# Oracle® Retail Fiscal Management and Brazil Localization

Installation Guide Release 13.2 E22177-02

March 2011



Copyright © 2011, Oracle. All rights reserved.

Primary Author: Wade Schwarz

Contributors: Nathan Young

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

#### Value-Added Reseller (VAR) Language

#### **Oracle Retail VAR Applications**

The following restrictions and provisions only apply to the programs referred to in this section and licensed to you. You acknowledge that the programs may contain third party software (VAR applications) licensed to Oracle. Depending upon your product and its version number, the VAR applications may include:

- (i) the **MicroStrategy** Components developed and licensed by MicroStrategy Services Corporation (MicroStrategy) of McLean, Virginia to Oracle and imbedded in the MicroStrategy for Oracle Retail Data Warehouse and MicroStrategy for Oracle Retail Planning & Optimization applications.
- (ii) the **Wavelink** component developed and licensed by Wavelink Corporation (Wavelink) of Kirkland, Washington, to Oracle and imbedded in Oracle Retail Mobile Store Inventory Management.
- (iii) the software component known as **Access Via**™ licensed by Access Via of Seattle, Washington, and imbedded in Oracle Retail Signs and Oracle Retail Labels and Tags.
- (iv) the software component known as **Adobe Flex**<sup>™</sup> licensed by Adobe Systems Incorporated of San Jose, California, and imbedded in Oracle Retail Promotion Planning & Optimization application.

You acknowledge and confirm that Oracle grants you use of only the object code of the VAR Applications. Oracle will not deliver source code to the VAR Applications to you. Notwithstanding any other term or condition of the agreement and this ordering document, you shall not cause or permit alteration of any VAR Applications. For purposes of this section, "alteration" refers to all alterations, translations, upgrades, enhancements, customizations or modifications of all or any portion of the VAR Applications including all reconfigurations, reassembly or reverse assembly, re-engineering or reverse engineering and recompilations or reverse compilations of the VAR Applications or any derivatives of the VAR Applications. You acknowledge that it shall be a breach of the agreement to utilize the relationship, and/or confidential information of the VAR Applications for purposes of competitive discovery.

The VAR Applications contain trade secrets of Oracle and Oracle's licensors and Customer shall not attempt, cause, or permit the alteration, decompilation, reverse engineering, disassembly or other reduction of the VAR Applications to a human perceivable form. Oracle reserves the right to replace, with functional equivalent software, any of the VAR Applications in future releases of the applicable program.

# **Contents**

S	end Us Your Comments	ix
Ρı	reface	<b>x</b> i
	Audience	xi
	Related Documents	xi
	Customer Support	xi
	Review Patch Documentation	xi
	Oracle Retail Documentation on the Oracle Technology Network	
	Conventions	xii
1	Preinstallation Tasks	1
	Check for the Current Version of the Installation Guide	1
	Hot Fixes Available for RMS/ORFM 13.2	1
	Check Supported Database Requirements	2
	Check Supported Application Server Requirements	2
	Verify Single Sign-On	3
	Check Supported Web Browser and Client Requirements	3
	Supported Oracle Retail Products	3
	UNIX User Account Privileges to Install the Software	3
	Supported Oracle Retail Integration Technologies	3
2	RAC and Clustering	5
3	RMS/ORFM Installation Sequence Overview	7
4	RTIL Installation Tasks	
	Install Managed Server in WebLogic	
	Install Node Manager	
	Start the Managed Servers	
	Install MasterSaf TaxRules Runtime	
	Expand the RTIL Application Distribution	18
	Run the RTIL Application Installer	18
	Resolving Errors Encountered During Application Installation	21
	Troubleshooting RTIL Deployment	21
5	Database Installation Tasks	23
	Create Staging Directory for ORFM Database Schema Files	23
	Grant Permissions	23
	Run the ORFM Database Schema Installer	24
6	Batch Installation Tasks	27
	Option 1: Use RMS Batch Installer to Install ORFM Batch	
	Create Staging Directories for ORFM and RMS Batch Files	
	Copy Batch Files	
	Custom Modules	
	Run the Installer Patching Utility	

	Run the RMS Batch Installer	28
	Resolving Errors Encountered During Batch Installation	30
	Data Conversion Scripts	30
	Option 2: Compile ORFM Batch Directly	30
	Create Staging Directory for RMS Batch Upgrade Files	30
	Set Environment Variables	31
	Compile Batch Libraries	31
	Compile Batch Source Code	32
	Copy Data Conversion Scripts	32
7	Application Installation Tasks	33
	Install Managed Server in WebLogic	33
	Create RMS Help Managed Server	34
	Install Node Manager	37
	Compile ORFM Forms Installation	44
	Option 1: Use Application Installer to Patch	44
	Prepare Application Server for RMS	44
	Create Staging Directories for ORFM and RMS Application Files	45
	Copy Forms and Library Patch Files	45
	Custom Modules	45
	Run the Installer Patching Utility	45
	Run the RMS Application Installer	46
	Resolving Errors Encountered During Application Installation	48
	Clustered Installations – Post-Installation Steps	49
	Oracle Configuration Manager	49
	RMS Reports Copied by the Application Installer	49
	Test the RMS Application	49
	Option 2: Compile RMS Forms Directly	50
	Create Staging Directory for ORFM Application Files	50
	Set Environment Variables	50
	ORFM Forms Installation	51
	Helpfile Installation	52
8	Reports Installation Tasks	53
	Path References Used in this Section	53
	BI Server Component Installation Tasks	54
	Installation Process Overview	54
	Extracting the BI Server Web Archive from the Source Media	54
	Creating an Exploded Directory for the Installation	55
	Configuring the BI Publisher Repository and Installing Fonts	56
	Install Managed Server in WebLogic	57
	Install Node Manager	62
	Start the Managed Servers	66
	Additional Set Up Steps Before Deploying the BI Application	66

	Deploying the BI Application in WebLogic	68
	Installing the RMS BI Publisher Templates	74
	Configuring the RMS JDBC connection	75
	Configuring the BIPublisher Scheduler	76
9	Data Migration	
	Create Staging Directory for RMS Data Migration Files	
	Configure ORFM Data Migration Tool	
	Run the ORFM Data Migration Tool	
Α	Appendix: ORFM RTIL Installer Screens	85
В	95Appendix: Database Schema Installer Screens	95
С	Appendix: RMS Batch Installer Screens	99
D	Appendix: RMS Application Installer Screens	105
Ε	Appendix: Installer Silent Mode	117
	Repeating an Installation Attempt	117
F	Appendix: Common Installation Errors	119
	Database Installer Hangs on Startup	
	Unreadable Buttons in the Installer	119
	Warning: Could not create system preferences directory	
	Warning: Couldn't find X Input Context	
	Unresponsive Country and Currency Drop-Downs	
	Couldn't execl robot child process: Permission denied	
	ConcurrentModificationException in Installer GUI	
	FRM-30064: Unable to parse statement select while compiling fm_ituda.fmb	
	ORA-04031 (unable to allocate memory) error during database schema installat	
	X Error of failed request: BadWindow (invalid Window parameter)	
	Error Connecting to Database URL	
	Multi-Threaded OCI Client Dumps Core after Reconnecting To Database	
	Forms Installer Fails on HP-UX	124
G	Appendix: URL Reference	125
	JDBC URL for a Database	125
	LDAP Derver URL	125
	JNDI Provider URL for an Application	125
Н	Appendix: Application Deployment Method	127
I	Appendix: Setting Up Password Stores with Oracle Wallet	129
	About Password Stores and Oracle Wallet	129
	Setting Up Password Stores for Database User Accounts	
	Setting Up Wallets for Database User Accounts	
	For RMS, RWMS, RPM Batch, RETL, RMS, RWMS, and ARI	
	For Java Applications (SIM, ReIM, RPM, Alloc, RIB, RSL, AIP, RETL)	133

	How does the Wallet tie back to the Application?	135
	How does the Wallet tie back to java pgm batch use (such as REIM batch)?	
	Setting up RETL Wallets for 13.2	135
	Quick Guide for Retail Wallets	137
J	Appendix: Configure Listener for External Procedures	143
Κ	Appendix: Installation Order	145
	Enterprise Installation Order	145

## **Send Us Your Comments**

Oracle Retail Fiscal Management and Brazil Localization Installation Guide, Release 13.2

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document.

Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- 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 new Applications Release Online Documentation CD available on My Oracle Support and <a href="https://www.oracle.com">www.oracle.com</a>. 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.

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at www.oracle.com.

## **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**

For more information, see the following documents in the Oracle Retail Fiscal Management and Brazil Localization Release 13.2 documentation set:

- Oracle Retail Fiscal Management Release Notes
- Oracle Retail Fiscal Management Operations Guide
- Oracle Retail Fiscal Management Online Help

### **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, 13.2.1). 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

# **Preinstallation Tasks**

This chapter includes tasks to complete before installation.

#### **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.

#### Hot Fixes Available for RMS/ORFM 13.2

Three hot fixes are available at My Oracle Support to address some issues discovered in RMS 13.2. Before you begin to install RMS/ORFM 13.2, you must download all of these hot fixes, as applicable for your installation:

• Hot fix 11071540

This hot fix contains miscellaneous changes related to order receiving and the itemsupplier data conversion load script. This fix should be applied to all RMS 13.2 installations.

Hot fix 11071552

This hot fix contains miscellaneous changes related to pack item upgrades and the entity Clasificación Nacional de Actividades Económicas (CNAE) codes data conversion load script. This fix applies only if you are installing RMS 13.2 with Brazil localization.

Hot fix 11849744

This hot fix contains miscellaneous changes related to the RMS 13.2 database and application installers and RMS 13.2 demo data and currency tables. This fix should be applied to all RMS 13.2 installations.

Access My Oracle Support at the following URL:

https://support.oracle.com

#### **Applying the Hot Fixes**

See the defect reports and README files included with each hot fix for more information about the content of the fixes and instructions for applying them.

#### **Check Supported Database Requirements**

ORFM requires that the RMS 13.2 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:		
	<ul> <li>Oracle Linux 5 Update 3 (OL5.3) for x86-64 (Actual hardware or Oracle Virtual Machine)</li> </ul>		
	Red Hat Enterprise Linux 5 Update 3 (RHEL 5.3) for x86-64 (Actual hardware or Oracle Virtual Machine)		
	■ IBM AIX 6.1 (actual hardware or LPARs)		
	Solaris 10 Sparc (actual hardware or Logical Domains)		
	HP-UX 11.31 Integrity (actual hardware or HPVM)		
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		
	<b>Note:</b> 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

### **Supported Oracle Retail Products**

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

### **UNIX User Account Privileges to Install the Software**

A UNIX user account is needed to install the software. The UNIX user that is used to install the software should have write access to the WebLogic server installation files. For example, "oretail."

**Note:** Installation steps will fail when trying to modify files under the WebLogic installation, unless the user has write access.

## **Supported Oracle Retail Integration Technologies**

Integration Technology	Version
Oracle Retail Integration Bus (RIB)	13.2

**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.

# **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.

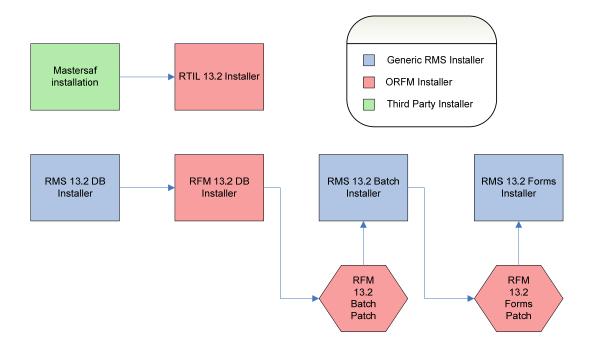
Clustering for WebLogic Server 10.3.3 is managed as an Active-Active cluster accessed through a Load Balancer. Validation has been completed utilizing a RAC 11.2.0.1 Oracle Internet Directory database with the WebLogic 10.3.3 cluster. It is suggested that a Web Tier 11.1.1.3 installation be configured 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 11g Release 2 (11.2) Part Number E16795-08

# **RMS/ORFM Installation Sequence Overview**

To succesfully complete installation of ORFM, installers from the RMS 13.2 and ORFM 13.2 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
- Chapter 5 Database Installation Tasks
- Chapter 6 Batch Installation Tasks
- Chapter 7 Application Installation Tasks
- Chapter 8 Reports Installation Tasks

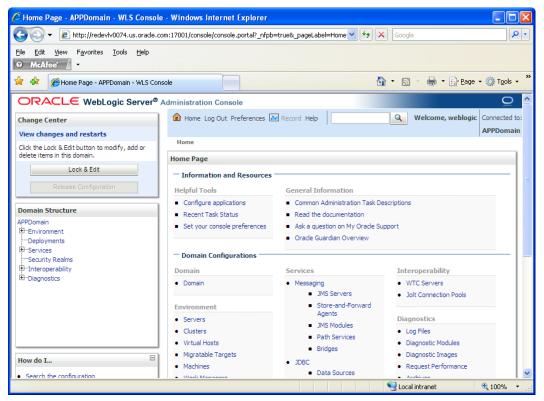
# **RTIL Installation Tasks**

These instructions apply to new installations. 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.

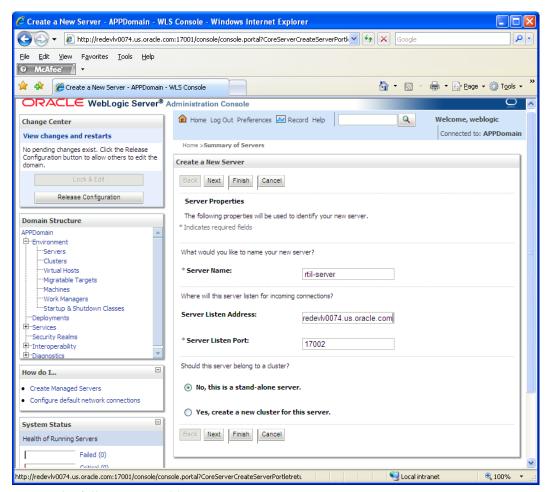
## Install Managed Server in WebLogic

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.

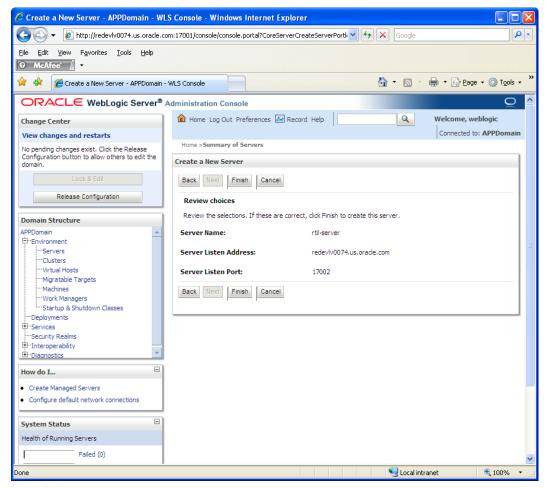
1. Log in to the admin console.



