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Send Us Your Comments

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

Oracle welcomes customers’ comments and suggestions on the quality and usefulness of this document.
Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

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

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

**Note:** Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Applications Release Online Documentation CD available on My Oracle Support and [www.oracle.com](http://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).

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

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at [www.oracle.com](http://www.oracle.com).
Oracle Retail Installation Guides contain the requirements and procedures that are necessary for the retailer to install Oracle Retail products.

**Audience**

This Installation Guide is written for the following audiences:

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

**Related Documents**

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

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

**Customer Support**

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

https://support.oracle.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

**Review Patch Documentation**

When you install the application for the first time, you install either a base release (for example, 13.2) or a later patch release (for example, 13.2.1). If you are installing the base release and additional patch and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch and bundled hot fix releases can contain critical information related to the base release, as well as information about code changes since the base release.
Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:
http://www.oracle.com/technology/documentation/oracle_retail.html

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

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

Conventions

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

This is a code sample

It is used to display examples of code
Preinstallation Tasks

This chapter includes tasks to complete before installation.

Check for the Current Version of the Installation Guide

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

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

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

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

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

Hot Fixes Available for RMS/ORFM 13.2

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

- Hot fix 11071540
  This hot fix contains miscellaneous changes related to order receiving and the item-supplier data conversion load script. This fix should be applied to all RMS 13.2 installations.

- Hot fix 11071552
  This hot fix contains miscellaneous changes related to pack item upgrades and the entity Clasificación Nacional de Actividades Económicas (CNAE) codes data conversion load script. This fix applies only if you are installing RMS 13.2 with Brazil localization.

- Hot fix 11849744
  This hot fix contains miscellaneous changes related to the RMS 13.2 database and application installers and RMS 13.2 demo data and currency tables. This fix should be applied to all RMS 13.2 installations.

Access My Oracle Support at the following URL:
https://support.oracle.com

Applying the Hot Fixes

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

ORFM requires that the RMS 13.2 database schema be installed. See the Oracle Retail Merchandising System Installation Guide for the supported database server requirements.

Check Supported Application Server Requirements

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

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

<table>
<thead>
<tr>
<th>Supported on</th>
<th>Versions Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Server OS</td>
<td>OS certified with Oracle Fusion Middleware 11g Release 1 (11.1.1.3). Options are:</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle Linux 5 Update 3 (OL5.3) for x86-64 (Actual hardware or Oracle Virtual Machine)</td>
</tr>
<tr>
<td></td>
<td>▪ Red Hat Enterprise Linux 5 Update 3 (RHEL 5.3) for x86-64 (Actual hardware or Oracle Virtual Machine)</td>
</tr>
<tr>
<td></td>
<td>▪ IBM AIX 6.1 (actual hardware or LPARs)</td>
</tr>
<tr>
<td></td>
<td>▪ Solaris 10 Sparc (actual hardware or Logical Domains)</td>
</tr>
<tr>
<td></td>
<td>▪ HP-UX 11.31 Integrity (actual hardware or HPVM)</td>
</tr>
<tr>
<td>Application Server</td>
<td>Oracle Fusion Middleware 11g Release 1 (11.1.1.3) with the following one off patches.</td>
</tr>
<tr>
<td></td>
<td>▪ 6880880 – New Opatch version for Linux 64-bit (Required for Forms 11.1.1.3 component)</td>
</tr>
<tr>
<td></td>
<td>▪ 10065423 - MERGE REQUEST ON TOP OF 11.1.1.3.0 FOR BUGS 9891666 9891675</td>
</tr>
<tr>
<td></td>
<td>▪ 9356983 - FORMS FAIL TO COMPIL WITH FRM-30312 WHEN NLS_LANG INCLUDES UTF8 CHARACTERSET</td>
</tr>
<tr>
<td>Note:</td>
<td>These patches are for Linux 64-bit only, for other OSES these patches are not required. Patch 10065423 must be applied before patch 9356983.</td>
</tr>
<tr>
<td>Components</td>
<td>▪ Oracle WebLogic Server 11g Release 1 (10.3.3)</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle Forms Services 11g Release 1 (11.1.1.3)</td>
</tr>
<tr>
<td>Optional (SSO required)</td>
<td>▪ Oracle BI Publisher 10g (10.1.3.4)</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle Internet Directory 10g (10.1.4.3)</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle WebTier 11g (11.1.1.3) – not required</td>
</tr>
</tbody>
</table>
Verify Single Sign-On

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

Check Supported Web Browser and Client Requirements

General requirements for client running RMS include the following.

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

Supported Oracle Retail Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Retail Merchandising System (RMS)</td>
<td>13.2</td>
</tr>
<tr>
<td>Oracle Retail Store Inventory Management (SIM)</td>
<td>13.2.1</td>
</tr>
<tr>
<td>Oracle Retail Warehouse Management System (RWMS)</td>
<td>13.2</td>
</tr>
</tbody>
</table>

UNIX User Account Privileges to Install the Software

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

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

Supported Oracle Retail Integration Technologies

<table>
<thead>
<tr>
<th>Integration Technology</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Retail Integration Bus (RIB)</td>
<td>13.2</td>
</tr>
</tbody>
</table>
Note: The following integration points are not supported for ORFM/RMS Brazil Localization, but they are supported with non-Brazil RMS:


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

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

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

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

References for Configuration:

- Oracle Fusion Middleware High Availability Guide 11g Release 1 (11.1.1) Part Number E10106-09
- Oracle Real Application Clusters Administration and Deployment Guide 11g Release 2 (11.2) Part Number E16795-08
To successfully complete installation of ORFM, installers from the RMS 13.2 and ORFM 13.2 releases must be run in a specific sequence.

This guide explains the steps needed to perform an installation of RMS/ORFM. These chapters should be followed in order:

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

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

Install Managed Server in WebLogic

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

1. Log in to the admin console.

2. Click Lock & Edit.

4. Set the following variables:

   - **Server Name**: This value should be specific to your targeted application (for example, rtil-server).
   
   - **Server Listen Address**: `<weblogic server>`
     (for example, redevlv0074.us.oracle.com)
   
   - **Server Listen Port**: A free port. Check for availability.
     A suggestion is to increment the AdminServer port by two and keep incrementing by two for each managed server (for example, 17003, 17005, 17007, and so on.)

5. Click **Next**.
6. Click Finish.
7. Click **Activate Changes** on the left side. Once the changes are activated, the State of the rtil-server should change to SHUTDOWN status.
Install Node Manager if it was not created during domain install. The node manager is required so that the managed servers can be started and stopped through the admin console. Only one node manager is needed per WebLogic install.

1. Log in to the admin console.
2. Click **Lock & Edit**. Navigate to Environments->Machines. Click **New**.
3. The following page is displayed. Set the following variables:
   - **Name**: Logical machine name
   - **Machine OS**: UNIX
4. Click **OK** to activate the changes.
5. Click the machine created.
6. Click the Node Manager tab and update the details below.

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

8. Click **Activate Changes**.

9. Click **Lock & Edit**.

10. Navigate to Environments > machines. Click the machine name. Select the **Servers** tab. Click **Add**.
11. Add the managed servers that need to be configured with the NodeManager. Save changes.
   - From the drop down select the managed server to be added to nodemanager
     Server: <app-server> (for example: rtil-server)
12. Click Next. Click Finish.
13. To activate changes the server must be stopped as follows:
    <WLS_HOME>/user_projects/domains/<domain name>/bin/
    stopManagedWebLogic.sh rtil-server ${server_name}:${server_port}
14. Go to each managed server that is being added to the machine and click the Server Start tab. In the Class Path box, add the following:
    $CLASSPATH:<full-path-to-domain>/servers/<managed-server>
    For example: $CLASSPATH:/u00/webadmin/product/10.3.3
    /WLS/user_projects/domains/rtil_domain/servers/rtil-server
15. Click Save.
16. Click Activate Changes.

**Start the Managed Servers**

To start the managed servers, complete the following steps.
1. Start the Node Manager from the command line.

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

   After the Node Manager is started, the managed servers can be started through the admin console.
2. Update in weblogic console->servers-><app>-server->server start tab->Classpath with the following:

   CLASSPATH: <WLS_HOME>/modules/com.bea.core.apache.log4j_1.2.13.jar

3. Navigate to Environments > Servers. Select <app-server> (for example, rtil-server server managed server). Click the Control tab.

4. Click Start to start the managed server.
Install MasterSaf TaxRules Runtime

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

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

Expand the RTIL Application Distribution

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

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

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

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

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

Run the RTIL Application Installer

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

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

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

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

2. Set and export the following environment variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORACLE_HOME</td>
<td>The location where Weblogic has been installed</td>
<td>ORACLE_HOME=/u00/webadmin/product/10.3.3/WLS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>export ORACLE_HOME</td>
</tr>
</tbody>
</table>
Run the RTIL Application Installer

### Variable Description Example

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEBLOGIC_DOMA.IN HOME</td>
<td>The location where the Weblogic domain has been installed</td>
<td>WEBLOGIC_DOMAIN_HOME=$ORACLE_HOME/user_projects/domains/ad_f_domain/ Export WEBLOGIC_DOMAIN_HOME</td>
</tr>
<tr>
<td>JAVA_HOME</td>
<td>Location of a Java 6.0 (1.6.0) JDK</td>
<td>JAVA_HOME=/u00/webadmin/java/jdk1.6.0_12 Export JAVA_HOME</td>
</tr>
<tr>
<td>DISPLAY</td>
<td>Address and port of X server on desktop system of user running installation. Optional for RTIL application installer.</td>
<td>DISPLAY=&lt;IP address&gt;:0 export DISPLAY</td>
</tr>
</tbody>
</table>

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

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

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

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

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

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

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

Override the default value to 1000
Resolving Errors Encountered During Application Installation

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

See Appendix: Common Installation Errors in this document for common installation errors.

