

Oracle® Retail Merchandising System

Installation Guide

Release 13.2.4

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Send Us Your Comments

Oracle Retail Merchandising System Installation Guide, Release 13.2.4

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?
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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 www.oracle.com. 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).

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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

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

- *Oracle Retail Merchandising System Release Notes*
- *Oracle Retail Merchandising System Installation Guide*
- *Oracle Retail Merchandising System Operations Guide*
- *Oracle Retail Merchandising System Data Model*
- *Oracle Retail Merchandising System Custom Flex Attribute Solution Implementation Guide*
- *Oracle Retail POS Suite/Merchandising Operations Management Implementation Guide*
- *Oracle Retail Merchandising Batch Schedule*
- *Oracle Retail Merchandising Implementation Guide*

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:
<https://support.oracle.com>

When contacting Customer Support, 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, 13.2.4). 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

Note: The RMS installer provides the option to configure multiple application deployment methods. See “[Appendix: Application Deployment Method](#)” to help determine your deployment approach.

Patch Contents

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

Check for the Current Version of the Installation Guide

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

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

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

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

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

Implementation Capacity Planning

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

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

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

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

A Note to Retailers Using the Croatian Language

See My Oracle Support document ID #393320.1 for important information regarding steps to enable the Croatian language for Forms and Reports.

A Note to Brazil Localization Retailers

If you are using Oracle Retail Fiscal Management (ORFM)/Brazil localization, you must read the entire *ORFM/RMS Brazil Localization Installation Guide* before proceeding with this *RMS Installation Guide*. The database installation order for RMS and ORFM must be followed exactly.

Check Supported Database Server Requirements

General requirements for a database server running RMS include:

Supported on:	Versions Supported:
Database Server OS	OS certified with Oracle Database 11gR2 Enterprise Edition. Options are: <ul style="list-style-type: none"> ▪ Oracle Linux 5 Update 5 for x86-64 (Actual hardware or Oracle virtual machine). ▪ Red Hat Enterprise Linux 5 Update 5 (RHEL 5.5) for x86-64 (Actual hardware or Oracle virtual machine). ▪ AIX 6.1 (Actual hardware or LPARs) ▪ Solaris 10 Sparc (Actual hardware or logical domains) ▪ HP-UX 11.31 Integrity (Actual hardware, HPVM, or vPars)
Database Server 11gR2	Oracle Database Enterprise Edition 11gR2 (11.2.0.2) with the following specifications: Components: <ul style="list-style-type: none"> ▪ Oracle Partitioning ▪ Examples CD (Formerly the companion CD) Patches: <ul style="list-style-type: none"> ▪ 10170431 - CTWR CONSUMING LOTS OF CPU CYCLES Apply the following patch to database home if ASM is used. <ul style="list-style-type: none"> ▪ 11808931 - MERGE REQUEST ON TOP OF 11.2.0.2.0 FOR BUGS 10410054 10422126 To verify patch level, set ORACLE_HOME, change directory to \$ORACLE_HOME/OPatch, and from the command line run: opatch lsinventory. This will show the applied patches. Other components: <ul style="list-style-type: none"> ▪ Perl compiler 5.0 or later ▪ X-Windows interface ▪ ANSI compliant C-compiler (certified with OS and database version).

Check Supported Application Server Requirements

General requirements for an application server capable of running RMS 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 \$ORACLE_HOME/utils/ccr/lib directory outside of the parent directory prior to applying a patch using OPatch, and recopy the lib directory back after you apply any patches. (If you backup the lib dir inside of the ccr dir, it will get overwritten when OPatch is run.)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 (11.1.1.4). Options are: <ul style="list-style-type: none"> ▪ Oracle Linux 5 Update 5 for x86-64 (Actual hardware or Oracle virtual machine). ▪ Red Hat Enterprise Linux 5 Update 5 (RHEL 5.5) for x86-64 (Actual hardware or Oracle virtual machine). ▪ AIX 6.1 (Actual hardware or LPARs) ▪ Solaris 10 Sparc (Actual hardware or logical domains) ▪ HP-UX 11.31 Integrity (Actual hardware, HPVM, or vPars)

Supported on	Versions Supported
Application Server	<p>Oracle Fusion Middleware 11g Release 1 (11.1.1.4) with the following one off patches</p> <ul style="list-style-type: none"> ▪ Patch 6880880: New Opatch version for Linux 64-bit. ▪ Patch 9438799 (Linux only): FORMS FAIL WITH FRM-93652 WHEN RECORD=NAMES IS SET AND LOV IS ACCESSED <p>Note: First apply prerequisite patch 12759877 mentioned in the README for Patch 9438799.</p> <ul style="list-style-type: none"> ▪ Patch 12361041: FRM-93652 while calling the scroll bar property from forms 11.1.1.4 <p>Note: Apply any prerequisite patches mentioned in the README for Patch 12361041.</p> <ul style="list-style-type: none"> ▪ Patches specific to OS: <ul style="list-style-type: none"> – Patch 13403345 for Sparc Solaris – Patch 13032871 for HP-UX Itanium – Patch 12836110 AIX – Patch 12759877 for Linux 64 bit supperceded the Linux patch listed in the README for Patch 12361041. <p>Components:</p> <ul style="list-style-type: none"> ▪ Oracle WebLogic Server 11g Release 1 (10.3.4) ▪ Oracle Forms Services 11g Release 1 (11.1.1.4) ▪ Java: <ul style="list-style-type: none"> JDK 1.6.0+ 64 bit or Jrockit 1.6 R28 build or later, within the 1.6 code line. 64 bit. For Linux and Solaris OS only. <p>IMPORTANT: If there is an existing WebLogic 10.3.3 installation on the server, you must upgrade WebLogic 10.3.3 to WebLogic 10.3.4. All middleware components associated with WebLogic server 10.3.3 should be upgraded to 11.1.1.4.</p> <p>Back up the weblogic.policy file (\$WLS_HOME/wlserver_10.3/server/lib) before upgrading your WebLogic server, because this file could be overwritten. Copy over the weblogic.policy backup file after the WebLogic upgrade is finished and the post patching installation steps are completed.</p> <p>For information on how to complete the upgrade to WebLogic 10.3.4, see the My Oracle Support document, "How to Upgrade from WebLogic11g 10.3.3 to WebLogic11g 10.3.4" (ID 1432575.1).</p> <p>Optional (SSO required)</p> <ul style="list-style-type: none"> ▪ Oracle SSO Server 10.1.4.3 ▪ Oracle Internet Directory 10g (10.1.4.3) or Oracle Internet Directory 11g (11.1.1.5) (must have separate WebLogic 10.3.5 for OID 11g) <p>Other components:</p> <ul style="list-style-type: none"> ▪ Oracle BI Publisher 10g (10.1.3.4)

Verify Single Sign-On

If a Single Sign-On is to be used, verify the Oracle Infrastructure Server 10g version 10.1.4.3 or Oracle Infrastructure Server 11g version Oracle 11.1.1.5 server has been installed. Verify the Oracle HTTP server hosting Oracle Forms is registered with the Infrastructure Oracle Internet Directory.

Check 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
Oracle (Sun) Java Runtime Environment	1.6.0_18
Browser	Microsoft Internet Explorer version 8.0 Mozilla Firefox 3.6.23

Supported Oracle Retail Products

Product	Version
Oracle Retail Analytics	13.2.4
Oracle Retail Active Retail Intelligence (ARI)	13.2
Oracle Retail Price Management (RPM)	13.2.4
Oracle Retail Allocation	13.2.4
Oracle Retail Invoice Matching (ReIM)	13.2.4
Oracle Retail Store Inventory Management (SIM)	13.2.4
Oracle Retail Warehouse Management System (RWMS)	13.2.4
Oracle Retail Advanced Inventory Planning (AIP)	13.2.4
Oracle Retail Merchandise Financial Planning (MFP)	13.3
Oracle Retail Demand Forecasting (RDF)	13.3
Oracle Retail Grade	13.3
Oracle Retail Predictive Application Server (RPAS)	13.3
Oracle Retail POS Suite	13.4.1

Supported Oracle Retail Integration Technologies

Integration Technology	Version
Oracle Retail Extract, Transform and Load (RETL)	13.2.4
Oracle Retail Integration Bus (RIB)	13.2.4
Oracle Retail Service Layer (RSL)	13.2.4

Supported Oracle Applications

Requirement	Version
Oracle E-Business Suite (General Ledger and Accounts Payable)	Oracle Application Integration Architecture (AIA) Media Pack 2.5 Oracle E-Business Suite 12.1.1 and 12.1.3 integration is supported using the Oracle Financial Operations Control Integration Pack for Oracle Retail Merchandising Suite and Oracle E-Business Suite Financials. See the <i>Oracle® Application Integration Architecture 2.5: Installation and Upgrade Guide</i> for specific version information.
PeopleSoft Enterprise Financials	Oracle Application Integration Architecture (AIA) Media Pack 2.5 PeopleSoft Enterprise Financials integration is supported using the Oracle Retail Merchandising Integration Pack for PeopleSoft Enterprise Financials: Financial Operations Control. See the <i>Oracle® Application Integration Architecture 2.5: Installation and Upgrade Guide</i> for specific version information.

Verify RMS and SIM Inventory Adjustment Reason Codes

SIM and RMS must have the same inventory adjustment reason codes to work properly, with the exception of the Pending Reason Code, which is used for internal purposes only.

RAC and Clustering

The Oracle Retail Merchandising has been validated to run in two configurations on Linux:

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

The Oracle Retail products have been validated against an 11.2.0.2 RAC database. When using a RAC database, all JDBC connections should be configured to use THIN connections rather than OCI connections

Clustering for WebLogic Server 10.3.4 is managed as an Active-Active cluster accessed through a Load Balancer. Validation has been completed utilizing a RAC 11.2.0.2 Oracle Internet Directory database with the WebLogic 10.3.4 cluster. It is suggested that a Web Tier 11.1.1.4 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 E16795-11

Patch Installation

The database portion of RMS can be upgraded from release 13.1.2 or patched from any 13.2.x release. This guide details the steps needed to perform a patch installation of RMS. For additional information on the upgrade, see the My Oracle Support document, *Oracle Retail Upgrade Guide* (ID 1073414.1).

The following chapters document the patch process:

- Chapter 4 RMS Database Installation – Patch
- Chapter 5 Batch Installation Tasks – Patch
- Chapter 6 Application Server Installation Tasks – Patch
- Chapter 7 RMS Reports Installation – Patch
- Chapter 8 Data Migration
- Chapter 9 WebServices Installation

RMS Database Installation — Patch

There are two different methods to use for installing the RMS 13.2.4 database schema patch. Option 1 uses the installer to apply the patch. Option 2 uses the patch controller scripts directly.

Note: The patching mechanism has been updated for the 13.2 release. Any patches that were released prior to 13.2 (For example, 13.1.1 and 13.1.2) will not be compatible with this installer.

Note: If any RMS, RPM, ReIM or Allocation hot fixes have been applied to the schema after 13.2, be aware that using the installer or controller scripts to apply the 13.2.4 patch can have unexpected results. You will need to decide if it is safe to run all the scripts in the patch, or if the scripts need to be selectively run.

Note: If you are patching from 13.2.1 or from an earlier release, and you have not already run the Data Migration utility in a previous release, this utility should be run after applying the 13.2.2 deltas and before applying any later patches (for example, 13.2.3). See Chapter 8, "[Data Migration](#)."

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

Note: If you are running the 13.2.1 patch as part of the database installation, you must make sure all the cost events for RECLASS are processed and purged before the 13.2.1 patch is applied. Ensure that before running this patch the table is empty and the existing data is already processed and purged in nightly batch. See "[Appendix: Common Installation Errors](#)" for more details.

Option 1: Patch RMS Database using the Patch Installer

The RMS 13.2.4 database schema patch installer may be used to apply the RMS patch. The installer should only be used to apply the patch if the schema being patched does not contain customizations or hot fixes. The patch may also be applied outside of the installer by calling the controller scripts directly. See “[Option 2: Patch RMS Database using Controller Scripts](#)” in this chapter for details on this method.

Before you apply the RMS 13.2.4 patch:

- Make a backup of all your objects and database schema.
- Determine which patches and hot fix bundles have already been installed.
- Review the enclosed RMS 13.2.4 Release Notes (rms-1324-rn.pdf).
- Review each of the enclosed defect documents.
- Make sure any applications that connect to the RMS schema are shut down. This includes RPM, ReIM, Allocation, RIB, and anything else that could be using the schema.

Create Staging Directory for RMS Database Schema Files

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

1. Log into the database server as a user that can connect to the RMS database.
2. Create a staging directory for the MOM 13.2.4 Patch. There should be a minimum of 1100 MB disk space available in this location.
3. Copy the mom-dbpatch.zip file from the RMS 13.2.4 release to the staging directory. This is referred to as DB_PATCH_DIR when patching a database schema.
4. Change directories to DB_PATCH_DIR and extract the mom-dbpatch.zip file. This creates a rms/dbschemapatch subdirectory under DB_PATCH_DIR

Edit controller ksh Scripts

To edit controller ksh scripts, complete the following steps.

1. Change directories to DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch.
2. For each product you are going to patch, edit the corresponding <product>_controller.ksh.

If you edit rms_controller.ksh, you must also edit rpm_controller.ksh and vice versa. alloc_controller.ksh and alloc_rms_controller.ksh must both be edited if patching Allocation. To edit these files, open up <product>_controller.ksh, and comment or uncomment the sections that perform the patches or hot fixes you want to apply. If you are patching from 13.2 and want to go to 13.2.4, you need to run all the patches up to 13.2.4. For this example you would need to edit the files to uncomment each patch after 13.2 (13.2.1, 13.2.2, and 13.2.3, 13.2.3.1, 13.2.3.2, 13.2.3.3, and 13.2.4).

If you are patching from 13.2.3 and want to go to 13.2.4, you need to run all the patches after 13.2.3 (13.2.3.1, 13.2.3.2, 13.2.3.3, and 13.2.4).

For this example you would not need to edit the files (the correct patches should already be uncommented in the default scripts).

Run the RMS Database Schema Patch Installer

Note: See “[Appendix: RMS Application Installer Screens](#)” for details on screens and fields in the RMS database schema patch installer.

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

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

Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

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

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

Variable	Description	Example
NLS_LANG	Locale setting for Oracle database client	NLS_LANG=AMERICAN_AMERICA.UTF8 export NLS_LANG
DISPLAY	Address and port of X server on desktop system of user running install. Optional for dbschema installer	DISPLAY=<IP address>:0.0 export DISPLAY

4. If you are going to run the installer in GUI mode using an X server, you need to have the XTEST extension enabled. This setting is not always enabled by default in your X server. See “[Appendix: Common Installation Errors](#)” for details.
5. If the patch installer has already been run in this location you may wish to back up the ant.install.properties file. The settings from the RMS 13.2.4 patch install will be refreshed with the latest input every time the installer runs.
6. Run the install.sh script to start the installer.

Note: Below are the usage details for install.sh. The typical usage for GUI mode is no arguments.

```
install.sh [text | silent]
```

7. On the Apply a Patch page for each product, provide the path to the corresponding controller ksh script. If you are only applying a single patch or hotfix bundle (for example, to get from 13.2.3.3 to 13.2.4), this path will be DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/<version>/<product>. If you are applying multiple patches or hotfix bundles (for example, to get from 13.1.2 to 13.2.4), this will be DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch. This directory should contain a <product>_controller.ksh file (for example, rms_controller.ksh), which the installer runs to apply the RMS 13.2.4 patch.

Note: Depending on which patches are run, database installation can take several hours to complete.

8. After the installer is complete, you can check its log file: rms-install-dbschema.<timestamp>.log.
9. 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`

10. For instructions on installing the new languages after running the RMS patch installer, see "[Appendix: Inserting New Languages.](#)"

Note: For Brazilian retailers planning to install the ORFM/RMS Brazil Localization patch, you may have invalid objects in your schema after running the RMS patch. If the RMS installation finished successfully without reporting that the installer failed, you can safely ignore these invalids and continue with the ORFM patch installer. After running the ORFM patch, these invalids should be resolved.

Option 2: Patch RMS Database using Controller Scripts

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

Before you apply the RMS 13.2.4 patch:

- Make a backup of all your objects and database schema.
- Determine which patches and hot fix bundles have already been installed
- Review the enclosed RMS 13.2.4 patch Release Notes (rms-1324-rn.pdf).

Create Staging Directory for RMS Database Schema Files

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

1. Log into the database server as a user that can connect to the RMS database.
2. Create a staging directory for the MOM 13.2.4 patch. There should be a minimum of 1100 MB disk space available in this location.
3. Copy the mom-dbpatch.zip file from the RMS 13.2.4 release to the staging directory. This is referred to as DB_PATCH_DIR when upgrading a database schema.
4. Change directories to DB_PATCH_DIR and extract the mom-dbpatch.zip file. This creates a rms/dbschemapatch subdirectory under DB_PATCH_DIR.

Run the RMS Database Controller Scripts

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

1. Change directories to `DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/`.
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$
```

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

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

4. Set and export the `NLS_LANG` environment variable.

```
Example: NLS_LANG=AMERICAN_AMERICA.UTF8
          export NLS_LANG
```

5. For each product and version you want to patch, configure the individual `controller.cfg` files as follows:
 - Copy `DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/<version>/<product>/templates/controller.cfg` to `DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/<version>/<product>/controller.cfg`
 - Open the `controller.cfg` file you just created and replace the tokens for the following variables with the appropriate values:
 - i. Export `PATCH_DIR= DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/<version>/<product>`
 - ii. export `SCHEMA_OWNER=<The name of the RMS schema>`
 - iii. export `MMUSER=<The name of the schema to Patch >`
 For RMS, RPM, ReIM, and Alloc_RMS, this will be the RMS schema
 For Alloc, this will be the Allocation schema
 - iv. export `ORACLE_SID=<SID for the database the MMUSER schema resides in>`
 - v. export `TNS_ADMIN=/path/to/wallet/files/dir/`
 - vi. export `UP=/@<Schema Owner Wallet Alias>`

Note: See "[Appendix: Setting Up Password Stores with Oracle Wallet](#)," later in this document for instructions to set up database wallet.

6. The patches should be run in the following order: RMS, RPM, ReIM, Alloc_RMS, and Allocation. If you are upgrading from 13.1.2 and want to get to 13.2.4, you need to run all the patches from DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/ (13.2 through 13.2.4) If you are patching from 13.2.3.3 and want to get to 13.2.4, you just need to apply the 13.2.4 patch. The Alloc controller is used to apply the necessary Allocation patch to the Allocation schema, while the Alloc_RMS controller is used to apply the necessary Allocation patch to the RMS schema. While you can choose not to run any of the patches, all of the non-RMS patches depend on the RMS patch being run. If you patch RMS you should also patch RPM; there is also a dependency between Alloc_RMS/Alloc. For each product you wish to patch, cd to DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/<version>/<product> and run the following commands:

```
For RMS run: $ ./rms_controller.ksh DBO N
For RPM run: $ ./rpm_controller.ksh DBO Y
For ReIM run: $ ./reim_controller.ksh DBO Y
For Alloc_rms run: $ ./alloc_controller.ksh DBO Y
For Allocation run: $ ./alloc_rms_controller.ksh DBO Y
```

Note: The controllers should be run in this order.

7. If the installation fails for any of the patches before completion, look at the logs in the DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/<version>/<product>/error and DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/<version>/<product>/log directories to determine the source of the error. You can continue the patch by rerunning the <product>_controller.ksh file, but only if the files generated in the DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/<version>/<product>/processed directory from the last patch attempt are still there. Any scripts that ran previously will be skipped. If you wish to start a new patch, delete all files in the DB_PATCH_DIR/rms/dbschemapatch/mom-dbpatch/<version>/<product>/processed directory.
8. For instructions on installing the new languages after running the RMS patch installer, see "[Appendix: Inserting New Languages.](#)"

Note: For Brazilian retailers planning to install the ORFM/RMS Brazil Localization patch, you may have invalid objects in your schema after running the RMS patch. If the RMS installation finished successfully without reporting that the installer failed, you can safely ignore these invalids and continue with the ORFM patch installer. After running the ORFM patch, these invalids should be resolved.

Batch Installation Tasks—Patch

There are two different methods to use for installing the RMS 13.2.4 batch patch. Option 1 uses the installer to apply patch. Option 2 compiles the batch directly.

Option 1: Use Batch Installer to Patch

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

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

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

Before you apply the RMS 13.2.4 batch patch:

- Make a backup of all your batch files.
- Review the enclosed RMS 13.2.4 Patch Release Notes (rms-1324-rn.pdf).

Before copying over any files:

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

Create Staging Directory for RMS Batch Patch Files

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

1. Log into the database server as a user that can connect to the RMS database.
2. Create a staging directory for the RMS 13.2.4 batch patch. There should be a minimum of 35 MB disk space available in this location.
3. Copy the rms1324batchpatch.zip file from the RMS 13.2.4 release to the staging directory. This is referred to as BATCH_PATCH_DIR when patching a database schema.
4. Change directories to BATCH_PATCH_DIR and extract the rms1324batchpatch.zip file. This creates a batch-patch subdirectory under BATCH_PATCH_DIR.
5. If you do not already have one, create a staging directory for the RMS batch installation software or use the same staging directory as created in the database schema step above. There should be a minimum of 35 MB disk space available in this location.

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

Custom Modules

Custom source can be provided by the user in a folder named 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 installer.dir and patch.to.version properties.

Variable	Description
installer.dir	The directory where the installer files are located under STAGING_DIR. For example: /opt/rms/batch
patch.to.version	The version want to patch to For example: 13.2.4

5. Run the patch.sh script. This script will copy the files from each patch from 13.2.1 up to the patch specified in the **patch.to.version** property. These files are copied into the installer package.

Run Batch Installer

Note: See "[Appendix: RMS Batch Installer Screens](#)" for details on every screen and field in the batch installer.

1. Change directories to STAGING_DIR/rms/batch. This directory was created when the rms13batch.zip file was expanded under STAGING_DIR.
2. Source the oraenv script to set up the Oracle environment variables (ORACLE_HOME, ORACLE_SID, PATH, etc)

Example:

```
prompt$ . oraenv
ORACLE_SID = [] ? mydb
prompt$
```

Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

Example:

```
prompt$ echo $ORACLE_HOME
/u00/oracle/product/mydbversion
prompt$ echo $ORACLE_SID
mydb
```

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

Example: Here are some locations where makedepend is commonly found:

```
Linux:      /usr/X11R6/bin
SUN:       /usr/openwin/bin
AIX:       /usr/X11R6/bin
HP-UX:     /opt/imak/bin
```

Note: For environments running Solaris and Oracle Database 11.2.0.2, ensure Sun Studio 12 compiler is in the path.

Example: export
 PATH=/vol.rtk/compilers/sunstudio12.1/bin:/usr/xpg4/bin:\$PATH

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>:0.0 export DISPLAY

5. If you are going to run the installer in GUI mode using an X server, you need to have the XTEST extension enabled. This setting is not always enabled by default in your X server. See "[Appendix: Common Installation Errors](#)" for more details.
6. Run the install.sh script to start the installer.

Note: Below are the usage details for `install.sh`. The typical usage for GUI mode is no arguments.

`./install.sh [text | silent]`

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

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

7. After the installer is complete, you can check its log file:
`rms.batch.install.<timestamp>.log`.
8. The installer leaves behind the `ant.install.properties` file for future reference and repeat installations. This file contains inputs you provided. As a security precaution, make sure that the file has restrictive permissions.

Example: `chmod 600 ant.install.properties`

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

Resolving Errors Encountered During Batch Installation

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

RETL

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

See “[Appendix: RMS RETL Instructions](#)” for more information.

Data Conversion Scripts

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

1. Create the following new directories:
`INSTALL_DIR/external/data`
`INSTALL_DIR/external/logs`
The RMS Batch installer should have already created `INSTALL_DIR/external/scripts`.
2. Log into `sqlplus` as `SYSTEM` and run the following commands:
`SQL> create or replace directory rmsdc_ext_data as
'INSTALL_DIR/external/data';`
`SQL> create or replace directory rmsdc_ext_logs as
'INSTALL_DIR/external/logs';`

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

Note: The user that creates these directories owns them.

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

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


```
SQL> grant read on directory rmsdc_ext_data to public;
SQL> grant read, write on directory rmsdc_ext_logs to public
```
4. Grant the following privileges to any other users who will be using data conversion.


```
SQL> grant read on directory rmsdc_ext_data to RMS01;
SQL> grant read, write on directory rmsdc_ext_logs to RMS01;
```

Option 2: Compile RMS Batch Directly

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

Create Staging Directory for RMS Batch Patch Files

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

1. Log into the database server as a user that can connect to the RMS database.
2. Create a staging directory for the RMS 13.2.4 batch patch. There should be a minimum of 35 MB disk space available in this location.
3. Copy the `rms1324batchpatch.zip` file from the RMS 13.2.4 release to the staging directory. This is referred to as `BATCH_PATCH_DIR` when patching the RMS batch.
4. Change directories to `BATCH_PATCH_DIR` and extract the `rms1324batchpatch.zip` file. This creates a `batch-patch` subdirectory under `BATCH_PATCH_DIR`.

Set Environment Variables

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

Make sure the following variables are set. The RMS 13.2.4 batch installer should have created a `batch.profile` file located at `INSTALL_DIR/batch.profile`. This profile script can be used to set all of the environment variables listed below.

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

Variables set by batch.profile:

- PATH must include make, makedepend and the C compiler
- MMHOME=INSTALL_DIR/rms
- MMUSER=RMS Schema Owner
- ORACLE_HOME=Location of Oracle 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

HP:

SHLIB_PATH=\$ORACLE_HOME/lib:\$MMHOME/oracle/lib/bin:\$SHLIB_PATH

Solaris:

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

Note: For environments running Solaris and Oracle RDBMS 11.2.0.2, ensure Sun Studio 12 compiler is in the path.

Example: export
PATH=/vol.rtk/compilers/sunstudio12.1/bin:/usr/xpg4/bin:\$PATH

Linux:

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

Compile Batch Libraries

To compile batch libraries, complete the following steps.

1. If they exist, copy the files from BATCH_PATCH_DIR/batch-patch/<version>/oracle/lib/src to INSTALL_DIR/oracle/lib/src. This step should be done with each version you want to apply in order of earliest to latest patch starting at 13.2 and ending with the 13.2.4 deltas.
2. Change directories to INSTALL_DIR/oracle/lib/src.
3. To make library dependencies run one of the following commands:
 - For Linux use:
make -f retek.mk -r depend 2>&1 | tee libdpnd.log
 - For other platforms use:
make -f retek.mk depend 2>&1 | tee libdpnd.logCheck the libdpnd.log file for errors
4. To make batch libraries:
 - For Linux use:
make -f retek.mk -r retek rms resa 2>&1 | tee libretek.log
 - For other platforms use:

```
make -f retek.mk retek rms resa 2>&1 | tee librettek.log
```

Check the librettek.log file for errors

5. To install batch libraries:

```
make -f retek.mk install
```

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

Compile Batch Source Code

To compile batch source code, complete the following steps.

1. If they exist, copy the files from `BATCH_PATCH_DIR/batch-patch/<version>/oracle/proc/src` to `INSTALL_DIR/oracle/proc/src`. This step should be done with each version in order of earliest to latest patch starting at 13.2 and ending with the 13.2.4 deltas.
2. Change directories to `INSTALL_DIR/oracle/proc/src`.
3. Create dependencies.
 - a. Run one of the following commands:
 - For Linux use:


```
make -f mts.mk -r depend 2>&1 | tee srcdpnd.log
```
 - For other platforms use:


```
make -f mts.mk depend 2>&1 | tee srcdpnd.log
```
 - b. Check the `srcdpnd.log` file for errors.
4. Create batch programs.
 - c. Run the following commands in the order stated.
 - For Linux use:


```
make -f rms.mk -r PRODUCT_PROCFLAGS=dynamic=ansi ditinsrt
make -f mts.mk -r rms-ALL recs-ALL resa-ALL rtm-ALL fif-ALL 2>&1 | tee
srcall.log
```
 - For other platforms use:


```
make -f rms.mk PRODUCT_PROCFLAGS=dynamic=ansi ditinsrt
make -f mts.mk rms-ALL recs-ALL resa-ALL rtm-ALL fif-ALL 2>&1 | tee
srcall.log
```
 - d. Check the `srcall.log` file for errors.
5. Install the batch programs.


