Oracle® Retail Merchandising System
Installation Guide
Release 13.0.3

September 2009
Value-Added Reseller (VAR) Language

Oracle Retail VAR Applications

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(ii) the MicroStrategy Components developed and licensed by MicroStrategy Services Corporation (MicroStrategy) of McLean, Virginia to Oracle and imbedded in the MicroStrategy for Oracle Retail Data Warehouse and MicroStrategy for Oracle Retail Planning & Optimization applications.

(iii) the SeeBeyond component developed and licensed by Sun Microsystems, Inc. (Sun) of Santa Clara, California, to Oracle and imbedded in the Oracle Retail Integration Bus application.

(iv) the Wavelink component developed and licensed by Wavelink Corporation (Wavelink) of Kirkland, Washington, to Oracle and imbedded in Oracle Retail Mobile Store Inventory Management.

(v) the software component known as Crystal Enterprise Professional and/or Crystal Reports Professional licensed by SAP and imbedded in Oracle Retail Store Inventory Management.

(vi) the software component known as Access Via™ licensed by Access Via of Seattle, Washington, and imbedded in Oracle Retail Signs and Oracle Retail Labels and Tags.

(vii) the software component known as Adobe Flex™ licensed by Adobe Systems Incorporated of San Jose, California, and imbedded in Oracle Retail Promotion Planning & Optimization application.

(viii) the software component known as Style Report™ developed and licensed by InetSoft Technology Corp. of Piscataway, New Jersey, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

(ix) the software component known as DataBeacon™ developed and licensed by Cognos Incorporated of Ottawa, Ontario, Canada, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

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Preface

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

Audience

This Installation Guide is written for the following audiences:

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

Related Documents

For more information, see the following documents:

- Oracle Retail Merchandising 13.0.3 Batch Schedule
- Oracle Retail Merchandising 13.0.3 Implementation Guide
- Oracle Retail Merchandising System 13.0.3 Data Model
- Oracle Retail Merchandising System 13.0.3 Defect Reports
- Oracle Retail Merchandising System 13.0.3 Installation Guide
- Oracle Retail Merchandising System 13.0.3 Online Help
- Oracle Retail Merchandising System 13.0.3 Operations Guide (Volumes 1 - 3)
- Oracle Retail Merchandising System 13.0.3 Release Notes
- Oracle Retail Merchandising System 13.0.3 User Guide

Customer Support

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

When contacting Customer Support, please provide the following:

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

Review Patch Documentation

If you are installing the application for the first time, you install either a base release (for example, 13.0.1) or a later patch release (for example, 13.0.3). If you are installing a software version other than the base release, be sure to read the documentation for each patch release (since the base release) before you begin installation. Patch documentation can contain critical information related to the base release and code changes that have been made since the base release.
Oracle Retail Documentation on the Oracle Technology Network

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

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

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

Conventions

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.”

Note: This is a note. It is used to call out information that is important, but not necessarily part of the procedure.

This is a code sample

It is used to display examples of code

A hyperlink appears like this.
Preinstallation Tasks

Implementation Capacity Planning

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

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

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

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

General requirements for a database server running RMS include:

<table>
<thead>
<tr>
<th>Supported on 10gR2</th>
<th>Versions Supported:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database Server OS</td>
<td>OS certified with Oracle Database 10gR2 Enterprise Edition. Options are:</td>
</tr>
<tr>
<td></td>
<td>▪ AIX 5.3</td>
</tr>
<tr>
<td></td>
<td>▪ Solaris 10 (Sparc)</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle Enterprise Linux 4 update 5 (OEL 4.5) for x86-64</td>
</tr>
<tr>
<td></td>
<td>▪ HPIA 11.23, 11.31 (Itanium 64-bit)</td>
</tr>
<tr>
<td>Database Server</td>
<td>Oracle Database 10g Release 2 Enterprise Edition (10.2.0.4 patchset required) with the following components:</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle Database 10g</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle Partitioning</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle Net Services</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle Call Interface (OCI)</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle Programmer</td>
</tr>
<tr>
<td></td>
<td>▪ Oracle XML Development Kit</td>
</tr>
<tr>
<td></td>
<td>▪ Companion CD</td>
</tr>
<tr>
<td></td>
<td>▪ ANSI compliant C compiler (certified with OS and database version)</td>
</tr>
<tr>
<td></td>
<td>Patches:</td>
</tr>
<tr>
<td></td>
<td>▪ 10.2.0.4 patchset: 6810189</td>
</tr>
<tr>
<td></td>
<td>▪ AIX oneoff patch: 6154596 (PRO*C THROWS PCC-2014 WHEN DIAGNOSTIC DIRECTIVE #WARNING IS USED).</td>
</tr>
<tr>
<td></td>
<td>Others components:</td>
</tr>
<tr>
<td></td>
<td>▪ Perl compiler 5.0 or later</td>
</tr>
<tr>
<td></td>
<td>▪ X-Windows interface</td>
</tr>
</tbody>
</table>

Verify Single Sign-On

If a Single Sign-On is to be used, verify the Oracle Infrastructure Server 10g has been installed. Verify the Mid-Tier server hosting Oracle Forms is registered with the Infrastructure Oracle Internet Directory.
Check Application Server Requirements

General requirements for an application server capable of running RMS include:

<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 Application Server 10g 10.1.2.2. Options are:</td>
</tr>
<tr>
<td></td>
<td>• AIX 5.3</td>
</tr>
<tr>
<td></td>
<td>• Solaris 10 (Sparc)</td>
</tr>
<tr>
<td></td>
<td>• Oracle Enterprise Linux 4 update 5 (OEL 4.5) for x86-64</td>
</tr>
<tr>
<td></td>
<td>• HPIA 11.23, 11.31 (Itanium 64-bit)</td>
</tr>
<tr>
<td>Application Server</td>
<td>Oracle Application Server Forms and Reports 10g version 10.1.2.2</td>
</tr>
<tr>
<td></td>
<td>Patches:</td>
</tr>
<tr>
<td></td>
<td>• 5861907 (IAS 10.1.2.2 PATCHSET UPDATES ORACLEHOMEPROPERTIES.XML WITH WRONG ARU_ID &amp; ARU_I)</td>
</tr>
<tr>
<td></td>
<td>• 5632264 (NEED UPDATED TIMEZONE FILES (VERSION 4) FOR MORE DST RULE CHANGES)</td>
</tr>
</tbody>
</table>

Note: If installing on HP, please refer to Metalink Note 367577.1.

