTALL_DIR/external/data

    INSTALL_DIR/external/logs

    The RMS Batch installer should have already created INSTALL_DIR/scripts.

2. Log into sqlplus as SYSTEM and run the following commands:

    ```
    SQL> create or replace directory rms13dev_ext_data as
    'INSTALL_DIR/external/data';
    SQL> create or replace directory rms13dev_ext_logs as
    'INSTALL_DIR/external/logs';
    ```

    > **Note:** You need to replace INSTALL_DIR with your INSTALL_DIR and you can rename the external data and log directory.

    > **Note:** The user that creates these directories owns them.

    > **Note:** The data and logs directories should be chmoded 777.

3. Log into sqlplus as SYSTEM and grant access to them by running the following commands:

    ```
    SQL> grant read on directory rms13dev_ext_data to public;
    SQL> grant read, write on directory rms13dev_ext_logs to public
    ```

4. Grant the following privileges to any other users who will be using data conversion.

    ```
    SQL> grant read on directory rms13dev_ext_data to RMS13DEVc;
    SQL> grant read, write on directory rms13dev_ext_logs to RMS13DEV;
    ```

Option 2: Compile ORFM Batch Directly

> **Note:** Warning messages may appear during the compilation of the batch. These warnings can be ignored if the batch executables are successfully generated.

Create Staging Directory for RMS Batch Patch Files

To create a staging directory for RMS batch patch files, complete the following steps.

1. Log into the database server as a user that can connect to the RMS database.

2. Create a staging directory for the ORFM 13.2.2 Batch Patch. There should be a minimum of 5 MB disk space available in this location.

3. Copy the orfm1322batchpatch.zip file from the ORFM 13.2.2 release to the staging directory. This is referred to as ORFM_BATCH_PATCH_DIR when patching a database schema.

4. Change directories to ORFM_BATCH_PATCH_DIR and extract the **orfm1322batchpatch.zip** file. This creates a batch-patch subdirectory under ORFM_BATCH_PATCH_DIR.

Set Environment Variables

> **Note**: INSTALL_DIR is the location where RMS 13 batch was installed.

To set environment variables, make sure the following variables are set. The RMS 13.2 batch installer should have created a batch.profile file located at INSTALL_DIR/batch.profile. This profile script can be used to set all environment variables listed below.

> **Example:** cd <INSTALL_DIR>
>   . ./batch.profile

The variables set by batch.profile are as follows.

- PATH must include make, makedepend and the C compiler
- MMHOME=INSTALL_DIR
- MMUSER=RMS Schema Owner
- ORACLE_HOME=Location of Oracle DB install
- ORACLE_SID=The Oracle Sid for the RMS database
- UP=/@< Schema Owner Wallet Alias >
- TNS_ADMIN=/path/to/wallet/files/dir/

AIX

- LIBPATH=$ORACLE_HOME/lib:$MMHOME/oracle/lib/bin:$LDPATH
- OBJECT_MODE=64
- LINK_CNTRL=L_PTHREADS_D7

Linux

- LD_LIBRARY_PATH=$ORACLE_HOME/lib: $MMHOME/oracle/lib/bin:$LD_LIBRARY_PATH

> **Note:** See Appendix K: Setting Up Password Stores with Oracle Wallet.

Compile Batch Libraries

To compile batch libraries, complete the following steps.

> **Note:** Verify that TNS is set up correctly by using the UP variable to successfully log in to the RMS 13 schema. For example, /u00/oracle> sqlplus $UP.

1. Copy the files from ORFM_BATCH_PATCH_DIR/batch-patch/<version>/oracle/lib/src to INSTALL_DIR/oracle/lib/src. This step should be done with each version you want to apply in order of earliest to latest patch starting at 13.2.0 and ending with the 13.2.2 deltas.

2. Change directories to INSTALL_DIR/oracle/lib/src.

3. To make library dependencies run this command.

   ```
   make -f l10n_rmslib.mk depend 2>&1 | tee libdpnd.log
   ```

   Check the libdpnd.log file for errors.

4. To make batch libraries:

   ```
   make -f l10n_rmslib.mk 2>&1 | tee libretek.log
   ```

   Check the libretek.log file for errors.

5. To install batch libraries:

   ```
   make -f l10n_rmslib.mk install
   ```

   The batch libraries should now be in INSTALL_DIR/oracle/lib/bin.

Compile Batch Source Code

1. Copy the files from ORFM_BATCH_PATCH_DIR/batch-patch/<version>/oracle/proc/src to INSTALL_DIR/oracle/proc/src. This step should be done with each version you want to apply in order of earliest to latest patch starting at 13.2.0 and ending with the 13.2.2 deltas.

2. Change directories to INSTALL_DIR/oracle/proc/src.

3. Create dependencies.

   a. Run the following command:

   ```
   make -f l10n_rms.mk depend 2>&1 | tee srcdpnd.log
   ```

   b. Check the srcdpnd.log file for errors.

4. Create batch programs.

   a. Run the following command:

   ```
   make -f l10n_rms.mk 2>&1 | tee srcall.log
   ```

   b. Check the srcall.log file for errors.

5. Install the batch programs.

   ```
   make -f l10n_rms.mk install
   ```

The ORFM batch programs should now be in INSTALL_DIR/oracle/proc/bin.

Copy Data Conversion Scripts

Copy the files from ORFM_BATCH_PATCH_DIR/batch-patch/<version>/external to INSTALL_DIR/external. This step should be done with each version you want to apply in order of earliest to latest patch starting at 13.2.0 and ending with the 13.2.2 deltas.

.

7

Application Installation Tasks—Patch

There are two different methods to use for installing the ORFM 13.2.2 Application patch. Option 1 uses the RMS installer to apply the patch. Option 2 compiles the ORFM toolset and forms directly.

> **Note**: If the 13.2.2 database schema patch has been run, the entire set of toolsets and forms must be recompiled.

Option 1: Use RMS Application Installer to Patch

> **Note:** If using the RMS Application Installer to apply the ORFM 13.2.2 patch, the RMS 13.2.2 and ORFM 13.2.2 Application patches should be applied at the same time. This section provides instructions on how to do this.

As shipped, the RMS 13.2 Forms installer installs and compiles the forms for version 13.2. Patches for ORFM Forms may be applied by copying the new source files and recompiling in place in the environment using the profile scripts created by the installer. This is the method to use if there is already an environment at the previous patch level. Go to the section "Option 2: Compile ORFM Toolset and Forms Directly" for these instructions.

The installer method is only intended for new environments. Do not use the installer patching utility to attempt patching of forms in existing environments with the installer. If the patch is applied to customizations, they will be overwritten.

In this section, STAGING_DIR refers to the location where the RMS 13.2 application installer was originally expanded. A new directory should be created with a fresh copy of the RMS 13.2 application installer.

Before you apply the RMS and ORFM 13.2.2 patch:

- Make a backup of all your forms and library files.
- Review the enclosed 13.2.2 Patch Release Notes (rms-1322-rn.pdf).

Before copying over any files:

- Note whether customizations have been made to the module. If so, then the customizations must be reapplied over the new version of the file (or the fix may need to be applied to the custom version of the code).
- Copy the original files to a different directory before copying over them in case they need to be referred to at a later date.

Create Staging Directory for RMS and ORFM Application Patch Files

To create a staging directory for RMS and ORFM application patch files, complete the following steps.

1. Log on to your application server as a user with read and write access to the Weblogic files.
2. Create a staging directory for the RMS Application patch. There should be a minimum of 500 MB disk space available in this location.

3. Copy the file rms1322apppatch.zip from the RMS 13.2.2 release to staging directory. This will be referred to as RMS_APP_PATCH_DIR when installing application software and reports.

4. Change directories to RMS_APP_PATCH_DIR and extract the file rms1322apppatch.zip. This creates an app-patch subdirectory under RMS_APP_PATCH_DIR.

5. Create a staging directory for the ORFM 13.2.2 Application Patch. There should be a minimum of 140 MB disk space available in this location. This should be a different directory than RMS_APP_PATCH_DIR.

6. Copy the orfm1322apppatch.zip file from the ORFM 13.2.2 release to the staging directory. This is referred to as ORFM_APP_PATCH_DIR when patching a database schema.

7. Change directories to ORFM_APP_PATCH_DIR and extract the **orfm1322apppatch.zip** file. This creates an app-patch subdirectory under ORFM_APP_PATCH_DIR.

8. If you do not already have one, create a staging directory for the RMS application installation software or use the same staging directory as created in the database schema step above. There should be a minimum of 600 MB disk space available in this location.

9. Copy the file rms13appserver.zip from the RMS 13. 2 release to staging directory. This will be referred to as STAGING_DIR when installing application software and reports.

10. Change directories to STAGING_DIR and extract the file rms13appserver.zip. This will create an rms/application subdirectory under STAGING_DIR.

Copy Forms and Library Patch Files

For new environments, the installer can be used to install and compile the forms at the latest patch level using the installer patching utility included with RMS and ORFM Forms patches. The utility is located under RMS_APP_PATCH_DIR/app-patch/patch-util and ORFM_APP_PATCH_DIR/app-patch/patch-util. This utility will accept as input the RMS and ORFM patch files and add them to the RMS 13.2 Forms installer package. After running this utility, the RMS Forms installer can be used to install the environment, and they will install the latest version of each batch module.

Custom Modules

Custom source can be provided by the user in a folder named RMS_APP_PATCH_DIR/app-patch/patch-util/custom and ORFM_APP_PATCH_DIR/app-patch/patch-util/custom. The source code in this folder is applied last, after all patches have been applied.

Run the Installer Patching Utility

To run the installer patching utility, complete the following steps.

1. Set the JAVA_HOME environment variable to point to a JDK.

2. Set the ANT_HOME environment variable to point to an Ant installation. There is one included with the RMS installer that can be used for this.

   ANT_HOME=<INSTALL_DIR>/rms/application/ant

   export ANT_HOME

3. Change directories to RMS_APP_PATCH_DIR/app-patch/patch-util/

4. Modify the patch.properties file. Set the staging.dir and patch.to.version properties.

Property Name	Description
staging.dir	The directory where the installer files are located under STAGING_DIR. Example: /opt/rms/application
patch.to.version	The version want to patch to Example: 13.2.2

5. Run the patch.sh script. This script will copy the files from each patch from 13.2.2 up to the patch specified in the **patch.to.version** property. These files are copied into the installer package.

6. Change directories to ORFM_APP_PATCH_DIR/app-patch/patch-util/

7. Modify the patch.properties file.

Property Name	Description
installer.dir	The directory where the RMS installer files are located under STAGING_DIR. Example: /opt/rms/application
patch.to.version	The version want to patch to Example: 13.2.2

8. Set the staging.dir and patch.to.version properties. Run the patch.sh script. This script will copy the ORFM files from each patch from 13.2.0 up to the patch specified in the **patch.to.version** property. These files are copied into the RMS installer package.

Run the RMS Application Installer

To run the RMS application installer, complete the following steps.

> **Note:** See Appendix: RMS Application Installer Screens for details on every screen and field in the application installer.

1. Log on to your application server as a user with read and write access to the Weblogic files.

2. Change directories to STAGING_DIR/rms/application. This directory was created when the rms13application.zip file was expanded under STAGING_DIR.

3. Set and export the following environment variables.

Variable	Description	Example
DOMAIN_HOME	The location where Forms 11.1.1.3 domain has been installed.	DOMAIN_HOME= /u00/webadmin/product/10.3.3/WLS_ Forms/user_projects/domains/ClassicD omain/ export DOMAIN_HOME
WLS_INSTANCE	The name of the managed server that contains Oracle Forms.	WLS_INSTANCE=WLS_FORMS Export WLS_INSTANCE
ORACLE_SID	The database/SID where the RMS schema resides.	ORACLE_SID=mydb
NLS_LANG	Locale setting for Oracle database client.	NLS_LANG=AMERICAN_AMERICA.U TF8 export NLS_LANG
JAVA_HOME	Location of a Java 6.0 (1.6.0) JDK.	JAVA_HOME= /u00/webadmin/java/jdk1.6.0_12 Export JAVA_HOME
DISPLAY	Address and port of X server on desktop system of user running install. Required for forms application installer.	DISPLAY=<IP address>:0 export DISPLAY

4. To install the RMS application you need to be using an X server such as Exceed and have set the DISPLAY environment variable. The installer does not continue otherwise.

5. Run the install.sh script to start the installer.

> **Note:** Below are the usage details for install.sh. The typical usage for GUI mode is no arguments.
>
> ./install.sh [text | silent]

6. The Installer automatically sets additional environment variables based on the values of the environment variables set in step 3. At the end of the preinstall checks it will print out a summary containing these new environment variables:

Example:

MW_HOME=/u00/webadmin/product/10.3.3/WLS_
Forms

ORACLE_HOME=/u00/webadmin/product/10.3.3/WLS_
Forms/as_1

ORACLE_INSTANCE=/u00/webadmin/product/10.3.3
/WLS_Forms/asinst_1

DOMAIN_HOME=/u00/webadmin/product/10.3.3/WLS_
Forms/user_projects/domains/ClassicDomain

WLS_INSTANCE=WLS_FORMS

ORACLE_SID=mydb

JAVA_HOME=/u00/webadmin/java/jdk1.6.0_12

Verify that these environment variables are correct. If any of them are incorrect, you
need to verify that the Weblogic shell scripts that set them are configured properly.
Check the following scripts:

```
$DOMAIN_HOME/bin/setDomainEnv.sh
$WEBLOGIC_HOME/wlserver_10.3/common/bin/commEnv.sh
```

Example:

/u00/webadmin/product/10.3.3/WLS_Forms/user_
projects/domains/ClassicDomain/bin/setDomainEnv.sh

/u00/webadmin/product/10.3.3/WLS_Forms/wlserver_
10.3/common/bin/commEnv.sh

Depending on system resources, a typical installation takes anywhere from 45
minutes to two hours.