```
make -f mts.mk install
```

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

Copy RETL Code

If they exist, copy the files from `BATCH_PATCH_DIR/batch-patch/<version>/RETLfor<product>` to `INSTALL_DIR/RETLfor<product>`. This step should be done with each version in order of earliest to latest patch starting at 13.2 and ending with the 13.2.4 deltas.

Copy Data Conversion Scripts

If they exist, copy the files from `BATCH_PATCH_DIR/batch-patch/<version>/external` to `INSTALL_DIR/external`. This step should be done with each version in order of earliest to latest patch starting at 13.2 and ending with the 13.2.4 deltas.

Application Server Installation Tasks—Patch

There are two methods for installing the RMS 13.2.4 application. Option 1 uses the installer to apply the patch. Option 2 compiles the RMS toolset and forms directly.

Note: If the 13.2.4 database schema patch has been run, the entire set of toolsets and forms must be recompiled.

IMPORTANT: If there is an existing WebLogic 10.3.3 installation on the server, you must upgrade the WebLogic 10.3.3 to WebLogic 10.3.4. All middleware components associated with WebLogic server 10.3.3 should be upgraded to 11.1.1.4.

Back up the weblogic.policy file (\$WLS_HOME/wlserver_10.3/server/lib) before upgrading your WebLogic server, because this file could be overwritten. Copy over the weblogic.policy backup file after the WebLogic upgrade is finished and the post patching installation steps are completed.

For information about how to complete the upgrade to WebLogic 10.3.4, see the My Oracle Support document, "How to Upgrade from WebLogic11g 10.3.3 to WebLogic11g 10.3.4" (ID 1432575.1).

Option 1: Use Application Installer to Patch

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

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

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

Before you apply the RMS 13.2.4 patch:

- Make a backup of all your forms and library files.
- Review the enclosed RMS 13.2.4 Patch Release Notes (rms-1324-rn.pdf).

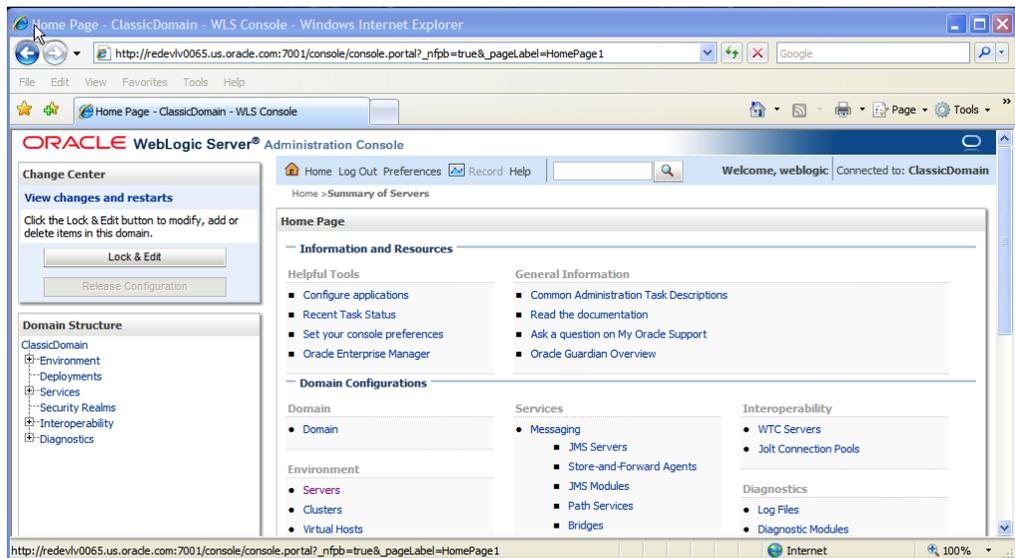
Before copying over any files:

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

Create RMS Help Managed Server

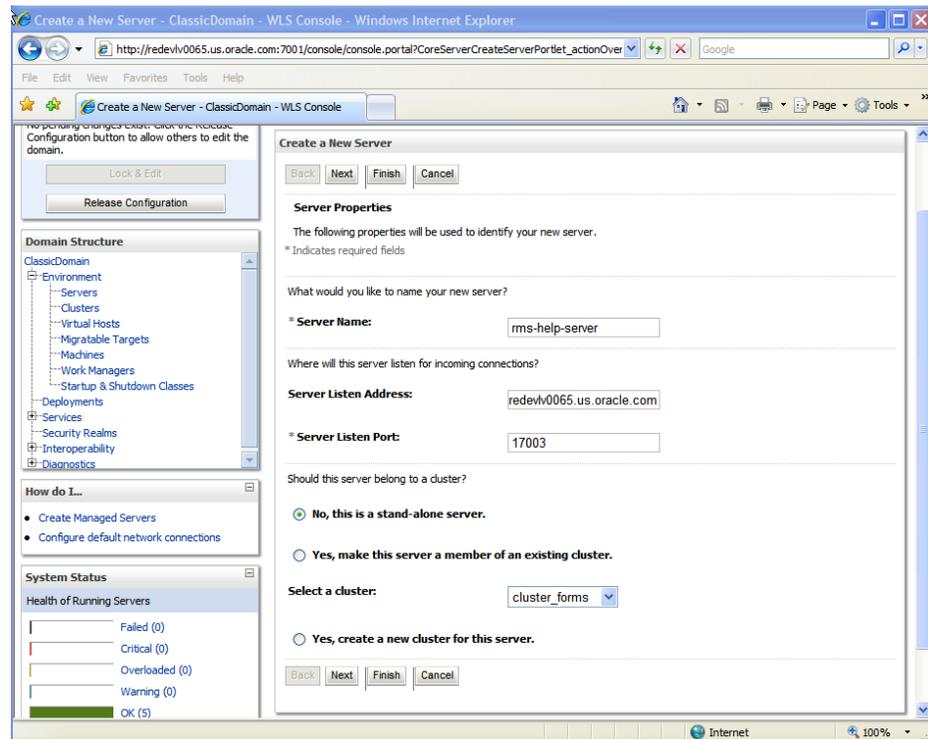
Note: If RMS help managed server is already installed, skip this section.

1. Log in to the administration console.



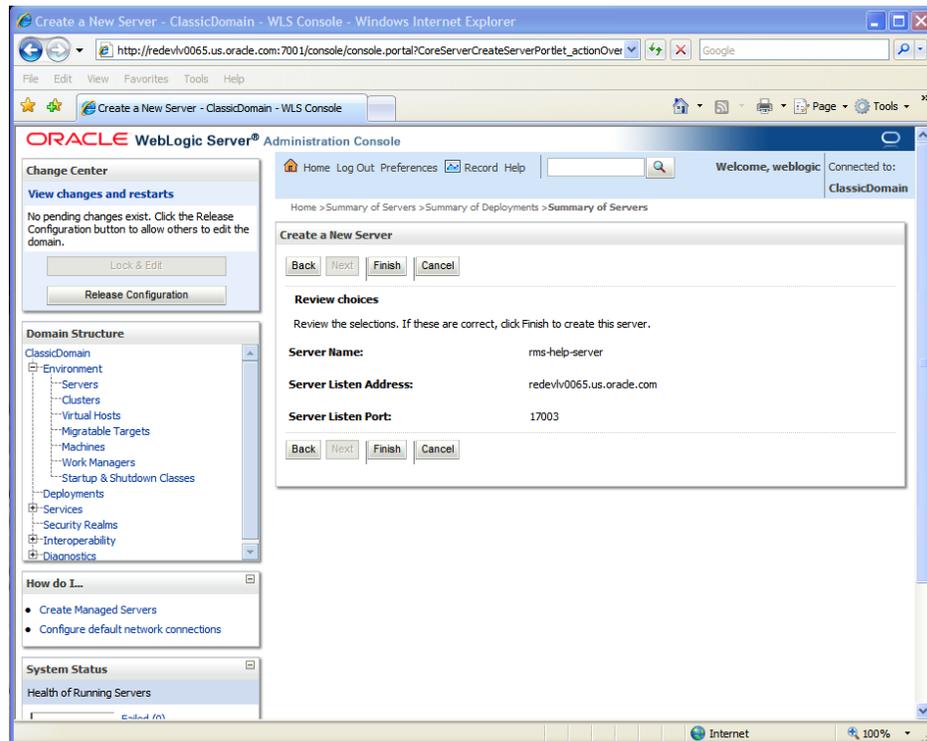
2. Click **Lock & Edit**.

3. Navigate to Environment > Servers and select new tab of the servers on the right side.



4. Set the following variables:
 - **Server Name:** These should be some name specific to your application targeted (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**.

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

http://redeviv0065.us.oracle.com:7001/console/console.portal?_nfb=true&_pagetabel=CoreServerServe

Messages

Server created successfully.

Summary of Servers

Configuration Control

A server is an instance of WebLogic Server that runs in its own Java Virtual Machine (JVM) and has its own configuration. This page summarizes each server that has been configured in the current WebLogic Server domain.

Customize this table

Servers (Filtered - More Columns Exist)

New Clone Delete Showing 1 to 6 of 6 Previous | Next

<input type="checkbox"/>	Name	Cluster	Machine	State	Health	Listen Port
<input type="checkbox"/>	AdminServer(admin)		redeviv0065	RUNNING	OK	7001
<input type="checkbox"/>	help-server		redeviv0065	RUNNING	OK	9003
<input type="checkbox"/>	publisher-ms		redeviv0065	RUNNING	OK	9004
<input type="checkbox"/>	rms-help-server			Unknown		17003
<input type="checkbox"/>	WLS_FORMS	cluster_forms	redeviv0065	RUNNING	OK	9001
<input type="checkbox"/>	WLS_REPORTS	cluster_reports	redeviv0065	RUNNING	OK	9002

New Clone Delete Showing 1 to 6 of 6 Previous | Next

How do I...

- Create Managed Servers
- Clone Servers
- Delete Managed Servers
- Delete the Administration Server
- Start and stop servers

System Status

Health of Running Servers

Failed (0)

Critical (0)

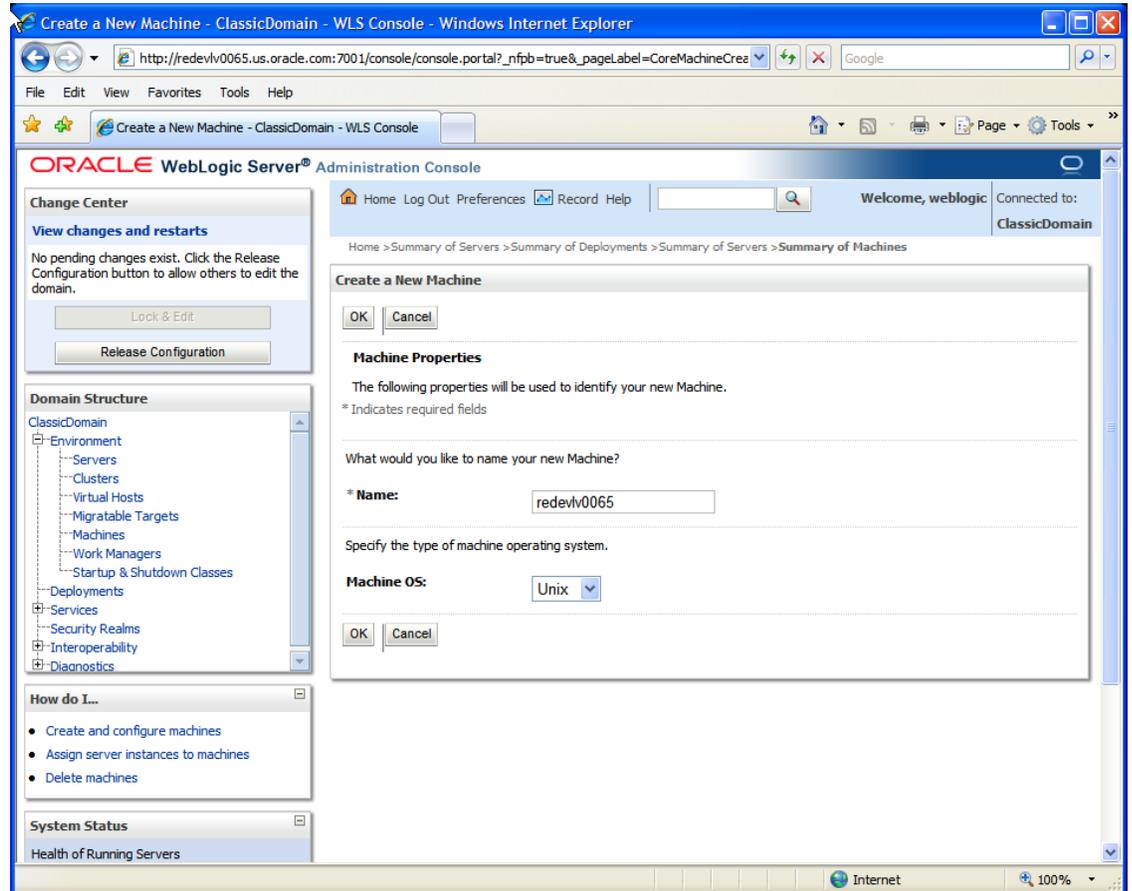
Degraded (0)

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

Install Node Manager

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

1. Log in to the administration console.
2. Click **Lock & Edit** button and 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.

The screenshot displays the Oracle WebLogic Server Administration Console in a Windows Internet Explorer browser. The browser's address bar shows the URL: `http://redevlv0065.us.oracle.com:7001/console/console.portal?_nfpb=true&pagelabel=CoreMachineMad`. The console interface includes a navigation menu on the left with categories like Change Center, Domain Structure, How do I..., and System Status. The main content area is titled "Summary of Machines" and contains a table with one machine entry.

Change Center
View changes and restarts
Pending changes exist. They must be activated to take effect.
[Activate Changes] [Undo All Changes]

Domain Structure
ClassicDomain
- Environment
- Servers
- Clusters
- Virtual Hosts
- Migratable Targets
- Machines
- Work Managers
- Startup & Shutdown Classes
- Deployments
- Services
- Security Realms
- Interoperability
- Diagnostics

How do I...
• Create and configure machines
• Assign server instances to machines
• Clone machines
• Delete machines

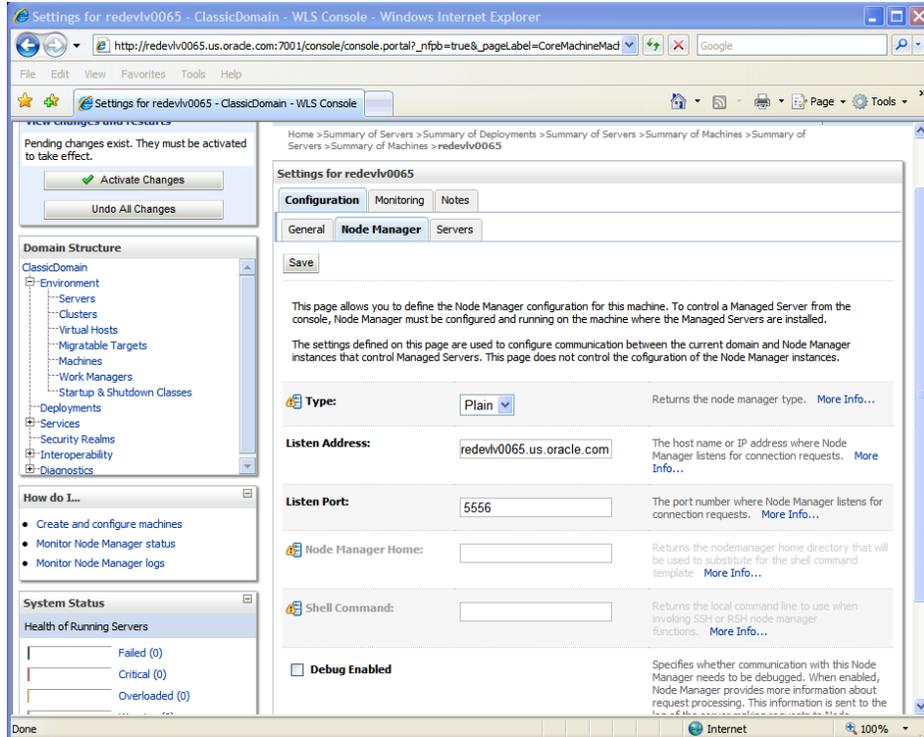
Summary of Machines
A machine is the logical representation of the computer that hosts one or more WebLogic Server instances (servers). WebLogic Server uses configured machine names to determine the optimum server in a cluster to which certain tasks, such as HTTP session replication, are delegated. The Administration Server uses the machine definition in conjunction with Node Manager to start remote servers.
This page displays key information about each machine that has been configured in the current WebLogic Server domain.

Customize this table

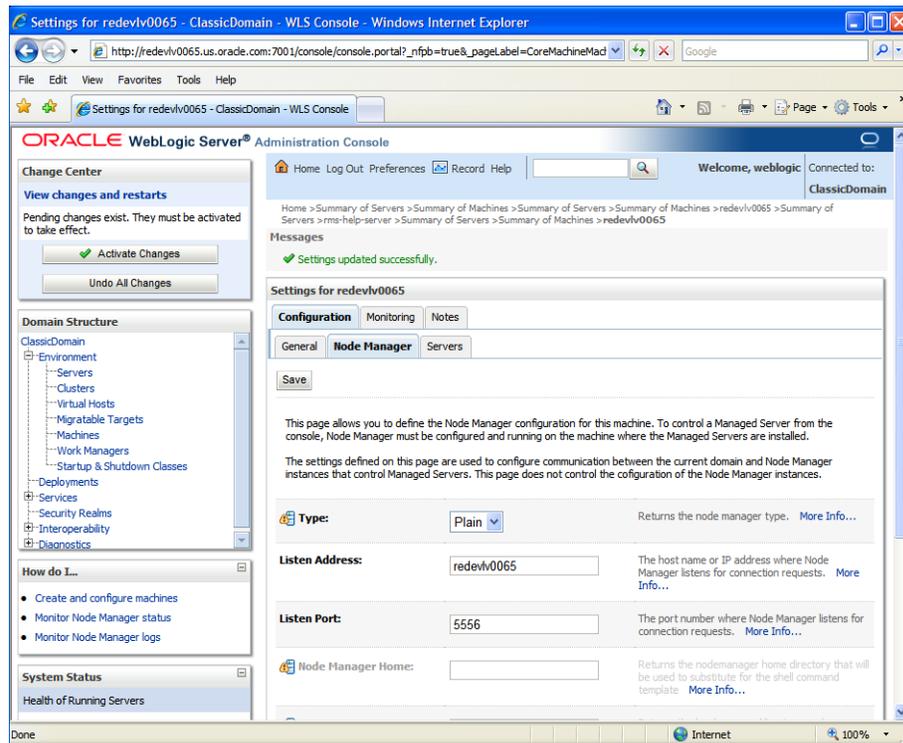
<input type="checkbox"/>	Name	Type
<input type="checkbox"/>	redevlv0065	UnixMachine

Showing 1 to 1 of 1 Previous | Next

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



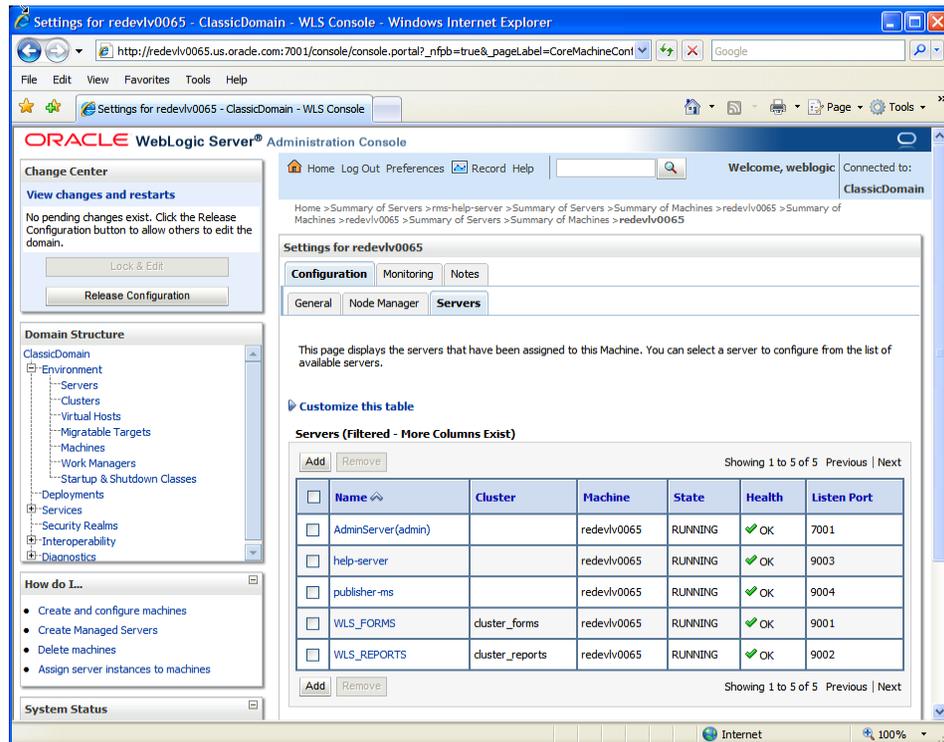
8. Click Save.



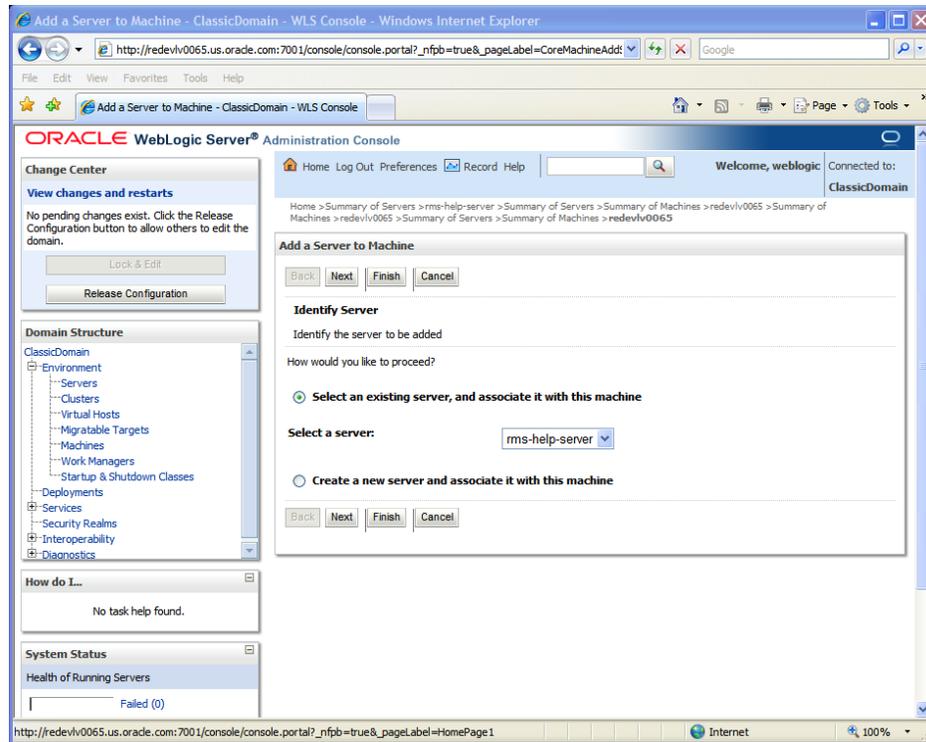
9. Click Activate Changes.

10. Click Lock & Edit.

11. Navigate to Environments->machines->click on the machine name and select the Servers tab.



12. Click Add. Add the managed servers that need to be configured with NodeManager.



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

Note: To activate changes the server must be stopped if it is running:

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

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:

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

For example:

```
/u00/webadmin/product/10.3.x/WLS/user_projects/domains/C
lassicDomain/servers/rms-help-server
```

16. After the CLASSPATH changes are finished, click **Save**.
17. Click **Activate Changes**.
18. Start the Nodemanager from the server using the startNodeManager.sh at \$WLS_HOME/wlserver_10.3/server/bin.

19. Edit the `nodemanager.properties` file at the following location with the below values:
\$WLS_HOME/wlserver_10.3/common/nodemanager/nodemanager.properties
 - `SecureListener=false`
 - `StartScriptEnabled=true`
 - `StartScriptName=startWebLogic.sh`
20. The NodeManager must be restarted after making changes to the `nodemanager.properties` file.

Note: The `nodemanager.properties` file is created after NodeManager is started for the first time. It is not available before that point.

Create Staging Directory for RMS Application Patch Files

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

1. Log on to your application server as a user with read and write access to the WebLogic files.
2. Create a staging directory for the RMS Application patch. There should be a minimum of 850 MB disk space available in this location.
3. Copy the file `rms1324apppatch.zip` from the RMS 13.2.4 release to staging directory. This will be referred to as `APP_PATCH_DIR` when installing application software and reports.
4. Change directories to `APP_PATCH_DIR` and extract the file `rms1324apppatch.zip`. This creates an `app-patch` subdirectory under `APP_PATCH_DIR`.
5. If you do not already have one, create a staging directory for the RMS application installation software or use the same staging directory as created in the database schema step above. There should be a minimum of 600 MB disk space available in this location.
6. Copy the file `rms13appserver.zip` from the RMS 13.2 release to staging directory. This will be referred to as `STAGING_DIR` when installing application software and reports.
7. Change directories to `STAGING_DIR` and extract the file `rms13appserver.zip`. This will create an `rms/application` subdirectory under `STAGING_DIR`.

Copy Forms and Library Patch Files

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

Custom Modules

Custom source can be provided by the user in a folder named `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 which is being used by WebLogic install.
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 installer.dir and patch.to.version properties.

Variable	Description
installer.dir	The directory where the installer files are located under STAGING_DIR. For example: /opt/rms/application
patch.to.version	The version want to patch to For example: 13.2.4

5. Run the patch.sh script. This script will copy the files from each patch from 13.2.1 up to the patch specified in the **patch.to.version** property. These files are copied into the installer package.

Run the RMS Application Installer

Note: See “[Appendix: RMS Application Installer Screens](#)” for details on every screen and field in the application installer.

Note: It is necessary to have \$ORACLE_HOME/network/admin/tnsnames.ora file configured in this WLS installation. Forms will use this information for connectivity.

A copy tnsnames.ora file must be created for the \$ORACLE_INSTANCE/config location. If the file is not copied to this location, forms will not compile correctly.

Note: ORACLE_HOME is the location where Oracle Forms 11gR1 has been installed.

ORACLE_INSTANCE is the instance that is created during configuration of Oracle forms 11gR1 and contains the executables to compile

1. Log on to your application server as a user with read and write access to the WebLogic files.
2. Change directories to STAGING_DIR/rms/application. This directory was created when the rms13application.zip file was expanded under STAGING_DIR.
3. Set and export the following environment variables.

Variable	Description	Example
DOMAIN_HOME	The location where Forms 11.1.1.4 domain has been installed.	DOMAIN_HOME= /u00/webadmin/product/10.3.x/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 export ORACLE_SID
NLS_LANG	Locale setting for Oracle database client.	NLS_LANG=AMERICAN_AMERICA.UTF8 export NLS_LANG
JAVA_HOME	Location of Java. Usually the same Java being used by WebLogic. Java choices are: <ul style="list-style-type: none"> ▪ JDK 1.6.0+ 64 bit or ▪ Jrockit 1.6 R28 build or later, within the 1.6 code line. 64 bit. For Linux and Solaris OS only. 	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>:0.0 export DISPLAY

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

Note: Below are the usage details for install.sh. The typical usage for GUI mode is no arguments.

