

Oracle® Retail Warehouse Management System
Installation Guide
Release 13.1.5
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Oracle Retail Warehouse Management System, Installation Guide, Release 13.1.5

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

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

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

Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Applications Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: retail-doc_us@oracle.com

Please give your name, address, electronic mail address, and telephone number (optional).

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

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

Preface

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

Audience

This Installation Guide is written for the following audiences:

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

Related Documents

For more information, see the following documents in the Oracle Retail Warehouse Management System Release 13.1.5 documentation set:

- *Oracle Retail Warehouse Management System Release Notes*
- *Oracle Retail Warehouse Management System Data Model*

Customer Support

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

<https://support.oracle.com>

When contacting Customer Support, please provide the following:

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

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 13.1) or a later patch release (for example, 13.1.2). If you are installing the base release and additional patch and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation.

Documentation for patch and bundled hot fix releases can contain critical information related to the base release, as well as information about code changes since the base release.

Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:

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

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

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

Conventions

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

This is a code sample

It is used to display examples of code

Preinstallation Tasks

This chapter describes the tasks that must be completed prior to installation.

Check for the Current Version of the Installation Guide

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

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

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

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

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

Check Supported Database Server Requirements

General Requirements for a database server running RWMS include:

Supported on:	Versions Supported:
Database Server OS	OS certified with Oracle Database 11gR1 and 11gR2 (11.2.0.2) Enterprise Edition. Options are: <ul style="list-style-type: none"> ▪ Oracle Enterprise Linux 5 Update 2 for x86-64 (actual hardware or Oracle virtual machine). ▪ Oracle Enterprise Linux 5 Update 5 for x86-64 (actual hardware or Oracle virtual machine). ▪ Red Hat Enterprise Linux 5 Update 2 (RHEL 5.2) for x86-64 (actual hardware or Oracle virtual machine). ▪ Red Hat Enterprise Linux 5 Update 5 (RHEL 5.5) for x86-64 (actual hardware or Oracle virtual machine). ▪ AIX 6.1, minimum TL1 (actual hardware or LPARs) ▪ Solaris 10 Sparc (actual hardware or Oracle VM Server for SPARC). ▪ HP-UX 11.31 Integrity (actual hardware or HPVM)

Supported on:	Versions Supported:
Database Server 11gR1	<p>Oracle Database Enterprise Edition 11gR1 with the following patches:</p> <ul style="list-style-type: none"> ▪ 6890831 – 11.1.0.7 patch set. <p>One offs:</p> <ul style="list-style-type: none"> ▪ 7036284: LOADJAVA run in a DV environment cannot load classes with a name longer than 128. ▪ 7378322: ORA-00600: internal error code, arguments [6704], [1], [532241], [532237]. ▪ 6800649: (AIX only) When non Oracle user uses client utilities sqlldr/sqlplus/impdp/expdp, core dump is generated. Need to “relink all” after applying the patch. ▪ 7697360: (RAC only) ORA-00600: internal error code, arguments [k2vcbk_6]. Database crashed during transaction recovery. ▪ 9969679: Merge request on top of 11.1.0.7.0 for defects 8596022 and 9582272. ▪ 6269507: After EXPDP and IMPDP, the package name in the dba_source changes from lowercase <p>Components:</p> <ul style="list-style-type: none"> ▪ Oracle Database 11g ▪ Oracle Partitioning ▪ Oracle Net Services ▪ Oracle Call Interface (OCI) ▪ Oracle Programmer ▪ Oracle XML Development Kit ▪ Examples CD <p>Other components:</p> <ul style="list-style-type: none"> ▪ Perl compiler 5.0 or later ▪ X-Windows interface
Database Server 11gR2	<p>Oracle Database 11g Release 2 (11.2.0.2) Enterprise Edition with the following one off patches:</p> <ul style="list-style-type: none"> ▪ 10170431: CTWR consumes a lot of CPU cycles. <p>If ASM is used, apply the following patch to RDBMS home:</p> <ul style="list-style-type: none"> ▪ 11808931: Merge request on top of 11.2.0.2.0 for defects 10410054 and 10422126. <p>Components:</p> <ul style="list-style-type: none"> ▪ Oracle Partitioning ▪ Examples CD <p>Other components:</p> <ul style="list-style-type: none"> ▪ Perl compiler 5.0 or later ▪ X-Windows interface

Verify Single Sign-On

If a Single Sign-On is to be used, verify the Oracle Infrastructure Server 10g server has been installed. Verify that the mid-tier server hosting Oracle Forms is registered with the Infrastructure Oracle Internet Directory.

