Oracle® Retail Merchandising System

Installation Guide
Release 12.0.6

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ORACLE

Oracle® Retail Merchandising System Installation Guide, Release 12.0.6

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Value-Added Reseller (VAR) Language

(i) the software component known as **ACUMATE** developed and licensed by Lucent Technologies Inc. of Murray Hill, New Jersey, to Oracle and imbedded in the Oracle Retail Predictive Application Server – Enterprise Engine, Oracle Retail Category Management, Oracle Retail Item Planning, Oracle Retail Merchandise Financial Planning, Oracle Retail Advanced Inventory Planning and Oracle Retail Demand Forecasting applications.

(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 Store Inventory Management.

(v) the software component known as **Crystal Enterprise Professional and/or Crystal Reports Professional** licensed by Business Objects Software Limited ("Business Objects") 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 **i-net Crystal-Clear™** developed and licensed by I-NET Software Inc. of Berlin, Germany, to Oracle and imbedded in the Oracle Retail Central Office and Oracle Retail Back Office applications.

(x) the software component known as **WebLogic™** developed and licensed by BEA Systems, Inc. of San Jose, California, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

(xi) 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.

Contents

Preface

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

Audience

This Installation Guide is written for the following audiences:

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

Related Documents

For more information, see the following documents in the Oracle Retail Merchandising System Release 12.0.6 documentation set:

- Oracle Retail Merchandising System Release Notes
- Oracle Retail Merchandising System Online Help
- Oracle Retail Merchandising System User Guide
- Oracle Retail Merchandising System Operations Guide – Volume 1
- Oracle Retail Merchandising System Data Model
- Oracle Retail Merchandising Batch Schedule
- Oracle Retail Integration Bus (RIB) documentation
- Oracle Retail Service Layer (RSL) documentation
- Oracle Retail Extract, Transform and Load (RETL) documentation
- Other Oracle Retail product documentation

Review Patch Documentation

For a base release (".0" release, such as 12.0), Oracle Retail strongly recommends that you read all patch documentation before you begin installation procedures. Patch documentation can contain critical information related to the base release, based on new information 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:

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.

Customer Support

- https://metalink.oracle.com

When contacting Customer Support, please provide:

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

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.

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Pre-Installation Tasks

Check Database Server Requirements

General Requirements for a database server running RMS include:

- UNIX based OS certified with Oracle RDBMS 10g Enterprise Edition (options are AIX5.2, AIX5.3, Solaris 9 (SPARC), and HP-UX 11.23 (PARISC))
- Oracle RDBMS 10g Release 2 Enterprise Edition (minimum 10.2.0.3.0 patchset required) with the following patches and components:

  Patches:

  - 5397953 (ORA-07445: [KKPAPITGETALL()+2152] [SIGSEGV] [ADDRESS NOT MAPPED TO OBJECT])

  Components:

  - Oracle Database 10g
  - Oracle Partitioning
  - Oracle Net Services
  - Oracle Call Interface (OCI)
  - Oracle Programmer
  - Oracle XML Development Kit
- ANSI compliant C compiler (certified with OS and database version)
- Perl compiler 5.0 or later
- x-Windows interface
- Oracle Enterprise Linux Requirements

Operating System Version:

- Oracle Enterprise Linux 4 Update 4 for x86-64
- Minimum kernel version kernel-smp-2.6.9-42.0.0.0.1.EL.x86_64

Oracle RDBMS

- Oracle RDBMS 10g Release 2 Enterprise Edition for Linux x86-64
- Minimum 10.2.0.3 patchset
- Patches:

  5397953 (ORA-07445: [KKPAPITGETALL()+2152] [SIGSEGV] [ADDRESS NOT MAPPED TO OBJECT])

  5921386 WRONG RESULT WITH MERGE JOINT OUTER IN THE EXECUTION PLAN

Oracle Retail Merchandising System

- Configured with “No RIB” option

Check Application Server Requirements

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

- UNIX based OS certified with Oracle Application Server 10g version 10.1.2.2 (options are AIX5.2, AIX5.3, Solaris 9 (SPARC), and HP-UX 11.23 (PARISC))
- Oracle Application Server Forms and Reports 10g version 10.1.2.2
- Patches:
  - 5123798 ERROR WHEN PASSING COMPOSITE PARAMETERS TO SP FROM 64BIT CLIENT (HP-UX PA-RSC 11.23)
- Oracle Enterprise Linux

