

Oracle® Retail Warehouse Management System
Installation Guide
Release 13.1
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Preface

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

Audience

This Installation Guide is written for the following audiences:

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

Related Documents

For more information, see the following documents in the Oracle Retail Warehouse Management System Release 13.1 documentation set:

- *Oracle Retail Warehouse Management System Data Model*
- *Oracle Retail Warehouse Management System Online Help*
- *Oracle Retail Warehouse Management System Operations Guide*
- *Oracle Retail Warehouse Management System Radio Frequency User Guide*
- *Oracle Retail Warehouse Management System Release Notes*
- *Oracle Retail Warehouse Management System User Guide*

See also:

- Oracle Retail Integration Bus 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

Check Database Server Requirements

General Requirements for a database server running RWMS 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
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 <p>RAC only</p> <ul style="list-style-type: none"> 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 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 RWMS include:

Supported on:	Versions Supported:
Application Server OS	OS certified with Oracle Application Server 10g version 10.1.2.3. Options are: <ul style="list-style-type: none">▪ Oracle Enterprise Linux 5 Update 2 (OEL 5.2) for Linux x86-64▪ AIX 6.1 TL1
Application Server	Oracle Application Server Forms and Reports 10g version 10.1.2.3 Patches: <ul style="list-style-type: none">▪ 7379122 MLR ON TOP OF 10.1.2.3 FOR CPUOCT2008

Check Web Browser and Client Requirements

General requirements for client running RWMS include:

Requirement	Version
Operating system	Windows 2000 or XP
Display resolution	1024x768
Processor	Pentium processor (minimum 450 MHz)
Memory	minimum of 256 MB RAM
Sun JRE Plug-in	1.4.2_06+
Microsoft Internet Explorer	version 6.0 and higher

Handheld Requirements

Windows CE 5.0 handhelds with the following screen sizes

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

Software Required on Handhelds

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

Supported Oracle Retail Products

Requirement	Version
Oracle Retail Merchandising System (RMS)	13.1
SIM	13.1

Create a UNIX User Account to Install the Software

1. Create a UNIX group named “dev”.
2. Create UNIX user named “oretail” and assign it to the “dev” group. This user will install the RWMS software

Create Staging Directory for RWMS Database Files

1. Log into the UNIX server as oretail.
2. Create a staging directory for the RWMS database installation software. There should be a minimum of 100 MB disk space available in this location.
3. Copy the rwms131dbserver.zip file from the CD/dbserverunix directory to the staging directory. This is referred to as STAGING_DIR for the remainder of this installation guide.
4. Change directories to STAGING_DIR and extract the rwms13dbserver.zip file.

Create Staging Directory for RWMS Application Server Files

1. Log into the application server as the oretail user.
2. Create a staging directory for the RWMS application installation software. There should be a minimum of 500 MB disk space available in this location.
3. Copy the file rwms131appserver.zip from the CD/appserverunix directory to staging directory. This is referred to as STAGING_DIR when installing application software.
4. Change directories to STAGING_DIR and extract the file rms131appserver.zip.
5. Make sure all scripts in STAGING_DIR/forms_scripts have at least execute permissions for the oretail user and its group (r-xr-x---).

RAC and Clustering

The Oracle Retail Warehouse Management System 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

Database Installation Tasks

If RWMS 13.0.2 is already installed, please go to chapter 4, Upgrade from 13.0.2 to 13.1 Database Tasks.

Create the RWMS Database

It is assumed that Oracle Enterprise Edition 11g, with all appropriate patches, has already been installed. If not, refer to “*Check Database Server Requirements*” in Chapter 1, “Preinstallation Tasks” before proceeding. Additionally, *INSTALL_DIR* in this section refers to the directory created in “Create Staging Directory for RWMS Database Files”, Chapter 1.

If a database has already been created, it is necessary to review the contents of this section to determine if all database components have been installed and configured properly. Refer also to Appendix A: Oracle 11G Database Parameter File.