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

Troubleshooting RTIL Deployment

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

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

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

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS_CODE</td>
<td>RTIL</td>
</tr>
<tr>
<td>RS_NAME</td>
<td>Retail Tax Integration Layer</td>
</tr>
<tr>
<td>RS_TYPE</td>
<td>S</td>
</tr>
<tr>
<td>URL</td>
<td>&lt;RTIL URL&gt; (for example, <a href="http://mspdv360:17002/taxrt">http://mspdv360:17002/taxrt</a>)</td>
</tr>
<tr>
<td>SERVER</td>
<td>&lt;RTIL_SERVER_NAME&gt;</td>
</tr>
<tr>
<td>PORT</td>
<td>&lt;PORT_NUMBER&gt; (for example, 17002)</td>
</tr>
</tbody>
</table>
Database Installation Tasks

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

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

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

Create Staging Directory for ORFM Database Schema Files

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

1. Log in to the database server as a user that can connect to the RMS database.
2. Create a staging directory for the ORFM database schema installation software. There should be a minimum of 40 MB disk space available in this location.
3. Copy the orfm13dbschema.zip file from the RMS 13.2 release to the staging directory. This is referred to as STAGING_DIR when installing database software.
4. Change directories to STAGING_DIR and extract the orfm13dbschema.zip file. This creates an orfm/dbschema subdirectory under STAGING_DIR.

Grant Permissions

To grant permissions, complete the following steps.

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

   **Example:**
   
   ```bash
   prompt$ . sqlplus <user> as SYSDBA
   SQL>@TaxServiceConsumer_grant.sql;
   Enter value for 1: rms01
   ```

   The script should display the new grants and print, **PL/SQL procedure successfully completed.**
Run the ORFM Database Schema Installer

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

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

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

Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

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

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLS_LANG</td>
<td>Locale setting for Oracle database client</td>
<td>NLS_LANG=AMERICAN_AMERICA.UTF8 export NLS_LANG</td>
</tr>
<tr>
<td>DISPLAY</td>
<td>Address and port of X server on desktop system of user running install. Optional for dbschema installer</td>
<td>DISPLAY=&lt;IP address&gt;:0 export DISPLAY</td>
</tr>
</tbody>
</table>

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

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

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

If prompted about resuming previous installation, respond with no.

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

You can verify the installer is working by logging into the schema and watching the count of invalid objects. It is also safe to cancel installation and resume it at a later time. If you choose to do this, when you rerun the installer make sure to answer Yes when asked if you want to resume the previous installation.
6. After the installer is complete, you can check the log file: orfm-install-dbschema.<timestamp>.log.

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

```bash
chmod 600 ant.install.properties
```
Batch Installation Tasks

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

Option 1: Use RMS Batch Installer to Install ORFM Batch

As shipped, the RMS 13.2 Batch installer installs and compiles the batch programs for RMS 13.2. The ORFM batch may be added to the RMS batch installation by copying the new source files and manually recompiling in the environment using the profile scripts created by the installer. This is the method to use if there is already an RMS batch environment with customizations. Go to the section, Option 2: Compile ORFM Batch Directly, for these instructions.

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

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

Before you apply the ORFM 13.2 Batch:

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

Before copying over any files, do the following:

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

Create Staging Directories for ORFM and RMS Batch Files

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

1. Log into the database server as a user that can connect to the RMS database.
2. Create a staging directory for the ORFM 13.2 Batch files. There should be a minimum of 2MB disk space available in this location.
3. Copy the orfm1320batchpatch.zip file from the ORFM 13.2 release to the staging directory. This is referred to as BATCH_PATCH_DIR when installing ORFM batch.
4. Change directories to BATCH_PATCH_DIR and extract the orfm1320batchpatch.zip file.
5. Create a staging directory for the RMS batch installation software. There should be a minimum of 35 MB disk space available in this location.
6. Copy the rms13batch.zip file from the RMS 13.2 release to the staging directory. This is referred to as STAGING_DIR when installing the RMS/ORFM batch software.
7. Change directories to STAGING_DIR and extract the rms13batch.zip file. This creates an rms/batch subdirectory under STAGING_DIR.
Copy Batch Files

For new environments, the installer can be used to install and compile the ORFM batch programs using the installer patching utility included with ORFM batch package. The utility is located under BATCH_PATCH_DIR/batch-patch/patch-util. This utility accepts as input the ORFM patch files and adds them to the RMS 13.2 batch installer package. After running this utility, the RMS Batch installer can be used to install both the 13.2 ORFM and RMS batch.

Custom Modules

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

Run the Installer Patching Utility

To run the installer patching utility, complete the following steps.
1. Set the JAVA_HOME environment variable to point to a JDK.
2. Set the ANT_HOME environment variable to point to an Ant installation. There is one included with the RMS installer that can be used for this.
   ANT_HOME=STAGING_DIR/rms/batch/ant
   export ANT_HOME
3. Change directories to BATCH_PATCH_DIR/batch-patch/patch-util/
4. Modify the patch.properties file. Set the staging.dir and patch.to.version properties.
   Property Name | Description
   1. Set the JAVA_HOME environment variable to point to a JDK.
   2. Set the ANT_HOME environment variable to point to an Ant installation. There is one included with the RMS installer that can be used for this.
   ANT_HOME=STAGING_DIR/rms/batch/ant
   export ANT_HOME
3. Change directories to BATCH_PATCH_DIR/batch-patch/patch-util/
4. Modify the patch.properties file. Set the staging.dir and patch.to.version properties.

Run the RMS Batch Installer

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

1. Change directories to STAGING_DIR/rms/batch. This directory was created when the rms13batch.zip file was expanded under STAGING_DIR.
2. Source the oraenv script to set up the Oracle environment variables (such as ORACLE_HOME and ORACLE_SID, PATH)
   **Example:**
   prompt$ . oraenv
   ORACLE_SID = [] ? mydb
   prompt$
   Verify the ORACLE_HOME and ORACLE_SID variables after running this script.
Run the RMS Batch Installer

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

   **Example:**
   Locations where makedepend is commonly found:
   Linux: /usr/X11R6/bin
   AIX: /usr/X11R6/bin

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISPLAY</td>
<td>Address and port of X server on desktop system of user running install. Optional for batch installer</td>
<td>DISPLAY=&lt;IP address&gt;:0 export DISPLAY</td>
</tr>
</tbody>
</table>

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

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

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

   Depending on system resources, a typical RMS batch installation can take 20 to 60 minutes.
   The installer asks for an installation directory. This is the destination directory for the RMS files. This directory is referred to as INSTALL_DIR for the remainder of this chapter. Do not provide an INSTALL_DIR that is located at or beneath STAGING_DIR.

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

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

   **Example:** chmod 600 ant.install.properties
Resolving Errors Encountered During Batch Installation

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

Data Conversion Scripts

To create data conversion scripts, complete the following steps.

1. The RMS batch installer installs the data conversion scripts under INSTALL_DIR/external/scripts. To complete the setup of these files, perform the following steps.
2. Create the following new directories:
   3. INSTALL_DIR/external/data
   4. INSTALL_DIR/external/logs
5. The RMS Batch installer should have already created INSTALL_DIR/external/scripts.
6. Log in to sqlplus as SYSTEM and run the following commands:

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

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

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

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

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

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

Option 2: Compile ORFM Batch Directly

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

Create Staging Directory for RMS Batch Upgrade Files

To create a staging director for RMS batch upgrade files, complete the following steps.

1. Log in to the database server as a user that can connect to the RMS database.
2. Create a staging directory for the RMS 13.2 Batch Upgrade. There should be a minimum of 14 MB disk space available in this location.
3. Copy the rms1320batchpatch.zip file from the RMS 13.2 release to the staging directory. This is referred to as BATCH_PATCH_DIR when upgrading a database schema.

4. Change directories to BATCH_PATCH_DIR and extract the rms1320batchpatch.zip file.

### Set Environment Variables

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

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

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

The variables set by batch.profile are as follows.

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

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

#### Linux
- **LD_LIBRARY_PATH**=$ORACLE_HOME/lib:
  $MMHOME/oracle/lib/bin:$LD_LIBRARY_PATH

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

### Compile Batch Libraries

To compile batch libraries, complete the following steps.

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

1. Copy the files from BATCH_PATCH_DIR/batch-patch/13.2.0/oracle/lib/src to INSTALL_DIR/oracle/lib/src.

2. Change directories to INSTALL_DIR/oracle/lib/src.
Option 2: Compile ORFM Batch Directly

3. To make library dependencies run this command.
   make -f l10n_rmslib.mk depend 2>&1 | tee libdpnd.log
   Check the libdpnd.log file for errors.

4. To make batch libraries:
   make -f l10n_rmslib.mk 2>&1 | tee libretek.log
   Check the libretek.log file for errors.

5. To install batch libraries:
   make -f l10n_rmslib.mk install
   The batch libraries should now be in INSTALL_DIR/oracle/lib/bin.

Compile Batch Source Code

1. Copy the files from BATCH_PATCH_DIR/batch-patch/13.2.0/oracle/proc/src to
   INSTALL_DIR/oracle/proc/src.
2. Change directories to INSTALL_DIR/oracle/proc/src.
3. Create dependencies.
   a. Run the following command:
      make -f l10n_rms.mk depend 2>&1 | tee srcdpnd.log
   b. Check the srcdpnd.log file for errors.
4. Create batch programs.
   a. Run the following command:
      make -f l10n_rms.mk 2>&1 | tee srcall.log
   b. Check the srcall.log file for errors.
5. Install the batch programs.
   make -f l10n_rms.mk install
   The ORFM batch programs should now be in INSTALL_DIR/oracle/proc/bin.

Copy Data Conversion Scripts

Copy the files from BATCH_PATCH_DIR/batch-patch/13.2.0/external to
INSTALL_DIR/external.
Application Installation Tasks

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

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

Install Managed Server in WebLogic

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

1. Log in to the admin console.

2. Click Lock & Edit.

4. Set the following variables:

- **Server Name**: A name specific to your targeted application (for example, rms-help-server)
- **Server Listen Address**: <weblogic server> (for example, redevlv0065.us.oracle.com)
- **Server Listen Port**: A free port. Check for availability. A suggestion is to increment the AdminServer port by two and keep incrementing by two for each managed server (for example, 17003, 17005, 17007, and so on.)

