

Oracle® Retail Warehouse Management System
Installation Guide
Release 13.1.6
E35870-02

December 2012

Copyright © 2012, Oracle. All rights reserved.

Primary Author: Donna Linde

Contributors: Nathan Young

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Value-Added Reseller (VAR) Language

Oracle Retail VAR Applications

The following restrictions and provisions only apply to the programs referred to in this section and licensed to you. You acknowledge that the programs may contain third party software (VAR applications) licensed to Oracle. Depending upon your product and its version number, the VAR applications may include:

(i) 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.

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

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

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

You acknowledge and confirm that Oracle grants you use of only the object code of the VAR Applications. Oracle will not deliver source code to the VAR Applications to you. Notwithstanding any other term or condition of the agreement and this ordering document, you shall not cause or permit alteration of any VAR Applications. For purposes of this section, "alteration" refers to all alterations, translations, upgrades, enhancements, customizations or modifications of all or any portion of the VAR Applications including all reconfigurations, reassembly or reverse assembly, re-engineering or reverse engineering and recompilations or reverse compilations of the VAR Applications or any derivatives of the VAR Applications. You acknowledge that it shall be a breach of the agreement to utilize the relationship, and/or confidential information of the VAR Applications for purposes of competitive discovery.

The VAR Applications contain trade secrets of Oracle and Oracle's licensors and Customer shall not attempt, cause, or permit the alteration, decompilation, reverse engineering, disassembly or other reduction of the VAR Applications to a human perceivable form. Oracle reserves the right to replace, with functional equivalent software, any of the VAR Applications in future releases of the applicable program.

Contents

Send Us Your Comments	vii
Preface	ix
Audience	ix
Related Documents.....	ix
Customer Support.....	ix
Review Patch Documentation.....	ix
Oracle Retail Documentation on the Oracle Technology Network.....	x
Conventions.....	x
1 Preinstallation Tasks	1
Check for the Current Version of the Installation Guide.....	1
Check Supported Database Server Requirements.....	1
Verify Single Sign-On.....	2
Check Supported Application Server Requirements	3
Check Web Browser and Client Requirements.....	3
Handheld Requirements	4
Supported Oracle Retail Products	4
2 Patch RWMS Database Installation	5
Patch RWMS Database using the Patch Installer.....	5
Create Staging Directory for RWMS Database Schema Files.....	5
Run the RWMS Database Schema Patch Installer	6
3 Patch RWMS Application Installation	9
Copy from CD Directory.....	9
Compile RWMS Oracle Forms and Reports.....	9
Set Environment Variables	9
Install RWMS Forms.....	10
A Appendix: 11gR2 Parameter File	11
B Appendix: RWMS Database Patch Installer Screens	13
C Appendix: Installer Silent Mode	17
D Appendix: Common Installation Errors	19
Database Installer hangs on startup	19
Unreadable buttons in the Installer	19
Warning: Could not create system preferences directory	19
Warning: Could not find X Input Context.....	20
Unresponsive drop-downs	20
Could not execl robot child process: Permission denied.....	21
ConcurrentModificationException in Installer GUI.....	21
ORA-04031 (unable to allocate memory) error during database schema installation.....	21
GUI screens fail to open when running Installer.....	22

E Appendix: Installation Order 23
Enterprise Installation Order.....23

Send Us Your Comments

Oracle Retail Warehouse Management System, Installation Guide, Release 13.1.6

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document.

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

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

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

Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Applications Release Online Documentation CD available on My Oracle Support and www.oracle.com. 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 13.1.6 documentation set:

- *Oracle Retail Warehouse Management System Release Notes*
- *Oracle Retail Warehouse Management System Radio Frequency User Guide*
- *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 Enterprise Edition. Options are: <ul style="list-style-type: none"> ▪ Oracle Linux 5 for x86-64 (Actual hardware or Oracle virtual machine). ▪ Red Hat Enterprise Linux 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 patchset. <p>Oneoffs:</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 BUGS 8596022 9582272 <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 oneoff patches:</p> <ul style="list-style-type: none"> ▪ 10170431 - CTWR CONSUMING LOTS OF CPU CYCLES <p>Apply the following patch to RDBMS home if ASM is used.</p> <ul style="list-style-type: none"> ▪ 11808931 - MERGE REQUEST ON TOP OF 11.2.0.2.0 FOR BUGS 10410054 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 for x86-64 (Actual hardware or Oracle virtual machine). ▪ Red Hat Enterprise Linux 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)	13.1.6
SIM	13.1.6

Patch RWMS Database Installation

This section describes how to update the RWMS database schema to release 13.1.6. It is assumed that your existing RWMS database schema is on at least release 13.1.5.