Create the Database

1. Login to UNIX as the Oracle user. Typically, this is the user that owns the Oracle Database software.
2. Create the Oracle recommended OFA directory structure for the database (datafile directories, adump, bdump, cdump, arch, create, exp, pfile, udump, utl_file_dir)
3. Place an entry in the oratab file for the database and execute oraenv to set the ORACLE_SID and ORACLE_HOME environment variables.
4. Copy STAGING_DIR/create_db/initrwms.ora to the \$ORACLE_HOME/pfile directory and rename it to init\${ORACLE_SID}.ora. Modify the parameters according to guidelines specified in this file.
5. Create a symbolic link from \$ORACLE_HOME/pfile/init\${ORACLE_SID}.ora to \$ORACLE_HOME/dbs/init\${ORACLE_SID}.ora.
6. Modify the STAGING_DIR/create_db/crdb1.sql file. Refer to comments in this file regarding modifications that need to be made.
7. Login to SQL*Plus as SYSDBA and execute STAGING_DIR/create_db/crdb1.sql. Review crdb1.log for errors and correct as needed.
8. Login to SQL*Plus as SYSDBA and execute STAGING_DIR/create_db/crdb2.sql. Review crdb2.log for errors and correct as needed.
9. Login to SQL*Plus as SYSDBA and execute STAGING_DIR/create_db/crdb3.sql. Review JServer.log, context.log and xdb_protocol.log for errors and correct as needed.
10. Configure the listener.
11. Confirm that these RWMS required packages exist and are valid:
DBMS_SESSION, DBMS_RANDOM, DBMS_LOCK, DBMS_AQ, DBMS_AQADM, DBMS_ALERT,
DBMS_PIPE, and DBMS_JOB

Create the Tablespaces

1. The STAGING_DIR/create_db/create_rwms_tablespaces.sql script contains the DDL for creating the required tablespaces. This script should be modified as appropriate for the intended environment. Refer to Appendix B: Tablespace Creation Script.
2. Login to SQL*Plus as SYSDBA and execute STAGING_DIR/create_db/create_rwms_tablespaces.sql.
3. Review create_rwms_tablespaces.log for errors and correct as needed.

Create the Schema Owner

Create an Oracle schema that will own the RWMS application.

Note: There is a ten character limit on the schema owner.

1. Change directories to STAGING_DIR/utility.
2. The create_user script relies on the empty roles, developer and wms_user, being created. Log into sqlplus as system and run the following command to create that role.

```
SQL> create role developer;  
SQL> create role wms_user;
```
3. Enter the following command to create the schema owner.

```
SQL> @create_user.sql
```

 - The following prompts occur:
 - Schema Owner – the Oracle user that owns all RWMS objects. Referred to in this install guide as RWMS131DEV
 - Password – the password for RWMS131DEV
 - Temp Tablespace – the temporary tablespace for RWMS131DEV
4. Check the log file create_user.log for any errors. This log file should be removed to prevent the password from being compromised.

Additional Grant for the Schema Owner

1. Change directories to STAGING_DIR/utility.
2. The rwms_owner_grants script grants specific grants needed by the RWMS schema owner. Log into sqlplus as 'sys as sysdba' and run the following command:

```
SQL> @rwms_owner_grants.sql
```
3. There will be a prompt for the schema owner (example: RWMS131DEV)
4. Check for any errors.

Create RIB Objects

Note: When running the scripts in this section the following errors may be encountered "ORA-04043 object XXXX does not exist" and "Warning: Type created with compilation errors". These errors can be ignored. The ORA errors are caused by dropping the item the script is about to create and the warnings are caused by dependencies on objects that get created later. The warnings are cleared when objects are revalidated later in the install.

Create RIB Tables and Types

1. Change directories to STAGING_DIR/rib_objects/ddl.
2. Log into sqlplus as RWMS131DEV and run the following command:
`SQL> @rib13ddl.sql`
3. Check the log file rib13ddl.log for any errors noting that ORA-04043 errors and warnings are to be ignored.

Create RIB Objects

1. Change directories to STAGING_DIR/rib_objects/db_objects/130.
2. Log into sqlplus as RWMS131DEV and run the following command:
`SQL> @InstallAndCompileAllRibOracleObjects.sql`
3. Verify that there are no invalid objects.

Create RWMS Objects

NOTE: Use a valid utf setting for your NLS_LANG (ex. AMERICA_AMERICAN.UTF8)

Create RWMS types

1. Change directories to STAGING_DIR/types/130.
2. Log into sqlplus as RWMS131DEV and run the following command:
`SQL> @rwms13type.sql`
3. Check the log file rwms13type.log for any errors

Create RWMS Tables

The warnings are cleared when objects are revalidated later in the install.

1. Change directories to STAGING_DIR/ddl.
2. Log into sqlplus as RWMS131DEV and run the following command:
`SQL> @rwms13.sql`
3. Check the log file rwms13.log for any errors.