5. Click Next.
6. Click Finish.
7. Click **Activate Changes** on the left side.

**Install Node Manager**

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

1. Log in to the admin console.
2. Click **Lock & Edit**. Navigate to Environments > Machines.
3. Click **New**.
4. Set the following variables:
   - **Name**: Logical machine name
   - **Machine OS**: UNIX
5. Click **OK**.
6. Click on the machine created.
7. Click the Node Manager tab and update the details below.
   - **Type**: Plain
   - **Listen Address**: Machine IP (for example, redev1v0065.us.oracle.com)
   - **Listen Port**: Node manager will be assigned a default port, such as 5556.
8. Click Save.
9. Click **Activate Changes**.

10. Click **Lock & Edit**.

11. Navigate to Environments > machines. Click on the machine name. Select the Servers tab.
12. Add the managed servers to be configured with the Nodemanager. Save the changes.
13. Click Add.
Create RMS Help Managed Server

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

15. Click Next. Click Finish.

   To activate changes, the server must be stopped as follows.
   `<WLS_HOME>/user_projects/domains/<domain name>/bin/stopManagedWebLogic.sh rms-help-server ${server_name}:${server_port}`

16. Go to each managed server that is being added to the machine and click the Server Start tab. In the Class Path box, add the following:
   `$CLASSPATH:<full-path-to-domain>/servers/<managed-server>
   For example:
   `$CLASSPATH:/u00/webadmin/product/10.3.3/WLS/user_projects/domains/ClassicDomain/servers/rms-help-server`

17. Click Save.

18. Click Activate Changes.
Compile ORFM Forms Installation

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

Option 1: Use Application Installer to Patch

As shipped, the RMS 13.2 Application installer installs and compiles the forms, for version 13.2 of RMS. The ORFM Forms may be applied by copying the new source files and manually recompiling in the environment using the profile scripts created by the installer. Use this method if there is already an RMS Forms environment with customizations. See Option 2: Compile RMS Forms Directly for these instructions. The installer method is intended only for new environments. Do not use the installer patching utility to attempt installing forms in existing environments with the installer. If the patch is applied to customizations, they will be overwritten.

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

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

Before copying over any files:

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

Prepare Application Server for RMS

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

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

1. The Tk2Motif.rgb file that is sent out with WebLogic (10.3.3) must be modified. It located at the following location: $ORACLE_INSTANCE/config/FRComponent/frcommon/guicomon/tk/admin

2. Make a copy of the file Tk2Motif.rgb, and name it Tk2Motif.rgb_ORIG (for example).

3. Modify the file Tk2Motif.rgb file so that it contains the following line:

   Tk2Motif*fontMapCs: iso8559-2=UTF8

4. Copy $ORACLE_INSTANCE/config/FRComponent/frcommon/guicomon/tk/admin/Tk2Motif.rgb to $ORACLE_HOME/guicomon/tk/admin/Tk2Motif.rgb
Create Staging Directories for ORFM and RMS Application Files

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

1. Log into the application server as a user with read and write access to the WebLogic files.
2. Create a staging directory for the ORFM 13.2 application installation software. There should be a minimum of 90MB disk space available in this location.
3. Copy the orfm1320apppatch.zip file from the ORFM 13.2 release to the staging directory. This is referred to as APP_PATCH_DIR when installing ORFM application software and reports.
4. Change directories to APP_PATCH_DIR and extract the orfm1320apppatch.zip file.
5. Create a staging directory for the RMS application installation software. There should be a minimum of 600 MB disk space available in this location.
6. Copy the file rms13application.zip from the RMS 13.2 release to staging directory. This will be referred to as STAGING_DIR when installing application software and reports.
7. Change directories to STAGING_DIR and extract the file rms13application.zip. This will create an rms/application subdirectory under STAGING_DIR.

Copy Forms and Library Patch Files

For new environments, the installer can be used to install and compile the ORFM forms using the installer patching utility included with ORFM Forms package. The utility is located under APP_PATCH_DIR/app-patch/patch-util. This utility will accept as input the ORFM patch files and add them to the RMS 13.2 Forms installer package. After running this utility, the RMS Forms installer can be used to install both the 13.2 ORFM and RMS application pieces.

Custom Modules

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

Run the Installer Patching Utility

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

1. Set the JAVA_HOME environment variable to point to a JDK.
2. Set the ANT_HOME environment variable to point to an Ant installation. There is one included with the RMS installer that can be used for this.
   
   ANT_HOME=<INSTALL_DIR>/rms/application/ant
   
   export ANT_HOME
3. Change directories to APP_PATCH_DIR/app-patch/patch-util/
4. Modify the patch.properties file. Set the staging.dir and patch.to.version properties.

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

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

---

**Run the RMS Application Installer**

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

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

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

3. Set and export the following environment variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOMAIN_HOME</td>
<td>The location where Forms 11.1.1.3 domain has been installed</td>
<td>DOMAIN_HOME=/u00/webadmin/product/10.3.3/WLS_Forms/user_projects/domains/ClassicDomain/ export DOMAIN_HOME</td>
</tr>
<tr>
<td>WLS_INSTANCE</td>
<td>The name of the managed server that contains Oracle Forms</td>
<td>WLS_INSTANCE=WLS_FORMS export WLS_INSTANCE</td>
</tr>
<tr>
<td>ORACLE_SID</td>
<td>The database/SID where the RMS schema resides</td>
<td>ORACLE_SID=mydb</td>
</tr>
<tr>
<td>JAVA_HOME</td>
<td>Location of a Java 6.0 (1.6.0) JDK</td>
<td>JAVA_HOME=/u00/webadmin/java/jdk1.6.0_12 export JAVA_HOME</td>
</tr>
<tr>
<td>DISPLAY</td>
<td>Address and port of X server on desktop system of user running install. Required for forms application installer</td>
<td>DISPLAY=&lt;IP address&gt;:0 export DISPLAY</td>
</tr>
</tbody>
</table>

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.
Run the RMS Application Installer

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

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

   `/install.sh [text | silent]`

6. The Installer automatically sets additional environment variables based on the values of the environment variables set in Step 3. At the end of the preinstallation checks, the installer prints out a summary containing these new environment variables:

   **Example:**

   
   ```
   MW_HOME=/u00/webadmin/product/10.3.3/WLS_Forms
   ORACLE_HOME=/u00/webadmin/product/10.3.3/WLS_Forms/as_inst_1
   ORACLE_INSTANCE=/u00/webadmin/product/10.3.3/WLS_Forms/user_projects/domains/ClassicDomain
   DOMAIN_HOME=/u00/webadmin/product/10.3.3/WLS_Forms/user_projects/domains/ClassicDomain
   WLS_INSTANCE=WLS_FORMS
   ORACLE_SID=mydb
   JAVA_HOME=/u00/webadmin/java/jdk1.6.0_12
   ```

   Verify that these environment variables are correct. If any of them are incorrect, verify that the Weblogic shell scripts that set them are configured properly.

   Check the following scripts:

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

   **Example:**

   ```
   /u00/webadmin/product/10.3.3/WLS_Forms/user_projects/domains/ClassicDomain/bin/setDomainEnv.sh
   /u00/webadmin/product/10.3.3/WLS_Forms/wlserver_10.3/common/bin/commEnv.sh
   ```

   Depending on system resources, a typical installation takes 45 minutes to two hours. The installer asks for an installation directory. This is the destination directory for the RMS files. The directory is referred to as INSTALL_DIR for the remainder of this chapter. Do not provide an INSTALL_DIR that is located at or underneath STAGING_DIR.

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

   ```
   [exec] Warning! One or more of your selected locales are not available.
   ```

   ```
   [exec] Please invoke the commands "locale" and "locale -a" to verify your
   ```
Resolving Errors Encountered During Application Installation

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

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

You can also safely rerun the installer to see if the form compiles.
Clustered Installations – Post-Installation Steps

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

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

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

Oracle Configuration Manager

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

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

Access My Oracle Support at the following URL:
https://support.oracle.com

OCM Documentation Link
http://www.oracle.com/technology/documentation/ocm.html

RMS Reports Copied by the Application Installer

The application installer copies RMS report files to INSTALL_DIR/base/reports. These files should be installed into BI Publisher, as described in Chapter 8, Reports Installation Tasks.

Test the RMS Application

Oracle Retail provides test cases that allow you to smoke test your installation. See the My Oracle Support document, “Oracle Retail Merchandising Installation Test Cases” (ID 1277131.1).
Option 2: Compile RMS Forms Directly

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

Create Staging Directory for ORFM Application Files

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

1. Log into the application server as a user with read and write access to the WebLogic files.
2. Create a staging directory for the ORFM application installation software. There should be a minimum of 90 MB disk space available in this location.
3. Copy the file orfm1320apppatch.zip from the ORFM 13.2 release to staging directory. This is referred to as APP_PATCH_DIR when installing application software and reports.
4. Change directories to APP_PATCH_DIR and extract the file orfm1320apppatch.zip.

Set Environment Variables

To set environment variables, complete the following steps.

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

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

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

Variables set by forms.profile are as follows.

- All OS Platforms
  - MMHOME=INSTALL_DIR/base
  - ORACLE_HOME=/path/to/WebLogic/as_1
  - ORACLE_INSTANCE=/path/to/WebLogic/asinst_1
  - ORACLE_SID= The Oracle Sid for the RMS database
  - UP=/<Schema Owner Wallet Alias>
  - TNS_ADMIN=/path/to/wallet/files/dir/
  - NLS_LANG=AMERICAN_AMERICA.UTF8
  - DISPLAY=<IP address of X server>:0.0
  - PATH=$ORACLE_HOME/bin:$ORACLE_HOME/opmn/bin:$ORACLE_HOME/dcm/bin:INSTALL_DIR/base/forms_scripts:$PATH
Option 2: Compile RMS Forms Directly

- \texttt{FORMS\_BUILDER\_CLASSPATH=}$\texttt{CLASSPATH}$
- \texttt{FORMS\_PATH=}$\texttt{INSTALL\_DIR/base/toolset/bin:INSTALL\_DIR/rms/forms/bin:$ORACLE\_HOME/forms}$
- \texttt{TK\_UNKNOWN=}$\texttt{ORACLE\_INSTANCE/config/FRComponent/frcommon/guicommon/tk/admin}$
- \texttt{PATH=}$\texttt{ORACLE\_INSTANCE/bin:$PATH}$

\textbf{Note: } See \textit{Appendix: Setting Up Password Stores with Oracle Wallet} in this document.

\begin{itemize}
\item \textbf{AIX}
  \begin{itemize}
  \item \texttt{LD\_LIBRARY\_PATH=}$\texttt{ORACLE\_HOME/lib:$ORACLE\_HOME/lib32:$ORACLE\_HOME/jdk/jre/lib}$
  \item \texttt{LIBPATH=}$\texttt{LD\_LIBRARY\_PATH}$
  \end{itemize}
\item \textbf{Linux}
  \begin{itemize}
  \item \texttt{LD\_LIBRARY\_PATH=}$\texttt{ORACLE\_HOME/lib:$ORACLE\_HOME/lib32:$ORACLE\_HOME/jdk/jre/lib}$
  \end{itemize}
\end{itemize}

\section*{ORFM Forms Installation}
Instructions for ORFM forms installation are as follows.