```
./install.sh [text | silent]
```

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

Example:

```
MW_HOME=/u00/webadmin/product/10.3.x/WLS_Forms
```

```
ORACLE_HOME=/u00/webadmin/product/10.3.x/WLS_Forms/as_1
```

```
ORACLE_INSTANCE=/u00/webadmin/product/10.3.x/WLS_Forms/asinst_1
```

```

DOMAIN_HOME=/u00/webadmin/product/10.3.x/WLS_
Forms/user_projects/domains/ClassicDomain
WLS_INSTANCE=WLS_FORMS
ORACLE_SID=mydb
JAVA_HOME=/u00/webadmin/java/jdk1.6.0_12

```

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

```

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

```

Example:

```

/u00/webadmin/product/10.3.x/WLS_Forms/user_
projects/domains/ClassicDomain/bin/setDomainEnv.sh

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

```

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

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

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

```

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

```

Or

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

This warning can be ignored.

7. After the installation is complete, you can check its log file: `INSTALL_DIR/base/log/rms.app.install.<timestamp>.log`. The `INSTALL_DIR/base/error` will contain information about possible failed compilations.
8. The installer leaves behind the `ant.install.properties` file for future reference and repeat installations. This file contains inputs you provided. As a security precaution, make sure that the file has restrictive permissions.

Example: `chmod 600 ant.install.properties`

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

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

Example:

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

```
/u00/webadmin/product/10.3.x/WLS_Forms/user_projects/domains/ClassicDomain/config/
fmwconfig/servers/WLS_FORMS/applications/formsapp_11.1.1/config/forms/registry/ora
cle/forms/registry/Registry.dat
/u00/webadmin/product/10.3.x/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.x/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.x/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 did not compile. To try and manually recompile the object run INSTALL_DIR/base/forms.profile and run the following command:

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

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

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

Clustered Installations – Post-Installation Steps

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

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

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

Oracle Configuration Manager

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

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

<https://support.oracle.com>

Oracle Configuration Manager Installer Guide (Doc ID: 1071030.1)

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

OCM Documentation Link

<http://www.oracle.com/technology/documentation/ocm.html>

RMS Reports Copied by the Application Installer

The application installer copies RMS report files to `INSTALL_DIR/base/reports`. These files should be installed into BI Publisher as documented in the chapter, [RMS Reports Installation—Patch](#).

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 Toolset and Forms Directly

To compile the RMS toolset and forms directly requires the following steps.

Create Staging Directory for RMS Application Patch Files

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

1. Log on to your application server as a user with read and write access to the WebLogic files.
2. Create a staging directory for the RMS Application patch. There should be a minimum of 850 MB disk space available in this location.
3. Copy the file `rms1324apppatch.zip` from the RMS 13.2.4 release to staging directory. This will be referred to as `APP_PATCH_DIR` when installing application software and reports.
4. Change directories to `APP_PATCH_DIR` and extract the file `rms1324apppatch.zip`. This creates an `app-patch` subdirectory under `APP_PATCH_DIR`.

Set Environment Variables

Note:

INSTALL_DIR is the location where RMS 13 forms were installed.

ORACLE_HOME is the location where Oracle Forms 11gR1 has been installed.

ORACLE_INSTANCE is the instance that is created during configuration of Oracle forms 11gR1 and contains the executables to compile.

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

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

Variables set by forms.profile:

- **All OS Platforms**

- MMHOME=INSTALL_DIR/base
- ORACLE_HOME=/path/to/WebLogic/as_1
- ORACLE_INSTANCE=/path/to/WebLogic/asinst_1
- ORACLE_SID= The Oracle Sid for the RMS database
- UP=/@< Schema Owner Wallet Alias >
- TNS_ADMIN=/path/to/wallet/files/dir/
- NLS_LANG=AMERICAN_AMERICA.UTF8
- DISPLAY=<IP address of X server>:0.0
- PATH=\$ORACLE_HOME/bin:\$ORACLE_HOME/opmn/bin:\$ORACLE_HOME/dcm/bin:INSTALL_DIR/base/forms_scripts:\$PATH
- CLASSPATH=\$ORACLE_HOME/jlib/importer:\$ORACLE_HOME/jlib/debugger.jar:\$ORACLE_HOME/jlib/utj.jar:\$ORACLE_HOME/jlib/ewt3.jar:\$ORACLE_HOME/jlib/share.jar:\$ORACLE_HOME/jlib/dfc.jar:\$ORACLE_HOME/jlib/help4.jar:\$ORACLE_HOME/jlib/oracle_ice.jar:\$ORACLE_HOME/jlib/jewt4.jar
- FORMS_BUILDER_CLASSPATH=\$CLASSPATH
- FORMS_PATH=INSTALL_DIR/base/toolset/bin:INSTALL_DIR/rms/forms/bin:\$ORACLE_HOME/forms
- TK_UNKNOWN=\$ORACLE_INSTANCE/config/FRComponent/frcommon/guicommon/tk/admin
- PATH=\$ORACLE_INSTANCE/bin:\$PATH

Note: See “[Appendix: Setting Up Password Stores with Oracle Wallet](#)” for how to set up database wallet.

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

Example: `/u00/oracle> sqlplus $UP`

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

Copy Forms and Library Patch Files

To copy forms and library patch files, complete the following steps.

1. Make a backup copy of the existing `INSTALL_DIR/base/toolset` and `INSTALL_DIR/base/forms` directories.
2. For the version number of the patch you are installing, navigate to the corresponding directory in `APP_PATCH_DIR` and copy the contents of the following directories into `INSTALL_DIR`. Depending on the patch, these directories may not exist. Copy the contents of `APP_PATCH_DIR/app-patch/<version>/base/toolset` into `INSTALL_DIR/base/toolset`, `APP_PATCH_DIR/app-patch/<version>/base/forms` into `INSTALL_DIR/base/forms`, and `APP_PATCH_DIR/app-patch/<version>/base/forms_scripts` into `INSTALL_DIR/base/forms_scripts`.

Delete Obsolete Files

The following forms and menus are obsolete as of 13.2.4 and should be deleted from `INSTALL_DIR`.

```
INSTALL_DIR/base/forms/src/company.mmb
INSTALL_DIR/base/forms/src/ribapierr.fmb
INSTALL_DIR/base/forms/bin/company.mmx
INSTALL_DIR/base/forms/bin/ribapierr.fmx
```

Install RMS Toolset

To install the RMS toolset, complete the following steps.

1. Copy all libraries (.pll files) in the `INSTALL_DIR/base/toolset/src` directory to the `INSTALL_DIR/base/toolset/bin` directory.
2. Change directories to `INSTALL_DIR/base/toolset/bin`.
3. Verify that the `PATH` variable contains the path `INSTALL_DIR/base/forms_scripts`. The `forms.profile` script should have set this up already.
4. Run `toolset.pll.sh` to compile all Toolset .pll's.

Note: If the `toolset.pll.sh` script is not used and the libraries are compiled individually, then they must be compiled in the following order (which is noted in the `toolset.pll.sh` script):

- `messge45.pll`
- `ariiflib.pll`
- `stand45.pll`
- `calend45.pll`
- `find45.pll`
- `item45.pll`

- tools45.pll
 - mblock45.pll
 - mview45.pll
 - nav45.pll
 - work45.pll
 - itnumtype.pll
 - hierfilter.pll
 - rmslib.pll
 - cflex.pll
5. Copy all forms (*.fmb files) in the INSTALL_DIR/base/toolset/src directory to the INSTALL_DIR/base/toolset/bin directory.
 6. Run forms.fm_fmb.sh (in INSTALL_DIR/base/toolset/bin) to compile the Toolset reference forms.
 7. Run forms.fmb.sh (in INSTALL_DIR/base/toolset/bin) to generate Toolset runtime forms – .fmx’s.
 8. Copy all menus (*.mmb files) in the INSTALL_DIR/base/toolset/src directory to the INSTALL_DIR/base/toolset/bin directory.
 9. Run menus.mmb.sh (in INSTALL_DIR/base/toolset/bin) to generate Toolset runtime menus – .mmx’s.

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

Install RMS Forms

To install RMS forms, complete the following steps.

1. Copy all libraries (.pll files) in the INSTALL_DIR/base/forms/src directory to the directories to the INSTALL_DIR/base/forms/bin directory.
2. Change directories to INSTALL_DIR/base/forms/bin.
3. Run forms.pll.sh to compile all RMS .pll’s.
4. Copy all forms (*.fmb files) in the INSTALL_DIR/base/forms/src directory to the INSTALL_DIR/base/forms/bin directory.
5. Run forms.fm_fmb.sh (in INSTALL_DIR/base/rms/forms/bin) to compile the RMS reference forms.
6. Run forms.fmb.sh (in INSTALL_DIR/base/rms/forms/bin) to generate RMS runtime forms – .fmx’s.
7. Copy all menus (*.mmb files) in the INSTALL_DIR/base/forms/src directory to the INSTALL_DIR/base/forms/bin directory.
8. Run menus.mmb.sh (in INSTALL_DIR/base/rms/forms/bin) to generate RMS runtime menus – .mmx’s.

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

Install Helpfile

To install the helpfile, complete the following steps.

1. Log into the WebLogic instance to which online help will be installed.
2. Create a server if necessary. In this example, rms-help-server is being used.
3. Select Deployments.
4. If there is an existing rms-help deployment, it must be stopped and deleted. Check the box next to rms-help. Click **Stop->Force Stop Now**. Click **Yes** on the next screen. Check the box next to rms-help. Click **Delete**. On the next screen, click **Yes**. When finished deleting, bounce the rms-help-server.
5. Select Deployments.
6. Click **Install**.
7. Click in the Path: box and enter APP_PATCH_DIR/app-patch/13.2.4/online-help/rms-help.ear, the ear file that will be deployed.
8. Leave **Install this deployment as an application selected**. Click **Next**.
9. Select the rms-help-server created in Step 2. Click **Next**.
10. Leave rms-help for the application name. Click **Next**.
11. Verify settings. Click **Finish**.
12. Select Deployments.
13. Check the box next to rms-help and click Start -> Servicing all Requests
14. Click **Yes**.
15. In the database, set the WEBHELP_SERVER column in the LANG table for the RMS schema owner to point to the RMS help server and port. For the example, it is set to http://redevlv0065.us.oracle.com:17003.

Install rms-icons.jar

If the patch contains a new rms-icons.jar, follow these steps to install it:

1. Copy the rms-icons.jar from APP_PATCH_DIR/app-patch/<version>/web_html/ and overwrite the one in \$ORACLE_HOME/as_1/forms/java/
2. Bounce the Weblogic managed server that contains Forms (for example: WL_FORMS).

Remove rms13unix.conf from the forms configuration

If it exists, remove rms13unix.conf from the forms configuration (\$DOMAIN_HOME/config/fmwconfig/servers/WLS_FORMS/applications/formsapp_11.1.1/config/rms132inst/rms13unix.conf). To remove this file:

1. Delete rms13unix.conf

```
rm /u00/webadmin/product/10.3.x/WLS_Forms/user_projects/domains/ClassicDomain/
config/fmwconfig/servers/WLS_FORMS/applications/formsapp_11.1.1/config/rms132inst/
rms13unix.conf
```

2. Take a backup of runtime httpd.conf.

```
cp /u00/webadmin/product/10.3.x/WLS_Forms/asinst_1/config/OHS/ohs1/httpd.conf
/u00/webadmin/product/10.3.x/WLS_Forms/asinst_1/config/OHS/ohs1/httpd.conf.
```

3. vi http.conf
4. Delete the line with reference to rms13unix.conf
5. Save the file.
6. Restart the OHS

RMS Reports Installation—Patch

RMS Reports are included in the RMS Application patch: rms1324apppatch.zip in the reports directory.

Manually Copy Reports to Install Directory

If you followed the instructions under “[Option 1: Use Application Installer to Patch](#)” in the chapter, “[Application Server Installation Tasks—Patch](#), you can skip to the next section (“[Installing the RMS BI Publisher Templates](#)”). If you followed “[Option 2: Compile RMS Toolset and Forms Directly](#),” you must manually copy the reports to INSTALL_DIR. Copy the reports from the RMS application patch APP_PATCH_DIR/app-patch/<version>/reports to the reports directory created during RMS installation, INSTALL_DIR/base/reports. This step should be done with each version in order of earliest to latest patch starting at 13.2.

Note: If BIPublisher application is already deployed to a bipublisher managed server in Weblogic, you can directly go to the “Installing the RMS BIPublisher Templates” section. If not, continue with the “BI Server Component Installation Tasks”.

BI Server Component Installation Tasks

Oracle BI Publisher is used as the main RMS and RWMS reporting engine and can be used in conjunction with external printing solutions like label printing. This section describes the installation of Oracle BI Publisher as a server application within WebLogic 10.3.4. 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. Optionally, install additional fonts into the JRE of the WebLogic server's JDK if you are planning to develop reports that are directly rendered by BI Publisher.

The following post-installation tasks are involved once BI Publisher has been installed:

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 for the 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 install media contains the following:

- BI Publisher server application
- BI Publisher runtime libraries
- BI Publisher fonts
- BI Publisher desktop tools
- Documentation: User's Guide, "Javadocs," demos, and samples

Individual components are located in the directory structure as follows:

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

Complete the following steps.

1. Create the <BI_DEPLOYMENT> directory on the server and change directory into this directory.

Example assuming that /u00/webadmin is the root of the installation:

```
mkdir /u00/webadmin/RMS_BIP
cd /u00/webadmin/RMS_BIP
```

2. Locate the manual/generic/xmlpserver.war file from this directory structure and copy it to the <BI_DEPLOYMENT> directory on the server using a copy command with the following syntax:

3. `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

You need to 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 this task by following these steps:

1. 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.

For 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 more information on catalogs, refer to the 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 to have read, write and execute permissions to enable the deployment of this directory structure to serve as a web application.

2. Open the `xm1p-server-config.xml` file located in `BI_HOME_DIR/xm1pserver/WEB-INF` directory with a text editor.

For example,

```
<?xml version="1.0" encoding="UTF-8"?>
<xm1pConfig xmlns="http://xmlns.oracle.com/oxp/xm1p">
  <resource>
    <file path="{oracle.home}/xdo/repository"/>
  </resource>
</xm1pConfig>
```

3. Replace `{oracle.home}/xdo/repository` with file path to the location where you copied the XMLP repository directory on your server.

For example,

```
<?xml version="1.0" encoding="UTF-8"?>
<xm1pConfig xmlns="http://xmlns.oracle.com/oxp/xm1p">
  <resource>
    <file path="/u00/webadmin/RMS_BIP/xm1pserver/XMLP"/>
  </resource>
</xm1pConfig>
```

4. Save the `xm1p-server-config.xml` after updating it.
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,

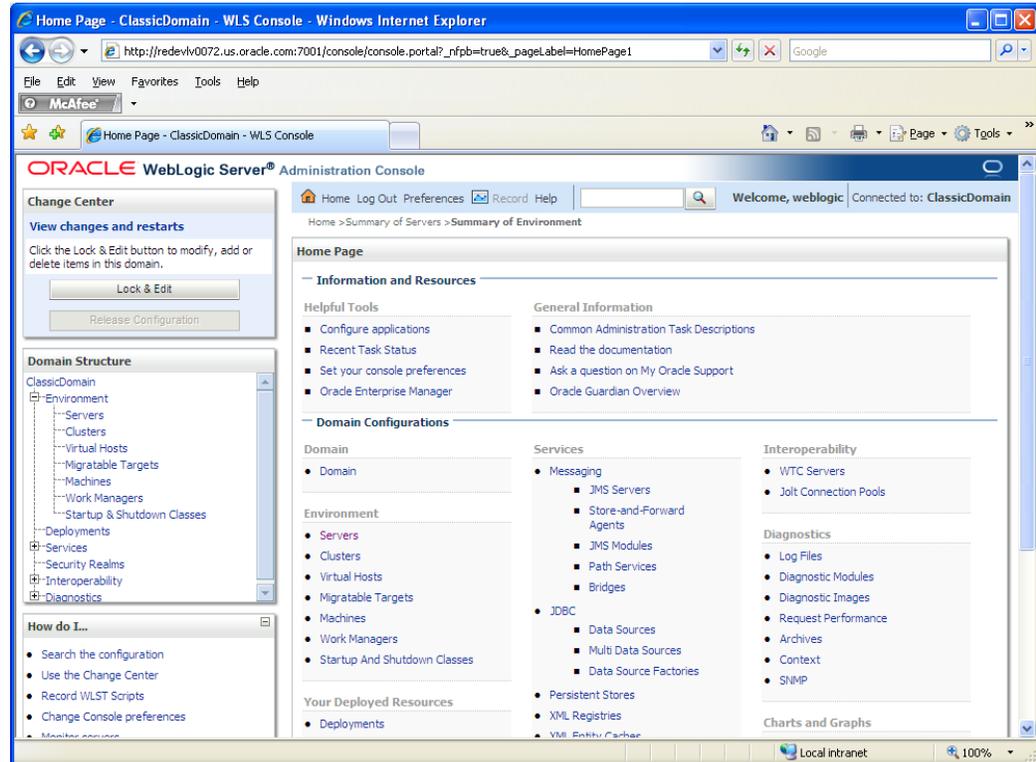
```
cp -R /tmp/BIPublisherSource/fonts WLS_JAVA_HOME/jre/lib/fonts
```

Note: This task will require a WLS server restart.

Install Managed Server in WebLogic

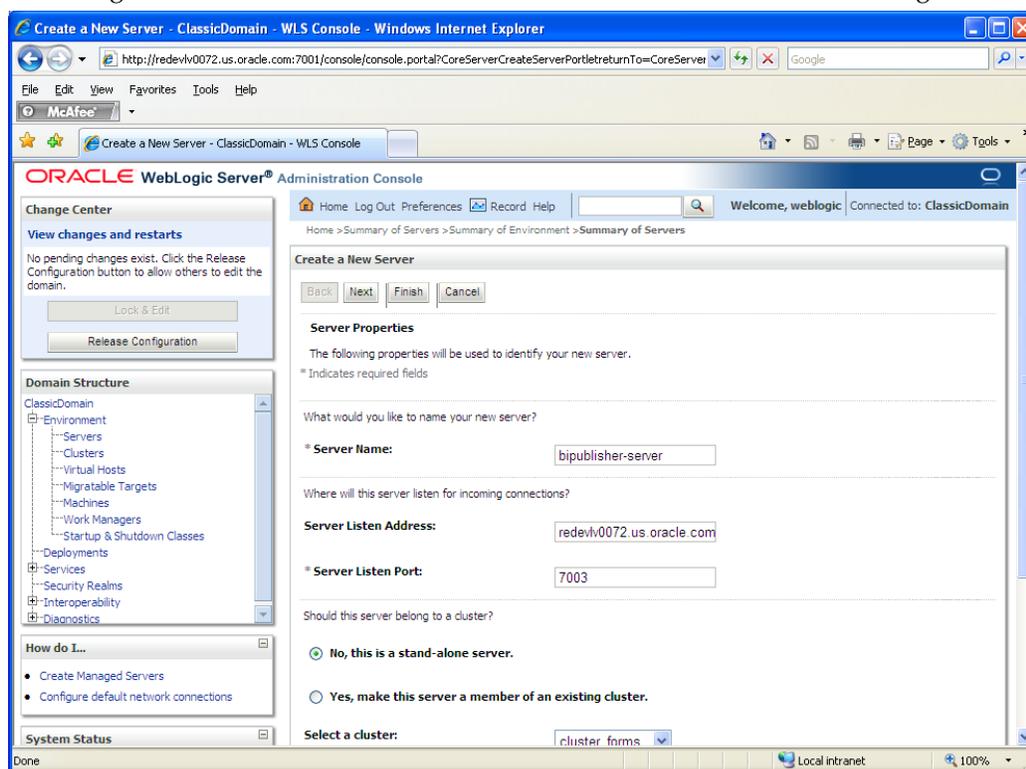
Before running the deployment of BI Application, you must install a managed server for deploying the BI application in WebLogic, if it was not created during the domain installation. Follow the steps below to install bipublisher managed server.

1. Log in to the administration console.



2. Click **Lock & Edit**.

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

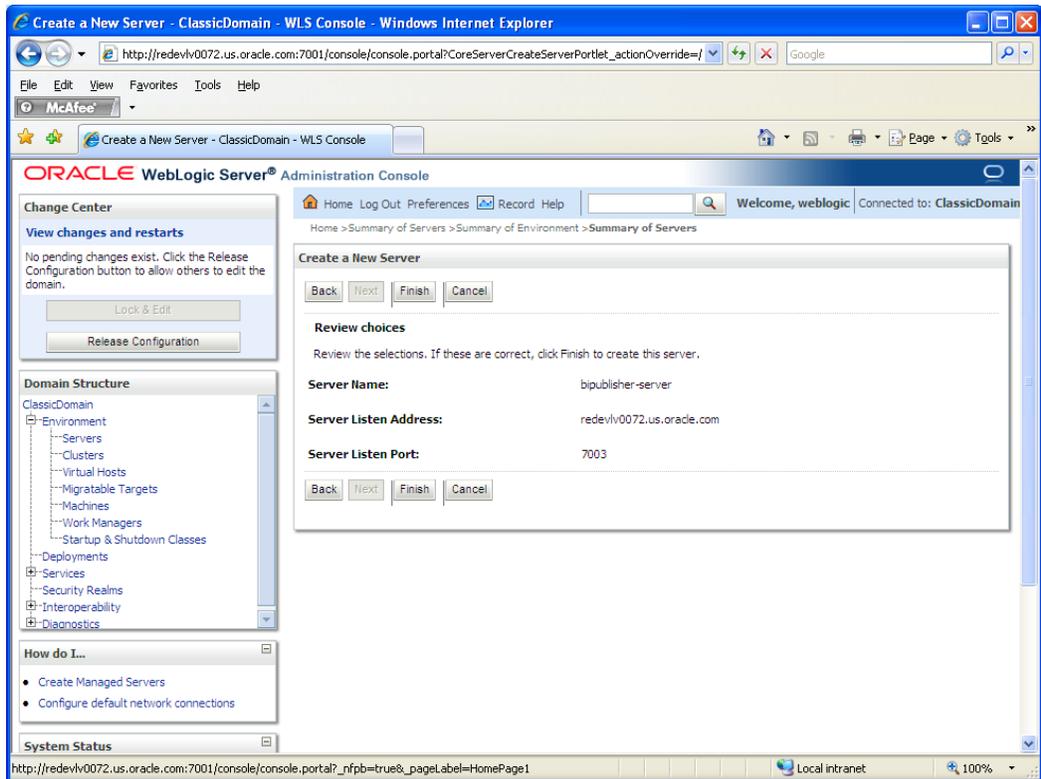


4. Set the following variables:

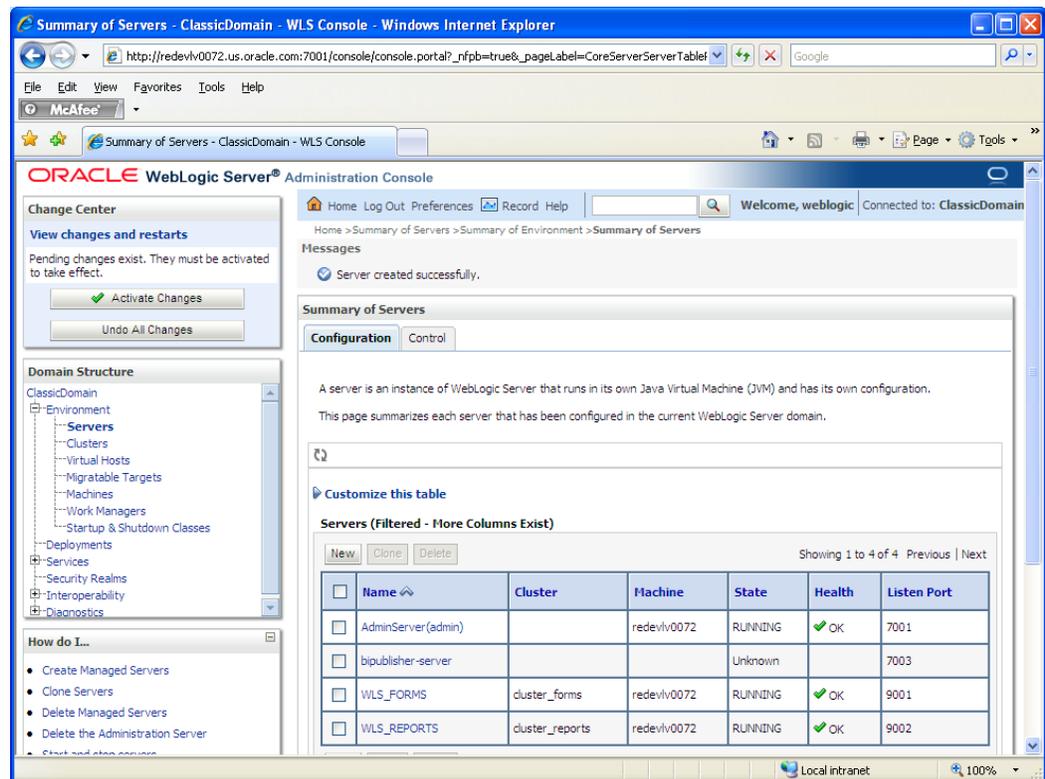
- **Server Name:** This value should be specific to your targeted application (for example, bipublisher-server)
- **Server Listen Address:** <weblogic server> (for example, redevlv0072.us.oracle.com)
- **Server Listen Port:** A free port. Check for availability.

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.)