Check Web Browser and Client Requirements

General requirements for client running RMS include:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating system</td>
<td>Windows 2000 or XP</td>
</tr>
<tr>
<td>Display resolution</td>
<td>1024x768</td>
</tr>
<tr>
<td>Processor</td>
<td>Pentium processor (minimum 450 MHz)</td>
</tr>
<tr>
<td>Memory</td>
<td>minimum of 256 MB RAM</td>
</tr>
<tr>
<td>Sun JRE Plug-in</td>
<td>1.4.1+</td>
</tr>
<tr>
<td>Microsoft Internet Explorer</td>
<td>version 5.5, 6.0 and higher</td>
</tr>
</tbody>
</table>
## Supported Oracle Retail Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Retail Active Retail Intelligence (ARI)</td>
<td>13.0.1</td>
</tr>
<tr>
<td>Oracle Retail Price Management (RPM)</td>
<td>13.0.3</td>
</tr>
<tr>
<td>Oracle Retail Allocation</td>
<td>13.0.3</td>
</tr>
<tr>
<td>Oracle Retail Invoice Matching (ReIM)</td>
<td>13.0.3</td>
</tr>
<tr>
<td>Oracle Retail Store Inventory Management (SIM)</td>
<td>13.0.3</td>
</tr>
<tr>
<td>Oracle Retail Warehouse Management System (RWMS)</td>
<td>13.0.3</td>
</tr>
<tr>
<td>Oracle Retail Data Warehouse (RDW)</td>
<td>13.0.2</td>
</tr>
<tr>
<td>Oracle Retail Predictive Application Server (RPAS)</td>
<td>13.0.4</td>
</tr>
<tr>
<td>Oracle Retail Advanced Inventory Planning (AIP)</td>
<td>13.0.2</td>
</tr>
<tr>
<td>Oracle Retail Strategic Store Solutions (ORSSS)</td>
<td>13.0.2</td>
</tr>
</tbody>
</table>

## Supported Oracle Retail Integration Technologies

<table>
<thead>
<tr>
<th>Integration Technology</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Retail Extract, Transform and Load (RETL)</td>
<td>13.0.2</td>
</tr>
<tr>
<td>Oracle Retail Integration Bus (RIB)</td>
<td>13.0.3</td>
</tr>
<tr>
<td>Oracle Retail Service Layer (RSL)</td>
<td>13.0.3</td>
</tr>
</tbody>
</table>

## Supported Oracle Products

**Note:** For integration with Oracle E-Business Suite, an Oracle Retail integration accelerator patch is available for download. This patch enables the integration between Oracle E-Business Suite and some Oracle Retail applications.

<table>
<thead>
<tr>
<th>Integration Technology</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle E-Business Suite</td>
<td>12.0.4</td>
</tr>
<tr>
<td>PeopleSoft Enterprise Financials</td>
<td>9.0</td>
</tr>
</tbody>
</table>

For support in implementing this integration, contact Oracle Customer Support and follow all typical Oracle Retail processes.

Oracle Retail applications can be integrated with PeopleSoft Enterprise Financials. See the [Oracle Application Integration Architecture 2.4: Installation and Upgrade Guide](#) for specific information on integrating your systems and supported versions.
Create a UNIX User Account to Install the Software

The following user should be created on both the application and database servers.

1. Create a UNIX group named “dev”.
2. Create UNIX user named “oretail” and assign it to the “dev” group. This user will install the RMS software.
The Oracle Retail Merchandising System has been validated to run in two configurations on Linux:

- Standalone OAS & RDBMS installations
- Real Application Cluster RDBMS & Oracle Application Server Clustering

The Oracle Retail products have been validated against a 10.2.0.4 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 Oracle Application Server installations.

Clustering for Oracle Application Server 10.1.3 is managed as an Active-Active cluster accessed through a hardware Load Balancer. It is suggested that a VirtualHost be added to the OAS 10.1.3 reflecting the Virtual Server Name configured in the load balancer. It is also suggested that the OC4J select method be configured to prefer the use of local OC4J instances. The Oracle Retail products are currently not validated to be distributable at the application level in an OAS 10.1.3 cluster.

Clustering for Oracle Application Server 10.1.2.2 is managed as an Active-Active cluster accessed through a hardware Load Balancer. It is suggested that the Web Cache installation included with OAS 10.1.2.2 be configured to reflect all application server Mid-Tier installations. Validation has been completed utilizing a RAC 10.2.0.3 Oracle Internet Directory database with the OAS 10.1.2.2 cluster.

References for Configuration:

- Oracle® Application Server High Availability Guide 10g Release 3 (10.1.3) Part Number B15977-02
- Oracle® Application Server High Availability Guide 10g Release 2 (10.1.2) Part Number B14003-05
- Oracle® Database Oracle Clusterware and Oracle Real Application Clusters Administration and Deployment Guide 10g Release 2 (10.2) Part Number B14197-03
RMS Database Installation – Patch

There are two options for installing the RMS 13.0.3 database schema patch. Option 1 uses the installer to apply the patch. Option 2 uses SQL*Plus directly. Both options are provided in this chapter.

Option 1: Patch RMS Database using the Installer

The RMS 13.0.1 database schema installer may be used to apply RMS patches. The entire 13.0.3 RMS patch may be installed by re-running the installer used with the RMS 13.0.1 full release.

The installer should only be used to apply patches if the schema being patched does not contain customizations or hotfixes. The patch may also be applied using SQL*Plus. See Option 2: Patch RMS Database using SQL*Plus later in this chapter for details on this method.

In this section, STAGING_DIR refers to the location where the RMS 13.0.1 database schema installer was originally expanded. The installer files from the original RMS 13.0.1 installation can be re-used or a new directory can be created with a fresh copy of the RMS 13.0.1 database schema installer.

Before you apply the RMS 13.0.3 patch:
- Make a backup of all your objects and database schema.
- Determine that either RMS 13.0.1 or RMS 13.0.2 is installed.
- Review the enclosed RMS 13.0.3 Release Notes.

Before copying over any files:
- Note whether customizations have been made to the module. If so, then the customizations must be reapplied over the new version of the module (or the fix may need to be applied to the custom version of the code).

Create Staging Directory for RMS Database Schema Files

1. Log into the database server as oretail.
2. Create a staging directory for the MOM 13.0.3 Patch. There should be a minimum of 40 MB disk space available in this location.
3. Copy the mom-dbpatch.zip file from the RMS 13.0.3 release to the staging directory. This is referred to as DB_PATCH_DIR when patching a database schema.
4. Change directories to DB_PATCH_DIR and extract the mom-dbpatch.zip file. This creates a mom-dbpatch subdirectory under DB_PATCH_DIR.
5. Create a staging directory for the RMS database schema installation software. There should be a minimum of 200 MB disk space available in this location.
6. Copy the rms13dbschema.zip file from the RMS 13.0.3 release to the staging directory. This is referred to as STAGING_DIR when upgrading a database schema.
Manual Edits to SQL Scripts

Modify the 13.0.3 rmsdbstart.sql file that will be used by the installer

Example: DB_PATCH_DIR/mom-dbpatch/13.0.3/rmsdbstart.sql

Make the following changes:

1. Locate the primary and secondary language data scripts at the bottom of the file. These sets of data scripts will be commented out in the SQL file using two preceding dash characters. Uncomment the scripts that pertain to your language settings. There can only be one primary language. Leave all primary language scripts commented out for English.