Operating System Version:

- Oracle Enterprise Linux 4 Update 4 for x86-64
- Minimum kernel version kernel-smp-2.6.9-42.0.0.0.1.EL.x86_64

Oracle Application Server

- Oracle Application Server 10g Release 2 (10.1.2.2) for Linux x86
- Oracle Application Server 10g Release 3 (10.1.3.0) for Linux x86

Oracle Retail Merchandising System

- Configured with "No RIB" option

Check Web Browser and Client Requirements

General requirements for client running RMS include:

Product	Version
JRE Plug-in	Sun JRE Plug-in 1.4.1+
Operating System	Windows 2000 or XP
Processor	Pentium processor
Display resolution	1024x768 resolution
PC Configuration	minimum 256 MB RAM, 450 MHz
Internet Explorer	5.5, 6.0 and higher

Supported Oracle Retail Products

Product	Version
Oracle Retail Price Management (RPM)	12.0.6
Oracle Retail Allocation	12.0.6
Oracle Retail Invoice Matching (ReIM)	12.0.6
Oracle Retail Store Inventory Management (SIM)	12.0
Oracle Retail Warehouse Management System (RWMS)	12.0.6
Oracle Retail Data Warehouse (RDW)	12.0

Supported Oracle Retail Integration Technologies

Integration Technology	Version
Oracle Retail Extract, Transform and Load (RETL)	12.0.1
Oracle Retail Integration Bus (RIB)	12.0.1
Oracle Retail Service Layer (RSL)	12.0.1

Supported Oracle Applications

Requirement	Version
Oracle E-Business Suite	11.5.10 or 12.0.2

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RAC and Clustering

Real Application Cluster RDBMS & Oracle Application Server Clustering for Oracle Retail Merchandising System has been validated to run only on Linux:

The Oracle Retail products have been validated against a 10.2.0.3 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

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Database Installation Tasks

Before you apply the RMS 12.0.6 patch:

- Make a backup of all your objects and database schema.
- Check that RMS 12.0.5 is installed.
- Review the enclosed RMS 12.0.6 Patch Release Notes (rms-1206-rn.pdf).
- Review each of the enclosed SIR documents.

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).
- Copy the original files to a different directory before copying over them in case they need to be referred to at a later date.

> **Note:** These instructions refer to RMS12DEV as the Oracle owning schema.

Mount CD-ROM on the Database Server

1. Copy the rms1206dbpatch.zip file from the CD /dbserverunix directory to a newly created staging directory on your UNIX server.
2. Unzip the file by entering:
   ```
   unzip rms1206dbpatch.zip
   ```

Alter Pricing Objects

Alter Pricing Types

1. Change directories to STAGING_AREA/pricing/types.
2. Log into sqlplus as RMS12DEV and run the following command:
   ```
   SQL> @pricing1206types.sql
   ```
3. Check the log file pricing1206types.log for any errors noting that ORA-04043 errors and warnings are to be ignored.

Alter Pricing DDL

1. Change directories to STAGING_AREA/pricing/dbcs.
2. Log into sqlplus as RMS12DEV and run the following command:
   ```
   SQL> @pricing1206dbcs.sql
   ```
3. Check the log file pricing1206dbcs.log for any errors.

Alter Pricing Objects

1. Change directories to STAGING_AREA/pricing/db_objects.
2. Log into sqlplus as RMS12DEV and run the following command:
   `SQL> @pricing1206rms.sql`
3. Check the log file pricing1206rms.log for any errors noting that ORA-04043 errors are to be ignored.

Alter Pricing Data

1. Change directories to STAGING_AREA/pricing/data.
2. Log into sqlplus as RMS12DEV and run the following command:
   `SQL> @pricing1206ctl.sql`
3. Check the log file pricing1206ctl.log for any errors.

Alter RMS Objects

Alter RMS Tables

> **Note:** The dbc script requires the role CC_ACCESS please log in as a user able to create roles and create the role.

1. Change directories to STAGING_AREA/dbcs.
2. Log into sqlplus as RMS12DEV and run the following command:
   `SQL> @patch1206dbcs.sql`
3. Check the log file patch1206dbcs.log for any errors.