Create RWMS Triggers

1. Change directories to STAGING_DIR/triggers/130.
2. Log into sqlplus as RWMS131DEV and run the following command:
`SQL> @rwms13trg.sql`
3. Check the log file rwms13trg.log for any errors.

Create RWMS Database Objects

1. Change directories to STAGING_DIR/db_objects/130.
2. Log into sqlplus as RWMS131DEV and run the following command:
`SQL> @rwms13dbo.sql`
3. Check the log file rwms13dbo.log for any errors.

Validate All Invalid Objects

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

1. Change directories to STAGING_DIR/utility.
2. Log into sqlplus as RWMS131DEV and run the following command:
SQL> @inv_obj_comp.sql
3. This script may need to be run more than once.

Insert Data for RWMS

1. Change directories to STAGING_DIR/data/130.
2. Log into sqlplus as RWMS131DEV and run the following command:
SQL> @create_base_data.sql
3. Check the log file rwms_base_data.log for any errors.

Update Additional RWMS Tables

1. Change directories to the STAGING_DIR/dbcs/1301.
2. Log on to SQL * Plus as RWMS131DEV, and run the following command:
SQL> @patch1301dbcs.sql
3. Check the log file patch1301dbcs.log for any errors.

Update Additional RWMS Database Objects

1. Change directories to the STAGING_DIR/db_objects/1301.
2. Log on to SQL * Plus as RWMS131DEV, and run the following command:
SQL> @patch1301rwms.sql
3. Check the log file patch1301rwms.log for any errors.

Update Additional Data for RWMS

1. Change directories to the STAGING_DIR/data/1301.
2. Log on to SQL *Plus as RWMS131DEV, and run the following command:
SQL> @patch1301ctl.sql
3. Check the log file patch1301ctl.log for any errors.

Validate All Invalid Objects

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

1. Change directories to STAGING_DIR/utility.
 2. Log on to SQL *Plus as RWMS131DEV, and run the following command:
SQL> @inv_obj_comp.sql
- You may need to run this script more than once.

Update RIB Database Objects

1. Change directories to the <staging area>/rib_objects/db_objects/1302.
2. Log on to SQL* Plus as RWMS13DEV, and run the following command:
`SQL> @InstallAndCompileAllRibOracleObjects.sql`
3. Please follow the instructions given by the script.

Update RWMS Types

1. Change directories to the <staging area>/types/1302.
2. Log on to SQL* Plus as RWMS13DEV, and run the following command:
`SQL> @patch1302types.sql`
3. Check the log file patch1302types.log for any errors.

Update RWMS DDL

1. Change directories to the <staging area>/dbcs/1302.
2. Log on to SQL* Plus as RWMS13DEV, and run the following command:
`SQL> @patch1302dbcs.sql`
3. Check the log file patch1302dbcs.log for any errors.

Update RWMS Database Objects

1. Change directories to the <staging area>/db_objects/1302.
2. Log on to SQL* Plus as RWMS13DEV, and run the following command:
`SQL> @patch1302rwms.sql`
3. Check the log file patch1302rwms.log for any errors.

Validate All Invalid Objects

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

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

Update Data for RWMS

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

1. Change directories to the <staging area>/data/1302.
2. Log on to SQL*Plus as RWMS13DEV, and run the following command:
`SQL> @base_reports_parameters.sql`
3. Log on to SQL*Plus as RWMS13DEV, and run the following command:
`SQL> @I18N_main_script.sql`
4. Check the log file I18N_main_script.log for any errors.

Proceed to the next chapter, 'Upgrade from 13.0.2 to 13.1 Database Tasks', to complete the RWMS 13.1 database installation.

Upgrade from 13.0.2 to 13.1 Database Tasks

Note: For additional information on the RWMS upgrade, see the *Oracle Retail Upgrade Guide* (Doc ID 837368.1)

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.

Update RIB Objects

1. Change directories to STAGING_DIR/rib_objects/db_objects/131.
2. Log into sqlplus as RWMS131DEV and run the following command:
`SQL> @InstallAndCompileAllRibOracleObjects.sql`
3. Verify that there are no invalid objects.

Update RWMS Objects

NOTE: Use a valid utf setting for your NLS_LANG (ex. AMERICA_AMERICAN.UTF8)

Update RWMS types

1. Change directories to STAGING_DIR/types/131.
2. Log into sqlplus as RWMS131DEV and run the following command:
`SQL> @rwms131types.sql`
3. Check the log file rwms131types.log for any errors

Update RWMS Tables

1. Change directories to STAGING_DIR/dbcs/131.
2. Log into sqlplus as RWMS131DEV and run the following command:
`SQL> @patch131dbcs.sql`
3. Check the log file patch131dbcs.log for any errors.