The installer asks for an installation directory. This is the destination directory for
the RMS files. This directory will be referred to as INSTALL_DIR for the remainder
of this chapter. Do not provide an INSTALL_DIR that is located at or underneath
STAGING_DIR.

Note: You may see the following warning repeated during
installation:

```
    [exec] Warning! One or more of your selected
locales are not available.
    [exec] Please invoke the commands "locale" and
"locale -a" to verify your
    [exec] selections and the available locales.
    [exec]
    [exec] Continuing processing using the "C" locale.
```

Or

```
    [exec] couldn't set locale correctly
```

This warning can be ignored.

7. After the installation is complete, you can check its log file:
    INSTALL_DIR/base/log/rms.app.install.<timestamp>.log. The
    INSTALL_DIR/base/error will contain information about possible failed
    compilations.

8. The installer leaves behind the ant.install.properties file for future reference and
    repeat installations. This file contains inputs you provided. As a security precaution,
    make sure that the file has restrictive permissions.

    > **Example:** `chmod 600 ant.install.properties`

    > **Note:** The object counts performed by the installer may be
    > off due to the patch adding or removing modules. The
    > installer warnings about this can be ignored

9. If during the screens you chose not to have the installer automatically configure
    WebLogic, after the installation is complete follow the post installation tasks by
    making backups of the listed files and copying the required files to the specified
    location.

Example:

```
##############################################################################
##                       WebLogic Configuration Tasks                      ##
##############################################################################
Contact your WebLogic administrator and have them make backups of the following
files:

/u00/webadmin/product/10.3.3/WLS_Forms/user_projects/domains/ClassicDomain/config/
fmwconfig/servers/WLS_FORMS/applications/formsapp_11.1.1/config/forms/registry/ora
cle/forms/registry/Registry.dat
/u00/webadmin/product/10.3.3/WLS_Forms/user_projects/domains/ClassicDomain/config/
fmwconfig/servers/WLS_FORMS/applications/formsapp_11.1.1/config/formsweb.cfg

Have the WebLogic administrator stop WLS_FORMS and ohs1,
copy everything in /home/oretail/rms132/install/post
to /u00/webadmin/product/10.3.3/WLS_Forms to update the files
and then start WLS_FORMS and ohs1
for the changes to take effect.

example: cp -R * /u00/webadmin/product/10.3.3/WLS_Forms
```

Delete Obsolete Files

The following forms and menus are obsolete as of 13.2.2 and should be deleted from
INSTALL_DIR.

```
INSTALL_DIR/base/forms/src/company.mmb
INSTALL_DIR/base/forms/src/ribapierr.fmb
INSTALL_DIR/base/forms/src/freclass.fmb
INSTALL_DIR/base/forms/src/l10ncnae.fmb
INSTALL_DIR/base/forms/src/tribsubs.fmb
INSTALL_DIR/base/forms/src/vfreclass.fmb
INSTALL_DIR/base/forms/bin/company.mmx
INSTALL_DIR/base/forms/bin/ribapierr.fmx
INSTALL_DIR/base/forms/bin/freclass.fmx
INSTALL_DIR/base/forms/bin/l10ncnae.fmx
INSTALL_DIR/base/forms/bin/tribsubs.fmx
INSTALL_DIR/base/forms/bin/vfreclass.fmx
```

Resolving Errors Encountered During Application Installation

In the event a form or menu does not compile, go to INSTALL_DIR/base/error and see which objects didn't compile. To try and manually recompile the object run INSTALL_DIR/base/forms.profile and run the following command:

```
# frmcmp.sh userid=$UP module_type=form module=FORM_OR_MENU
```

You can also safely rerun the installer to see if the form compiles.

> **Note:** If you rerun the installer, and choose to check the box **Configure WebLogic** in the installer screens, you may need to clean up duplicate entries in the WebLogic formsweb.cfg file.

Clustered Installations – Post-Installation Steps

If you are installing the RMS application to a clustered Oracle Application Server environment, there are some extra steps you need to take to complete the installation. In these instructions, the application server node with the ORACLE_HOME you used for the RMS application installer is referred to as *master node*. All other nodes are referred to as *remote nodes*.

To complete the RMS forms application install, the installer provided new versions of formsweb.cfg and the newly-created env files for the new RMS installation. The env files should be copied from the master node to the remote node(s). The entries added to formsweb.cfg for these new environments should be copied from the master node to the remote nodes.

> **Note:** Do not copy the entire formsweb.cfg file from one node to another. Only copy the RMS entries appended to this file by the installer. There is node-specific information in this file that is different between ORACLE_HOME installations.

Oracle Configuration Manager

The Oracle Retail OCM Installer packaged with this release installs the latest version of OCM.

The following document is available through My Oracle Support (formerly MetaLink). Access My Oracle Support at the following URL:

```
https://support.oracle.com
```

Oracle Configuration Manager Installer Guide (Doc ID: 1071030.1)

This guide describes the procedures and interface of the Oracle Retail Oracle Configuration Manager Installer that a retailer runs at the beginning of the installation process.

OCM Documentation Link

```
http://www.oracle.com/technology/documentation/ocm.html
```

RMS Reports Copied by the Application Installer

The application installer copies RMS report files to INSTALL_DIR/base/reports. These files should be installed into BI Publisher as documented in the RMS Reports chapter of this document.

Test the RMS Application

Oracle Retail provides test cases that allow you to smoke test your installation. Refer to My Oracle Support document, *Oracle Retail Merchandising Installation Test Cases* (ID 1277131.1.1).

Option 2: Compile ORFM Toolset and Forms Directly

Option 2 entails compiling ORFM forms directly, as described below.

Create Staging Directory for ORFM Application Files

To create a staging directory for ORFM application files, complete the following steps.

1. Log into the application server as a user with read and write access to the WebLogic files.

2. Create a staging directory for the ORFM application installation software. There should be a minimum of 140 MB disk space available in this location.

3. Copy the file orfm1322apppatch.zip from the ORFM 13.2.2 release to staging directory. This is referred to as ORFM_APP_PATCH_DIR when installing application software and reports.

4. Change directories to ORFM_APP_PATCH_DIR and extract the file orfm1322apppatch.zip.

Set Environment Variables

To set environment variables, complete the following steps.

> **Note**:
> INSTALL_DIR is the location where RMS 13 forms were installed.
>
> ORACLE_HOME is the location where Oracle WebLogic (10.3.3) has been installed.
>
> ORACLE_INSTANCE is the location where WebLogic has been installed and contains the executables to compile forms.

Make sure the following variables are set. The RMS 13.2 forms installer should have created a forms.profile file located at INSTALL_DIR/base/forms.profile. This profile script can be used to set all environment variables listed below.

> **Example:**   cd <INSTALL_DIR>/base
>   . ./forms.profile

Variables set by forms.profile are as follows.

- **All OS Platforms**
    - MMHOME=INSTALL_DIR/base
    - ORACLE_HOME=/path/to/WebLogic/as_1
    - ORACLE_INSTANCE=/path/to/WebLogic/asinst_1
    - ORACLE_SID= The Oracle Sid for the RMS database
    - UP=/@< Schema Owner Wallet Alias >
    - TNS_ADMIN=/path/to/wallet/files/dir/
    - NLS_LANG=AMERICAN_AMERICA.UTF8
    - DISPLAY=<IP address of X server>:0.0

- PATH=$ORACLE_HOME/bin:$ORACLE_HOME/opmn/bin:$ORACLE_HOME/dcm/bin:INSTALL_DIR/base/forms_scripts:$PATH
- CLASSPATH=$ORACLE_HOME/jlib/importer: $ORACLE_HOME/jlib/debugger.jar:$ORACLE_HOME/jlib/utj.jar:$ORACLE_HOME/jlib/ewt3.jar:$ORACLE_HOME/jlib/share.jar:$ORACLE_HOME/jlib/dfc.jar:$ORACLE_HOME/jlib/help4.jar:$ORACLE_HOME/jlib/oracle_ice.jar:$ORACLE_HOME/jlib/jewt4.jar
- FORMS_BUILDER_CLASSPATH=$CLASSPATH
- FORMS_PATH=INSTALL_DIR/base/toolset/bin:INSTALL_DIR/rms/forms/bin:$ORACLE_HOME/forms
- TK_UNKNOWN=$ORACLE_INSTANCE/config/FRComponent/frcommon/guicommon/tk/admin
- PATH=$ORACLE_INSTANCE/bin:$PATH

> **Note:** See Appendix M: Setting Up Password Stores with Oracle Wallet in this document.

> **Note:** Verify that TNS is set up correctly by using the UP variable to successfully log in to the RMS 13 schema.
>
> **Example:** /u00/oracle> sqlplus $UP

- **AIX**
  - LD_LIBRARY_PATH=$ORACLE_HOME/lib:$ORACLE_HOME/lib32:$ORACLE_HOME/jdk/jre/lib
  - LIBPATH=$LD_LIBRARY_PATH
- **Linux**
  - LD_LIBRARY_PATH=$ORACLE_HOME/lib:$ORACLE_HOME/lib32:$ORACLE_HOME/jdk/jre/lib

Delete Obsolete Files

The following forms and menus are obsolete as of 13.2.2 and should be deleted from INSTALL_DIR.

```
INSTALL_DIR/base/forms/src/company.mmb
INSTALL_DIR/base/forms/src/ribapierr.fmb
INSTALL_DIR/base/forms/src/freclass.fmb
INSTALL_DIR/base/forms/src/l10ncnae.fmb
INSTALL_DIR/base/forms/src/tribsubs.fmb
INSTALL_DIR/base/forms/src/vfreclass.fmb
INSTALL_DIR/base/forms/bin/company.mmx
INSTALL_DIR/base/forms/bin/ribapierr.fmx
INSTALL_DIR/base/forms/bin/freclass.fmx
INSTALL_DIR/base/forms/bin/l10ncnae.fmx
INSTALL_DIR/base/forms/bin/tribsubs.fmx
INSTALL_DIR/base/forms/bin/vfreclass.fmx
```

ORFM Forms Installation

Instructions for ORFM forms installation are as follows.

1. Copy the files from ORFM_APP_PATCH_DIR/app-patch /<version>/ base/forms/src to INSTALL_DIR/base/forms/src. This step should be done with each version you want to apply in order of earliest to latest patch starting at 13.2.0 and ending with the 13.2.2 deltas.

2. Copy all libraries (.pll files) in the INSTALL_DIR/base/forms/src directory to the directories to the INSTALL_DIR/base/forms/bin directory.

3. Change directories to INSTALL_DIR/base/forms/bin.

4. Run forms.pll.sh to compile all RMS .pll's.

5. Copy all forms (*.fmb files) in the INSTALL_DIR/base/forms/src directory to the INSTALL_DIR/base/forms/bin directory.

6. Run forms.fm_fmb.sh (in INSTALL_DIR/base/rms/forms/bin) to compile the RMS reference forms.

7. Run forms.fmb.sh (in INSTALL_DIR/base/rms/forms/bin) to generate RMS runtime forms – .fmx's.

8. Check to make sure that each non-reference form .fmb file has a corresponding .fmx file.

9. Copy all menus (*.mmb files) in the INSTALL_DIR/base/forms/src directory to the INSTALL_DIR/base/forms/bin directory.

10. Run menus.mmb.sh (in INSTALL_DIR/base/rms/forms/bin) to generate RMS runtime menus – .mmx's.

> **Note:** .err files may be created by the compilation scripts above. These files are logs of the compilation process and can be removed.

Install the Online Help

To install the online help, complete the following steps.

1. Log into the WebLogic instance to which online help will be installed.

2. Create a server if necessary. In this example, rms-help-server is being used.

3. Select **Deployments**.

4. If there is an existing "rms-help" deployment, it must be stopped and deleted. Check the box next to "rms-help" and click **Stop**->**Force Stop Now**. Click **Yes** on the next screen**.** Check the box next to "rms-help" and click **Delete.** On the next screen, click **Yes**. When finished deleting, bounce the rms-help-server.

5. Select **Deployments**.

6. Click **Install**.

7. Click in the **Path:** box and enter ORFM_APP_PATCH_DIR/app-patch/13.2.2/online-help/rms-help.ear, the ear file that will be deployed.

8. Leave **Install this deployment as an application** selected. Click **Next**.

9. Select the rms-help-server created in Step 2. Click **Next**.

10. Leave rms-help for the application name. Click **Next**.

11. Verify settings. Click **Finish**.

12. Select **Deployments**.

13. Check the box next to rms-help and click **Start -> Servicing all Requests**

14. Click **Yes**

15. In the database, set the WEBHELP_SERVER column in the LANG table for the RMS schema owner to point to the RMS help serr and port. For the above example, it is set to http://redevlv0065.us.oracle.com:17003.

8

Reports Installation Tasks—Patch

ORFM Reports are included in the ORFM Application patch: orfm1322apppatch.zip in the reports directories.