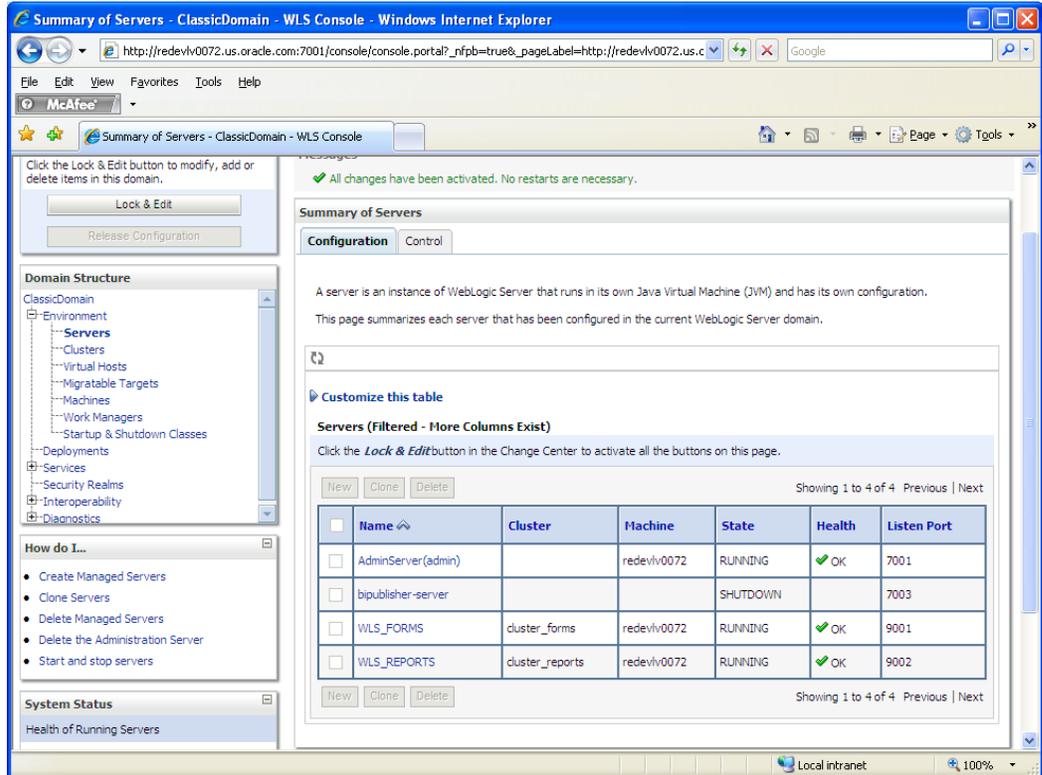
5. Click Next.



6. Click Finish.



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



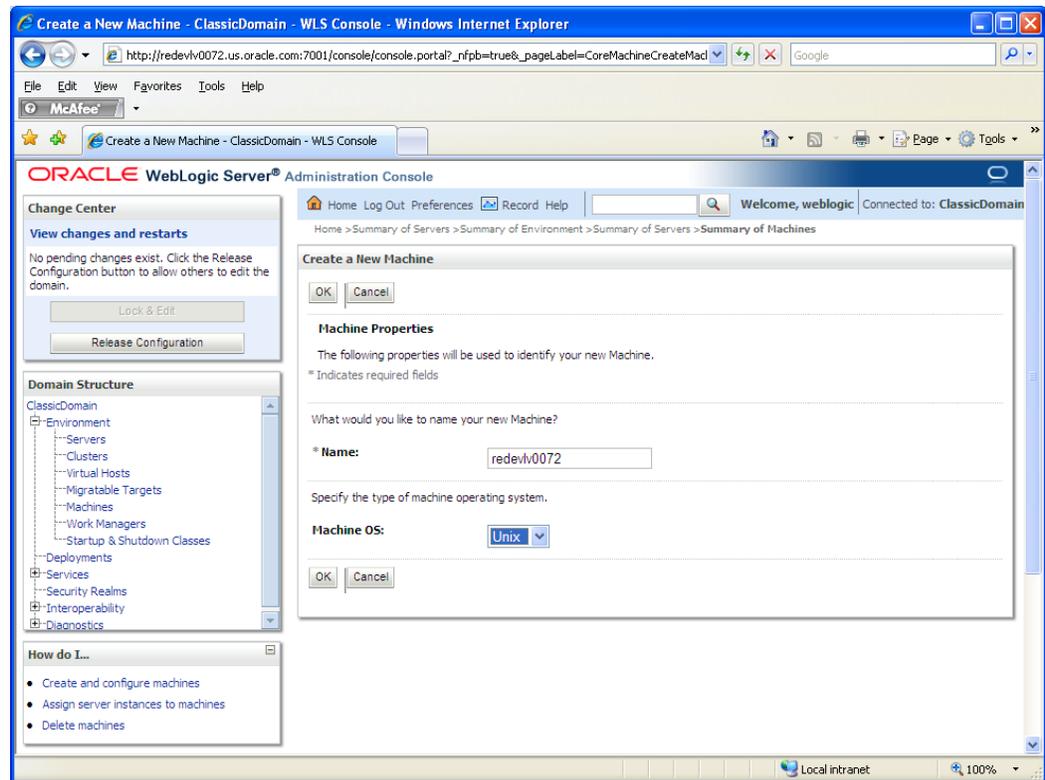
Install Node Manager

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

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

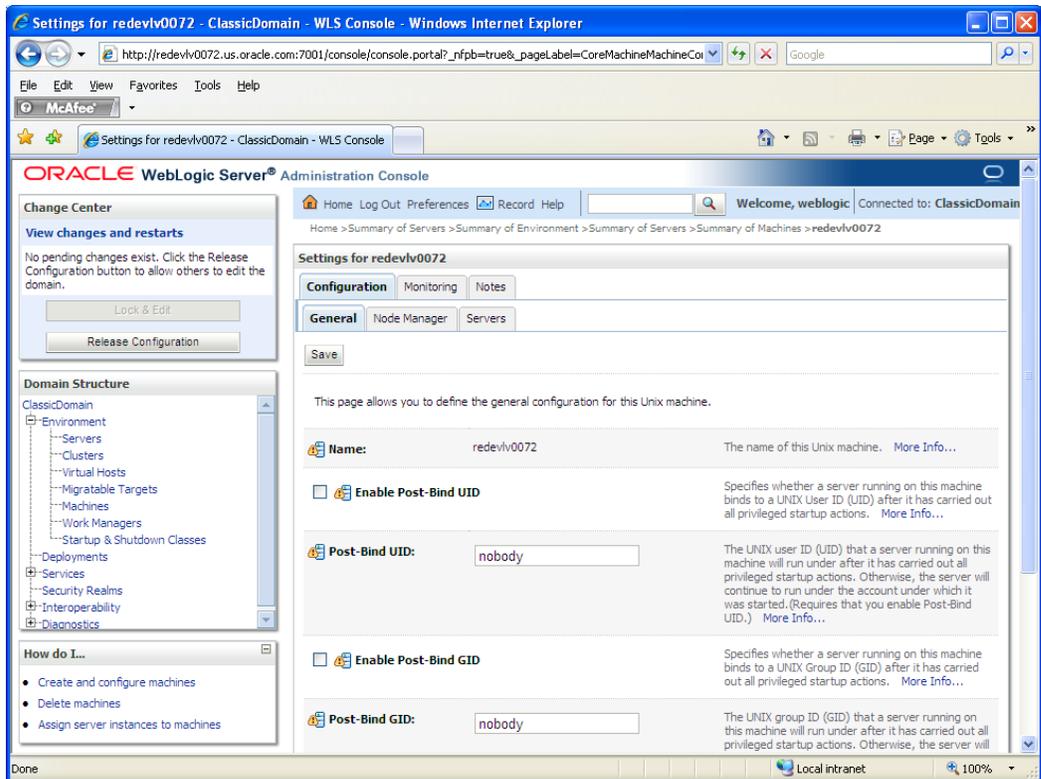
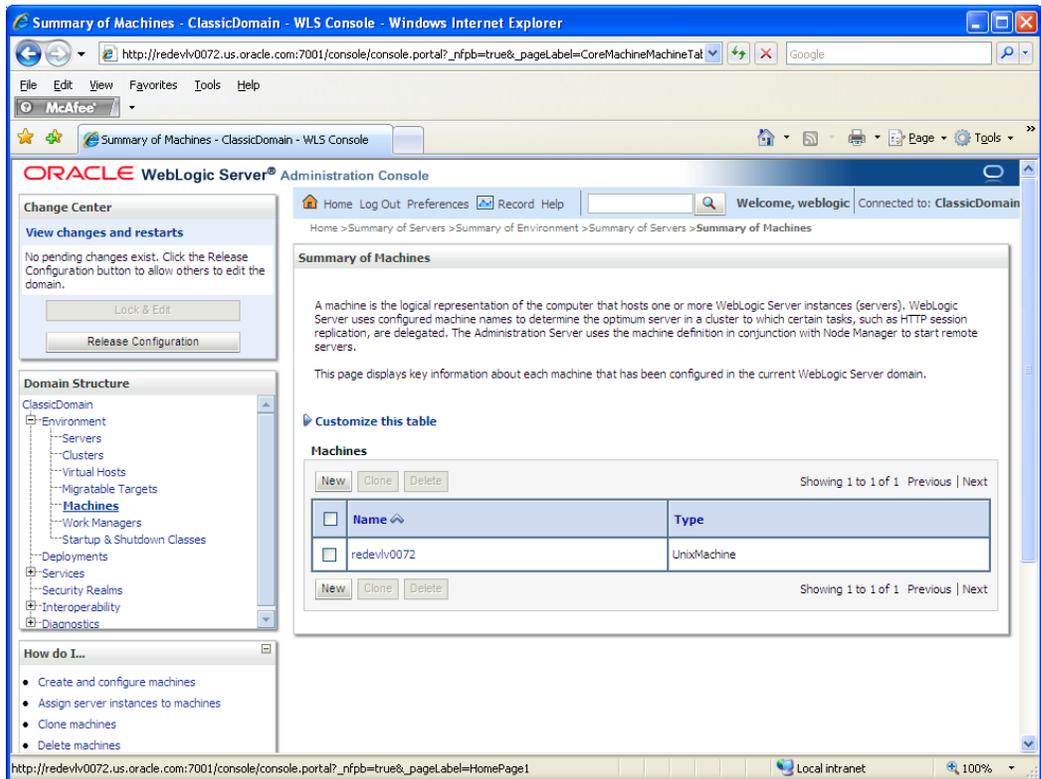
The following page is displayed. Set the following variables:

- Name: Logical machine name
- Machine OS: UNIX

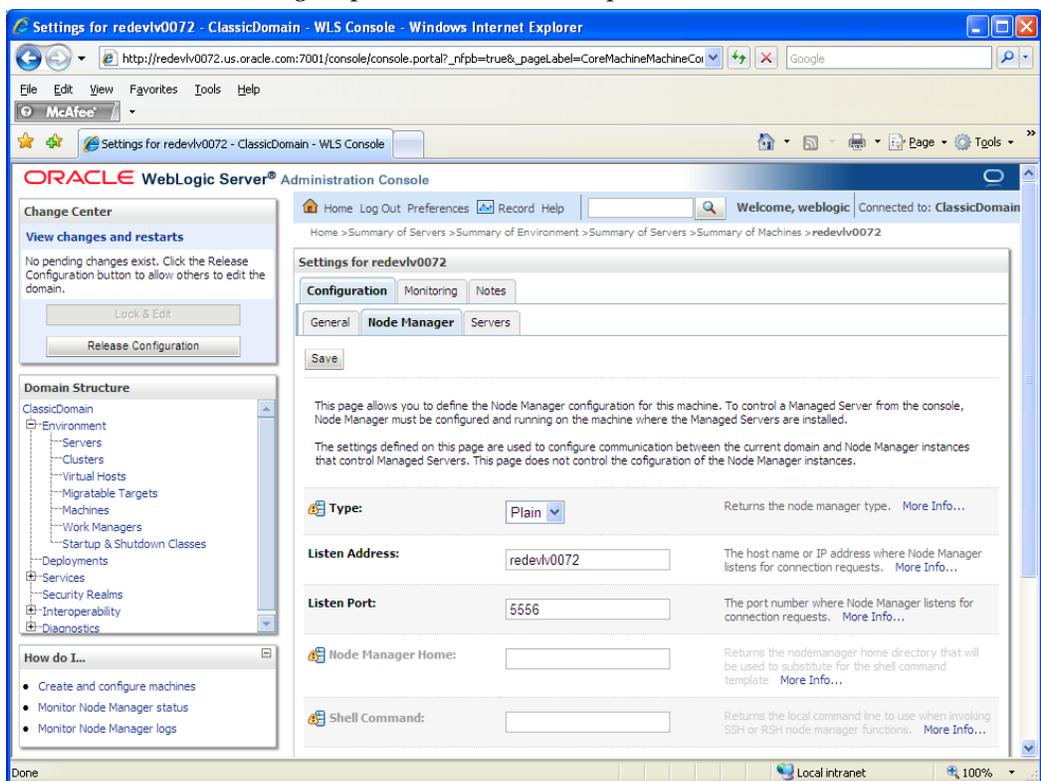


3. Click **OK** to activate the changes.

4. Click the machine created.

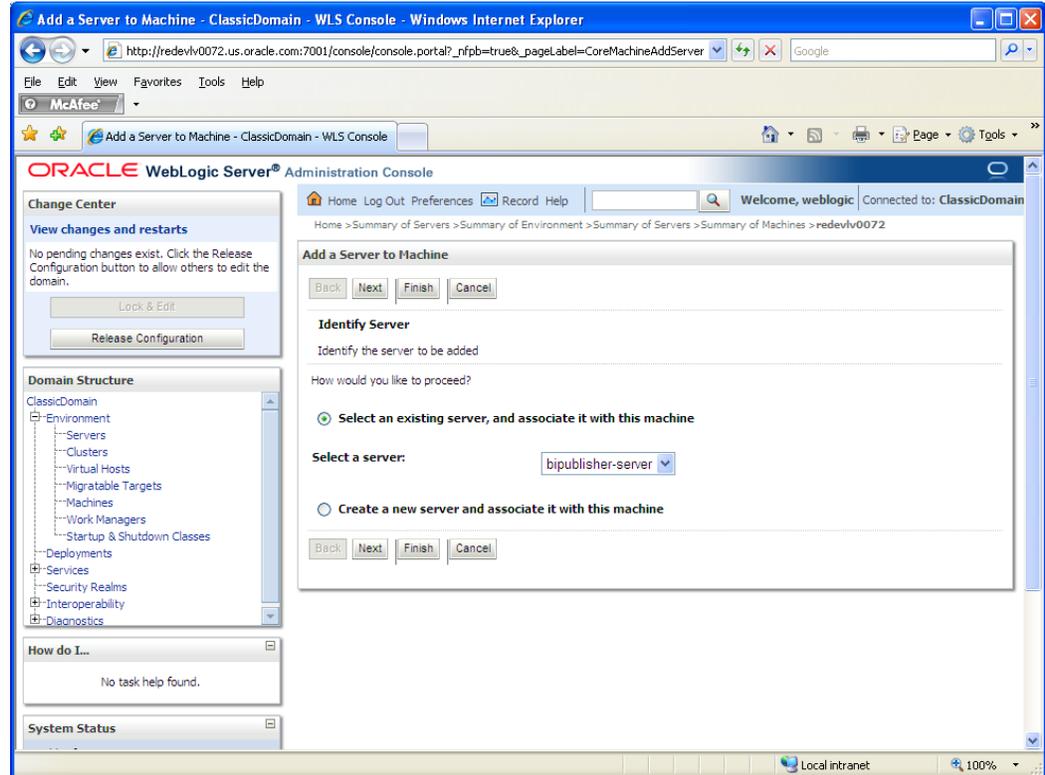


5. Click the NodeManager tab and update the details below.
 - **Type:** Plain
 - **Listen Address:** <weblogic server> (for example, redevlv0072.us.oracle.com)
 - **Listen Port:** Assign a port number. Default port is 5556.



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

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:

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

```
For example: /u00/webadmin/product/10.3.x
/WLS/user_projects/domains/<Domain
_name>/servers/bipublisher-server
```

13. Click **Save**.
14. Click **Activate Changes**.
15. Edit the nodemanager.properties file at the following location with the below values:
 \$WLS_HOME/wlserver_10.3/common/nodemanager/nodemanager.properties
 - SecureListener=false
 - StartScriptEnabled=true
 - StartScriptName=startWebLogic.sh.
16. Start NodeManager from the server using the startNodeManager.sh at
 <WEBLOGIC_HOME>/wlserver_10.3/server/bin

Start the Managed Servers

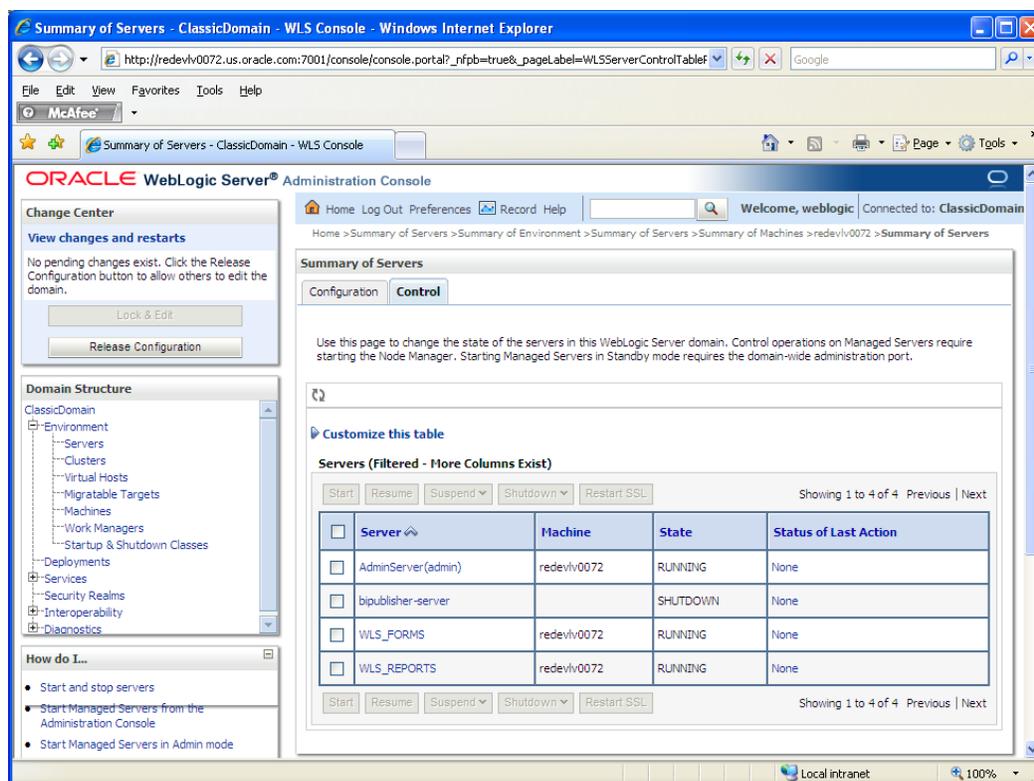
To start the managed servers, complete the following steps.

1. Start the Node Manager from the command line if it is not started already.

```
$WLS_HOME/wlserver_10.3/server/bin startNodeManager.sh
```

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

2. Navigate to Environments > Servers. Select <bipublisher-server> managed server. Click the Control tab.



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

Additional Setup 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

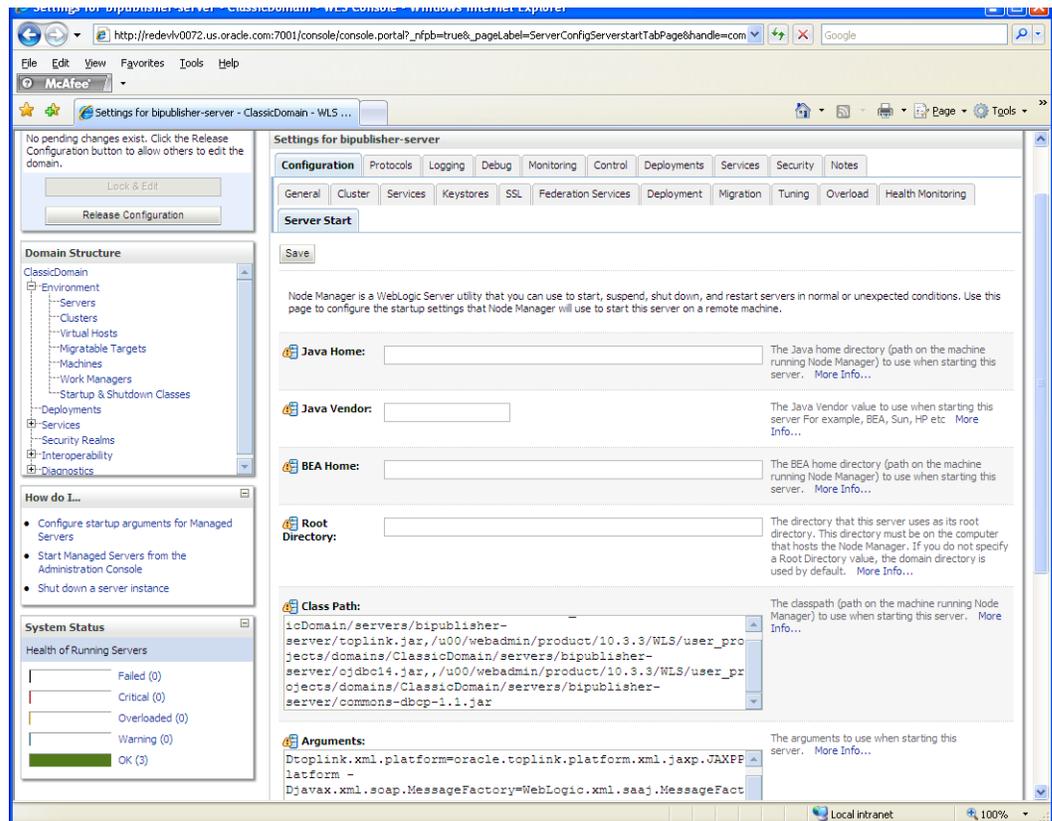
<WLS_HOME>/user_projects/domains/<domain_home>/servers/bipublisher-server/). Append the path of the libraries to the Java classpath for the bipublisher managed server in the weblogic administration console (Classpath in weblogic administration console is available in the path: Weblogic Administration console->Servers->BIPublisher managed server->Server Start-> Classpath)