2. Examine the rest of the SQL script to see all of the files that are included in the patch.

13.0.1 to 13.0.3 Database Patching Steps

You will need to perform the following steps only if you are applying the 13.0.3 Patch to an RMS 13.0.1 schema. If applying the 13.0.3 Patch to a RMS 13.0.2 schema skip to the section titled “Run the RMS Database Schema Installer”.

Manual Edits to SQL Scripts

1. Change directories to DB_PATCH_DIR/mom-dbpatch/13.0.2/.

2. Repeat the edits to 13.0.2 rmsdbstart.sql that you performed in the previous step on the 13.0.3 rmsdbstart.sql.
   - Locate the primary and secondary language data scripts at the bottom of the file. These sets of data scripts will be commented out in the SQL file using two preceding dash characters. Uncomment the scripts that pertain to your language settings. There can only be one primary language. Leave all primary language scripts commented out for English.
   - Examine the rest of the SQL script to see all of the files that are included in the patch.

3. Change directories to DB_PATCH_DIR/mom-dbpatch/./

4. For each product you are going to patch, edit the corresponding <product>dbstart.sql. To edit these files, uncomment the sections that perform the 13.0.2 patches. For example:

   --@@13.0.2/rmsdbstart.sql

   @13.0.3/rmsdbstart.sql

   exit;

Should be edited to:

   @13.0.2/rmsdbstart.sql

   @13.0.3/rmsdbstart.sql

   exit;
Run the RMS Database Schema Installer

**Note:** Appendix A contains details on screens and fields in the RMS database schema installer.

1. Change directories to STAGING_DIR/rms/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.
   
   **Note:** The SQLPATH environment variable is critical for a patch installation to be successful.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQLPATH</td>
<td>Locations to which SQL*Plus will look for referenced SQL scripts. It is important that SQLPATH include the path to the patch directory where rmsdbstart.sql resides.</td>
<td>SQLPATH=&lt;DB_PATCH_DIR&gt;/momdbpatch/</td>
</tr>
</tbody>
</table>
   | NLS_LANG  | Locale setting for Oracle database client                                  | NLS_LANG=AMERICAN_AMERICA.UTF8
   |           |                                                                             | export NLS_LANG                 |
   | DISPLAY   | Address and port of X server on desktop system of user running install. Optional for dbschema installer | DISPLAY=<IP address>:0
   |           |                                                                             | export DISPLAY                  |

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

5. If the installer has already been run in this location you may wish to back up the ant.install.properties file. The settings from the RMS 13.0.1 full install might be in this file, and running the installer again for the patch clears out some of the settings that are not used by the installer’s patch mode.

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

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

   ```
   install.sh [text | silent]
   ```
If prompted about resuming previous installation, respond with no. Select the Patch option on the Full Install or Patch Option screen.

7. On the Apply an RMS DB Patch page, provide the path to the DB_PATCH_DIR/mom-dbpatch. This directory should contain a rmsdbstart.sql file, which the installer runs to apply the RMS 13.0.3 patch.

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

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

   Example: chmod 600 ant.install.properties

Resolving Errors Encountered During Database Schema Installation

Errors encountered during patch installation should be resolved outside of the installer using SQL*Plus. The installer’s resume function is only useful for full installs.

Additional Steps

The calendar.sql needs to be run for customers installing 13.0 for first time or for a full install of 13.0 only.

   Note: This file is not needed if you already have a working RMS calendar installed.

2. Log into SQL*Plus as the RMS schema owner (Example: RMSDEV) and run calendar.sql.

   Example: SQL> @calendar.sql;

   Note: Make sure you are not rerunning calendar.sql. If calendar.sql is run after having already been run, it will create data issues in the calendar and other dependent tables like month_data, week_data, etc.

Option 2: Patch RMS Database using SQL*Plus

While the installer can be used to apply the entire RMS database patch, there are situations in which it is better to use SQL*Plus directly with the scripts released in the patch. The installer calls a single start-all script named rmsdbstart.sql which runs all of the files in the patch. If there are any customizations or hotfixes in the schema then certain statements in the patch may result in errors. In this situation it is better to investigate where the conflicts are and fix the SQL scripts accordingly.

Before you apply the RMS 13.0.3 patch:
- Make a backup of all your objects and database schema.
- Determine that either RMS 13.0.1 or RMS 13.0.2 is installed.
- Review the enclosed RMS 13.0.3 Patch Release Notes.

Before copying over any files:
- Note whether customizations have been made to the module. If so, then the customizations must be reapplied over the new version of the module (or the fix may need to be applied to the custom version of the code).

Create Staging Directory for RMS Database Schema Files
1. Log into the database server as oretail.
2. Create a staging directory for the MOM 13.0.3 Patch. There should be a minimum of 40 MB disk space available in this location.
3. Copy the mom-dbpatch.zip file from the RMS 13.0.3 release to the staging directory. This is referred to as DB_PATCH_DIR when upgrading a database schema.
4. Change directories to DB_PATCH_DIR and extract the mom-dbpatch.zip file. This creates an mom-dbpatch subdirectory under DB_PATCH_DIR

Manual Edits to SQL Scripts
Modify the 13.0.3 rmsdbstart.sql file that will be used.

Example:
```
DB_PATCH_DIR/mom-dbpatch/13.0.3/rmsdbstart.sql
```

Make the following changes:
1. Locate the primary and secondary language data scripts at the bottom of the file. These sets of data scripts will be commented out in the SQL file using two preceding dash characters. Uncomment the scripts that pertain to your language settings. There can only be one primary language. Leave all primary language scripts commented out for English.
2. Examine the rest of the SQL script to see all of the files that are included in the patch.

13.0.1 to 13.0.3 Database Patching Steps
You will need to perform the following steps only if you are applying the 13.0.3 Patch to a RMS 13.0.1 schema. If applying the 13.0.3 Patch to a RMS 13.0.2 schema skip to the section titled “Run the RMS Database Patching Script”.