Alter RMS Database Objects

1. Change directories to STAGING_AREA/db_objects.
2. Log into sqlplus as RMS12DEV and run the following command:
   `SQL> @patch1206rms.sql`
3. Check the log file patch1206rms.log for any errors.

Validate all Invalid Objects

> **Note:** Deadlocked objects may appear when running this script. This is expected. Run the script until no invalid objects remain.

1. Change directories to STAGING_AREA/utility.
2. Log into sqlplus as RMS12DEV and run the following command:
   `SQL> @inv_obj_comp.sql`
3. This script may need to be run more than once.

Update Data for RMS

> **Note:** Esure that you have your NLS_LANG set to UTF-8. For example AMERICAN_AMERICA.UTF8

1. Change directories to STAGING_AREA/data.
2. Log into sqlplus as RMS12DEV and run the following command:
   `SQL> @patch1206ctl.sql`
3. Check the log file patch1206ctl.log for any errors.

Insert Secondary Language Data

> **Note:** These scripts are only for customers who wish to have a primary language of English and a secondary language of any combination of the following: German, Spanish, French, Italian, Korean, Russian, Brazilian Portuguese, Japanese, Simplified Chinese or Traditional Chinese. The scripts are UTF-8 encoded. We recommend installing them into a database that has been set to UTF-8.

1. Change directories to INSTALL_DIR/data/lang/<lang>
   <lang> is the country code for the language you wish to install.
2. Set the sqlplus session so that the encoding component of the NLS_LANG is UTF8. For example,AMERICAN_AMERICA.UTF8
3. Log into sqlplus as RMS12DEV and run the following command:
   `SQL> @ patch1206ctl_<lang>_sec.sql`
4. Check the log file patch1206ctl_<lang>_sec.log for any errors.
   - <lang> is the country code for the language you wish to install.
   - de – German
   - es – Spanish
   - fr – French
   - it - Italian
   - ja – Japanese
   - ko – Korean
   - ptb – Brazilian Poruguese
   - ru - Russian
   - zhs – Simplified Chinese
   - zht – Traditional Chinese

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

Insert Primary Language Data

> **Note:** These scripts are only for customers who wish to have a primary language of one of the following: German, Spanish, French, Italian, Russian, Korean, Brazilian Portuguese, Japanese, Simplified Chinese or Traditional Chinese. . The scripts are UTF-8 encoded. We recommend installing them into a database that has been set to UTF-8.
>
> The following scripts will prompt for a country code and a currency code. Make sure you use either a 2 or 3 letter country code based on what was chosen previously.

1. Change directories to INSTALL_DIR/data/lang/<lang>

   <lang> is the country code for the language you wish to install.
2. Set the sqlplus session so that the encoding component of the NLS_LANG is UTF8. For example AMERICAN.AMERICA.UTF8
3. Log into sqlplus as RMS12DEV and run the following command:

   ```
   SQL> @patch1206ctl_<lang>_prim.sql
   ```
4. Check the log file patch1206ctl_<lang>_prim.log for any errors.
   - <lang> is the country code for the language you wish to install.
   - de – German
   - es – Spanish
   - fr – French
   - it - Italian
   - ja – Japanese
   - ko – Korean
   - ptb – Brazilian Poruguese
   - ru - Russian
   - zhs – Simplified Chinese
   - zht – Traditional Chinese

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

Compile RMS Batch Libraries and Programs

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

Set Environment Variables

1. Make sure the following variables are set:

   > **Note:** INSTALL_DIR is the location where RMS 12 was installed.
   >
   > Make sure the path for make, makedepend, and the compiler are in $PATH environment variable.

   - 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

   HP:

   - SHLIB_PATH=$ORACLE_HOME/lib:$MMHOME/oracle/lib/bin:
   - $SH_LIBPATH

   Solaris:

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

   Oracle Enterprise Linux:

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

Compile Batch Libraries

1. Copy the files from STAGING_AREA/batch/lib/src to INSTALL_DIR/rms/oracle/lib/src.
2. Change directories to INSTALL_DIR/rms/oracle/lib/src.
3. Create library dependencies.
   a. For UNIX, run this command:
      ```
      make –f retek.mk depend 2>&1 | tee libdpnd.log
      ```
   b. For Oracle Enterprise Linux run this command:
      ```
      make –f retek.mk –r depend 2>&1 | tee libdpnd.log
      ```
   c. Check the libdpnd.log file for errors.

