

Oracle® Retail Merchandising System
Installation Guide
Release 13.1.1

July 2009

Copyright © 2009, Oracle. All rights reserved.

Primary Author: Wade Schwarz

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 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, Oracle Retail Demand Forecasting, Oracle Retail Regular Price Optimization, Oracle Retail Size Profile Optimization, Oracle Retail Replenishment Optimization 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 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.

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

Preface	ix
Audience	ix
Related Documents.....	ix
Customer Support.....	ix
Review Patch Documentation.....	x
Oracle Retail Documentation on the Oracle Technology Network.....	x
Conventions.....	x
1 Preinstallation Tasks.....	1
Implementation Capacity Planning.....	1
Check Database Server Requirements	2
Verify Single Sign-On.....	2
Check Application Server Requirements.....	3
Check Web Browser and Client Requirements.....	3
Supported Oracle Retail Products	3
Supported Oracle Retail Integration Technologies	4
Supported Oracle Applications.....	4
Verify RMS and SIM Inventory Adjustment Reason Codes.....	4
2 RAC and Clustering.....	5
3 Patch Installation	7
4 RMS Database Installation—Patch	9
Option 1: Patch RMS Database using the Installer.....	9
Create Staging Directory for RMS Database Schema Files	9
13.0.2 to 13.1.1 Database Patching Steps	10
Run the RMS Database Schema Installer.....	11
Option 2: Patch RMS Database using Controller Scripts.....	12
Create Staging Directory for RMS Database Schema Files	12
13.0.2 to 13.1.1 Database Patching Steps	13
Run the RMS Database Controller Scripts.....	13
5 Batch Installation Tasks—Patch	15
Option 1: Use Batch Installer to Patch.....	15
Create Staging Directory for RMS Batch Patch Files.....	15
Copy Batch Files.....	16
Run Batch Installer.....	16
Resolving Errors Encountered During Batch Installation	17
RETL	17
Data Conversion Scripts.....	17
Option 2: Compile RMS Batch Directly	18
Create Staging Directory for RMS Batch Patch Files.....	18
Set Environment Variables	18

Compile Batch Libraries.....	19
Compile Batch Source Code	19
Copy RETL Code	20
6 Application Server Installation Tasks—Patch	21
Option 1: Use Application Installer to Patch.....	21
Create Staging Directory for RMS Application Patch Files.....	21
Copy Forms and Library Patch Files.....	22
Run the RMS Application Installer.....	22
Resolving Errors Encountered During Application Installation.....	23
Test the RMS Application.....	24
Option 2: Compile RMS Toolset and Forms Directly.....	24
Create Staging Directory for RMS Application Patch Files.....	24
Set Environment Variables	24
RMS Toolset Installation.....	25
RMS Forms Installation.....	26
Configuring Oracle Application Server 10g for RMS	27
Create a New OC4J Instance for Webhelp.....	27
Update Helpfile Installation.....	28
7 RMS Reports Installation—Patch.....	33
8 Data Migration	35
Configure RMS Data Migration Tool.....	35
Run the RMS Data Migration Tool	37
Configure ReIM Data Migration Tool.....	37
Run the ReIM Data Migration Tool.....	37
9 Web Services Installation	39
Overview	39
Extract Web Services Files	40
Setup Environment	40
Drop Existing Java Code from RMS Database Schema	40
Loading Java Code to the RMS Database Schema.....	41
Web Service installation Process – WebLogic.....	42
Common Steps for both Administration Console and Autodeployment Mechanism Process.....	42
WebLogic 10.3 Administration Console Installation Process	51
WebLogic 10.3 Autodeploy Installation Process	57
A Appendix: RMS Database Schema Installer Screens	59
B Appendix: RMS Batch Installer Screens	71
C Appendix: RMS Application Installer Screens.....	75
D Appendix: Installer Silent Mode	83
Repeating an Installation Attempt.....	83

E Appendix: URL Reference	85
JDBC URL for a Database	85
LDAP Server URL.....	85
JNDI Provider URL for an Application	85
F Appendix: Common Installation Errors.....	87
Database Installer Hangs on Startup.....	87
Unreadable Buttons in the Installer	87
“Could not create system preferences directory” Warning	87
“Couldn't find X Input Context” Warnings	87
Unresponsive Country and Currency Drop-Downs.....	88
Couldn't exelc robot child process: Permission denied	88
ConcurrentModificationException in Installer GUI.....	89
FRM-30064: Unable to parse statement select while compiling fm_ituda.fmb	89
ORA-04031 (unable to allocate memory) error during database schema installation.....	89
X Error of failed request: BadWindow (invalid Window parameter)	90
RIB Errors.....	90
“Error Connecting to Database URL”	90
G Appendix: Application Deployment Method	91
H Appendix: Single Sign-On Resource Access Descriptors	93
I Appendix: AIX Shared Library Bug Fix	95
J Appendix: RMS RETL Instructions	97
Configuration	97
RETL	97
RETL user and permissions.....	97
K Appendix: Installation Order	99
Enterprise Installation Order.....	99

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

You can find more information about this product in these resources:

- *Oracle Retail Merchandising System Data Model*
- *Oracle Retail Merchandising System Online Help*
- *Oracle Retail Merchandising System Operations Guide*
- *Oracle Retail Merchandising System Release Notes*
- *Oracle Retail Merchandising System Reports User Guide*
- *Oracle Retail Merchandising System User Guide*
- *Oracle Retail Sales Audit User Guide*
- *Oracle Retail Trade Management User Guide*

See also:

- *Oracle Retail Merchandising Batch Schedule*
- *Oracle Retail Merchandising Implementation Guide*
- Oracle Retail Integration Bus documentation
- Oracle Retail Service Layer documentation
- Oracle Retail Extract, Transform, and Load documentation

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) or a later patch release (for example, 13.0.2). 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

Note: The RMS installer provides the option to configure multiple application deployment methods. See Appendix G: Application Deployment Method to help determine your deployment approach.

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 sparsity
- 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:

Supported on:	Versions Supported:
Database Server OS	<p>OS certified with Oracle Database 11gR1 Enterprise Edition. Options are:</p> <ul style="list-style-type: none"> ▪ Oracle Enterprise Linux 5 Update 2 (OEL 5.2) for Linux x86-64 ▪ AIX 6.1 TL1 ▪ Solaris 10 ▪ HP-UX 11.31 (Integrity)
Database Server	<p>Oracle Database 11g Release 1 Enterprise Edition (minimum 11.1.0.7 patchset required) with the following patches and components:</p> <p>Patches:</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 ORA-00600: internal error code, arguments: [k2vcbk_6], Database crashed during transaction recovery. <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 (Formerly the companion CD) <p>ANSI compliant C compiler (certified with OS and database version)</p> <p>Perl compiler 5.0 or later</p> <p>x-Windows interface</p>

Verify Single Sign-On

If a Single Sign-On is to be used, verify the Oracle Infrastructure Server 10g version 10.1.2.3 server 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:

Supported on:	Versions Supported:
Application Server OS	OS certified with Oracle Application Server 10g version 10.1.2.3. & Oracle Business Intelligence Publisher 10.1.3.4 Options are: <ul style="list-style-type: none"> ▪ Oracle Enterprise Linux 5 Update 2 (OEL 5.2) for Linux x86-64 ▪ AIX 6.1 TL1 ▪ Solaris 10 ▪ HP-UX 11.31 (Integrity)
Application Server	Oracle Business Intelligence Publisher 10.1.3.4 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

Check Web Browser and Client Requirements

General requirements for client running RMS include:

Requirement	Version
Operating system	Windows 2000 or XP
Display resolution	1024x768
Processor	Pentium processor (minimum 450 MHz)
Memory	minimum of 256 MB RAM
Sun JRE Plug-in	1.4.1+
Microsoft Internet Explorer	version 6.0 and higher

Supported Oracle Retail Products

Product	Version
Oracle Retail Active Retail Intelligence (ARI)	13.1.1
Oracle Retail Price Management (RPM)	13.1.1
Oracle Retail Allocation	13.1.1
Oracle Retail Invoice Matching (ReIM)	13.1.1
Oracle Retail Store Inventory Management (SIM)	13.1.1
Oracle Retail Warehouse Management System (RWMS)	13.1.1
Oracle Retail Data Warehouse (RDW)	13.1.1
Oracle Retail Predictive Application Server (RPAS)	13.0.4

Supported Oracle Retail Integration Technologies

Integration Technology	Version
Oracle Retail Extract, Transform and Load (RETL)	13.1
Oracle Retail Integration Bus (RIB)	13.1.1
Oracle Retail Service Layer (RSL)	13.1.1

Supported Oracle Applications

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.

Requirement	Version
Oracle E-Business Suite (General Ledger and Accounts Payable)	12.0.4 For support in implementing this integration, contact Oracle Customer Support and follow all typical Oracle Retail processes.

Verify RMS and SIM Inventory Adjustment Reason Codes

SIM and RMS must have the same inventory adjustment reason codes to work properly, with the exception of the Pending Reason Code, which is used for internal purposes only.

RAC and Clustering

The Oracle Retail Merchandising has been validated to run in two configurations on Linux:

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

The Oracle Retail products have been validated against a 11.1.0.7 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 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 be configured to reflect all application server Mid-Tier installations. Validation has been completed utilizing a RAC 11.1.0.7 Oracle Internet Directory database with the OAS 10.1.2 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 Real Application Clusters Administration and Deployment Guide 11g Release 1 (11.1) Part Number B28254-07

Patch Installation

The database portion of RMS can be upgraded from release 13.1 to release 13.1.1, or 13.0.2 to release 13.1.1. This guide details the steps needed to perform a patch installation of RMS. For additional information on the 13.1 upgrade, see the *Oracle Retail Upgrade Guide* (Doc ID 837368.1) at My Oracle Support (formerly MetaLink).

The Oracle Retail Upgrade Guide describes the approach that this Oracle Retail application takes for the upgrading process, as well as this product's upgrade assumptions and considerations.

The following chapters document the patch process:

- Chapter 4 RMS Database Installation – Patch
- Chapter 5 Batch Installation Tasks – Patch
- Chapter 6 Application Server Installation Tasks – Patch
- Chapter 7 RMS Reports Installation – Patch
- Chapter 8 Data Migration
- Chapter 9 WebServices Installation

RMS Database Installation—Patch

There are two different methods to use for installing the RMS 13.1.1 database schema patch. Option 1 uses the installer to apply the patch. Option 2 uses the patch controller scripts directly.

Note: The patching mechanism has been updated for the 13.1 release. Any patches that were released prior to 13.1 (For example, 13.0.1 and 13.0.2) will not be compatible with this installer. If you need to upgrade from 13.0.1 to 13.1.1, please use the 13.0.1 installer to apply the 13.0.2 patch, and the 13.1 installer to apply the 13.1.1 patch.

Option 1: Patch RMS Database using the Installer

The RMS 13.1 database schema installer may be used to apply the RMS 13.1.1 patch from either the 13.0.2 or 13.1 level. The installer should only be used to apply the patch if the schema being patched does not contain customizations or hotfixes. The patch may also be applied outside of the installer by calling the controller scripts directly. *See* Option 2: Patch RMS Database using Controller Scripts later in this chapter for details on this method.

In this section, STAGING_DIR refers to the location where the RMS 13.1 database schema installer was originally expanded. The installer files from the original RMS 13.1 installation can be re-used or a new directory can be created with a fresh copy of the RMS 13.1 database schema installer.

Before you apply the RMS 13.1.1 patch:

- Make a backup of all your objects and database schema.
- Determine that either RMS 13.0.2 or RMS 13.1 is installed.
- Review the enclosed RMS 13.1.1 Release Notes (rms-1311-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).

Create Staging Directory for RMS Database Schema Files

1. Log into the database server as oretail.
2. Create a staging directory for the MOM 13.1.1 Patch. There should be a minimum of 70 MB disk space available in this location.
3. Copy the mom-dbpatch.zip file from the RMS 13.1.1 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 180 MB disk space available in this location.
6. Copy the rms13dbschema.zip file from the RMS 13.1 release to the staging directory. This is referred to as STAGING_DIR when upgrading a database schema.

7. Change directories to STAGING_DIR and extract the rms13dbschema.zip file. This creates an rms/dbschema subdirectory under STAGING_DIR.

13.0.2 to 13.1.1 Database Patching Steps

You will need to perform the following steps only if you are applying the 13.1.1 Patch to a RMS 13.0.2 schema. If applying the 13.1.1 Patch to a RMS 13.1 schema skip to the section titled “Run the RMS Database Schema Installer”.

Grant Permissions to RMS schema

The RMS schema will need certain privileges granted to it. Log into the database as SYSTEM with sqlplus and grant these privileges by running the following command:

```
SQL> grant create job to <RMS schema>;
```

Replace <RMS schema> with the name of your RMS schema.

Update RMS 13.1 Database Installer

The RMS 13.1 Database installer needs an update to be able to apply the RMS 13.1.1 patch to an RMS 13.0.2 schema.

Copy the DB_PATCH_DIR/build.xml file to STAGING_DIR/rms/dbschema/.

Edit controller ksh scripts

1. Change directories to DB_PATCH_DIR/mom-dbpatch.
2. For each product you are going to patch, edit the corresponding <product>_controller.ksh.

If you edit rms_controller.ksh, you must also edit rpm_controller.ksh and vice versa. alloc_controller.ksh and alloc_rms_controller.ksh must both be edited if patching Allocation. To edit these files, open up <product>_controller.ksh, and uncomment the each of the sections that perform the 13.1 and 13.1.1 patches. For example:

```
#echo "Running RMS 13.1 controller"
#cd ./13.1/rms/
#./rms_controller.ksh DBO N
#STATUS=$?
#if [ $STATUS -eq 1 ];
#then
#  exit 1
#fi

#echo "Running RMS 13.1.1 controller"
#cd ../../13.1.1/rms/
#./rms_controller.ksh DBO N
#STATUS=$?
#if [ $STATUS -eq 1 ];
#then
#  exit 1
#fi
```

Should be edited to:

```
echo "Running RMS 13.1 controller"
cd ./13.1/rms/
./rms_controller.ksh DBO N
STATUS=$?
if [ $STATUS -eq 1 ];
then
  exit 1
```

```

fi

echo "Running RMS 13.1.1 controller"
cd ../../13.1.1/rms/
./rms_controller.ksh DBO N
STATUS=$?
if [ $STATUS -eq 1 ];
then
    exit 1
fi

```

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.

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 F: 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 13.1.1 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 a Patch page for each product, provide the path to the corresponding controller ksh script. If you are going from 13.1 to 13.1.1, this path will be `DB_PATCH_DIR/mom-dbpatch/<product>`. If you are going from 13.0.2 to 13.1.1, this will be `DB_PATCH_DIR/mom-dbpatch`. This directory should contain a `<product>_controller.ksh` file (for example, `rms_controller.ksh`), which the installer runs to apply the RMS 13.1.1 Patch.
8. After the installer is complete, you can check its log file: `rms-install-dbschema.<timestamp>.log`.

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

```
chmod 600 ant.install.properties
```

Option 2: Patch RMS Database using Controller Scripts

While the installer can be used to apply the entire RMS database patch, there are situations in which it is better to run the patch directly with the scripts released in the patch. The installer calls start-all ksh scripts named `<product>_controller.ksh` which run 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 13.1.1 patch:

- Make a backup of all your objects and database schema.
- Determine that either RMS 13.0.2 or RMS 13.1 is installed.
- Review the enclosed RMS 13.1.1 Patch Release Notes (`rms-1311-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).

Create Staging Directory for RMS Database Schema Files

1. Log into the database server as `oretail`.
2. Create a staging directory for the MOM 13.1.1 Patch. There should be a minimum of 70 MB disk space available in this location.
3. Copy the `mom-dbpatch.zip` file from the RMS 13.1.1 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`

13.0.2 to 13.1.1 Database Patching Steps

You will need to perform the following step only if you are applying the 13.1.1 Patch to a RMS 13.0.2 schema. If applying the 13.1.1 Patch to a RMS 13.1 schema skip to the section titled “Run the RMS Database Controller Scripts”.

Grant Permissions to RMS schema

The RMS schema will need certain privileges granted to it. Log into the database as SYSTEM with sqlplus and grant these privileges by running the following command:

```
SQL> grant create job to <RMS schema>;
```

Replace <RMS schema> with the name of your RMS schema.

Run the RMS Database Controller Scripts

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. For each product and version you want to patch, configure the individual controller.cfg files. To do this:
 - Copy DB_PATCH_DIR/mom-dbpatch/<version>/<product>/templates/controller.cfg to DB_PATCH_DIR/mom-dbpatch/<version>/<product>/controller.cfg
 - Open the controller.cfg file you just created and replace the tokens for the following variables with the appropriate values:
 - i. Export PATCH_DIR=DB_PATCH_DIR/mom-dbpatch/<version>/<product>
 - ii. export SCHEMA_OWNER=<The name of the RMS schema>
 - iii. export MMUSER=<The name of the schema to Patch >
 - For RMS, RPM, ReIM, and Alloc_RMS, this will be the RMS schema
 - For Alloc, this will be the Allocation schema
 - iv. export PASSWORD=<password for the MMUSER schema>
 - v. export ORACLE_SID=<SID for the database the MMUSER schema resides in>
6. The patches should be run in the following order: RMS, RPM, ReIM, Alloc_RMS, and Allocation. If you are patching from 13.0.2, you need to run the patches under DB_PATCH_DIR/mom-dbpatch/13.1 and DB_PATCH_DIR/mom-dbpatch/13.1.1. If you are patching from 13.1, you only need to apply the patches under

DB_PATCH_DIR/mom-dbpatch/13.1.1. The Alloc controller is used to apply the necessary Allocation patch to the Allocation schema, while the Alloc_RMS controller is used to apply the necessary Allocation patch to the RMS schema. While you can choose not to run any of the patches, all of the non-RMS patches depend on the RMS patch being run. If you patch RMS you should also patch RPM; there is also a dependency between Alloc_RMS/Alloc. For each product you wish to patch, cd to DB_PATCH_DIR/mom-dbpatch/<version>/<product> and run the following commands:

```
For RMS run: $ ./rms_controller.ksh DBO N
For RPM run: $ ./rpm_controller.ksh DBO Y
For ReIM run: $ ./reim_controller.ksh DBO Y
For Alloc_rms run: $ ./alloc_controller.ksh DBO Y
For Allocation run: $ ./alloc_rms_controller.ksh DBO Y
```

Note: The controllers should be run in this order.