Check Supported Application Server Requirements

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

Supported on:	Versions Supported:
Application Server OS	OS certified with Oracle Application Server 10g version 10.1.2.3. Options are: <ul style="list-style-type: none"> ▪ Oracle Linux 5 Update 2 for x86-64 (Actual hardware or Oracle virtual machine). ▪ Oracle Linux 5 Update 5 for x86-64 (Actual hardware or Oracle virtual machine). ▪ Red Hat Enterprise Linux 5 Update 2 (RHEL 5.2) for x86-64 (Actual hardware or Oracle virtual machine). ▪ Red Hat Enterprise Linux 5 Update 5 (RHEL 5.5) for x86-64 (Actual hardware or Oracle virtual machine). ▪ AIX 6.1, minimum TL1 (Actual hardware or LPARs) ▪ Solaris 10 Sparc (Actual hardware or Oracle VM Server for SPARC) ▪ HP-UX 11.31 Integrity (Actual hardware or HPVM)
Application Server	Oracle Application Server Forms and Reports 10g version 10.1.2.3 Patches: <ul style="list-style-type: none"> ▪ 7379122 MLR ON TOP OF 10.1.2.3 FOR CPUOCT2008

Note: If installing on HP, see the My Oracle Support document, "Trying to Execute a Stored Program Unit with a Type as Parameter" (ID 367577.1).

Check Web Browser and Client Requirements

General requirements for client running RWMS include:

Requirement	Version
Operating system	Windows 2000 or XP
Display resolution	1024x768
Processor	Pentium processor (minimum 450 MHz)
Memory	minimum of 256 MB RAM
Java	Oracle JRE Plug-in 5.0 Update 11 (1.5.0_11) or 6.0 Update 12 (1.6.0_12)
Browser	Microsoft Internet Explorer version 7.0

Handheld Requirements

Windows CE 5.0 handhelds with the following screen sizes

- Hand held: 240 x 320
- Wrist mount: 320 x 240
- Truck mount – full screen: 800 x 600
- Truck mount – half screen: 800 x 320

Software Required on Handhelds

- Remote Desktop Client (aka Microsoft Terminal Services Client)
- DataWedge (software provided by and maintained by Motorola for use with the barcode scanners)

Supported Oracle Retail Products

Requirement	Version
Oracle Retail Merchandising System (RMS)	13.1.5
SIM	13.1.5

Database Upgrade Instructions

This chapter describes how you can upgrade the RWMS database with this patch release.

Before You Begin

Before you apply the RWMS 13.1.5 patch:

- Make a backup of all your objects and database schema.
- Check that RWMS 13.1.4 is installed.
- Review the *Oracle Retail Warehouse Management System Release Notes* (rwms-1315-rn.pdf).

Before copying over any files:

- Note whether customizations have been made to the module. If so, then the customizations must be reapplied over the new version of the 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 RWMS13DEV as the Oracle owning schema.

Copy from CD Directory

To copy from the CD directory, do the following.

1. Copy the rwms1315dbpatch.zip file from the CDRUM/dbserverunix directory to a newly created staging directory on your UNIX server.
2. Unzip the file using the following command:

```
unzip rwms1315dbpatch.zip
```

Update RWMS DDL

To update the RWMS DDL, do the following.

1. Change directories to the <staging area>/dbcs.
2. Log on to SQL* Plus as RWMS13DEV, and run the following command:

```
SQL> @patch1315dbcs.sql
```
3. Check the log file patch1315dbcs.log for any errors.

Update RWMS Database Objects

To update RWMS database objects, do the following.

1. Change directories to the <staging area>/db_objects.
2. Log on to SQL* Plus as RWMS13DEV, and run the following command:

```
SQL> @patch1315rwms.sql
```
3. Check the log file patch1315rwms.log for any errors.

Validate all Invalid Objects

Note: Deadlocked objects may appear when running this script. Run the script until no more invalid objects remain.