1. Copy all files from APP\_PATCH\_DIR/app-patch/13.2.0/base/forms/src to INSTALL\_DIR/base/forms/src.
2. Copy all libraries (.pll files) in the INSTALL\_DIR/base/forms/src directory to the directories to the INSTALL\_DIR/base/forms/bin directory.
3. Change directories to INSTALL\_DIR/base/forms/bin.
4. Run \texttt{forms.pll.sh} to compile all RMS .pll’s.
5. Check to make sure that each .pll file has a corresponding .plx (to ensure that all .pll’s compiled successfully). Remove all newly created .plx files.
6. Copy all forms (*.fmb files) in the INSTALL\_DIR/base/forms/src directory to the INSTALL\_DIR/base/forms/bin directory.
7. Run \texttt{forms.fm_fmb.sh} (in INSTALL\_DIR/base/rms/forms/bin) to compile the RMS reference forms.
8. Remove all newly created fm_*.*fmx files (reference forms should not have executable files).
9. Run \texttt{forms.fmb.sh} (in INSTALL\_DIR/base/rms/forms/bin) to generate RMS runtime forms – .fmx’s.
10. Check to make sure that each non-reference form .fmb file has a corresponding .fmx file.
Option 2: Compile RMS Forms Directly

**Note:** Disregard the fm_*.fmx files that may be created. These files should be removed. They should not exist in the INSTALL_DIR/base/forms/bin directory.

11. Remove all non-reference form forms from INSTALL_DIR/base/forms/bin; the following syntax will leave all reference forms (fm_*.fmb) in the bin directory, while removing all other forms:
   ```bash
   > for PROG in `ls *.fmb | grep -v fm_`
   > do PROGNAME=`echo $PROG`
   > rm $PROGNAME
   > done
   ```

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

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

14. Make sure that each .mmb file has a corresponding .mmx file.

15. Remove all .mmb files from INSTALL_DIR/base/forms/bin.

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

Helpfile Installation

Instructions for helpfile installation are as follows.

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

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

3. Select Deployments.

4. Select Install.

5. Click the box called Path: and enter APP_PATCH_DIR/app-patch/13.2.0/online-help/rms-help.ear the ear file that will be deployed.

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

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

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

9. Verify settings. Click **Finish**.
Reports Installation Tasks

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

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

Path References Used in this Section

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

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;STAGING_DIR&gt;</td>
<td>The application installation staging directory as defined for the source installation files.</td>
<td></td>
</tr>
<tr>
<td>&lt;INSTALL_DIR&gt;</td>
<td>The destination directory mentioned in the RMS Application installer for the RMS files.</td>
<td></td>
</tr>
<tr>
<td>&lt;BI_MEDIA&gt;</td>
<td>Expanded source media for BI Publisher.</td>
<td>/tmp/BIPublisherSource/</td>
</tr>
<tr>
<td>&lt;BI_DEPLOYMENT&gt;</td>
<td>The deployment directory for BI Publisher as a WebLogic web application.</td>
<td>/u00/webadmin/RMS_BIP/</td>
</tr>
<tr>
<td>&lt;WLS_JAVA_HOME&gt;</td>
<td>The JDK location used by the WebLogic Server instance being installed to.</td>
<td>/u00/webadmin/java/jdk1.6.0_22.x64</td>
</tr>
<tr>
<td>&lt;BI_REPOSITORY&gt;</td>
<td>The BI Publisher reports repository. By default this is called XMLP.</td>
<td>/u00/webadmin/RMS_BIP/xmlpserver/XMLP</td>
</tr>
<tr>
<td>&lt;WLS_SERVER_CONFIG_DIR&gt;</td>
<td>The configuration base directory for the WebLogic server instance supporting the Oracle Forms environment.</td>
<td>/u00/webadmin/product/10.3.3/WLS_Forms/domains/ClassicDomain/config/fmwconfig/servers/WLS_FORMS</td>
</tr>
<tr>
<td>&lt;FORMS_INSTALL_BASE&gt;</td>
<td>The Oracle Forms base configuration directory.</td>
<td>&lt;WLS_SERVER_CONFIG_DIR&gt;/applications/formsapp_11.1.1/config</td>
</tr>
</tbody>
</table>
BI Server Component Installation Tasks

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

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

Installation Process Overview

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

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

The following are post-installation tasks:

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

Extracting the BI Server Web Archive from the Source Media

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

The BI Publisher installation media contains the following:

- BI Publisher server application
- BI Publisher runtime libraries
- BI Publisher fonts
- BI Publisher desktop tools
- Documentation, including users Guide, Javadocs, demos, and samples
Individual components are located in the directory structure as follows:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;BI_MEDIA&gt;/fonts</code></td>
<td>Font files.</td>
</tr>
<tr>
<td><code>&lt;BI_MEDIA&gt;/generic</code></td>
<td>xmlpserver.war (for non-oc4j application servers)</td>
</tr>
<tr>
<td></td>
<td>xmlpserver.ear (for non-oc4j application servers)</td>
</tr>
<tr>
<td><code>&lt;BI_MEDIA&gt;/oc4j</code></td>
<td>xmlpserver.ear (for oc4j).</td>
</tr>
<tr>
<td><code>&lt;BI_MEDIA&gt;/XMLP</code></td>
<td>XMLP repository.</td>
</tr>
<tr>
<td><code>&lt;BI_MEDIA&gt;/XMLP/DemoFiles</code></td>
<td>Data source for demo reports.</td>
</tr>
</tbody>
</table>

Complete the following tasks:

1. Create the `<BI_DEPLOYMENT>` directory on the server and change directory to this directory.
   For example, assuming that `/u00/webadmin` is the root of the installation:
   
   ```
   mkdir /u00/webadmin/RMS_BIP
   cd /u00/webadmin/RMS_BIP
   ```

2. On the server, locate the manual/generic/xmlpserver.war file from this directory structure and copy it to the `<BI_DEPLOYMENT>` directory, using a copy command with the following syntax: `cp <BI_MEDIA>/manual/generic/xmlpserver.war <BI_DEPLOYMENT>`
   For example,
   ```
   cp /tmp/BIPublisherSource/manual/xmlpserver.war /u00/webadmin/RMS_BIP
   ```

**Creating an Exploded Directory for the Installation**

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

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

Complete the following steps:

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.
   Example:
   ```
   mkdir xmlpserver
   cd xmlpserver
   jar -xvf /u00/webadmin/RMS_BIP/xmlpserver/xmlpserver.war
   ```
You should now have an exploded directory structure (with `<BI_DEPLOYMENT>/xmlpserver/`) for the deployment.

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

3. Delete the war file. For example,

   `rm /u00/webadmin/RMS_BIP/xmlpserver/xmlpserver.war`

### Configuring the BI Publisher Repository and Installing Fonts

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

To set up the repository, copy the `<BI_MEDIA>/XMLP` directory to `<BI_REPOSITORY>`.

For example,

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

1. Assign appropriate permissions for the WebLogic server instance user, including read, write, and execute permissions to enable the deployment of this directory structure to serve as a Web application.

2. Open the `xmlp-server-config.xml` file located in the `<BI_DEPLOYMENT>/xmlpserver/` directory with a text editor.

   For example,

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

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

4. After updating it, save the `xmlp-server-config.xml`.

5. Optional: Copy the font files from the `<BI_MEDIA>/fonts` in the installation media to the fonts directory of the Java Runtime Environment used by the WebLogic server being used for the deployment (represented by `WLS_JAVA_HOME` in the example below). This is an optional task for users that plan to deploy their own customized reports for RMS using BI Publisher directly.

   For example,

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

**Note:** For this task, you must re-start the WLS server restart.
Install Managed Server in WebLogic

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

1. Log in to the admin console.

2. Click Lock & Edit.

4. Set the following variables:
   - **Server Name**: This value should be specific to your targeted application (for example, bipublisher-server)
   - **Server Listen Address**: <weblogic server> (for example, redevlv0074.us.oracle.com)
   - **Server Listen Port**: A free port. Check for availability. A suggestion is to increment the AdminServer port by two and keep incrementing by two for each managed server (for example, 7003, 7005, 7007 and so on.)
5. Click Next.
6. Click Finish.
7. Click **Activate Changes** on the left side. Once the changes are activated, the State of the bipublisher-server should change to SHUTDOWN status.
Install Node Manager

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

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

   The following page is displayed. Set the following variables:
   - Name: Logical machine name
   - Machine OS: UNIX

3. Click **OK** to activate the changes.
4. Click the machine created.
5. Click the Node Manager tab and update the details below.
   - **Type:** Plain
   - **Listen Address:** <weblogic server> (for example, redevlv0074.us.oracle.com)
   - **Listen Port:** Assign a port number. Default port is 5556.