Manual Edits to SQL Scripts
1. Change directories to DB_PATCH_DIR/mom-dbpatch/13.0.2/.
2. Repeat the edits to 13.0.2 rmsdbstart.sql that you performed in the previous step on the 13.0.3 rmsdbstart.sql.
   - Locate the primary and secondary language data scripts at the bottom of the file. These sets of data scripts will be commented out in the SQL file using two preceding dash characters. Uncomment the scripts that pertain to your language settings. There can only be one primary language. Leave all primary language scripts commented out for English.
   - Examine the rest of the SQL script to see all of the files that are included in the patch.
3. Change directories to DB_PATCH_DIR/mom-dbpatch/.
4. For each product you are going to patch, edit the corresponding <product>-dbstart.sql. To edit these files, uncomment the sections that perform the 13.0.2 patches. For example, in the rmsdbstart.sql:
```
--@13.0.2/rmsdbstart.sql
```
Option 2: Patch RMS Database using SQL*Plus

@@13.0.3/rmsdbstart.sql
exit;

Should be edited to:
@@13.0.2/rmsdbstart.sql
@@13.0.3/rmsdbstart.sql
exit;

Run the RMS Database Patching Script

1. Change directories to DB_PATCH_DIR/mom-dbpatch/.
2. Source the oraenv script to set up the Oracle environment variables (ORACLE_HOME, ORACLE_SID, PATH, etc)
   
   **Example:**
   ```
   prompt$ . oraenv
   ORACLE_SID = [ ] ? mydb
   prompt$
   ```

3. Verify the ORACLE_HOME and ORACLE_SID variables after running this script.
   
   **Example:**
   ```
   prompt$ echo $ORACLE_HOME
   /u00/oracle/product/mydbversion
   prompt$ echo $ORACLE_SID
   mydb
   ```

4. Set and export the NLS_LANG environment variable.
   
   **Example:**
   ```
   NLS_LANG=AMERICAN_AMERICA.UTF8
   export NLS_LANG
   ```

5. Set and export the SQLPATH environment variable.
   
   **Example:**
   ```
   SQLPATH=<DB_PATCH_DIR>/mom-dbpatch/
   export SQLPATH
   ```

6. Log into SQL*Plus as the RMS schema owner (Example: RMSDEV) and run the sql scripts for each product you are patching.
   
   **Example:**
   ```
   SQL> @rmsdbstart.sql;
   SQL> @reimdbstart.sql;
   ```

   **Note:** This <product>dbstart.sql scripts installs the entire patch. It is recommended that you open these file and review all of the scripts that are being called. Some files may require modification for a successful installation.
Additional Steps

If it has not been run previously, run the script calendar.sql:

2. Log into SQL*Plus as the RMS schema owner (Example: RMSDEV) and run calendar.sql.

Example: SQL> @calendar.sql;

Note: Make sure you are not rerunning calendar.sql. If calendar.sql is run after having already been run, it will create data issues in the calendar and other dependent tables like month_data, week_data, etc…
Batch Installation Tasks—Patch

There are two different options for installing the RMS 13.0.3 Batch Patch. Option 1 uses the installer to apply patch. Option 2 compiles the batch directly.

Option 1: Use Batch Installer to Patch

The installer should only be used to apply the patch if the batch being patched does not contain customizations or hotfixes. If the patch is applied to customizations, they will be overwritten.

In this section, STAGING_DIR refers to the location where the RMS 13.0.1 Batch installer was originally expanded. The installer files from the original RMS 13.0.1 installation can be re-used or a new directory can be created with a fresh copy of the RMS 13.0.1 application installer.

Before you apply the RMS 13.0.3 Batch patch:
- Make a backup of all your Batch files.

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

Create Staging Directory for RMS Batch Patch Files

1. Log into the database server as oretail.
2. Create a staging directory for the RMS 13.0.3 Batch Patch. There should be a minimum of 10 MB disk space available in this location.
3. Copy the rms1303batchpatch.zip file from the RMS 13.0.3 release to the staging directory. This is referred to as BATCH_PATCH_DIR when patching a database schema.
4. Change directories to BATCH_PATCH_DIR and extract the rms1303batchpatch.zip file. This creates batch/lib, batch/proc, RETLforRDW, and RETLforRPM subdirectories under BATCH_PATCH_DIR.
5. If you do not already have one, create a staging directory for the RMS batch installation software or use the same staging directory as created in the database schema step above. There should be a minimum of 30 MB disk space available in this location.
6. Copy the rms13batch.zip file from the RMS 13.0.1 release to the staging directory. This is referred to as STAGING_DIR when installing the RMS batch software.
7. Change directories to STAGING_DIR and extract the rms13batch.zip file. This creates an rms/batch subdirectory under STAGING_DIR.
Copy Batch Files

**Note:** If you have applied any customizations to any of your batch files, the compiled batch that is created by the installer will not contain them.

1. Copy all files from BATCH_PATCH_DIR/batch/proc/src to STAGING_DIR/rms/batch/rms13/oracle/proc/src.
2. Copy all files from BATCH_PATCH_DIR/batch/lib/src to STAGING_DIR/rms/batch/rms13/oracle/lib/src.
3. Copy all files from BATCH_PATCH_DIR/RETLforRDW to STAGING_DIR/rms/batch/rms13/RETLforRDW.
4. Copy all files from BATCH_PATCH_DIR/RETLforRPM to STAGING_DIR/rms/batch/rms13/RETLforRPM.

Run Batch Installer

**Note:** Appendix B contains details on every screen and field in the batch installer.

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

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

   Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

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

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

   **Example:**
   Here are some locations where makedepend is commonly found:
   - Linux: /usr/X11R6/bin
   - 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 are going to run the installer in GUI mode using an X server, you need to have the XTEST extension enabled. This setting is not always enabled by default in your X server. See Appendix E: Common Installation Errors for more details.

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

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

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

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

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

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

8. The installer leaves behind the ant.install.properties file for future reference and repeat installations. This file contains all inputs you provided, including passwords. 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 install that starts from the beginning each time it is run. If you encounter errors in your environment, after resolving the issue you can safely run the batch installer again to attempt another installation.

RETL

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

Data Conversion Scripts

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

1. Create the following new directories:
   INSTALL_DIR/external/data
   INSTALL_DIR/external/logs
   The RMS Batch installer should have already created INSTALL_DIR/scripts.

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

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

   Note: You need to replace INSTALL_DIR with your INSTALL_DIR and you can rename the external data and log directory.
Option 2: Compile RMS Batch Directly

Note: The user that creates these directories owns them.