Manually Copy Reports to Install Directory

If you followed "Option 1: Use RMS Application Installer to Patch"in the chapter, Application Installation Tasks—Patch," you can skip to the next section ("Installing the RMS/ORFM BI Publisher Templates.") If you followed "Option 2: Compile ORFM Toolset and Forms Directly," you must manually copy the reports to INSTALL_DIR. Copy the reports from the ORFM application patch ORFM_APP_PATCH_DIR/app-patch/<version>/reports to the reports directory created during RMS installation, INSTALL_DIR/base/reports. This step should be done with each version you want to apply in order of earliest to latest patch starting at 13.2.0 and ending with the 13.2.2 deltas.

Installing the RMS/ORFM BI Publisher Templates

In this section we will outline how the RMS/ORFM report templates are installed into the appropriate BI server repositories. BI_REPOSITORY refers to the BI Publisher reports repository. Example: /u00/webadmin/RMS_BIP/xmlpserver/XMLP

Report files are placed in the directory - "`INSTALL_DIR/base/reports`" and have to be copied into the BI repository directory.

1. Locate the RMS directory to hold the reports under <BI_REPOSITORY>/Reports/Guest.

   Example <BI_REPOSITORY>Reports/Guest/RMS13

2. Change directory to the INSTALL_DIR/base/reports used for the application install. This directory contains subdirectories whose names reflect the names of report templates provided with RMS and ORFM.

3. Copy each report directory into the directory created above

   For example,

   ```
   cp -R *  /u00/webadmin/RMS_BIP/xmlpserver/XMLP/Reports/Guest/RMS13/
   ```

Data Migration

The 13.2.2 release includes a tool for upgrading prexisting data in the RMS schema to the ORFM 13.2.2 schema, once 13.2.2 ORFM database scripts are executed. When ORFM is installed, your existing RMS data must be migrated to accommodate changes to the database caused by ORFM installation.

Before running the ORFM 13.2.2 Data Migration Tool, do the following.

1. Make a backup of all your objects and database schema.
2. Ensure that ORFM 13.2.2 is installed.
3. Review the enclosed 13.2.2 Upgrade Release Notes (rms-1322-rn.pdf).
4. Review each of the enclosed defect documents.
5. Run the l10nbrfisdnld.pc batch program. This program must to be run after RTIL has been installed.

Create Staging Directory for RMS Data Migration Files

To create a staging directory for RMS data migration files, complete the following steps.

1. Log in to the database server as a user that can connect to the RMS database.
2. Create a staging directory for the RMS database schema installation software.
3. Copy the orfm1322datamigration.zip file from the ORFM 13.2 release to the staging directory. This is referred to as STAGING_DIR when running the data migration tool.
4. Change directories to STAGING_DIR and extract the orfm1322datamigration.zip file. This creates a "master_controller" subdirectory under STAGING_DIR.

Configure ORFM Data Migration Tool

To configure the ORFM data migration tool, complete the following steps.

1. Change directories to STAGING_DIR/master_controller/rms/br.
2. Source the oraenv script to set up the Oracle environment variables (ORACLE_HOME, ORACLE_SID, PATH, etc).

Example:	prompt$. oraenv ORACLE_SID = [] ? mydb prompt$

3. Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

Example:	prompt$ echo $ORACLE_HOME
	         /u00/oracle/product/mydbversion
	prompt$ echo $ORACLE_SID
	         mydb

4. Set and export the NLS_LANG environment variable.

Example:	NLS_LANG=AMERICAN_AMERICA.UTF8 export NLS_LANG

5. Set and export the TNS_ADMIN environment variable.

| **Example:** | TNS_ADMIN=/path/to/wallet/files/dir/ |
| | export TNS_ADMIN |

6. Open the l10nbrcontroller.cfg file and replace the values variables as follows:

   a. Export PATCH_DIR=STAGING_DIR/master_controller/rms

   b. export SCHEMA_OWNER=<The name of the RMS schema>

   c. export MMUSER=/@< Schema Owner Wallet Alias >

   Note: See Appendix K: Setting Up Password Stores with Oracle Wallet for how to set up database wallet.

   Note: Verify that TNS is set up correctly by using the UP variable to successfully log in to the RMS 13 schema.

   Example: /u00/oracle> sqlplus $UP

7. Configure the following files in the STAGING_DIR/master_controller/rms/br/files directory with data from your existing RMS/ORFM schema for the migration. (Use the existing files as templates for how this data should be formatted. For descriptions of this data, see the *Oracle Retail Fiscal Management Data Model*.)

   - competitor.dat

     This file is used to update the jurisdiction code for a given competitor. Attributes are:

     – Competitor

     – Jurisdiction Code

   - country_atrib.dat

     This file is used to update the country attributes for Brazil. Attributes are:

     – Item costing tax inclusive indicator (Y/N)

     – Default cost for purchase orders, deals, cost components

     – Default location

     – Default location type

   - vat_codes.dat

     This file is used to load the tax codes for Brazil. Attributes are:

     – Tax code

     – Tax code description

     – Indictor (Y/N), depending on whether the tax code is included in the calculation of the Negotiated Item Cost.

   - addr.dat

     This file is used to update the jurisdiction code for a given supplier/partner/store/warehouse. Attributes are:

     – Address key

     – Jurisdiction code

- comphead.dat

  This file is used to update the jurisdiction code for a company. Attributes are:
  - company
  - Jurisdiction code

- comp_store.dat

  This file is used to update the jurisdiction code for a competitor store. Attributes are:
  - Competitor store
  - Jurisdiction code

- customer.dat

  This is used to update the jurisdiction code for a given customer. Attributes are:
  - Customer
  - Jurisdiction code

- ordcust.dat

  This file is used to update the jurisdiction code for a customer order. Attributes are:
  - Customer
  - Customer order sequence number
  - Jurisdiction code

- outloc.dat

  This file is used to update the jurisdiction code for a given outside location. Attributes are:
  - Outside location type
  - Outside location
  - Jurisdiction code

- rtv_head.dat

  This file is used to update the jurisdiction code for a RTV. Attributes are:
  - RTV order number
  - Jurisdiction code

- country_l10n_ext.dat

  This file is used to load the fiscal attributes for countries. Attributes are:
  - Country
  - Fiscal country
  - Fiscal code

- item_country_l10n_ext.dat

  This file is used to load the fiscal attributes for items. Attributes are:
  - Item
  - Country
  - Service ind
  - Merchandise origin
  - NCM
  - NCM characteristic
  - IPI

- – Pauta code
- – Service code
- – Federal service code
- – State_of_manufacture
- – Pharma_list_type
- ▪ outloc_l10n_ext.dat

  This file is used to load the fiscal attributes for outside locations. Attributes are:
  - – Outside location type
  - – Outside location
  - – Taxpayer type
  - – Address line 1
  - – Address line 2
  - – Address line 3
  - – Neighborhood
  - – Jurisdiction code
  - – State
  - – Country
  - – Postal code
  - – CPF
  - – CNPJ
  - – NIT
  - – SUFRAMA
  - – City inscription
  - – State inscription
  - – IPI contributor (Y/N)

- partner_l10n_ext.dat

  This file is used to load the fiscal attributes for partners. Attributes are:
  - Partner type
  - Partner
  - Taxpayer type
  - Address line 1
  - Address line 2
  - Address line 3
  - Neighborhood
  - Jurisdiction code
  - State
  - Country
  - Postal code
  - CPF
  - CNPJ
  - NIT
  - SUFRAMA
  - City inscription
  - State inscription
  - IPI contributor (Y/N)
  - ICMS contributor (Y/N)
  - PIS contributor (Y/N)
  - COFINS contributor (Y/N)

- store_l10n_ext.dat

  This file is used to load the fiscal attributes for stores. Attributes are:
  - Store
  - Taxpayer type
  - Address line 1
  - Address line 2
  - Address line 3
  - Neighborhood
  - Jurisdiction code
  - State
  - Country
  - Postal code
  - CPF
  - CNPJ
  - NIT
  - SUFRAMA
  - City inscription
  - State inscription
  - ISS contributor (Y/N)

- Rural producer (Y/N)
- IPI contributor (Y/N)
- ICMS contributor (Y/N)
- Matching operation type
- Control recovery of ST (Y/N)
- PIS contributor (Y/N)
- COFINS contributor (Y/N)

▪ sups_l10n_ext.dat

This file is used to load the fiscal attributes for suppliers.

- Supplier
- Taxpayer type
- Address line 1
- Address line 2
- Address line 3
- Neighborhood
- Jurisdiction code
- State
- Country
- Postal code
- CPF
- CNPJ
- NIT
- SUFRAMA
- City inscription
- State inscription
- ISS contributor (Y/N)
- SIMPLES contributor (Y/N)
- ST contributor (Y/N)
- Rural producer (Y/N)
- IPI contributor (Y/N)
- ICMS contributor (Y/N)
- PIS contributor (Y/N)
- COFINS contributor (Y/N)
- is_income_range_eligible
- is_distr_a_manufacturer
- icms_simples_rate

▪ wh_l10n_ext.dat

This file is used to load the fiscal attributes for warehouses. Attributes are:

- Warehouse
- Taxpayer type
- Address line 1
- Address line 2

- Address line 3
- Neighborhood
- Jurisdiction code
- State
- Country
- Postal code
- CPF
- CNPJ
- NIT
- SUFRAMA
- City inscription
- State inscription
- ISS contributor (Y/N)
- Rural producer (Y/N)
- IPI contributor (Y/N)
- ICMS contributor (Y/N)
- Matching operation type
- Control recovery of ST (Y/N)
- PIS contributor (Y/N)
- COFINS contributor (Y/N)

▪ l10n_br_entity_trib_subs.dat

This file is used to load the state inscriptions for suppliers/warehouses and stores. Attributes are:

- Supplier/Warehouse/Store
- Entity Type (SUPP/S/W)
- Country
- State
- State Inscription

▪ l10n_br_entity_cnae_codes.dat

This file is used to load the CNAE codes for supplier/store/warehouse/company/ outside location/partner. Attributes are:

- Supplier/Store/Warehouse/Company/Outside location/ Partner
- Partner type/Outside location type
- Entity type
- Country
- CNAE code
- Primary indicator (Y/N)

▪ l10n_br_sup_tax_regime.dat

This file is used to load the tax regime of the supplier. Attributes are:

- Supplier
- Tax_regime

Run the ORFM Data Migration Tool

To run the ORFM data migration tool, complete the following steps.

1. Change directories to STAGING_DIR/master_controller/rms/br.

2. If rerunning the data migration process, clear the contents of the "processed" directory.

3. Run prevalidation tool to ensure that the input files for the data migration tool is up to date:

   ```
   $ ./rms132_br_upgrade.ksh PREVALIDATION
   ```

4. Run migration tool.

   ```
   $ ./rms132_br_upgrade.ksh UPGRADE
   ```

5. Run migration cleanup tool to remove temporary data migration objects from the database.

   ```
   $ ./rms132_br_upgrade.ksh CLEANUP
   ```

6. Refer to the files in the **log** and **error** directory if there are problems during migration.

7. Rebuild synonyms for any additional RMS users.

Appendix: ORFM RTIL Installer Screens

You need the following details about your environment for the installer to successfully deploy the RTIL application. Depending on the options you select, you may not see some screens or fields.

Screen: Retail Tax Integration Layer – Introduction
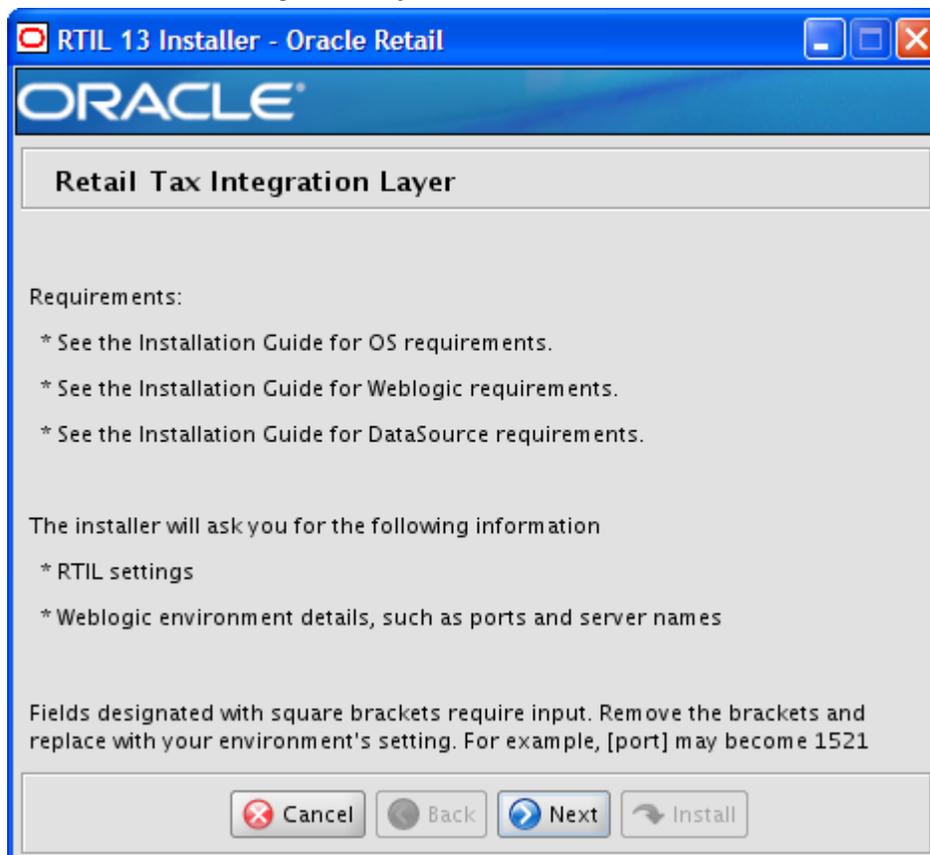
Screen: Manual Deployment Option

Fields on this Screen:

Field Title	Install files to app server?
Field Description	If you do not have write access under ORACLE_HOME, you can still use the installer to gather your settings and configure the RTIL files locally in the staging area. At a later time, an administrator can manually copy over the RTIL files and deploy the war file. If you select this option, instructions are printed to the console and the installer log file for the steps needed to complete the installation.