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

Note: If you are installing multiple patches, you must run the database schema patch installer separately for each patch. For example, if upgrading from 13.1.5 to 13.1.6, the installer should first be run to install the 13.1.5.1 scripts, followed by 13.1.6.

Patch RWMS Database using the Patch Installer

The RWMS 13.1.6 database schema patch installer should be used to apply the RWMS patch.

Before you apply the RWMS 13.1.6 patch:

- Make a backup of all your objects and database schema.
- Determine which patches and hot fix bundles have already been installed.
- Review the enclosed RWMS 13.1.6 Release Notes (rwms-1316-rn.pdf).
- Review each of the enclosed defect documents.
- Make sure any applications that connect to the RWMS schema are shut down. This includes RIB and anything else that could be using the schema.

Create Staging Directory for RWMS Database Schema Files

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

1. Log in to the database server as a user that can connect to the RWMS database.
2. Create a staging directory for the RWMS 13.1.6 Patch. There should be a minimum of 60 MB disk space available in this location.
3. Copy the rwms1316dbpatch.zip file from the RWMS 13.1.6 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 rwms1316dbpatch.zip file. This creates a RWMS/dbschemapatch subdirectory under DB_PATCH_DIR.

Run the RWMS Database Schema Patch Installer

Note: See “[Appendix: RWMS Database Patch Installer Screens](#)” for details about screens and fields in the RWMS database schema patch installer.

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

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

Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

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

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

Variable	Description	Example
NLS_LANG	Locale setting for Oracle database client	NLS_LANG=AMERICAN_AMERICA.UTF8 export NLS_LANG
DISPLAY	Address and port of X server on desktop system of user running install. Optional for dbschema installer	DISPLAY=<IP address>:0 export DISPLAY

4. If you are going to run the installer in GUI mode using an X server, you need to have the XTEST extension enabled. This setting is not always enabled by default in your X server. See “[Appendix: Common Installation Errors](#)” for details.
5. 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] or ./install.sh [text | silent]
```

6. On the Apply a Patch page, provide the path to the corresponding patch you are applying. This path will be DB_PATCH_DIR/rwms/dbschemapatch/rwms-dbpatch/<version>/.

Note: If you have 13.1.5 installed, then select the 13.1.5.1 patch. Once the 13.1.5.1 patch has been applied, rerun the installer and select the 13.1.6 patch. If you have 13.1.5.1 installed, then just select the 13.1.6 patch.

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

Example: `chmod 600 ant.install.properties`

9. If you are applying multiple patches (for example, if you are going from 13.1.5 to 13.1.6), rerun the installer. On the Apply a Patch page, select the next patch in the sequence. Repeat this step until you have installed all required patches for the desired patch level.

Note: For more information, see "[Optional Security](#)."

Patch RWMS Application Installation

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 `rwms1316apppatch.zip` file from the `CDROM/appserverunix` directory to a newly created staging directory on your UNIX server. This will be referred to as `STAGING_DIR`. There should be a minimum of 20 MB disk space available in this location.
2. Unzip the file using the following command:

```
unzip rwms1316apppatch.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. Make a backup copy of the INSTALL_DIR/rwms/forms directory
2. For the version number of the patch or hotfix bundle you are installing, navigate to the corresponding directories in STAGING_DIR and copy the contents of the following directories into INSTALL_DIR. Depending on the patch, these directories may not exist.
 - Copy all forms (fmb) in STAGING_DIR/app-patch/<version>/forms/src to the INSTALL_DIR/rwms/forms/src directory.
 - Copy all scripts in APP_PATCH_DIR/app-patch/<version>/forms/bin to the INSTALL_DIR/rwms/forms/bin directory.