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

3. Log into sqlplus as SYSTEM and grant access to them by running the following commands:
   SQL> grant read on directory rms13dev_ext_data to public;
   SQL> grant read, write on directory rms13dev_ext_logs to public

Option 2: Compile RMS Batch Directly

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

Create Staging Directory for RMS Batch Patch Files

1. Log into the database server as oretail.
2. Create a staging directory for the RMS 13.0.3 Batch Patch. There should be a minimum of 10 MB disk space available in this location.
3. Copy the rms1303batchpatch.zip file from the RMS 13.0,3 release to the staging directory. This is referred to as BATCH_PATCH_DIR when patching the RMS Batch.
4. Change directories to BATCH_PATCH_DIR and extract the rms1303batchpatch.zip file. This creates batch,RETLforRDW, and RETLforRPM subdirectories under BATCH_PATCH_DIR.

Set Environment Variables

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

Make sure the following variables are set. The RMS 13.0.1 batch installer should have created a batch.profile file located at INSTALL_DIR/batch.profile. This profile script can be used to set all of the environment variables listed below.

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

Variables set by batch.profile:
- PATH must include make, makedepend and the C compiler
- MMHOME=INSTALL_DIR/rms
- MMUSER=RMS Schema Owner
- PASSWORD=RMS Schema Owner Password
- ORACLE_HOME=Location of Oracle install
- ORACLE_SID=The Oracle Sid for the RMS database

AIX:
- LIBPATH=$ORACLE_HOME/lib:$MMHOME/oracle/lib/bin:$LDPATH
- OBJECT_MODE=64
- LINK_CNTRL=L_PTHREADS_D7
Option 2: Compile RMS Batch Directly

HP:
- \( \text{SHLIB\_PATH} = \$\text{ORACLE\_HOME}/\text{lib} : \$\text{MMHOME}/\text{oracle}/\text{lib}/\text{bin} : \$\text{SHLIB\_PATH} \)

Solaris:
- \( \text{LD\_LIBRARY\_PATH} = \$\text{ORACLE\_HOME}/\text{lib} : \$\text{MMHOME}/\text{oracle}/\text{lib}/\text{bin} : \$\text{LD\_LIBRARY\_PATH} \)

Oracle Enterprise Linux:
- \( \text{LD\_LIBRARY\_PATH} = \$\text{ORACLE\_HOME}/\text{lib} : \$\text{MMHOME}/\text{oracle}/\text{lib}/\text{bin} : \$\text{LD\_LIBRARY\_PATH} \)

**Compile Batch Libraries**
1. Copy the files from `BATCH_PATCH_DIR/batch/lib/src` to `INSTALL_DIR/oracle/lib/src`.
2. Change directories to `INSTALL_DIR/oracle/lib/src`.
3. To make library dependencies run one of the following commands:
   - For Oracle Enterprise Linux use:
     \[
     \text{make -f retek.mk -r depend 2>&1 | tee libdpnd.log}
     \]
   - For other platforms use:
     \[
     \text{make -f retek.mk depend 2>&1 | tee libdpnd.log}
     \]
   Check the `libdpnd.log` file for errors.
4. To make batch libraries:
   - For Oracle Enterprise Linux use:
     \[
     \text{make -f retek.mk -r retek rms resa 2>&1 | tee libretek.log}
     \]
   - For other platforms use:
     \[
     \text{make -f retek.mk retek rms resa 2>&1 | tee libretek.log}
     \]
   Check the `libretek.log` file for errors.
5. To install batch libraries:
   \[
   \text{make -f retek.mk install}
   \]
   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/proc/src` to `INSTALL_DIR/oracle/proc/src`.
2. Change directories to `INSTALL_DIR/oracle/proc/src`.
3. Create dependencies.
   - Run one of the following commands:
     - For Oracle Enterprise Linux use:
       \[
       \text{make -f mts.mk -r depend 2>&1 | tee srcdpnd.log}
       \]
     - For other platforms use:
       \[
       \text{make -f mts.mk depend 2>&1 | tee srcdpnd.log}
       \]
   Check the `srcdpnd.log` file for errors.
4. Create batch programs.
   - Run the following commands in the order stated.
     - For Oracle Enterprise Linux use:
Option 2: Compile RMS Batch Directly

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

b. Check the srcall.log file for errors.

5. Install the batch programs.
   ```
   make -f mts.mk install
   ```

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

Copy RETL Code

1. Copy all files from BATCH_PATCH_DIR/RETLforRDW to INSTALL_DIR/RETLforRDW.

2. Copy all files from BATCH_PATCH_DIR/ RETLforRPM to INSTALL_DIR/RETLforRPM.
Application Server Installation Tasks—Patch

There are two different methods to use for installing the RMS 13.0.3 Application. Option 1 uses the installer to apply the patch. Option 2 compiles the RMS toolset and forms directly.

Option 1: Use Application Installer to Patch

The installer should only be used to apply the patch if the forms and libraries being patched do not contain customizations or hotfixes. If the patch is applied to customizations, they will be overwritten.

In this section, STAGING_DIR refers to the location where the RMS 13.0.1 application installer was originally expanded. The installer files from the original RMS 13.0.1 installation can be re-used or a new directory can be created with a fresh copy of the RMS 13.0.1 application installer.

Before you apply the RMS 13.0.3 patch:
- Make 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, then the customizations must be reapplied over the new version of the file (or the fix may need to be applied to the custom version of the code).
- Copy the original files to a different directory before copying over them in case they need to be referred to at a later date.

Create Staging Directory for RMS Application Patch Files

1. Log into the application server as the oretail user.
2. Create a staging directory for the RMS 13.0.3 application patch. There should be a minimum of 200 MB disk space available in this location.
3. Copy the file rms1303apppatch.zip from the RMS 13.0.3 release to staging directory. This will be referred to as APP_PATCH_DIR when installing application software and reports.
4. Change directories to APP_PATCH_DIR and extract the file rms1303apppatch.zip. This will create base, reports, and webhelp subdirectories under APP_PATCH_DIR.
5. If you don’t already have one, create a staging directory for the RMS application installation software or use the same staging directory as created in the database schema step above. There should be a minimum of 600 MB disk space available in this location.
6. Copy the file rms13appserver.zip from the RMS 13.0.1 release to staging directory. This will be referred to as STAGING_DIR when installing application software and reports.
7. Change directories to STAGING_DIR and extract the file rms13appserver.zip. This will create an rms/application subdirectory under STAGING_DIR.
Copy Forms and Library Patch Files

- **Note**: If you have applied any customizations to any of your forms or libraries, the compiled forms and libraries that are created by the installer will not contain them. If you don’t want recompiled versions of these files, remove the appropriate files from STAGING_DIR/rms/application/rms13/forms/src and STAGING_DIR/rms/application/rms13/toolset/src.

1. Copy all files from APP_PATCH_DIR/base/forms/ to STAGING_DIR/rms/application/rms13/forms/src.
2. Copy all files from APP_PATCH_DIR/base/toolset/ to STAGING_DIR/rms/application/rms13/toolset/src.