- ojdbc14.jar
- bijdbc14.jar
- topink.jar
- commons-dbc-1.1.jar

4. Add the following arguments to the arguments of the java launcher (Arguments in weblogic administration 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.saaaj.MessageFactoryImpl
```

Note: The information in the Class Path field in the following screens is for demonstration purposes only. Therefore, version numbers may not reflect the latest version available.



5. Restart the WebLogic server.

Deploying the BI Application in WebLogic

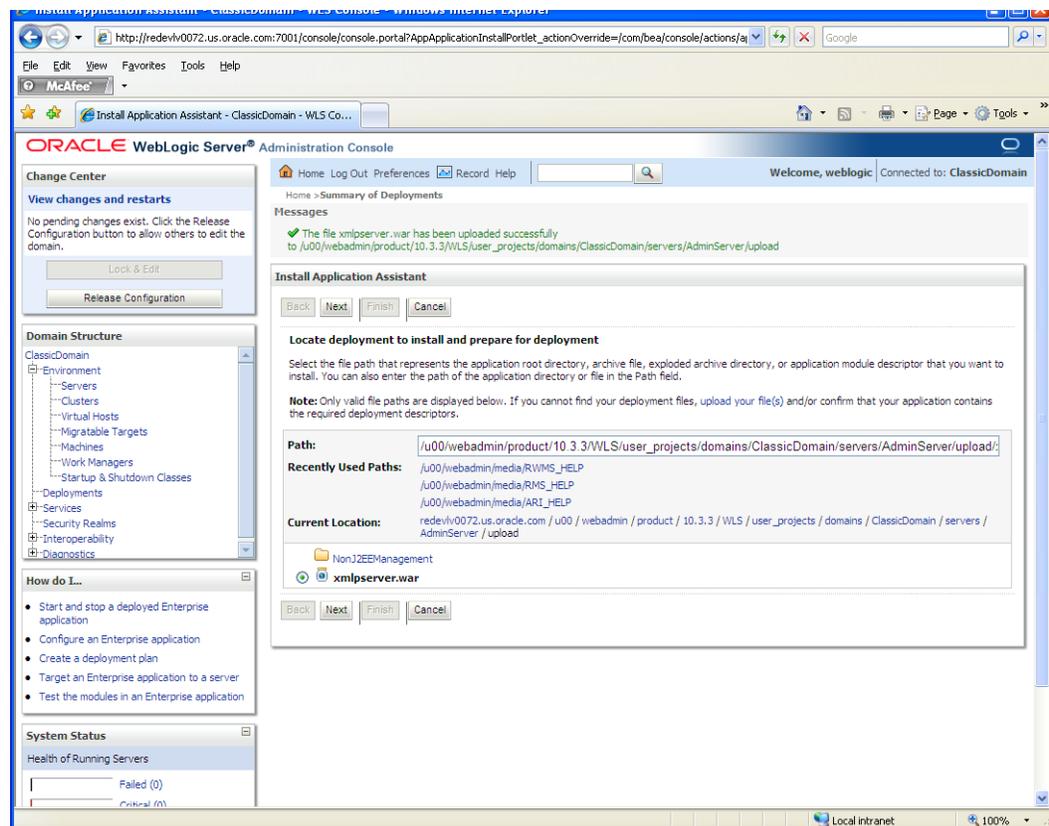
The exploded archive directory created above in “Creating an Exploded Directory for the Installation” must now be deployed into the bipublisher managed server of WebLogic. Deployment can be achieved in a number of ways but we will use the WebLogic Administration Console and the following steps.

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

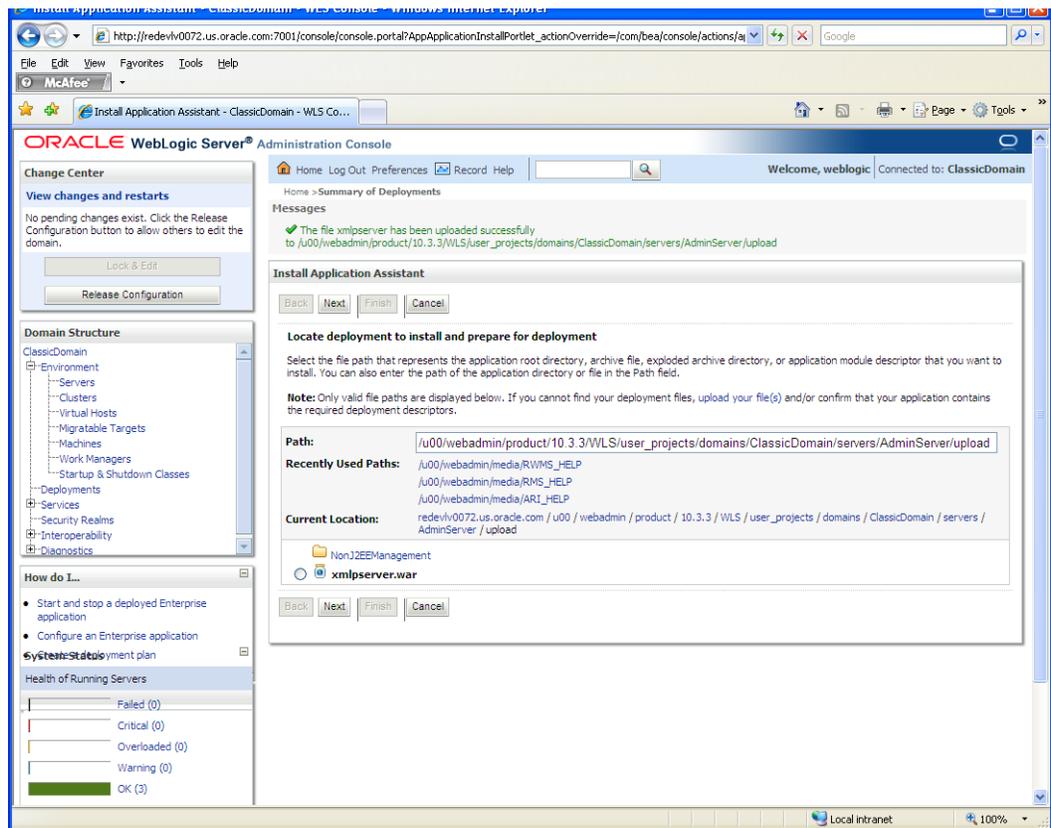
For example,

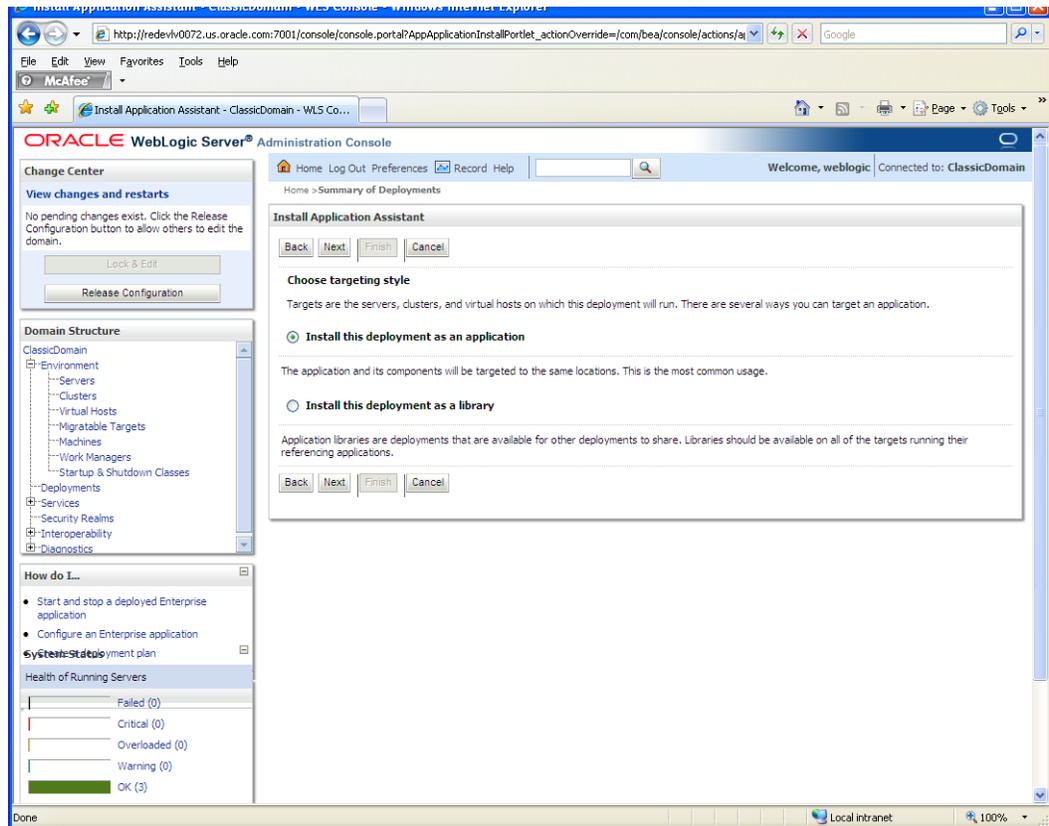
`http://redev1v0072.us.oracle.com:7001/console`

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.

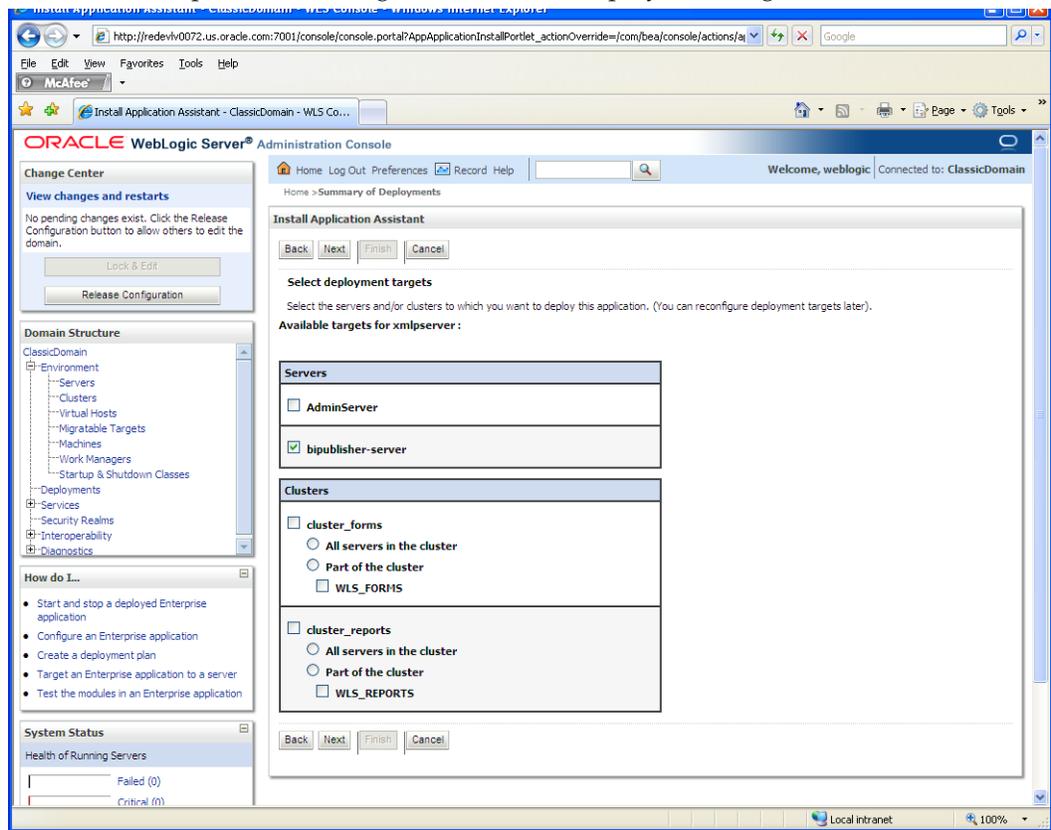


5. Select the exploded directory referenced by <BI_DEPLOYMENT>/xmlpsrver. Click **Next**.

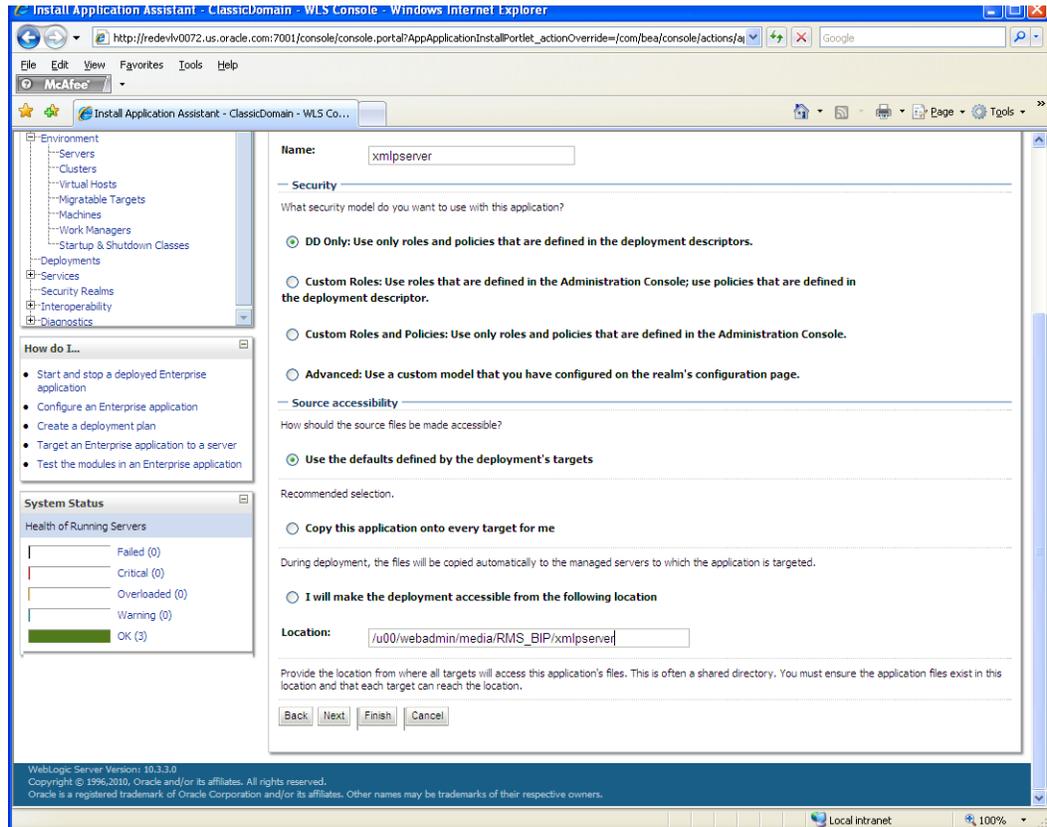


6. Select the Install this deployment as an application option. Click Next.

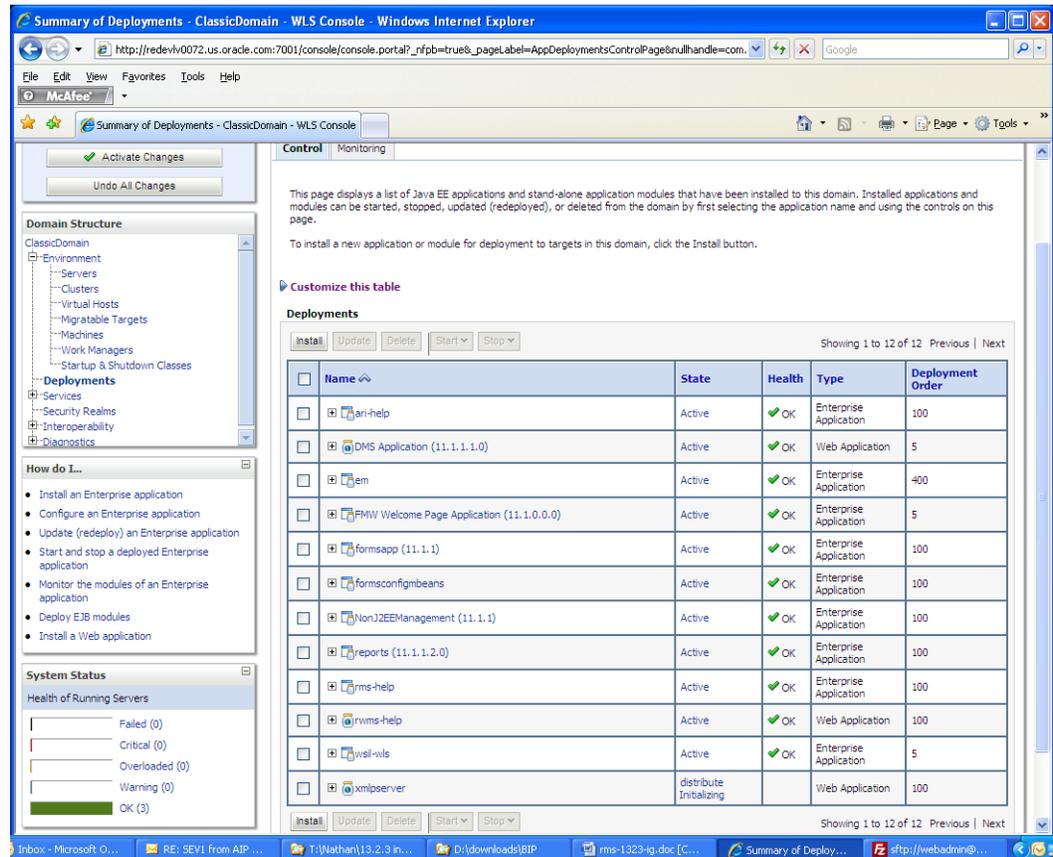
7. Select the bipublisher managed server as the deployment target. Click Next.



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

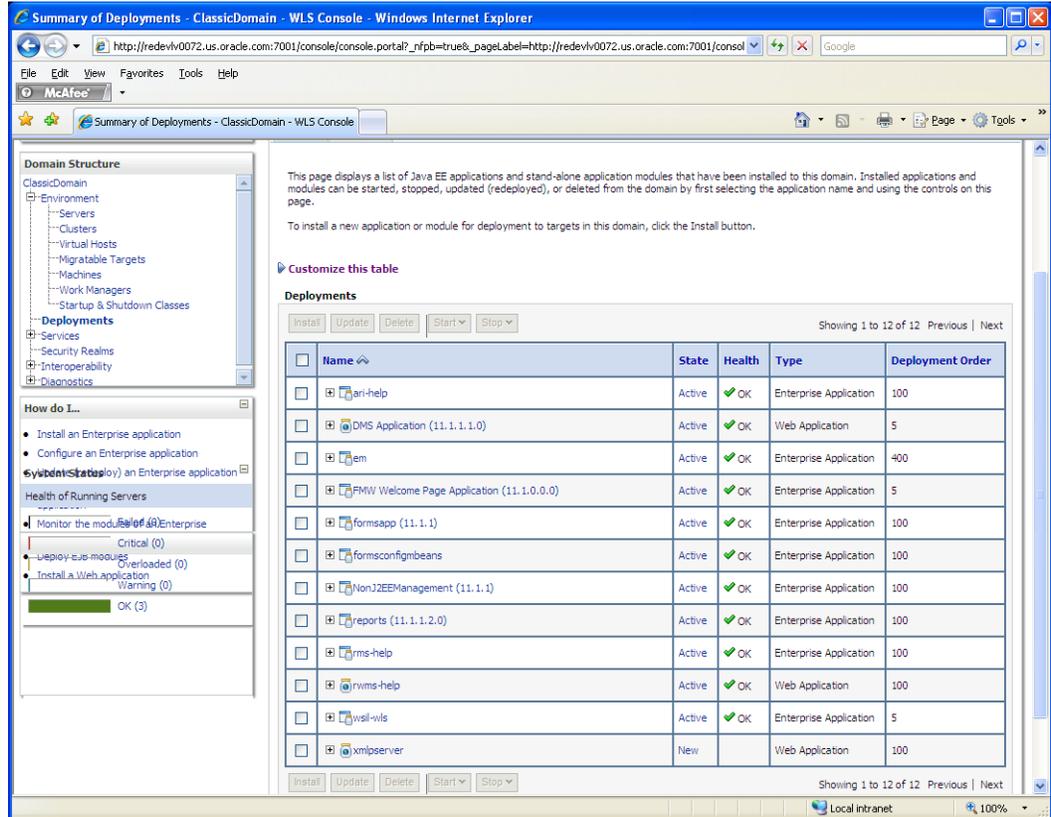


9. Click Finish.

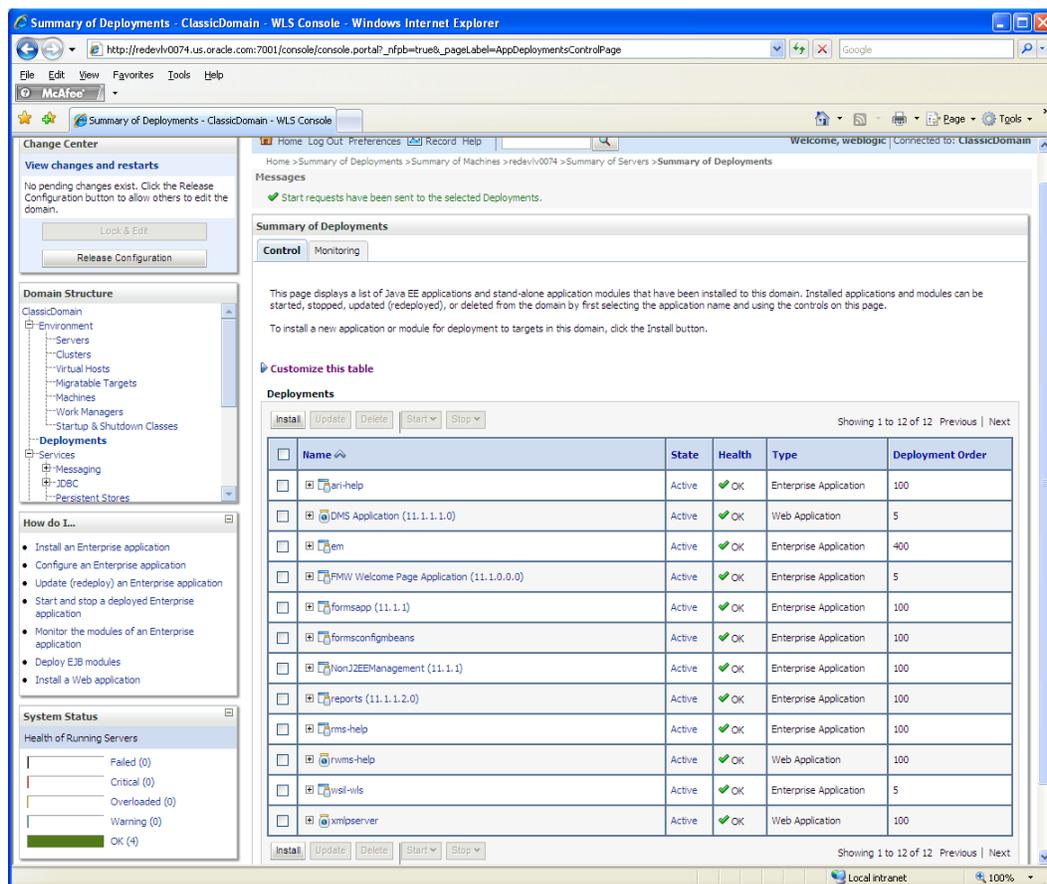


10. To activate these changes, in the **Change Center** of the Administration Console, click **Activate Changes**.

- 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.



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

For example:

`http://redev1v0072.us.oracle.com:7001/console`

Note: If using SSO/LDAP for BIPublisher, BIPublisher managed server should be started using the following parameter:

`-Dweblogic.http.enableRemoteUserHeader=true`

If the `<bipublisher-server>` is being started from WebLogic administration console, the above parameter should be added here before restarting the BIPublisher managed server from the administration console:

Adminconsole > Environment > Servers-> `<bipublisher-server>` > Server Start > Arguments.

If the server is being started from UNIX, consider the following example:

```
<WEBLOGIC_DOMAIN_HOME>/bin/startManagedWeblogic.sh <bipublisher-server> <server:port> -Dweblogic.http.enableRemoteUserHeader=true
```

Installing the RMS BI Publisher Templates

This section describes how the RMS report templates are installed into the appropriate BI server repositories. BI_REPOSITORY refers to the BI Publisher reports repository.

Example: /u00/webadmin/RMS_BIP/xmlpserver/XMLP

Report files are placed in the directory, INSTALL_DIR/base/reports, and must be copied into the BI repository directory.

1. Create the RMS directory to hold the reports under <BI_REPOSITORY>/Reports/Guest/RMS13.
2. Change directory to the INSTALL_DIR/base/reports used for the application installation. 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 is the data source that RMS uses 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 is displayed.

The screenshot shows the Oracle BI Publisher Admin console in a Windows Internet Explorer browser. The page title is "Oracle BI Publisher Enterprise" and the user is logged in as "administrator". The navigation tabs are "Reports", "Schedules", and "Admin". The current page is "Admin > JDBC > Update Data Source: RMS13". The "Update Data Source: RMS13" form is displayed with the following fields:

- General**
 - Data Source Name:** RMS13
 - Driver Type:** Oracle 9i/10g/11g
 - Database Driver Class:** oracle.jdbc.OracleDriver
 - Connection String:** jdbc:oracle:thin:@redevl0064.us.oracle.com:1521:dvols72
 - Username:** rms01app
 - Password:** [masked]
 - Pre Process Function:** [empty]
 - Post Process Function:** [empty]
 - Use Proxy Authentication
 -
- Security**
 - Available Roles:** qsbrole
 - Allowed Roles:** [empty]
 -
 -

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

Configuring the BIPublisher Scheduler

Complete the following tasks for scheduler configuration:

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


```
create user <scheduler schema user> identified by <password> default
tablespace <table space name> temporary tablespace temp;
grant create session,create table to <scheduler schema user>;
alter user <scheduler schema user> quota unlimited on <table space name>;
```
2. Navigate to the top level Admin display and select the **Scheduler Configuration** hyperlink. This will show you the Scheduler Configuration screen. Enter the appropriate database connection details and test the connection as previously done. If this connection operates successfully, save the connection details. Click **Install Schema** to install the schema for BI publisher using the <scheduler schema user> that was created in the previous step.

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 Oracle BI Publisher Set Up for RMS Reports

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

1. 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.
2. 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://redevlv0072.us.oracle.com:7003/
 ORACLE_RMS_RWSERVER=/<location to RMS directory>/
 For example, ORACLE_RMS_RWSERVER=xmlpserver/Guest/RMS13/

Data Migration

Included in the 13.2.4 release is a tool responsible for upgrading preexisting data in the RMS schema once 13.2.2 database upgrades are executed. If upgrading from 13.2.1, or earlier, you will need to run this tool to upgrade your data after completing the 13.2.2 Database patch. Running the tool against schemas that have been patched to a version later than 13.2.2 may have unexpected results.

Note: If you already ran the Data Migration tool during or after the 13.2 release, you do not need to run it again.

Note: High volume environments may require multiple days for data migration.

Before running the RMS 13.2 Data Migration Tool:

- Make a backup of all your objects and database schema.
- Check that RMS has 13.2.2 installed.
- Review the enclosed RMS 13.2.4 Patch Release Notes (rms-1324-rn.pdf).

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 rms1324datamigration.zip file from the RMS 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 rms1324datamigration.zip file. This creates a “master_controller” subdirectory under STAGING_DIR.

Configure RMS Data Migration Tool

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

1. Change directories to STAGING_DIR/master_controller/rms.
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 controller.cfg file and replace the values for the following variables with the appropriate values.

- a. Export PATCH_DIR=STAGING_DIR/master_controller/rms
- b. export SCHEMA_OWNER=<The name of the RMS schema>
- c. export MMUSER=/@< Schema Owner Wallet Alias >

```

Note: See "Appendix: Setting Up Password Stores with Oracle Wallet" for how to set up the 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/files directory with data from your existing RMS schema for the migration. Use the existing files as templates for how this data should be formatted. For descriptions of this data, refer to the RMS 13.2.4 Data Model document (rms-1324-dm.pdf).

- state.dat

state.dat is used to update the country for a state in the STATE table. This file is required if there are no stores/warehouses in the system or stores/warehouses are in more than one country. This check is done in the PREVALIDATION routine. Replace the default values in the template state.dat file with the correct values for your schema.

- country_tax_jurisdiction.dat

country_tax_jurisdiction.dat is used to populate the jurisdiction codes in the COUNTRY_TAX_JURISDICTION table. Replace the default values in the template country_tax_jurisdiction.dat file with the correct values for your schema. This is optional and required only if jurisdiction codes need to be loaded into the schema.

- **addr.dat**
addr.dat is used to update the jurisdiction code for a state/country in the ADDR table. Replace the default values in the template addr.dat file with the correct values for your schema. This is optional and required only if jurisdiction codes need to be loaded into the schema.
 - **comp_store.dat**
comp_store.dat is used to update the jurisdiction code for a state/country in the COMP_STORE table. Replace the default values in the template comp_store.dat file with the correct values for your schema. This is optional and required only if jurisdiction codes need to be loaded into the schema.
 - **competitor.dat**
competitor.dat is used to update the jurisdiction code for a state/country in the COMPETITOR table. Replace the default values in the template competitor.dat file with the correct values for your schema. This is optional and required only if jurisdiction codes need to be loaded into the schema.
 - **comphead.dat**
comphead.dat is used to update the jurisdiction code for a state/country in the COMPHEAD table. Replace the default values in the template comphead.dat file with the correct values for your schema. This is optional and required only if jurisdiction codes need to be loaded into the schema.
 - **customer.dat**
customer.dat is used to update the jurisdiction code for a state/country in the CUSTOMER table. Replace the default values in the template customer.dat file with the correct values for your schema. This is optional and required only if jurisdiction codes need to be loaded into the schema.
 - **ordcust.dat**
ordcust.dat is used to update the jurisdiction code for a state/country in the ORDCUST table. Replace the default values in the template ordcust.dat file with the correct values for your schema. This is optional and required only if jurisdiction codes need to be loaded into the schema.
 - **outloc.dat**
outloc.dat is used to update the jurisdiction code for a state/country in the OUTLOC table. Replace the default values in the template outloc.dat file with the correct values for your schema. This is optional and required only if jurisdiction codes need to be loaded into the schema.
 - **rtv_head.dat**
rtv_head.dat is used to update the jurisdiction code for a state/country in the RTV_HEAD table. Replace the default values in the template rtv_head.dat file with the correct values for your schema. This is optional and required only if jurisdiction codes need to be loaded into the schema.
- 8.** Run the following insert statement into your RMS schema manually. You can modify the default values if necessary:
- ```
insert into upg_item_supp_manu_country select item,supplier,origin_country_id, 'Y' from item_supp_country;
```

## Run the RMS Data Migration Tool

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

```
Change directories to
STAGING_DIR/master_controller/rms.
```

1. If rerunning the data migration process, clear the contents of the “processed” directory.
2. Run prevalidation tool. This ensures that the input files for the data migration tool is up to date:
 

```
$./rms132_upgrade.ksh PREVALIDATION
```
3. Run migration tool.
 

```
$./rms132_upgrade.ksh UPGRADE
```
4. Run the migration cleanup tool. This removes temporary data migration objects from the database.
 

```
$./rms132_upgrade.ksh CLEANUP
```
5. Refer to the files in the log and error directory for details if there are problems during migration.
6. You will need to rebuild synonyms for any additional RMS users. Create synonyms to the owner schema for all tables, views, sequences, functions, procedures, packages and types to which the user has access.

## Configure ReIM Data Migration Tool

If you choose to migrate ReIM data, follow these steps.

1. Change directories to STAGING\_DIR/master\_controller/reim.
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 controller.cfg file and replace the values for the following variables with the appropriate values:
  - Export PATCH\_DIR=STAGING\_DIR/master\_controller/reim
  - export SCHEMA\_OWNER=<The name of the RMS schema>
  - export MMUSER=/@< Schema Owner Wallet Alias >

---

**Notes:**

See "[Appendix: Setting Up Password Stores with Oracle Wallet](#)" for how to set up database wallet.

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

---

## Run the ReIM Data Migration Tool

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

1. Change directories to STAGING\_DIR/master\_controller/reim.
2. If rerunning the data migration process, clear the contents of the processed directory.
3. Run migration tool.  
\$ ./reim132\_upgrade.ksh UPGRADE
4. Run migration cleanup tool. This removes temporary data migration objects from the database.  
\$ ./reim132\_upgrade.ksh CLEANUP
5. Refer to the files in the log and error directory for details if there are problems during migration.
6. Rebuild synonyms for any additional RMS users.