7. If the installation fails for any of the patches before completion, look at the logs in the DB_PATCH_DIR/mom-dbpatch/<version>/<product>/error and DB_PATCH_DIR/mom-dbpatch/<version>/<product>/log directories to determine the source of the error. You can continue the patch by rerunning the <product>_controller.ksh file, but only if the files generated in the DB_PATCH_DIR/mom-dbpatch/<version>/<product>/processed directory from the last patch attempt are still there. Any scripts that ran previously will be skipped. If you wish to start a new patch, delete all files in the DB_PATCH_DIR/mom-dbpatch/<version>/<product>/processed directory.

Batch Installation Tasks—Patch

There are two different methods to use for installing the RMS 13.1.1 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 13.1 Batch installer was originally expanded. The installer files from the original RMS 13.1 installation can be re-used or a new directory can be created with a fresh copy of the RMS 13.1 application installer.

Before you apply the RMS 13.1.1 Batch patch:

- Make a backup of all your Batch files.
- Review the enclosed RMS 13.1.1 Patch Release Notes (rms-1311-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 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 13.1.1 Batch Patch. There should be a minimum of 10 MB disk space available in this location.
3. Copy the rms1311batchpatch.zip file from the RMS 13.1.1 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 rms1311batchpatch.zip file. This creates batch/lib, batch/proc, RETLforRDW, and RETLforReSA 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 13.1 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/RETLforReSA to STAGING_DIR/rms/batch/rms13/RETLforReSA.

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:

```
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. 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.

Variable	Description	Example
DISPLAY	Address and port of X server on desktop system of user running install. Optional for batch installer	DISPLAY=<IP address>:0 export DISPLAY

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 F: Common Installation Errors for more details.
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]
```

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`.

See Appendix J of this document for more information about RETL.

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.

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 13.1.1 Batch Patch. There should be a minimum of 10 MB disk space available in this location.
3. Copy the `rms1311batchpatch.zip` file from the RMS 13.1.1 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 `rms1311batchpatch.zip` file. This creates `batch`, `RETLforRDW`, `RETLforReSA` 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 13.1.1 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

HP:

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

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 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:
make -f retek.mk -r depend 2>&1 | tee libdpnd.log
 - For other platforms use:
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:
make -f retek.mk -r retek rms resa 2>&1 | tee libretek.log
 - For other platforms use:
make -f retek.mk retek rms resa 2>&1 | tee libretek.log
 Check the libretek.log file for errors
5. To install batch libraries:
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.
 - a. Run one of the following commands:
 - For Oracle Enterprise Linux use:
make -f mts.mk -r depend 2>&1 | tee srcdpnd.log
 - For other platforms use:
make -f mts.mk depend 2>&1 | tee srcdpnd.log
 - b. Check the srcdpnd.log file for errors.
4. Create batch programs.
 - a. Run the following commands in the order stated.

- For Oracle Enterprise Linux use:

```
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/RETLforReSA` to `INSTALL_DIR/RETLforReSA`.

Application Server Installation Tasks—Patch

There are two different methods to use for installing the RMS 13.1.1 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 13.1 application installer was originally expanded. The installer files from the original RMS 13.1 installation can be re-used or a new directory can be created with a fresh copy of the RMS 13.1 application installer.

Before you apply the RMS 13.1.1 patch:

- Make a backup of all your forms and library files.
- Review the enclosed RMS 13.1.1 Patch Release Notes (rms-1311-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 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 application installation software. There should be a minimum of 200 MB disk space available in this location.
3. Copy the file rms1311apppatch.zip from the RMS 13.1.1 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 rms1311apppatch.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 500 MB disk space available in this location.
6. Copy the file rms13appserver.zip from the RMS 13.1 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.
3. Copy APP_PATCH_DIR/webhelp/rms-help.ear to STAGING_DIR/rms/application/rms13/online-help/

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.

Variable	Description	Example
ORACLE_HOME	The location where Oracle Application Server 10g (10.1.2.2) has been installed.	ORACLE_HOME= /u00/webadmin/product/OAS/myversion/midtier export ORACLE_HOME
ORACLE_SID	The database/SID where the RMS schema resides	ORACLE_SID=mydb
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. Required for forms application installer	DISPLAY=<IP address>:0 export DISPLAY

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/10.1.2.3_FULL/midtier/Apache/Apache/conf/httpd.conf
/u00/webadmin/product/10.1.2.3_FULL/midtier/forms/java/oracle/forms/registry/Regis
try.dat
/u00/webadmin/product/10.1.2.3_FULL/midtier/forms/server/formsweb.cfg
/u00/webadmin/product/10.1.2.3_FULL/midtier/forms/admin/resource/US/fmrweb.res
/u00/webadmin/product/10.1.2.3_FULL/midtier/forms/admin/resource/US/fmrweb.res_utf
8.res
Have the Oracle administrator copy everything in
/projects/rmsse/con/installs/app/post
to /u00/webadmin/product/10.1.2.3_FULL/midtier to update the files,
and then restart the application server for the changes to take effect.

example: cp -R * /u00/webadmin/product/10.1.2.3_FULL/midtier
```

Resolving Errors Encountered During Application Installation

In the event a form or menu does not compile, go to `<INSTALL_LOCATION>/base/error` and see which objects did not compile. To try and manually recompile the object run `<INSTALL_LOCATION>/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.

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 application installation software. There should be a minimum of 200 MB disk space available in this location.
3. Copy the file rms1311apppatch.zip from the RMS 13.1.1 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 rms1311apppatch.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
 - 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/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**
 - 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 Enterprise 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.

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):

- message45.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 form 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:


```
> 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 form forms from `INSTALL_DIR/base/forms/bin`; the following syntax will leave all reference forms (`fm_*.fmb`) in the bin directory, while removing all other forms:


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

Create a New OC4J Instance for Webhelp

The RMS Webhelp application must be deployed to its own dedicated OC4J instance. For instructions on how to create a new OC4J instance, see *Creating OC4J Instances on the Application Tier* in the *Installing and Configuring the myJ2EECompany Application Infrastructure* chapter of the *Oracle Application Server Enterprise Deployment Guide*.

1. Log into the server which is running your RMS installation. Set your `ORACLE_HOME` environment variable to point to this installation.
2. Choose a name for the new OC4J instance.

Example: `rms-help`

3. Create this OC4J instance as documented in the *Oracle Application Server Enterprise Deployment Guide*.

4. Start the OC4J instance. You can do this through the Enterprise Manager web interface, or on the command line using the opmnctl utility:

Example: `$ORACLE_HOME/opmn/bin/opmnctl @cluster startproc ias-component=rms-help`

5. Verify that the OC4J group was fully started. If you are using the Enterprise Manager web interface, the instance should have a green arrow indicating that it is running. On the command line, verify that the instance has a status of “Alive”.

Example: `$ORACLE_HOME/opmn/bin/opmnctl status`

Update Helpfile Installation

1. Log into the Enterprise Manager for the 10.1.2 OAS instance to which online help will be installed.

The screenshot displays the Oracle Enterprise Manager 10g Application Server Control interface. The main content area shows the 'System Components' section with a table of instances. The 'rms_help_instance' is highlighted in blue. The table includes columns for Name, Status, Start Time, CPU Usage (%), and Memory Usage (MB).

Select Name	Status	Start Time	CPU Usage (%)	Memory Usage (MB)
<input type="checkbox"/> Forms	↑	May 2, 2009 8:32:33 AM	0.00	0.00
<input type="checkbox"/> home	↑	May 2, 2009 8:32:33 AM	0.00	66.86
<input type="checkbox"/> HTTP_Server	↑	May 2, 2009 8:12:32 AM	0.21	192.89
<input type="checkbox"/> OC4J_BI_Forms	↑	May 2, 2009 8:32:33 AM	0.00	118.77
<input type="checkbox"/> OC4J_Portal	↑	May 2, 2009 8:32:33 AM	0.00	215.73
<input type="checkbox"/> Portal_portal	↑	N/A	N/A	N/A
<input type="checkbox"/> Reports_Server_rep_mspdev89_1012_MIDTIER	↑	N/A	N/A	N/A
<input type="checkbox"/> rms_help_instance	↑	May 2, 2009 8:32:33 AM	0.00	56.53
<input type="checkbox"/> rms_help_instance	↑	May 2, 2009 8:32:33 AM	0.00	72.77
<input type="checkbox"/> Web Cache	↑	May 2, 2009 8:12:32 AM	0.00	67.25
<input type="checkbox"/> Management	↑	May 2, 2009 8:12:08 AM	0.52	234.66

2. Click on the OC4J instance to which online help will be deployed. In this example `rms_help_instance` is being used.

Oracle Enterprise Manager 10g
Application Server Control

Home > Application Server 1012_MIDTIER.mspsdev89.us.oracle.com >
OC4J: rms_help_instance

Page Refreshed Jun 1, 2009 12:06:43 PM

General

Status **Up**
Start Time **May 2, 2009 8:32:03 AM**
Virtual Machines **1**

JDBC Usage

Open JDBC Connections **0**
Total JDBC Connections **0**
Active Transactions **0**
Transaction Commits **0**
Transaction Rollbacks **0**

Status

CPU Usage (%) **0.02**
Memory Usage (MB) **56.53**
Heap Usage (MB) **4.17**

Response - Servlets and JSPs

Active Sessions **0**
Active Requests **1**
Request Processing Time (seconds) **0.005**
Requests per Second **0.07**

Response - EJBs

Active EJB Methods **0**
Method Execution Time (seconds) **0.00**
Method Execution Rate (per second) **0.00**

Related Link [All Metrics](#)

Home Applications Administration

Copyright © 1996, 2005, Oracle. All rights reserved.
About Oracle Enterprise Manager 10g Application Server Control

Logs | Topology | Preferences | Help

3. Click on the applications tab.

Oracle Enterprise Manager 10g
Application Server Control

Home > Application Server 1012_MIDTIER.mspsdev89.us.oracle.com >
OC4J: rms_help_instance

Page Refreshed Jun 1, 2009 12:07:14 PM

Default Application Name **default**
Default Application Path **application.xml**

Deployed Applications

Select Name	Path	Parent Application	Active Requests	Request Processing Time (seconds)	Active EJB Methods
No applications deployed					

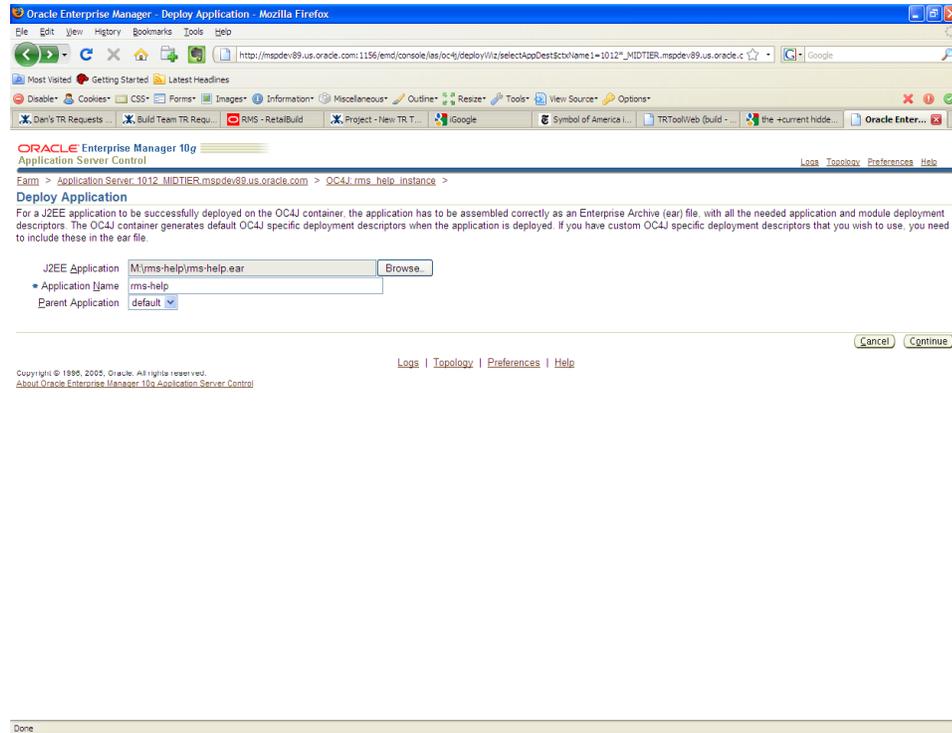
Home Applications Administration

Copyright © 1996, 2005, Oracle. All rights reserved.
About Oracle Enterprise Manager 10g Application Server Control

Logs | Topology | Preferences | Help

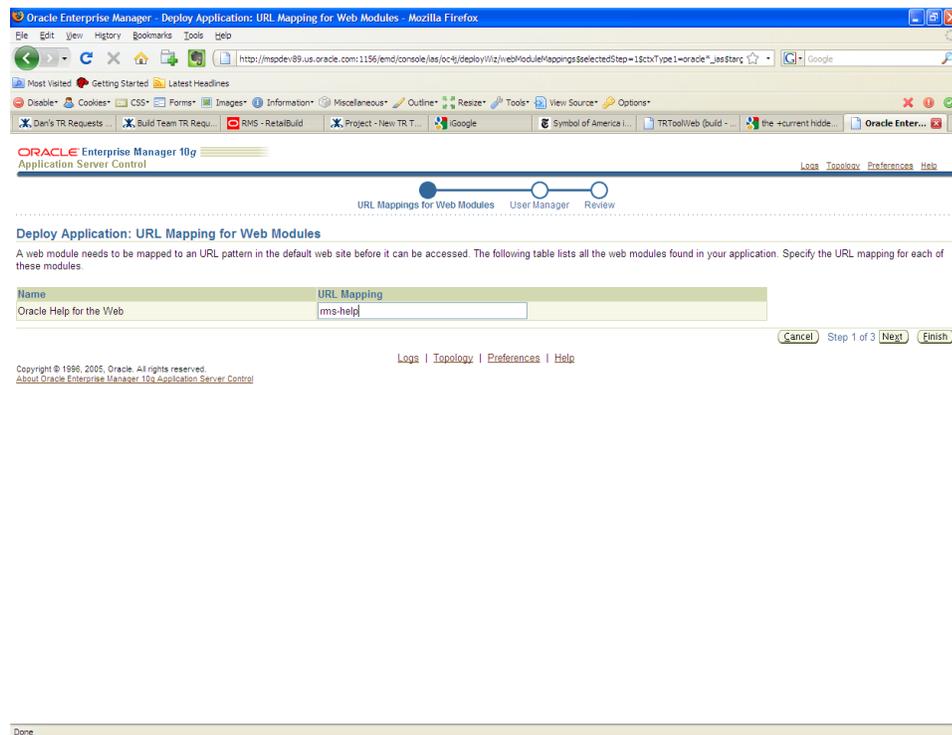
http://mspsdev89.us.oracle.com:1156/nd/console/as/oc4j/deploy/viz/selectAppDest?ctxName=1012*_MIDTIER.mspsdev89.us.oracle.com&farm=1012*_MIDTIER.mspsdev89.us.oracle.com&target=1012*_MIDTIER.mspsdev89.us.oracle.com

- Click the **Deploy EAR File** button.
- Click in the box entitled **J2EE Application** and browse to APP_PATCH_DIR/webhelp/rms-help.ear the ear file that will be deployed.
- Enter **rms-help** for the application name, and click Continue.

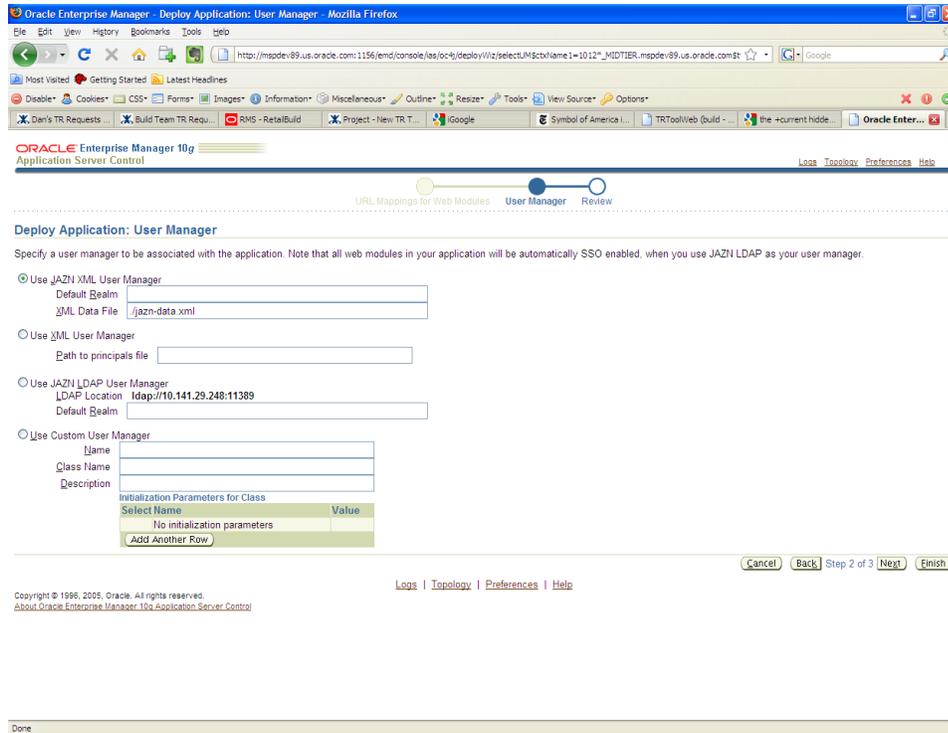


7. Enter **rms-help** in the URL-mapping text box. This sets the context root for the online help files. Click Next.

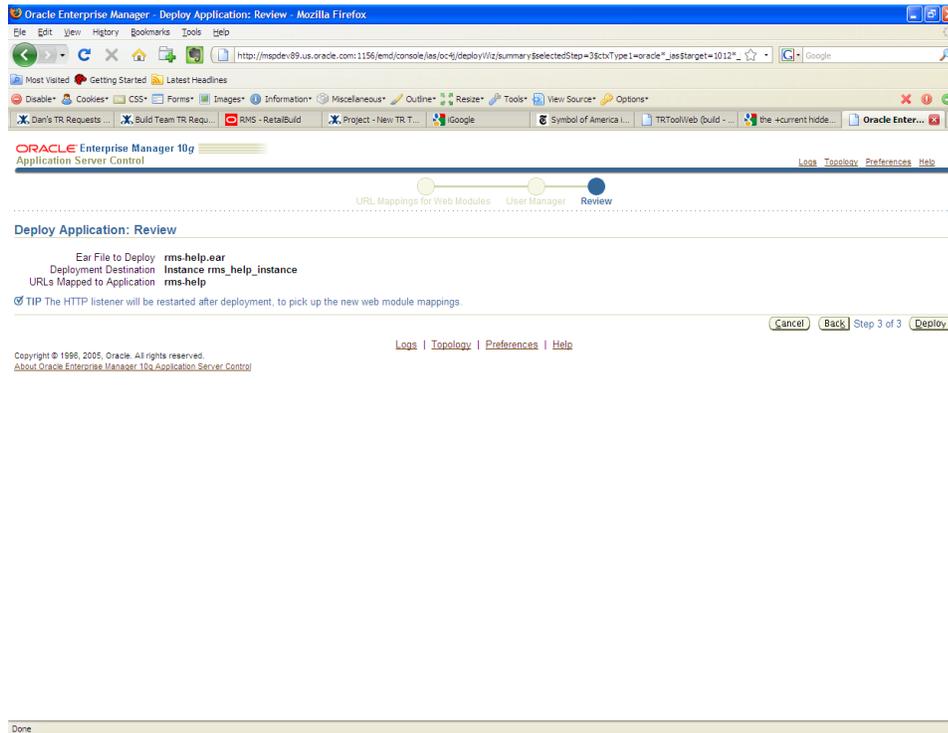
Note: Using anything other than **rms-help** will prevent the rms application from accessing the help files



8. Leave the default values in place, and click Next.



9. Review the deployment properties, and click Deploy.



A progress screen will appear while the application is being deployed.

10. When the ear file has been successfully deployed, click OK.

RMS Reports Installation—Patch

RMS Reports are included in the RMS Application patch: rms1311apppatch.zip in the reports directory. To install the reports files, copy them from the RMS application patch APP_PATCH_DIR/reports to the reports directory created during RMS installation.

Data Migration

Included in the 13.1.1 release is a tool responsible for upgrading preexisting data in the RMS schema once 13.1 database upgrades are executed. If upgrading from 13.0.2, you will need to run this tool to upgrade your data after completing the 13.1.1 Database patch. If you already ran this Data Migration tool during the previous 13.1 release, you do not need to run it again.

Before running the RMS 13.1 Data Migration Tool:

- Make a backup of all your objects and database schema.
- Check that RMS has at least 13.1 installed.
- Review the enclosed RMS 13.1.1 Patch Release Notes (rms-1311-rn.pdf).

Configure RMS Data Migration Tool

1. Change directories to DB_PATCH_DIR/mom-dbpatch/13.1/rms.
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. If there is an existing controller.cfg in DB_PATCH_DIR/mom-dbpatch/13.1/rms/ from a previous running of the 13.1 upgrade and its contents are still valid, it can be reused. Otherwise, copy DB_PATCH_DIR/mom-dbpatch/13.1/rms/templates/controller.cfg to DB_PATCH_DIR/mom-dbpatch/13.1/rms/.

Open the controller.cfg file you just created and replace the tokens for the following variables with the appropriate values:

- a. Export PATCH_DIR=DB_PATCH_DIR/mom-dbpatch/13.1/<product>
- b. export SCHEMA_OWNER=<The name of the RMS schema>
- c. export MMUSER=<The name of the RMS schema>
- d. export PASSWORD=<password for the MMUSER schema>
- e. export ORACLE_SID=<SID for the database the MMUSER schema resides in>
6. Configure the following files in the DB_PATCH_DIR/mom-dbpatch/13.1/rms/files directory with data from your existing RMS schema for the migration. Use the existing files as templates for how this data should be formatted.

Note: For descriptions of this data, refer to the RMS 13.1 Data Model document (rms-131-dm.pdf).

▪ **store.dat**

store.dat is used to update the time zone for a given store. To populate store.dat, use the query