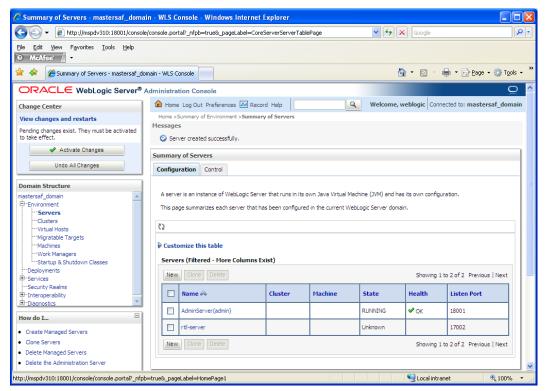
- 2. Click Lock & Edit.
- 3. Navigate to Environment > Servers. Select new tab of the servers on the right side.



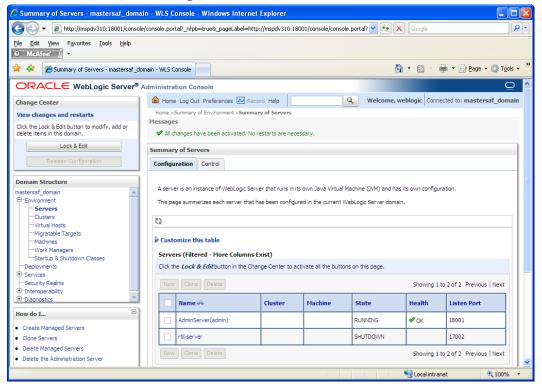
- **4.** Set the following variables:
  - **Server Name**: This value should be specific to your targeted application (for example, rtil-server).
  - Server Listen Address: <weblogic server> (for example, redevlv0074.us.oracle.com)
  - Server Listen Port: A free port. Check for availability.
     A suggestion 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.



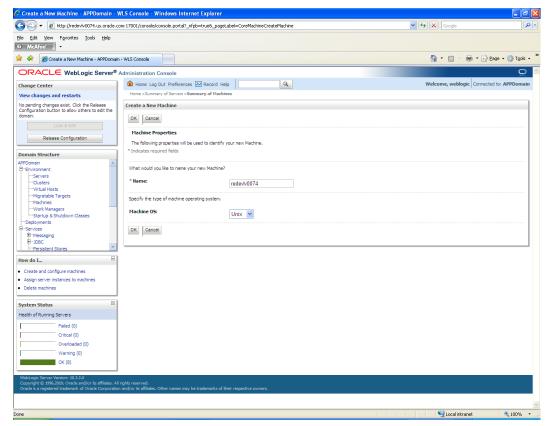
**7.** Click **Activate Changes** on the left side. Once the changes are activated, the State of the rtil-server should change to SHUTDOWN status.



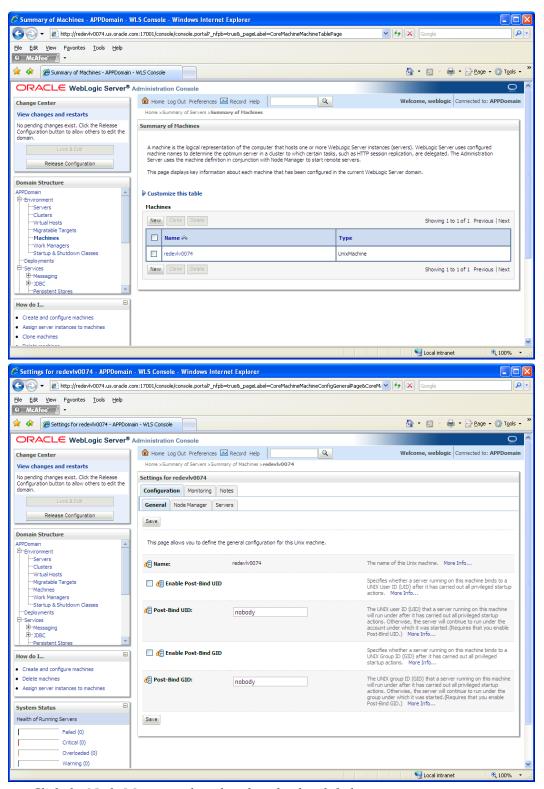
#### **Install Node Manager**

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 install.

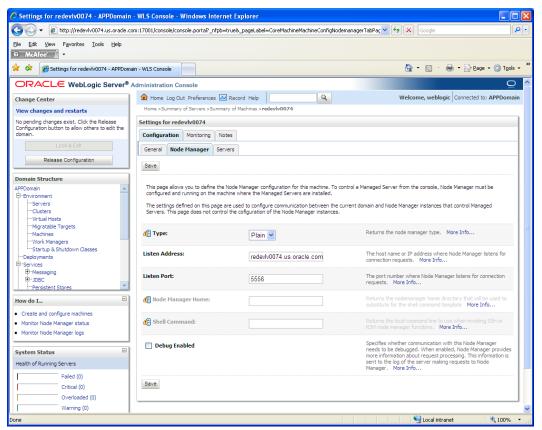
- 1. Log in to the admin console.
- 2. Click Lock & Edit. Navigate to Environments->Machines. Click New.
- **3.** The following page is displayed. Set the following variables:
  - Name: Logical machine name
  - Machine OS: UNIX



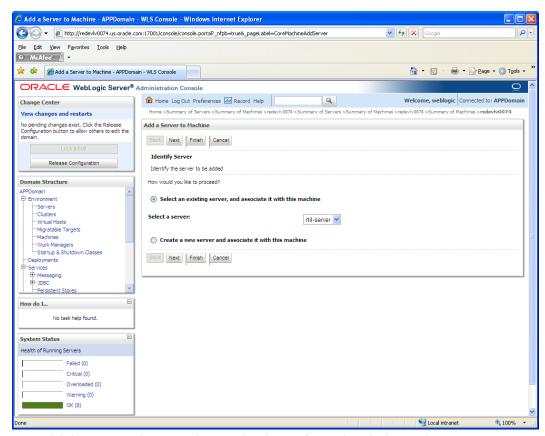
- **4.** Click **OK** to activate the changes.
- **5.** Click the machine created.



- **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

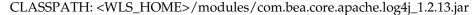
To start the managed servers, complete the following steps.

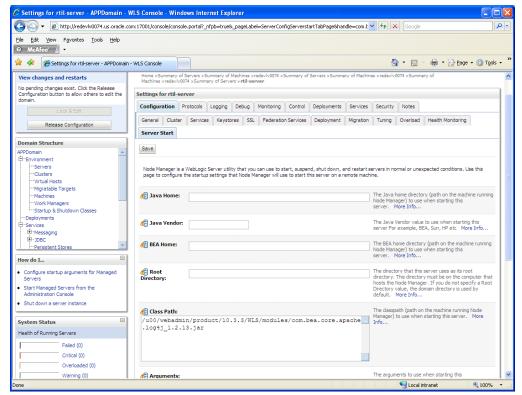
1. Start the Node Manager from the command line.

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

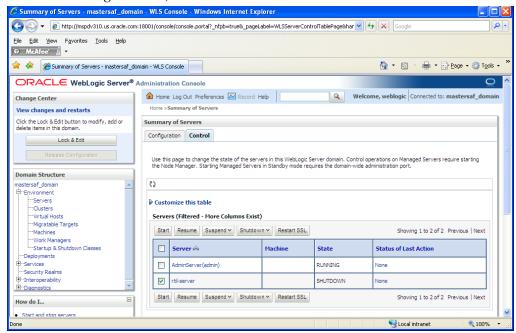
After the Node Manager is started, the managed servers can be started through the admin console.

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





**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 MasterSaf TaxRules Runtime

MasterSaf TaxRules Runtime (MTR) is a J2EE application, and the binary distribution is made available by MasterSaf as an EAR file. MTR is deployed to a WebLogic Managed Server within the WebLogic installation. It is recommended that RTIL and MTR be deployed in the same WebLogic domain. MTR also requires that Oracle RDBMS 11g Release 2 is installed for its application schema installation and configuration. MTR 2.7.11.5 is compatible with ORFM 13.2

For detailed installation and configuration instructions for MasterSaf TaxRules Runtime, see the installation guide supplied by MasterSaf.

## **Expand the RTIL Application Distribution**

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

**5.** 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.

**6.** 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

Variable	Description	Example
WEBLOGIC_DOM AIN_HOME	The location where the Weblogic domain has been installed	WEBLOGIC_DOMAIN_HOME=\$O RACLE_ HOME/user_projects/domains/ad f_domain/
		Export WEBLOGIC_DOMAIN_HOME
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</ip>

- **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).

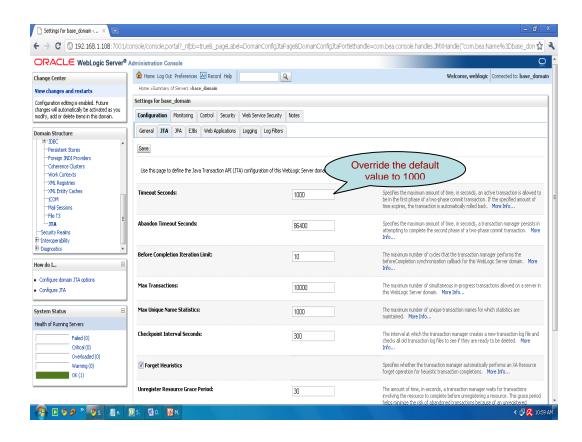
 $\textbf{Note:} \ \ \text{The typical usage for GUI mode is no arguments}.$ 

./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 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).



### **Resolving Errors Encountered During Application Installation**

If the application installer encounters any errors, it halts execution 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 in this document for silent mode instructions.

See Appendix: Common Installation Errors in this document 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, ocmplete 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://mspdv360:17002/taxrt)</rtil>
SERVER	<rtil_server_name></rtil_server_name>
PORT	<port_number> (for example, 17002)</port_number>

## **Database Installation Tasks**

It is assumed that Oracle Enterprise Edition 11gR2, with all appropriate patches, has already been installed and the RMS 13.2 schema has been installed. If not, see RMS 13.2 documentation before proceeding, as the ORFM database objects are installed into the RMS schema.

> **Note:** For Brazilian retailers planning to install ORFM/RMS Brazil Localization, the RMS 13.2 installation must include the following specific installation settings:

- Primary Country = BRAZIL (BR)
- Primary Currency = Brazil Real (BRL)
- Enable VAT = unchecked

#### Create Staging Directory for ORFM Database Schema Files

To create a staging directory for ORFM database schema 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 ORFM database schema installation software. There should be a minimum of 40 MB disk space available in this location.
- **3.** Copy the orfm13dbschema.zip file from the RMS 13.2 release to the staging directory. This is referred to as STAGING\_DIR when installing database software.
- Change directories to STAGING DIR and extract the orfm13dbschema.zip file. This creates an orfm/dbschema subdirectory under STAGING\_DIR.

#### **Grant Permissions**

To grant permissions, complete the following steps.

- 1. Change directories to STAGING DIR/orfm/dbschema/dbscripts/rtil.
- 2. Run the TaxServiceConsumer\_grant.sql script as sysdba to grant necessary permissions. At the prompt, **Enter a value for 1**, enter the RMS schema owner.

Example: prompt\$ . sqlplus <user> as SYSDBA

SQL>@TaxServiceConsumer\_grant.sql;

Enter value for 1: rms01

The script should display the new grants and print, PL/SQL procedure successfully completed.

#### **Run the ORFM Database Schema Installer**

**Note:** See Appendix: ORFM RTIL Installer Screens for details about every screen and field in the database schema installer.

1. Change directories to STAGING\_DIR/orfm/dbschema.

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</ip>

- **4.** If you run the installer in GUI mode using an X server, you must have the XTEST extension enabled. This setting is not always enabled by default in your X server. Appendix: Common Installation Errors in this document for more details.
- **5.** Run the install.sh script to start the installer.

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

If prompted about resuming previous installation, respond with no.

**Note:** ORFM database schema installation can take hours to run, with the large majority of this time used to compile invalid objects. It may appear to be frozen on the message:

[exec] Execution of INV\_OBJ\_COMP script

You can verify the installer is working by logging into the schema and watching the count of invalid objects. It is also safe to cancel installation and resume it at a later time. If you choose to do this, when you rerun the installer make sure to answer Yes when asked if you want to resume the previous installation.

**6.** After the installer is complete, you can check the log file: orfm-install-dbschema.<timestamp>.log.

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

chmod 600 ant.install.properties

# **Batch Installation Tasks**

There are two different methods to use for installing the ORFM 13.2 Batch. Option 1 uses the RMS batch installer to apply patch. Option 2 compiles the batch directly.

### Option 1: Use RMS Batch Installer to Install ORFM Batch

As shipped, the RMS 13.2 Batch installer installs and compiles the batch programs for RMS 13.2. The ORFM batch may be added to the RMS batch installation by copying the new source files and manually recompiling in the environment using the profile scripts created by the installer. This is the method to use if there is already an RMS batch environment with customizations. 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 installing batch in existing environments. 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 is expanded. The installer files from a previous RMS 13.2 installation can be re-used or a new directory can be created with a fresh copy of the RMS 13.2 batch installer.

Before you apply the ORFM 13.2 Batch:

- Make a backup of all your Batch files.
- See the *Oracle Retail Merchandising System Release Notes*.

Before copying over any files, do the following:

- Note whether customizations have been made to the module. If so, 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 Directories for ORFM and RMS Batch Files**

To create staging directories for ORFM and RMS batch 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 Batch files. There should be a minimum of 2MB disk space available in this location.
- **3.** Copy the orfm1320batchpatch.zip file from the ORFM 13.2 release to the staging directory. This is referred to as BATCH\_PATCH\_DIR when installing ORFM batch.
- **4.** Change directories to BATCH\_PATCH\_DIR and extract the orfm1320batchpatch.zip file.
- **5.** Create a staging directory for the RMS batch installation software. There should be a minimum of 35 MB disk space available in this location.
- **6.** 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/ORFM batch software.
- **7.** 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 ORFM batch programs using the installer patching utility included with ORFM batch package. The utility is located under BATCH\_PATCH\_DIR/batch-patch/patch-util. This utility accepts as input the ORFM patch files and adds them to the RMS 13.2 batch installer package. After running this utility, the RMS Batch installer can be used to install both the 13.2 ORFM and RMS batch.

#### **Custom Modules**

Custom source can be provided by the user in a folder named 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 for this.

```
ANT_HOME=STAGING_DIR/rms/batch/ant export ANT_HOME
```

- **3.** Change directories to 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 installer files are located under STAGING_DIR. For example, /opt/rms/batch.
patch.to.version	The version to which to patch. For example, 13.2.0.