## Configure Allocation Data Migration Tool

If you choose to migrate Allocation data, follow these steps:

1. Change directories to STAGING\_DIR/master\_controller/alloc-rms.
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 controller.cfg file and replace the values for the following variables with the appropriate values :

- Export PATCH\_DIR=STAGING\_DIR/master\_controller/alloc-rms
- export SCHEMA\_OWNER=<The name of the RMS schema>
- export MMUSER=/@< Schema Owner Wallet Alias >

```

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

```

```

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

```

```

Example: /u00/oracle> sqlplus $UP

```

## Run the Allocation Data Migration Tool

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

1. Change directories to STAGING\_DIR/master\_controller/alloc-rms.
2. If rerunning the data migration process, clear the contents of the processed directory.
3. Run prevalidation tool. This ensures that the input files for the data migration tool is up to date:
 

```
$./allocation132_upgrade.ksh PREVALIDATION
```
4. Run migration tool.
 

```
$./allocation132_upgrade.ksh UPGRADE
```
5. Run migration cleanup tool. This removes temporary data migration objects from the database.
 

```
$./allocation132_upgrade.ksh CLEANUP
```
6. Refer to the files in the log and error directory for details if there are problems during migration.
7. Rebuild synonyms for any additional RMS users.

---



---

## Web Services Installation

Some Oracle Retail applications; <app> (for example, RMS) use Oracle Objects for the PL/SQL API's. The tool generates a Web Service Provider layer between the external clients and the <app> API's to provide the Web Service functionality, such as faults, logging, and security, as well as the conversion from xml payloads to Oracle Objects. The Retail Service Enabler (RSE) tool creates the appropriate Provider web service endpoints as well as templates for the PL/SQL APIs.

---



---

**Note:** Depending on your business needs, you may not need to install web services.

---



---

### Extract Web Services Files

To extract Web Services files, do the following:

1. Create a directory under the Batch INSTALL\_DIR to hold the web services files. This will be referred to as Web Service Objects.
2. Copy the rms1324webservices.zip file from the RMS 13.2.4 release to INSTALL\_DIR/'Web Service Objects'.
3. Unzip rms1324webservices.zip from INSTALL\_DIR/'Web Service Objects'.

### Set up Environment

To set up the environment, do the following:

1. Source the oraenv script to set up the Oracle environment variables (ORACLE\_HOME, ORACLE\_SID, PATH, etc)

---



---

**Example:** prompt\$ . oraenv  
ORACLE\_SID = [] ? mydb  
prompt\$

---



---

2. 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. Export TNS\_ADMIN=/path/to/wallet/files/dir/
4. Export UP=/@<Schema Owner Wallet Alias>

---



---

**Note:** See "[Appendix: Setting Up Password Stores with Oracle Wallet](#)" for how to set up database wallet.

---



---

5. 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

---



---

## Drop Existing Java Code from RMS Database Schema

If you have an existing Web service installation in the RMS schema, you will need to drop the Java code from it before continuing.

```
dropjava -u $SUP -v missing11g.jar dbwsclientws.jar dbwsclientdb11.jar
```

```
dropjava -u $SUP -v GetDrillBackForwardURLConsumer.jar
```

```
dropjava -u $SUP -v ProcessGLAccountValidationRetailReqABCSEncoder.jar
```

If you encounter errors while dropping the Java, drop the individual classes..

---

---

**Example:** dropjava -u \$SUP  
oracle/retail/integration/services/consumer/GetURLWS/runtime/SourceSystem\_Encoder

---

---

## Loading Java Code to the RMS Database Schema

Web service installation involves loading java code to the RMS database schema itself. Perform the following procedures to load java code to the RMS database schema..

1. Increase ORACLE initialization parameter JAVA\_POOL\_SIZE. 150MB is recommended.
2. Run the following commands:

```
cd INSTALL_DIR/'Web Service Objects'/Consumer/lib

loadjava -u $SUP -v -r -f missing11g.jar dbwsclientws.jar dbwsclientdb11.jar
```
3. Make sure the step above completes with 0 errors. If you encounter errors, run the following command, correct the error, and then repeat the steps above.

```
dropjava -u $SUP -v missing11g.jar dbwsclientws.jar dbwsclientdb11.jar
```
4. Change the contents of the following files to your RMS schema owner name when seeing the value <USER>.
  - INSTALL\_DIR/'Web Service Objects'/Consumer/sql/GetDrillBackForwardURLConsumer\_grant.sql
  - INSTALL\_DIR/'Web Service Objects'/Consumer/sql/ProcessGLAccountValidationRetailReqABCSEncoder\_grant.sql

---

---

**Example:** Change all occurrence of <USER> to RMS schema owner RMS01 in the files:

```
dbms_java.grant_permission('<USER>',
'SYS:java.lang.RuntimePermission', 'setFactory', '')

to

dbms_java.grant_permission('RMS01',
'SYS:java.lang.RuntimePermission', 'setFactory', '')
```

---

---

5. Run the above files as the database sys user.
6. Perform the following commands to load java to the database:

```
cd ../jars
```

```
loadjava -u $SUP -v -r -f GetDrillBackForwardURLConsumer.jar
```

7. Make sure the step above completes with 0 errors. If you encounter errors, run the following command, correct the error, and then repeat the steps above.  

```
dropjava -u $SUP -v GetDrillBackForwardURLConsumer.jar
```
8. Perform the following commands to continue loading java to the database:  

```
loadjava -u $SUP -v -r -f
ProcessGLAccountValidationRetailReqABCServiceImplConsumer.jar
```
9. Make sure the step above completes with 0 errors. If you encounter errors, run the following command, correct the error, and then repeat the steps above.  

```
dropjava -u $SUP -v ProcessGLAccountValidationRetailReqABCServiceImplConsumer.jar
```
10. You do NOT create synonyms to each java object loaded as the synonyms were created in packages previously loaded pointing to the exposed java objects.

## Create a Managed Server

Create a managed server for the RMS Web services app to be deployed per the *WebLogic Installation Guide*.

## Create a Datasource

Create a datasource for RMS Webservices to point to the RMS schema as follows.

- Name can be anything you want.
- JNDI Name must be jdbc/RetailWebServiceDs.
- Set database type and driver for your environment.
- Set connection properties for the database using the rms user (rms01user). Be sure to test the configuration before moving on.
- Point the data source to the server created in the Create a Managed Server section above.

## Deploy RMS Service EAR File

To deploy the RMS Service .ear file, do the following.

1. Make sure that the managed server created in Step 2, where this application will be deployed, is up and running.
2. In the left Domain Structure window, click Environment > Deployments.
3. Click **Lock and Edit** in the change center to install the ear file. It will enable the install button on the deployments screen.
4. Click Install.
5. Click the **upload your file(s)** link.
6. Click the **Deployment Archive** browse button.
7. Select the rms-service.ear file from local machine.
8. Click **Next**. Make sure that the radio button for rms-services.ear is selected.
9. Click **Next** again. Make sure that **Install this deployment as an application** is selected.
10. Click **Next** again and select the server created in Step 2.
11. Click **Next**. Click **Finish** to return to the deployments page. You should see rms-service in the list of deployments.
12. Click **Activate Changes** in the change center. The state of the application may be shown as prepared. If so, select the check box next to rms-service to will enable the **Start** button. Click **Start**. Select **servicing all requests**.

13. To test the deployment, click on the application. Click the testing tab.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area is titled "Settings for rms-service" and has several tabs: Overview, Deployment Plan, Configuration, Security, Targets, Control, **Testing**, Monitoring, and Notes. The Testing tab is active, displaying a table of deployment tests.

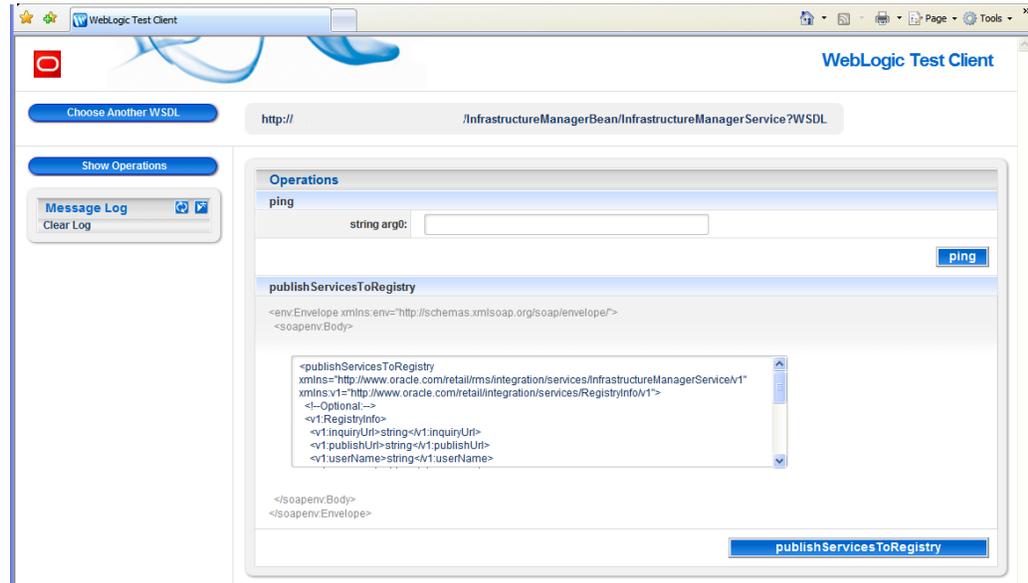
Text in the console: "Some deployment types support test points you can use to verify that a deployment was successful and that the module is ready for use. The following table includes all of the test points available for this application or module."

| Name                                                    | Test Point  | Comments                                      |
|---------------------------------------------------------|-------------|-----------------------------------------------|
| InfrastructureManagerBean                               |             | There are no test points for this EJB module. |
| InfrastructureManagerService                            |             | Test points for this WebService module.       |
| /InfrastructureManagerBean/InfrastructureManagerService | ?WSDL       | WSDL page on server rms-service-server        |
| /InfrastructureManagerBean/InfrastructureManagerService | Test client | Test client on server rms-service-server      |
| PayTermBean                                             |             | There are no test points for this EJB module. |
| PayTermService                                          |             | Test points for this WebService module.       |
| ReportLocatorBean                                       |             | There are no test points for this EJB module. |
| ReportLocatorService                                    |             | Test points for this WebService module.       |
| SupplierBean                                            |             | There are no test points for this EJB module. |
| SupplierService                                         |             | Test points for this WebService module.       |

On the left side of the console, there are several panels: "Change Center" with "Lock & Edit" and "Release Configuration" buttons; "Domain Structure" showing a tree view of the environment; "How do I..."; and "System Status" showing "Health of Running Servers" with a bar chart indicating 15 servers are OK.

At the bottom of the console, the version information is displayed: "WebLogic Server Version: 10.3.3.0. Copyright © 1996-2010, Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners."

14. Expand one of the four web services. Click the **?WSDL** and **Test Client** links to test. For the test client you should see a screen similar to the following:



## Configure Web Service Security

---

**Note:** If you are utilizing the AIA 2.5 solution for PeopleSoft or EBS, you must skip this section.

---

This section details how to configure the web service deployment to use the WS-Security Username Profile. Configuring this policy will force all incoming requests to contain WS Security headers to authenticate the requestor based on a user name and password elements. The use of this profile does not provide any confidentiality protection on web service requests: data contained within the Web service messages will not be encrypted. However, using a secure message transport, such as SSL/TLS, will provide confidentiality for the message as it traverses the network. For more information on using SSL/TLS see the section, “Configuring SSL” found in the WebLogic document, “Securing the WebLogic Server, 10g Release 3 (10.3)”.

Additional WS Security policies may also be available depending on the configuration of the WebLogic server. Using these policies will require appropriate changes to web service requests created by applications consuming the web service. Many of these policies also require additional steps for correct keystore and truststore file configuration.

---

**Note:** The AIA 2.5 solution for PeopleSoft and EBS does not support the WS-Security Username profile.

---

When a web service uses the WS-Security Username profile, all web service consumers must specify a user name configured within the current WebLogic domain. This user name must also have the appropriate role(s) associated with it. Using this profile is thus a two-step process:

1. Attach the WS-Security Username policy to the web service
2. Create roles and users who can access the web services

These steps are explained below.

## Attach Policy File to the Web Service

The ear file contains **usnametoken.xml** in the **META-INF/policies** folder. This file contains the policy which is used by the web service. Follow the below steps to attach it to a web service:

1. Click on the application in the deployments screen.
2. The overview page of the application shows all the modules and components which are installed as part of the application:
3. Click on the web service for which you want to enable security.
4. Click the Configuration > WS-Policy tab of the web service. You should see the Web Service port (for example, PayTermPort) in the list of service endpoints.
5. Click the plus sign next to the Web Service to show all the operations of the Web Service.
6. Secure all the operations of the Web Service or selected operations of the Web Service. If you click on the Web Service port, it will show the next page, where you can attach policy file to the web service.
7. In the Available Endpoint Policies list, select the policy:usnametoken.xml option and move it to the list of Chosen Endpoint Policies.
8. Click **OK**. Leave all default values as they are.
9. Click **OK** again.
10. Verify the policy details have been added by clicking on the Testing tab of the web service page, and then selecting the WSDL. The WSDL should contain content similar to that shown below, along with additional service specific details:

```
<?xml version='1.0' encoding='UTF-8'?>
 <definitions xmlns:wssutil="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
 xmlns:wsp="http://schemas.xmlsoap.org/ws/2004/09/policy"
 xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdL"
 xmlns:soap="http://schemas.xmlsoap.org/wsdL/soap/"
 xmlns:tns="http://www.oracle.com/retail/rms/integration/services/PayTermService/v1" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns="http://schemas.xmlsoap.org/wsdL/"
 targetNamespace="http://www.oracle.com/retail/rms/integration/services/PayTermService/v1" name="PayTermService">
 <wsp:UsingPolicy wssutil:Required="true" />
 <wsp:Policy wssutil:Id="usnametoken">
 <ns1:SupportingTokens xmlns:ns1="http://docs.oasis-open.org/ws-sx/ws-securitypolicy/200512">
 <wsp:Policy>
 <ns1:UsernameToken ns1:IncludeToken="http://docs.oasis-open.org/ws-sx/ws-securitypolicy/200512/IncludeToken/AlwaysToRecipient">
 <wsp:Policy>
 <ns1:WssUsernameToken10 />
 </wsp:Policy>
 </ns1:UsernameToken>
 </wsp:Policy>
 </ns1:SupportingTokens>
 </wsp:Policy>
 </definitions>
```

## Create Roles and Users who can Access the Web Services

The second step is to create roles and users who can access the Web services, as follows.

1. Add users to the security realm. In the Domain Structure window, click the Security Realms link. The default realm is shown.
2. Click the link on the realm.
3. Click the Users and Groups tab.
4. Click **New**. And enter user name and password details on the next screen. Leave the default value for Provider.
5. Click **OK** to save the changes. The new user is shown in the list of users
6. Add roles either from the Roles and Policies tab of the security realm, or through the Security tab of the Web Service. This example shows how to create a role from the security tab of the Web Service.
7. Navigate to the Security tab of the Web Service to which you are adding security.
8. In the Roles tab, click **New**.
9. In the Name field, enter the role name. For example, rmsrole. Leave the Provider Name to default value. Click **OK**. The newly created role is shown in the role tab.
10. Add the user to the role. Click on the newly created role.
11. Click **Add Conditions**.
12. Select User in the Predicate List drop down. Click **Next**.
13. Enter the user name that was created in the security realm. Click **Add**. It is added to the list below the text box.
14. Click **Finish**.
15. Click **Save**.
16. Navigate back to the Security > Policies tab of the Web Service.
17. Click **Add Conditions**.
18. Select Role in the Predicate List drop down. Click **Next**.
19. Enter the role name that was created earlier and click **Add**. The role is added in the list below the text box.
20. Click **Finish**.
21. Click **Save**.

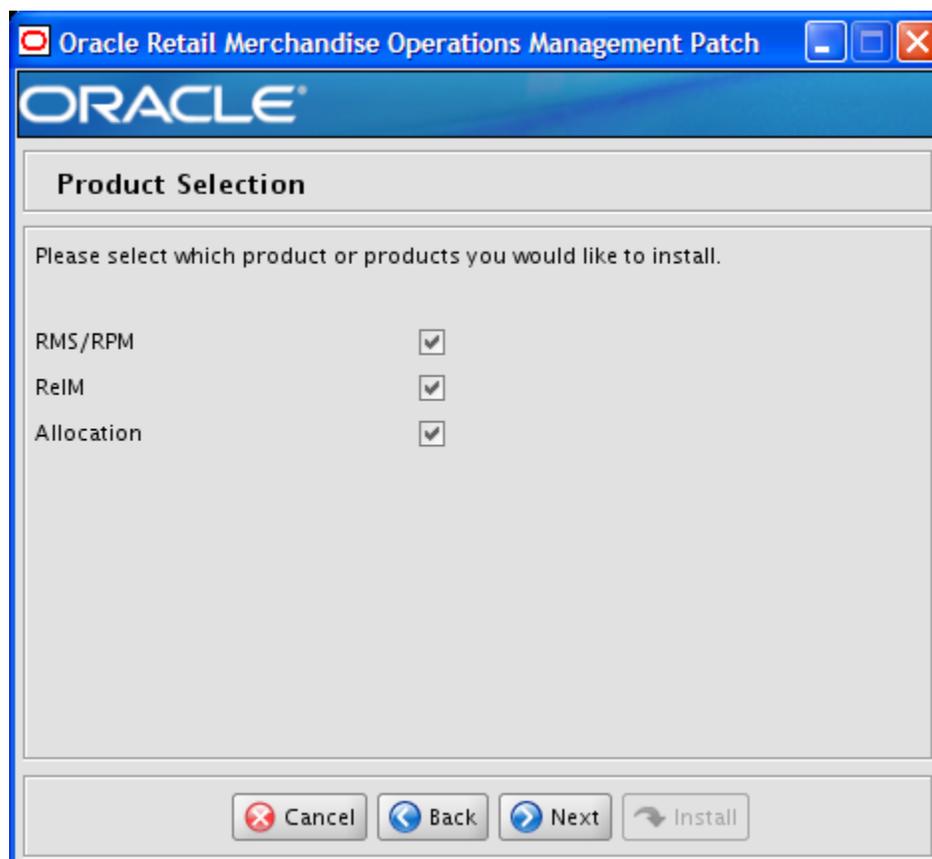
The process of adding security to Web Services is complete. Open the test page of the Web Service and verify that the Web Service is secured.



## Appendix: RMS Database Patch Installer Screens

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

### Screen: Product Selection



|                          |                                                                                                                                                                                                                     |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | Product Selection                                                                                                                                                                                                   |
| <b>Field Description</b> | By default the RMS database schema patch installer creates the database objects for RMS/ReSA/RTM and RPM. As an option, the database objects for ReIM and/or Allocation may be installed at the same time or later. |
| <b>Example</b>           | RMS/RPM, ReIM, Allocation                                                                                                                                                                                           |

**Screen: RMS Database Schema Details**

|                          |                                                                                                                                                                                                                  |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | RMS schema                                                                                                                                                                                                       |
| <b>Field Description</b> | Provide the RMS database user here. The installer logs into the database as this user to patch the RMS schema. This user must already exist in the database when the RMS database schema patch installer is run. |
| <b>Example</b>           | rms01                                                                                                                                                                                                            |

|                          |                                             |
|--------------------------|---------------------------------------------|
| <b>Field Title</b>       | RMS schema password                         |
| <b>Field Description</b> | Database password for the RMS schema Owner. |

|                          |                                                                                |
|--------------------------|--------------------------------------------------------------------------------|
| <b>Field Title</b>       | RMS Oracle SID                                                                 |
| <b>Field Description</b> | Oracle system identifier for the database where the RMS patch will be applied. |
| <b>Example</b>           | pkols05                                                                        |

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

### Screen: Allocation Database Schema Details

|                          |                                                                                                                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | Alloc schema                                                                                                                                                                                                             |
| <b>Field Description</b> | Provide the Allocation database user here. The installer logs into the database as this user to patch the Allocschema. This user must already exist in the database when the RMS database schema patch installer is run. |
| <b>Example</b>           | rms01app                                                                                                                                                                                                                 |

|                          |                                                   |
|--------------------------|---------------------------------------------------|
| <b>Field Title</b>       | Alloc schema password                             |
| <b>Field Description</b> | Database password for the Allocation user schema. |

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

## Screen: DBA User

**Oracle Retail Merchandise Operations Management Patch**

**ORACLE**

**DBA User**

Please provide the username and password of a database account that has sufficient privileges to create the Allocation user and synonyms between the Allocation user and RMS user. Example: SYSTEM. This user is referred to as the Allocation DBA user by this installer.

DBA user: SYSTEM

DBA user password: \*\*\*\*\*

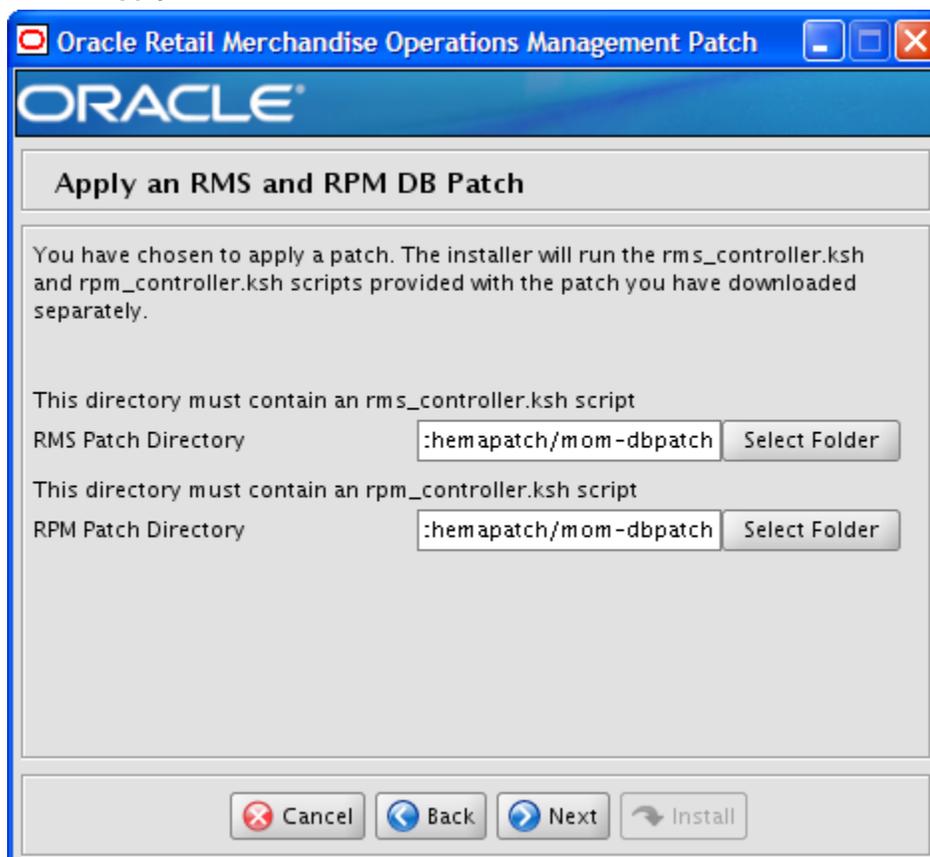
Buttons: Cancel, Back, Next, Install

|                          |                                                                                                                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | DBA user                                                                                                                                                                                                                 |
| <b>Field Description</b> | Provide a database user with sufficient privileges to create synonyms between other users. The installer logs into the database using this account and creates the synonyms needed between the RMS and Allocation users. |
| <b>Example</b>           | SYSTEM                                                                                                                                                                                                                   |

|                          |                                     |
|--------------------------|-------------------------------------|
| <b>Field Title</b>       | DBA user password                   |
| <b>Field Description</b> | Database password for the DBA user. |

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

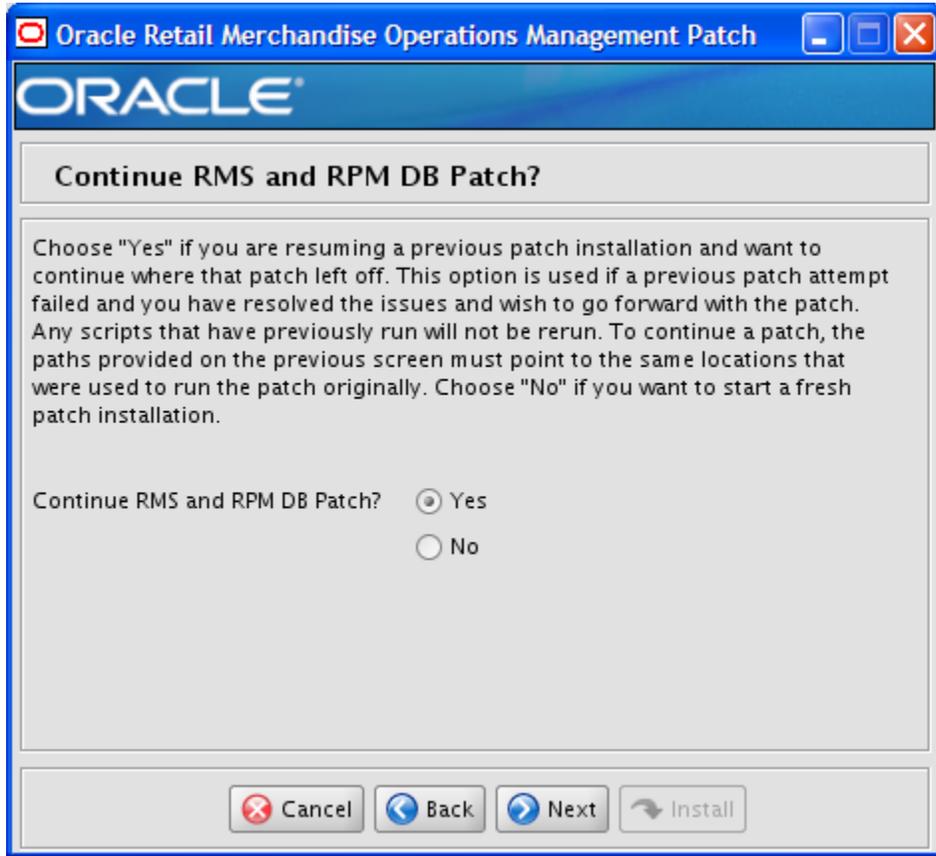
### Screen: Apply an RMS and RPM DB Patch



|                          |                                                                                                                                                                                                   |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | RMS Patch Directory                                                                                                                                                                               |
| <b>Field Description</b> | Provide the directory path to the RMS patch you want to install. The installer runs only the patch you provide.<br><b>Note:</b> The directory you choose must contain an rms_controller.ksh file. |
| <b>Example</b>           | /path/to/rms/dbschemapatch/mom-dbpatch for all 13.2.x patches<br><b>Note:</b> The patch option is intended for patches starting with 13.2.                                                        |