6. Click **Save**.

7. Click **Activate Changes**.

8. Click **Lock & Edit**.
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:
   ```bash
   <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:
   ```bash
   $CLASSPATH:<full-path-to-domain>/servers/<managed-server>
   ```
   For example: $CLASSPATH:/u00/webadmin/product/10.3.3
   /WLS/user_projects/domains/<Domain_name>/servers/bipublisher-server
13. Click Save.
14. Click Activate Changes.

Start the Managed Servers

To start the managed servers, complete the following steps.

1. Start the Node Manager from the command line.
   
   $WEBLOGIC_HOME/wlserver_10.3/server/bin startNodeManager.sh
   
   After the Node Manager is started, the managed servers can be started through the
   admin console.

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

3. Click Start to start the managed server.

Additional Set Up Steps Before Deploying the BI Application

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

1. Shutdown the bipublisher managed server created above.
2. Add the following option to the startWebLogic.sh script for the server on which the
   BI Publisher instance is installed.
   
   JAVA_OPTIONS="\$\{JAVA_OPTIONS\} -Dtoplink.xml.platform=oracle.toplink.platform.xml.jaxp.JAXPPlatform"
3. Locate the below mentioned jar files in `<BI_DEPLOYMENT>/xmlpserver/WEB-INF/lib` and add the libraries in your installation (example: copy the jars to the location `<WLS_HOME/user_projects/domains/<domain_home>/servers/bipublisher-server/`). Append the path of the libraries to the Java classpath for the bipublisher managed server in the weblogic admin console (Classpath in weblogic admin console is available in the path: Weblogic Administration console->Servers->BIPublisher managed server->Server Start-> Classpath)
   - ojdbc14.jar
   - bijdbc14.jar
   - toplink.jar
   - commons-dbcp-1.1.jar

4. Add the following arguments to the arguments of the java launcher (Arguments in weblogic admin console is available in the path: Weblogic Administration console->Servers->BIPublisher managed server->Server Start-> Arguments)
   
   -Xms512m -Xmx512m 
   -Dtoplink.xml.platform=oracle.toplink.platform.xml.jaxp.JAXPPlatform 

5. Restart the WebLogic server.
Deploying the BI Application in WebLogic

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

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

For example, http://wls_srv:7001/console

1. Log on to the console using an administrator user name and password.
2. In the Change Center of the Administration Console, click Lock & Edit.
3. In the left pane of the Administration Console, click Deployments.
4. In the right pane, click Install. The following screen should be displayed.
5. Select the exploded directory referenced by `<BI_DEPLOYMENT>/xmlpserver`. Click Next.

6. Select the Install this deployment as an application option. Click Next.
7. Select the bipublisher managed server as the deployment target. Click Next.
8. Select I will make the deployment accessible from the following location from Source accessibility.
9. Click Finish.

10. To activate these changes, in the Change Center of the Administration Console, click Activate Changes.
11. On the left side of the console, select Deployments. A list of deployments should now be showing in the table on the right.
12. Scroll down and select xmlpserver to start the service. The server’s state should change to an active state when refreshed.

![WebLogic Service Status](image)

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

For example:

http://wls_srv:7003/xmlpserver

### Installing the RMS BI Publisher Templates

In this section we will outline how the RMS report templates are installed into the appropriate BI server repositories. Report files are placed by the application installer in the directory - "INSTALL_DIR/base/reports" and have to be copied into the newly created directory.

1. Create a RMS directory to hold the reports under `<BI_REPOSITORY>/Reports/Guest.`

   Example `<BI_REPOSITORY>/Reports/Guest/RMS13`

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

3. Copy each report directory into the directory created above

   For example,
   ```bash
   cp -R * /u00/webadmin/RMS_BIP/xmlpserver/XMLP/Reports/Guest/RMS13/
   ```
Configuring the RMS JDBC connection

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

1. Log on with the default user ID and passwords for BI Publisher using the administrative user and password configured previously.

2. Click the Admin tab and select the JDBC Connection hyperlink in the Data Sources lists. The following screen will be displayed:

3. Enter the appropriate details for the RMS data source. Once the data is entered, click Test Connection to test the connection.
Deploying the BI Application in WebLogic

Configuring the BIPublisher Scheduler

Complete the following tasks for scheduler configuration:

1. Create the database user for scheduler configuration as below:
   ```
   create user <scheduler schema user> identified by <password> default
   tablespace <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 following screen. Enter the appropriate database connection details and test the connection as previously done. If this connection operates successfully, save the connection details and proceed by clicking the Install Schema button. This installs the schema for BI publisher using the RWMS connection details.

   **Note:** For information about configuring BI Publisher, use the following URL:
   [http://download.oracle.com/docs/cd/E12844_01/doc/bip.1013/e12690/T434820T487783.htm#5187634](http://download.oracle.com/docs/cd/E12844_01/doc/bip.1013/e12690/T434820T487783.htm#5187634)

3. Click the **Admin** tab. Click **Report Repository** under System Maintenance. The Path variable should be set as part of the BI Publisher install, REPORTS_DIR.

4. Add the following values to the `<installation name>` .env file located here:
   ```
   $WLS_HOME/user_projects/domains/<domain name>/config/fmwconfig/servers/WLS_FORMS/applications/formsapp_11.1.1/config/<installation name>/<installation name>.env
   ```
   - `ORACLE_RMS_REPORTS_HOST=http://<server>:<port>/`
     For example, `ORACLE_RMS_REPORTS_HOST=http://redevlv0065.us.oracle.com:9004/`
   - `ORACLE_RMS_RWSERVER=/<location to RMS directory>/`
     For example, `ORACLE_RMS_RWSERVER=xmlpserver/Guest/RMS13/`
Data Migration

The 13.2 release includes a tool for upgrading preexisting data in the RMS schema to the ORFM 13.2 schema, once 13.2 ORFM database scripts are executed. When ORFM is installed, your existing RMS data must be migrated to accommodate changes to the database caused by ORFM installation.

Before running the ORFM 13.2 Data Migration Tool, do the following.
- Make a backup of all your objects and database schema.
- Ensure that ORFM 13.2 is installed.
- Review each of the enclosed defect documents.

Create Staging Directory for RMS Data Migration Files

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

1. Log in to the database server as a user that can connect to the RMS database.
2. Create a staging directory for the RMS database schema installation software.
3. Copy the orfm1320datamigration.zip file from the ORFM 13.2 release to the staging directory. This is referred to as STAGING_DIR when running the data migration tool.
4. Change directories to STAGING_DIR and extract the orfm1320datamigration.zip file. This creates a “master_controller” subdirectory under STAGING_DIR.

Configure ORFM Data Migration Tool

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

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

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

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

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

4. Set and export the NLS_LANG environment variable.

   Example:  
   ```
   NLS_LANG=AMERICAN_AMERICA.UTF8
   export NLS_LANG
   ```
Create Staging Directory for RMS Data Migration Files

5. Set and export the TNS_ADMIN environment variable.

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

6. Open the l10nbrcontroller.cfg file and replace the values variables as follows:
   a. Export PATCH_DIR=STAGING_DIR/master_controller/rms
   b. export SCHEMA_OWNER=<The name of the RMS schema>
   c. export MMUSER=@< Schema Owner Wallet Alias>

   Note: See the document, “oracle_wallet_setup_for_mom.doc” for how to set up database wallet.

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

   Example: /u00/oracle> sqlplus $UP

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

   - country_atrib.dat
     This file is used to update the country attributes for Brasil. Attributes are:
     - Item costing tax inclusive indicator (Y/N)
     - Default cost for purchase orders, deals, cost components
     - Default location
     - Default location type

   - vat_codes.dat
     This file is used to load the tax codes for Brazil. Attributes are:
     - Tax code
     - Tax code description
     - Indicator (Y/N), depending on whether the tax code is included in the calculation of the Negotiated Item Cost.

   - addr.dat
     This file is used to update the jurisdiction code for a given supplier/partner/store/warehouse. Attributes are:
     - Address key
     - Jurisdiction code

   - comphead.dat
     This file is used to update the jurisdiction code for a company. Attributes are:
     - Company
     - Jurisdiction code
- **comp_store.dat**
  This file is used to update the jurisdiction code for a competitor store. Attributes are:
  - Competitor store
  - Jurisdiction code

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

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

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

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

- **comphead_l10n_ext.dat**
  This file is used to load the fiscal attributes for a company. Attributes are:
  - Company
  - Taxpayer type
  - Address line 1
  - Address line 2
  - Address line 3
  - Neighborhood
  - Jurisdiction code
  - State
  - Country
  - Postal code
  - CPF
  - CNPJ
  - NIT
  - SUFRAMA
Create Staging Directory for RMS Data Migration Files

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

**country_l10n_ext.dat**
This file is used to load the fiscal attributes for countries. Attributes are:
- Country
- Fiscal country
- Fiscal code

**item_country_l10n_ext.dat**
This file is used to load the fiscal attributes for items. Attributes are:
- Item
- Country
- Service ind
- Merchandise origin
- NCM
- NCM characteristic
- IPI
- Pauta code
- Service code
- Federal service code

**outloc_l10n_ext.dat**
This file is used to load the fiscal attributes for outside locations. Attributes are:
- Outside location type
- Outside location
- Taxpayer type
- Address line 1
- Address line 2
- Address line 3
- Neighborhood
- Jurisdiction code
- State
- Country
- Postal code
- CPF
- CNPJ
- NIT
- SUFRAMA
- City inscription
- State inscription
- IPI contributor (Y/N)
Create Staging Directory for RMS Data Migration Files

- `partner_l10n_ext.dat`
  This file is used to load the fiscal attributes for partners. Attributes are:
  - Partner type
  - Partner
  - Taxpayer type
  - Address line 1
  - Address line 2
  - Address line 3
  - Neighborhood
  - Jurisdiction code
  - State
  - Country
  - Postal code
  - CPF
  - CNPJ
  - NIT
  - SUFRAMA
  - City inscription
  - State inscription
  - IPI contributor (Y/N)
  - ICMS contributor (Y/N)
  - PIS contributor (Y/N)
  - COFINS contributor (Y/N)

- `store_l10n_ext.dat`
  This file is used to load the fiscal attributes for stores. Attributes are:
  - Store
  - Taxpayer type
  - Address line 1
  - Address line 2
  - Address line 3
  - Neighborhood
  - Jurisdiction code
  - State
  - Country
  - Postal code
  - CPF
  - CNPJ
  - NIT
  - SUFRAMA
  - City inscription
  - State inscription
  - ISS contributor (Y/N)
Create Staging Directory for RMS Data Migration Files