**5.** Run the patch.sh script. This script will copy the files into the installer package.

### **Run the RMS Batch Installer**

**Note:** See Appendix: RMS Batch Installer Screens in this document for details about 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 (such as ORACLE\_HOME and ORACLE\_SID, PATH)

```
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:** Locations where makedepend is commonly

found:

Linux: /usr/X11R6/bin AIX: /usr/X11R6/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.

Variable	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</ip>

- **5.** If you run the installer in GUI mode using an X server, you must have the XTEST extension enabled. This setting is not always enabled by default in your X server. See Appendix: Common Installation Errors for more details.
- **6.** Run the install.sh script to start the installer.

Note: The typical usage for GUI mode is no arguments.

./install.sh [text | silent]

Depending on system resources, a typical RMS batch installation can take 20 to 60 minutes.

The installer asks 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 beneath STAGING\_DIR.

- **7.** After the installer is complete, you can check the 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 input you provided. As a security precaution, make sure that the file has restrictive permissions.

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

# **Resolving Errors Encountered During Batch Installation**

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

# **Data Conversion Scripts**

To create data conversion scripts, complete the following steps.

- 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.
- **2.** Create the following new directories:
- 3. INSTALL\_DIR/external/data
- 4. INSTALL\_DIR/external/logs
- **5.** The RMS Batch installer should have already created INSTALL\_DIR/external/scripts.
- **6.** Log in to 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 must replace INSTALL\_DIR with your INSTALL\_DIR and you can rename the external data and log directory.

**Note:** The user who creates these directories owns them.

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

- Log into sqlplus as SYSTEM and grant access to them by running the following commands:
- 8. grant the below privileges to any other users that 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 Upgrade Files

To create a staging director for RMS batch upgrade 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 13.2 Batch Upgrade. There should be a minimum of 14 MB disk space available in this location.

- **3.** Copy the rms1320batchpatch.zip file from the RMS 13.2 release to the staging directory. This is referred to as BATCH\_PATCH\_DIR when upgrading a database schema.
- **4.** Change directories to BATCH\_PATCH\_DIR and extract the rms1320batchpatch.zip file.

#### **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: 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 BATCH\_PATCH\_DIR/batch-patch/13.2.0/oracle/lib/src to INSTALL\_DIR/oracle/lib/src.
- **2.** Change directories to INSTALL\_DIR/oracle/lib/src.

**3.** To make library dependencies run this command.

```
make -f 110n_rmslib.mk depend 2>&1 | tee libdpnd.log Check the libdpnd.log file for errors.
```

**4.** To make batch libraries:

```
make -f ll0n_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 BATCH\_PATCH\_DIR/batch-patch/13.2.0/oracle/proc/src to INSTALL\_DIR/oracle/proc/src.
- **2.** Change directories to INSTALL\_DIR/oracle/proc/src.
- 3. Create dependencies.
  - **a.** Run the following command:

```
make -f 110n_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 110n_rms.mk 2>&1 | tee srcall.log
```

- **b.** Check the srcall.log file for errors.
- **5.** Install the batch programs.

```
make -f 110n_rms.mk install
```

The ORFM batch programs should now be in INSTALL\_DIR/oracle/proc/bin.

# **Copy Data Conversion Scripts**

Copy the files from BATCH\_PATCH\_DIR/batch-patch/13.2.0/external to INSTALL\_DIR/external.

# **Application Installation Tasks**

Before proceeding, you must install Oracle WebLogic Server 11g Release 1 (10.3.3) and patches listed in Chapter 1, Preinstallation Tasks. The Oracle Retail RMS/ORFM application is deployed to a WebLogic Managed server within the WebLogic installation. It is assumed Oracle database has already been configured and loaded with the appropriate RMS schemas for your installation.

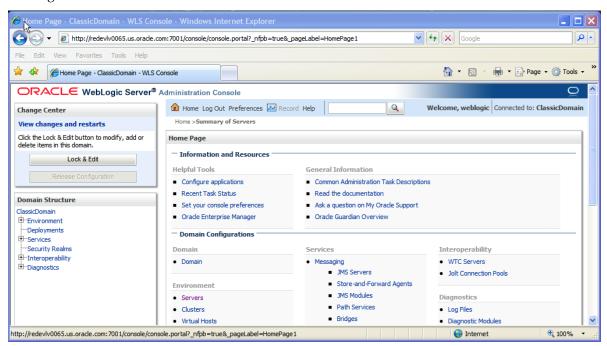
**Note:** \$ORACLE\_HOME/network/admin/tnsnames.ora file must be configured in this WLS installation. Forms will use this information for connectivity. See Appendix: Configure Listener for External Procedures for a sample setup of the tnsnames.ora file.

# Install Managed Server in WebLogic

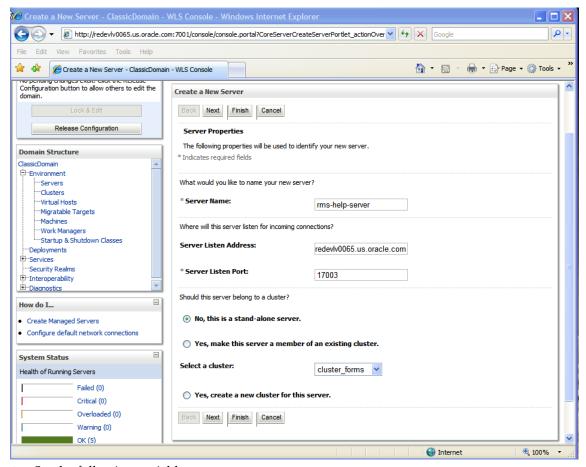
Before running the application installer, you must install a managed server with Oracle Forms Services, a managed server for RMS/ORFM help, and Node Manager in WebLogic if it was not created during the domain installation. Following are the steps to install RMS/ORFM help.

# **Create RMS Help Managed Server**

1. Log in to the admin console.

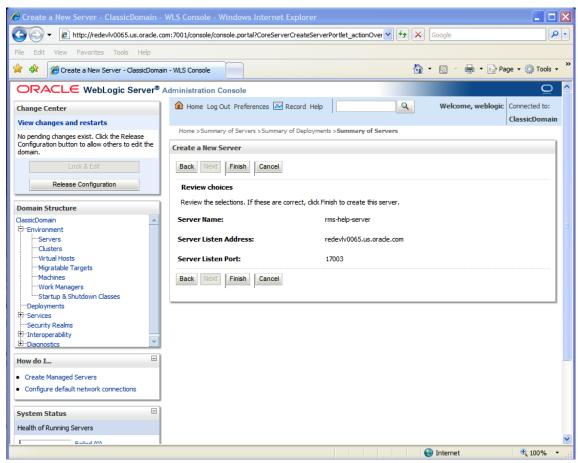


- 2. Click Lock & Edit.
- 3. Navigate to Environment> Servers. Select new tab of the servers on the right side.

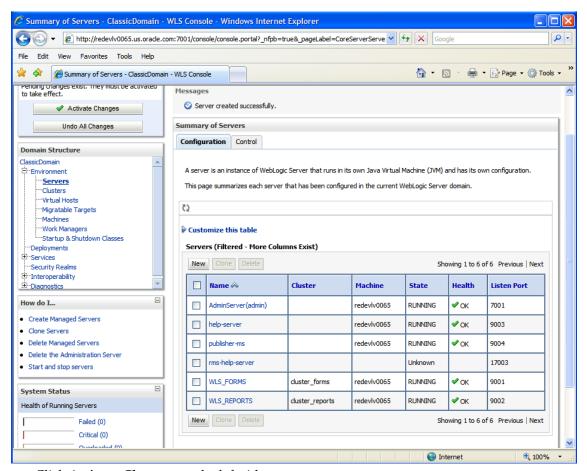


- **4.** Set the following variables:
  - Server Name: A name specific to your targeted application (for example, rms-help-server)
  - Server Listen Address: <weblogic server>
     (for example, redevlv0065.us.oracle.com)
    - Server Listen Port: A free port. Check for availability.

      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.

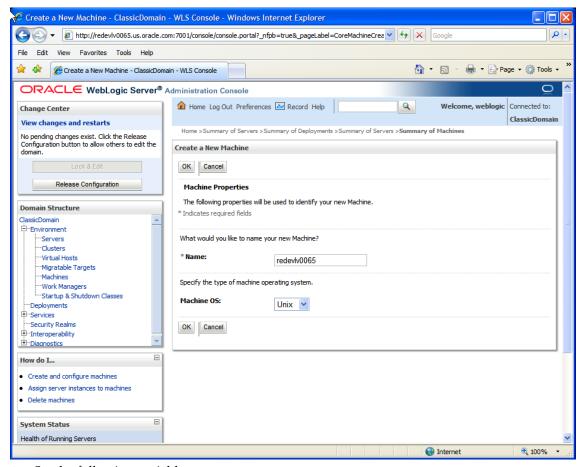


7. Click **Activate Changes** on the left side.

#### **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 install.

- 1. Log in to the admin console.
- **2.** Click **Lock & Edit.** Navigate to Environments > Machines.
- **3.** Click **New**.

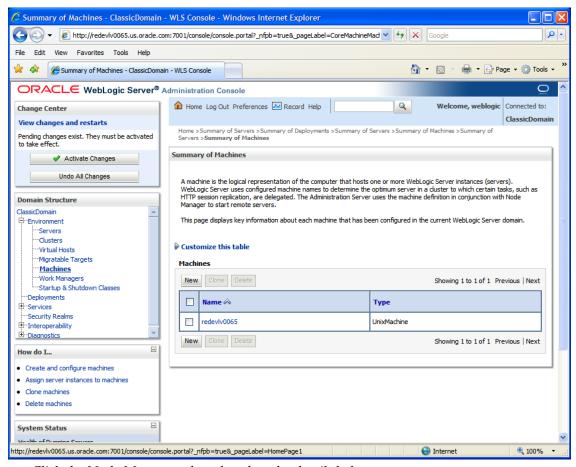


**4.** Set the following variables:

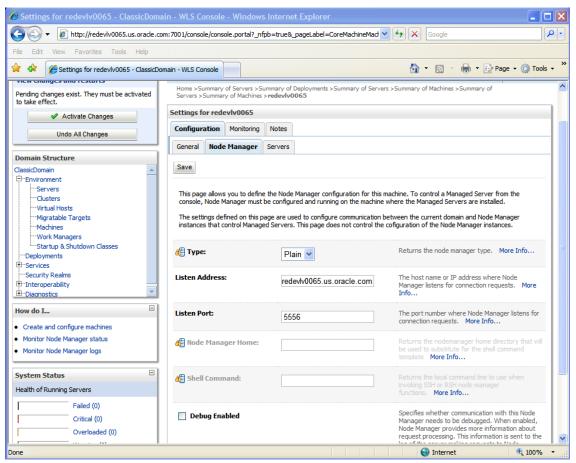
Name: Logical machine name

Machine OS: UNIX

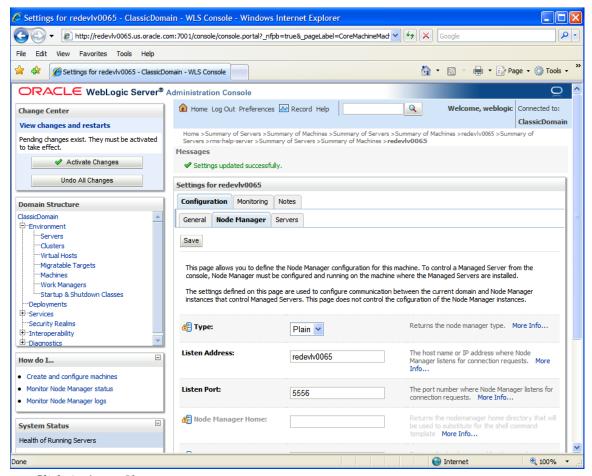
- 5. Click OK.
- **6.** Click on the machine created.



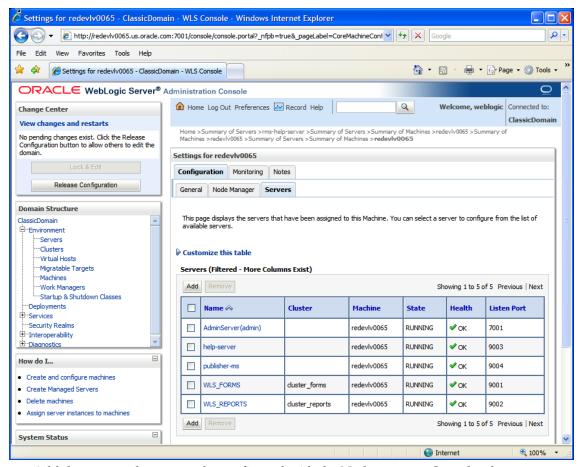
- 7. Click the Node Manager tab and update the details below.
  - Type: Plain
  - Listen Address: Machine IP (for example, redevlv0065.us.oracle.com)
  - Listen Port: Node manager will be assigned a default port, such as 5556.



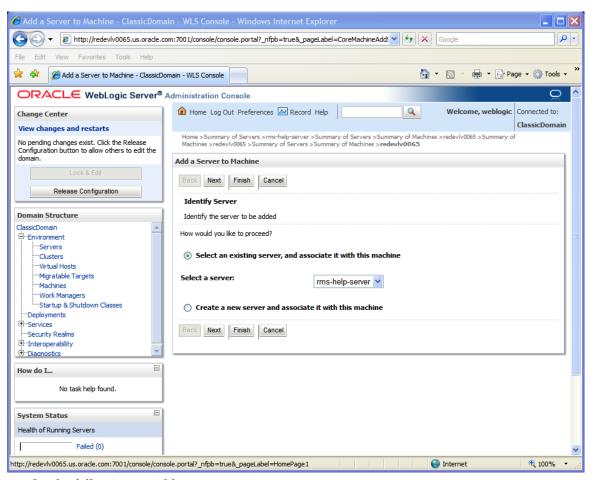
8. Click Save.



- 9. Click Activate Changes.
- 10. Click Lock & Edit.
- **11.** Navigate to Environments > machines. Click on the machine name. Select the Servers tab.



- **12.** Add the managed servers to be configured with the Nodemanager. Save the changes.
- 13. Click Add.



- **14.** Set the following variables:
  - Server: name of server previously created (for example, rms-help-server)
- 15. Click Next. Click Finish.

To activate changes, the server must be stopped as follows. <WLS\_HOME>/user\_projects/domains/<domain name>/bin/ stopManagedWebLogic.sh rms-help-server \${server\_name}:\${server\_port}

**16.** 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/ClassicDomain/servers/rms-help-server

- 17. Click Save.
- **18.** Click **Activate Changes**.

### **Compile ORFM Forms Installation**

There are two methods for installing the ORFM13.2 Application. Option 1 uses the RMS application installer to apply upgrade. Option 2 compiles the ORFM forms directly.