Run the RMS Application Installer

- **Note**: Appendix C contains details on every screen and field in the application installer.

1. Logon to your application server as the oretail user.
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>ORACLE_HOME</td>
<td>The location where Oracle Application Server 10g (10.1.2.2) has been installed.</td>
<td>ORACLE_HOME=/u00/webadmin/product/OAS/myversion/midtier export ORACLE_HOME</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>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. 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.
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]
Depending on system resources, a typical installation takes anywhere from 45 minutes to two hours.

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

6. The RMS Application installer might launch the Retail OCM Installer automatically after it is finished with the RMS installation. You should opt out of the OCM install for this patch by clicking the Cancel button in the Retail OCM Installer.

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

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

Example: chmod 600 ant.install.properties

9. After the installation is complete, follow the post installation tasks by making backups of the listed files and copying the required files to the specified location.

Example:

###########################################################################
##             Oracle Application Server Configuration Tasks             ##
###########################################################################
Contact your Oracle administrator and have them make backups of the following files:

/u00/webadmin/product/10.1.2_FULL/midtier/Apache/Apache/conf/httpd.conf
/u00/webadmin/product/10.1.2_FULL/midtier/forms/java/oracle/forms/registry/Registry.dat
/u00/webadmin/product/10.1.2_FULL/midtier/forms/server/formsweb.cfg
/u00/webadmin/product/10.1.2_FULL/midtier/forms/admin/resource/US/fmrweb.res
/u00/webadmin/product/10.1.2_FULL/midtier/forms/admin/resource/US/fmrweb_utf8.res

Have the Oracle administrator copy everything in /vol.rtk/pkg_mocks/rms13/forms/post to /u00/webadmin/product/10.1.2_FULL/midtier to update the files, and then restart the application server for the changes to take effect.

example: cp -R * /u00/webadmin/product/10.1.2_FULL/midtier

Resolving Errors Encountered During Application Installation

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

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

You can also safely rerun the installer to see if the form compiles.
Verify and Update Helpfile Installation

If there is a new web_html.zip file provided with this RMS patch release, follow these instructions to install it.

1. Remove the old webhelp directory

   Example:  `rm -rf <INSTALL_DIR>/base/web_html/`

2. Unzip web_html.zip from APP_PATCH_DIR/webhelp at this spot:
   `<INSTALL_DIR>/base/
   Help file structure should be something similar to:
   `<INSTALL_DIR>/base/web_html/helpfiles/english/rms`

3. Make sure that rhelp.pl has execute permissions:

   Example:  `chmod 755 <INSTALL_DIR>/base/web_html/helpfiles/help/rhelp.pl`

Test the RMS Application

Oracle Retail provides test cases that allow you to smoke test your installation. Refer to the Oracle Retail Merchandising Installation Test Cases document; Doc ID 845148.1 on My Oracle Support (formerly MetaLink).

Option 2: Compile RMS Toolset and Forms Directly

Create Staging Directory for RMS Application Patch Files

1. Log into the application server as the oretail user.

2. Create a staging directory for the RMS 13.0.3 application patch. There should be a minimum of 200 MB disk space available in this location.

3. Copy the file rms1303apppatch.zip from the RMS 13.0.3 release to staging directory. This will be referred to as APP_PATCH_DIR when installing application software and reports.

4. Change directories to APP_PATCH_DIR and extract the file rms1303apppatch.zip. This will create a base, reports, and webhelp subdirectories under APP_PATCH_DIR.

Set Environment Variables

Note:  INSTALL_DIR is the location where RMS 13 forms were installed.
ORACLE_HOME is the location where Oracle Application Server 10g (10.1.2.3) has been installed.

Make sure the following variables are set. The RMS 13.1 forms installer should have created a forms.profile file located at INSTALL_DIR/base/forms.profile. This profile script can be used to set all of the environment variables listed below.

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

- **All OS Platforms**
  - `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`
  - `FORMS_BUILDER_CLASSPATH=$CLASSPATH`
  - `FORMS_PATH=INSTALL_DIR/base/toolset/bin:INSTALL_DIR/rms/forms/bin:$ORACLE_HOME/forms`
  - `TK_UNKNOWN==$ORACLE_HOME/guicommon/tk/admin`
  - `UP=<RMS schema owner>/<RMS schema password>@<RMS database>`

  **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`

- **Solaris**

- **HP-UX**

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

- **Oracle Enterprisr Linux**
  - `LD_LIBRARY_PATH=$ORACLE_HOME/lib:$ORACLE_HOME/lib32:$ORACLE_HOME/jdk/jre/lib`

**RMS Toolset Installation**

1. Make a backup copy of the existing INSTALL_DIR/base/toolset and INSTALL_DIR/base/forms directories.
2. Copy the contents of the RMS application patch into the above locations. `APP_PATCH_DIR/base/toolset` into INSTALL_DIR/base/toolset and `APP_PATCH_DIR/base/forms` into INSTALL_DIR/base/forms.
3. Copy all libraries (.pll files) in the INSTALL_DIR/base/toolset/src directory to the INSTALL_DIR/base/toolset/bin directory.
4. Change directories to INSTALL_DIR/base/toolset/bin.
5. Verify that the PATH variable contains the path INSTALL_DIR/base/forms_scripts. The forms.profile script should have set this up already.
6. Run `pll2plx10gr2_toolset` to compile all Toolset .pll’s.
Option 2: Compile RMS Toolset and Forms Directly

**Note:** If the pll2plx10gr2_toolset script is not used and the libraries are compiled individually, then they must be compiled in the following order (which is noted in the pll2plx10gr2_toolset script):

- messge45.pll
- ariiflib.pll
- stand45.pll
- calend45.pll
- find45.pll
- item45.pll
- tools45.pll
- mblock45.pll
- mview45.pll
- nav45.pll
- work45.pll
- itnumtype.pll
- hierfilter.pll
- rmslib.pll

7. Check to make sure that each .pll file has a corresponding .plx (to ensure that all .pll’s compiled successfully).
8. Remove all newly created .plx files.
9. Copy all forms (*.fmb files) in the INSTALL_DIR/base/toolset/src directory to the INSTALL_DIR/base/toolset/bin directory.
10. Run fmb2fmx10gr2_fm (in INSTALL_DIR/base/toolset/bin) to compile the Toolset reference forms.
11. Remove all newly created fm_*.fmx files (reference forms should not have executable files).
12. Run fmb2fmx10gr2 (in INSTALL_DIR/base/toolset/bin) to generate Toolset runtime forms – .fmx’s.
13. Check to make sure that each non-reference form (.fmb file) has a corresponding .fmx file.