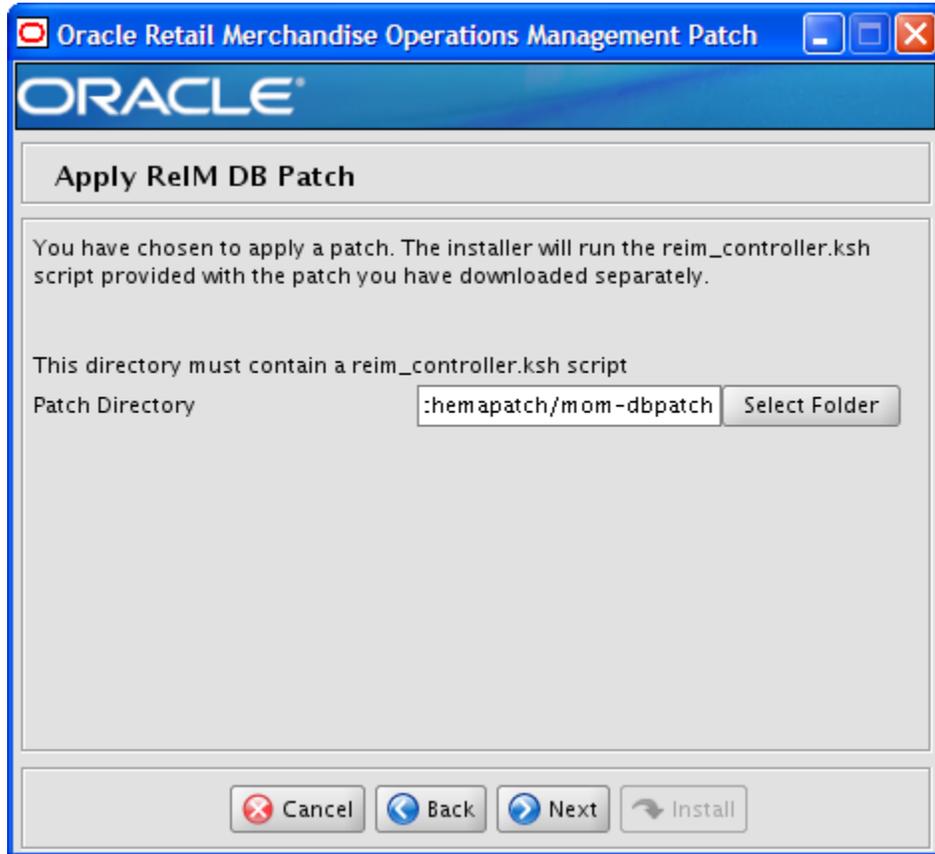
|                          |                                                                                                                                                                                                   |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | RPM Patch Directory                                                                                                                                                                               |
| <b>Field Description</b> | Provide the directory path to the RPM patch you want to install. The installer runs only the patch you provide.<br><b>Note:</b> The directory you choose must contain an rpm_controller.ksh file. |
| <b>Example</b>           | /path/to/rms/dbschemapatch/mom-dbpatch for all 13.2.x patches<br><b>Note:</b> The patch option is intended for patches starting with 13.2.                                                        |

Screen: Continue RMS and RPM DB Patch



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

**Screen: Apply ReIM DB Patch**



|                          |                                                                                                                                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | Patch Directory                                                                                                                                                                                    |
| <b>Field Description</b> | Provide the directory path to the ReIM patch you want to install. The installer runs only the patch you provide.<br><b>Note:</b> The directory you choose must contain a reim_controller.ksh file. |
| <b>Example</b>           | /path/to/rms/dbschemapatch/mom-dbpatch for all 13.2.x patches<br><b>Note:</b> The patch option is intended for patches starting with 13.2.                                                         |

## Screen: Continue ReIM DB Patch

**Continue ReIM DB Patch?**

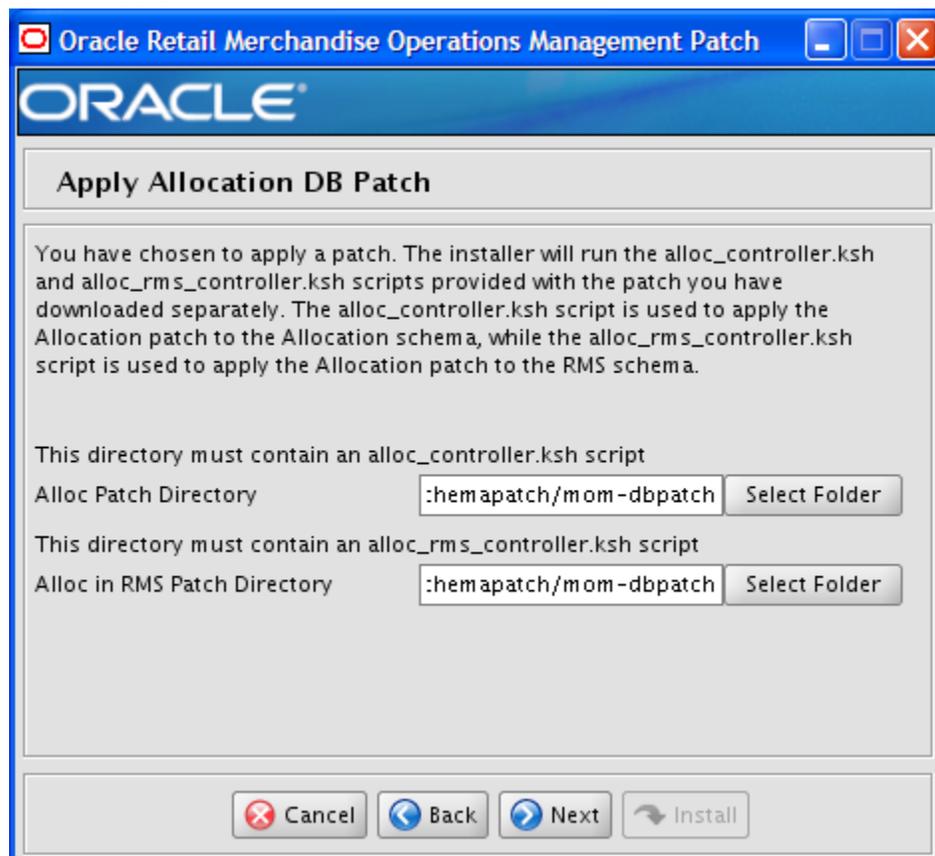
Choose "Yes" if you are resuming a previous patch installation and want to continue where that patch left off. This option is used if a previous patch attempt failed and you have resolved the issues and wish to go forward with the patch. Any scripts that have previously run will not be rerun. To continue a patch, the path provided on the previous screen must point to the same location that was used to run the patch originally. Choose "No" if you want to start a fresh patch installation.

Continue ReIM DB Patch?  Yes  No

Cancel Back Next Install

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

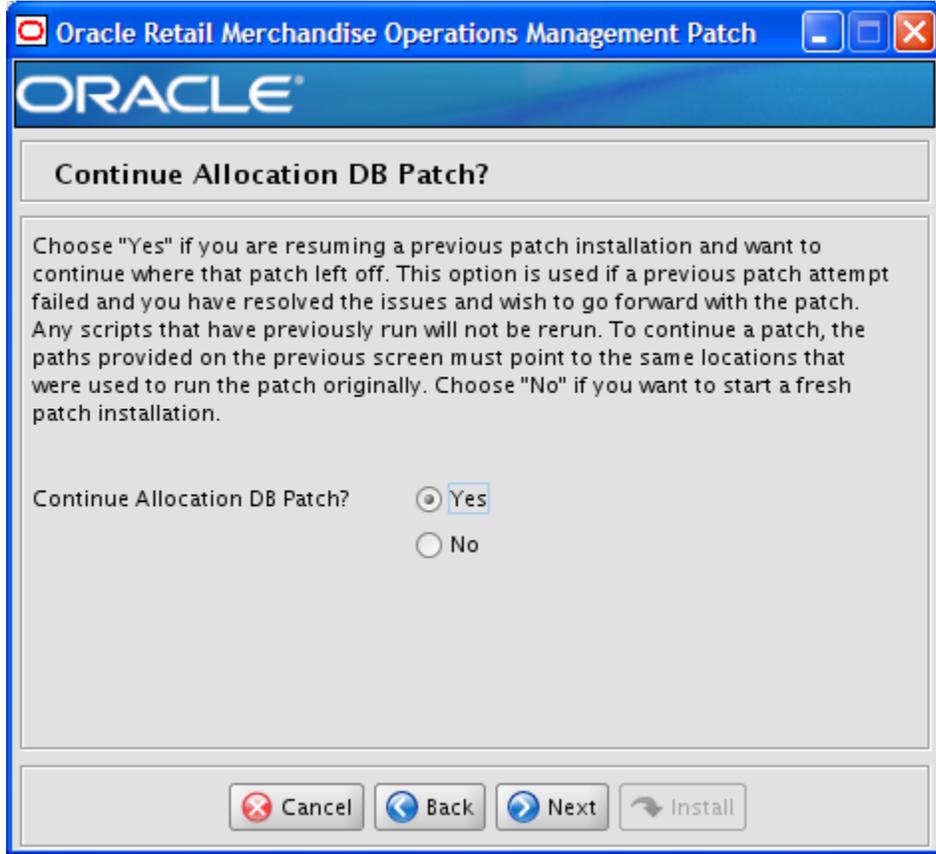
### Screen: Apply Allocation DB Patch



|                          |                                                                                                                                                                                                                                                                                                                            |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | Alloc Patch Directory                                                                                                                                                                                                                                                                                                      |
| <b>Field Description</b> | Provide the directory path to the patch for the Allocation schema you want to install. The installer runs only the patch you provide. The Alloc controller is used to apply the necessary Allocation patches to the Allocation schema.<br><b>Note:</b> The directory you choose must contain an alloc_controller.ksh file. |
| <b>Example</b>           | /path/to/rms/dbschemapatch/mom-dbpatch for all 13.2.x patches<br><b>Note:</b> The patch option is intended for patches starting with 13.2.                                                                                                                                                                                 |

|                          |                                                                                                                                                                                                                                                                                                                                 |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | Alloc in RMS Patch Directory                                                                                                                                                                                                                                                                                                    |
| <b>Field Description</b> | Provide the directory path to the Allocation patch for the RMS Schema you want to install. The installer runs only the patch you provide. The Alloc_RMS controller is used to apply the necessary Allocation patches to the RMS schema.<br><b>Note:</b> The directory you choose must contain an alloc_rms_controller.ksh file. |
| <b>Example</b>           | /path/to/rms/dbschemapatch/mom-dbpatch for all 13.2.x patches<br><b>Note:</b> The patch option is intended for patches starting with 13.2.                                                                                                                                                                                      |

Screen: Continue Allocation DB Patch



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



## 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: DataSource Details

|                          |                                                                                                                                                                                                                                                            |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | RMS Schema Owner                                                                                                                                                                                                                                           |
| <b>Field Description</b> | 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. |
| <b>Example</b>           | rms01                                                                                                                                                                                                                                                      |

|                          |                                             |
|--------------------------|---------------------------------------------|
| <b>Field Title</b>       | RMS Schema Password                         |
| <b>Field Description</b> | Database password for the RMS Schema Owner. |

|                          |                                                                       |
|--------------------------|-----------------------------------------------------------------------|
| <b>Field Title</b>       | RMS Oracle SID                                                        |
| <b>Field Description</b> | Oracle system identifier for the database where RMS will be installed |
| <b>Example</b>           | pkols05                                                               |

## Screen: Oracle Wallet

**Oracle Wallet**

An Oracle Wallet is an encrypted container used to store and retrieve sensitive information, such as user credentials. A new Wallet is created to contain passwords used by RMS. Every Wallet is itself protected by a password, and the field for this Wallet password must be filled out to move on to the next screen.

The password must have a minimum length of eight characters and contain alphabetic characters combined with numbers or special characters.

Oracle Wallet password

Please re-enter password

|                          |                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | Oracle Wallet password                                                                                                  |
| <b>Field Description</b> | This is the password for the wallet that will store the database credentials that were supplied in the previous screen. |

**Screen: Batch Installation Directory**



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

## Appendix: RMS Application Installer Screens

### Screen: Oracle Customer Information

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

### Screen: Data Source Details

**Oracle Retail Merchandising System - Forms App Installer**

**ORACLE**

**Data Source Details**

Please enter the RMS 13 schema name and password.

RMS Schema Owner: rms01

RMS Schema Password: .....

RMS Oracle Database: pkols05

If checked, the installer will try to validate your schema when you click "Next"

Test Data Source?

Buttons: Cancel, Back, Next, Install

|                          |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|
| <b>Field Title</b>       | RMS Schema Owner                                                                  |
| <b>Field Description</b> | This is the same username that was used during the RMS Database Schema Installer. |
| <b>Example</b>           | rms01                                                                             |

|                          |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|
| <b>Field Title</b>       | RMS Schema Password                                                               |
| <b>Field Description</b> | This is the same password that was used during the RMS Database Schema Installer. |

|                          |                                                                                     |
|--------------------------|-------------------------------------------------------------------------------------|
| <b>Field Title</b>       | RMS Oracle SID                                                                      |
| <b>Field Description</b> | This is the same Oracle SID that was used during the RMS Database Schema Installer. |
| <b>Example</b>           | pkols05                                                                             |

|                          |                                                                                                                                                                                                                                                                      |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | Test Data Source?                                                                                                                                                                                                                                                    |
| <b>Field Description</b> | <p>Attempt to validate the Data Source Details on this screen. This will happen when you click "Next"</p> <p><b>Note:</b> If you get any errors not related to incorrectly entered credentials, refer to "<a href="#">Appendix: Common Installation Errors.</a>"</p> |

## Screen: Oracle Wallet

The screenshot shows a window titled "Oracle Retail Merchandising System - Forms App Installer". The window has a blue header with the Oracle logo. Below the header, the title "Oracle Wallet" is displayed. The main content area contains the following text:

An Oracle Wallet is an encrypted container used to store and retrieve sensitive information, such as user credentials. A new Wallet is created to contain passwords used by RMS. Every Wallet is itself protected by a password, and the field for this Wallet password must be filled out to move on to the next screen.

The password must have a minimum length of eight characters and contain alphabetic characters combined with numbers or special characters.

Oracle Wallet password

Please re-enter password

At the bottom of the window, there are four buttons: "Cancel", "Back", "Next", and "Install".

|                          |                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | Oracle Wallet password                                                                                                  |
| <b>Field Description</b> | This is the password for the wallet that will store the database credentials that were supplied in the previous screen. |

**Screen: Installation Name**

The screenshot shows a window titled "Oracle Retail Merchandising System - Forms App Installer". The window has a blue header with the Oracle logo. Below the header, the text "Installation Name" is displayed. A paragraph of instructions follows: "Please enter the Installation Name. The Installation Name is a unique name that will be used to identify this installation of RMS. This name will be included in the RMS Application URLs and reported by the Oracle Configuration Manager." Below this text is a text input field with the value "rms13inst". At the bottom of the window, there are four buttons: "Cancel", "Back", "Next", and "Install".

|                          |                                                                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | Installation Name                                                                                                                                                                                       |
| <b>Field Description</b> | 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. |
| <b>Example</b>           | rms13inst                                                                                                                                                                                               |

## Screen: Application Installation Directory

**Oracle Retail Merchandising System - Forms App Installer**

**ORACLE**

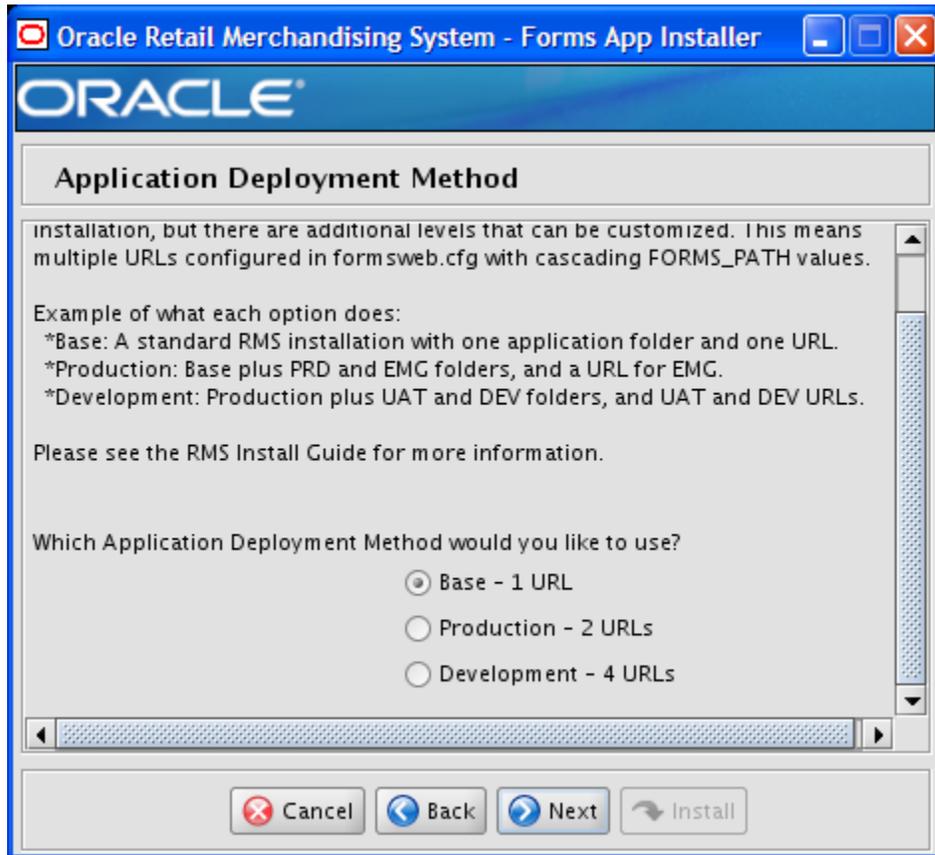
**Application Installation Directory**

Please enter the directory where RMS Application forms will be installed. Typically the RMS forms installation directory is located outside of the Weblogic installation.

Installation Directory

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

**Screen: Application Deployment Method**



|                          |                                                                                                                           |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | Which Environment Deployment Method would you like to use                                                                 |
| <b>Field Description</b> | Select the Application Deployment Method you would like. See " <a href="#">Appendix: Application Deployment Method.</a> " |
| <b>Example</b>           | Base – 1 URL                                                                                                              |

## Screen: WebLogic Configuration



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

**Screen: WebLogic Administrative Details**

**Fields on this Screen:**

|                          |                                    |
|--------------------------|------------------------------------|
| <b>Field Title</b>       | Hostname                           |
| <b>Field Description</b> | Hostname of the application server |
| <b>Example</b>           | redevlv0065                        |

|                          |                                         |
|--------------------------|-----------------------------------------|
| <b>Field Title</b>       | WebLogic Admin port                     |
| <b>Field Description</b> | Port number of the WebLogic AdminServer |
| <b>Example</b>           | 7001                                    |

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

|                          |                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Field Title</b>       | WebLogic Admin Password                                                                               |
| <b>Field Description</b> | Password for the WebLogic admin user. You chose this password when you created the WebLogic instance. |

**Screen: Webhelp Installation Details**



|                          |                                                                               |
|--------------------------|-------------------------------------------------------------------------------|
| <b>Field Title</b>       | WebLogic Help Server                                                          |
| <b>Field Description</b> | The WebLogic managed server that was created for the RMS Webhelp application. |
| <b>Example</b>           | rms-help-instance                                                             |

---

---

## Appendix: Installer Silent Mode

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

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

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

1. Edit the `ant.install.properties` file and correct any invalid settings that may have caused the installer to fail in its previous run.
2. Look for duplicate properties in the `ant.install.properties` file. Some properties are set on multiple pages to ensure default values when a page is only displayed under certain conditions. For example, if there are two instances of `input.property.name`, remove all but the last one.
3. Run the installer again with the **silent** argument.

---

---

**Example:** `install.sh silent`

---

---



---

---

## Appendix: URL Reference

This appendix is a URL reference.

### JDBC URL for a Database

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

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

<sid>: system identifier for the database

---

---

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

---

---

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

<host>: hostname of the database server

<port>: database listener port

<sid>: system identifier for the database

---

---

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

---

---

### LDAP Server URL

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

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

<host>: hostname of the directory server

<port>: LDAP server port

---

---

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

---

---

### JNDI Provider URL for an Application

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

WebLogic :

Syntax: t3://<host>:<port>/<app>

- <host>: hostname of the WebLogic environment
- <port>: Port of the managed server to which rpm has been deployed. This can be found in the <WEBLOGIC\_DOMAIN\_HOME>/config/config.xml file.
- <app>: Deployment name for the application.

---

---

**Example:** t3://myhost:8001/rpm13

---

---

---

---

**Note:** The JNDI provider URL can have a different format depending on your cluster topology. Consult the WebLogic documentation

---

---

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: Common Installation Errors

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

### Database Installer Hangs on Startup

**Symptom:**

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

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

**Solution:**

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

### Unreadable Buttons in the Installer

If you are unable to read the text within the installer buttons, it probably means that your JAVA\_HOME is pointed to a pre-1.4.2 JRE or JDK.

Set JAVA\_HOME with the appropriate JDK (the same JDK used by the WebLogic server).

### Warning: Could not create system preferences directory

**Symptom:**

The following text appears in the installer Errors tab:

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

**Solution:**

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

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

### Warning: Couldn't find X Input Context

**Symptom:**

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

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

**Solution:**

This message is harmless and can be ignored.

## Unresponsive Country and Currency Drop-Downs

### Symptom:

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

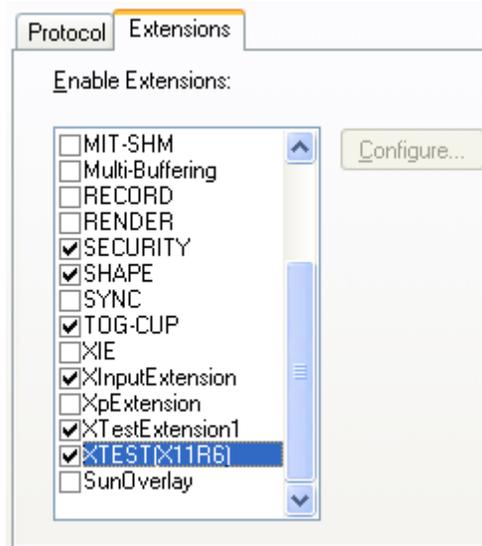
```
XTEST extension not installed on this X server: Error 0
```

### Solution:

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

To enabling XTEST in Xceed, do the following:

1. Open Xconfig to edit Xceed configuration.
2. Go to the X Server Protocol settings.
3. Click the Extensions tab.
4. Make sure that the XTEST extension is selected:



5. Restart the X Server and re-run the RMS installer.

## Could not exec 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 exec robot child process: Permission denied
```

### Solution:

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

Example (using SUN Solaris):

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

## ConcurrentModificationException in Installer GUI

### Symptom:

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

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

### Solution:

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

## FRM-30064: Unable to parse statement select while compiling fm\_ituda.fmb

### Symptom:

When running the application installer you get the following error:

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

```
FRM-30085: Unable to adjust form for output.
```

```
Form not created
```

### Solution:

Disable the database filter policies by running drop\_filter\_policy.sql, run the application installer again and then run add\_filter\_policy.sql. Both files can be located with the database installer.

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

### Symptom:

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

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

### Solution:

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

- Log into the database and attempt to recompile invalid objects in the database schema. Subsequent attempts to compile the same object(s) can be successful.

- Have a DBA increase the shared pool size on the database and re-run the installer from scratch on a new schema user.

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

### Symptom:

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

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

### Solution:

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

### Example:

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

## RIB Errors

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

You must re-initialize the reference to reference an existing object as follows:

1. Bring down the RIB WebLogic in question
2. Run /RIB\_INSTALL\_DIR>/InstallAndCompileAllRibOracleObjects.sql
3. Run another object validate script (ex: inv\_obj\_comp.sql) to make sure objects are valid (some may have deadlocked in the end of the previous step).
4. Bring up the RIB WebLogic in question

## Error Connecting to Database URL

### Symptom:

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

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

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

### Solution:

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

```
Error connecting to database URL <url> as user <user>
java.lang.Exception: UnsatisfiedLinkError encountered when using the Oracle
driver.
```

Please check that the library path is set up properly or switch to the JDBC thin client.

It may mean that the installer is using the incorrect library path variables for the platform you are installing on. Open the file

<STAGING\_DIR>/rms/dbschema/common/preinstall.sh and toggle the variable "use32bit" to "true" if it is set to "false" or vice versa. This setting is dependant on the JRE that is being used.

## Multi-Threaded OCI Client Dumps Core after Reconnecting To Database

### Symptom

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

```
skgfgio sdbgrfbibf_io_block_file dbgrfrbf_read_block_file dbgrmflrp_read_page
dbgrmblgmp_get_many_pages dbgrmmdrmd_read_relation_meta_data
dbgrmmdora_open_record_access_full
dbgriporc_openrel_wcreate dbgrip_open_relation_access dbgrip_start_iterator
dbgrip_relation_iterator dbgruprac_read_adrctl...
```

### Solution

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

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

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

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

## Forms Installer Fails testing Database credentials on "Datasource Details" screen

### Symptom

Errors occur during Forms installer screens. 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. The installer will attempt to validate once again when installation starts, and the installer will fail if the credentials are incorrect.

## RMS DB Installer Fails on s11716147a\_cost\_event\_reclass.sql

### Symptom

When running the RMS 13.2.1 database patch, it fails on the file s11716147a\_cost\_event\_reclass.sql:

```
[exec] Executing file s11716147a_cost_event_reclass.sql
[exec] ORA Error while executing s11716147a_cost_event_reclass.sql
[delete] Deleting directory
/vol.rtk/pkg_mocks/rms1322/rmsdb/rms/dbschemapatch/dblogs/.wallet

BUILD FAILED

/vol.rtk/pkg_mocks/rms1322/rmsdb/rms/dbschemapatch/build.xml:571: The following
error occurred while executing this line:
/vol.rtk/pkg_mocks/rms1322/rmsdb/rms/dbschemapatch/build.xml:367: The following
error occurred while executing this line:
/vol.rtk/pkg_mocks/rms1322/rmsdb/rms/dbschemapatch/build.xml:276:
/vol.rtk/pkg_mocks/rms1322/rmsdb/rms/dbschemapatch/mom-dbpatch/rms_controller.ksh
has failed.
```

If you look in the file s11716147a\_cost\_event\_reclass.err, it reports this error message:

```
Altering table COST_EVENT_RECLASS
ALTER TABLE COST_EVENT_RECLASS MODIFY ITEM VARCHAR2(25) NOT NULL
*
ERROR at line 1:
ORA-02296: cannot enable (RMS132MOCK.) - null values found
```

### Solution

You must make sure all the cost events for RECLASS are processed and purged before the 13.2.1 patch is applied. The DBC script s11716147a\_cost\_event\_reclass.sql is altering the table COST\_EVENT\_RECLASS and adding PK on it. Ensure that before running this DBC the table is empty and the existing data is already processed and purged in nightly batch. The installation can be rerun after this is done. You should choose to continue the previous install when rerunning the installer.

## GUI Screens Fail to Open When Running Installer

### Symptom

When running the installer in GUI mode, the screens fail to open and the installer ends, returning to the console without an error message. The ant.install.log file contains this error:

```
Fatal exception: Width (0) and height (0) cannot be <= 0
java.lang.IllegalArgumentException: Width (0) and height (0) cannot be <= 0
```

### Solution

This is an error encountered when Antinstaller is used in GUI mode with certain X Servers. To workaroud this issue, copy ant.install.properties.sample to ant.install.properties and rerun the installer.

## Deployed BIPublisher Application fails to start up

### Symptom

After deploying the BIPublisher into the WebLogic, the application fails to start up with a “missing CipherException.class” exception.

### Solution

Add CLASSPATH to point to the osdt\_core3.jar which resides in \$WLS\_HOME/oracle\_common/oui/jlib/lib.

Go to WebLogic Adminconsole > BIPublisher managed server that is used for deploying BIPublisher. Click the Server Start tab. In the Class Path box, add the following (values are examples): /u00/webadmin/product/WLS/oracle\_common/oui/jlib/lib

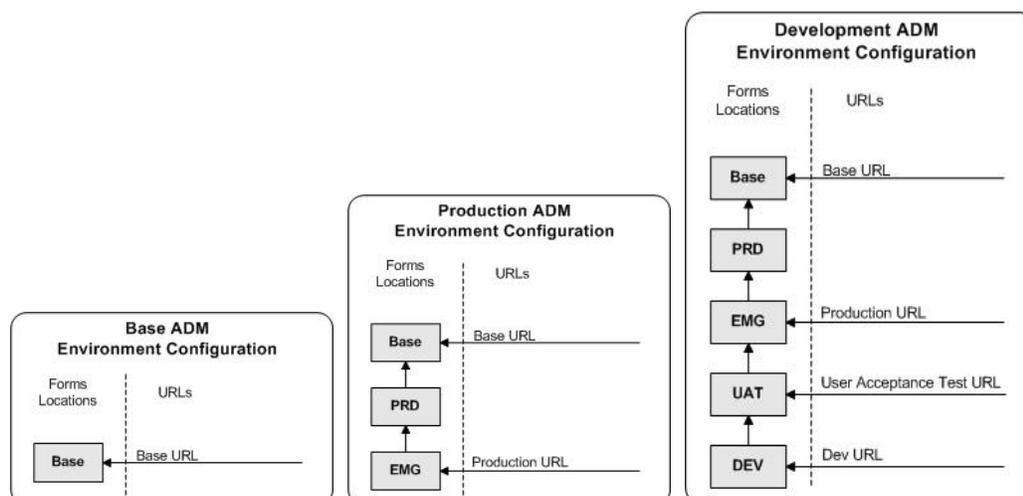


## Appendix: Application Deployment Method

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

The installer provides three choices for cascading environment configuration:

- Base: A standard RMS base installation with one application installation folder, and one URL.
- Production: Base plus two additional forms directories for PRD and EMG and an additional URL for EMG.
- Development: Production plus two additional forms directories for UAT and DEV and two additional URLs for UAT and DEV.



The above diagrams show how the application deployment method environment configurations are set up in the forms installation.

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



---

---

## Appendix: Single Sign-On Resource Access Descriptors

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

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

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

---

---

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

---

---

RADs may be created and through LDIF scripts as well. For information, see the My Oracle Support document, "How to Create and Copy SSO User Resources (RADs) (ID 244526.1).



---

---

# Appendix: AIX Shared Library Bug Fix

The env\_rdbms.mk file for Oracle 10g and higher includes defect 2143531, which was not fixed because there is a workaround. For the workaround, the following changes in bold and italics must need to be made to the \$ORACLE\_HOME/rdbms/lib/env\_rdbms.mk file. Note that changes are made in both the BUILDLIB\_WITH\_CONTEXT and BUILDLIB\_WITH\_NO\_CONTEXT functions.