## **Option 1: Use Application Installer to Patch**

As shipped, the RMS 13.2 Application installer installs and compiles the forms, for version 13.2 of RMS. The ORFM Forms may be applied by copying the new source files and manually recompiling in the environment using the profile scripts created by the installer. Use this method if there is already an RMS Forms environment with customizations. See Option 2: Compile RMS Forms Directly for these instructions.

The installer method is intended only for new environments. Do not use the installer patching utility to attempt installing 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 is expanded. The installer files from the original RMS 13.2 installation can be reused or a new directory can be created with a fresh copy of the RMS 13.2 application installer.

**Note:** Before you apply the ORFM 13.2 patch, a backup of all your forms and library files.

Before copying over any files:

- Note whether customizations have been made to the module. If so, 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 them over in case they need to be referred to at a later date.

# **Prepare Application Server for RMS**

**Note:** ORACLE\_HOME is the location where Oracle Forms 11gR1 has been installed.

**Note:** ORACLE\_INSTANCE is the instance that is created during installation of Oracle Forms 11gR1 and contains the executables to compile forms.

- 1. The Tk2Motif.rgb file that is sent out with WebLogic (10.3.3) must be modified. It located at the following location:\$ORACLE\_INSTANCE/config/FRComponent/frcommon/guicommon/tk/admin
- **2.** Make a copy of the file Tk2Motif.rgb, and name it Tk2Motif.rgb\_ORIG (for example).
- **3.** Modify the file Tk2Motif.rgb file so that it contains the following line:

Tk2Motif\*fontMapCs: iso8859-2=UTF8

**4.** Copy \$ORACLE\_INSTANCE/config/FRComponent/frcommon/guicommon/tk/admin/Tk2Motif.rgb to \$ORACLE\_HOME/guicommon/tk/admin/Tk2Motif.rgb

### Create Staging Directories for ORFM and RMS Application Files

To create staging directories for ORFM and RMS batch files, complete the following steps.

- 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 13.2 application installation software. There should be a minimum of 90MB disk space available in this location.
- **3.** Copy the orfm1320apppatch.zip file from the ORFM 13.2 release to the staging directory. This is referred to as APP\_PATCH\_DIR when installing ORFM application software and reports.
- **4.** Change directories to APP\_PATCH\_DIR and extract the orfm1320apppatch.zip file.
- **5.** Create a staging directory for the RMS application installation software. There should be a minimum of 600 MB disk space available in this location.
- **6.** Copy the file rms13application.zip from the RMS 13.2 release to staging directory. This will be referred to as STAGING\_DIR when installing application software and reports.
- **7.** Change directories to STAGING\_DIR and extract the file rms13application.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 ORFM forms using the installer patching utility included with ORFM Forms package. The utility is located under APP\_PATCH\_DIR/app-patch/patch-util. This utility will accept as input the 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 both the 13.2 ORFM and RMS application pieces.

#### **Custom Modules**

Custom source can be provided by the user in a folder named 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 APP\_PATCH\_DIR/app-patch/patch-util/

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

<b>Property Name</b>	Description
staging.dir	The directory where the installer files are located under STAGING_DIR. For example, /opt/rms/application.
patch.to.version	The version to which to patch. For example, 13.2.0.

**5.** Run the patch.sh script. This script will copy the files into the 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.

- Log into the 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/ClassicDomain/ 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.UTF8 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</ip>

**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 preinstallation checks, the installer prints out a summary containing these new environment variables:

#### Example:

MW\_HOME=/u00/webadmin/product/10.3.3/WLS\_Form s

ORACLE\_HOME=/u00/webadmin/product/10.3.3/WLS\_ Forms/as\_1

ORACLE\_INSTANCE=/u00/webadmin/product/10.3.3/W LS\_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, 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\_project s/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 45 minutes to two hours. The installer asks for an installation directory. This is the destination directory for the RMS files. The 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.

**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

**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:**

 $/u00/webadmin/product/10.3.3/WLS\_Forms/user\_projects/domains/ClassicDomain/config/fmwconfig/servers/WLS\_FORMS/applications/formsapp\_11.1.1/config/forms/registry/oracle/forms/registry/Registry.dat$ 

 $/u00/webadmin/product/10.3.3/WLS\_Forms/user\_projects/domains/ClassicDomain/config/fmwconfig/servers/WLS\_FORMS/applications/formsapp\_11.1.1/config/formsweb.cfg$ 

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

# **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 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 in the installer screens called Configure WebLogic, 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 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 the *master node*. All other nodes are referred to as *remote nodes*.

To complete the RMS forms application installation, 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 nodes. 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. Copy only the RMS entries appended to this file by the installer. There is node-specific information in this file that differs among ORACLE\_HOME installations.

### **Oracle Configuration Manager**

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

See the My Oracle Support document, "Oracle Configuration Manager Installer Guide" (ID 1071030.1). This guide describes the procedures and interface for the Oracle Retail Oracle Configuration Manager Installer that a retailer runs at the beginning of the installation process.

Access My Oracle Support at the following URL:

https://support.oracle.com

#### 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 described in Chapter 8, Reports Installation Tasks.

# **Test the RMS Application**

Oracle Retail provides test cases that allow you to smoke test your installation. See the My Oracle Support document, "Oracle Retail Merchandising Installation Test Cases" (ID 1277131.1).

### **Option 2: Compile RMS Forms Directly**

Option 2 entails compiling RMS 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.

- 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 90 MB disk space available in this location.
- Copy the file orfm1320apppatch.zip from the ORFM 13.2 release to staging directory.
   This is referred to as APP\_PATCH\_DIR when installing application software and reports.
- 4. Change directories to APP\_PATCH\_DIR and extract the file orfm1320apppatch.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 ORFM 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/share.jar:\$ORACLE\_HOME

E/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/form s/bin:\$ORACLE\_HOME/forms
- TK\_UNKNOWN=\$ORACLE\_INSTANCE/config/FRComponent/frcommon/guicommon/tk/admin
- PATH=\$ORACLE INSTANCE/bin:\$PATH

**Note:** See Appendix: 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:\$OR ACLE\_HOME/jdk/jre/lib
- LIBPATH=\$LD\_LIBRARY\_PATH

#### Linux

 LD\_LIBRARY\_PATH=\$ORACLE\_HOME/lib:\$ORACLE\_HOME/lib32:\$OR ACLE\_HOME/jdk/jre/lib

#### **ORFM Forms Installation**

Instructions for ORFM forms installation are as follows.

- **1.** Copy all files from APP\_PATCH\_DIR/app-patch/13.2.0/base/forms/src to INSTALL\_DIR/base/forms/src.
- **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.** Check to make sure that each .pll file has a corresponding .plx (to ensure that all .pll's compiled successfully). Remove all newly created .plx files.
- **6.** Copy all forms (\*.fmb files) in the INSTALL\_DIR/base/forms/src directory to the INSTALL\_DIR/base/forms/bin directory.
- **7.** Run forms.fm\_fmb.sh (in INSTALL\_DIR/base/rms/forms/bin) to compile the RMS reference forms.
- **8.** Remove all newly created fm\_\*.fmx files (reference forms should not have executable files).
- **9.** Run forms.fmb.sh (in INSTALL\_DIR/base/rms/forms/bin) to generate RMS runtime forms .fmx's.
- **10.** Check to make sure that each non-reference form .fmb file has a corresponding .fmx file.

**Note:** Disregard the fm\_\*.fmx files that may be created. These files should be removed. They should not exist in the INSTALL\_DIR/base/forms/bin directory.

**11.** Remove all non-reference form forms from INSTALL\_DIR/base/forms/bin; the following syntax will leave all reference forms (fm\_\*.fmb) in the bin directory, while removing all other forms:

```
> for PROG in `ls *.fmb | grep -v fm_`
> do PROGNAME=`echo $PROG`
> rm $PROGNAME
> done
```

- **12.** Copy all menus (\*.mmb files) in the INSTALL\_DIR/base/forms/src directory to the INSTALL\_DIR/base/forms/bin directory.
- **13.** Run menus.mmb.sh (in INSTALL\_DIR/base/rms/forms/bin) to generate RMS runtime menus .mmx's.
- **14.** Make sure that each .mmb file has a corresponding .mmx file.
- **15.** Remove all .mmb files from INSTALL DIR/base/forms/bin.

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

### Helpfile Installation

Instructions for helpfile installation are as follows.

- 1. Log into the WebLogic instance to which online help will be installed.
- **2.** Create a server. In this example rms-help-server is being used.
- **3.** Select Deployments.
- 4. Select Install.
- **5.** Click the box called Path: and enter APP\_PATCH\_DIR/app-patch/13.2.0/online-help/rms-help.ear the ear file that will be deployed.
- 6. Leave Install this deployment as an application selected. Click Next.
- 7. Select the rms-help-server created in Step 2. Click Next.
- **8.** Leave **rms-help for the application name**. Click **Next**.
- 9. Verify settings. Click Finish.

# **Reports Installation Tasks**

Before reports installation tasks can begin, the following must be true:

- The RMS Database Schema has been installed in a running Oracle 11gR2 database platform.
- RMS application components have been installed in a working WebLogic 10.3.3 domain.

### Path References Used in this Section

The directory structures outlined in this section will vary according to your specific configuration of the target WebLogic domain. For this chapter of the guide, use the labels outlined in the following table as references to directories used for the configuration of external dependencies for RMS 13.2.

Note the directory names for each of the labels outlined below for your installation environment.

Variable	Description	Example
<staging_dir></staging_dir>	The application installation staging directory as defined for the source installation files.	
<install_dir></install_dir>	The destination directory mentioned in the RMS Application installer for the RMS files.	
<bi_media></bi_media>	Expanded source media for BI Publisher.	/tmp/BIPublisherSource/
<bi_deployment></bi_deployment>	The deployment directory for BI Publisher as a WebLogic web application.	/u00/webadmin/RMS_BIP/
<wls_java_home></wls_java_home>	The JDK location used by the WebLogic Server instance being installed to.	/u00/webadmin/java/jdk1.6.0_22.x64
<bi_repository></bi_repository>	The BI Publisher reports repository. By default this is called XMLP.	/u00/webadmin/RMS_BIP/xmlpserver/ XMLP
<wls_server_con FIG_DIR&gt;</wls_server_con 	The configuration base directory for the WebLogic server instance supporting the Oracle Forms environment.	/u00/webadmin/product/10.3.3/WLS_ Forms/domains/ClassicDomain/config/ fmwconfig/servers/WLS_FORMS
<forms_install_ BASE&gt;</forms_install_ 	The Oracle Forms base configuration directory.	<wls_server_config_dir>/ applications/formsapp_11.1.1/config</wls_server_config_dir>

### **BI Server Component Installation Tasks**

Oracle BI Publisher can be used in conjunction with external printing solutions, such as label printing. This section describes the installation of Oracle BI Publisher as a server application within WebLogic 10.3.3. One deployment of BI Publisher can be used for both the RMS and RWMS reports.

If you are installing BI Publisher as a part the Oracle OBIEE suite, refer to the appropriate Fusion Middleware guides for the installation of the product in a WebLogic server environment. Otherwise, you must perform the steps described in this section to deploy Oracle BI Publisher as a standalone Web application into a WebLogic server environment.

#### Installation Process Overview

Installing the BI Publisher server as a standalone Web application in a WebLogic server involves the following tasks:

- **1.** Locate the correct and generic version of xmlpserver.war from the BI Publisher source media.
- **2.** Create an exploded directory from the xmlpserver.war file, where the BI server installation will reside on the WebLogic server.
- **3.** Deploy BI Publisher into the WebLogic application server instance.
- **4.** Configure the BI Publisher repository.
- **5.** Optional: If you are planning to develop reports that are directly rendered by BI Publisher, install additional fonts into the JRE of the WebLogic server's JDK

The following are post-installation tasks:

- 1. Set up the RMS BI Publisher Report Templates produced for RMS.
- **2.** Create the BI Publisher scheduler schema on the database server (required to send and schedule reports).
- **3.** Set up RMS application specific configuration files to integrate BI Publisher.

### **Extracting the BI Server Web Archive from the Source Media**

The BI Server components must be extracted from the source installation media. If you have downloaded the source distribution of Oracle BI EE, you must locate the BI Publisher source directory from the media.

The BI Publisher installation media contains the following:

- BI Publisher server application
- BI Publisher runtime libraries
- BI Publisher fonts
- BI Publisher desktop tools
- Documentation, including users Guide, Javadocs, demos, and samples

Directory	Component
<bi_media>/fonts</bi_media>	Font files.
<bi_media>/generic</bi_media>	xmlpserver.war (for non-oc4j application servers) xmlpserver.ear (for non-oc4j application servers)
<bi_media>/oc4j</bi_media>	xmlpserver.ear (for oc4j).
<bi_media>/XMLP</bi_media>	XMLP repository.
<bi_media>/XMLP/DemoFiles</bi_media>	Data source for demo reports.
<bi_media>/XMLP/Tools</bi_media>	Template Builder for Word Add-in.

Individual components are located in the directory structure as follows:

#### Complete the following tasks:

**1.** Create the <BI\_DEPLOYMENT> directory on the server and change directory to this directory.

For example, assuming that /u00/webadmin is the root of the installation:

mkdir /u00/webadmin/RMS\_BIP cd /u00/webadmin/RMS\_BIP

2. On the server, locate the manual/generic/xmlpserver.war file from this directory structure and copy it to the <BI\_DEPLOYMENT> directory, using a copy command with the following syntax: cp <BI\_MEDIA>/manual/generic/xmlpserver.war <BI\_DEPLOYMENT>

For example,

cp /tmp/BIPublisherSource/manual/xmlpserver.war /u00/webadmin/RMS\_BIP

### **Creating an Exploded Directory for the Installation**

Create an exploded archive directory from this xmlpserver.war file. This will be the directory from which WebLogic will run the BI Server.

**Note:** Do not deploy the xmlpserver.war or xmlpserver.ear file on the WebLogic Server by uploading it from the WebLogic console, because the console deploys the application (or Web module) in an archived file format. This is not recommended for BI Publisher configuration, because you must update WEB-INF/xmlp-server-config.xml manually before the deployment. To work around this issue, use an "exploded archive" directory.

#### Complete the following steps:

- Change directory to <BI\_DEPLOYMENT> on the server.
   Example assuming that /u00/webadmin is the root of the installation:
   cd /u00/webadmin/RMS BIP
- **2.** By running the jar command with -x for extraction with the file xmlpserver.jar, create an exploded directory called xmlpserver within <BI\_DEPLOYMENT>. This is the location where the application will be deployed in the WebLogic server.

#### Example:

```
mkdir xmlpserver
cd xmlpserver
jar -xvf /u00/webadmin/RMS_BIP/xmlpserver/xmlpserver.war
```

You should now have an exploded directory structure (with <BI\_DEPLOYMENT>/xmlpserver/) for the deployment.

**Note:** Any changes to the BI Publisher configuration files, such as to update the catalog path in the xmlp-server-config.xml file, must be done before deployment. For information on catalogs, refer to BI Publisher documentation.