**Note:** Disregard fm_*.fmx files should they be created. These files should be removed. They should NOT exist in the INSTALL_DIR/base/toolset/bin directory.

14. Remove all non-reference forms from INSTALL_DIR/base/toolset/bin. The following syntax leaves 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
```
15. Copy all menus (*.mmb files) in the INSTALL_DIR/base/toolset/src directory to the INSTALL_DIR/base/toolset/bin directory.
16. Run mmb2mmx10gr2 (in INSTALL_DIR/base/toolset/bin) to generate Toolset runtime menus – .mmx’s.
17. Check to make sure that each .mmb file has a corresponding .mmx file.

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

18. Remove all .mmb files from INSTALL_DIR/base/toolset/bin.

**RMS Forms Installation**

1. Copy all the files from APP_PATCH_DIR/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 pll2plx10gr2_forms 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 fmb2fmx10gr2_fm (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 fmb2fmx10gr2 (in INSTALL_DIR/base/rms/forms/bin) to generate RMS runtime forms – .fmx’s.
10. Check to make sure that each non-reference form .fmb file has a corresponding .fmx file.

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

11. Remove all non-reference 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 mmb2mmx10gr2 (in INSTALL_DIR/base/rms/forms/bin) to generate RMS runtime menus – .mmx’s.
14. Check to 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.
Configuring Oracle Application Server 10g for RMS

1. Open the rms.env file for your installation under ORACLE_HOME/forms/server/.
2. Check that the variable FORMS_USERNAME_CASESENSITIVE=1. If it does not, manually update this, or add the variable if it does not exist.

Verify and Update Helpfile Installation

Perform the following procedure to install the web_html.zip file provided with this RMS patch release.

1. Remove the old webhelp directory
   
   **Example:** `rm -rf <INSTALL_DIR>/base/web_html/`

2. Unzip web_html.zip from APP_PATCH_DIR/webhelp at this spot:
   
   `<INSTALL_DIR>/base/`
   
   Help file structure should be something similar to:
   
   `<INSTALL_DIR>/base/web_html/helpfiles/english/rms`

3. Make sure that rhelp.pl has execute permissions:
   
   **Example:** `chmod 755 <INSTALL_DIR>/base/web_html/helpfiles/help/rhelp.pl`
RMS Reports Installation

RMS Reports are included in the RMS Application patch: rms1303apppatch.zip in the reports directory. To install the reports files, copy them from APP_PATCH_DIR/reports to the reports directory created during RMS installation. See the RMS 13.0.1 Installation Guide for the instructions for initial setup of Oracle BI Publisher for RMS reports.
Appendix: RMS DB Installer Screens

You need the following details about your environment for the installer to successfully patch the RMS database schema. Depending on the options you select, you may not see some screens or fields. Starting with the RMS 13.0.1 release, the RMS database schema installer also includes the option to install the database schema objects for the ReIM and Allocation products.

Screen: Full Install or Patch Option

This installer can create the full 13.0.1 baseline schema or apply a patch.

Full: Run the bundled scripts to create the 13.0.1 baseline schema.

Patch: Run a user-provided patch that was downloaded separately.

Full-Patch: Run both of the above options to create a new schema up to a certain patch level.

Select your choice

- Full
- Patch
- Full-Patch

Fields on this screen:

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Full or Patch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>The installer can create the full baseline schema, apply a patch, or do both. For the RMS 13.0.3 patch release, select Patch</td>
</tr>
<tr>
<td>Example</td>
<td>Patch</td>
</tr>
</tbody>
</table>
Screen: Product Selection

By default the RMS database schema installer creates the database objects for RMS/ReSA/RTM and RPM. Optionally, the database objects for ReIM and/or Allocation may be installed at the same time or later.

Example

RMS/RPM
Screen: RMS Database Schema Details

Fields on this screen:

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Field Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMS schema</td>
<td>Provide the RMS database user here. The installer logs into the database as this user to create the RMS schema. This user must already exist in the database when the RMS database schema installer is run.</td>
</tr>
<tr>
<td>RMS schema password</td>
<td>Database password for the RMS schema Owner.</td>
</tr>
<tr>
<td>RMS Oracle SID</td>
<td>Oracle system identifier for the database where RMS will be installed.</td>
</tr>
</tbody>
</table>

The database settings provided are validated by the installer when you advance to the next screen.
Screen: Allocation Database Schema Details

Please provide information on a pre-existing database user for this Allocation installation. The installer will authenticate as this user and create the Allocation database objects.

Alloc schema
Alloc schema password

Fields on this screen:

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Alloc schema</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>Provide the Allocation database user here. The installer logs into the database as this user to create the Alloc schema. This user must already exist in the database when the RMS database schema installer is run.</td>
</tr>
<tr>
<td>Example</td>
<td>ALLOC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Alloc schema password</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>Database password for the Allocation user schema.</td>
</tr>
</tbody>
</table>

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

![DBA User Screen](image)

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

| **Field Title** | **DBA user password**
--- | ---
**Field Description** | Database password for the DBA user.

The database settings provided are validated by the installer when you advance to the next screen.
Screen: Apply an RMS DB Patch

You have chosen to apply a patch. The installer will run the rmsdbstart.sql script provided with the patch you have downloaded separately.

The directory provided here must contain an rmsdbstart.sql script.

Patch Directory

Example:
/path/to/mom-dbpatch/for all 13.0.x patches

Fields on this screen:

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Patch Directory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>This page appears if the Patch or Full+Patch option is selected on the earlier Full Or Patch screen, and RMS is being patched. Provide the directory path to the downloaded patch you want to install. The installer runs only the patch you provide. Note: The directory you choose must contain an rmsdbstart.sql file.</td>
</tr>
<tr>
<td>Example</td>
<td>/path/to/mom-dbpatch/for all 13.0.x patches</td>
</tr>
</tbody>
</table>
Screen: Apply ReIM DB Patch

You have chosen to apply a patch. The installer will run the reimdbstart.sql script provided with the patch you have downloaded separately.

The directory provided here must contain an reimdbstart.sql script.

Patch Directory: /my/reim/patch/dir

Note: The directory you choose must contain an reimdbstart.sql file.

Example: /path/to/mom-dbpatch/for all 13.0.x patches
**Screen: Apply Allocation DB Patch**

You have chosen to apply a patch. The installer will run the allocdbstart.sql and allocuserdbstart.sql scripts provided with the patch you have downloaded separately.

The directory provided here must contain an allocdbstart and allocuserdbstart.sql scripts.

**Fields on this screen:**

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Patch Directory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>This page appears if the Patch or Full+Patch option is selected on the earlier Full Or Patch screen, and Allocation is being patched. Provide the directory path to the downloaded patch you want to install. The installer runs only the patch you provide. Note: The directory you choose must contain allocdbstart.sql and allocuserdbstart.sql files. Example</td>
</tr>
</tbody>
</table>
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**

![Welcome Screen](image)

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

![DataSourceDetails screen](image)

**Fields on this Screen:**

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