```
select store || '|' || 'EST' from store;
```

And modify the time zone “EST” to represent the correct time zone for each store. You should retain the header “STORE|TIMEZONE_NAME” as it is in the sample store.dat.

▪ **elc_comp.dat**

elc_comp.dat is used to update the system generated indicator for comp_id. To populate elc_comp.dat, use the query

```
select comp_id || '|' || 'Y' from elc_comp;
```

You should retain the header “COMP_ID|SYSTEM_GENERATED_IND” as it is in the sample elc_comp.dat.

▪ **system_options.dat**

This updates the RMS system options (system_options). Replace the default values in the template system_options.dat file with the correct values for your schema. You should not update the first column.

▪ **sa_system_options.dat**

This updates the sales audit system options (sa_system_options). Replace the default values in the template sa_system_options.dat file with the correct values for your schema. You should not update the first column.

▪ **ce_comp_min_max.dat**

This inserts a new table “ce_comp_min_max.” Replace the values in the template ce_comp_min_max.dat file with the correct values for your schema. You should retain the header “COUNTRY_ID|COMP_ID|MIN_AMT|MAX_AMT|CURRENCY_CODE” as it is in the sample ce_comp_min_max.dat.

7. If the item_supp_country table contains a high volume of rows (i.e. more than 500,000 rows), follow these steps:

- a. Enter the item, supplier, manufacturing country id and primary_manu_country_ind into a spreadsheet.
- b. Have your tech team load the data manually from the spreadsheet to upg_item_manu_country table. The load strategy will depend on the recommendation of the tech person, but Oracle highly recommends SQL Loader.

Otherwise, run the following insert statement into your RMS schema manually. You can modify the default values if necessary. If the item_supp_country table contains a high volume of rows, it is not advisable to run this insert query:

```
insert into upg_item_supp_manu_country select item,supplier,origin_country_id,primary_country_ind from item_supp_country;
```

Run the RMS Data Migration Tool

1. Change directories to `DB_PATCH_DIR/mom-dbpatch/13.1/rms`.
2. If rerunning the data migration process, clear the contents of the “processed” directory.
3. Run prevalidation tool. This ensures that the input files for the data migration tool are up to date:

```
$ ./rms_controller.ksh PREVALIDATION
```
4. Run migration tool.

```
$ ./rms_controller.ksh UPGRADE
```
5. Run migration cleanup tool. This removes temporary data migration objects from the database.

```
$ ./rms_controller.ksh CLEANUP
```
6. Refer to the files in the “log” and “error” dir for details if there are problems during migration.
7. You need to rebuild synonyms for any additional RMS users. See the chapter “Set up Additional RMS Users” for instructions on creating these synonyms.

Configure ReIM Data Migration Tool

If you choose to migrate ReIM data, follow these steps:

1. Change directories to `DB_PATCH_DIR/mom-dbpatch/13.1/reim`.
2. If there is an existing `controller.cfg` in `DB_PATCH_DIR/mom-dbpatch/13.1/reim/` from a previous running of the 13.1 upgrade and its contents are still valid, it can be reused. Otherwise, copy `DB_PATCH_DIR/mom-dbpatch/13.1/reim/templates/controller.cfg` to `DB_PATCH_DIR/mom-dbpatch/13.1/reim/`

Open the `controller.cfg` file you just created and replace the tokens for the following variables with the appropriate values:

- a. `export PATCH_DIR=DB_PATCH_DIR/mom-dbpatch/13.1/<product>`
- b. `export SCHEMA_OWNER=<The name of the RMS schema>`
- c. `export MMUSER=<The name of the RMS schema>`
- d. `export PASSWORD=<password for the MMUSER schema>`
- e. `export ORACLE_SID=<SID for the database the MMUSER schema resides in>`

Run the ReIM Data Migration Tool

1. Change directories to `DB_PATCH_DIR/mom-dbpatch/13.1/reim`.
2. If rerunning the data migration process, clear the contents of the “processed” directory.
3. Run migration tool.

```
$ ./reim_controller.ksh UPGRADE
```
4. Run migration cleanup tool. This removes temporary data migration objects from the database.

```
$ ./reim_controller.ksh CLEANUP
```
5. Refer to the files in the “log” and “error” dir for details if there are problems during migration.

6. You will need to rebuild synonyms for any additional RMS users. Create synonyms to the owner schema for all tables, views, sequences, functions, procedures, packages and types that the user has access to.

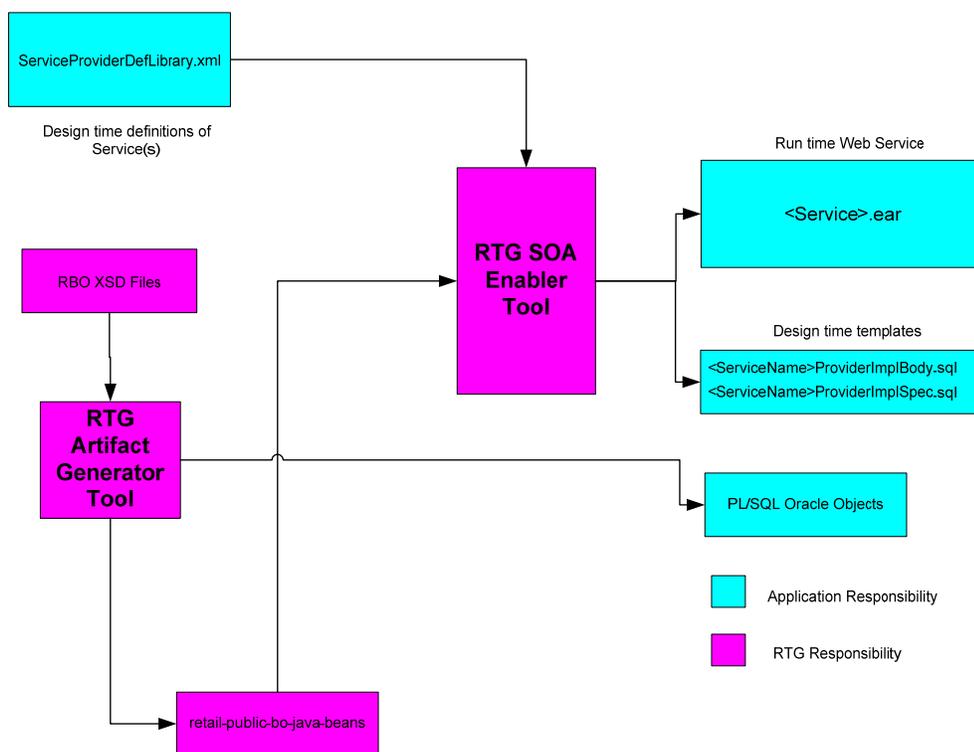
Web Services Installation

Overview

Some Oracle Retail applications; <app> (for example, RMS) use Oracle Objects for the PL/SQL API's. The tool generates a Web Service Provider layer between the external clients and the <app> API's to provide the Web Service functionality, such as faults, logging, and security, as well as the conversion from xml payloads to Oracle Objects.

The Retail Service Enabler (RSE) tool creates the appropriate Provider web service endpoints as well as templates for the PL/SQL API's.

RSE Tool - PL/SQL Provider Service



Example Contents of an <app>_PLSQLServiceProvider.zip

Extract Web Services Files

1. Create a directory under the Batch `INSTALL_DIR` to hold the webservices files. This will be referred to as 'Web Service Objects'.
2. Copy the `rms1311webservices.zip` file from the RMS 13.1.1 release to `INSTALL_DIR/'Web Service Objects'`.
3. Unzip `rms1311webservices.zip` from `INSTALL_DIR/'Web Service Objects'`.

Setup Environment

4. 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
```

5. 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
MMUSER	RMS schema owner	MMUSER=RMS13 export MMUSER
PASSWORD	Password for the RMS schema owner	PASSWORD=<RMS13 password> export PASSWORD

Drop Existing Java Code from RMS Database Schema

If you have an existing Web service installation in the RMS schema, you will need to drop the Java code from it before continuing.

```
dropjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v missing.jar dbwsclient.sws.jar
dbwsclient102.jar
```

```
dropjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v GetDrillBackForwardURLConsumer.jar
```

```
dropjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v
ProcessGLAccountValidationRetailReqABCSImplConsumer.jar
```

If you encounter errors while dropping the Java, drop the individual classes.

```
Example: dropjava -u
           $MMUSER/$PASSWORD@$ORACLE_SID
           oracle/retail/integration/services/consumer/G
           etURLWS/runtime/SourceSystem_Encoder
```

Loading Java Code to the RMS Database Schema

Web service installation involves loading java code to the RMS database schema itself. Perform the following procedures to load java code to the RMS database schema.

1. Increase ORACLE initialization parameter JAVA_POOL_SIZE. 150MB is recommended.
2. Run the following commands:


```
cd INSTALL_DIR/'Web Service Objects'/Consumer/lib

loadjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v -r -f missing.jar
dbwsclientsws.jar dbwsclient102.jar
```
3. Make sure the step above completes with 0 errors. If you encounter errors, run the following command, correct the error, and then repeat the steps above.


```
dropjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v missing.jar dbwsclientsws.jar
dbwsclient102.jar
```
4. Change the contents of the following files to your RMS schema owner name when seeing the value <USER>.
 - INSTALL_DIR/'Web Service Objects'/Consumer/sql/GetDrillBackForwardURLConsumer_grant.sql
 - INSTALL_DIR/'Web Service Objects'/Consumer/sql/ProcessGLAccountValidationRetailReqABCSImplConsumer_grant.sql

Example: Change all occurrence of <USER> to RMS schema owner RMS01 in the files below:

```
dbms_java.grant_permission( '<USER>',
'SYS:java.lang.RuntimePermission', 'setFactory', '' )

to

dbms_java.grant_permission( 'RMS01',
'SYS:java.lang.RuntimePermission', 'setFactory', '' )
```

5. Run the above files as the database sys user.
6. Perform the following commands to load java to the database:


```
cd ../jars

loadjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v -r -f
GetDrillBackForwardURLConsumer.jar
```
7. Make sure the step above completes with 0 errors. If you encounter errors, run the following command, correct the error, and then repeat the step above.


```
dropjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v
GetDrillBackForwardURLConsumer.jar
```
8. Perform the following commands to continue loading java to the database:


```
loadjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v -r -f
ProcessGLAccountValidationRetailReqABCSImplConsumer.jar
```
9. Make sure the step above completes with 0 errors. If you encounter errors, run the following command, correct the error, and then repeat the step above.


```
dropjava -u $MMUSER/$PASSWORD@$ORACLE_SID -v
ProcessGLAccountValidationRetailReqABCSImplConsumer.jar
```

You do NOT create synonyms to each java object loaded as the synonyms were created in packages previously loaded pointing to the exposed java objects.

10. Run the following scripts to drop existing Web Service Objects. You can ignore error messages from these scripts.

- `INSTALL_DIR/ 'Web Service Objects' /Consumer/sql/GetDrillBackForwardURLConsumer_drop.sql`
- `INSTALL_DIR/ 'Web Service Objects' /Consumer/sql/ProcessGLAccountValidationRetailReqABCSImplConsumer_drop.sql`

11. Run the following against \$MMUSER:

- `INSTALL_DIR/ 'Web Service Objects' /Consumer/sql/GetDrillBackForwardURLConsumer_create.sql`
- `INSTALL_DIR/ 'Web Service Objects' /Consumer/sql/ProcessGLAccountValidationRetailReqABCSImplConsumer_create.sql`
- `INSTALL_DIR/ 'Web Service Objects' /Provider/sql/PayTermServiceProviderImplSpec.sql`
- `INSTALL_DIR/ 'Web Service Objects' /Provider/sql/ReportLocatorServiceProviderImplSpec.sql`
- `INSTALL_DIR/ 'Web Service Objects' /Provider/sql/SupplierServiceProviderImplSpec.sql`

Web Service installation Process – WebLogic

There are two ways of installing the web service application, one using the WebLogic administration console and the other using the autodeployment mechanism.

The following steps are performed in the installation:

- Meet or verify the prerequisites.
- Creating a domain for the application to run in.
- Deploy the rms-service.ear to the WebLogic instance..

Common Steps for both Administration Console and Autodeployment Mechanism Process

Prerequisites

- WebLogic server is installed and domain has been created to host the application.