**3.** Delete the war file. For example,

rm /u00/webadmin/RMS\_BIP/xmlpserver/xmlpserver.war

### Configuring the BI Publisher Repository and Installing Fonts

Before deploying BI Publisher in your WebLogic server, you must set up the BI Publisher repository and install the font files into the JVM used by the server.

To set up the repository, copy the <BI\_MEDIA>/XMLP directory to <BI\_REPOSITORY>. For example,

```
cp -R /tmp/BIPublisherSource/XMLP /u00/webadmin/RMS_BIP/xmlpserver
```

- 1. Assign appropriate permissions for the WebLogic server instance user, including read, write, and execute permissions to enable the deployment of this directory structure to serve as a Web application.
- **2.** Open the xmlp-server-config.xml file located in the <BI\_DEPLOYMENT> /xmlpserver/ directory with a text editor.

For example,

 Replace \${oracle.home}/xdo/repository with file path to the location where you copied the XMLP repository directory on your server. For example,

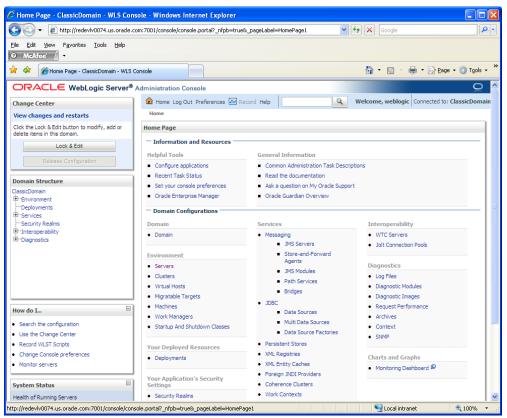
- **4.** After updating it, save the xmlp-server-config.xml.
- 5. Optional: Copy the font files from the <BI\_MEDIA>/fonts in the installation media to the fonts directory of the Java Runtime Environment used by the WebLogic server being used for the deployment (represented by WLS\_JAVA\_HOME in the example below). This is an optional task for users that plan to deploy their own customized reports for RMS using BI Publisher directly. For example,
  - cp R /tmp/BIPublisherSource/fonts WLS\_JAVA\_HOME/jre/lib/fonts

**Note:** For this task, you must re-start the WLS server restart.

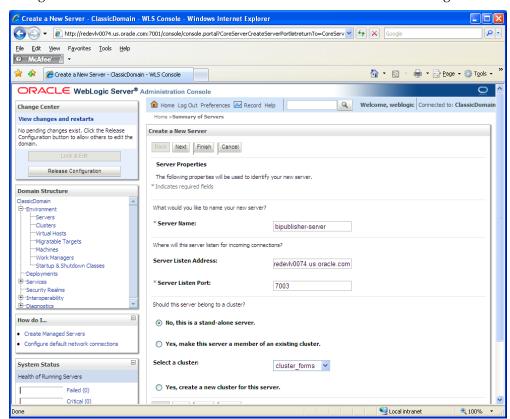
## Install Managed Server in WebLogic

Before running the deployment of BI Application, you must install a managed server for deploying the BI application in WebLogic, if it was not created during the domain installation. Follow the steps below to install bipublisher managed server.

1. Log in to the admin console.



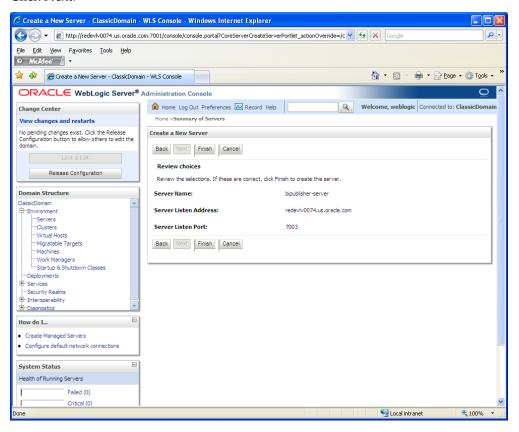
2. Click Lock & Edit.



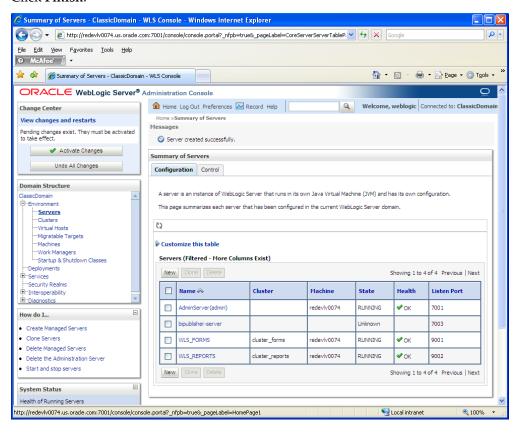
**3.** Navigate to Environment > Servers. Select new tab of the servers on the right side.

- **4.** Set the following variables:
  - Server Name: This value should be specific to your targeted application (for example, bipublisher-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, 7003, 7005, 7007 and so on.)

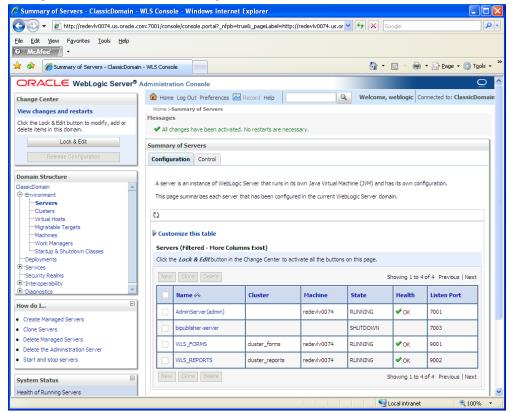
#### 5. Click Next.



#### 6. Click Finish.



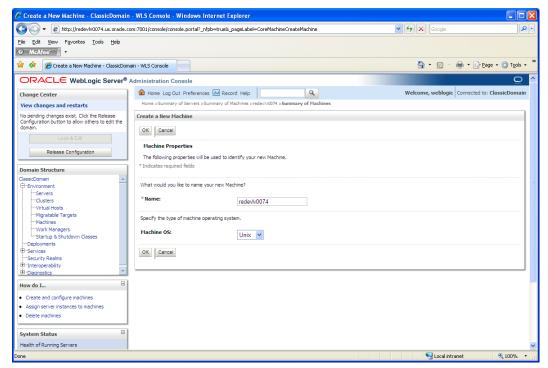
**7.** Click **Activate Changes** on the left side. Once the changes are activated, the State of the bipublisher-server should change to SHUTDOWN status.



## **Install Node Manager**

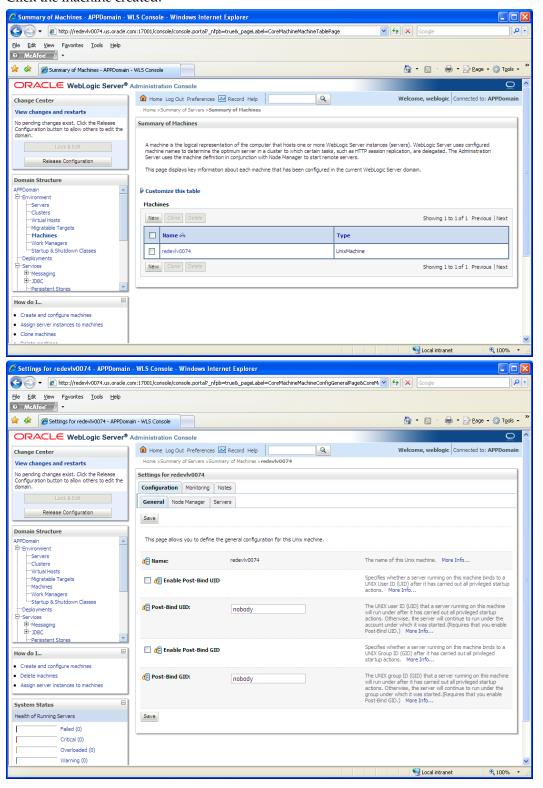
Install Node Manager if it was not created during domain install. The node manager is required so that the managed servers can be started and stopped through the admin console. Only one node manager is needed per WebLogic install.

- **1.** Log in to the admin console.
- **2.** Click **Lock & Edit**. Navigate to Environments->Machines. Click **New**. The following page is displayed. Set the following variables:
  - Name: Logical machine name
  - Machine OS: UNIX

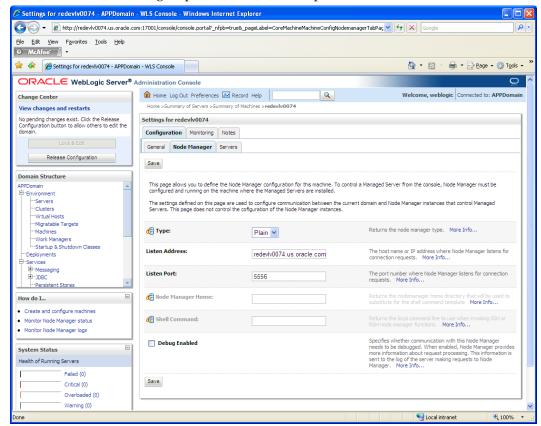


**3.** Click **OK** to activate the changes.

**4.** Click the machine created.



- **5.** 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. Default port is 5556.



- 6. Click Save.
- 7. Click Activate Changes.
- 8. Click Lock & Edit.

Add a Server to Machine - ClassicDomain - WLS Console - Windows Internet Explorer 🔾 🔾 🗸 http://redevlv0074.us.oracle.com:7001/console/console.portal?\_nfpb=true&\_pageLabel=CoreMachineAddServer 🔻 🐓 🗙 Google 0 File Edit View Favorites Tools Help ↑ Page 
↑ Tools 
↑ 😭 🍄 🏿 🍘 Add a Server to Machine - ClassicDomain - WLS Console ORACLE WebLogic Server® Administration Console ♠ Home Log Out Preferences № Record Help Welcome, weblogic Connected to: ClassicDomain Change Center Home >Summary of Servers >Summary of Machines >redevlv0074 >Summary of Machines >redevlv0074 View changes and restarts No pending changes exist. Click the Release Configuration button to allow others to edit the Add a Server to Machine Back Next Finish Cancel Identify Server Release Configuration Identify the server to be added Domain Structure How would you like to proceed? ClassicDomain - Environment Select an existing server, and associate it with this machine Select a server: bipublisher-server 💌 --Virtual Hosts --Migratable Targets --Machines O Create a new server and associate it with this machine --Work Managers --Startup & Shutdown Classes Back Next Finish Cancel -Security Realms How do I... No task help found. System Status Health of Running Servers Failed (0) Critical (0

**9.** Navigate to Environments > machines. Click the machine name. Select the Servers tab. Click **Add**.

- **10.** 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: bipublisher-server)
- 11. Click Next. Click Finish.
- 12. Click Activate Changes.

**Note:** To activate changes the server needs to be stopped:

<WLS\_HOME>/user\_projects/domains/<Domain\_name>/bin/

stopManagedWebLogic.sh bipublisher-server
\${server\_name}:\${server\_port}

Go to the 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>

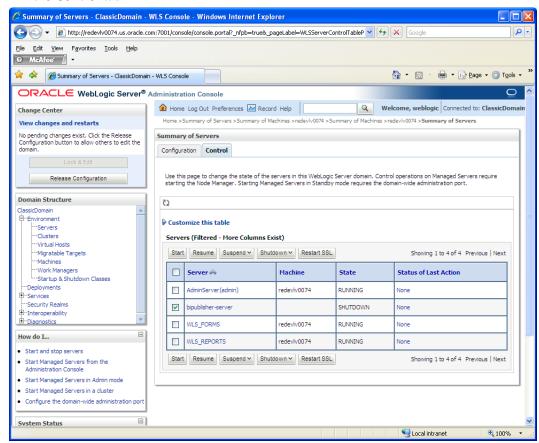
For example: \$CLASSPATH:/u00/webadmin/product/10.3.3 /WLS/user\_projects/domains/<Domain\_name>/servers/bipubli sher-server

- 13. Click Save.
- 14. Click Activate Changes.

#### **Start the Managed Servers**

To start the managed servers, complete the following steps.

- Start the Node Manager from the command line. \$WEBLOGIC\_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.** Navigate to Environments > Servers. Select bipublisher-server managed server. Click the Control tab.



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

# Additional Set Up Steps Before Deploying the BI Application

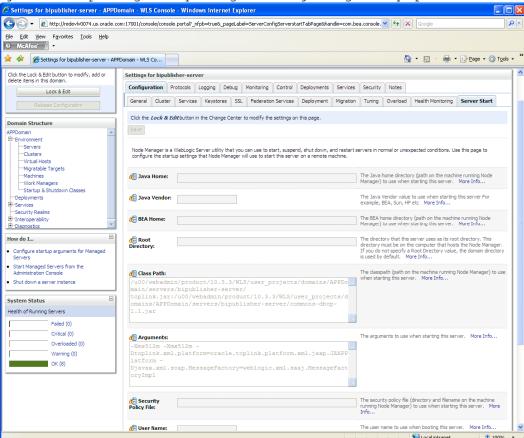
Following steps are the additional set up steps required before deploying the BI application in WebLogic.

- 1. Shutdown the bipublisher managed server created above.
- **2.** Add the following option to the startWebLogic.sh script for the server on which the BI Publisher instance is installed.

```
JAVA_OPTIONS="${JAVA_OPTIONS} -
Dtoplink.xml.platform=oracle.toplink.platform.xml.jaxp.JAXPPlatform"
```

- **3.** Locate the below mentioned jar files in <BI\_DEPLOYMENT>/xmlpserver/WEB-INF/lib and add the libraries in your installation (example: copy the jars to the location
  - <WLS\_HOME/user\_projects/domains/<domain\_home>/servers/bipublisher-server/). Append the path of the libraries to the Java classpath for the bipublisher managed server in the weblogic admin console (Classpath in weblogic admin console is available in the path: Weblogic Administration console->Servers->BIPublisher managed server->Server Start-> Classpath)
  - ojdbc14.jar
  - bijdbc14.jar
  - toplink.jar
  - commons-dbcp-1.1.jar
- **4.** Add the following arguments to the arguments of the java launcher (Arguments in weblogic admin console is available in the path: Weblogic Administration console->Servers->BIPublisher managed server->Server Start-> Arguments)
  - -Xms512m -Xmx512m -

Dtoplink.xml.platform=oracle.toplink.platform.xml.jaxp.JAXPPlatform - Djavax.xml.soap.MessageFactory=WebLogic.xml.saaj.MessageFactoryImpl



**5.** Restart the WebLogic server.

# Deploying the BI Application in WebLogic

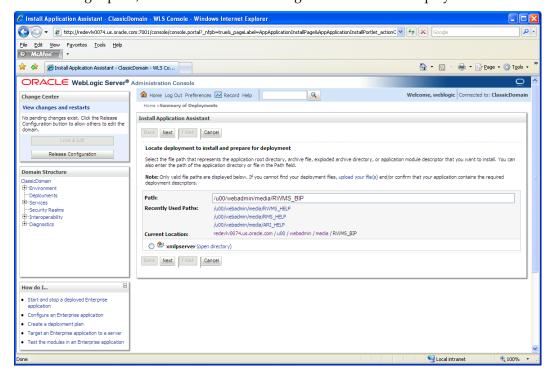
The exploded archive directory created above in "Creating an Exploded Directory for the Installation" must now be deployed into the bipublisher managed server of WebLogic. Deployment can be achieved in a number of ways but we will use the WebLogic Administration Console and the following steps.