If you are applying multiple patches (for example, if you are going from 13.1.5 to 13.1.6), you must copy the files from the directories for each patch in sequence. For example, if you are going from 13.1.5 to 13.1.6, you will need to copy the files from STAGING_DIR/app-patch/13.1.5.1/forms, followed by the files from STAGING_DIR/app-patch/13.1.6/forms

2. Run forms.fmb.sh (located in STAGING_DIR/app-patch/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 INSTALL_DIR /rwms/forms/src directory to the INSTALL_DIR/rwms/forms/bin directory.

Install RWMS Reports (*.rdf)

1. Copy all *.rdf files located in INSTALL_DIR/rwms/reports/src to INSTALL_DIR/rwms/reports/bin directory.

Note: The .rdf files in /bin must be overwritten with those from /src.

2. Copy label.prt from INSTALL_DIR/rwms/reports/bin to INSTALL_DIR/rwms/extras.

Appendix: 11gR2 Parameter File

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

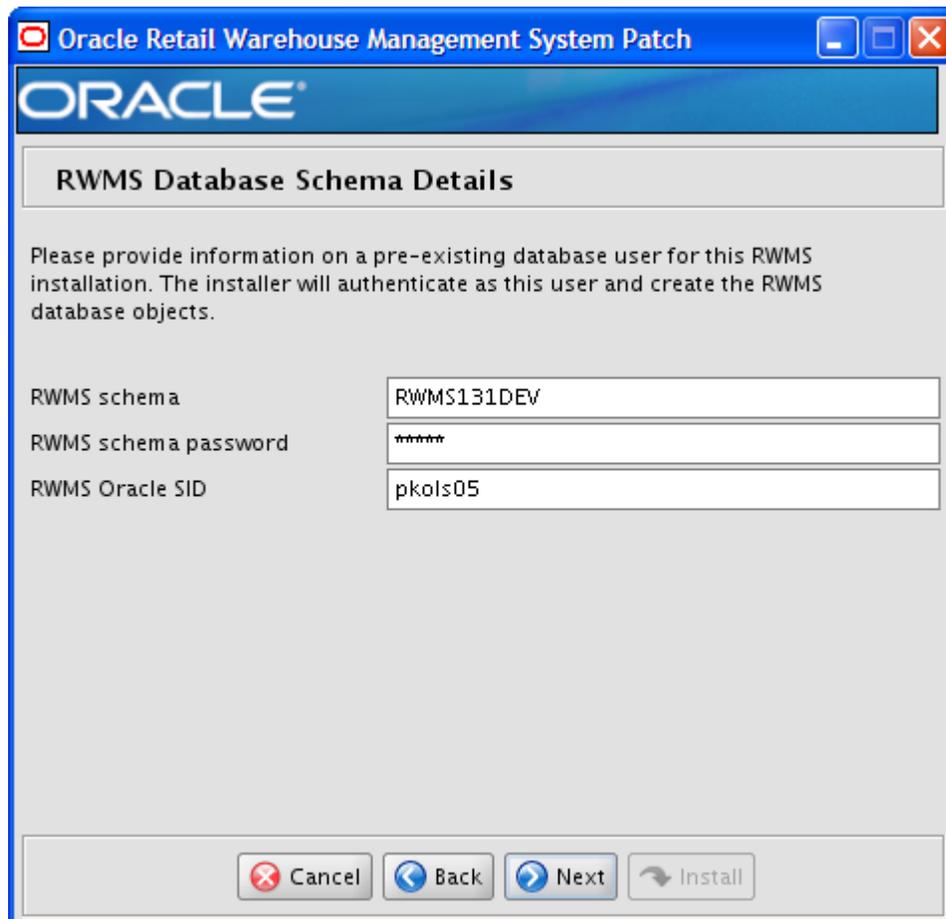
```
#####
# Oracle 11.2.0.x Parameter file
#
# NOTES: Before using this script:
#       1. Change <datafile_path>, <admin_path>, <utl_file_path>, <diag_path>
and <hostname>
#       values as appropriate.
#       2. Replace the word SID with the database name.
#       3. Size parameters as necessary for 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: RWMS Database Patch Installer Screens

The following details about your environment are necessary for the installer to successfully patch the RWMS database schema.

Screen: Database Schema Details

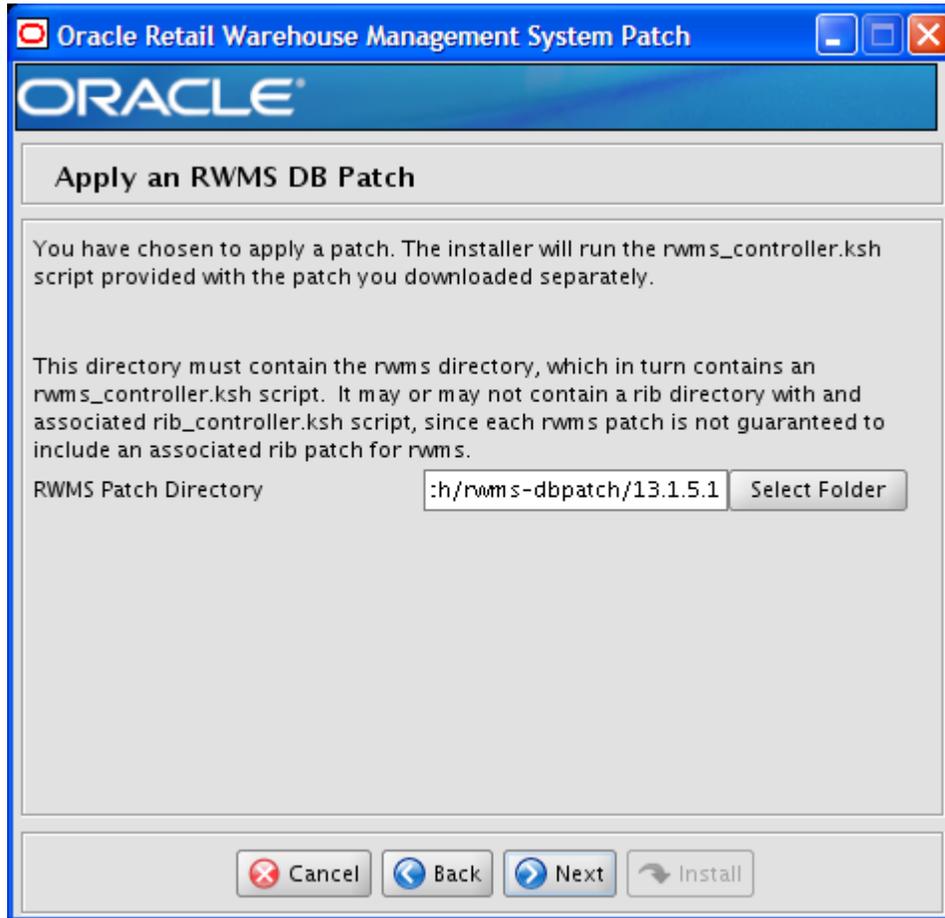


Field Title	RWMS schema
Field Description	Provide the RWMS database user here. The installer logs into the database as this user to create the RWMS schema. This user must already exist in the database when the RWMS database schema installer is run.
Example	RWMS131DEV

Field Title	RWMS schema password