1. Change directories to <INSTALL_DIR>/utility.
2. Log on to SQL*Plus as RWMS13DEV, and run the following command:
SQL> @inv_obj_comp.sql
3. You may need to run this script more than once.

Update Data for RWMS

Note: Ensure that your NLS_LANG has been set to a valid UTF8.

1. Change directories to the <staging area>/data.
2. Log on to SQL*Plus as RWMS13DEV, and run the following command:
SQL> @patch1315data.sql
3. Check the log file patch1315data.log for any errors.

Application Server Installation Tasks

Note: STAGING_DIR is the directory where the RWMS files are extracted from its zip file. INSTALL_DIR is where the application will be run from.

It is assumed that Oracle Application Server 10g version 10.1.2.3 (OAS) has already been installed. If not, refer to “[Check Supported Application Server Requirements](#)” in Chapter 1, “[Preinstallation Tasks](#),” before proceeding.

Copy from CD Directory

To copy from the CD directory, do the following.

1. Copy the `rwms1315apppatch.zip` file from the `CDROM/appserverunix` directory to a newly created staging directory on your UNIX server.
2. Unzip the file using the following command:

```
unzip rwms1315apppatch.zip
```

Compile RWMS Oracle Forms and Reports

To compile RWMS Oracle forms and reports, complete the following tasks.

Set Environment Variables

Note: ORACLE_HOME is the location where Oracle Application Server 10g (10.1.2.3) has been installed.

1. Verify that the `T2kMotif.rgb` file that is sent out with Oracle Application Server 10g (10.1.2.3) has been modified. It is located at the following location:

```
$ORACLE_HOME/guicommon/tk/admin
```

 - a. Make a copy of the file `ORACLE_HOME/guicommon/tk/admin/Tk2Motif.rgb`, and name it `Tk2Motif.rgb_ORIG` (for example).
 - b. Modify the file `Tk2Motif.rgb` file so that it contains the following line:

```
Tk2Motif*fontMapCs: iso8859-2=UTF8
```
2. Log on to the application server as the `oretail` user.
3. Set the `DISPLAY` variable to the IP address of the application server, plus “:0.0” (for example, `10.1.1.1:0.0`).
4. Set the following variables:
 - All OS Platforms
 - `PATH=$ORACLE_HOME/bin:$ORACLE_HOME/opmn/bin:$ORACLE_HOME/dcm/bin:INSTALL_DIR/forms_scripts:$PATH`
 - `CLASSPATH=$ORACLE_HOME/jlib/importer:$ORACLE_HOME/jlib/debugger.jar:$ORACLE_HOME/jlib/utj.jar:$ORACLE_HOME/jlib/ewt3.jar:$ORACLE_HOME/jlib/share.jar:$ORACLE_HOME/jlib/dfc.jar:$ORACLE_HOME/jlib/help4.jar:$ORACLE_HOME/jlib/oracle_ice.jar:$ORACLE_HOME/jlib/jewt4.jar`

- FORMS_BUILDER_CLASSPATH=\$CLASSPATH
- FORMS_PATH=INSTALL_DIR/rwms/forms/bin:\$ORACLE_HOME/forms
- REPORTS_PATH=INSTALL_DIR/rwms/reports/bin:\$ORACLE_HOME/forms
- TK_UNKNOWN=\$ORACLE_HOME/guicommon/tk/admin
- UP=<RWMS schema owner>/<RWMS schema password>@<RWMS database>

Install RWMS Forms

To install RWMS forms, do the following.

1. Copy all forms (*.fmb files) from the STAGING_DIR/rwms/forms/src directory to the INSTALL_DIR/rwms/forms/src directory.
2. Run forms.fmb.sh (located in STAGING_DIR/utility) to generate RWMS runtime forms – .fmx's.
3. Make sure that each form .fmb file has a corresponding .fmx file.
4. Copy all newly generated fmx files in the STAGING_DIR/rwms/forms/src directory to the INSTALL_DIR/rwms/forms/bin directory.