Screen: Application Deployment Details

Fields on this Screen:

Field Title	RTIL 13 app deployment name
Field Description	Name by which this RTIL application is identified in the application server
Example	rtil13

Field Title	RTIL 13 server/cluster
Field Description	Name of the RTIL WebLogic managed server or cluster.
Example	rtil-server

Screen: WebLogic Administrative User

Fields on this Screen:

Field Title	Hostname
Field Description	Hostname of the application server
Example	Mspdv360

Field Title	WebLogic admin port
Field Description	Port number of admin console
Example	17001

Field Title	WebLogic admin user
Field Description	User name of the admin user for the WebLogic instance to which the ORFM application is being deployed.
Example	weblogic

Field Title	WebLogic admin password
Field Description	Password for the WebLogic admin user. You chose this password when you created the WebLogic instance or when you started the instance for the first time.

Screen: Log 4j logger Details

Fields on this Screen:

Field Title	Log4j Log Level
Field Description	Specifies the level at which the logging is enabled.
Example	INFO

Field Title	Output to STDOUT
Field Description	Specifies whether the logs should be routed to the console.

Field Title	Log4j logfile MaxFileSize (MB)
Field Description	Specifies the file size threshold beyond which the log file gets rolled over.
Example	5

Field Title	Log4j logfile MaxBackupIndex
Field Description	Specifies the number of rolled over log files that will be retained.
Example	30

Screen: Data Source Details

Fields on this Screen:

Field Title	RMS JDBC URL
Field Description	URL used by the application to access the RMS Database schema.
Example	jdbc:oracle:thin@mspdv311:1521:dvols29

Field Title	RMS schema user
Field Description	Database schema user for the application. This value should match the value in the RMS database schema field for the RMS DB installer.
Example	rms01app

Field Title	RMS schema password
Field Description	Password for user, RMS Schema User
Example	

Screen: Installation Summary

All fields on this summary screen are read-only. In GUI mode of the installer, this screen provides the opportunity to review inputs and go back to previous screens to correct them if necessary.

Appendix: ORFM Database Patch Installer Screens

You need the following details about your environment for the installer to successfully patch the ORFM/RMS database schema.

Screen: ORFM Database Schema Details

Fields on this screen:

Field Title	ORFM/RMS schema
Field Description	Provide the RMS database user here. The installer logs into the database as this user to patch the RMS schema. This user must already exist in the database when the ORFM database schema patch installer is run.
Example	RMSUSER

Field Title	ORFM/RMS schema password
Field Description	Database password for the RMS schema Owner.

Field Title	ORFM/RMS Oracle SID
Field Description	Oracle system identifier for the database where the ORFM patch will be applied.
Example	mydb

The database settings provided are validated by the installer when you advance to the next screen.

Screen: Apply an ORFM DB Patch

Fields on this Screen:

Field Title	ORFM Patch Directory
Field Description	Provide the directory path to the ORFM patch you want to install. The installer runs only the patch you provide. **Note:** The directory you choose must contain an orfm_controller.ksh file.
Example	/path/to/ orfm/dbschemapatch/orfm-dbpatch/13.2.2/orfm **Note:** The patch option is intended for patches starting with 13.2.1

Screen: Continue ORFM DB Patch

Fields on this Screen:

Field Title	Continue ORFM DB Patch?
Field Description	The patch process allows you to continue a previously run patch if it stopped before completion or failed. If Yes is selected, any scripts that were previously run for the ORFM patch will be skipped. If No is selected, the patch will start from the beginning.
	Note: To continue a patch, the content of the "processed" directories in the ORFM Patch Directory chosen on the previous screen must be the same as it was after the previous patch was stopped. If you choose No, this directory will be cleared, and you will not be able to continue this patch in the future.

Appendix: RMS Batch Installer Screens

You need the following details about your environment for the installer to successfully compile and install the RMS batch programs. Depending on the options you select, you may not see some screens or fields.

Screen: Welcome
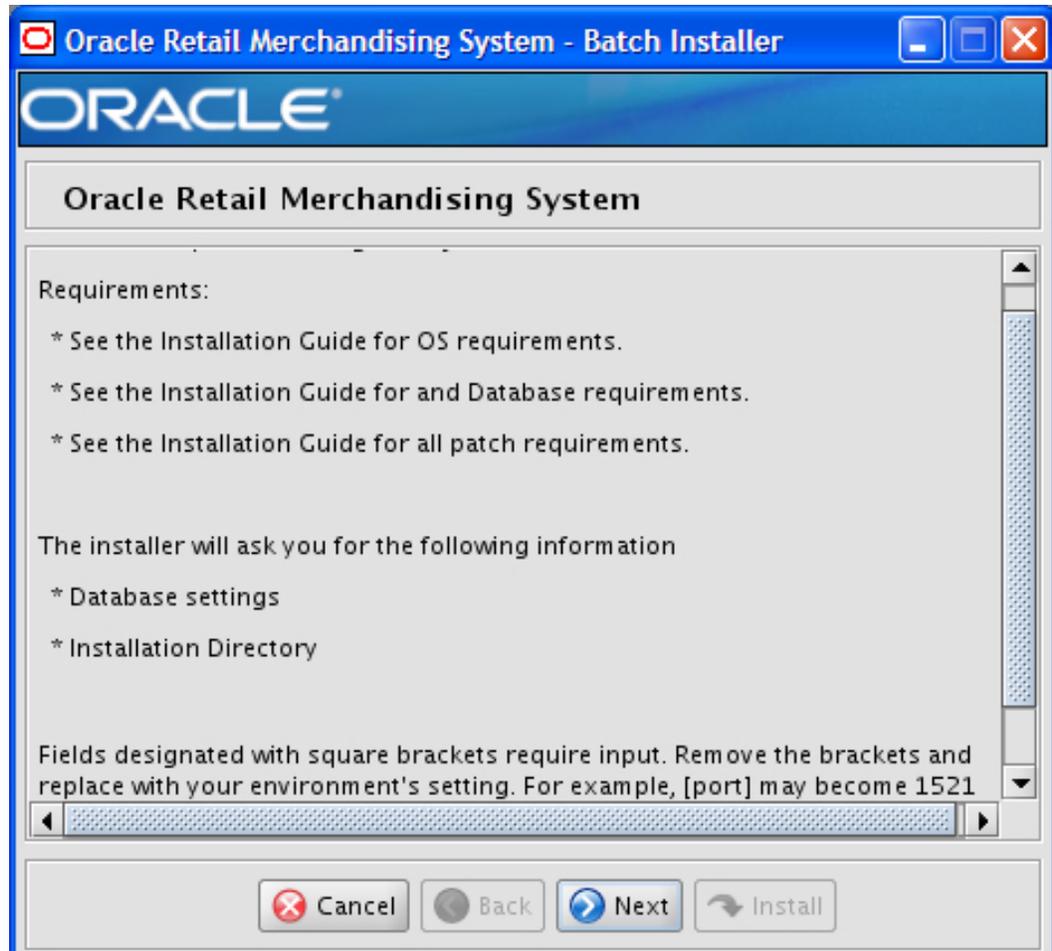
There are no fields on this screen. The Welcome screen contains information about the RMS Batch Installer and prerequisites.

Screen: DataSourceDetails

Fields on this Screen:

Field Title	RMS Schema Owner
Field Description	Provide the RMS database user here. The installer will log into the database as this user to create RMS library objects and query for data to generate batch source files. This user must already exist in the database and have the RMS tables installed.
Example	rms01

Field Title	RMS Schema Password
Field Description	Database password for the RMS Schema Owner.

Field Title	RMS Oracle SID
Field Description	Oracle system identifier for the database where RMS will be installed
Example	pkols05

Screen: Oracle Wallet

Fields on this Screen:

Field Title	Oracle Wallet password
Field Description	This is the password for the wallet that will store the database credentials that were supplied in the previous screen.

Screen: Batch Installation Directory

Fields on this Screen:

Field Title	Batch Installation Directory
Field Description	Location where the installer will install the batch source and then compile it. This is the permanent location for the RMS batch programs.
Example	/opt/oracle/retail/rmsbatch

Screen: Summary

All of the fields on this summary screen are read-only. In GUI mode of the installer, this screen provides the opportunity to review inputs and go back to previous screens to correct them if necessary.

Once you advance forward from this screen, the installer connects to the database and validate that the RMS user exists before beginning installation.

Appendix: RMS Application Installer Screens

Screen: Welcome
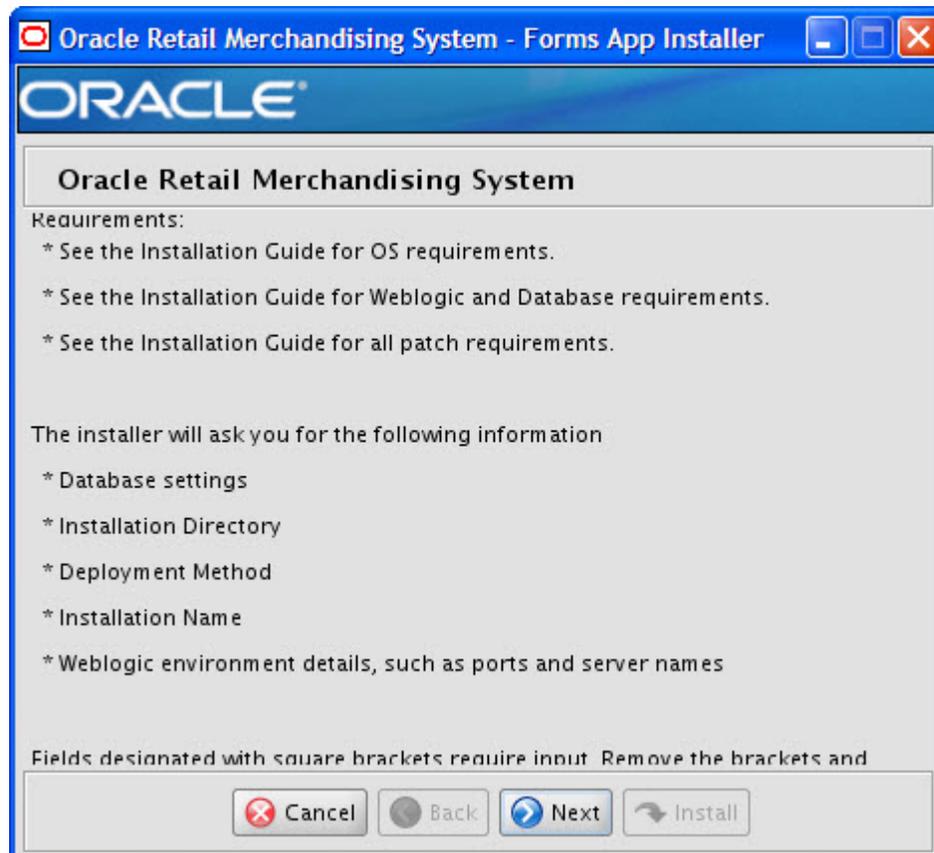
There are no fields on this screen. The Welcome screen contains information about the RMS Application Installer and prerequisites.

Screen: Oracle Customer Information

For information about this screen, see the "Oracle Configuration Manager" section in the *Oracle Configuration Manager Installer Guide*.

Screen: Data Source Details

Fields on this Screen:

Field Title	RMS Schema Owner
Field Description	This is the same username that was used during the RMS Database Schema Installer.
Example	rms01

Field Title	RMS Schema Password
Field Description	This is the same password that was used during the RMS Database Schema Installer.

Field Title	RMS Oracle SID
Field Description	This is the same Oracle SID that was used during the RMS Database Schema Installer.
Example	pkols05

Field Title	Test Data Source?
Field Description	Attempt to validate the Data Source Details on this screen. This will happen when you click **Next**. **Note:** If you get any errors not related to incorrectly entered credentials, please refer to Appendix: Common Installation Errors.