Note: Every .ear file or ejb-jar file which contains the services should be deployed on its own weblogic instance. To avoid confusion the recommended naming convention for the WebLogic instance is the .ear file name with the extension `_wls_instance`, Eg - If the ear file name is rms-service.ear then the instance name would be rms-service_wls_instance

- The rms-service.ear file has been extracted from the above rms1311webservices.zip file

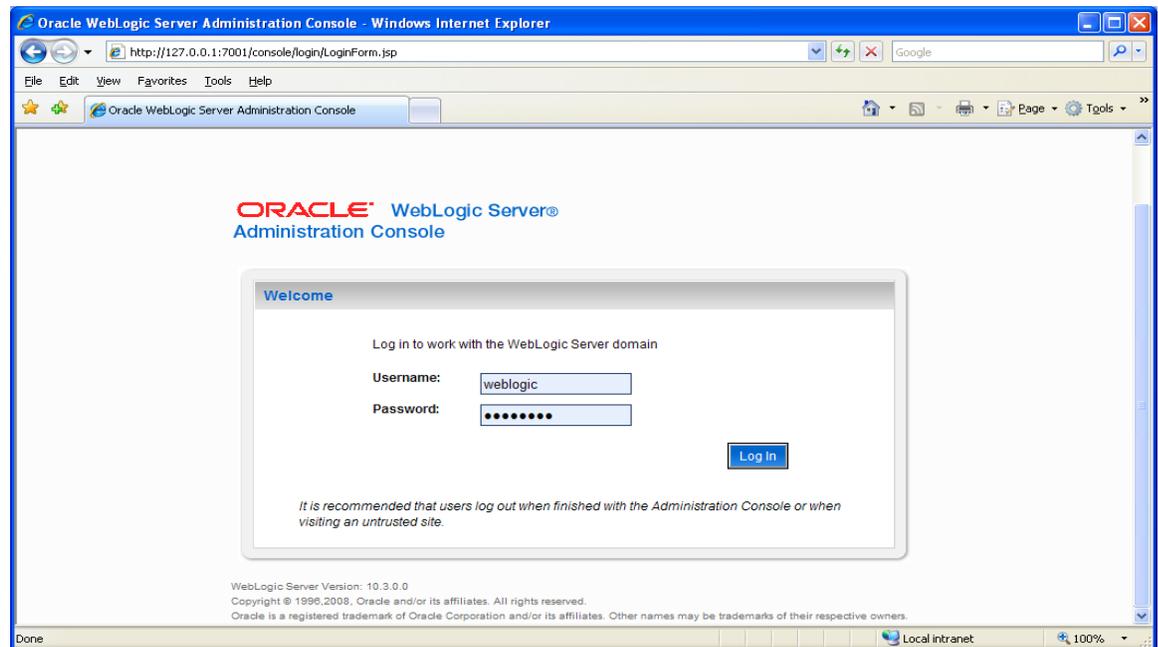
Creating a new domain in WebLogic 10.3

- The details of creating new WebLogic domains can be found in the WebLogic documentation here:

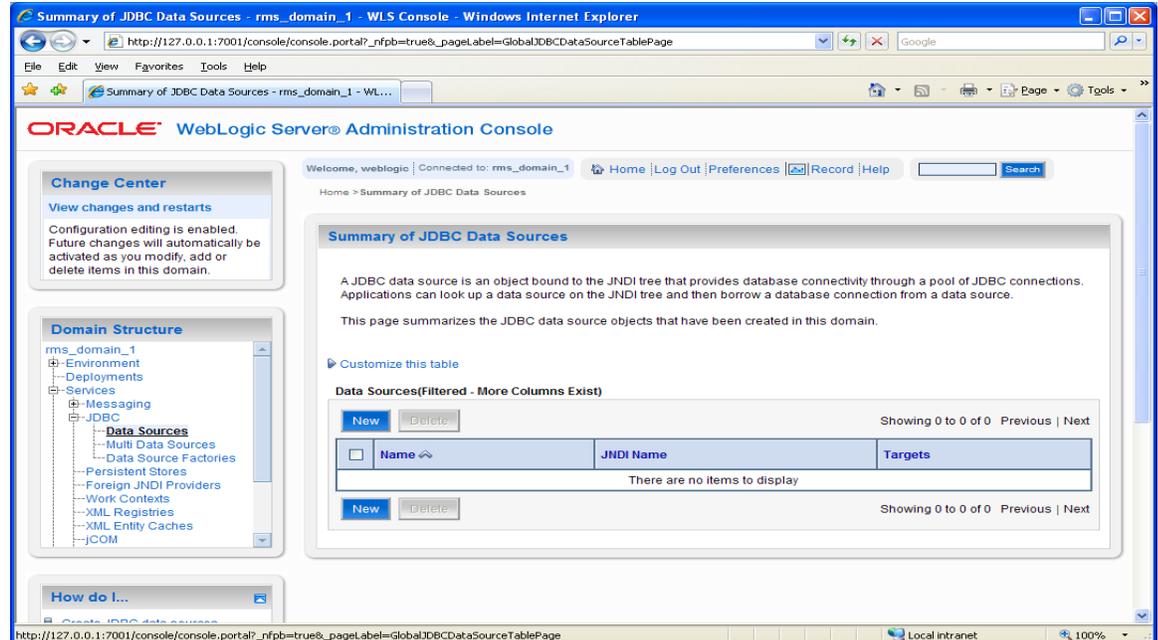
<http://edocs.bea.com/common/docs103/configwiz/newdom.html>

Creating a JDBC data source in WebLogic 10.3

1. Login to the Weblogic administration console. Use the URL `http://<host>:<listen port>/console/login/LoginForm.jsp`.

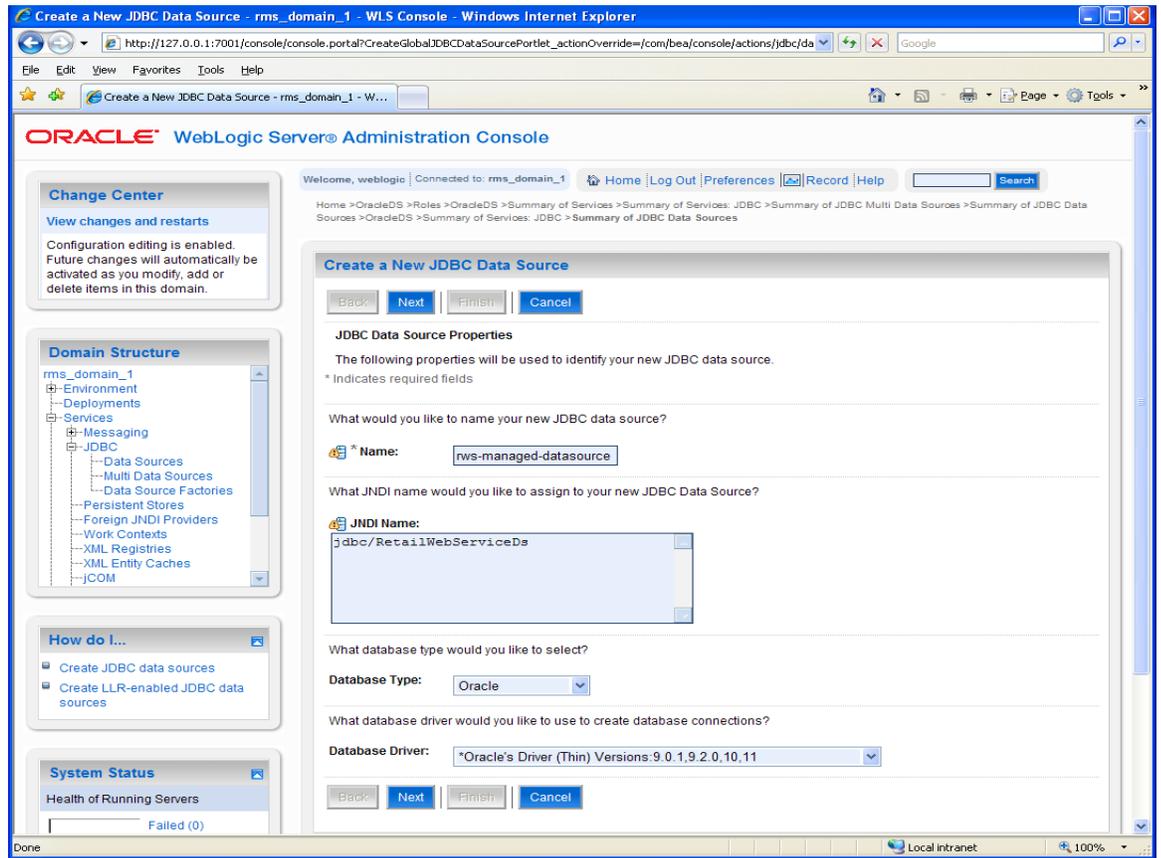


2. Navigate the domain structure tree to Services/JDBC/Data Sources.

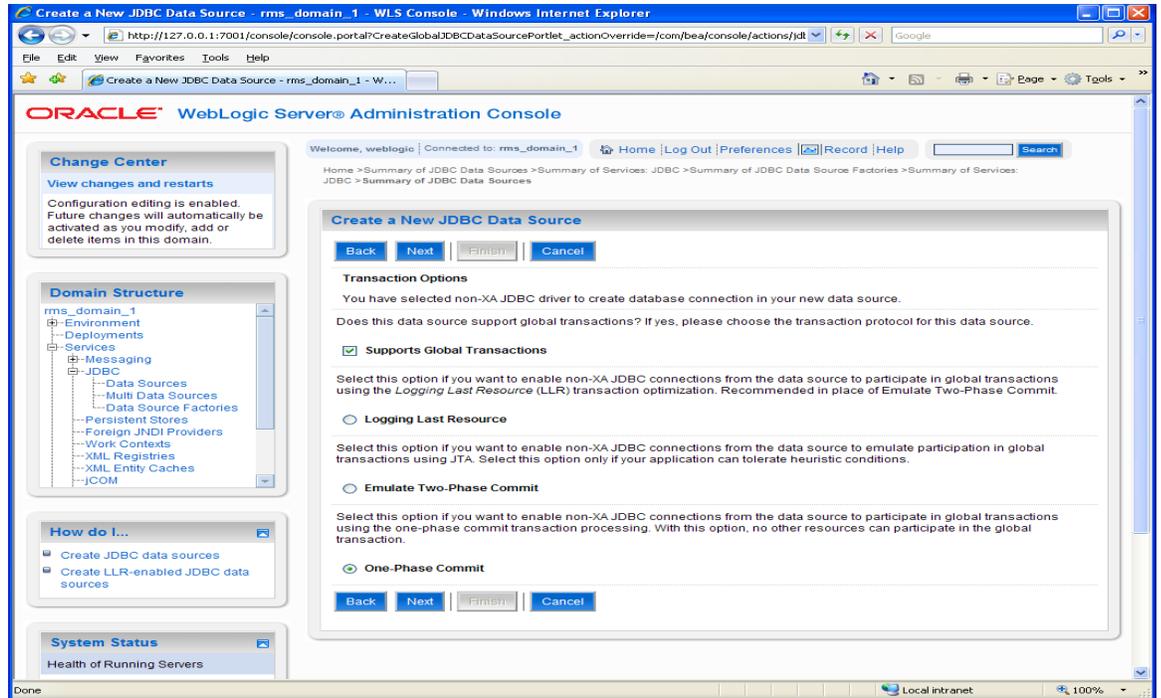


3. Click the New button to start creating the new Data Source. Enter the required information. You may choose any name for the data source in the Name field..

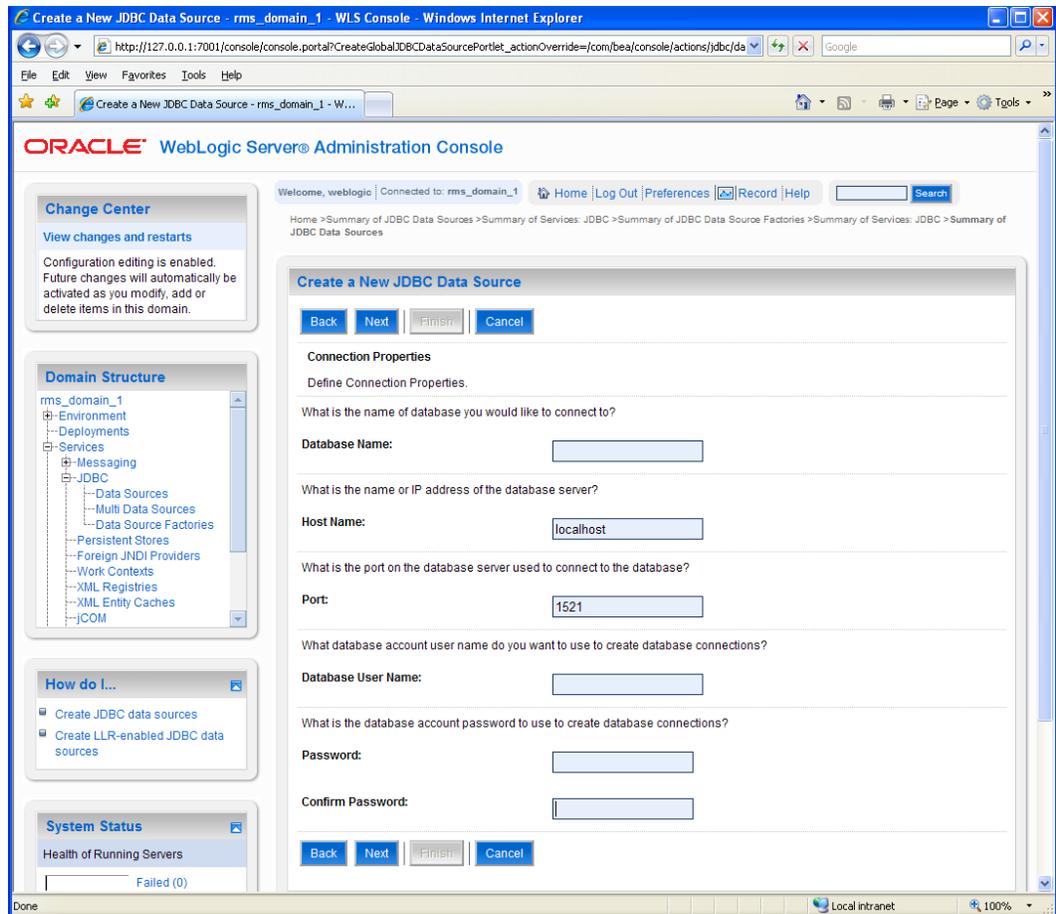
Note: The JNDI name must be set to “jdbc/RetailWebServiceDs”. The generated code for the service will use this JNDI name to lookup the data source



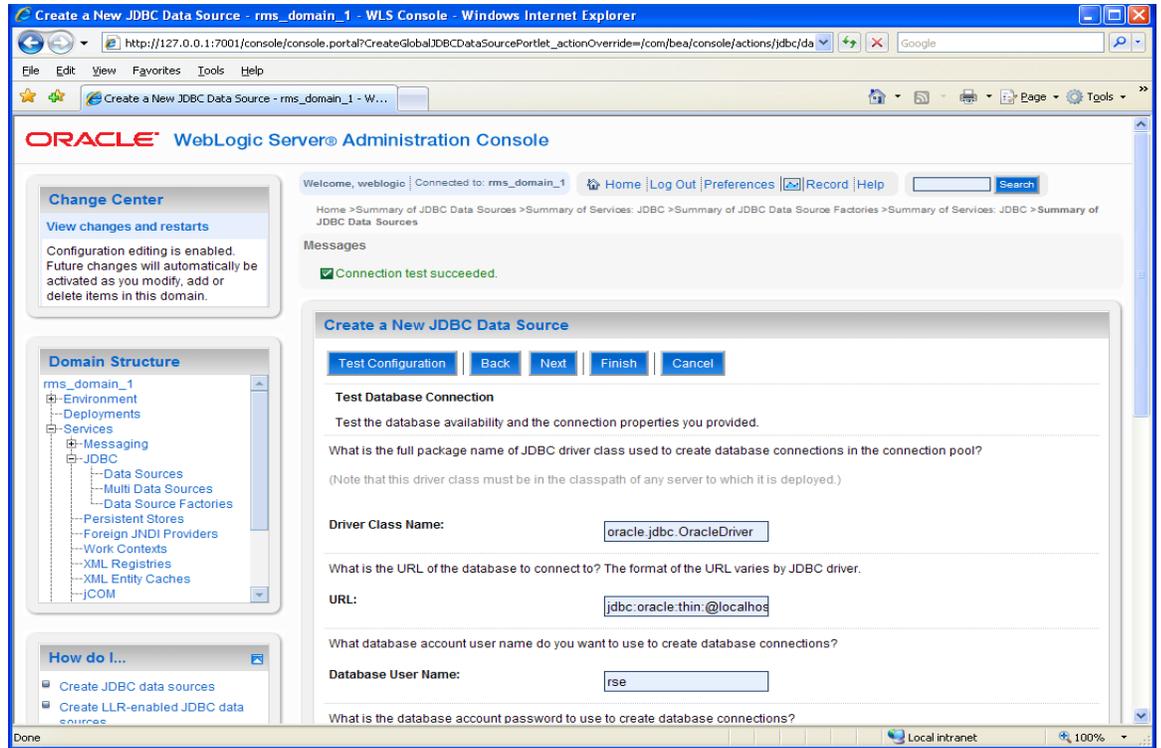
4. Select the transaction options for your data source and click Next.