Appendix: 11gR2 Parameter File

This parameter file can also be found at STAGING_DIR/create_db.

```
#####
# Oracle 11.2.0.x Parameter file
#
# NOTES: Before using this script:
#       1. Change <datafile_path>, <admin_path>, <utl_file_path>, <diag_path>
and <hostname>
#       values as appropriate.
#       2. Replace the word SID with the database name.
#       3. Size parameters as necessary for development, test, and production
environments.
# -----
# MAINTENANCE LOG
#
# Date      By      Parameter      Old/New      Notes
# +-----+ +-----+ +-----+ +-----+ +-----+
#
#
#####
# -----
# The policy is to give 60% for sga and 40% for PGA out of Memory Target at
startup
# -----
memory_target          = 2000M
# -----
audit_file_dest        = <admin_path>/adump
compatible             = 11.2.0
control_files          = (<datafile_path>/control01.ctl
, <datafile_path>/control02.ctl)
db_block_size          = 8192      # Default is 2k; adjust before db creation,
cannot change after db is created
db_cache_size          = <A mimimum starting value >
db_file_multiblock_read_count = 16      # Platform specific (max io
size)/(block size)
db_name                = SID
diagnostic_dest        = '<diag_path>'
java_pool_size         = 100M
job_queue_processes    = 5          # Oracle Retail required; number of
cpu's + 1
local_listener         =
"(ADDRESS=(PROTOCOL=TCP)(HOST=<hostname>)(PORT=1521))"
nls_calendar           = GREGORIAN
nls_date_format        = DD-MON-RR # Oracle Retail required; if RDW
database see later entry for proper format
nls_language           = AMERICAN  # Default
nls_numeric_characters = "., "    # Should be explicitly set to ensure all
users/batch get the same results
nls_sort               = BINARY    # Should be explicitly set to ensure all
sessions get the same order
nls_territory          = AMERICA   # Default
open_cursors           = 900      # Oracle Retail required (minimum=900);
default is 50
```

```
plsql_optimize_level          = 2           # 10g change; use this setting
to optimize plsql performance
processes                     = 2000       # Max number of OS processes that can connect
to the db
query_rewrite_enabled         = TRUE       # Oracle Retail required for function-
based indexes
session_cached_cursors        = 900       # Oracle Retail required;
shared_pool_size              = <A minimum starting value >
shared_pool_reserved_size     = < 10% of the shared_pool_size >
undo_management                = AUTO
undo_retention                 = 1800      # Currently set for 30 minutes; set to avg
length of transactions in sec
undo_tablespace               = undo_ts
utl_file_dir                  = <utl_file_path>
workarea_size_policy          = auto       # Should be set to auto
when pga_aggregate_target is set
#
# *** Set these parameters for Oracle Retail Data Warehouse (RDW) database ***
#nls_date_format               = DD-MON-RRRR # Required by MicroStrategy
#query_rewrite_integrity      = TRUSTED
#star_transformation_enabled  = TRUE
#utl_file_dir                  = <Windows_utl_file_path>,
<UNIX_util_file_path>
#
# *** Archive Logging, set if needed ***
#log_archive_dest_1           = 'location=<admin_path>/arch/'
#log_archive_format           = SIDarch_%r_%s_%t.log
#log_buffer                   = 10485760   # Set to (512K or 128K)*CPUs
#log_checkpoint_interval      = 51200     # Default:0 - unlimited
#log_checkpoint_timeout       = 7200      # Default:1800 seconds
```

Appendix: Installation Order

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

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

Enterprise Installation Order

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

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

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

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

13. Oracle Retail Predictive Application Server (RPAS)
14. Oracle Retail Demand Forecasting (RDF)
15. Oracle Retail Category Management (CM)
16. Oracle Retail Replenishment Optimization (RO)
17. Oracle Retail Analytic Parameter Calculator Replenishment Optimization (APC RO)
18. Oracle Retail Regular Price Optimization (RPO)
19. Oracle Retail Merchandise Financial Planning (MFP)
20. Oracle Retail Size Profile Optimization (SPO)

21. Oracle Retail Assortment Planning (AP)
22. Oracle Retail Item Planning (IP)
23. Oracle Retail Item Planning configured for COE (IPCOE)
24. Oracle Retail Advanced Inventory Planning (AIP)
25. Oracle Retail Integration Bus (RIB)
26. Oracle Retail Point-of-Service (ORPOS)
27. Oracle Retail Analytics Applications
28. Oracle Retail Data Warehouse (RDW)
29. Oracle Retail Workspace (ORW)