Screen: Oracle Wallet
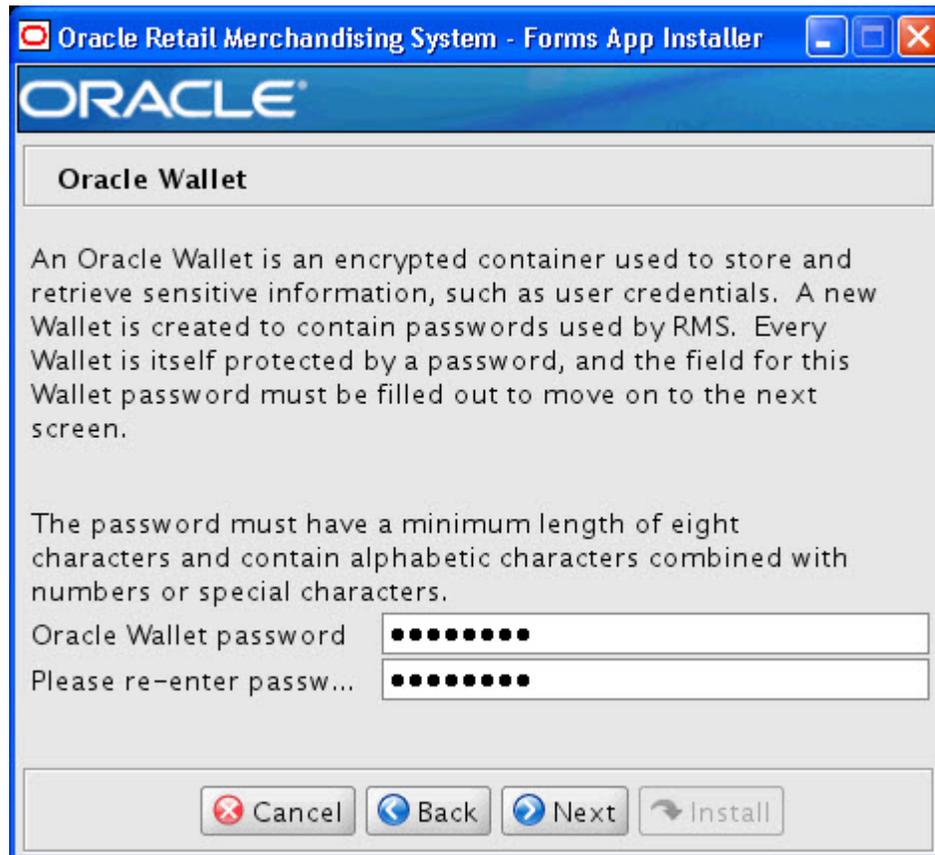
Fields on this Screen:

Field Title	Oracle Wallet password
Field Description	This is the password for the wallet that will store the database credentials that were supplied in the previous screen.

Screen: Installation Name

Fields on this Screen:

Field Title	Installation Name
Field Description	This value is used in conjunction the Oracle Configuration Manager (OCM). It gives the installation a unique name so the OCM can identify different installations of RMS in the same WebLogic instance.
Example	rms13inst

Screen: Application Installation Directory
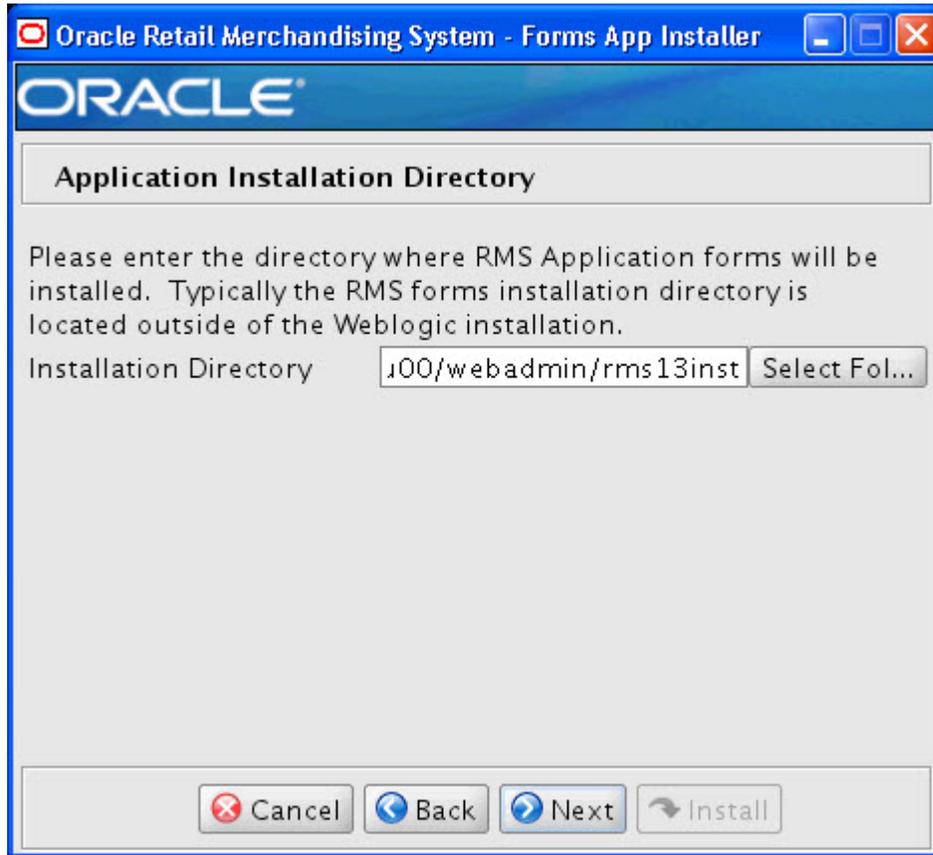
Fields on this Screen:

Field Title	Application Installation Directory
Field Description	The location where the RMS Application (toolset, forms and reports) will be installed. The RMS $MMHOME path will be a subdirectory of this directory, named base.
Example	/u01/oracle/retail

Screen: Application Deployment Method
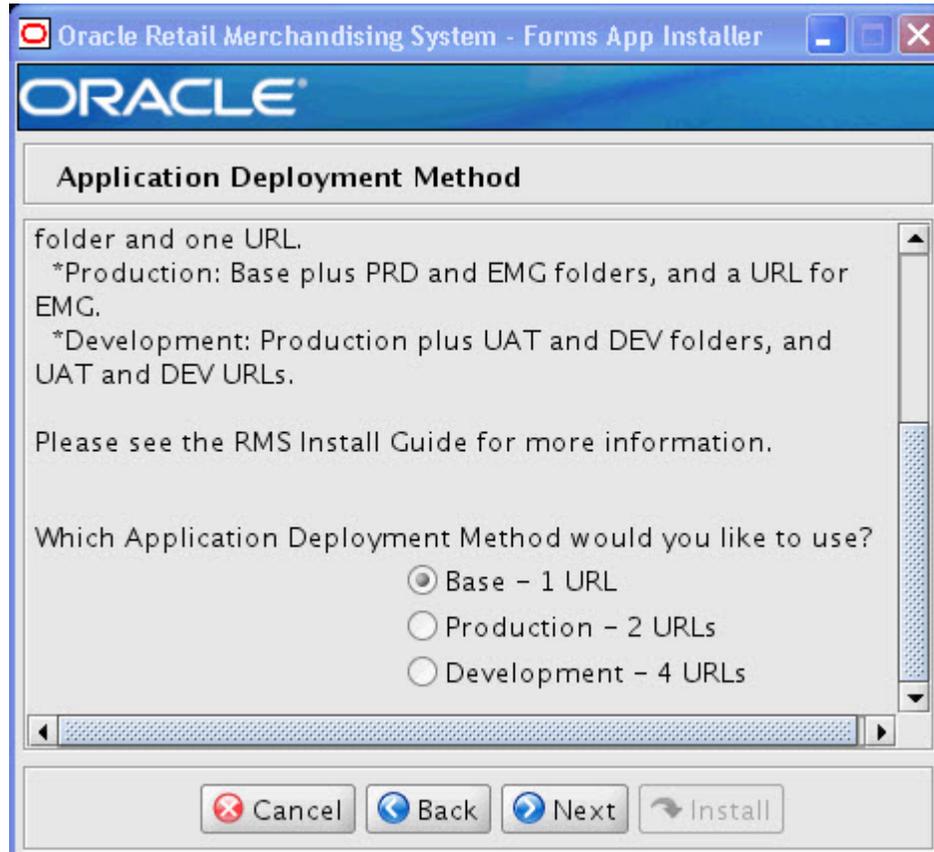
Fields on this Screen:

Field Title	Which Environment Deployment Method would you like to use
Field Description	Select the Application Deployment Method you would like. See Appendix: Application Deployment Method for information.
Example	Base

Screen: WebLogic Configuration

Fields on this Screen:

Field Title	Configure WebLogic
Field Description	Make the necessary configurations to the WebLogic server to be able to run RMS forms. If you choose No, these configurations should be done manually. **Note:** If you rerun the installer, and choose to check the box in the installer screens, Configure WebLogic, you may need to clean up duplicate entries in the WebLogic formsweb.cfg file.

Screen: Weblogic Administrative Details

Fields on this Screen:

Field Title	WebLogic Admin User
Field Description	Username of the admin user for WebLogic instance to which the RMS Webhelp application is being deployed.
Example	weblogic

Field Title	WebLogic Admin Password
Field Description	Password for the WebLogic admin user. You chose this password when you created the WebLogic instance.

Screen: Webhelp Installation Details

Fields on this Screen:

Field Title	WebLogic Help Server
Field Description	The WebLogic managed server that was created for the RMS Webhelp application.
Example	rms_help_instance

Appendix: RMS Application Installer Screens

Screen: Summary

All of the fields on this summary screen are read-only. In GUI mode of the installer, this screen provides the opportunity to review inputs and go back to previous screens to correct them if necessary.

Once you advance forward from this screen, the installer connects to the database and validates that the RMS user exists before beginning installation.

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Appendix: Installer Silent Mode

Repeating an Installation Attempt

In addition to the GUI and text interfaces of the RMS installer, there is a silent mode that can be run. This mode is useful if you wish to run a repeat installation without retyping the settings you provided in the previous installation. It is also useful if you encounter errors in the middle of an installation and wish to continue.

The installer runs in two distinct phases. The first phase involves gathering settings from the user. At the end of the first phase, a properties file named ant.install.properties is created with the settings that were provided. Then the second phase begins, where this properties file is used to provide your settings for the installation.

To skip the first phase and re-use the ant.install.properties file from a previous run, follow these instructions:

1. Edit the ant.install.properties file and correct any invalid settings that may have caused the installer to fail in its previous run.

2. Look for duplicate properties in the ant.install.properties file. Some properties are set on multiple pages to ensure default values when a page is only displayed under certain conditions. For example, if there are two instances of input.property.name, remove all but the last one.

3. Run the installer again with the **silent** argument.

> **Example:** install.sh silent

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Appendix: URL Reference

JDBC URL for a Database

Used by the Java application and by the installer to connect to the database.

Thick Client Syntax: jdbc:oracle:oci:@<sid>

<sid>: system identifier for the database

> **Example:** jdbc:oracle:oci:@mysid

Thin Client Syntax: jdbc:oracle:thin:@<host>:<port>:<sid>

<host>: hostname of the database server

<port>: database listener port

<sid>: system identifier for the database

> **Example:** jdbc:oracle:thin:@myhost:1521:mysid

LDAP Server URL

Used by the Java application to connect to the LDAP directory.

Syntax: ldap://<host>:<port>

<host>: hostname of the directory server

<port>: LDAP server port

> **Example:** ldap://myhost:389

JNDI Provider URL for an Application

Used by the application client to access the application running in the server. Also used by other applications for server-to-server calls.

OracleAS :

Syntax: opmn:ormi://<host>:<port>:<instance>/<app>

<host>: hostname of the OracleAS environment

<port>: OPMN request port of the OracleAS environment. This can be found in the <ORACLE_HOME>/opmn/conf/opmn.xml file.

<instance>: Name of the OC4J instance running the application

<app>: Deployment name for the application.

> **Example:** opmn:ormi://myhost:6003:rsm-oc4j-instance/rsm13

> **Note:** The JNDI provider URL can have a different format depending on your cluster topology. Consult the Oracle Application Server documentation for further details.

WebSphere:

Syntax: iiop://<host>:<port>

<host>: hostname of the WebSphere environment

<port>: BOOTSTRAP port of the WebSphere server that is running the application.

Example: iiop://myhost:2809

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Appendix: Common Installation Errors

This section provides some common errors encountered during installation of RMS.

Database Installer Hangs on Startup

Symptom:

When the database schema installer is run, the following is written to the console and the installer hangs indefinitely:

```
Running pre-install checks
Running tnsping to get listener port
```

Solution:

The installer startup script is waiting for control to return from the **tnsping** command, but tnsping is hanging. Type Control+C to cancel the installer, and investigate and solve the problem that is causing the **tnsping <sid>** command to hang. This can be caused by duplicate database listeners running.

Unreadable Buttons in the Installer

If you are unable to read the text within the installer buttons, it probably means that your JAVA_HOME is pointed to a pre-1.4.2 JRE or JDK. Set JAVA_HOME to a Java runtime environment of version 1.5 or later and run the installer again.

Warning: Could not create system preferences directory

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.

Warning: Couldn't find X Input Context

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.

Unresponsive Country and Currency Drop-Downs

Symptom:

In GUI mode, when you click on the drop-down list selection for the primary country or currency, the list does not appear, and this message appears in the console window:

```
XTEST extension not installed on this X server: Error 0
```

Solution:

To run the RMS installer in GUI mode you must have the XTEST extension enabled in your X server.

Enabling XTEST in Exceed:

1. Open Xconfig to edit Exceed configuration
2. Go to the X Server Protocol settings
3. Click on the Extensions tab
4. Make sure that the XTEST extension is selected:
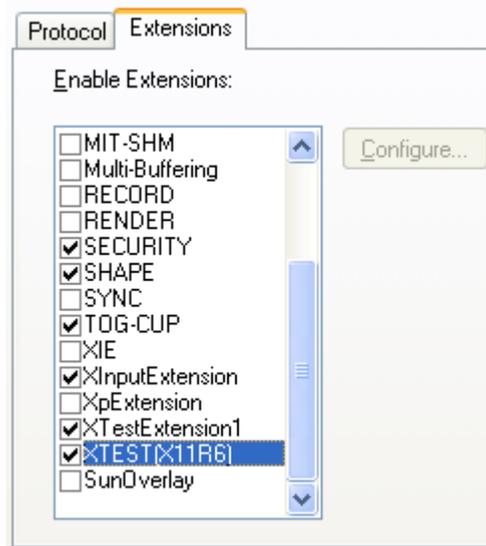
5. Restart the X Server and re-run the RMS installer.