4. Create the batch libraries.
   a. For UNIX, run this command:
      ```
      make –f retek.mk retek rms resa 2>&1 | tee libretek.log
      ```
   b. For Oracle Enterprise Linux run this command:
      ```
      make –f retek.mk –r retek rms resa 2>&1 | tee libretek.log
      ```
   c. Check the libretek.log file for errors.
5. Install the batch libraries.
   ```
   make –f retek.mk install
   ```
   The batch libraries should now be in INSTALL_DIR/rms/oracle/lib/bin.

Compile Batch Source Code

1. Copy the files from STAGING_AREA/batch/proc/src to INSTALL_DIR/rms/oracle/proc/src.
2. Copy the files from STAGING_AREA/batch/proc/bin to INSTALL_DIR/rms/oracle/proc/bin.
3. Change directories to INSTALL_DIR/rms/oracle/proc/src.
4. Create dependencies.
   a. For UNIX, run the following command:
      ```
      make –f mts.mk rms-depend recs-depend rtm-depend resa-depend 2>&1 | tee srcdpnd.log
      ```
   b. For Oracle Enterprise Linux run this command:
      ```
      make –f mts.mk –r rms-depend recs-depend rtm-depend resa-depend 2>&1 | tee srcdpnd.log
      ```
   c. Check the srcdpnd.log file for errors.
5. Create batch programs.
   a. For UNIX, run the following commands in the order stated.
      ```
      make –f rms.mk PRODUCT_PROCFLAGS=dynamic=ansi ditinsrt
      make –f mts.mk rms-ALL recs-ALL resa-ALL rtm-ALL 2>&1 | tee srcall.log
      ```
   b. For Oracle Enterprise Linux run the following commands:
      ```
      make –f rms.mk –r PRODUCT_PROCFLAGS=dynamic=ansi ditinsrt
      make –f mts.mk –r rms-ALL recs-ALL resa-ALL rtm-ALL 2>&1 | tee srcall.log
      ```
   c. Check the srcall.log file for errors.
6. Install the batch programs.
   ```
   make –f mts.mk rms-install recs-install resa-install rtm-install
   ```
   The batch programs should now be in INSTALL_DIR/rms/oracle/proc/bin.

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Application Server Installation Tasks

Mount CD-ROM on the Database Server

1. Copy the rms1206apppatch.zip file from the CD /appserverunix directory to a newly created staging directory on your UNIX server.
2. Unzip the file by entering:
   `unzip rms1206apppatch.zip`

Set Environment Variables

> **Note:** ORACLE_HOME is the location where Oracle Application Server 10g (10.1.2.0.2) has been installed

1. Set the DISPLAY variable to the IP address plus ":0.0" (ie: 10.1.1.1:0.0) of the application server.
2. Set the following variables:

> **Note:** ORACLE_HOME is the location where Oracle Application Server 10g (10.1.2.0.2) has been installed

- **All OS Platforms**
  - PATH=$ORACLE_HOME/bin:$ORACLE_HOME/opmn/bin:$ORACLE_HOME/dcm/bin:INSTALL_DIR/forms10gr2_scripts:$PATH
  - CLASSPATH=$ORACLE_HOME/jlib/importer:$ORACLE_HOME/jlib/debugger.jar:$ORACLE_HOME/jlib/utj.jar:$ORACLE_HOME/jlib/ewt3.jar:$ORACLE_HOME/jlib/share.jar:$ORACLE_HOME/jlib/dfc.jar:$ORACLE_HOME/jlib/help4.jar:$ORACLE_HOME/jlib/oracle_ice.jar:$ORACLE_HOME/jlib/jewt4.jar
  - FORMS_BUILDER_CLASSPATH=$CLASSPATH
  - FORMS_PATH=INSTALL_DIR/toolset/bin:INSTALL_DIR/rms/forms/bin:$ORACLE_HOME/forms
  - REPORTS_PATH=INSTALL_DIR/rms/reports/bin:$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 into the RMS 12 schema.
>
> **Example:** /u00/oracle> sqlplus $UP