**Example**

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMS Schema Owner</td>
<td>RMSUSER</td>
</tr>
<tr>
<td>RMS Oracle SID</td>
<td>rmsdb</td>
</tr>
</tbody>
</table>
### Screen: Batch Installation Directory

![Oracle Retail Merchandising System - Batch Installer](image)

#### Field Title
Batch Installation Directory

#### Field Description
Location where the installer will install the batch source and then compile it. This is the permanent location for the RMS batch programs.

#### Example
/opt/oracle/retail/rmsbatch

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Batch Installation Directory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field 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>
Screen: Summary

Fields on this Screen:
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: RMS Application Installer Screens

Screen: Welcome

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

<table>
<thead>
<tr>
<th>Field Title</th>
<th>RMS Schema Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>This is the same username that was used during the RMS Database Schema Installer.</td>
</tr>
<tr>
<td>Example</td>
<td>RMS</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>This is the same password that was used during the RMS Database Schema Installer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Title</th>
<th>RMS Oracle SID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>This is the same Oracle SID that was used during the RMS Database Schema Installer.</td>
</tr>
<tr>
<td>Example</td>
<td>Rmsdb</td>
</tr>
</tbody>
</table>
### Screen: Application Installation Directory

![Application Installation Directory](image)

#### Fields on this Screen:

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Application Installation Directory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>The location where the RMS Application (toolset, forms and reports) will be installed. The RMS $SMHOME path will be a subdirectory of this directory, named “base”.</td>
</tr>
<tr>
<td>Example</td>
<td><code>/u01/oracle/retail</code></td>
</tr>
</tbody>
</table>
### Screen: Installation Name

![Installation Name Screen](image)

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Installation Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</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 Oracle Application Server instance.</td>
</tr>
<tr>
<td>Example</td>
<td>rms13inst</td>
</tr>
</tbody>
</table>
Screen: Application Deployment Method

The RMS installer provides the option to configure multiple application deployment methods. In this setup there is still a single primary RMS installation, but there are additional levels that can be customized.

- Base: One application folder and one URL
- Production: Base plus PROD and DM10 folders, and a URL for DM10
- Development: Production plus UAT and DEV folders and URLs.

Please see the RMS Install Guide for more information.

Which Application Deployment Method would you like to use?

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

Fields on this Screen:

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Which Environment Deployment Method would you like to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Description</td>
<td>Select the Application Deployment Method you would like. Reference Appendix D for more information.</td>
</tr>
<tr>
<td>Example</td>
<td>Base</td>
</tr>
</tbody>
</table>
### Screen: Install OCM

![Oracle Retail Merchandising System - Forms App Installer](image)

**Install OCM**

Oracle Configuration Manager (OCM) is used to collect client configuration information and upload it to Oracle. When the client configuration data is uploaded on a regular basis, customer support representatives can analyze this data and provide better services to customers.

To install OCM you must have write access to the $ORACLE_HOME. If you do not have write access to the $ORACLE_HOME then uncheck the box.

The OCM collector will be installed to $ORACLE_HOME/or if this directory does not yet exist.

- **Install OCM**

   *Please reference the install guide to install OCM manually.*

---

### Fields on this Screen:

<table>
<thead>
<tr>
<th>Field Title</th>
<th>Install OCM</th>
</tr>
</thead>
</table>

**Field Description**

Install OCM checkbox. This field gives you the option to install or not install OCM. The default option is checked.

You should choose to uncheck this and not install OCM for this patch,

**Example**

Checked/False
Appendix: Application Deployment Method

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

The installer provides three choices for cascading environment configuration:

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

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

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

“Could not create system preferences directory” Warning

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

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

May 22, 2006 11:17:09 AM java.util.prefs.FileSystemPreferences
checkLockFile0ErrorCode
WARNING: Could not lock System prefs. Unix error code -26494624.

**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.

“Couldn't find X Input Context” Warnings

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

Couldn’t find X Input Context.

**Solution:**
This message is harmless and can be ignored.
Unresponsive Country and Currency Drop-Downs

**Symptom:**
In GUI mode, when you click on the drop-down list selection for the primary country or currency, the list does not appear, and this message appears in the console window:
XTEST extension not installed on this X server: Error 0

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

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

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

ConcurrentModificationException in Installer GUI

**Symptom:**
In GUI mode, the errors tab shows the following error:
java.util.ConcurrentModificationException
at
java.util.AbstractList$Itr.checkForComodification(AbstractList.java:448)
at java.util.AbstractList$Itr.next(AbstractList.java:419)
... etc

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

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 pool","unknown object","FL/SQL MFCODE","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

**SP2-0310: unable to open file Error During Patch Mode**

**Symptom:**
When using the installer to apply a database patch, this error message appears repeatedly:

[ora:sqlplus] SP2-0310: unable to open file "pricing/dbcs/0021_rpm_promo_dtl.sql"

**Solution:**
SQLPATH is not set properly. Review the instructions for running the installer.
SQLPATH must contain the patch directory.

Example:
SQLPATH=/path/to/mom-dbpatch/13.0.1/rms; export SQLPATH
Appendix: Single Sign-On Resource Access Descriptors

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

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

RADs may be created by administrators or users via the Delegated Administration Services application. Note: users can create new RADs only if one or more RADs already exist.

RADs may be created and via LDIF scripts as well. Documentation on this may be found in the Metalink document number 244526.1.
Appendix: Data Conversion

Install Data Conversion Scripts

1. The following directories need to be created:
   INSTALL_DIR/external/scripts
   INSTALL_DIR/external/data
   INSTALL_DIR/external/logs

2. Change directories to DB_PATCH_DIR/mom-
   dbpatch/13.0.1/rms/data_conversion_scripts/external_table_scripts.

3. Copy the external directory to INSTALL_DIR/external/scripts.
   \> cp –R * INSTALL_DIR/external/scripts

4. Change directories to DB_PATCH_DIR/mom-
   dbpatch/13.0.1/rms/data_conversion_scripts/data_load_scripts.

5. Copy the external directory to INSTALL_DIR/external/scripts.
   \> cp –R * INSTALL_DIR/external/scripts

6. Log into sqlplus as SYSTEM and run the following commands:
   SQL> create or replace directory rms13dev_ext_data as
   | 'INSTALL_DIR/external/data';
   SQL> create or replace directory rms13dev_ext_logs as
   | 'INSTALL_DIR/external/logs';

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

   Note: The user that creates these directories owns them.

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

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