Could not execl robot child process: Permission denied

Symptom:

When opening a drop-down list in GUI mode of the RMS installer, the installer freezes up and displays the following message in the console:

```
Couldn't execl robot child process: Permission denied
```

Solution:

As the owner of the database ORACLE_HOME (i.e. *oracle*), grant execute permissions to the awt_robot* files under $ORACLE_HOME/jdk/jre/lib. The database schema installer uses $ORACLE_HOME/jdk for its JAVA_HOME.

Example (using SUN Solaris):

```
chmod a+x $ORACLE_HOME/jdk/jre/lib/sparc/awt_robot
chmod a+x $ORACLE_HOME/jdk/jre/lib/sparcv9/awt_robot
```

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.

FRM-30064: Unable to parse statement select while compiling fm_ituda.fmb

Symptom:

When running the application installer you get the following error:

```
FRM-30064: Unable to parse statement select vu.uda_desc,  vu.uda_id  from v_uda vu
where get_primary_lang = get_user_lang  and vu.display_type = 'LV' union all
select nvl(t.translated_value, vu.uda_desc),  vu.uda_id  from tl_shadow t,  v_uda
vu  where get_primary_lang != get_user_lang and upper(vu.uda_desc) = t.key(+) and
get_user_lang = t.lang(+) and vu.display_type = 'LV' order by 1.
ORA-28112: failed to execute policy function
Record Group RG_UDA_LOV
Form: FM_ITUDALST

FRM-30085: Unable to adjust form for output.

Form not created
```

Solution:

Disable the database filter policies by running drop_filter_policy.sql, run the application installer again and then run add_filter_policy.sql. Both files can be located with the database installer.

ORA-04031 (unable to allocate memory) error during database schema installation

Symptom:

When running the database schema installer you get the following error one or more times:

```
[ora:sqlplus] alter package
[ora:sqlplus] *
[ora:sqlplus] ERROR at line 1:
[ora:sqlplus] ORA-04031: unable to allocate 92120 bytes of shared memory ("shared
[ora:sqlplus] pool","unknown object","PL/SQL MPCODE","BAMIMA: Bam Buffer")
```

Solution:

There was not enough available memory in the shared pool on the database at the time of compilation. There are several choices to get past this error:

- Log into the database and attempt to recompile invalid objects in the database schema. Subsequent attempts to compile the same object(s) can be successful.
- Have a DBA increase the shared pool size on the database and re-run the installer from scratch on a new schema user.

X Error of failed request: BadWindow (invalid Window parameter)

Symptom:

When compiling forms during the application installation you receive this error one or more times:

```
X Error of failed request:  BadWindow (invalid Window parameter)
  Major opcode of failed request:  18 (X_ChangeProperty)
  Resource id in failed request:  0x1800002
  Serial number of failed request:  432
  Current serial number in output stream:  437
```

Solution:

This error occurs when there are too many requests made to the X server. If this error occurs manually recompile the form.

Example:

```
frmpcmp.sh userid=$UP module_type=form module=FORM_OR_MENU
```

RIB Errors

At random times, the RIB will get certain errors such as GETNXT(?,?,?,?,?,?,?) and/or ORA-21700 object does not exist or is marked for delete. This is very confusing because you may research and find that the object exists and is valid.

You must re-initialize the reference to reference an existing object. You do this by:

1. Bringing down the RIB OAS in question

2. Running /RIB_INSTALL_DIR>/InstallAndCompileAllRibOracleObjects.sql

3. Running another object validate script (ex: inv_obj_comp.sql) to make sure objects are valid (some may have deallocked in the end of the previous step).

4. Bringing up the RIB OAS in question

Error Connecting to Database URL

Symptom:

After entering database credentials in the installer screens and hitting next, a message pops up with an error like this:

```
Error connecting to database URL <url> as user <user>
details...
```

The message prevents you from moving on to the next screen to continue the installation.

Solution:

This error occurs when the installer fails to validate the user credentials you have entered on the screen. Make sure that you have entered the credentials properly. If you receive a message similar to this:

```
Error connecting to database URL <url> as user <user>
java.lang.Exception: UnsatisfiedLinkError encountered when using the Oracle driver.
Please check that the library path is set up properly or switch to the JDBC thin client.
```

It may mean that the installer is using the incorrect library path variables for the platform you are installing on. Open the file <STAGING_DIR>/rms/dbschema/common/preinstall.sh and toggle the variable "use32bit" to "true" if it is set to "false" or vice versa. This setting is dependant on the JRE that is being used.

Multi-Threaded OCI Client Dumps Core after Reconnecting To Database

Symptom

If a multi-threaded Oracle client process that uses OCI to connect to a remote database loses connectivity with the database, it tries to reconnect and the client program continues to run. The program then dumps the core with the following stack trace, when Automatic Diagnostic Repository (ADR) is enabled.

```
skgfqio sdbgrfbibf_io_block_file dbgrfrbf_read_block_file dbgrmflrp_read_page
dbgrmblgmp_get_many_pages dbgrmmdrrmd_read_relation_meta_data
dbgrmmdora_open_record_access_full
dbgriporc_openrel_wcreate dbgrip_open_relation_access dbgrip_start_iterator
dbgrip_relation_iterator dbgruprac_read_adrctl...
```

Solution

Oracle Retail recommended you disable ADR (diag_adr_enabled=OFF, a sqlnet.ora parameter) while using multi-threaded OCI/OCCI application. diag_adr_enabled was introduced in Oracle 11g as a new method of tracing ADR. This will dump additional trace details.

Disabling 'diag_adr_enabled' does not disturb any functionality. Therefore, it can safely be unset by doing diag_adr_enabled=off in sqlnet.ora. However, if you still want tracing, you can have following parameters/variables set in sqlnet.ora:

```
trace_level_server=16 -- for server side NET tracing
trace_level_client=16 -- for client side NET tracing
```

For how to set traditional tracing, see the My Oracle Support document, "SQL*Net, Net8, Oracle Net Services - Tracing and Logging at a Glance" (ID 219968.1).

Forms Installer Fails on HP-UX

Symptom

Errors occur during Forms installer screens when run on HP-UX. When you click **Next** on the installer screen, "Data Source Details," the following error is issued: "No ocijdbc11 in java.library.path." The message prevents you from moving to the next screen.

Solution

This error message can be ignored. Verify that the data source details you entered are correct, and uncheck the box labeled **Test Data Source?** The installer screens will not attempt to validate the data source when you click **Next**. The installer will attempt to validate once again when installation starts, and the installer will fail if the credentials are incorrect.

ORFM DB Installer Fails on s11071552_extax_help_gtt_l10n_br.sql after applying hotfix 11071552

Symptom

When running the ORFM 13.2.1 database patch, it fails on the file s11071552_extax_help_gtt_l10n_br.sql:

```
    [exec] Executing file s11071552_extax_help_gtt_l10n_br.sql
    [exec] ORA Error while executing s11071552_extax_help_gtt_l10n_br.sql
  [delete] Deleting directory
/home/waschwar/RFM13.2.1/orfm/dbschemapatch/dblogs/.wallet

BUILD FAILED

/home/waschwar/RFM13.2.1/orfm/dbschemapatch/build.xml:385: The following error
occurred while executing this line:
/home/waschwar/RFM13.2.1/orfm/dbschemapatch/build.xml:236: The following error
occurred while executing this line:
/home/waschwar/RFM13.2.1/orfm/dbschemapatch/build.xml:175:
/home/waschwar/RFM13.2.1/orfm/dbschemapatch/orfm-
dbpatch/13.2.1/orfm/orfm_controller.ksh has failed.  Check error logs in
/home/waschwar/RFM13.2.1/orfm/dbschemapatch/orfm-dbpatch/13.2.1/orfm/error/ for
more details
```

If you look in the file s11071552_extax_help_gtt_l10n_br.err, it reports this error message:

```
Altering table EXTAX_HELP_GTT_L10N_BR
ALTER TABLE EXTAX_HELP_GTT_L10N_BR ADD PACK_NO VARCHAR2(25)
                                             *
ERROR at line 1:
ORA-01430: column being added already exists in table
```

Solution

This error occurs when running the ORFM 13.2.1 database schema patch after applying the required hotfix 11071552. This will fail because dbc's are not rerunable, and this hotfix contains dbcs that are called by the 13.2.1 patch. To resolve this issue, you must edit the DBC.dat file for ORFM 13.2.1 so that the dbcs contained in the hotfix 11071552 do not run during 13.2.1 installation.

1. Change directories to DB_PATCH_DIR/orfm/dbschemapatch/orfm-dbpatch/13.2.1/orfm/files.

2. Make a backup of the DBC.dat file:

   ```
   $ cp DBC.dat DBC.dat_ORIG
   ```

3. Open up DBC.dat in a text editor and remove the lines beginning in **s11071552 or s11071552a**:

```
s11071552_extax_help_gtt_l10n_br.sql
s11071552_extax_res_retail_det_l10n_br.sql
s11071552_extax_res_retail_l10n_br.sql
s11071552_extax_stg_retail_l10n_br.sql
s11071552a_extax_stg_retail_l10n_br.sql
s11071552_extax_res_cost_l10n_br.sql
s11071552_extax_res_cost_det_l10n_br.sql
s11071552_extax_stg_cost_l10n_br.sql
s11071552a_extax_stg_cost_l10n_br.sql
s11802380_fm_ap_stage_detail_hist.sql
s11802380_fm_ap_stage_head_hist.sql
s11802380_fm_fiscal_doc_complement_hist.sql
s11802380_fm_schedule_hist.sql
```

4. DBC.dat should now look like this:

```
s11802380_fm_ap_stage_detail_hist.sql
s11802380_fm_ap_stage_head_hist.sql
s11802380_fm_fiscal_doc_complement_hist.sql
s11802380_fm_schedule_hist.sql
```

5. Save and exit. The installation can be rerun after this is done. You should choose to continue the previous install when rerunning the installer.

H

Appendix: Application Deployment Method

The RMS installer provides the option to configure multiple application deployment methods. This is a setup where there is still a single primary RMS installation, but there are additional levels where customization can occur. This means multiple URLs configured in formsweb.cfg with cascading FORMS_PATH values.

The installer provides three choices for cascading environment configuration:

- **Base**: A standard RMS base installation with one application installation folder, and one URL.
- **Production**: Base plus two additional forms directories for PRD and EMG and an additional URL for EMG.
- **Development**: Production plus two additional forms directories for UAT and DEV and two additional URLs for UAT and DEV.
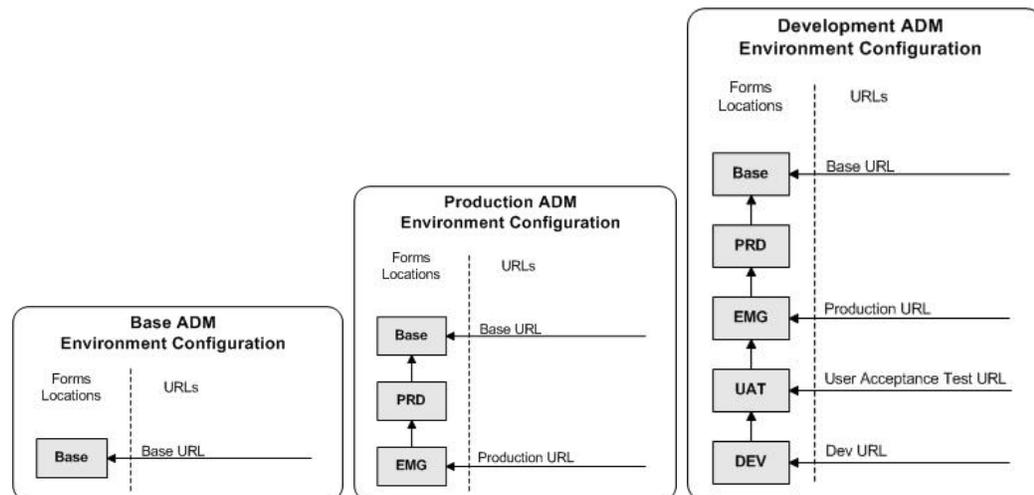
The above diagrams show how the application deployment method environment configurations are set up in the forms installation.

The installer creates the set of URLs, and empty directories for the other environments. All forms installed by this installer are placed in the "Base" environment. We are simply laying down the structure for customizations and fixes that the user can make after installation is complete.

Appendix: Single Sign-On Resource Access Descriptors

Oracle Forms applications such as RMS use database connections for authentication and authorization purposes. Oracle Single Sign-On, however, uses the Oracle Internet Directory (OID) user ID and password for this purpose. The Forms framework maps OID user IDs to database connections via information stored in Resource Access Descriptors (RADs). A user will have one RAD for each application accessed.   RADs may be created by an administrator or by an LDIF script. Depending on the Oracle Internet Directory and/or the formsweb.cfg configuration, RADs may also be created by the user.