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

• sups_l10n_ext.dat
  This file is used to load the fiscal attributes for suppliers.
  - Supplier
  - Taxpayer type
  - Address line 1
  - Address line 2
  - Address line 3
  - Neighborhood
  - Jurisdiction code
  - State
  - Country
  - Postal code
  - CPF
  - CNPJ
  - NIT
  - SUFRAMA
  - City inscription
  - State inscription
  - ISS contributor (Y/N)
  - SIMPLES contributor (Y/N)
  - ST contributor (Y/N)
  - Rural producer (Y/N)
  - IPI contributor (Y/N)
  - ICMS contributor (Y/N)
  - PIS contributor (Y/N)
  - COFINS contributor (Y/N)

• wh_l10n_ext.dat
  This file is used to load the fiscal attributes for warehouses. Attributes are:
  - Warehouse
  - Taxpayer type
  - Address line 1
  - Address line 2
  - Address line 3
  - Neighborhood
  - Jurisdiction code
Create Staging Directory for RMS Data Migration Files

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

- entity_trib_subs.dat
  This file is used to load the state inscriptions for suppliers/warehouses and stores. Attributes are:
  - Supplier/Warehouse/Store
  - Entity Type (SUPP/S/W)
  - Country
  - State
  - State Inscription

- entity_cnae_codes.dat
  This file is used to load the CNAE codes for supplier/store/warehouse/company/outside location/partner. Attributes are:
  - Supplier/Store/Warehouse/Company/Outside location/Partner
  - Partner type/Outside location type
  - Entity type
  - Country
  - CNAE code
  - Primary indicator (Y/N)

Run the ORFM Data Migration Tool

To run the ORFM data migration tool, complete the following steps.
1. Change directories to STAGING_DIR/master_controller/rms/br.
2. If rerunning the data migration process, clear the contents of the “processed” directory.
3. Run prevalidation tool to ensure that the input files for the data migration tool is up to date:
   $ ./rms132_br_upgrade.ksh PREVALIDATION
4. Run migration tool.
   $ ./rms132_br_upgrade.ksh UPGRADE

5. Run migration cleanup tool to remove temporary data migration objects from the database.
   $ ./rms132_br_upgrade.ksh CLEANUP

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

7. Rebuild synonyms for any additional RMS users.
Appendix: ORFM RTIL Installer Screens

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

Screen: Manual Deployment Option

This installer will configure the application and app server files. Then it can proceed with installing the application into the server. If you do not have filesystem access to the application server, or you wish to deploy using a different method, you can choose to have the installer skip the final installation phase. The configured files will be made available for your use after this installer has completed.

Install files to app server?

- Yes. I have write access to the application server.
- No. Configure but do not install the application.

Note: You will still be prompted for application server settings if you choose No above. This is because some application server settings are configured in the application files.

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

The default values shown below are examples

<table>
<thead>
<tr>
<th>Field Title</th>
<th>RTIL 13 app deployment name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name by which this RTIL application is identified in the application server</td>
<td>rtil13</td>
</tr>
<tr>
<td>Example</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Title</th>
<th>RTIL13 server/cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the RTIL WebLogic managed server or cluster.</td>
<td>rtil-server</td>
</tr>
<tr>
<td>Example</td>
<td></td>
</tr>
</tbody>
</table>
## Screen: WebLogic Administrative User

Enter the administrative user and password for the Weblogic Server to which the application will be deployed.

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostname</td>
<td>Hostname of the application server</td>
<td>Mspdv360</td>
</tr>
<tr>
<td>Weblogic admin port</td>
<td>Port number of admin console</td>
<td>17001</td>
</tr>
<tr>
<td>Weblogic admin user</td>
<td></td>
<td>weblogic</td>
</tr>
<tr>
<td>Weblogic admin password</td>
<td></td>
<td>******</td>
</tr>
<tr>
<td>Field Title</td>
<td>WebLogic admin user</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Field Description</td>
<td>User name of the admin user for the WebLogic instance to which the ORFM application is being deployed.</td>
<td></td>
</tr>
<tr>
<td>Example</td>
<td>weblogic</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Title</th>
<th>WebLogic admin password</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>Password for the WebLogic admin user. You chose this password when you created the WebLogic instance or when you started the instance for the first time.</td>
</tr>
</tbody>
</table>
### Screen: Log 4j logger Details

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Log 4j Log Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>Specifies the level at which the logging is enabled.</td>
</tr>
<tr>
<td>Example</td>
<td>INFO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Output to STDOUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>Specifies whether the logs should be routed to the console.</td>
</tr>
<tr>
<td>Field Title</td>
<td>Log4j logfile MaxFileSize (MB)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Field Description</td>
<td>Specifies the file size threshold beyond which the log file gets rolled over.</td>
</tr>
<tr>
<td>Example</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Log4j logfile MaxBackupIndex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>Specifies the number of rolled over log files that will be retained.</td>
</tr>
<tr>
<td>Example</td>
<td>30</td>
</tr>
</tbody>
</table>
### Screen: Tax-Service-Provider Details

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax-Service-Provider Server</td>
<td>Specifies the host server on which MasterSaf /Tax Service Provider is deployed.</td>
<td>myhost82</td>
</tr>
<tr>
<td>Tax-Service-Provider port</td>
<td>Specifies the port number of managed Server (WebLogic) on which MasterSaf /Tax Service Provider application instance is deployed.</td>
<td>7001</td>
</tr>
<tr>
<td>Tax-Service-Provider context...</td>
<td></td>
<td>taxrulesruntime</td>
</tr>
<tr>
<td>Tax-Service-Provider porttype</td>
<td></td>
<td>TaxRulesAPI</td>
</tr>
</tbody>
</table>

---

### Appendix: ORFM RTIL Installer Screens

#### Tax-Service-Provider Details

Provide the details for the RTIL Tax-Service-Provider

- **Tax-Service-Provider Server**: myhost82
- **Tax-Service-Provider port**: 7001
- **Tax-Service-Provider context...**: taxrulesruntime
- **Tax-Service-Provider porttype**: TaxRulesAPI

![RTIL 13 Installer - Oracle Retail](image.png)
<table>
<thead>
<tr>
<th>Field Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax-Service-Provider context</td>
<td>Specifies the application context root of the deployed MasterSaf/Tax Service Provider.</td>
</tr>
<tr>
<td>Example</td>
<td>taxrulesruntime</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Tax-Service-Provider porttype</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>Specifies the port type of the deployed MasterSaf/Tax Service Provider.</td>
</tr>
<tr>
<td>Example</td>
<td>TaxRulesAPI</td>
</tr>
</tbody>
</table>
All fields on this summary screen are read-only. In GUI mode of the installer, this screen provides the opportunity to review inputs and go back to previous screens to correct them if necessary.

Once you advance forward from this screen, the installer connects to the database and validate that the RMS user exists before beginning installation.
You need the following details about your environment for the installer to successfully install the ORFM database schema. Depending on the options you select, you may not see some screens.

**Screen: ORFM Database Schema Details**

Please provide the database user for this ORFM 13.2 installation. The database user will be the RMS 13.2 user. The installer will authenticate this user, if it exists, and create the ORFM database objects.

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORFM/RMS schema</td>
<td>rms01</td>
</tr>
<tr>
<td>ORFM/RMS schema password</td>
<td>password</td>
</tr>
<tr>
<td>ORFM/RMS Oracle SID</td>
<td>ptols05</td>
</tr>
</tbody>
</table>
### ORFM/RMS Schema Installer Screens

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORFM/RMS schema password</td>
<td>Database password for the ORFM/RMS Schema Owner.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORFM/RMS Oracle SID</td>
<td>Oracle system identifier for the database where ORFM/RMS will be installed</td>
</tr>
<tr>
<td>Example</td>
<td>pkols05</td>
</tr>
</tbody>
</table>

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

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

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

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

Screen: Welcome

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

Screen: DataSourceDetails

Please provide information for the RMS database user. It is assumed that you have already run the RMS DB schema installer with this user to create the RMS tables and objects. The RMS batch installer will authenticate as this user to create library objects and query for data to generate batch source files.

<table>
<thead>
<tr>
<th>Field Title</th>
<th>RMS Schema Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>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.</td>
</tr>
<tr>
<td>Example</td>
<td>rms01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Title</th>
<th>RMS Schema Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>Database password for the RMS Schema Owner.</td>
</tr>
<tr>
<td>Field Title</td>
<td>RMS Oracle SID</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Field Description</td>
<td>Oracle system identifier for the database where RMS will be installed</td>
</tr>
<tr>
<td>Example</td>
<td>pkols05</td>
</tr>
</tbody>
</table>
Screen: 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.

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Wallet password</td>
<td>This is the password for the wallet that will store the database credentials that were supplied in the previous screen.</td>
</tr>
<tr>
<td>Please re-enter password</td>
<td></td>
</tr>
</tbody>
</table>
Appendix: RMS Batch Installer Screens

Screen: Batch Installation Directory

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

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

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

Screen: Oracle Customer Information

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

Screen: Data Source Details

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? [ ]

[ ] Cancel [ ] Back [ ] Next [ ] Install
### RMS Application Installer Screens

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMS Schema Owner</td>
<td>This is the same username that was used during the RMS Database Schema Installer.</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: rms01</td>
</tr>
<tr>
<td>RMS Schema Password</td>
<td>This is the same password that was used during the RMS Database Schema Installer.</td>
</tr>
<tr>
<td>RMS Oracle SID</td>
<td>This is the same Oracle SID that was used during the RMS Database Schema Installer.</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: pkols05</td>
</tr>
<tr>
<td>Test Data Source?</td>
<td>Attempt to validate the Data Source Details on this screen. This will happen when you click <strong>Next</strong>.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> If you get errors not related to incorrectly entered credentials, refer to Appendix F: Common Installation Errors.</td>
</tr>
</tbody>
</table>
Screen: 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.

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Oracle Wallet password</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>This is the password for the wallet that will store the database credentials that were supplied in the previous screen.</td>
</tr>
</tbody>
</table>
### Appendix: RMS Application Installer Screens

#### Screen: Installation Name

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Installation Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field Description</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Example</strong></td>
<td>rms13inst</td>
</tr>
</tbody>
</table>

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.