Open the WebLogic Administration console web page by typing the appropriate URL for the WebLogic admin server.

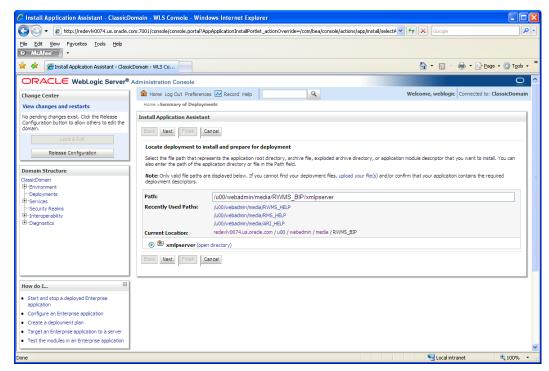
#### For example,

http://wls\_srv:7001/console

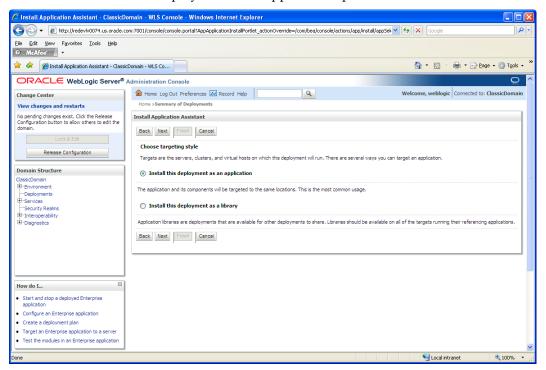
- 1. Log on to the console using an administrator user name and password.
- 2. In the Change Center of the Administration Console, click Lock & Edit.
- 3. In the left pane of the Administration Console, click **Deployments**.
- **4.** In the right pane, click **Install**. The following screen should be displayed.



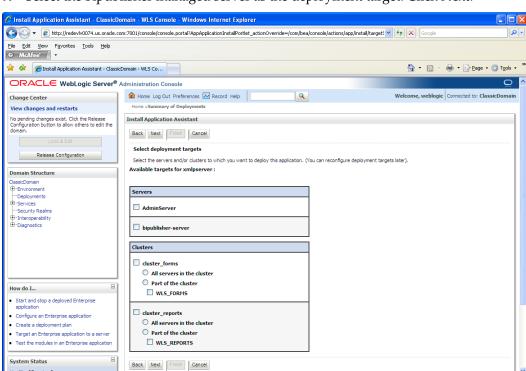
**5.** Select the exploded directory referenced by <BI\_DEPLOYMENT>/xmlpserver. Click **Next**.



6. Select the Install this deployment as an application option. Click Next.



Health of Running Servers

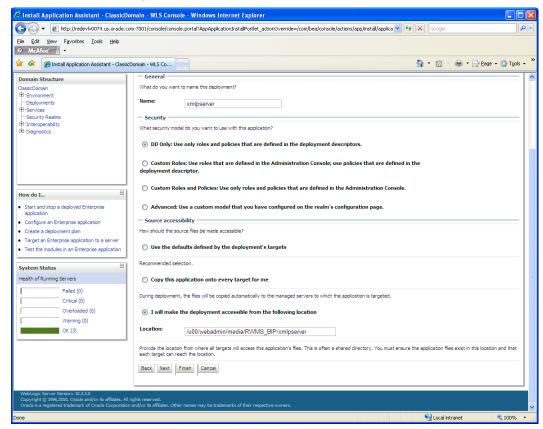


S Local intranet

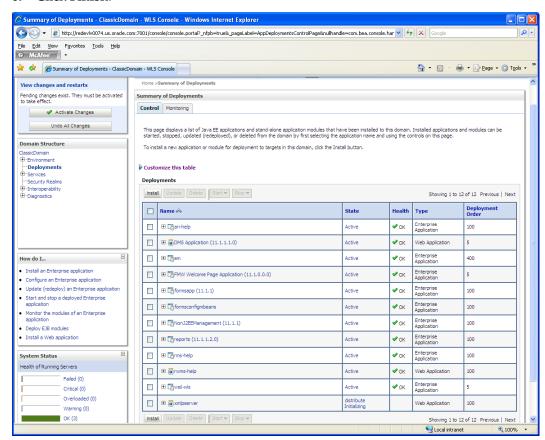
**4** 100%

7. Select the bipublisher managed server as the deployment target. Click Next.

**8.** Select **I** will make the deployment accessible from the following location from Source accessibility.

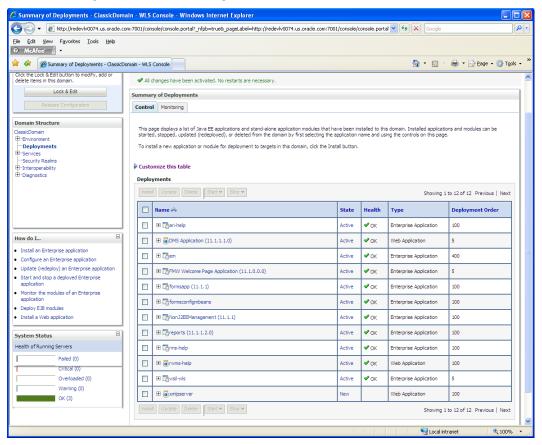


#### 9. Click Finish.



**10.** To activate these changes, in the **Change Center** of the Administration Console, click **Activate Changes**.

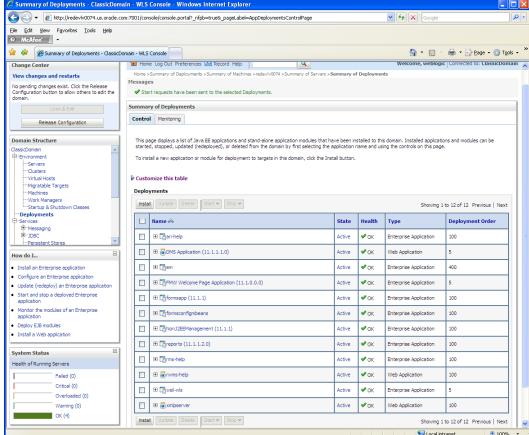
**11.** On the left side of the console, select Deployments. A list of deployments should now be showing in the table on the right.



12. Scroll down and select xmlpserver to start the service. The server's state should change to an active state when refreshed.

Summary of Deployments - ClassicDomain - WLS Console - Windows Internet Explorer

Left Wew Favorites Tools Heb



**13.** Launch BI Publisher using the appropriate URL for the WebLogic server appended by the web application context "/xmlpserver".

For example:

http://wls\_srv:7003/xmlpserver

# **Installing the RMS BI Publisher Templates**

In this section we will outline how the RMS report templates are installed into the appropriate BI server repositories.

Report files are placed by the application installer in the directory - " INSTALL\_DIR/base/reports" and have to be copied into the newly created directory.

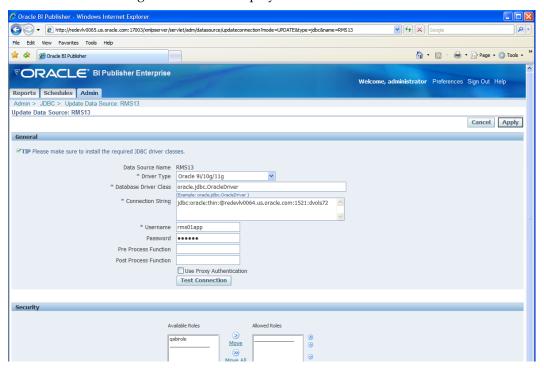
- Create a RMS directory to hold the reports under <BI\_REPOSITORY>/Reports/Guest.
   Example <BI\_REPOSITORY>Reports/Guest/RMS13
- 2. Change directory to the INSTALL\_DIR/base/reports used for the application install. This directory contains subdirectories whose names reflect the names of report templates provided with RMS.
- **3.** Copy each report directory into the directory created above For example,

cp -R \* /u00/webadmin/RMS\_BIP/xmlpserver/XMLP/Reports/Guest/RMS13/

# **Configuring the RMS JDBC connection**

Follow the below steps to configure JDBC connection for RMS Data Source name. This datasource RMS will be used for RMS reports.

- **1.** Log on with the default user ID and passwords for BI Publisher using the administrative user and password configured previously.
- **2.** Click the **Admin** tab and select the **JDBC Connection** hyperlink in the Data Sources lists. The following screen will be displayed:



**3.** Enter the appropriate details for the RMS data source. Once the data is entered, click Test Connection to test the connection.

#### Configuring the BIPublisher Scheduler

Complete the following tasks for scheduler configuration:

1. Create the database user for scheduler configuration as below:

```
create user <scheduler schema user> identified by <password> default tablespace  temporary tablespace temp; grant create session,create table to <scheduler schema user>; alter user <scheduler schema user> quota unlimited on ;
```

2. Navigate to the top level Admin display and select the **Scheduler Configuration** hyperlink. This will show you the following screen. Enter the appropriate database connection details and test the connection as previously done. If this connection operates successfully, save the connection details and proceed by clicking the Install Schema button. This installs the schema for BI publisher using the RWMS connection details.

**Note:** For information about configuring BI Publisher, use the following URL:

http://download.oracle.com/docs/cd/E12844\_01/doc/bip. 1013/e12690/T434820T487783.htm#5187634

Verify that Oracle BI Publisher has been set up correctly as follows:

- **3.** Click the **Admin** tab. Click **Report Repository** under System Maintenance. The Path variable should be set as part of the BI Publisher install, REPORTS\_DIR.
- **4.** Add the following values to the <installation name>.env file located here: \$WLS\_HOME/user\_projects/domains/<domain name>/config/fmwconfig/servers/WLS\_FORMS/applications/formsapp\_11.1.1/config/<installation name>/<installation name>.env
  - ORACLE\_RMS\_REPORTS\_HOST=http://<server>:<port>/
     For example,
     ORACLE\_RMS\_REPORTS\_HOST=http://redevlv0065.us.oracle.com:9004/
  - ORACLE\_RMS\_RWSERVER=/<location to RMS directory>/
     For example, ORACLE\_RMS\_RWSERVER=xmlpserver/Guest/RMS13/

# **Data Migration**

The 13.2 release includes a tool for upgrading prexisting data in the RMS schema to the ORFM 13.2 schema, once 13.2 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 Data Migration Tool, do the following.

- Make a backup of all your objects and database schema.
- Ensure that ORFM 13.2 is installed.
- Review the enclosed ORFM 13.2 Upgrade Release Notes (orfm-132-rn.pdf).
- Review each of the enclosed defect documents.

# **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 orfm1320datamigration.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 orfm1320datamigration.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 the document,

"oracle\_wallet\_setup\_for\_mom.doc" 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*.)
  - country\_atrib.dat

This file is used to update the country attributes for Brasil. 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
- comphead\_l10n\_ext.dat

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

- Company
- Taxpayer type
- Address line 1
- Address line 2
- Address line 3
- Neighborhood
- Jurisdiction code
- State
- Country
- Postal code
- CPF
- CNPI
- NIT
- SUFRAMA

- City inscription
- State inscription
- IPI contributor (Y/N)
- 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
- 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)
- 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
- CNPI
- 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)
- 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
- 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)

# **Run the ORFM Data Migration Tool**

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

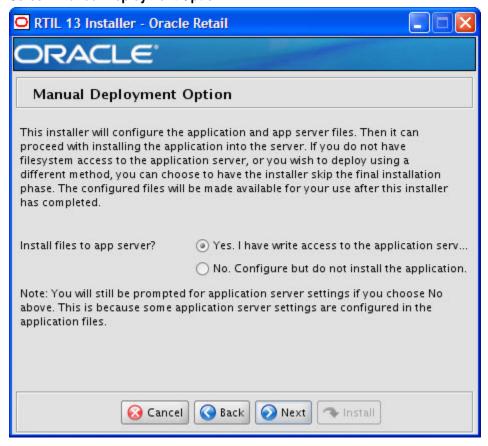
- 1. Change directories to STAGING\_DIR/master\_controller/rms/br.
- **2.** If rerunning the data migration process, clear the contents of the "processed" directory.
- **3.** Run prevalidation tool to ensure that the input files for the data migration tool is up to date:
  - \$ ./rms132\_br\_upgrade.ksh 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**

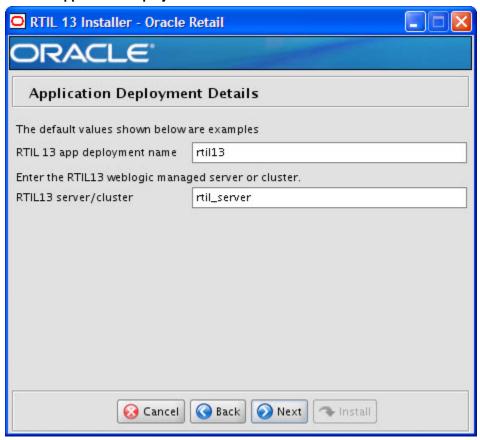
You need the following details about your environment for the installer to successfully deploy the RTIL application. Depending on the options you select, you may not see some screens or fields.

#### **Screen: Manual Deployment Option**



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.