Field Description	Database password for the RWMS schema Owner.

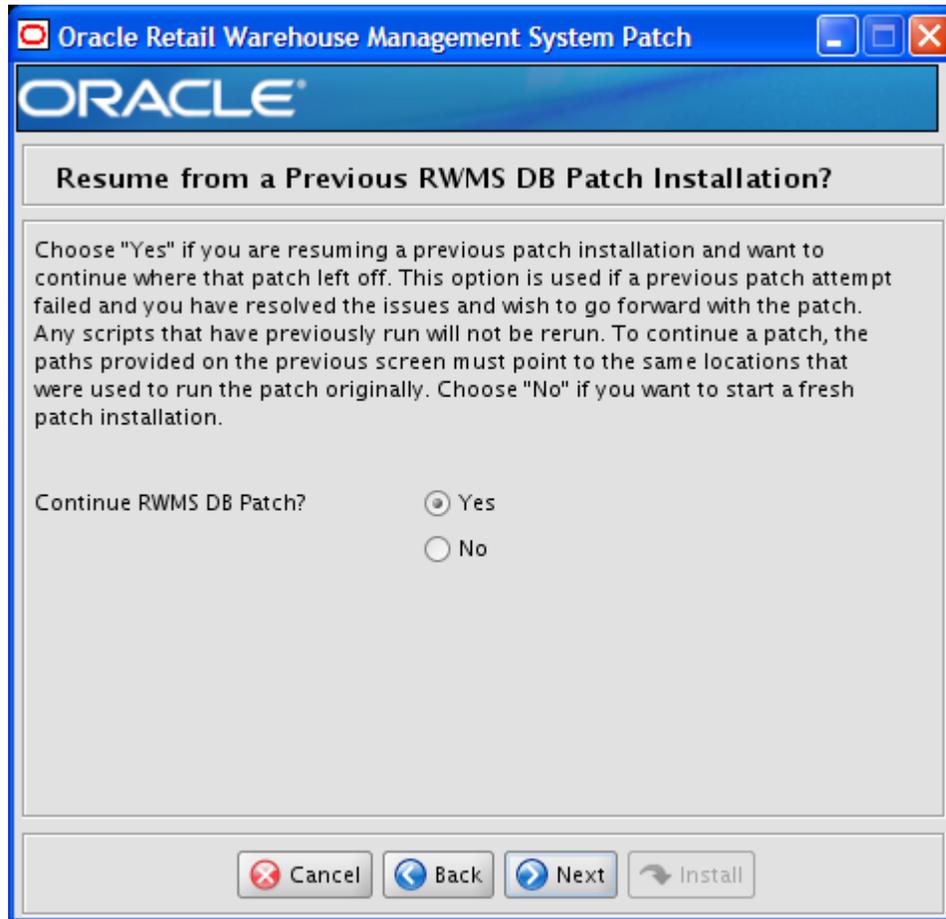
Field Title	RWMS Oracle SID
Field Description	Oracle system identifier for the database where the RWMS patch will be applied.
Example	rwmsdb

Screen: Apply an RWMS DB Patch



Field Title	RWMS Patch Directory
Field Description	Provide the directory path to the RWMS patch you want to install. The installer runs only the patch you provide. Note: The directory you choose must contain rwm_s/rwm_s_controller.ksh, and may contain rib/rib_controller.ksh.
Example	/path/to/rwm_s/dbschemapatch/rwm_s-dbpatch/<version> for all 13.1.x patches Note: The patch option is intended for patches starting with 13.1.5.1.

Screen: Continue RWMS DB Patch



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

Appendix: Installer Silent Mode

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

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

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

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

Example: `install.sh silent`

Appendix: Common Installation Errors

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

Database Installer hangs on startup

Symptom

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

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

Solution

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

Unreadable buttons in the Installer

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

Set JAVA_HOME with the appropriate JDK (the same JDK that has been used by WebLogic Server).

Warning: Could not create system preferences directory

Symptom

The following text appears in the installer Errors tab:

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

Solution

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