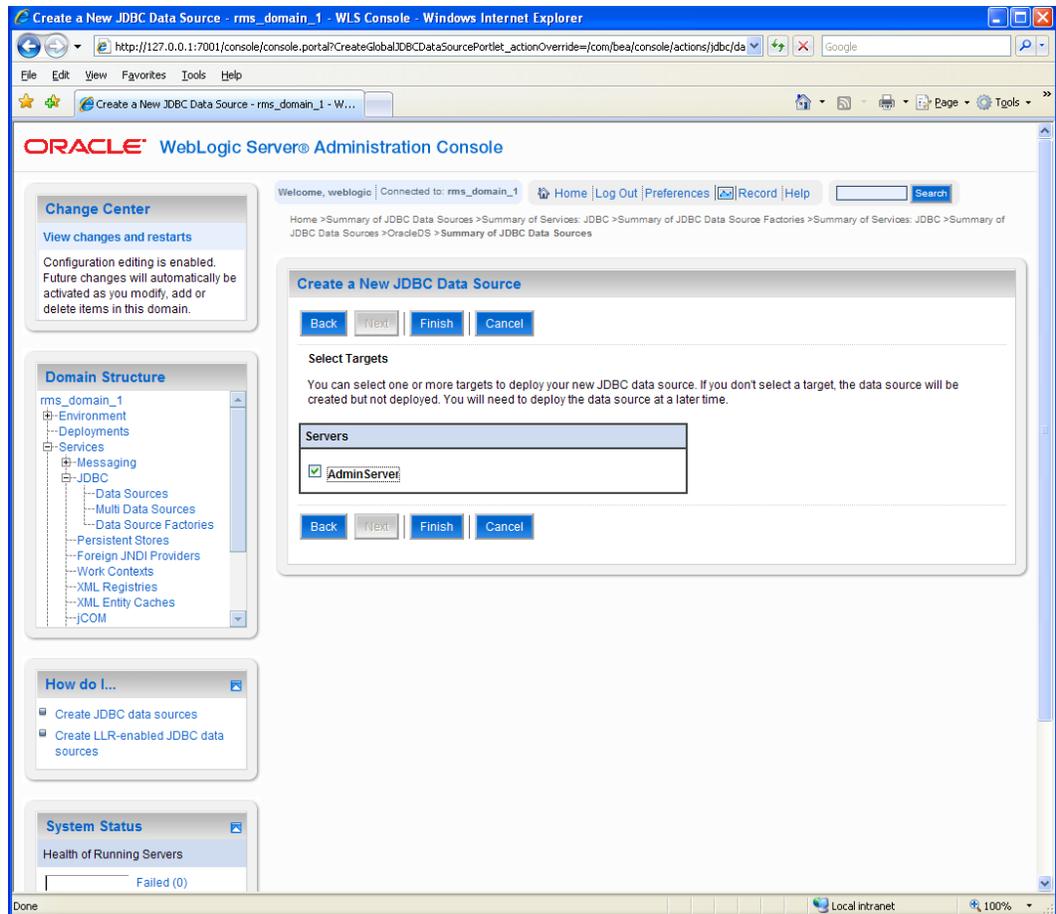
5. Enter the database name and user information for your data source and click Next.



6. This screen will display the connection information for your data source. Use the Test Configuration button to ensure the connection information is correct. You will see a message "Connect test succeeded" if everything is correct.



7. Click the Next button and select a server to deploy the data source to. This is not necessary at this point if you want to deploy the data source to a server at a later time.

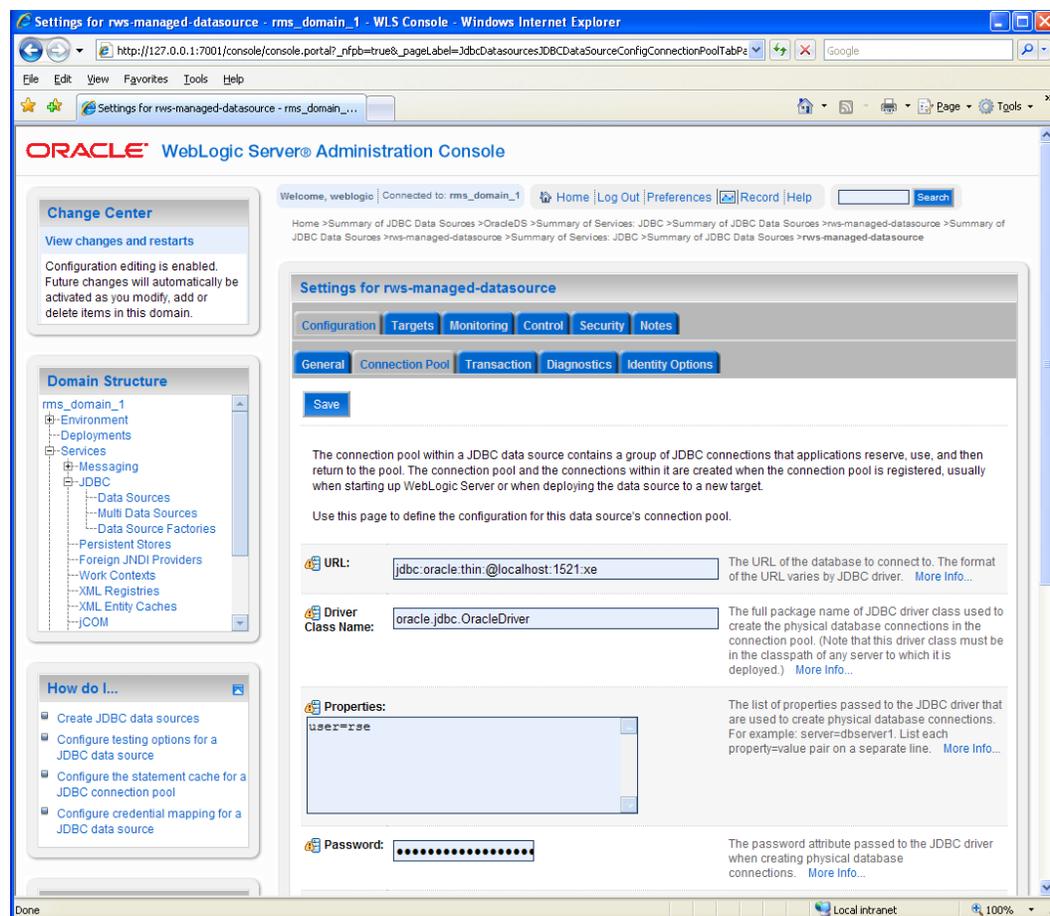


8. Click the Finish button to complete the data source setup. This will display the data sources page, and the new data source will be present.

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area is titled "Summary of JDBC Data Sources". It includes a "Change Center" on the left, a "Domain Structure" tree, and a "System Status" section. The central panel shows a message: "All changes have been activated. No restarts are necessary." Below this, there is a table of data sources:

Data Sources(Filtered - More Columns Exist)		
Name	JNDI Name	Targets
rws-managed-datasource	jdbc/RetailWebServiceDs	AdminServer

- Click on the new data source to see its properties page. You will see that a default connection pool is created for the data source. Click the Connection Pool tab to view the connection pool properties.



10. Here you will see the generated JDBC connection URL for the data source. The Oracle URL is of the format (`jdbc:oracle:thin:@<hostname>:<port>:<sid>`).

Example: `jdbc:oracle:thin:@localhost:1521:orc`

11. If the database is a RAC database the URL should be in the following format `jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=<host>)(PORT=<port>)))(ADDRESS=(PROTOCOL=TCP)(HOST=<host>)(PORT=<port>))(LOAD_BALANCE=yes))(CONNECT_DATA=(SERVICE_NAME=<sid>))`).

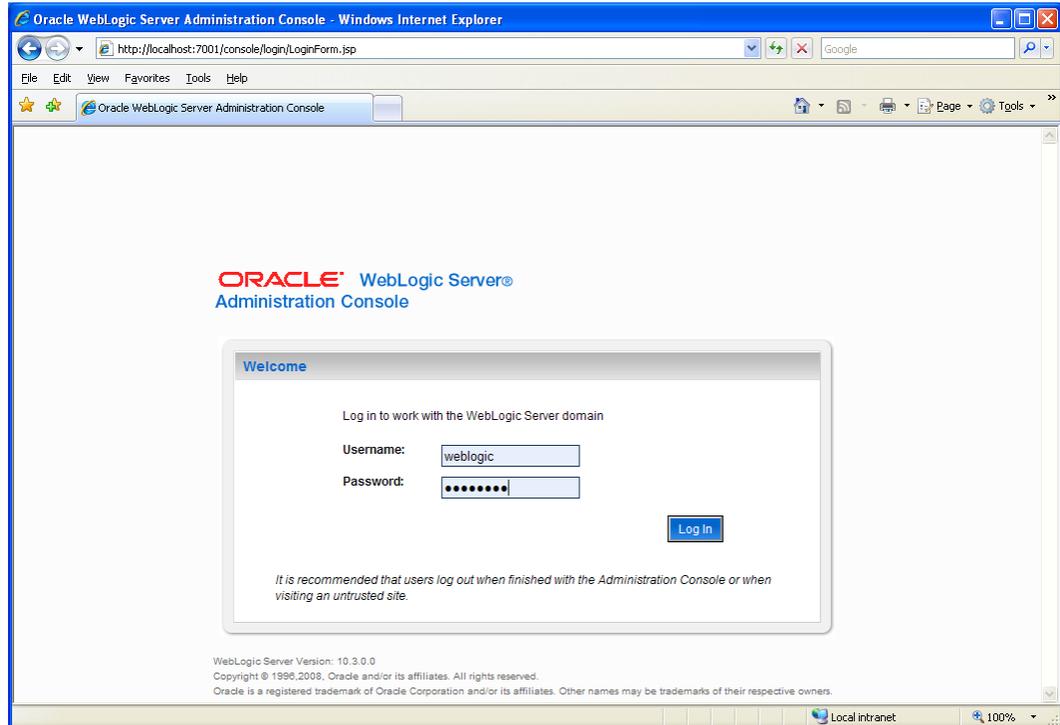
Example: `jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=mspvip72)(PORT=1521))(ADDRESS=(PROTOCOL=TCP)(HOST=mspvip73)(PORT=1521))(LOAD_BALANCE=yes))(CONNECT_DATA=(SERVICE_NAME=dvolr02))`

12. In the configuration > connection pool tab of the data source, set the values for following properties:
- **Initial capacity:** Set the value to 20 connections. This value should be increased or decreased based on the expected load on the server.
 - **Maximum capacity:** Set the value to 100 connections. This value should be increased or decreased based on the expected load on the server.
 - **Capacity Increment:** Set the value to 20 connections. This value should be increased or decreased based on the expected load on the server.

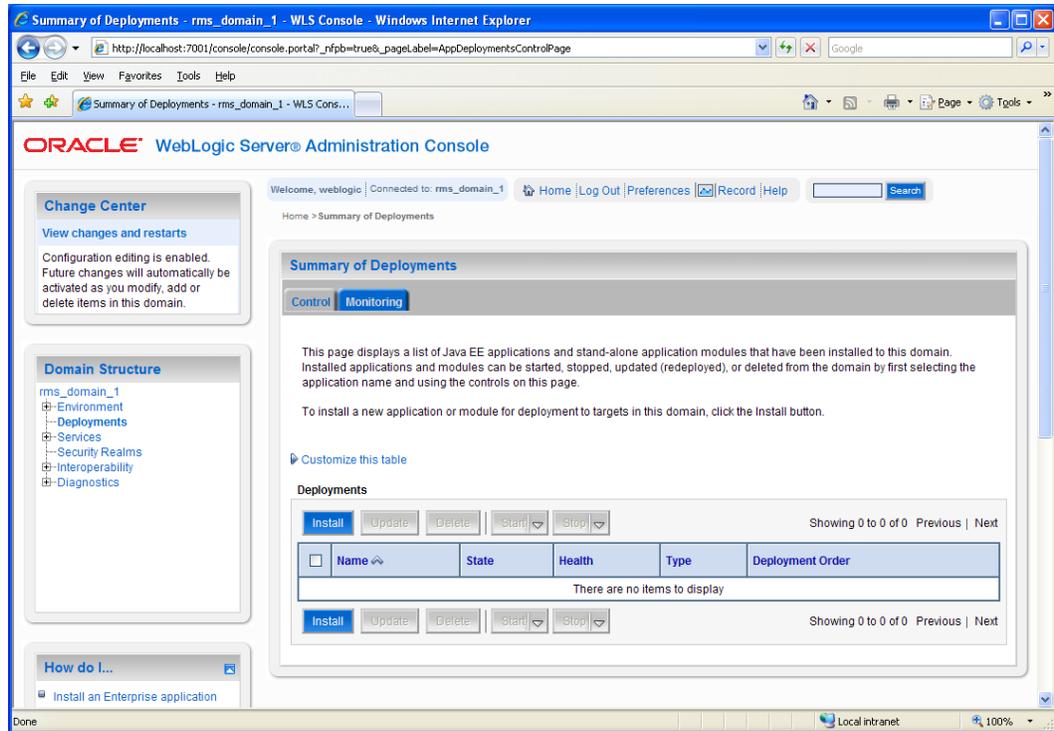
- **Inactive Connection Timeout:** This property is available in the advanced section of the connection pool configuration. Set the value of this property to 60 seconds.
- **Remove Infected Connections Enabled:** This check box must be unchecked.

WebLogic 10.3 Administration Console Installation Process

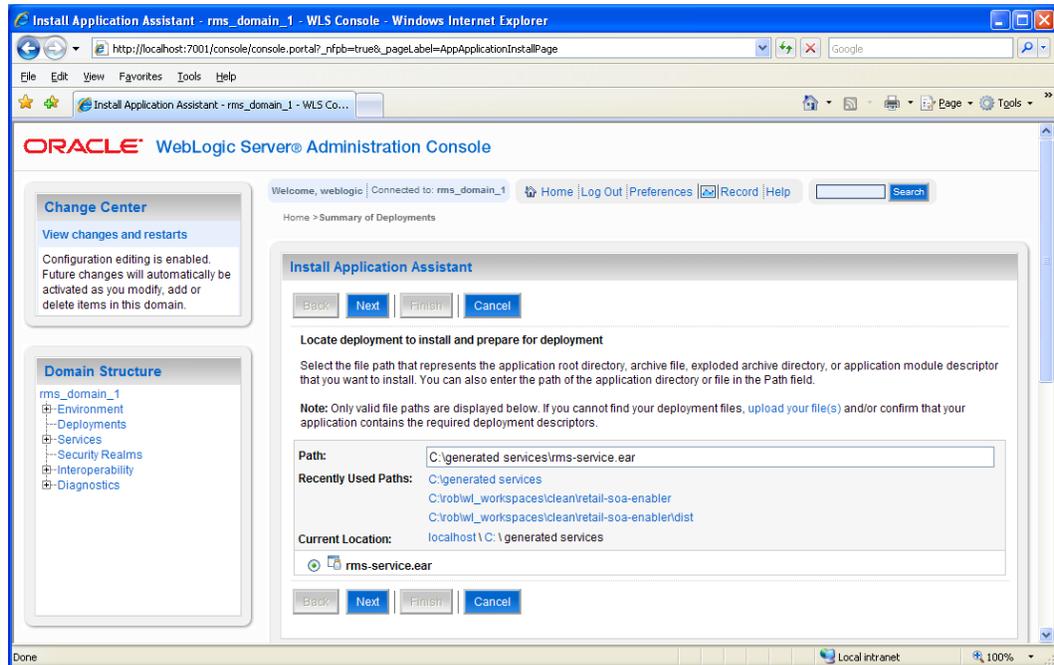
1. Login to the administration console using the URL `http://<host>:<listen port>/console/login/LoginForm.jsp`.



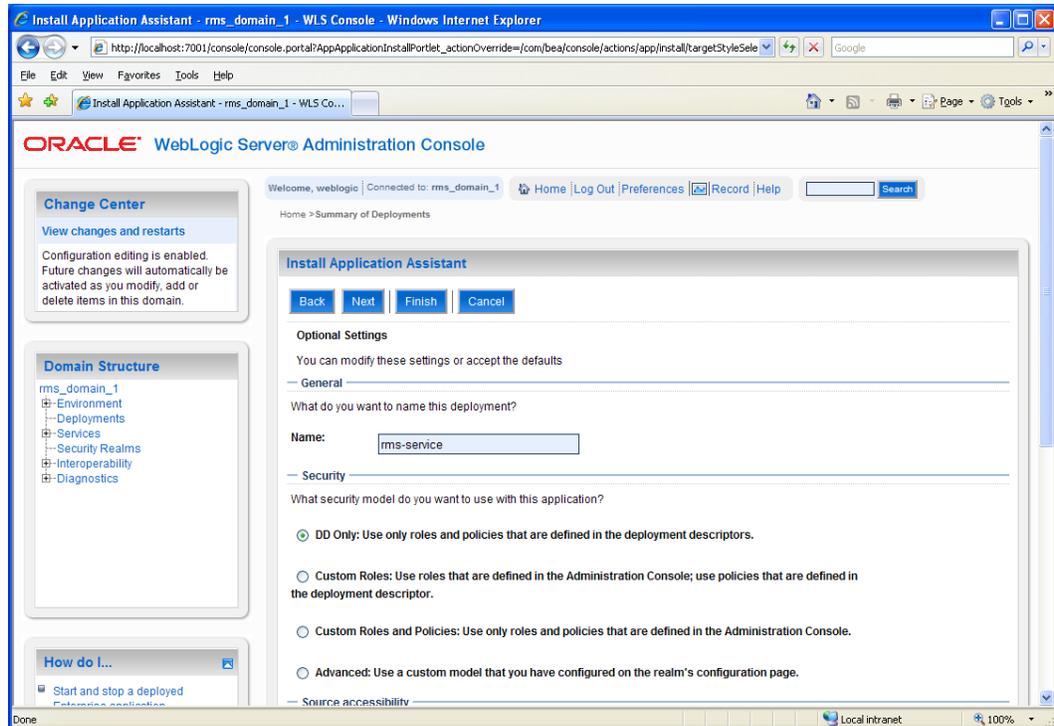
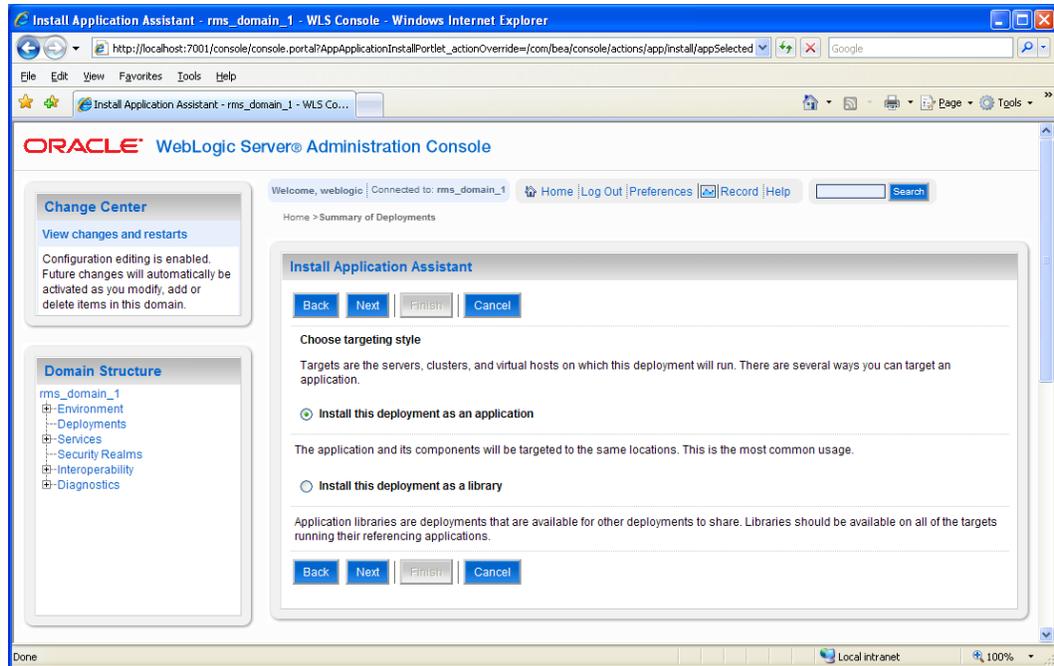
2. Click on the the Configure Applications link to get to the deployments page