[Image of Installation Name screen]

**Example**: rms13inst
Screen: 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: /u01/webadmin/rms13inst

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

Screen: Application Deployment Method

Which Environment Deployment Method would you like to use?

- Base - 1 URL
- Production - 2 URLs
- Development - 4 URLs

Field Title | Description
-------------|--------------------------------------------------
Field Title  | Which Environment Deployment Method would you like to use.
Example      | Base
Screen: WebLogic Configuration

The installer has the ability to automatically configure Weblogic for RMS if you have write permissions to the Weblogic installation. If you do not have permissions to the Weblogic installation the installer will create a directory containing the files you need to configure Weblogic after the installation.

The following files will be modified in the Weblogic installation:
*formsweb.cfg
*Registry.dat
*httpd.conf

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Configure WebLogic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>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.</td>
</tr>
<tr>
<td>Note:</td>
<td>If you rerun the installer, and choose to check the box in the installer screens called Configure WebLogic, you may need to clean up duplicate entries in the WebLogic formsweb.cfg file.</td>
</tr>
</tbody>
</table>
Appendix: RMS Application Installer Screens

Screen: Weblogic Administrative Details

Enter the administrative user and password for the Weblogic Server to which the application will be deployed.

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostname</td>
<td>Hostname of the application server.</td>
</tr>
<tr>
<td>Example</td>
<td>mspdv161</td>
</tr>
<tr>
<td>WebLogic Admin port</td>
<td>Listen port for the Weblogic Admin console</td>
</tr>
<tr>
<td>Example</td>
<td>7001</td>
</tr>
<tr>
<td>Field Title</td>
<td>WebLogic Admin User</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Field Description</td>
<td>User name of the admin user for WebLogic instance to which the RMS Webhelp application is being deployed.</td>
</tr>
<tr>
<td>Example</td>
<td>weblogic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Title</th>
<th>WebLogic Admin Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>Password for the WebLogic admin user. You chose this password when you created the WebLogic instance.</td>
</tr>
</tbody>
</table>
Screen: Webhelp Installation Details

RMS webhelp provides enhanced accessibility and usability of product documentation. The installation of webhelp requires a running Weblogic managed server instance. If a managed server has not been configured or is not running, please see the documentation on pre-installation setup requirements.

Enter the Weblogic managed server for RMS webhelp.

RMS Help Server  rms_help_instance

<table>
<thead>
<tr>
<th>Field Title</th>
<th>WebLogic Help Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>The WebLogic managed server that was created for the RMS Webhelp application.</td>
</tr>
<tr>
<td>Example</td>
<td>rms_help_instance</td>
</tr>
</tbody>
</table>
Screen: Summary

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

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

Repeating an Installation Attempt

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

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

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

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

Example: install.sh silent
Appendix: Common Installation Errors

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

Database Installer Hangs on Startup

**Symptom**
When the database schema installer is run, the following is written to the console and the installer hangs indefinitely:
- Running pre-install checks
- Running tnsping to get listener port

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

Unreadable Buttons in the Installer

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

Warning: Could not create system preferences directory

**Symptom**
The following text appears in the installer Errors tab:

May 22, 2006 11:16:39 AM java.util.prefs.FileSystemPreferences$3 run
WARNING: Could not create system preferences directory. System preferences are unusable.

May 22, 2006 11:17:09 AM java.util.prefs.FileSystemPreferences
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](http://bugs.sun.com) for details.

This is an issue with your installation of Java and does not affect the Oracle Retail product installation.
Warning: Couldn’t find X Input Context

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

Couldn’t find X Input Context

Solution
This message is harmless and can be ignored.

Unresponsive Country and Currency Drop-Downs

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

XTEST extension not installed on this X server: Error 0

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

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

   ![Xconfig Extensions Tab](image)

5. Restart the X Server and re-run the RMS installer.
Appendix: Common Installation Errors

Couldn't execl robot child process: Permission denied

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

Couldn't execl robot child process: Permission denied

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

Example (using SUN Solaris):

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

ConcurrentModificationException in Installer GUI

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

java.util.ConcurrentModificationException
at
dc0eutil.ArrayList$Itr.checkForComodification(AbstractList.java:448)
at java.util.ArrayList$Itr.next(AbstractList.java:419)
... etc

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

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

Symptom
When running the application installer you get the following error:

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

FRM-30085: Unable to adjust form for output.

Form not created
Solution
Disable the database filter policies by running drop_filter_policy.sql, run the application installer again and then run add_filter_policy.sql. Both files can be located with the database installer.

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

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

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

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

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

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

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

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

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

Example:
```
frmpcmp.sh userid=$UP module_type=form module=FORM_OR_MENU
```
Appendix: Common Installation Errors

Error Connecting to Database URL

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

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

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

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

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

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

It may mean that the installer is using the incorrect library path variables for the platform you are installing on. Open the file <STAGING_DIR>/rms/dbschema/common/preinstall.sh and make sure the variable “use32bit” is set to “true” if you are on a 32 bit platform, and “false” if you are on a 64 bit platform.

Multi-Threaded OCI Client Dumps Core after Reconnecting To Database

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

skgfqio sdbgrfbibf_io_block_file dbgrfrbfb_read_block_file dbgrmflrp_read_page
dbqmbligmp_get_many_pages dbgrmmdrrmd_read_relation_meta_data
dbqgmmddora_open_record_access_full
dbgriporc_openrel_wcreate dbgrip_open_relation_access dbgrip_start_iterator
dbgrip_relation_iterator dbgripac_read_adrcfl...

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

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

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

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

Symptom
Errors occur during Forms installer screens when run on HP-UX. When you click **Next** on the installer screen “Data Source Details” you get an error message on the screen saying “no ocijdbc11 in java.library.path” that prevents you from moving to the next screen.

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

**JDBC URL for a Database**

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

**Thick Client Syntax:** `jdbc:oracle:oci:}@<sid>`

- `<sid>`: system identifier for the database

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

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

- `<host>`: hostname of the database server
- `<port>`: database listener port
- `<sid>`: system identifier for the database

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

**LDAP Derver URL**

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

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

- `<host>`: hostname of the directory server
- `<port>`: LDAP server port

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

**JNDI Provider URL for an Application**

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

**OracleAS:**

**Syntax:** `opmn:ormi:}@<host>:<port>:<instance>/<app>`

- `<host>`: hostname of the OracleAS environment
- `<port>`: OPMN request port of the OracleAS environment. This can be found in the `<ORACLE_HOME>/opmn/conf/opmn.xml` file.
- `<instance>`: Name of the OC4J instance running the application
- `<app>`: Deployment name for the application

**Example:** `opmn:ormi:}@myhost:6003:rsm-oc4j-instance/rsm13`

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

<host>: hostname of the WebSphere environment
<port>: BOOTSTRAP port of the WebSphere server that is running the application.
Example: iiop://myhost:2809
Appendix: Application Deployment Method

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

The installer provides three choices for cascading environment configuration:

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

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

The installer creates the set of URLs and empty directories for the other environments. All forms installed by this installer are placed in the Base environment. We establish the structure for customizations and fixes that the user can make after installation is complete.
Appendix: Setting Up Password Stores with Oracle Wallet

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

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

About Password Stores and Oracle Wallet

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

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

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

```
sqlplus /@db_username
```

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

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

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

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

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

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

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

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

1. Create a wallet using the following command:

   kstore -wrl <wallet_location> -create

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

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

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>)
   )
   )

   

Appendix: Setting Up Password Stores with Oracle Wallet
In the previous example, \texttt{<alias-name>}, \texttt{<host>}, \texttt{<port>}, and \texttt{<service>} are placeholder text for illustration purposes. Ensure that you replace these with the relevant values.

## Setting Up Wallets for Database User Accounts

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

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

### For RMS, RWMS, RPM Batch, RETL, RMS, RWMS, and ARI

1. Create a new directory called wallet under your folder structure.
   ```
   cd /projects/rms13.2/dev/
   mkdir .wallet
   ```

   \textbf{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
   ```

   \textbf{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)))
   ```

   \textbf{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.
Appendix: Setting Up Password Stores with Oracle Wallet

4. Create the wallet files. These are empty initially.
   a. Ensure you are in the intended location.
      
      $ pwd
      /projects/rms13.2/dev/.wallet
   
   b. Create the wallet files.
      
      $ mkstore -wrl . –create
   
   c. Enter the wallet password you want to use. It is recommended that you use the
      same password as the UNIX user you are creating the wallet on.
   
   d. Enter the password again.
      
      Two wallet files are created from the above command:
      – ewallet.p12
      – cwallet.sso

5. Create the wallet entry that associates the user name and password to the custom tns
   alias that was setup in the wallet’s tnsnames.ora file.
   
   mkstore -wrl . –createCredential <tns_alias> <username> <password>

   **Example:**
   
   $ mkstore -wrl . –createCredential
dscols29_rms01user rms01user passwd

6. Test the connectivity. The ORACLE_HOME used with the wallet must be the same
   version or higher that what the wallet was created with.
   
   $ export TNS_ADMIN=/projects/rms13.2/dev/.wallet /* This is very important to use
   wallet to point at the alternate tnsnames.ora created in this example */
   
   $ sqlplus /@dvols29_rms01user
   
   SQL*Plus: Release 11
   
   Connected to:
   
   Oracle Database 11g

   SQL> show user
   
   USER is "rms01user"

   Running batch programs or shell scripts would be similar:

   Ex: dtesys /@dvols29_rms01user
   script.sh /@dvols29_rms01user
   
   Set the UP unix variable to help with some compiles :
   
   export UP=/@dvols29_rms01user
   for use in RMS batch compiles, and RMS, RWMS, and ARI forms compiles.

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

Additional Database Wallet Commands

The following is a list of additional database wallet commands.