- **Solaris**
  - LD_LIBRARY_PATH=$ORACLE_HOME/lib:$ORACLE_HOME/jdk/jre/lib/sparc:$ORACLE_HOME/jdk/jre/lib/sparc/native_threads
- **HP-UX**
  - SHLIB_PATH=$ORACLE_HOME/lib32:$ORACLE_HOME/lib:$ORACLE_HOME/jdk/jre/lib/PA_RISC:$ORACLE_HOME/jdk/jre/lib/PA_RISC/server
- **AIX**
  - LD_LIBRARY_PATH=$ORACLE_HOME/lib:$ORACLE_HOME/lib32:$ORACLE_HOME/jdk/jre/lib
  - LIBPATH=$LD_LIBRARY_PATH
- **Oracle Enterpirse Linux**
  - LD_LIBRARY_PATH=$ORACLE_HOME/lib:$ORACLE_HOME/lib32:$ORACLE_HOME/jdk/jre/lib

RMS Toolset Installation

1. Copy all libraries (.pll files) in the INSTALL_DIR/toolset/src directory to the INSTALL_DIR/toolset/bin directory.
2. Change directories to INSTALL_DIR/toolset/bin.
3. Run pll2plx10gr2_toolset to compile all Toolset .pll's.

> **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

4. Check to make sure that each .pll file has a corresponding .plx (to ensure that all .pll's compiled successfully).
5. Remove all newly created .plx files.
6. Copy all forms (*.fmb files) in the INSTALL_DIR/toolset/src directory to the INSTALL_DIR/toolset/bin directory.
7. Run fmb2fmx10gr2_fm (in INSTALL_DIR/toolset/bin) to compile the Toolset reference forms.
8. Remove all newly created fm_*.fmx files (reference forms should not have executable files).
9. Run fmb2fmx10gr2 (in INSTALL_DIR/toolset/bin) to generate Toolset 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/toolset/bin directory.

11. Remove all non-reference forms from INSTALL_DIR/toolset/bin; the following syntax will leave all reference forms (fm_*.fmb) in the bin directory, while removing all other forms:

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

12. Copy all menus (*.mmb files) in the INSTALL_DIR/toolset/src directory to the INSTALL_DIR/toolset/bin directory.
13. Run mmb2mmx10gr2 (in INSTALL_DIR/toolset/bin) to generate Toolset runtime menus – .mmx's.
14. Check to make sure that each .mmb file has a corresponding .mmx file.

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

15. Remove all .mmb files from INSTALL_DIR/toolset/bin.

RMS Forms Installation

1. Copy all the files from STAGING_AREA/forms/src to INSTALL_DIR/rms/forms/src.
2. Copy all libraries (.pll files) in the INSTALL_DIR/rms/forms/src directory to the directories to the INSTALL_DIR/rms/forms/bin directory.
3. Change directories to INSTALL_DIR/rms/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/rms/forms/src directory to the INSTALL_DIR/rms/forms/bin directory.
7. Run fmb2fmx10gr2_fm (in INSTALL_DIR/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/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/rms/forms/bin directory.

11. Remove all non-reference form forms from INSTALL_DIR/rms/forms/bin; the following syntax will leave all reference forms (fm_*.fmb) in the bin directory, while removing all other forms:

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

12. Copy all menus (*.mmb files) in the INSTALL_DIR/rms/forms/src directory to the INSTALL_DIR/rms/forms/bin directory.
13. Run mmb2mmx10gr2 (in INSTALL_DIR/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/rms/forms/bin.

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

RMS Reports Installation

1. Copy all reports (*.rdf files) in the STAGING_AREA/reports/src directory to the INSTALL_DIR/rms/reports/bin directory.
2. Run rdf2rep10gr2 (in INSTALL_DIR/rms/reports/bin) to generate Reports runtime reports – .rep's.

> **Note:** The following error messages may appear when running rdf2rep10gr2; these errors can be ignored if report (.rep) generation was successful:
>
> REP-0759: One or more PL/SQL libraries have been modified since the reports was saved. The PL/SQL will be recompiled.
>
> REP-0202: Attempt to free a null pointer
>
> REP-0759 is generated by the r25conv program. The error appears any time a report is converted.
>
> REP-0202 is due to an Oracle bug with rwconverter and can be ignored

3. Check to make sure that each .rdf file has a corresponding .rep file.

4. Remove all .rdf files from INSTALL_DIR/rms/reports/bin.

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