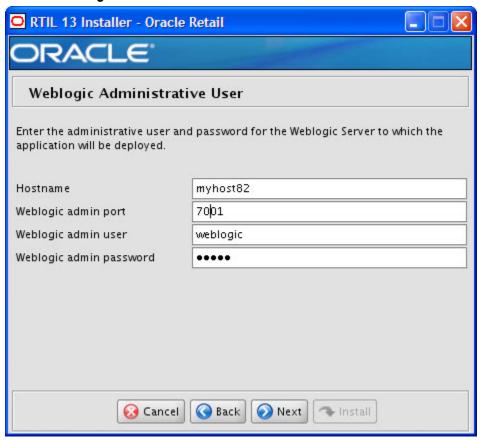
# **Screen: Application Deployment Details**



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



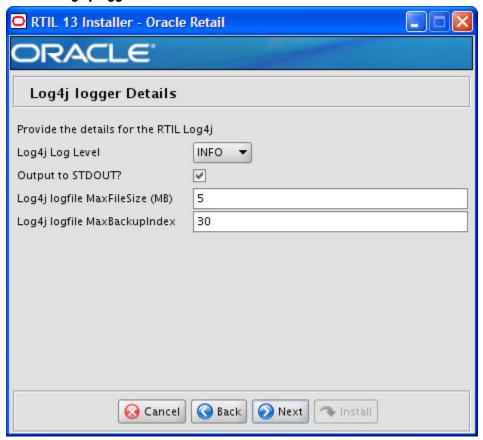
Field Title	Hostname
Field Description	Hostname of the application server
Example	Mspdv360

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



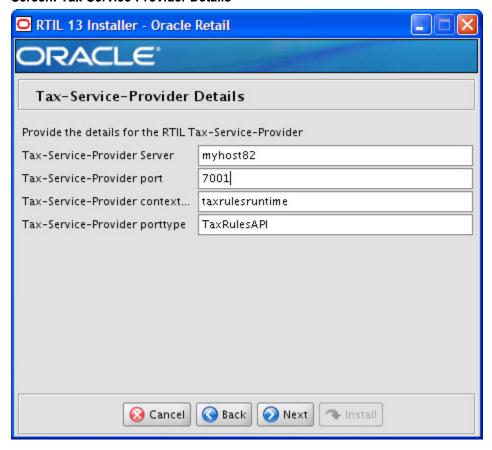
Field Title	Log4j Log Level
Field Description	Specifies the level at which the logging is enabled.
Example	INFO

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: Tax-Service-Provider Details



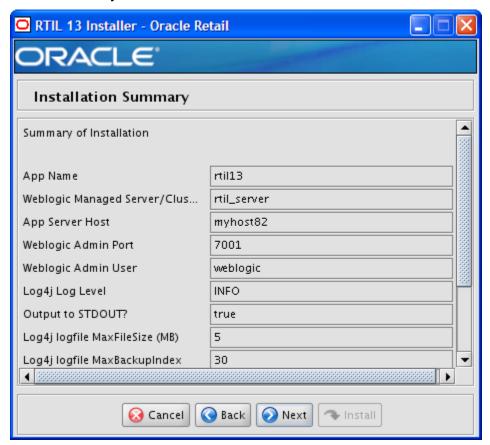
Field Title	Tax-Service-Provider Server
Field Description	Specifies the host server on which MasterSaf /Tax Service Provider is deployed.
Example	Mspdv360

Field Title	Tax-Service-Provider port
Field Description	Specifies the port number of managed Server (WebLogic) on which MasterSaf /Tax Service Provider application instance is deployed.
Example	17063

Field Title	Tax-Service-Provider context
Field Description	Specifies the application context root of the deployed MasterSaf/Tax Service Provider.
Example	taxrulesruntime

Field Title	Tax-Service-Provider porttype
Field Description	Specifies the port type of the deployed MasterSaf/Tax Service Provider.
Example	TaxRulesAPI

#### **Screen: Summary**



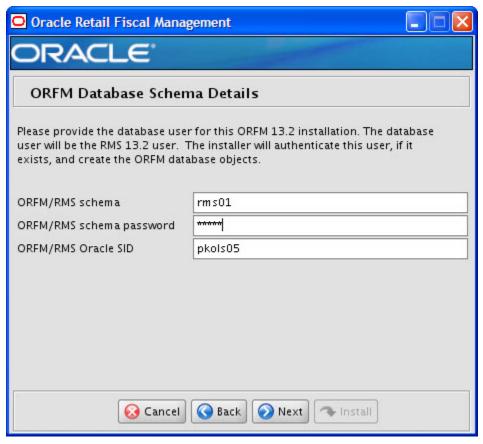
All fields on this summary screen are read-only. In GUI mode of the installer, this screen provides the opportunity to review inputs and go back to previous screens to correct them if necessary.

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

# Appendix: Database Schema Installer Screens

You need the following details about your environment for the installer to successfully install the ORFM database schema. Depending on the options you select, you may not see some screens.

Screen: ORFM Database Schema Details



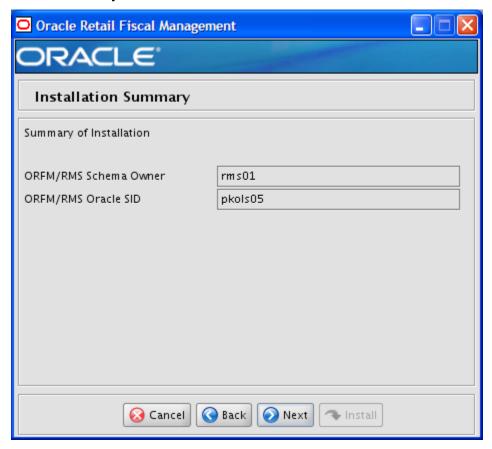
Field Title	ORFM/RMS schema
Field Description	Provide the ORFM/RMS database user here. The installer logs into the database as this user to create the ORFM db objects. This user must already exist in the database when the ORFM/RMS database schema installer is run.
Example	rms01

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

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

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

#### **Screen: Summary**



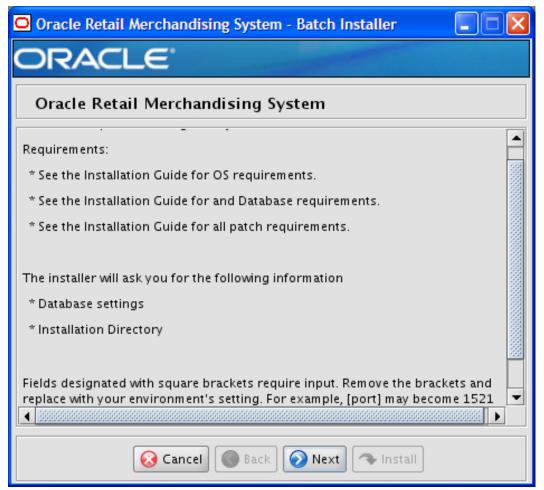
All of the fields on this summary screen are read-only. In GUI mode of the installer, this screen provides the opportunity to review inputs and go back to previous screens to correct them if necessary.

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 Batch Installer Screens**

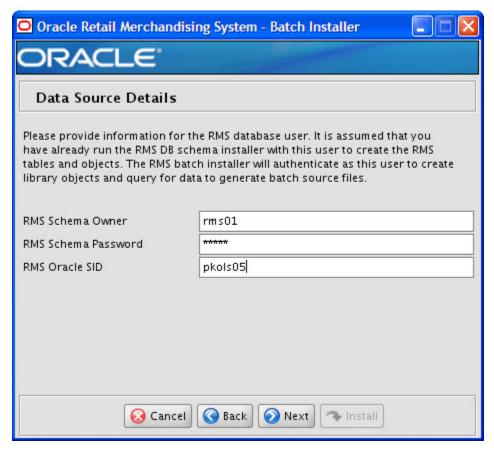
You need the following details about your environment for the installer to successfully compile and install the RMS batch programs. Depending on the options you select, you may not see some screens or fields.

Screen: Welcome



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

#### Screen: DataSourceDetails

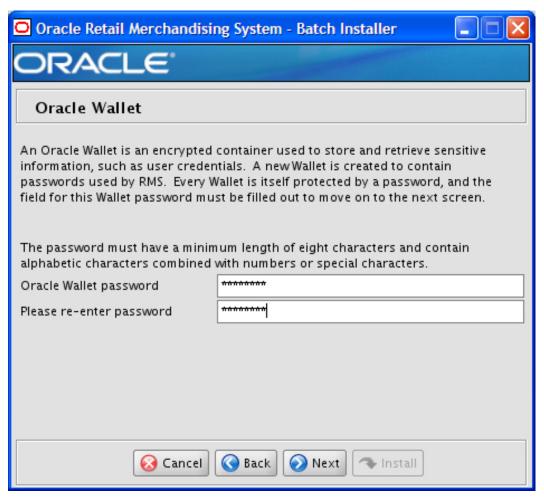


Field Title	RMS Schema Owner
Field Description	Provide the RMS database user here. The installer will log into the database as this user to create RMS library objects and query for data to generate batch source files. This user must already exist in the database and have the RMS tables installed.
Example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



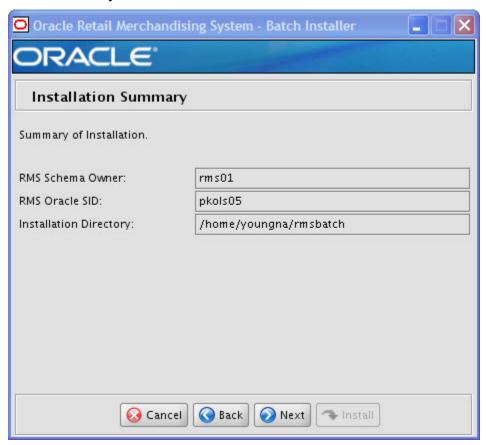
Field Title	Oracle Wallet password
Field Description	This is the password for the wallet that will store the database credentials that were supplied in the previous screen.

### **Screen: Batch Installation Directory**



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: Oracle Customer Information**

For information about this screen, see the *Oracle Configuration Manager Installer Guide*), as described earlier in this guide in the section, "Oracle Configuration Manager."

#### **Screen: Data Source Details**



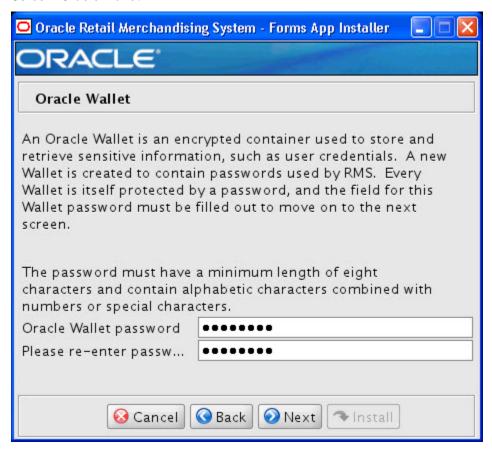
Field Title	RMS Schema Owner
Field Description	This is the same username that was used during the RMS Database Schema Installer.
Example	rms01

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 <b>Next</b> .	
	<b>Note:</b> If you get errors not related to incorrectly entered credentials, refer to Appendix F: Common Installation Errors.	

#### **Screen: Oracle Wallet**



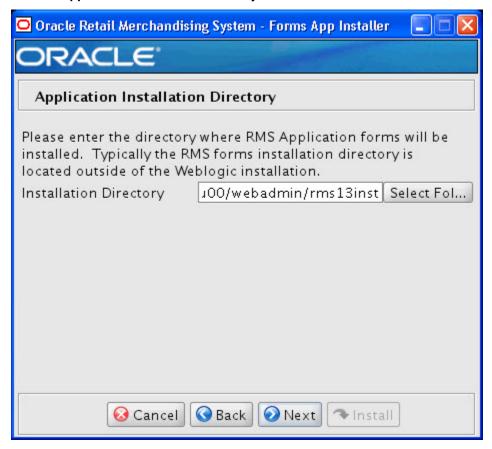
Field Title	Oracle Wallet password
Field Description	This is the password for the wallet that will store the database credentials that were supplied in the previous screen.

#### **Screen: Installation Name**



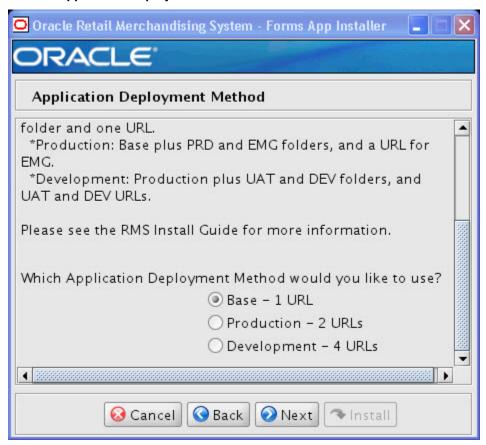
Field Title	Installation Name
Field Description	This value is used in conjunction the Oracle Configuration Manager (OCM). It gives the installation a unique name so the OCM can identify different installations of RMS in the same WebLogic instance.
Example	rms13inst

#### **Screen: Application Installation Directory**



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**



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 more information.				
Example	Base				

#### Screen: WebLogic Configuration



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

### **Screen: Weblogic Administrative Details**



Field Title	Hostname			
Field Description	Hostname of the application server.			
Example	mspdv161			

Field Title	VebLogic admin port			
Field Description	Listen port for the Weblogic Admin console			
Example	7001			

Field Title	WebLogic Admin User				
Field Description	User name 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**



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

#### **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.

## **Appendix: Installer Silent Mode**

## Repeating an Installation Attempt

In addition to the GUI and text interfaces of the ORFM/RMS installers, 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. The properties file is used in the second phase 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.** The installer screens remove any password properties from the ant.install.properties after they run. You may need to add these in to your properties file.
- **3.** 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.
- **4.** Run the installer again with the silent argument.

**Example:** install.sh silent

## **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 thsping 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 1.4.2 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 checkLockFileOErrorCode

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:

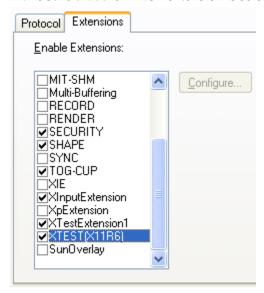
XTEST extension not installed on this X server: Error 0

#### 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.

## Couldn't exect 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:

#### 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.
```

#### 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

## **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 make sure the variable "use32bit" is set to "true" if you are on a 32 bit platform, and "false" if you are on a 64 bit platform.

## 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
```

How to set traditional tracing are discussed more in detail in My Oracle Support Note 219968.1 SQL\*Net, Net8, Oracle Net Services - Tracing and Logging at a Glance.

### 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" you get an error message on the screen saying ""no ocijdbc11 in java.library.path" that 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**. But the installer will attempt to validate once again when installation starts, and the installer will fail if the credentials are incorrect.

## **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 Derver 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/rsm12

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.

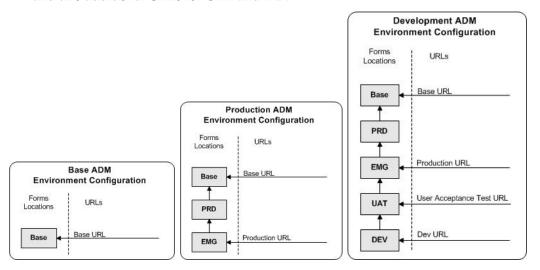
Example: iiop://myhost:2809

## **Appendix: Application Deployment Method**

The RMS installer provides the option to configure multiple application deployment methods. This is a setup with a single primary RMS installation. But there are additional levels where customization can occur, which could mean 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.0
- **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 diagrams above 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 establish the structure for customizations and fixes that the user can make after installation is complete.