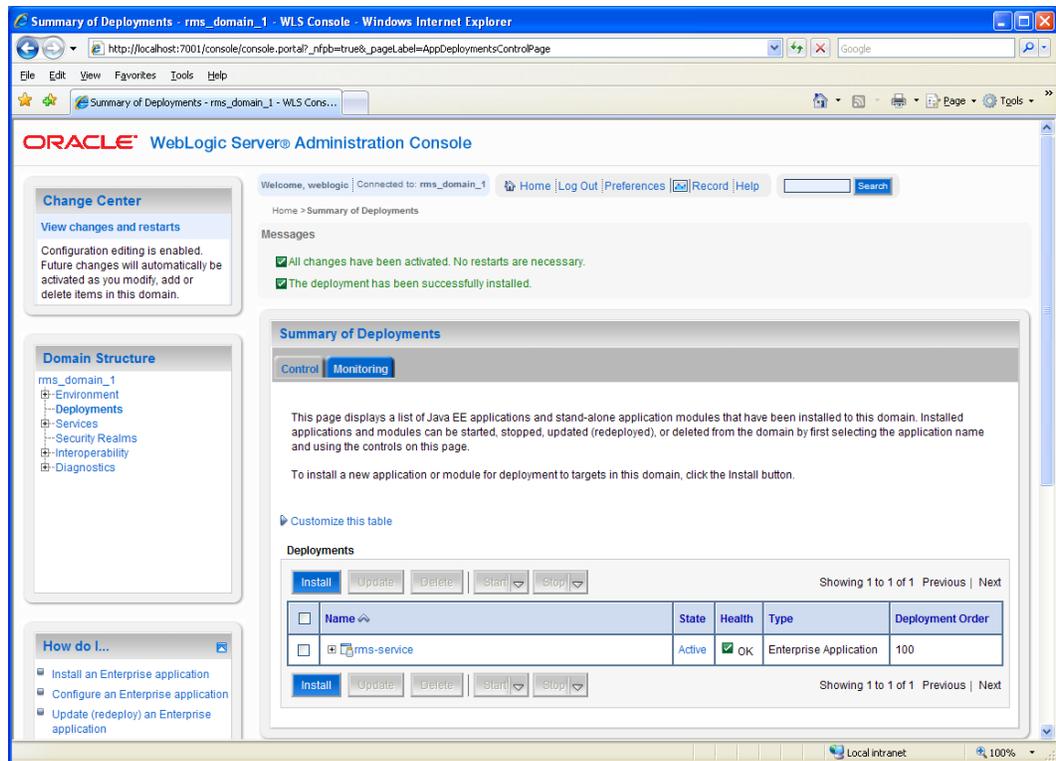
3. Click on the Install button and navigate to the directory containing the .ear file.



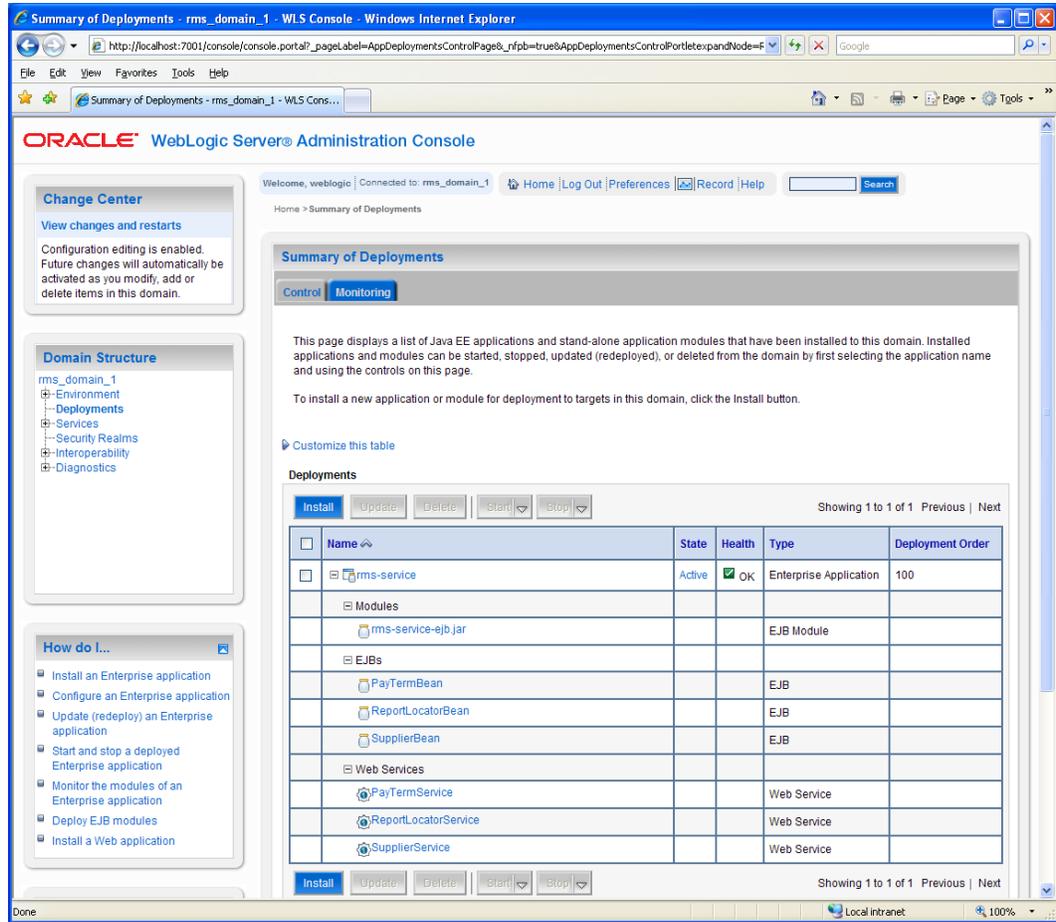
4. Click on the Next button. Verify that Install as an application is selected. Click Next again.



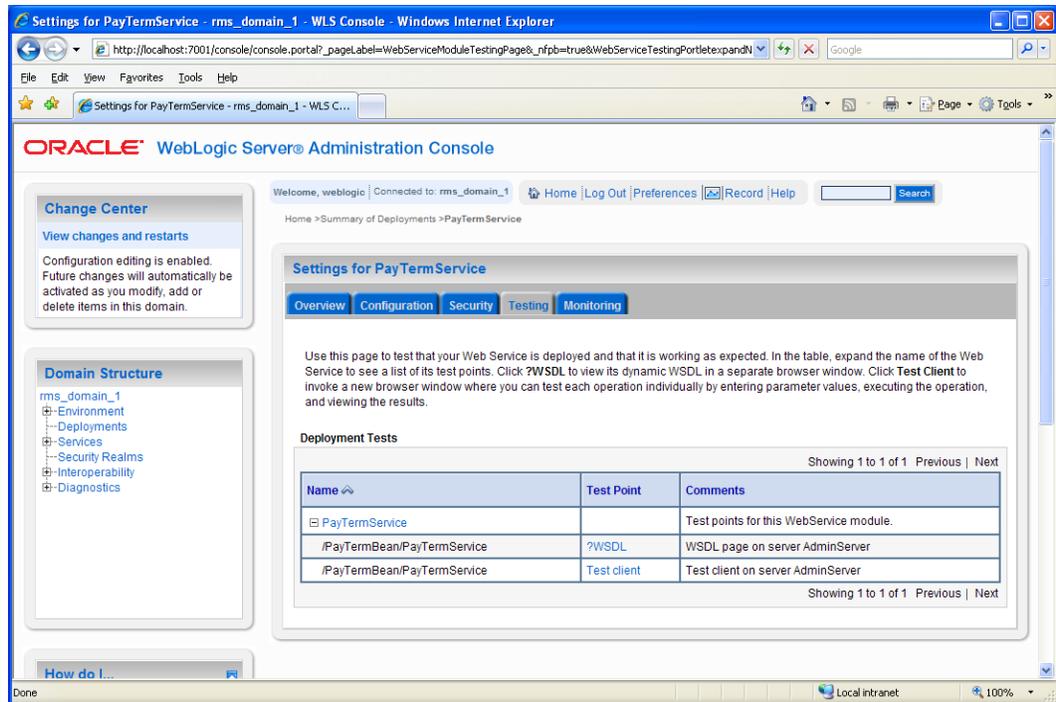
5. Click Finish to deploy the application. The application should now be deployed.
6. Restart the weblogic instance.



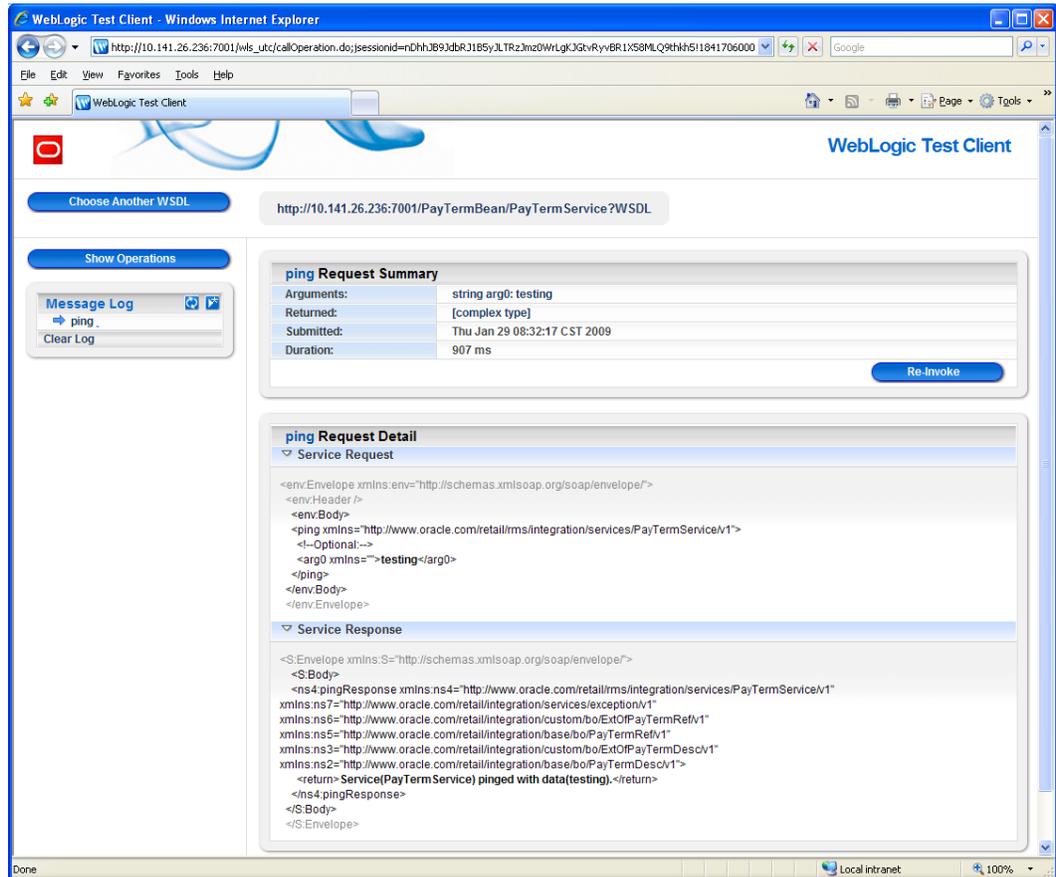
7. Expand the deployment tree, and verify the EJBs and Web Services



- Click on the link for one of the services. Then click the Testing tab and expand the service tree. You will see options to view the Dynamically generated WSDL being used, and a Test Client for the service. Click the Test Client link.



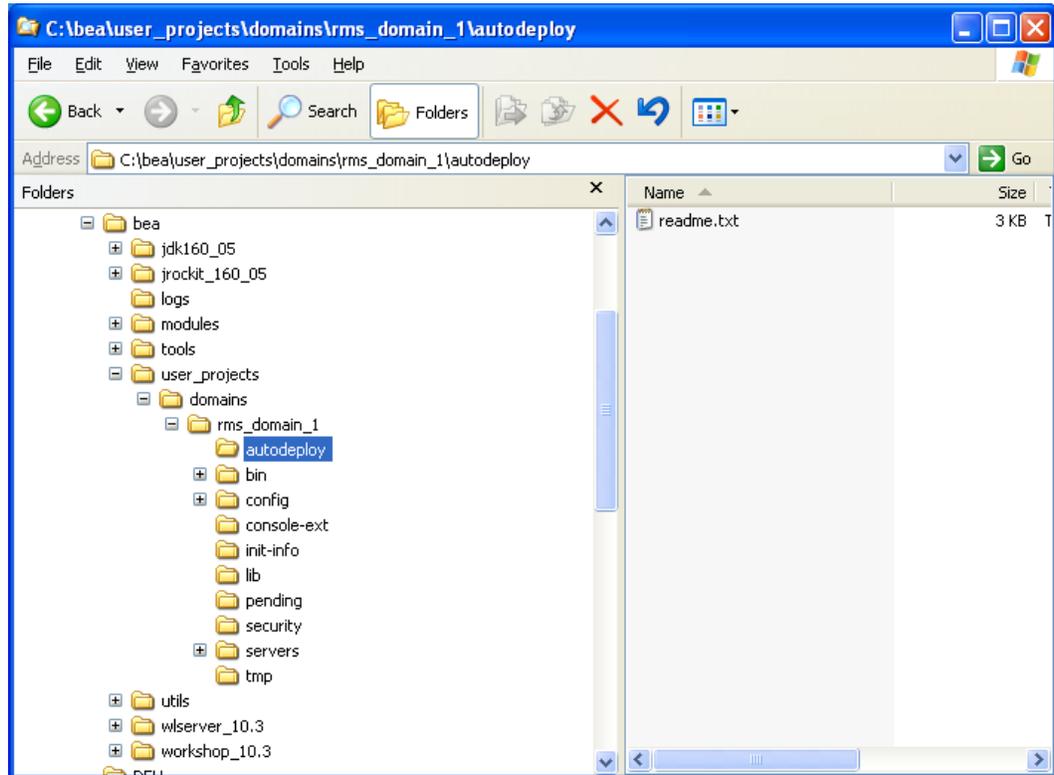
- Test the “ping” method of the service. You should see a valid response if the service is responding.



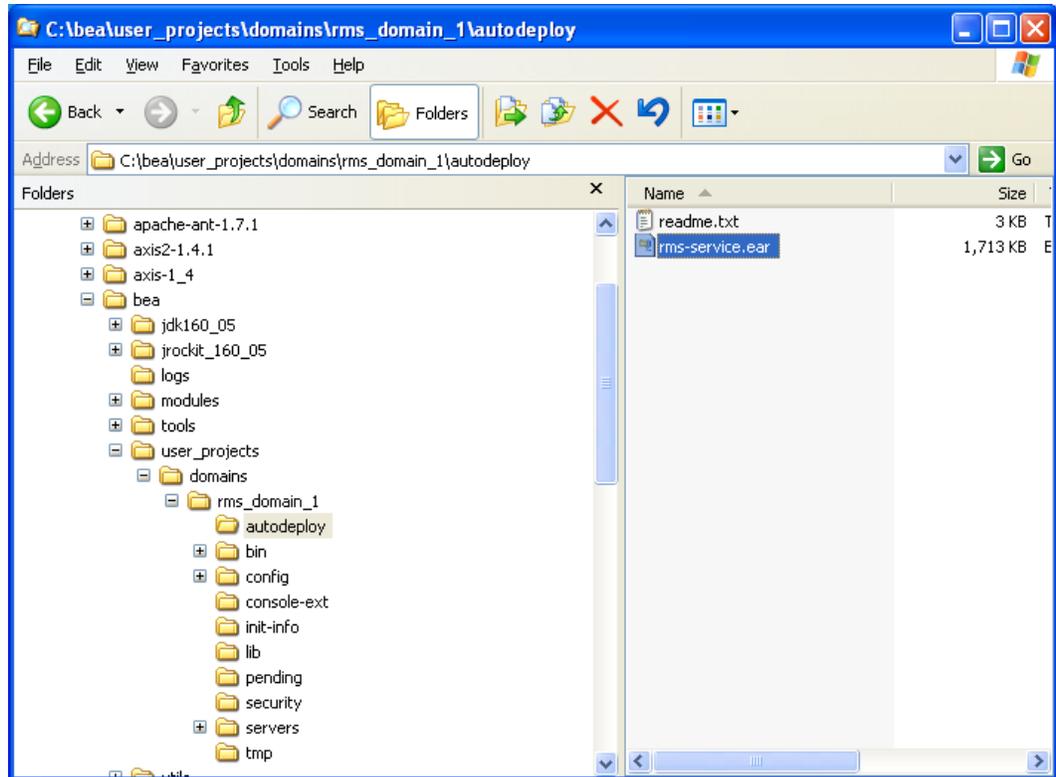
10. Testing the other methods of this service with the default values will likely result in a schema validation exception being returned. The exception will list the fields that do not conform to the schema. Once the values are changed to conform to the schema, the service will attempt to call the PL/SQL implementation layer.