- Delete a credential on wallet
  
  mkstore -wrl . –deleteCredential dvols29_rms01user

- Change the password for a credential on wallet
  
  mkstore -wrl . –modifyCredential dvols29_rms01user rms01user passwd
List the wallet credential entries
mkstore -wrl . -list
This command returns values such as the following.
oracle.security.client.connect_string1
oracle.security.client.user1
oracle.security.client.password1

View the details of a wallet entry
mkstore -wrl . -viewEntry oracle.security.client.connect_string1
Returns the value of the entry:
dvols29_rms01user
mkstore -wrl . -viewEntry oracle.security.client.user1
Returns value of the entry:
rms01user
mkstore -wrl . -viewEntry oracle.security.client.password1
Returns value of the entry:
passwd

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

For Java application, consider the following:

- For database user accounts, ensure that you set up the same alias names between the password stores (database wallet and Java wallet). You can provide the alias name during the installer process.
- Document all aliases that you have set up. During the application installation, you must enter the alias names for the application installer to connect to the database and application server.

Java wallets do not have a password to update their entries. Entries in Java wallets are stored in partitions, or application-level keys. In each retail application, after you unzip <app>/application.zip, cd into <app>/application/retail-public-security-api/bin (for example, mspdv351:[1033_WLS]/u00/webadmin/product/10.3.3/WLS/user_projects/domains/132_mck_soa_domain/reim13/wallet/bin
or
Unzip to reim/application/retail-public-security-api-bin to run the commands below to administer java wallets. The application installers should create the Java wallets for you, but it is good to know how this works for future use and understanding.

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

Dump_credentials.sh

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

Dump_credentials.sh <wallet location>
Example:

dump_credentials.sh
location:/u00/webadmin/product/10.3.3/WLS/user_projects/domains/132_mck_soa_domain/sim-client/csm

Retail Public Security API Utility
=============================================  
Below are the credentials found in the wallet at the location:/u00/webadmin/product/10.3.3/WLS/user_projects/domains/132_mck_soa_domain/retail/reim13/config

=============================================  

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

Save_credentials.sh

Save_credentials.sh is used to update the information in wallet. If you are unsure about the information that is currently in the wallet, use dump_credentials.sh as indicated above.

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

Example:

```
mspdv351:[1033_WLS]/u00/webadmin/mock132_testing/rtil/rtil/application/retail-public-security-api/bin> save_credential.sh -l wallet_test -a myalias -p mypartition -u myuser
```

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

Enter password:
Verify password:

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

Save_credentials.sh and dump_credentials.sh scripts are the same for all applications.

Usage:

```
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
```

Oracle Retail Fiscal Management and Brazil Localization
created. If not specified, it creates the wallet under secure-credential-wallet directory which is already present under the retail-public-security-api/directory.

-p, --appLevelKeyPartitionName <arg> application level key partition name
-u, --userName <arg> username to be stored in secure credential wallet for specified alias*

How does the Wallet tie back to the Application?

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

Reim.properties code sample:

datasource.url=jdbc:oracle:thin:@mspdv349.us.oracle.com:1521:pkols07
datasource.schema.owner=rms132mock
dataSource.credential.alias=RMS-ALIAS
#  =========================================================================#
# ossa related Configuration
#
# These settings are for ossa configuration to store credentials.
#  =========================================================================
csm.wallet.path=/u00/webadmin/product/10.3.3/WLS/user_projects/domains/132_mck_soa_domain/retail/reim13/config
csm.wallet.partition.name=reim

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

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

Setting up RETL Wallets for 13.2

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

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

To set up RETL wallets, perform the following steps:

1. Set the following environment variables:
   - ORACLE_SID=retaildb
   - RFX_HOME=/u00/rfx/rfx-13.2.0
   - RFX_TMP=/u00/rfx/rfx-13.2.0/tmp
   - JAVA_HOME=/usr/jdk1.6.0_12.64bit
   - LD_LIBRARY_PATH=$ORACLE_HOME
   - PATH=$RFX_HOME/bin:$JAVA_HOME/bin:$PATH
2. Change directory to $RFX_HOME/bin.
   - 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 $MMHOME/RETLforRPAS/rfx/etc/rmse_rpas_config.env.
   - The RETL_WALLET_ALIAS should point to the Java wallet entry:
     ```bash
     export RETL_WALLET_ALIAS="retl_java_rms01user"
     ```
   - The ORACLE_WALLET_ALIAS should point to the Oracle network wallet entry:
     ```bash
     export ORACLE_WALLET_ALIAS="dvols29_rms01user"
     ```
   - The SQLPLUS_LOGON should use the ORACLE_WALLET_ALIAS:
     ```bash
     export SQLPLUS_LOGON="/@$\{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

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<td>rib-&lt;app&gt;-app-server-instance</td>
<td>&lt;rib-app weblogic user alias&gt;</td>
<td>&lt;rib-app weblogic user name&gt;</td>
<td>Integration use</td>
<td>Installer</td>
<td>weblogic-alias</td>
<td></td>
</tr>
<tr>
<td>Admin GUI</td>
<td></td>
<td></td>
<td>rib-&lt;app&gt;#web-app-user-alias</td>
<td>&lt;rib-app admin gui user alias&gt;</td>
<td>&lt;rib-app admin gui user name&gt;</td>
<td>Integration use</td>
<td>Installer</td>
<td>admin-gui-alias</td>
<td></td>
</tr>
<tr>
<td>Application</td>
<td></td>
<td></td>
<td>rib-&lt;app&gt;#user-alias</td>
<td>&lt;app weblogic user alias&gt;</td>
<td>&lt;app weblogic user name&gt;</td>
<td>Integration use</td>
<td>Installer</td>
<td>app-user-alias</td>
<td>Valid only for aip, rpm, sim</td>
</tr>
<tr>
<td>DB</td>
<td></td>
<td></td>
<td>rib-&lt;app&gt;#app-db-user-alias</td>
<td>&lt;rib-app database schema user alias&gt;</td>
<td>&lt;rib-app database schema user name&gt;</td>
<td>Integration use</td>
<td>Installer</td>
<td>db-user-alias</td>
<td>Valid only for rfm, rms, rwms, tafr</td>
</tr>
<tr>
<td>Error Hospital</td>
<td></td>
<td></td>
<td>rib-&lt;app&gt;#hosp-user-alias</td>
<td>&lt;rib-app error hospital database schema user alias&gt;</td>
<td>&lt;rib-app error hospital database schema user name&gt;</td>
<td>Integration use</td>
<td>Installer</td>
<td>hosp-user-alias</td>
<td></td>
</tr>
</tbody>
</table>
Appendix: Configure Listener for External Procedures

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

```sql
# File: listener.ora
# Desc: Oracle Net8 listener file.
# Notes: Modify <hostname>

##########################
LISTENER =
  (DESCRIPTION_LIST =
    (DESCRIPTION =
      (PROTOCOL_STACK =
        (PRESENTATION = TTC)
        (SESSION = NS))
      (ADDRESS =
        (PROTOCOL = tcp)
        (HOST = <hostname>))
      (PORT = 1521))
      (ADDRESS =
        (PROTOCOL = IPC)
        (KEY = extproc_key))
    )
  )

SID_LIST_LISTENER =
  (SID_LIST =
    (SID_DESC =
      (PROGRAM = extproc)
      (SID_NAME = extproc_agent)
      (ENVS='EXTPROC_DLLS=ANY'))
  )
```
Note: This example illustrates the configuration of net
services names required for external procedures. It does not
include environment specific settings that may be needed.
Consult Oracle Net Services guides for additional
information

```
# File: tnsnames.ora
# Desc: Net Services configuration file.
# Note: Change these values: <service_name>, <oracle_sid>, <hostname>,
#       <global_name>

# File: tnsnames.ora
# Desc: Net Services configuration file.
# Note: Change these values: <service_name>, <oracle_sid>, <hostname>,
#       <global_name>

EXTPROC_CONNECTION_DATA =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = IPC)(Key = extproc_key)))
    (CONNECT_DATA = (SID = extproc_agent)))

EXTPROC_CONNECTION_DATA.world =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = IPC)(Key = extproc_key)))
    (CONNECT_DATA = (SID = extproc_agent)))

<service_name> =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)(host = <hostname>)(Port = 1521)))
    (CONNECT_DATA = (SID = <oracle_sid>) (GLOBAL_NAME = <global_name>)))

<service_name>.world =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)(host = <hostname>)(Port = 1521)))
    (CONNECT_DATA = (SID = <oracle_sid>) (GLOBAL_NAME = <global_name>)))

Example:
EXTPROC_CONNECTION_DATA =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = IPC)(Key = extproc_key)))
    (CONNECT_DATA = (SID = extproc_agent)))

EXTPROC_CONNECTION_DATA.world =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = IPC)(Key = extproc_key)))
    (CONNECT_DATA = (SID = extproc_agent)))

prod_db1 =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)(host = server_01)(Port = 1521)))
    (CONNECT_DATA = (SID = prod_db1) (GLOBAL_NAME = prod_db1.world)))

prod_db1.world =
  (DESCRIPTION =
    (ADDRESS_LIST = (ADDRESS = (PROTOCOL = tcp)(host = server_01)(Port = 1521)))
    (CONNECT_DATA = (SID = prod_db1) (GLOBAL_NAME = prod_db1.world)))
```
Appendix: Installation Order

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

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

Enterprise Installation Order

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

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

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

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

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

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

13. Oracle Retail Predictive Application Server (RPAS)
14. Oracle Retail Demand Forecasting (RDF)
15. Oracle Retail Category Management (CM)
16. Oracle Retail Replenishment Optimization (RO)
17. Oracle Retail Analytic Parameter Calculator Replenishment Optimization (APC RO)
18. Oracle Retail Regular Price Optimization (RPO)
19. Oracle Retail Merchandise Financial Planning (MFP)
20. Oracle Retail Size Profile Optimization (SPO)
21. Oracle Retail Assortment Planning (AP)
22. Oracle Retail Item Planning (IP)
23. Oracle Retail Item Planning Configured for COE (IP COE)
24. Oracle Retail Advanced Inventory Planning (AIP)
25. Oracle Retail Integration Bus (RIB)
26. Oracle Retail Point-of-Service (ORPOS)
27. Oracle Retail Markdown Optimization (MDO)
28. Oracle Retail Clearance Optimization Engine (COE)
29. Oracle Retail Analytic Parameter Calculator for Markdown Optimization (APC-MDO)
30. Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)
31. Oracle Retail Promotion Intelligence and Promotion Planning and Optimization (PI-PPO)
32. Oracle Retail Workspace (ORW)