A user is prompted for the database connection information whenever formsweb.cfg file specifies ssoMode = true and createDynamicResources = true for an application and no valid RAD exists. RADs may become invalid when passwords have expired or have been changed.

RADs may be created by administrators or users via the Delegated Administration Services application.

> **Note:** Users can create new RADs only if one or more RADs already exist.

RADs may be created and via LDIF scripts as well. See My Oracle Support document 244526.1.

Appendix: RMS RETL Instructions

This Appendix summarizes the RETL program features utilized in the RMS Extractions (RMS ETL). More information about the RETL tool is available in the *Oracle Retail Extract, Transform, and Load Programmer's Guide*. More information about RMS ETL is available in the RMS ETL operations guide.

Configuration

The following are configuration instructions.

RETL

Before attempting to configure and run RMS ETL, install RETL version 10.3 or later which is required to run RMS ETL. Run the verify_retl script (included as part of the RETL installation) to ensure that RETL is working properly before proceeding.

RETL User and Permissions

RMS ETL should be installed and run as the RETL user. Additionally, the permissions should be set up as per the *Oracle Retail Extract, Transform, and Load Programmer's Guide*. RMS ETL reads data, creates, deletes and updates tables. (This is to ensure that weekly sales data is not pulled multiple times on subsequent extractions.) If these permissions are not set up properly, extractions will fail.

Environment Variables

In addition to the RETL environment variables (please see the Programmer's Guide for version of RETL), you need to set MMHOME to the base directory for RMS ETL. This is the top level directory that selected during the RMS Batch installation process. So in .kshrc you should add a line like the following:

```
export MMHOME=<base directory for RMS ETL>
```

rmse_config.env

There are a couple variables that will need to change depending upon local settings:

```
export DBNAME=int9i
export RMS_OWNER=RMS13DEV
export BA_OWNER=rmsint1012
```

Also, you will need to set the environment variable PASSWORD in either the rmse_config.env, .kshrc or some other location that can be included via one of those two means. For example, adding this line to the rmse_config.env will cause the password "bogus" to be used to log into the database: `export PASSWORD=pass1`

Appendix: Setting Up Password Stores with Oracle Wallet

As part of an application installation, administrators must set up password stores for database user accounts using Oracle Wallet. These password stores must be installed on the application database side. While the installer handles much of this process, the administrators must perform some additional steps.

A password store for the application and application server user accounts must also be installed; however, the installer takes care of this entire process.

About Password Stores and Oracle Wallet

Oracle databases have allowed other users on the server to see passwords in case database connect strings (username/password@db) were passed to programs. In the past, users could navigate to `ps -ef|grep <username>` to see the password if the password was supplied in the command line when calling a program.

To make passwords more secure, Oracle Retail has implemented the Oracle Software Security Assurance (OSSA) program. Sensitive information such as user credentials now must be encrypted and stored in a secure location. This location is called password stores or wallets. These password stores are secure software containers that store the encrypted user credentials.

Users can retrieve the credentials using aliases that were set up when encrypting and storing the user credentials in the password store. For example, if `username/password@db` is entered in the command line argument and the alias is called `db_username`, the argument to a program is as follows:

```
sqlplus /@db_username
```

This would connect to the database as it did previously, but it would hide the password from any system user.

After this is configured, as in the example above, the application installation and the other relevant scripts are no longer needed to use embedded usernames and passwords. This reduces any security risks that may exist because usernames and passwords are no longer exposed.

When the installation starts, all the necessary user credentials are retrieved from the Oracle Wallet based on the alias name associated with the user credentials.

There are two different types of password stores or wallets. One type is for database connect strings used in program arguments (such as `sqlplus /@db_username`). The other type is for Java application installation and application use.

Setting Up Password Stores for Database User Accounts

After the database is installed and the default database user accounts are set up, administrators must set up a password store using the Oracle wallet. This involves assigning an alias for the username and associated password for each database user account. The alias is used later during the application installation. This password store must be created on the system where the application server and database client are installed.

This section describes the steps you must take to set up a wallet and the aliases for the database user accounts. For more information on configuring authentication and password stores, see the *Oracle Database Security Guide*.

> **Note:** In this section, `<wallet_location>` is a placeholder text for illustration purposes. Before running the command, ensure that you specify the path to the location where you want to create and store the wallet.

To set up a password store for the database user accounts, perform the following steps:

1. Create a wallet using the following command:

   ```
   mkstore -wrl <wallet_location> -create
   ```

   After you run the command, a prompt appears. Enter a password for the Oracle Wallet in the prompt.

   > **Note:** The `mkstore` utility is included in the Oracle Database Client installation.

   The wallet is created with the auto-login feature enabled. This feature enables the database client to access the wallet contents without using the password. For more information, refer to the *Oracle Database Advanced Security Administrator's Guide.*

2. Create the database connection credentials in the wallet using the following command:

   ```
   mkstore -wrl <wallet_location> -createCredential <alias-name> <database-user-name>
   ```

   After you run the command, a prompt appears. Enter the password associated with the database user account in the prompt.

3. Repeat Step 2 for all the database user accounts.

4. Update the sqlnet.ora file to include the following statements:

   ```
   WALLET_LOCATION = (SOURCE = (METHOD = FILE) (METHOD_DATA = (DIRECTORY =
   <wallet_location>)))
   SQLNET.WALLET_OVERRIDE = TRUE
   SSL_CLIENT_AUTHENTICATION = FALSE
   ```

5. Update the tnsnames.ora file to include the following entry for each alias name to be set up.

   ```
   <alias-name> =
       (DESCRIPTION =
        (ADDRESS_LIST =
             (ADDRESS = (PROTOCOL = TCP) (HOST = <host>) (PORT = <port>))
           )
           (CONNECT_DATA =
             (SERVICE_NAME = <service>)
            )
       )
   ```

In the previous example, `<alias-name>`, `<host>`, `<port>`, and `<service>` are placeholder text for illustration purposes. Ensure that you replace these with the relevant values.

Setting Up Wallets for Database User Accounts

The following examples show how to set up wallets for database user accounts for the following applications:

- For RMS, RWMS, RPM Batch, RETL, RMS, RWMS, and ARI
- For Java Applications (SIM, ReIM, RPM, Alloc, RIB, RSL, AIP, RETL)

For RMS, RPM Plsql Batch, RETL DB, RWMS batch, and ARI

1. Create a new directory called wallet under your folder structure.

   ```
   cd /projects/rms13.2/dev/
   mkdir .wallet
   ```

   > **Note:** The default permissions of the wallet allow only the owner to use it, ensuring the connection information is protected. If you want other users to be able to use the connection, you must adjust permissions appropriately to ensure only authorized users have access to the wallet.

2. Create a sqlnet.ora in the wallet directory with the following content.

   ```
   WALLET_LOCATION =   (SOURCE =     (METHOD = FILE)    (METHOD_DATA =
   (DIRECTORY =  /projects/rms13.2/dev/.wallet)) )
   SQLNET.WALLET_OVERRIDE=TRUE
   SSL_CLIENT_AUTHENTICATION=FALSE
   ```

   > **Note**: WALLET_LOCATION must be on line 1 in the file.

3. Setup a tnsnames.ora in the wallet directory. This tnsnames.ora includes the standard tnsnames.ora file. Then, add two custom tns_alias entries that are only for use with the wallet. For example, `sqlplus /@dvols29_rms01user`.

   ```
   ifile = /u00/oracle/product/11.2.0.1/network/admin/tnsnames.ora

   dvols29_rms01user =
     (DESCRIPTION = (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)
     (host = mspdv311.us.oracle.com) (Port = 1521)))
       (CONNECT_DATA = (SID = dvols29) (GLOBAL_NAME = dvols29)))

   dvols29_rms01user.world =
     (DESCRIPTION = (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)
     (host = mspdv311.us.oracle.com) (Port = 1521)))
       (CONNECT_DATA = (SID = dvols29) (GLOBAL_NAME = dvols29)))
   ```

   > **Note**: It is important to not just copy the tnsnames.ora file because it can quickly become out of date. The ifile clause (shown above) is key.

4. Create the wallet files. These are empty initially.

   a. Ensure you are in the intended location.

      ```
      $ pwd
      /projects/rms13.2/dev/.wallet
      ```

   b. Create the wallet files.

   ```
   $ mkstore -wrl . –create
   ```

   c. Enter the wallet password you want to use. It is recommended that you use the same password as the UNIX user you are creating the wallet on.

   d. Enter the password again.

   Two wallet files are created from the above command:

   – ewallet.p12

   – cwallet.sso

5. Create the wallet entry that associates the user name and password to the custom tns alias that was setup in the wallet's tnsnames.ora file.

```
mkstore –wrl . –createCredential <tns_alias> <username> <password>
```

> **Example:** mkstore –wrl . –createCredential
> dvols29_rms01user rms01user passwd

6. Test the connectivity. The ORACLE_HOME used with the wallet must be the same version or higher than what the wallet was created with.

```
$ export TNS_ADMIN=/projects/rms13.2/dev/.wallet /* This is very import to use
wallet to point at the alternate tnsnames.ora created in this example */

$ sqlplus /@dvols29_rms01user

SQL*Plus: Release 11

Connected to:
Oracle Database 11g

SQL> show user
USER is "rms01user"
```

Running batch programs or shell scripts would be similar:

```
Ex: dtesys /@dvols29_rms01user
script.sh /@dvols29_rms01user

Set the UP unix variable to help with some compiles :

export UP=/@dvols29_rms01user
for use in RMS batch compiles, and RMS, RWMS, and ARI forms compiles.
```

As shown in the example above, users can ensure that passwords remain invisible.

Additional Database Wallet Commands

The following is a list of additional database wallet commands.

- Delete a credential on wallet

  ```
  mkstore –wrl . –deleteCredential dvols29_rms01user
  ```

- Change the password for a credential on wallet

  ```
  mkstore –wrl . –modifyCredential dvols29_rms01user rms01user passwd
  ```

- List the wallet credential entries

  ```
  mkstore -wrl . -list
  ```

  This command returns values such as the following.

  ```
  oracle.security.client.connect_string1
  oracle.security.client.user1
  oracle.security.client.password1
  ```

- View the details of a wallet entry

  ```
  mkstore -wrl . -viewEntry oracle.security.client.connect_string1
  ```

  Returns the value of the entry:

  ```
  dvols29_rms01user
  mkstore -wrl . -viewEntry oracle.security.client.user1
  ```

  Returns value of the entry:

  ```
  rms01user
  ```

  ```
  mkstore -wrl . -viewEntry oracle.security.client.password1
  ```

  Returns value of the entry:

  ```
  passwd
  ```

For Java Applications (SIM, ReIM, RPM, Alloc, RIB, RSL, AIP, RETL)

For Java application, consider the following:

- For database user accounts, ensure that you set up the same alias names between the password stores (database wallet and Java wallet). You can provide the alias name during the installer process.

- Document all aliases that you have set up. During the application installation, you must enter the alias names for the application installer to connect to the database and application server.

- Java wallets do not have a password to update their entries. Entries in Java wallets are stored in partitions, or application-level keys. In each retail application, after you unzip <app>13application.zip, cd into <app>/application/retail-public-security-api/bin (for example,
  mspdv351:[1033_WLS]
  /u00/webadmin/product/10.3.3/WLS/user_projects/domains/132_mck_soa_domain/reim13/wallet/bin

  or

  Unzip to

  reim/application/retail-public-security-api-bin to run the commands below to adminster java wallets. The application installers should create the Java wallets for you, but it is good to know how this works for future use and understanding.

  There are two scripts relating to this at that folder: dump_credentials.sh and save_credential.sh.

dump_credentials.sh

dump_credentials.sh is used to retrieve information from wallet. For each entry found in the wallet, the wallet partition, the alias, and the user name are displayed. Note that the password is not displayed. If the value of an entry is uncertain, run save_credential.sh to resave the entry with a known password.

```
dump_credentials.sh <wallet location>
```

Example:

dump_credentials.sh
/u00/webadmin/product/10.3.3/WLS/user_projects/domains/132_mck_soa_dom
ain/retail/reim13/config

```
Retail Public Security API Utility
==========================================
```

Below are the credentials found in the wallet at the
location:/u00/webadmin/product/10.3.3/WLS/user_projects/domains/132_mck_s
oa_domain/retail/reim13/config

```
==========================================

Apapplication level key partition name:reim13
User Name Alias:WLS-ALIAS User Name:weblogic
User Name Alias:RETAIL-ALIAS User Name:retail.user
User Name Alias:LDAP-ALIAS User Name:RETAIL.USER
User Name Alias:RMS-ALIAS User Name:rms132mock
User Name Alias:REIMBAT-ALIAS User Name:reimbat
```

save_credential.sh

save_credential.sh is used to update the information in wallet. If you are unsure
about the information that is currently in the wallet, use dump_credentials.sh as
indicated above. You can add new or update using save_credential.sh as shown
below:

```
save_credential.sh -a <alias> -u <user> -p <partition name>  -l <path of the
wallet file location where credentials are stored>
```

Example:

```
mspdv351:[1033_WLS]
/u00/webadmin/mock132_testing/rtil/rtil/application/retail-public-security-
api/bin> save_credential.sh –l
/u00/webadmin/product/10.3.3/WLS/user_projects/domains/132_mck_soa_domain/reta
il/reim13/config
-a RMS-ALIAS –p reim13 -u rms132mock

==========================================
Retail Public Security API Utility
==========================================

Enter password:
Verify password:
```

> **Note:** -p in the above command is for partition name. You
> must specify the proper partition name used in application
> code for each Java application.
>
> save_credential.sh and dump_credentials.sh scripts are the
> same for all applications. If using save_credential.sh to add a
> wallet entry or to update a wallet entry, bounce the
> application/managed server so that your changes are visible
> to the application. Also, save a backup copy of your
> cwallet.sso file in a location outside of the deployment path,
> because redeployment or reinstallation of the application
> will wipe the wallet entries you made after installation of the
> application. To restore your wallet entries after a
> redeployment/reinstallation, copy the backed up cwallet.sso
> file over the cwallet.sso file. Then bounce the
> application/managed server.