WebLogic 10.3 Autodeploy Installation Process

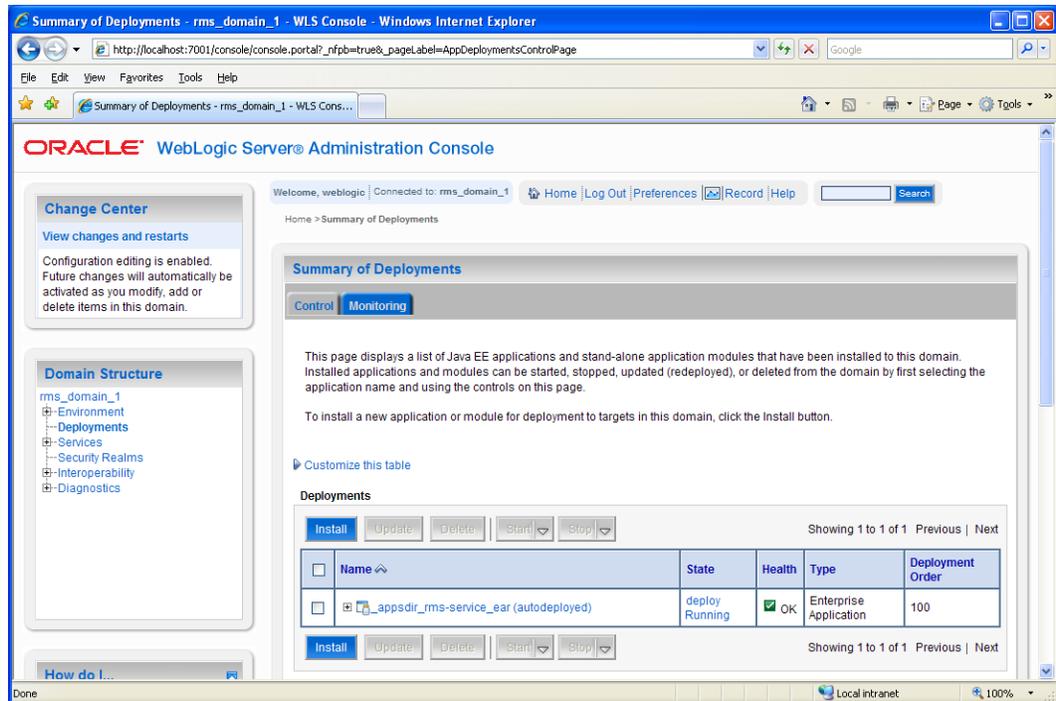
1. Start WebLogic server. Locate the autodeploy directory under your WebLogic domain directory.



2. Drop the rms-service.ear file in the autodeploy directory. This will automatically deploy the application.



- Log in to the administration console and click on the Configure Applications link. The new deployment will be listed under its default name with a suffix of (autodeployed).

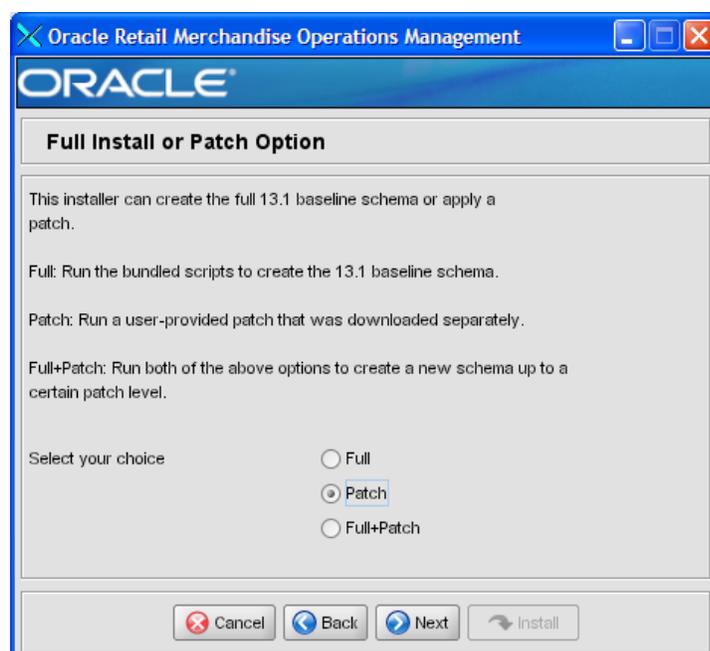


Appendix: RMS Database Schema Installer Screens

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.

The RMS database schema installer also includes the option to patch the database schema objects for the ReIM and Allocation products.

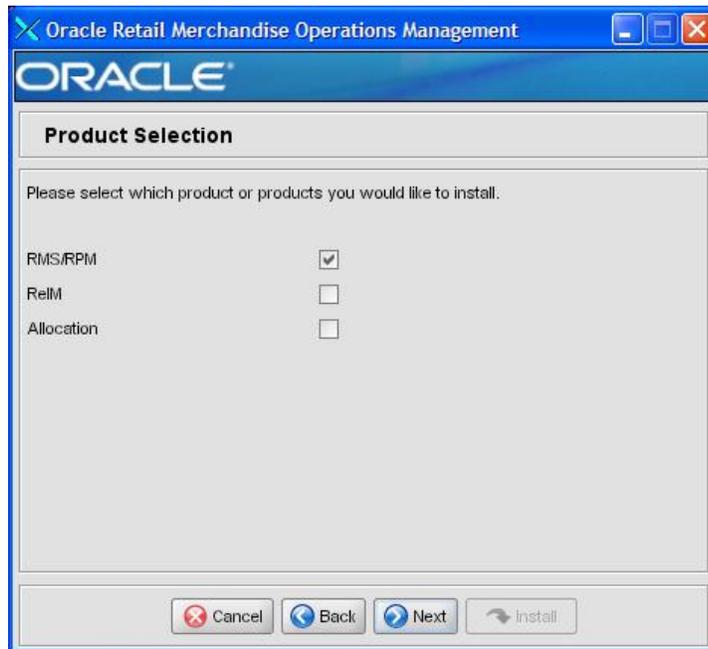
Screen: Full Install or Patch Option



Fields on this Screen:

Field Title	Full or Patch
Field Description	The installer can create the full baseline schema, apply a patch, or do both. To install a new instance of the RMS 13.1 release, select Full. If installing 13.1.1 or later, select Patch and the installer prompts for the location of the patch files on the next screen. Note: This installer cannot be used to apply any patches earlier than 13.1. To apply the 13.0.1 or 13.0.2 patch, please use the 13.0.1 Full installer, or apply them manually.
Example	Patch

Screen: Product Selection



Fields on this Screen:

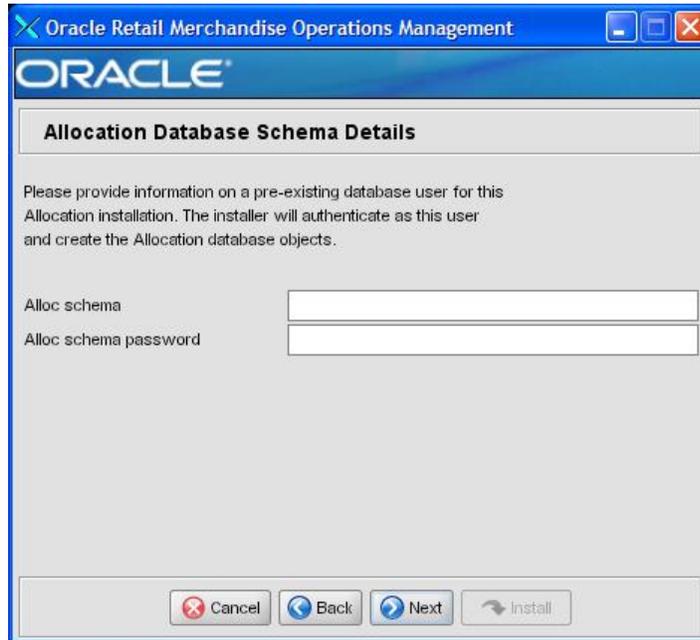
Field Title	Product Selection
Field Description	By default the RMS database schema installer creates the database objects for RMS/ReSA/RTM and RPM. Optionally, the database objects for ReIM and/or Allocation may be installed at the same time or later.
Example	RMS/RPM, ReIM, Allocation

Screen: RMS Database Schema Details
Fields on this Screen:

Field Title	RMS schema
Field Description	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.
Example	RMS
Field Title	RMS schema password
Field Description	Database password for the RMS Schema Owner.
Field Title	RMS Oracle SID
Field Description	Oracle system identifier for the database where RMS will be installed
Example	rmsdb

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

Screen: Allocation Database Schema Details



Fields on this Screen:

Field Title	Alloc schema
Field Description	Provide the Allocation database user here. The installer logs into the database as this user to create the Allocation schema objects. This user must already exist in the database when the database schema installer is run.
Example	ALLOC
Field Title	Alloc schema password
Field Description	Database password for the Allocation database user.

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

Screen: DBA User

DBA User

Please provide the username and password of a database account that has sufficient privileges to create the Allocation user and synonyms between the Allocation user and RMS user. Example: SYSTEM. This user is referred to as the Allocation DBA user by this installer.

DBA user:

DBA user password:

Buttons: Cancel, Back, Next, Install

Fields on this Screen:

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.

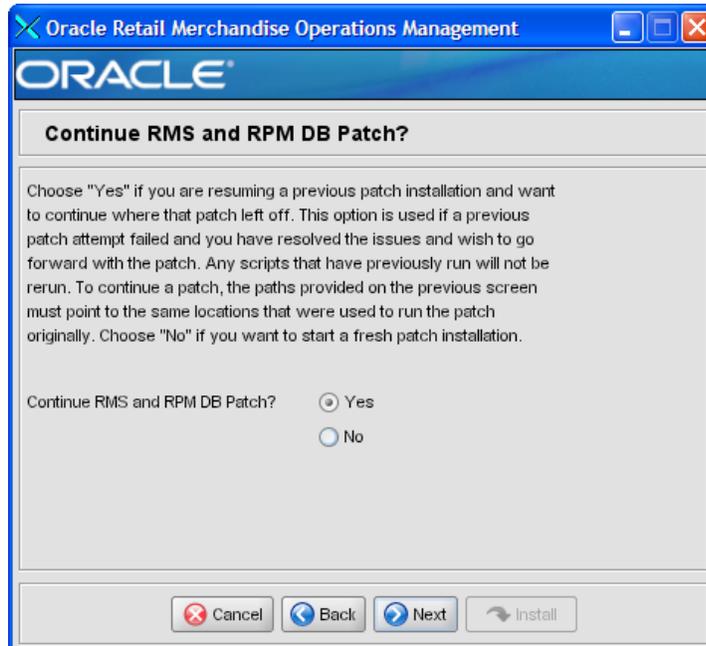
The database settings provided are validated by the installer when you advance to the next screen.

Screen: Apply an RMS and RPM DB Patch



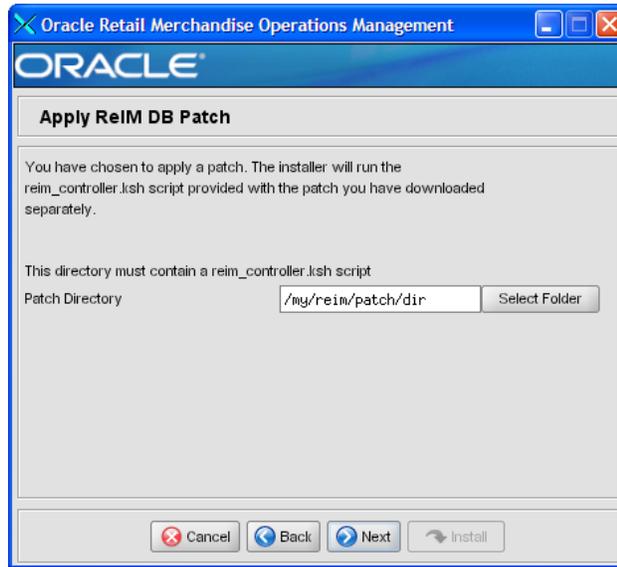
Fields on this Screen:

Field Title	RMS Patch Directory
Field Description	This page appears if the Patch or Full+Patch option is selected on the earlier Full Or Patch screen. Provide the directory path to the downloaded RMS patch you want to install. The installer runs only the patch you provide. Note: The directory you choose must contain an rms_controller.ksh file.
Example	/my/rms/patch/dir for all 13.1.x patches Note: The patch option is intended for patches starting with 13.1.
Field Title	RPM Patch Directory
Field Description	This page appears if the Patch or Full+Patch option is selected on the earlier Full Or Patch screen. Provide the directory path to the downloaded RPM patch you want to install. The installer runs only the patch you provide. Note: The directory you choose must contain an rpm_controller.ksh file.
Example	/my/rpm/patch/dir for all 13.1.x patches Note: The patch option is intended for patches starting with 13.1.

Screen: Continue RMS and RPM DB Patch**Fields on this Screen:**

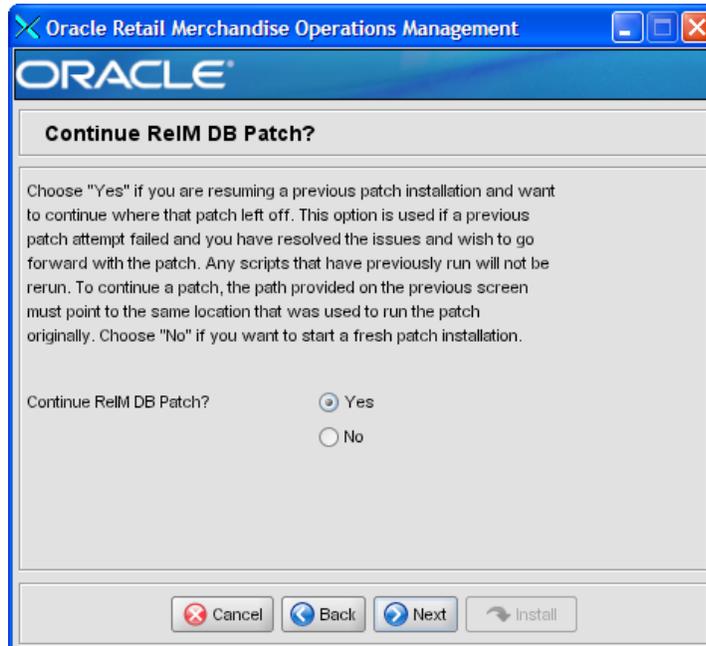
Field Title	Continue RMS and RPM DB Patch?
Field Description	<p>The patch process allows you to continue a previously run patch if it stopped before completion or failed. If "Yes" is selected, any scripts that were previously run for the RMS and RPM patch will be skipped. If "No" is selected, the patch will start from the beginning.</p> <p>Note: To continue a patch, the content of the "processed" directories in the RMS Patch Directory and RPM Patch Directory 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 won't be able to continue this patch in the future.</p>

Screen: Apply ReIM DB Patch



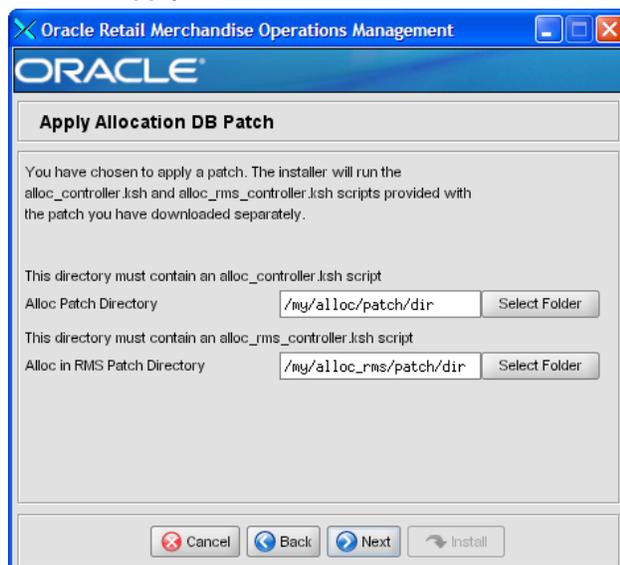
Fields on this Screen:

Field Title	Patch Directory
Field Description	This page appears if the Patch or Full+Patch option is selected on the earlier Full Or Patch screen. Provide the directory path to the downloaded ReIM patch you want to install. The installer runs only the patch you provide. Note: The directory you choose must contain a reim_controller.ksh file.
Example	/my/reim/patch/dir for all 13.1.x patches Note: The patch option is intended for patches starting with 13.1.