# 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, then the argument to a program would be the following:

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:

```
kstore -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 the thin ames or a file to include the following entry for each alias name to be set up.

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, RWMS, RPM Batch, RETL, RMS, RWMS, 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 the alias that was setup in the wallet's the that was setup in the wallet's the that was setup in the wallet's the user name and password to the custom the alias that was setup in the wallet's the user name and password to the custom the setup that was setup in the wallet's the user name and password to the custom the alias that was setup in the wallet's the user name and password to the custom the alias that was setup in the wallet's the user name and password to the custom the alias that was setup in the wallet's the user name and password to the custom the alias that was setup in the wallet's the user name and password to the custom the alias that was setup in the wallet's the password to the custom the alias that was setup in the wallet's the password to the custom the alias that was setup in the wallet's the password to the custom the alias that was setup in the wallet's the password to the custom the alias that was setup in the wallet's the password to the custom the alias that was setup in the wallet's the password to the custom the alias that was setup in the wallet's the alias that was setup in the wallet was the custom the custom

```
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_rms0luser
script.sh /@dvols29_rms0luser

Set the UP unix variable to help with some compiles:

export UP=/@dvols29_rms0luser
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_rms0luser rms0luser 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_rms0luser
mkstore -wrl . -viewEntry oracle.security.client.user1
Returns value of the entry:
rms0luser
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\_credentials.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
```

 $\label{location:/u00/webadmin/product/10.3.3/WLS/user\_projects/domains/132\_mck\_soa\_domain/sim-client/csm$ 

```
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:reiml3
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 credentials.sh

Save\_credentials.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.

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 wallet\_test -a myalias -p mypartition -u myuser

\_\_\_\_\_

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 which is used in application code for each Java application.

save\_credentials.sh and dump\_credentials.sh scripts are the same for all applications.

#### Usage:

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 tie back 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:

```
\verb|datasource.url=jdbc:oracle:thin:@mspdv349.us.oracle.com:1521:pkols07| | datasource.schema.owner=rms132mock| | datasource.schema.owner=rms132mo
```

#### datasource.credential.alias=RMS-ALIAS

csm.wallet.path=/u00/webadmin/product/10.3.3/WLS/user\_projects/domains/132\_mck\_soa \_domain/retail/reim13/config csm.wallet.partition.name=reim

## How does the Wallet tie back to java pgm batch use (such as REIM batch)?

Some of the ORACLE Retail Java batch applicationss have an alias to use when running Java batch programs. For example, alias REIMBAT-ALIAS maps through the wallet to dbuser 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  $\mbox{SMMHOME/RETLforRPAS/rfx/etc/rmse\_rpas\_config.env}$ .

- The RETL\_WALLET\_ALIAS should point to the Java wallet entry: export RETL\_WALLET\_ALIAS="retl\_java\_rms0luser"
- 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 loc	Wallet partition	Alias name	User name	Use	Create by	Alias Example	Notes
RMS batch	DB	<rms batch="" dir<br="" install="">(MMHOME)&gt;/.wallet</rms>	n/a	<database SID&gt;_<data base schema owner&gt;</data </database 	<rms schema owner&gt;</rms 	Compile, execution	Installer	n/a	Alias hard-coded by installer
RMS forms	DB	<forms install<br="">dir&gt;/base/.wallet</forms>	n/a	<database SID&gt;_<data base schema owner&gt;</data </database 	<rms schema owner&gt;</rms 	Compile	Installer	n/a	Alias hard-coded by installer
ARI forms	DB	<forms dir="" install="">/base/.wallet</forms>	n/a	<db_ari01></db_ari01>	<ari schema<br="">owner&gt;</ari>	Compile	Manual	ari-alias	
RMWS forms	DB	<forms install<br="">dir&gt;/base/.wallet</forms>	n/a	<database SID&gt;_<data base schema owner&gt;</data </database 	<rwms schema owner&gt;</rwms 	Compile forms, execute batch	Installer	n/a	Alias hard-coded by installer
RPM арр	DB	<rpm batch="" dir="" install="">/.wallet</rpm>	n/a	<rms schema owner alias&gt;</rms 	<rms schema owner&gt;</rms 	Execute batch	Manual	rms-alias	
RWMS auto- login	JAVA	<forms dir="" install="">/base/.javawallet</forms>							
			<rwms Installation name&gt;</rwms 	<rwms database user alias&gt;</rwms 	<rwms schema owner&gt;</rwms 	RWMS forms app to avoid dblogin screen	Installer	rwms13inst	
			<rwms Installation name&gt;</rwms 	BI_ALIAS	<bi Publisher administrat ive user&gt;</bi 	RWMS forms app to connect to BI Publisher	Installer	n/a	Alias hard-coded by installer

Retail app	Wallet type	Wallet loc	Wallet partition	Alias name	User name	Use	Create by	Alias Example	Notes
AIP app	JAVA	<pre><weblogic domain="" home="">/retail/<deployed aip="" app="" name="">/config</deployed></weblogic></pre>							Each alias must be unique
			aip13	<aip weblogic user alias&gt;</aip 	<aip weblogic user name&gt;</aip 	App use	Installer	aip- weblogic- alias	
			aip13	<aip database schema user alias&gt;</aip 	<aip database schema user name&gt;</aip 	App use	Installer	aip01user- alias	
			aip13	<rib-aip weblogic user alias&gt;</rib-aip 	<rib-aip weblogic user name&gt;</rib-aip 	App use	Installer	rib-aip- weblogic- alias	
RPM арр	JAVA	<pre><weblogic domain="" home="">/retail/<deployed app="" name="" rpm="">/config</deployed></weblogic></pre>							Each alias must be unique
			rpm13	<rpm weblogic user alias&gt;</rpm 	<rpm weblogic user name&gt;</rpm 	App use	Installer	rpm- weblogic- alias	
			rpm13	<rms shema<br="">user alias&gt;</rms>	<rms shema user name&gt;</rms 	App, batch use	Installer	rms01user- alias	
			rpm13	<rpm application user one alias&gt;</rpm 	<rpm application user one name&gt;</rpm 	App use	Installer	user1-alias	

Retail app	Wallet type	Wallet loc	Wallet partition	Alias name	User name	Use	Create by	Alias Example	Notes
			rpm13	<rpm application user two alias&gt;</rpm 	<rpm application user two name&gt;</rpm 	App use	Installer	user2-alias	
			rpm13	<rpm alias="" batch="" user=""></rpm>	<rpm batch="" name="" user=""></rpm>	App, batch use	Installer	rpmbatch- alias	
			rpm13	<rib-rpm weblogic user alias&gt;</rib-rpm 	<rib-rpm weblogic user name&gt;</rib-rpm 	App use	Installer	rib-rpm- weblogic- alias	
ReIM app	JAVA	<pre><weblogic domain="" home="">/retail/<deployed app="" name="" reim="">/config</deployed></weblogic></pre>							Each alias must be unique
			<installed app="" name=""></installed>	<reim weblogic user alias&gt;</reim 	<reim weblogic user name&gt;</reim 	App use	Installer	weblogic- alias	
			<installed app="" name=""></installed>	<rms shema<br="">user alias&gt;</rms>	<rms shema user name&gt;</rms 	App, batch use	Installer	rms01user- alias	
			<installed app="" name=""></installed>	<reim webservice validation user alias&gt;</reim 	<reim webservice validation user name&gt;</reim 	App use	Installer	reimwebser vice-alias	
			<installed app="" name=""></installed>	<reim batch<br="">user alias&gt;</reim>	<reim batch="" name="" user=""></reim>	App, batch use	Installer	REIMBAT- ALIAS	
Alloc app	JAVA	<pre><weblogic domain="" home="">/retail/<deployed alloc="" app="" name="">/config</deployed></weblogic></pre>							Each alias must be unique

Retail app	Wallet type	Wallet loc	Wallet partition	Alias name	User name	Use	Create by	Alias Example	Notes
			<installed app="" name=""></installed>	<alloc weblogic user alias&gt;</alloc 	<alloc weblogic user name&gt;</alloc 	App use	Installer	weblogic- alias	
			<installed app="" name=""></installed>	<rms shema<br="">user alias&gt;</rms>	<rms shema user name&gt;</rms 	App use	Installer	rms01user- alias	
			<installed app="" name=""></installed>	<rsl for="" rms<br="">weblogic user alias&gt;</rsl>	<rsl for="" rms<br="">weblogic user name&gt;</rsl>	App use	Installer	rsl-rms- weblogic- alias	
RSL app	JAVA	<rsl dir="" install="">/rsl-rms/security/config</rsl>							Each alias must be unique
			rsl-rsm	<rsl weblogic user alias&gt;</rsl 	<rsl weblogic user name&gt;</rsl 	App use	Installer	weblogic- alias	
			rsl-rsm	<rms shema<br="">user alias&gt;</rms>	<rms shema user name&gt;</rms 	App use	Installer	rms01user- alias	
SIM app	JAVA	<weblogic domain<br="">home&gt;/sim-client/csm</weblogic>							
			rpm	<rpm weblogic user alias&gt;</rpm 	<rpm weblogic user name&gt;</rpm 	App use	Installer	rpm- weblogic- alias	
			rms	<rsl for="" rms<br="">weblogic user alias&gt;</rsl>	<rsl for="" rms<br="">weblogic user name&gt;</rsl>	App use	Installer	rsl-rms- weblogic- alias	
			rib-sim	<rib-sim weblogic user alias&gt;</rib-sim 	<rib-sim weblogic user name&gt;</rib-sim 	App use	Installer	rib-sim- weblogic- alias	
RETL	JAVA	<retl home&gt;/etc/security</retl 	n/a	<target application user alias&gt;</target 	<target application db userid&gt;</target 	App use	Manual	retl_java_rm s01user	User may vary depending on RETL flow's target application

Retail app	Wallet type	Wallet loc	Wallet partition	Alias name	User name	Use	Create by	Alias Example	Notes
RETL	DB	<retl home="">/.wallet</retl>	n/a	<target application user alias&gt;</target 	<target application db userid&gt;</target 	App use	Manual	<db>_<user &gt;</user </db>	User may vary depending on RETL flow's target application
RIB	JAVA	<ribhome DIR&gt;/deployment- home/conf/security</ribhome 							<app> is one of aip, rfm, rms, rpm, sim, rwms, tafr</app>
JMS			jms<1-5>	<jms user<br="">alias&gt; for jms&lt;1-5&gt;</jms>	<jms user<br="">name&gt; for jms&lt;1-5&gt;</jms>	Integra- tion use	Installer	jms-alias	
WebLogic			rib- <app>- app-server- instance</app>	<rib-app weblogic user alias&gt;</rib-app 	<rib-app weblogic user name&gt;</rib-app 	Integra- tion use	Installer	weblogic- alias	
Admin GUI			rib- <app>#web- app-user- alias</app>	<rib-app admin gui user alias&gt;</rib-app 	<rib-app admin gui user name&gt;</rib-app 	Integra- tion use	Installer	admin-gui- alias	
Application			rib- <app>#user- alias</app>	<app weblogic user alias&gt;</app 	<app weblogic user name&gt;</app 	Integra- tion use	Installer	app-user- alias	Valid only for aip, rpm, sim
DB			rib- <app>#app- db-user-alias</app>	<rib-app database schema user alias&gt;</rib-app 	<rib-app database schema user name&gt;</rib-app 	Integra- tion use	Installer	db-user- alias	Valid only for rfm, rms, rwms, tafr
Error Hospital			rib- <app>#hosp -user-alias</app>	<rib-app error hospital database schema user alias&gt;</rib-app 	<rib-app error hospital database schema user name&gt;</rib-app 	Integra- tion use	Installer	hosp-user- alias	

# Appendix: Configure Listener for External Procedures

**Note:** This example illustrates the listener configuration required for external procedures. It does not include environment specific settings that may be needed. Consult Oracle Net Services guides for additional information.

```
# File: listener.ora
# Desc: Oracle Net8 listener file.
# Notes: Modify <hostname>
LISTENER =
 (DESCRIPTION_LIST =
   (DESCRIPTION =
    (PROTOCOL_STACK =
      (PRESENTATION = TTC)
      (SESSION = NS))
    (ADDRESS =
      (PROTOCOL = tcp)
      (HOST = <hostname>)
      (PORT = 1521)
    (ADDRESS =
      (PROTOCOL = IPC)
      (KEY = extproc_key))
SID_LIST_LISTENER =
 (SID_LIST =
   (SID_DESC =
    (PROGRAM = extproc)
    (SID_NAME = extproc_agent)
    (ENVS='EXTPROC_DLLS=ANY')
```

**Note:** This example illustrates the configuration of net services names required for external procedures. It does not include environment specific settings that may be needed. Consult Oracle Net Services guides for additional information

```
# File: tnsnames.ora
# Desc: Net Services configuration file.
# Note: Change these values: <service_name>, <oracle_sid>, <hostname>,
#
       <global_name>
EXTPROC_CONNECTION_DATA =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = IPC)(Key = extproc_key)))
   (CONNECT_DATA = (SID = extproc_agent)))
EXTPROC CONNECTION DATA.world =
  (DESCRIPTION =
    (ADDRESS LIST = (ADDRESS = (PROTOCOL = IPC)(Key = extproc key)))
   (CONNECT_DATA = (SID = extproc_agent)))
<service_name> =
  (DESCRIPTION =
   (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)(host = <hostname>)(Port = 1521)))
   (CONNECT_DATA = (SID = <oracle_sid>) (GLOBAL_NAME = <global_name>)))
<service_name>.world =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)(host = <hostname>)(Port = 1521)))
   (CONNECT_DATA = (SID = <oracle_sid>) (GLOBAL_NAME = <global_name>)))
Example:
EXTPROC CONNECTION DATA =
  (DESCRIPTION =
   (ADDRESS_LIST = (ADDRESS = (PROTOCOL = IPC)(Key = extproc_key)))
    (CONNECT_DATA = (SID = extproc_agent)))
EXTPROC CONNECTION DATA.world =
  (DESCRIPTION =
   (ADDRESS LIST = (ADDRESS = (PROTOCOL = IPC)(Key = extproc key)))
   (CONNECT_DATA = (SID = extproc_agent)))
prod db1 =
  (DESCRIPTION =
   (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)(host = server_01)(Port = 1521)))
   (CONNECT_DATA = (SID = prod_db1) (GLOBAL_NAME = prod_db1.world)))
prod_dbl.world =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)(host = server_01)(Port = 1521)))
   (CONNECT_DATA = (SID = prod_db1) (GLOBAL_NAME = prod_db1.world)))
```

# **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 some, but not all, 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**

 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 Allocation
- **7.** Oracle Retail Invoice Matching (ReIM)
- **8.** Oracle Retail Price Management (RPM)

**Note:** During installation of RPM, you are asked for the RIBforRPM provider URL. Since RIB is installed after RPM, make a note of the URL you enter. If you need to change the RIBforRPM provider URL after you install RIB, you can do so by editing the remote\_service\_locator\_info\_ribserver.xml file.

- **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. Since RIB is installed after SIM, make a note of the URL you enter. If you need to change the RIB provider URL after you install RIB, you can do so by editing 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 Workspace (ORW)