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

Warning: Could not find X Input Context

Symptom

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

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

Solution

This message is harmless and can be ignored.

Unresponsive drop-downs

Symptom

In GUI mode, when you click on the drop-down list, the list does not appear, and the following message appears in the console window:

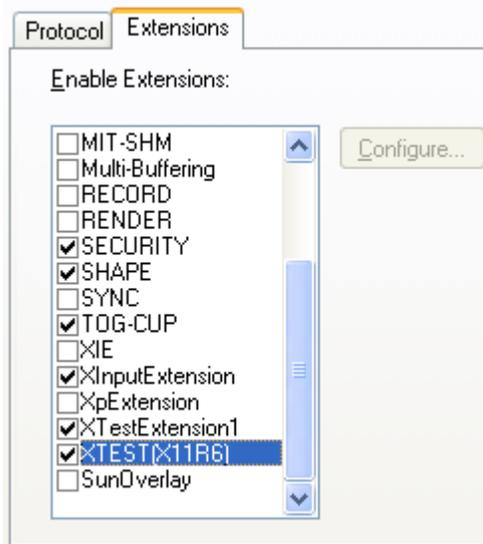
```
XTEST extension not installed on this X server: Error 0
```

Solution

To run the 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 the Extensions tab.
4. Make sure that the XTEST extension is selected:



5. Restart the X Server and run the installer again.

Could not execl robot child process: Permission denied

Symptom

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

```
Couldn't execl robot child process: Permission denied
```

Solution

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

Example (using SUN Solaris):

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

ConcurrentModificationException in Installer GUI

Symptom

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

```
java.util.ConcurrentModificationException
    at
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.

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

Symptom

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

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

Solution

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

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

GUI screens fail to open when running Installer

Symptom

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

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

Solution

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

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)