Screen: Continue ReIM DB Patch**Fields on this Screen:**

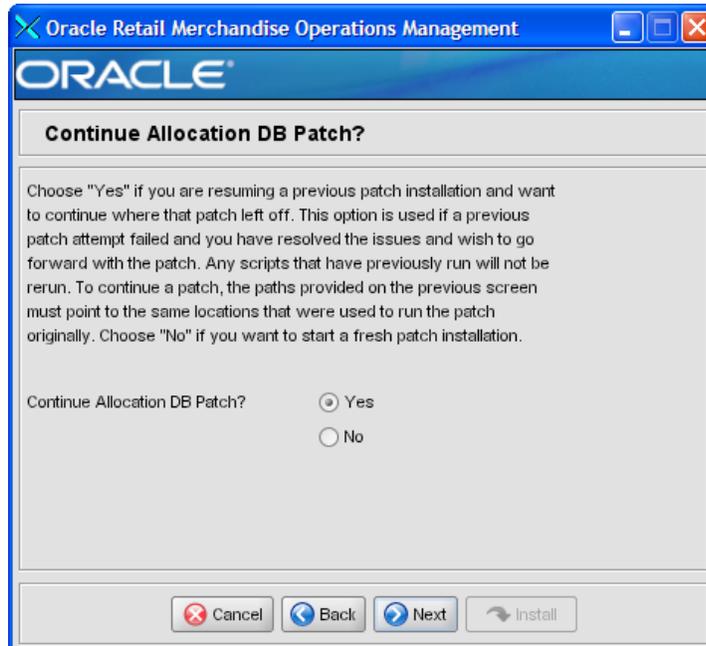
Field Title	Continue ReIM DB Patch?
Field Description	<p>The patch process allows you to continue a previously run patch if it stopped before completion or failed. If "Yes" is selected, any scripts that were previously run for the ReIM patch will be skipped. If "No" is selected, the patch will start from the beginning.</p> <p>Note: To continue a patch, the content of the "processed" directory in the Patch Directory 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 won't be able to continue this patch in the future.</p>

Screen: Apply Allocation DB Patch



Fields on this Screen:

Field Title	Alloc Patch Directory
Field Description	This page appears if the Patch or Full+Patch option is selected on the earlier Full Or Patch screen. Provide the directory path to the downloaded patch for the Allocation schema you want to install. The installer runs only the patch you provide. The Alloc controller is used to apply the necessary Allocation patches to the Allocation schema. Note: The directory you choose must contain an alloc_controller.ksh file.
Example	/my/alloc/patch/dir for all 13.1.x patches Note: The patch option is intended for patches starting with 13.1.
Field Title	Alloc in RMS Patch Directory
Field Description	This page appears if the Patch or Full+Patch option is selected on the earlier Full Or Patch screen. Provide the directory path to the downloaded Allocation patch for the RMS Schema you want to install. The installer runs only the patch you provide. The Alloc_RMS controller is used to apply the necessary Allocation patches to the RMS schema Note: The directory you choose must contain an alloc_rms_controller.ksh file.
Example	/my/alloc_rms/patch/dir for all 13.1.x patches Note: The patch option is intended for patches starting with 13.1.

Screen: Continue Allocation DB Patch**Fields on this Screen:**

Field Title	Continue Allocation 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 Allocation patch in the Allocation and RMS schemas 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 Alloc Patch Directory and Alloc in RMS Patch Directory 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 won't be able to continue this patch in the future.</p>

Appendix: RMS Batch Installer Screens

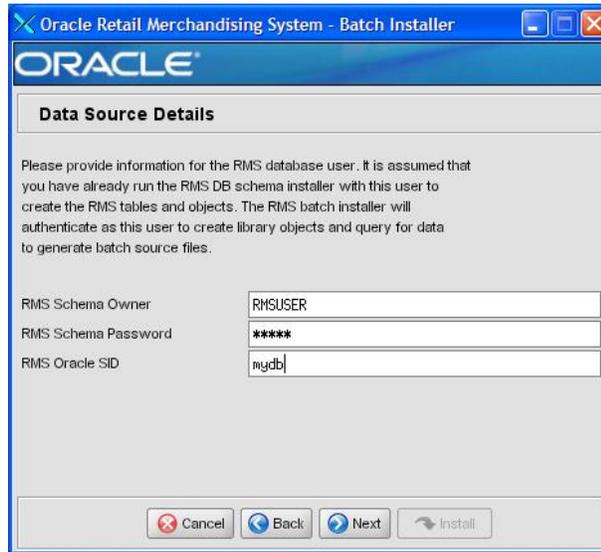
You need the following details about your environment for the installer to successfully compile and install the RMS batch programs. Depending on the options you select, you may not see some screens or fields.

Screen: Welcome



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

Screen: DataSourceDetails



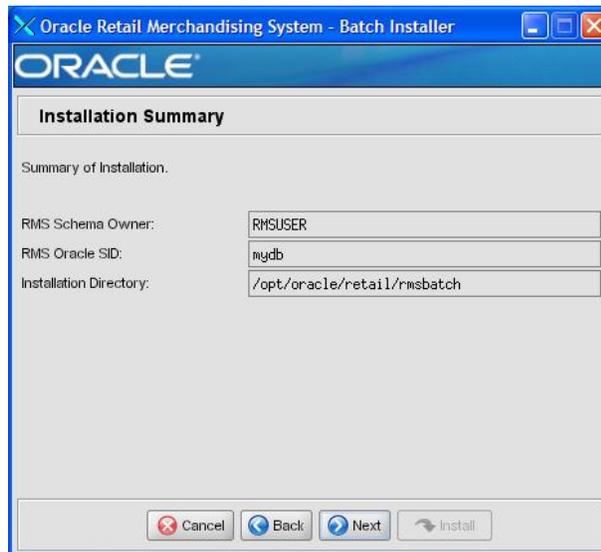
Fields on this Screen:

Field Title	RMS Schema Owner
Field Description	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.
Example	RMSUSER
Field Title	RMS Schema Password
Field Description	Database password for the RMS Schema Owner.
Field Title	RMS Oracle SID
Field Description	Oracle system identifier for the database where RMS will be installed
Example	rmsdb

Screen: Batch Installation Directory**Fields on this Screen:**

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

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 validate 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

Fields on this Screen:

Field Title	RMS Schema Owner
Field Description	This is the same username that was used during the RMS Database Schema Installer.
Example	RMS
Field Title	RMS Schema Password
Field Description	This is the same password that was used during the RMS Database Schema Installer.
Field Title	RMS Oracle SID
Field Description	This is the same Oracle SID that was used during the RMS Database Schema Installer.
Example	Rmsdb

Screen: Application Installation Directory**Fields on this Screen:**

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

Screen: Installation Name



Fields on this Screen:

Field Title	Installation Name
Field Description	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.
Example	rms13inst

Screen: Application Deployment Method



Fields on this Screen:

Field Title	Which Environment Deployment Method would you like to use
Field Description	Select the Application Deployment Method you would like. Reference Appendix G for more information.
Example	Base

Screen: Webhelp Installation Details

Webhelp Installation Details

RMS webhelp provides enhanced accessibility and usability of product documentation. The installation of webhelp requires a running OC4J instance. If an OC4J instance has not been configured or is not running, please see the documentation on pre-installation setup requirements.

OC4J Admin User:

OC4J Admin Password:

OC4J Instance Name:

Buttons: Cancel, Back, Next, Install

Fields on this Screen:

Field Title	OC4J Admin User
Field Description	Username of the admin user for OC4J instance to which the RMS Webhelp application is being deployed.
Example	oc4jadmin
Field Title	OC4J Admin Password
Field Description	Password for the OC4J admin user. You chose this password when you created the OC4J instance.
Field Title	OC4J Instance Name
Field Description	Name of the OC4J instance that was created for the RMS Webhelp application.
Example	rms_help_instance

Screen: Install OCM**Fields on this Screen:**

Field Title	Install OCM
Field Description	Install OCM checkbox. This field gives you the option to install or not install OCM. The default option is checked. It is highly recommended you install OCM if you meet the requirements.
Example	Checked/True

Screen: Summary

Installation Summary	
Summary of Installation.	
RMS Schema Owner:	wade_rms1
RMS Database:	dvols17
Installation Directory:	/u00/webadmin/rmsapp
Installation Name:	rms13inst
Deployment Method:	Base
Admin User:	oc4jadmin
OC4J Instance Name:	rms_help_instance
Install OCM:	true

Buttons: Cancel, Back, Next, Install

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: Installer Silent Mode

Repeating an Installation Attempt

In addition to the GUI and text interfaces of the RMS 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: URL Reference

JDBC URL for a Database

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

Thick Client Syntax: jdbc:oracle:oci:@<sid>

<sid>: system identifier for the database

Example: jdbc:oracle:oci:@mysid

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

<host>: hostname of the database server

<port>: database listener port

<sid>: system identifier for the database

Example: jdbc:oracle:thin:@myhost:1521:mysid

LDAP Server URL

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

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

<host>: hostname of the directory server

<port>: LDAP server port

Example: ldap://myhost:389

JNDI Provider URL for an Application

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

OracleAS :

Syntax: opmn:ormi://<host>:<port>:<instance>/<app>

<host>: hostname of the OracleAS environment

<port>: OPMN request port of the OracleAS environment. This can be found in the <ORACLE_HOME>/opmn/conf/opmn.xml file.

<instance>: Name of the OC4J instance running the application

<app>: Deployment name for the application.

Example: opmn:ormi://myhost:6003:rsm-oc4j-instance/rsm13

Note: The JNDI provider URL can have a different format depending on your cluster topology. Consult the Oracle Application Server documentation for further details.

WebSphere:

Syntax: `iiop://<host>:<port>`

`<host>`: hostname of the WebSphere environment

`<port>`: BOOTSTRAP port of the WebSphere server that is running the application.

Example: `iiop://myhost:2809`

Appendix: 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 -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.

“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:

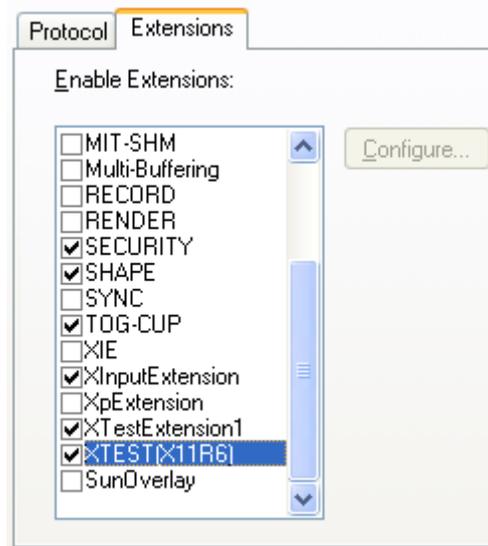
```
XTEST extension not installed on this X server: Error 0
```

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.

Couldn't exec1 robot child process: Permission denied

Symptom:

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

```
Couldn't exec1 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.

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

Symptom:

When running the application installer you get the following error:

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

```
FRM-30085: Unable to adjust form for output.
```

```
Form not created
```

Solution:

Disable the database filter policies by running `drop_filter_policy.sql`, run the application installer again and then run `add_filter_policy.sql`. Both files can be located with the database installer.

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

Symptom:

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

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

Solution:

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

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

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

Symptom:

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

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

Solution:

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

Example:

```
frmpcmp.sh userid=$SUP module_type=form module=FORM_OR_MENU
```

RIB Errors

At random times, the RIB will get certain errors such as GETNEXT(?,?,?,?,?,?) and/or ORA-21700 object does not exist or is marked for delete. This is very confusing because you may research and find that the object exists and is valid.

You must re-initialize the reference to reference an existing object. You do this by:

1. Bringing down the RIB OAS in question
2. Running `/RIB_INSTALL_DIR>/InstallAndCompileAllRibOracleObjects.sql`
3. Running another object validate script (ex: `inv_obj_comp.sql`) to make sure objects are valid (some may have deallocated in the end of the previous step).
4. Bringing up the RIB OAS in question

“Error Connecting to Database URL”

Symptom:

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

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

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

Solution:

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

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

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

It may mean that the installer is using the incorrect library path variables for the platform you are installing on. Open the file

```
<STAGING_DIR>/rms/dbschema/common/preinstall.sh
```

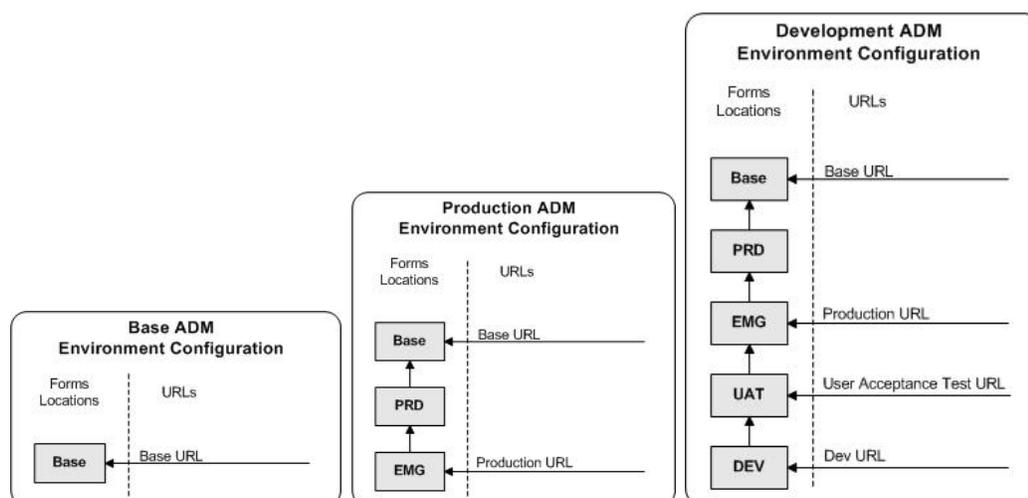
and make sure the variable “use32bit” is set to “true” if you are on a 32 bit platform, and “false” if you are on a 64 bit platform.

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: 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 My Oracle Support document; Doc ID: 244526.1.

Appendix: AIX Shared Library Bug Fix

The env_rdbms.mk file for Oracle 11g has Bug #2143531. This bug was not fixed because there is a workaround. The following changes in **bold** need to be made to the \$ORACLE_HOME/rdbms/lib/env_rdbms.mk file. Notice that changes are made in both the BUILD_WITH_CONTEXT and BUILD_WITH_NO_CONTEXT functions.

```
-----
BUILDLIB_WITH_CONTEXT=generate_export_list() \
{ \
/bin/nm -X32_64 -B -h -g "$$1" | grep -v ' U ' | awk '{print $$3}' | \
egrep -v '^\.|^TOC' | sort | uniq ; \
}; \
generate_import_list() { \
LIB_NAME=$$1; \
IMP_FILE=$$2; \
\
cat ${ORACLE_HOME}/rdbms/lib/xa.imp | head -1 | awk '{print $$0, "."}' >
$${IMP_FILE}; \
/bin/nm -X32_64 -C -B -h -g ${LIB_NAME} | grep ' U ' | grep -v "::" | grep -v "("
| grep -v "\.cc" | awk '{print $$3}' | sed -e "s/\./g
" | grep -v "^_" >> $${IMP_FILE}; \
}; \
\
generate_import_list "$(OBJS)" $(SHARED_LIBNAME).imp; \
generate_export_list $(OBJS) > $(SHARED_LIBNAME).exp; \
$(LD) -bnoentry -bM:SRE -bE:$(SHARED_LIBNAME).exp -bI:$(SHARED_LIBNAME).imp \
-o $(SHARED_LIBNAME) $(OBJS) -L$(ORACLE_HOME)/lib -lc_r -lm $(LLIBCLNTSH)
$(MATHLIB)
-----
BUILDLIB_NO_CONTEXT=generate_export_list() \
{ \
/bin/nm -X32_64 -B -h -g "$$1" | grep -v ' U ' | awk '{print $$3}' | \
egrep -v '^\.|^TOC' | sort | uniq ; \
}; \
generate_import_list() { \
LIB_NAME=$$1; \
IMP_FILE=$$2; \
\
cat ${ORACLE_HOME}/rdbms/lib/xa.imp | head -1 | awk '{print $$0, "."}' >
$${IMP_FILE}; \
/bin/nm -X32_64 -C -B -h -g ${LIB_NAME} | grep ' U ' | grep -v "::" | grep -v "("
| grep -v "\.cc" | awk '{print $$3}' | sed -e "s/\./g
" | grep -v "^_" >> $${IMP_FILE}; \
}; \
\
generate_import_list "$(OBJS)" $(SHARED_LIBNAME).imp; \
generate_export_list $(OBJS) > $(SHARED_LIBNAME).exp; \
$(LD) -bnoentry -bM:SRE -bE:$(SHARED_LIBNAME).exp -bI:$(SHARED_LIBNAME).imp \
-o $(SHARED_LIBNAME) $(OBJS) -L$(ORACLE_HOME)/lib -lc_r -lm $(LLIBCLNTSH)
$(MATHLIB)
```

Appendix: RMS RETL Instructions

This Appendix summarizes the RETL program features utilized in the RMS Extractions (RMS ETL). More information about the RETL tool is available in the latest RETL Programmer's Guide. More information about RMS ETL is available in the RMS ETL operations guide.

Configuration

RETL

Before trying to configure and run RMS ETL, install RETL version 10.3 or later which is required to run RMS ETL. Run the "verify_retl" script (included as part of the RETL installation) to ensure that RETL is working properly before proceeding.

RETL user and permissions

RMS ETL should be installed and run as the RETL user. Additionally, the permissions should be set up as per the RETL Programmer's Guide. RMS ETL reads data, creates, deletes and updates tables. (This is to ensure that weekly sales data is not pulled multiple times on subsequent extractions.) If these permissions are not set up properly, extractions will fail.

Environment variables

In addition to the RETL environment variables (please see the Programmer's Guide for version of RETL), you need to set MMHOME to the base directory for RMS ETL. This is the top level directory that selected during the RMS Batch installation process. So in .kshrc you should add a line like the following:

```
export MMHOME=<base directory for RMS ETL>
```

rmse_config.env

There are a couple variables that will need to change depending upon local settings:

```
export DENAME=int9i
export RMS_OWNER=RMS13DEV
export BA_OWNER=rmsint1012
```

Also, you will need to set the environment variable PASSWORD in either the rmse_config.env, .kshrc or some other location that can be included via one of those two means. For example, adding this line to the rmse_config.env will cause the password "bogus" to be used to log into the database: `export PASSWORD=pass1`

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 AIP provider URL. Since AIP is installed after SIM, make a note of the URL you enter. If you need to change the AIP provider URL after you install AIP, 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 Mobile Point-of-Service (ORMPOS)
28. Oracle Retail Analytics Applications
29. Oracle Retail Data Warehouse (RDW)
30. Oracle Retail Workspace (ORW)