```

BUILDLIB_WITH_CONTEXT=generate_export_list() \
{ \
/bin/nm -X32_64 -B -h -g "$$1" | grep -v ' U ' | awk '{print $$3}' | \
egrep -v '^\.|^TOC' | sort | uniq ; \
}; \
generate_import_list() { \
LIB_NAME=$$1; \
IMP_FILE=$$2; \
\
cat ${ORACLE_HOME}/rdbms/lib/xa.imp | head -1 | awk '{print $$0, "."}' >
$${IMP_FILE}; \
/bin/nm -X32_64 -C -B -h -g ${LIB_NAME} | grep ' U ' | grep -v "::" | grep -v "("
| grep -v "\.cc" | awk '{print $$3}' | sed -e "s/\.//g
" | grep -v "^_" >> $${IMP_FILE}; \
}; \
\
generate_import_list "$(OBJS)" $(SHARED_LIBNAME).imp; \
generate_export_list $(OBJS) > $(SHARED_LIBNAME).exp; \
$(LD) -bnoentry -bM:SRE -bE:$(SHARED_LIBNAME).exp -bI:$(SHARED_LIBNAME).imp \
-o $(SHARED_LIBNAME) $(OBJS) -L$(ORACLE_HOME)/lib -lc_r -lm $(LLIBCLINTSH)
$(MATHLIB)

BUILDLIB_NO_CONTEXT=generate_export_list() \
{ \
/bin/nm -X32_64 -B -h -g "$$1" | grep -v ' U ' | awk '{print $$3}' | \
egrep -v '^\.|^TOC' | sort | uniq ; \
}; \
generate_import_list() { \
LIB_NAME=$$1; \
IMP_FILE=$$2; \
\
cat ${ORACLE_HOME}/rdbms/lib/xa.imp | head -1 | awk '{print $$0, "."}' >
$${IMP_FILE}; \
/bin/nm -X32_64 -C -B -h -g ${LIB_NAME} | grep ' U ' | grep -v "::" | grep -v "("
| grep -v "\.cc" | awk '{print $$3}' | sed -e "s/\.//g
" | grep -v "^_" >> $${IMP_FILE}; \
}; \
\
generate_import_list "$(OBJS)" $(SHARED_LIBNAME).imp; \
generate_export_list $(OBJS) > $(SHARED_LIBNAME).exp; \
$(LD) -bnoentry -bM:SRE -bE:$(SHARED_LIBNAME).exp -bI:$(SHARED_LIBNAME).imp \
-o $(SHARED_LIBNAME) $(OBJS) -L$(ORACLE_HOME)/lib -lc_r -lm $(LLIBCLINTSH)
$(MATHLIB)
```



---

---

## Appendix: RMS RETL Instructions

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

### Configuration

The following are configuration instructions.

### RETL

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

### RETL User and Permissions

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

#### Environment variables

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

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

#### rmse\_config.env

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

```
export DBNAME=pk01s05
export RMS_OWNER=rms01
export BA_OWNER=rms01
```

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



---

---

## Appendix: Inserting New Languages

A new language was added for the RMS 13.2 release, Croatian (hr). As the RMS dbschema installer does not support inserting new languages that have not already been installed, this section documents how to manually insert new languages as either primary or secondary languages. These steps should be done after installing the RMS 13.2.4 upgrade.

In this section <lang> represents the two or three-letter code for the language you wish to insert. This is the list of supported codes and the languages they represent:

- de - German
- es - Spanish
- el - Greek
- fr - French
- hu - Hungarian
- hr - Croatian
- it - Italian
- ja - Japanese
- ko - Korean
- nl - Dutch
- pl - Polish
- ptb - Brazilian Portuguese
- ru - Russian
- sv - Swedish
- tr - Turkish
- zhs - Simplified Chinese
- zht - Traditional Chinese

### Insert Secondary Language Data

To insert secondary language data, complete the following steps.

---

---

**Note:** These scripts are only for customers who wish to have a primary language of English and a secondary language of any combination of the supported languages. The scripts are UTF-8 encoded. We recommend installing them into a database that has been set to UTF-8.

---

---

1. Change directories to DB\_PATCH\_DIR/rms/dbschemapatch/mom-dbpatch/13.2.4/rms/lang/.
2. Set the sqlplus session so that the encoding component of the NLS\_LANG is UTF8. For example AMERICAN\_AMERICA.UTF8.

3. Log into sqlplus with the RMS schema and run the following command:  
SQL> @rms1324\_secondary\_<lang>.sql
4. Check the log file rms1324\_secondary\_<lang>.log for any errors.

---

**Note:** Multiple secondary languages can be added to a primary language install of English.

---

## Insert Primary Language Data

To insert primary language data, complete the following steps.

---

**Note:** These scripts are only for customers who wish to have a primary language of one of the non-English supported languages. Once you run one of these primary scripts, you will not be able to revert back to English as your primary language. The scripts are UTF-8 encoded. We recommend installing them into a database that has been set to UTF-8.

---

1. Change directories to DB\_PATCH\_DIR/rms/dbschemapatch/mom-dbpatch/13.2.4/rms/lang/.
2. Set the sqlplus session so that the encoding component of the NLS\_LANG is UTF8. For example AMERICAN\_AMERICA.UTF8.
3. Log into sqlplus with the RMS schema and run the following command:  
SQL> @rms1324\_primary\_<lang>.sql
4. Check the log file rms1324\_primary\_<lang>.log for any errors.

---

**Note:** Only one language can be set as the primary language for the system.

---

---

---

## Appendix: Setting Up Password Stores with Oracle Wallet

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

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

### About Password Stores and Oracle Wallet

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

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

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

```
sqlplus /@db_username
```

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

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

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

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

## Setting Up Password Stores for Database User Accounts

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

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

---

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

---

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

1. Create a wallet using the following command:

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

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

---

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

---

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

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

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

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

3. Repeat Step 2 for all the database user accounts.
4. Update the `sqlnet.ora` file to include the following statements:

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

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

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

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

## Setting Up Wallets for Database User Accounts

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

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

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

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

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

---

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

---

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

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

---

**Note:** WALLET\_LOCATION must be on line 1 in the file.

---

3. Setup a tnsnames.ora in the wallet directory. This tnsnames.ora includes the standard tnsnames.ora file. Then, add two custom tns\_alias entries that are only for use with the wallet. For example, sqlplus /@dvols29\_rms01user.

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

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

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

---

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

---

4. Create the wallet files. These are empty initially.
  - e. Ensure you are in the intended location.

```
$ pwd
/projects/rms13.2/dev/.wallet
```
  - f. Create the wallet files.

```
$ mkstore -wrl . -create
```
  - g. 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.
  - h. Enter the password again.
5. Create the wallet entry that associates the user name and password to the custom tns alias that was setup in the wallet's tnsnames.ora file.

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

---

**Example:** `mkstore -wrl . -createCredential  
dvols29_rms01user rms01user passwd`

---

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

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

```
$ sqlplus /@dvols29_rms01user
```

```
SQL*Plus: Release 11
```

```
Connected to:
Oracle Database 11g
```

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

Running batch programs or shell scripts would be similar:

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

Set the UP unix variable to help with some compiles :

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

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

### Additional Database Wallet Commands

The following is a list of additional database wallet commands.

- Delete a credential on wallet

```
mkstore -wrl . -deleteCredential dvols29_rms01user
```
- Change the password for a credential on wallet

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

- List the wallet credential entries  
`mkstore -wrl . -list`  
 This command returns values such as the following.  
`oracle.security.client.connect_string1`  
`oracle.security.client.user1`  
`oracle.security.client.password1`
- View the details of a wallet entry  
`mkstore -wrl . -viewEntry oracle.security.client.connect_string1`  
 Returns the value of the entry:  
`dvo1s29_rms01user`  
`mkstore -wrl . -viewEntry oracle.security.client.user1`  
 Returns value of the entry:  
`rms01user`  
  
`mkstore -wrl . -viewEntry oracle.security.client.password1`  
 Returns value of the entry:  
`passwd`

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

For Java application, consider the following:

- For database user accounts, ensure that you set up the same alias names between the password stores (database wallet and Java wallet). You can provide the alias name during the installer process.
- Document all aliases that you have set up. During the application installation, you must enter the alias names for the application installer to connect to the database and application server.
- Passwords are not used to update entries in Java wallets. Entries in Java wallets are stored in partitions, or application-level keys. In each retail application that has been installed, the wallet is located in  
`<WEBLOGIC_DOMAIN_HOME>/retail/<appname>/config` Example:  
`mspd351:[103x_WLS] /u00/webadmin/product/10.3.x/WLS/user_projects/`  
`domains/132_mck_soa_domain/retail/reim13/config`
- Application installers should create the Java wallets for you, but it is good to know how this works for future use and understanding.
- Scripts are located in `<WEBLOGIC_DOMAIN_HOME>/retail/<appname>/retail-public-security-api/bin` for administering wallet entries.  
 Example:  
`mspd351:[103x_WLS] /u00/webadmin/product/10.3.x/WLS/user_projects/`  
`domains/132_mck_soa_domain/retail/reim13/retail-public-security-api/bin`
- In this directory is a script to help you update each alias entry without having to remember the wallet details. For example, if you set the RPM database alias to `rms01user`, you will find a script called `update-RMS01USER.sh`.

---

**Note:** These scripts are available only with application installed by way of an installer.

---

- Two main scripts are related to this script in the folder for more generic wallet operations: `dump_credentials.sh` and `save_credential.sh`.

- If you have not installed the application yet, you can unzip the application zip file and view these scripts in <app>/application/retail-public-security-api/bin.

Example:

```
mispdv351:[103x_WLS] /u00/webadmin/reim/application/retail-public-security-api/bin
```

#### update-<ALIAS>.sh

update-<ALIAS>.sh updates the wallet entry for this alias. You can use this script to change the user name and password for this alias. Because the application refers only to the alias, no changes are needed in application properties files.

##### Usage:

```
update-<username>.sh <myuser>
```

##### Example:

```
mispdev71:[103x4WLS]
/u00/webadmin/product/10.3.x4/WLS/user_projects/domains/java_domain/retail/rpm
132test/retail-public-security-api/bin> ./update-RMS01USER.sh
usage: update-RMS01USER.sh <username>
```

<username>: the username to update into this alias.

Example: update-RMS01USER.sh myuser

Note: this script will ask you for the password for the username that you pass in.

```
mispdev71:[103x4WLS]
/u00/webadmin/product/10.3.4/WLS/user_projects/domains/java_domain/retail/rpm
132test/retail-public-security-api/bin>
```

#### dump\_credentials.sh

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

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

##### Example:

```
dump_credentials.sh
/u00/webadmin/product/10.3.x/WLS/user_projects/domains/132_mck_soa_dom
ain/retail/reim13/config
```

```
Retail Public Security API Utility
```

```
=====
```

Below are the credentials found in the wallet at the location: /u00/webadmin/product/10.3.x/WLS/user\_projects/domains/132\_mck\_soa\_domain/retail/reim13/config

```
=====
```

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

**save\_credential.sh**

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

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

**Example:**

```
mospdv351:[103x_WLS]
/u00/webadmin/mock132_testing/rtil/rtil/application/retail-public-security-
api/bin> save_credential.sh -l
/u00/webadmin/product/10.3.x/WLS/user_projects/domains/132_mck_soa_domain/reta
il/reiml3/config
-a RMS-ALIAS -p reiml3 -u rms132mock
```

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

```
Enter password:
Verify password:
```

---

**Note:** -p in the above command is for partition name. You must specify the proper partition name used in application code for each Java application.

save\_credential.sh and dump\_credentials.sh scripts are the same for all applications. If using save\_credential.sh to add a wallet entry or to update a wallet entry, bounce the application/managed server so that your changes are visible to the application. Also, save a backup copy of your cwallet.sso file in a location outside of the deployment path, because redeployment or reinstallation of the application will wipe the wallet entries you made after installation of the application. To restore your wallet entries after a redeployment/reinstallation, copy the backed up cwallet.sso file over the cwallet.sso file. Then bounce the application/managed server.

---

**Usage**

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

## How Does the Wallet Relate to the Application?

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

Reim.properties code sample:

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

cs.m.wallet.path=/u00/webadmin/product/10.3.x/WLS/user_projects/domains/132_mck_soa
_domain/retail/reim13/config
cs.m.wallet.partition.name=reim13
```

## How Does the Wallet Relate to Java Batch Program Use?

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

## Setting up RETL Wallets

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

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

To set up RETL wallets, perform the following steps:

1. Set the following environment variables:
  - `ORACLE_SID=<retaildb>`
  - `RFX_HOME=/u00/rfx/rfx-13.2.0`
  - `RFX_TMP=/u00/rfx/rfx-13.2.0/tmp`
  - `JAVA_HOME=/usr/jdk1.6.0_12.64bit`
  - `LD_LIBRARY_PATH=$ORACLE_HOME`
  - `PATH=$RFX_HOME/bin:$JAVA_HOME/bin:$PATH`
2. Change directory to `$RFX_HOME/bin`.
3. Run `setup-security-credential.sh`.
  - Enter 1 to add a new database credential.
  - Enter the dbuseralias. For example, `retl_java_rms01user`.
  - Enter the database user name. For example, `rms01user`.
  - Enter the database password.

- Re-enter the database password.
  - Enter D to exit the setup script.
4. Update your RETL environment variable script to reflect the names of both the Oracle Networking wallet and the Java wallet.
- For example, to configure RETLforRPAS, modify the following entries in `$MMHOME/RETLforRPAS/rfx/etc/rmse_rpas_config.env`.
- The RETL\_WALLET\_ALIAS should point to the Java wallet entry:  
`export RETL_WALLET_ALIAS="retl_java_rms01user"`
  - The ORACLE\_WALLET\_ALIAS should point to the Oracle network wallet entry:  
`export ORACLE_WALLET_ALIAS="dvo1s29_rms01user"`
  - The SQLPLUS\_LOGON should use the ORACLE\_WALLET\_ALIAS:  
`export SQLPLUS_LOGON="/@${ORACLE_WALLET_ALIAS}"`
5. To change a password later, run `setup-security-credential.sh`.
- Enter 2 to update a database credential.
  - Select the credential to update.
  - Enter the database user to update or change.
  - Enter the password of the database user.
  - Re-enter the password.



## Quick Guide for Retail Wallets

| Retail App             | Wallet Type | Wallet Location                          | Wallet Partition         | Alias Name                             | User Name           | Use                                    | Create By | Alias Example | Notes                         |
|------------------------|-------------|------------------------------------------|--------------------------|----------------------------------------|---------------------|----------------------------------------|-----------|---------------|-------------------------------|
| <b>RMS batch</b>       | DB          | <RMS batch install dir (MMHOME)>/.wallet | n/a                      | <Database SID>_<Database schema owner> | <rms schema owner>  | Compile, execution                     | Installer | n/a           | Alias hard-coded by installer |
| <b>RMS forms</b>       | DB          | <forms install dir>/base/.wallet         | n/a                      | <Database SID>_<Database schema owner> | <rms schema owner>  | Compile                                | Installer | n/a           | Alias hard-coded by installer |
| <b>ARI forms</b>       | DB          | <forms install dir>/base/.wallet         | n/a                      | <Db_Ari01 >                            | <ari schema owner>  | Compile                                | Manual    | ari-alias     |                               |
| <b>RMWS forms</b>      | DB          | <forms install dir>/base/.wallet         | n/a                      | <Database SID>_<Database schema owner> | <rwms schema owner> | Compile forms, execute batch           | Installer | n/a           | Alias hard-coded by installer |
| <b>RPM app</b>         | DB          | <RPM batch install dir>/.wallet          | n/a                      | <rms schema owner alias>               | <rms schema owner>  | Execute batch                          | Manual    | rms-alias     |                               |
| <b>RWMS auto-login</b> | JAVA        | <forms install dir>/base/.javawallet     |                          |                                        |                     |                                        |           |               |                               |
|                        |             |                                          | <RWMS Installation name> | <RWMS database user alias>             | <RWMS schema owner> | RWMS forms app to avoid dblogin screen | Installer | rwms13inst    |                               |

| Retail App     | Wallet Type | Wallet Location                                              | Wallet Partition         | Alias Name                       | User Name                          | Use                                       | Create By | Alias Example          | Notes                         |
|----------------|-------------|--------------------------------------------------------------|--------------------------|----------------------------------|------------------------------------|-------------------------------------------|-----------|------------------------|-------------------------------|
|                |             |                                                              | <RWMS Installation name> | BI_ALIAS                         | <BI Publisher administrative user> | RWMS forms app to connect to BI Publisher | Installer | n/a                    | Alias hard-coded by installer |
| <b>AIP app</b> | JAVA        | <weblogic domain home>/retail/<deployed aip app name>/config |                          |                                  |                                    |                                           |           |                        | Each alias must be unique     |
|                |             |                                                              | aip13                    | <AIP weblogic user alias>        | <AIP weblogic user name>           | App use                                   | Installer | aip-weblogic-alias     |                               |
|                |             |                                                              | aip13                    | <AIP database schema user alias> | <AIP database schema user name>    | App use                                   | Installer | aip01user-alias        |                               |
|                |             |                                                              | aip13                    | <rib-aip weblogic user alias>    | <rib-aip weblogic user name>       | App use                                   | Installer | rib-aip-weblogic-alias |                               |
| <b>RPM app</b> | JAVA        | <weblogic domain home>/retail/<deployed rpm app name>/config |                          |                                  |                                    |                                           |           |                        | Each alias must be unique     |
|                |             |                                                              | rpm13                    | <rpm weblogic user alias>        | <rpm weblogic user name>           | App use                                   | Installer | rpm-weblogic-alias     |                               |
|                |             |                                                              | rpm13                    | <rms shema user alias>           | <rms shema user name>              | App, batch use                            | Installer | rms01user-alias        |                               |

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

| Retail App       | Wallet Type | Wallet Location                                                | Wallet Partition     | Alias Name                        | User Name                        | Use     | Create By | Alias Example          | Notes                     |
|------------------|-------------|----------------------------------------------------------------|----------------------|-----------------------------------|----------------------------------|---------|-----------|------------------------|---------------------------|
| <b>Alloc app</b> | JAVA        | <weblogic domain home>/retail/<deployed alloc app name>/config |                      |                                   |                                  |         |           |                        | Each alias must be unique |
|                  |             |                                                                | <installed app name> | <alloc weblogic user alias>       | <alloc weblogic user name>       | App use | Installer | weblogic-alias         |                           |
|                  |             |                                                                | <installed app name> | <rms shema user alias>            | <rms shema user name>            | App use | Installer | rms01user-alias        |                           |
|                  |             |                                                                | <installed app name> | <rsl for rms weblogic user alias> | <rsl for rms weblogic user name> | App use | Installer | rsl-rms-weblogic-alias |                           |
| <b>RSL app</b>   | JAVA        | <RSL INSTALL DIR>/rsl-rms/security/config                      |                      |                                   |                                  |         |           |                        | Each alias must be unique |
|                  |             |                                                                | rsl-rsm              | <rsl weblogic user alias>         | <rsl weblogic user name>         | App use | Installer | weblogic-alias         |                           |
|                  |             |                                                                | rsl-rsm              | <rms shema user alias>            | <rms shema user name>            | App use | Installer | rms01user-alias        |                           |
| <b>SIM app</b>   | JAVA        | <weblogic domain home>/retail/<deployed sim app name>/config   |                      |                                   |                                  |         |           |                        |                           |
|                  |             |                                                                | rpm                  | <rpm weblogic user alias>         | <rpm weblogic user name>         | App use | Installer | rpm-weblogic-alias     |                           |

| Retail App | Wallet Type | Wallet Location                             | Wallet Partition              | Alias Name                        | User Name                        | Use             | Create By | Alias Example          | Notes                                                     |
|------------|-------------|---------------------------------------------|-------------------------------|-----------------------------------|----------------------------------|-----------------|-----------|------------------------|-----------------------------------------------------------|
|            |             |                                             | rms                           | <rsl for rms weblogic user alias> | <rsl for rms weblogic user name> | App use         | Installer | rsl-rms-weblogic-alias |                                                           |
|            |             |                                             | rib-sim                       | <rib-sim weblogic user alias>     | <rib-sim weblogic user name>     | App use         | Installer | rib-sim-weblogic-alias |                                                           |
| RETL       | JAVA        | <RETL home>/etc/security                    | n/a                           | <target application user alias>   | <target application db userid>   | App use         | Manual    | retl_java_rms01user    | User may vary depending on RETL flow's target application |
| RETL       | DB          | <RETL home>/wallet                          | n/a                           | <target application user alias>   | <target application db userid>   | App use         | Manual    | <db>_<user>            | User may vary depending on RETL flow's target application |
| RIB        | JAVA        | <RIBHOME DIR>/deployment-home/conf/security |                               |                                   |                                  |                 |           |                        | <app> is one of aip, rfm, rms, rpm, sim, rwms, tafr       |
| JMS        |             |                                             | jms<1-5>                      | <jms user alias> for jms<1-5>     | <jms user name> for jms<1-5>     | Integration use | Installer | jms-alias              |                                                           |
| WebLogic   |             |                                             | rib-<app>-app-server-instance | <rib-app weblogic user alias>     | <rib-app weblogic user name>     | Integration use | Installer | weblogic-alias         |                                                           |
| Admin GUI  |             |                                             | rib-<app>#web-app-user-alias  | <rib-app admin gui user alias>    | <rib-app admin gui user name>    | Integration use | Installer | admin-gui-alias        |                                                           |

| Retail App        | Wallet Type | Wallet Location | Wallet Partition                        | Alias Name                                                         | User Name                                                            | Use                 | Create By | Alias Example   | Notes                                        |
|-------------------|-------------|-----------------|-----------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------|---------------------|-----------|-----------------|----------------------------------------------|
| Application       |             |                 | rib-<br><app>#user-alias                | <app<br>weblogic<br>user alias>                                    | <app<br>weblogic<br>user<br>name>                                    | Integratio<br>n use | Installer | app-user-alias  | Valid only<br>for aip,<br>rpm, sim           |
| DB                |             |                 | rib-<br><app>#app-<br>db-user-<br>alias | <rib-app<br>database<br>schema user<br>alias>                      | <rib-app<br>database<br>schema<br>user<br>name>                      | Integratio<br>n use | Installer | db-user-alias   | Valid only<br>for rfm,<br>rms, rwms,<br>tafr |
| Error<br>Hospital |             |                 | rib-<br><app>#hosp-<br>user-alias       | <rib-app<br>error<br>hospital<br>database<br>schema user<br>alias> | <rib-app<br>error<br>hospital<br>database<br>schema<br>user<br>name> | Integratio<br>n use | Installer | hosp-user-alias |                                              |

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## Appendix: Installation Order

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

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

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### Enterprise Installation Order

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

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

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2. Oracle Retail Service Layer (RSL)
3. Oracle Retail Extract, Transform, Load (RETL)
4. Oracle Retail Active Retail Intelligence (ARI)
5. Oracle Retail Warehouse Management System (RWMS)
6. Oracle Retail Invoice Matching (ReIM)
7. Oracle Retail Price Management (RPM)

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

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

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

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

18. Oracle Retail Regular Price Optimization (RPO)
19. Oracle Retail Merchandise Financial Planning (MFP)
20. Oracle Retail Size Profile Optimization (SPO)
21. Oracle Retail Assortment Planning (AP)
22. Oracle Retail Item Planning (IP)
23. Oracle Retail Item Planning Configured for COE (IP COE)
24. Oracle Retail Advanced Inventory Planning (AIP)
25. Oracle Retail Integration Bus (RIB)
26. Oracle Retail Point-of-Service (ORPOS)
27. Oracle Retail Markdown Optimization (MDO)
28. Oracle Retail Clearance Optimization Engine (COE)
29. Oracle Retail Analytic Parameter Calculator for Markdown Optimization (APC-MDO)
30. Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)
31. Oracle Retail Promotion Intelligence and Promotion Planning and Optimization (PI-PPO)
32. Oracle Retail Analytics
33. Oracle Retail Workspace (ORW)