Usage

```
===========================================
Retail Public Security API Utility
===========================================
usage: save_credential.sh -au[plh]
E.g. save_credential.sh -a rms-alias -u rms_user -p rib-rms -l ./
 -a,--userNameAlias <arg>            alias for which the credentials
needs to be stored
 -h,--help                          usage information
 -l,--locationofWalletDir <arg>     location where the wallet file is
created.If not specified, it creates the wallet under secure-credential-wallet
directory which is already present under the retail-public-security-api/
directory.
 -p,--appLevelKeyPartitionName <arg>  application level key partition name
 -u,--userName <arg>                username to be stored in secure
credential wallet for specified alias*
```

How Does the Wallet Relate to the Application?

The ORACLE Retail Java applications have the wallet alias information you create in an
<app-name>.properties file. Below is the reim.properties file. Note the database
information and the user are presented as well. The property called
datasource.credential.alias=RMS-ALIAS uses the ORACLE wallet with the argument of
RMS-ALIAS at the csm.wallet.path and csm.wallet.partition.name = reim13 to retrieve
the password for application use.

Reim.properties code sample:

```
datasource.url=jdbc:oracle:thin:@mspdv349.us.oracle.com:1521:pkols07
datasource.schema.owner=rms132mock
datasource.credential.alias=RMS-ALIAS
# ================================================================
# ossa related Configuration
#
# These settings are for ossa configuration to store credentials.
# ================================================================

csm.wallet.path=/u00/webadmin/product/10.3.3/WLS/user_projects/domains/132_mck_soa
_domain/retail/reim13/config
csm.wallet.partition.name=reim13
```

How Does the Wallet Relate to java pgm batch use (such as ReIM batch)?

Some of the ORACLE Retail Java batch applications have an alias to use when running Java batch programs. For example, alias REIMBAT-ALIAS maps through the wallet to REIM app user reimbat, already on the database. To run a ReIM batch program the format would be: reimbatchpgmname REIMBAT-ALIAS <other arguments as needed by the program in question>.

Setting up RETL Wallets for 13.2

RETL 13.2 creates a wallet under $RFX_HOME/etc/security, with the following files:

- cwallet.sso
- jazn-data.xml
- jps-config.xml
- README.txt

To set up RETL wallets, perform the following steps:

1. Set the following environment variables:

    - `ORACLE_SID=<retaildb>`
    - `RFX_HOME=/u00/rfx/rfx-13.2.0`
    - `RFX_TMP=/u00/rfx/rfx-13.2.0/tmp`
    - `JAVA_HOME=/usr/jdk1.6.0_12.64bit`
    - `LD_LIBRARY_PATH=$ORACLE_HOME`
    - `PATH=$RFX_HOME/bin:$JAVA_HOME/bin:$PATH`

2. Change directory to `$RFX_HOME/bin`.

3. Run `setup-security-credential.sh`.

    - Enter 1 to add a new database credential.
    - Enter the dbuseralias. For example, `retl_java_rms01user`.
    - Enter the database user name. For example, `rms01user`.
    - Enter the database password.
    - Re-enter the database password.
    - Enter D to exit the setup script.

4. Update your RETL environment variable script to reflect the names of both the Oracle Networking wallet and the Java wallet.

    For example, to configure RETLforRPAS, modify the following entries in `$MMHOME/RETLforRPAS/rfx/etc/rmse_rpas_config.env`.

    - The RETL_WALLET_ALIAS should point to the Java wallet entry:
      `export RETL_WALLET_ALIAS="retl_java_rms01user"`
    - The ORACLE_WALLET_ALIAS should point to the Oracle network wallet entry:
      `export ORACLE_WALLET_ALIAS="dvols29_rms01user"`
    - The SQLPLUS_LOGON should use the ORACLE_WALLET_ALIAS:
      `export SQLPLUS_LOGON="/@${ORACLE_WALLET_ALIAS}"`

5. To change a password later, run `setup-security-credential.sh`.
   - Enter 2 to update a database credential.
   - Select the credential to update.
   - Enter the database user to update or change.
   - Enter the password of the database user.
   - Re-enter the password.

Quick Guide for Retail Wallets

Retail App	Wallet Type	Wallet Location	Wallet Partition	Alias Name	User Name	Use	Create By	Alias Example	Notes
RMS batch	DB	<RMS batch install dir (MMHOME)>/.wallet	n/a	<Database SID>_<Data base schema owner>	<rms schema owner>	Compile, execution	Installer	n/a	Alias hard-coded by installer
RMS forms	DB	<forms install dir>/base/.wallet	n/a	<Database SID>_<Data base schema owner>	<rms schema owner>	Compile	Installer	n/a	Alias hard-coded by installer
ARI forms	DB	<forms install dir>/base/.wallet	n/a	<Db_Ari01 >	<ari schema owner>	Compile	Manual	ari-alias	
RMWS forms	DB	<forms install dir>/base/.wallet	n/a	<Database SID>_<Data base schema owner>	<rwms schema owner>	Compile forms, execute batch	Installer	n/a	Alias hard-coded by installer
RPM app	DB	<RPM batch install dir>/.wallet	n/a	<rms schema owner alias>	<rms schema owner>	Execute batch	Manual	rms-alias	
RWMS auto-login	JAVA	<forms install dir>/base/.javawallet							
			<RWMS Installation name>	<RWMS database user alias>	<RWMS schema owner>	RWMS forms app to avoid dblogin screen	Installer	rwms13inst	
			<RWMS Installation name>	BI_ALIAS	<BI Publisher administrat ive user>	RWMS forms app to connect to BI Publisher	Installer	n/a	Alias hard-coded by installer
AIP app	JAVA	<weblogic domain home>/retail/<deployed aip app name>/config							Each alias must be unique
			aip13	<AIP weblogic user alias>	<AIP weblogic user name>	App use	Installer	aip-weblogic-alias	
			aip13	<AIP database schema user alias>	<AIP database schema user name>	App use	Installer	aip01user-alias	

Retail App	Wallet Type	Wallet Location	Wallet Partition	Alias Name	User Name	Use	Create By	Alias Example	Notes
			aip13	<rib-aip weblogic user alias>	<rib-aip weblogic user name>	App use	Installer	rib-aip-weblogic-alias	
RPM app	JAVA	<weblogic domain home>/retail/<deployed rpm app name>/config							Each alias must be unique
			rpm13	<rpm weblogic user alias>	<rpm weblogic user name>	App use	Installer	rpm-weblogic-alias	
			rpm13	<rms shema user alias>	<rms shema user name>	App, batch use	Installer	rms01user-alias	
			rpm13	<rpm application user one alias>	<rpm application user one name>	App use	Installer	user1-alias	
			rpm13	<rpm application user two alias>	<rpm application user two name>	App use	Installer	user2-alias	
			rpm13	<rpm batch user alias>	<rpm batch user name>	App, batch use	Installer	rpmbatch-alias	
			rpm13	<rib-rpm weblogic user alias>	<rib-rpm weblogic user name>	App use	Installer	rib-rpm-weblogic-alias	
ReIM app	JAVA	<weblogic domain home>/retail/<deployed reim app name>/config							Each alias must be unique
			<installed app name>	<reim weblogic user alias>	<reim weblogic user name>	App use	Installer	weblogic-alias	
			<installed app name>	<rms shema user alias>	<rms shema user name>	App, batch use	Installer	rms01user-alias	
			<installed app name>	<reim webservice validation user alias>	<reim webservice validation user name>	App use	Installer	reimwebservice-alias	
			<installed app name>	<reim batch user alias>	<reim batch user name>	App, batch use	Installer	reimbatch-alias	

Retail App	Wallet Type	Wallet Location	Wallet Partition	Alias Name	User Name	Use	Create By	Alias Example	Notes
Alloc app	JAVA	\<weblogic domain home>/retail/\<deployed alloc app name>/config							Each alias must be unique
			\<installed app name>	\<alloc weblogic user alias>	\<alloc weblogic user name>	App use	Installer	weblogic-alias	
			\<installed app name>	\<rms shema user alias>	\<rms shema user name>	App use	Installer	rms01user-alias	
			\<installed app name>	\<rsl for rms weblogic user alias>	\<rsl for rms weblogic user name>	App use	Installer	rsl-rms-weblogic-alias	
RSL app	JAVA	\<RSL INSTALL DIR>/rsl-rms/security/config							Each alias must be unique
			rsl-rsm	\<rsl weblogic user alias>	\<rsl weblogic user name>	App use	Installer	weblogic-alias	
			rsl-rsm	\<rms shema user alias>	\<rms shema user name>	App use	Installer	rms01user-alias	
SIM app	JAVA	\<weblogic domain home>/sim-client/csm							
			rpm	\<rpm weblogic user alias>	\<rpm weblogic user name>	App use	Installer	rpm-weblogic-alias	
			rms	\<rsl for rms weblogic user alias>	\<rsl for rms weblogic user name>	App use	Installer	rsl-rms-weblogic-alias	
			rib-sim	\<rib-sim weblogic user alias>	\<rib-sim weblogic user name>	App use	Installer	rib-sim-weblogic-alias	
RETL	JAVA	\<RETL home>/etc/security	n/a	\<target application user alias>	\<target application db userid>	App use	Manual	retl_java_rms01user	User may vary depending on RETL flow's target application

Retail App	Wallet Type	Wallet Location	Wallet Partition	Alias Name	User Name	Use	Create By	Alias Example	Notes
RETL	DB	<RETL home>/.wallet	n/a	<target application user alias>	<target application db userid>	App use	Manual	<db>_<user>	User may vary depending on RETL flow's target application
RIB	JAVA	<RIBHOME DIR>/deployment-home/conf/security							<app> is one of aip, rfm, rms, rpm, sim, rwms, tafr
JMS			jms<1-5>	<jms user alias> for jms<1-5>	<jms user name> for jms<1-5>	Integration use	Installer	jms-alias	
Weblogic			rib-<app>-app-server-instance	<rib-app weblogic user alias>	<rib-app weblogic user name>	Integration use	Installer	weblogic-alias	
Admin GUI			rib-<app>#web-app-user-alias	<rib-app admin gui user alias>	<rib-app admin gui user name>	Integration use	Installer	admin-gui-alias	
Application			rib-<app>#user-alias	<app weblogic user alias>	<app weblogic user name>	Integration use	Installer	app-user-alias	Valid only for aip, rpm, sim
DB			rib-<app>#app-db-user-alias	<rib-app database schema user alias>	<rib-app database schema user name>	Integration use	Installer	db-user-alias	Valid only for rfm, rms, rwms, tafr
Error Hospital			rib-<app>#hosp-user-alias	<rib-app error hospital database schema user alias>	<rib-app error hospital database schema user name>	Integration use	Installer	hosp-user-alias	

Appendix: Installation Order

This section provides a guideline as to 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.

> **Note:** The installation order is not meant to imply integration between products.

Enterprise Installation Order

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

   > **Note:** ORFM is an optional application for RMS if you are implementing Brazil localization.

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 Invoice Matching (ReIM)
7. 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. To change the RIBforRPM provider URL after you install RIB, edit the remote_service_locator_info_ribserver.xml file.

8. Oracle Retail Allocation
9. Oracle Retail Central Office (ORCO)
10. Oracle Retail Returns Management (ORRM)
11. Oracle Retail Back Office (ORBO) or Back Office with Labels and Tags (ORLAT)
12. Oracle Retail Store Inventory Management (SIM)

    > **Note:** During installation of SIM, you are asked for the RIB provider URL. Because RIB is installed after SIM, make a note of the URL you enter. To change the RIB provider URL after you install RIB, edit the remote_service_locator_info_ribserver.xml file.

13. Oracle Retail Predictive Application Server (RPAS)
14. Oracle Retail Demand Forecasting (RDF)
15. Oracle Retail Category Management (CM)
16. Oracle Retail Replenishment Optimization (RO)
17. Oracle Retail Analytic Parameter Calculator Replenishment Optimization (APC RO)

18. Oracle Retail Regular Price Optimization (RPO)

19. Oracle Retail Merchandise Financial Planning (MFP)

20. Oracle Retail Size Profile Optimization (SPO)

21. Oracle Retail Assortment Planning (AP)

22. Oracle Retail Item Planning (IP)

23. Oracle Retail Item Planning Configured for COE (IP COE)

24. Oracle Retail Advanced Inventory Planning (AIP)

25. Oracle Retail Integration Bus (RIB)

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

27. Oracle Retail Markdown Optimization (MDO)

28. Oracle Retail Clearance Optimization Engine (COE)

29. Oracle Retail Analytic Parameter Calculator for Markdown Optimization (APC-MDO)

30. Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)

31. Oracle Retail Promotion Intelligence and Promotion Planning and Optimization (PI-PPO)

32. Oracle Retail Analytics

33. Oracle Retail Workspace (ORW)