Update RWMS Triggers

1. Change directories to STAGING_DIR/triggers/131.
2. Log into sqlplus as RWMS131DEV and run the following command:
`SQL> @patch131trg.sql`
3. Check the log file patch131trg.log for any errors.

Update RWMS Database Objects

1. Change directories to STAGING_DIR/db_objects/131.
2. Log into sqlplus as RWMS131DEV and run the following command:
SQL> @patch131rwms.sql
3. Check the log file patch131rwms.log for any errors.

Validate All Invalid Objects

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

1. Change directories to STAGING_DIR/utility.
2. Log into sqlplus as RWMS131DEV and run the following command:
SQL> @inv_obj_comp.sql
3. This script may need to be run more than once.

Update Data for RWMS

1. Change directories to STAGING_DIR/data/131.
2. Log into sqlplus as RWMS131DEV and run the following commands:
SQL> @base_copyright_info.sql
SQL> @base_currency.sql
SQL> @base_item_master.sql
SQL> @13.1_main_script.sql
3. Check the log file for any errors.

Application Server Installation Tasks

Note: STAGING_DIR is the directory where the RWMS files are extracted from its zip file.

INSTALL_DIR is where the application will be run from.

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

Compile RWMS Oracle Forms and Reports

Environment Variables

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

1. The Tk2Motif.rgb file that is sent out with Oracle Application Server 10g (10.1.2.3) must be modified. It located at the following location:

\$ORACLE_HOME/guicommon/tk/admin

Make a copy of the file ORACLE_HOME/guicommon/tk/admin/Tk2Motif.rgb, and name it Tk2Motif.rgb_ORIG (for example).

Modify the file Tk2Motif.rgb file so that it contains the following line:

Tk2Motif*fontMapCs: iso8859-2=UTF8

2. Logon to the application server as the oretail user,
3. Set the DISPLAY variable to the IP address plus “:0.0” (ie: 10.1.1.1:0.0) of the application server.
4. Set the following variables:
 - All OS Platforms
 - PATH=\$ORACLE_HOME/bin:\$ORACLE_HOME/opmn/bin:\$ORACLE_HOME/dcm/bin:INSTALL_DIR/forms_scripts:\$PATH
 - CLASSPATH=\$ORACLE_HOME/jlib/importer:\$ORACLE_HOME/jlib/debugger.jar:\$ORACLE_HOME/jlib/utj.jar:\$ORACLE_HOME/jlib/ewt3.jar:\$ORACLE_HOME/jlib/share.jar:\$ORACLE_HOME/jlib/dfc.jar:\$ORACLE_HOME/jlib/help4.jar:\$ORACLE_HOME/jlib/oracle_ice.jar:\$ORACLE_HOME/jlib/jewt4.jar
 - FORMS_BUILDER_CLASSPATH=\$CLASSPATH
 - FORMS_PATH=INSTALL_DIR/rwms/forms/bin:\$ORACLE_HOME/forms
 - REPORTS_PATH=INSTALL_DIR/rwms/reports/bin:\$ORACLE_HOME/forms
 - TK_UNKNOWN=\$ORACLE_HOME/guicommon/tk/admin
 - UP=<RWMS schema owner>/<RWMS schema password>@<RWMS database>

Note: Verify that TNS is set up correctly by using the UP variable to successfully log into the RWMS 13 schema.

Example: /u00/oracle> sqlplus \$UP

Default Directory Structure

1. Copy all the files and directories from STAGING_DIR to INSTALL_DIR
From the INSTALL_DIR:

```
>cp -R STAGING_DIR/* .
```
2. Assuming the RWMS default directory structure is going to be used, the following directories need to be created as follows if they do not already exist:
 - a. INSTALL_DIR/rwms (owner=rdmusr group=rdm permissions=775)
 - b. INSTALL_DIR/rwms/bin (owner=rdmusr group=rdm permissions=775)
 - c. INSTALL_DIR/rwms/reports (owner=rdmusr group=rdm permissions=775)
 - d. INSTALL_DIR/rwms/hostcomm/download (owner=rdmusr group=rdm permissions=775)
 - e. INSTALL_DIR/rwms/hostcomm/upload (owner=rdmusr group=rdm permissions=775)
 - f. INSTALL_DIR/rwms/hostcomm/sortation (owner=rdmusr group=rdm permissions=775)
 - g. INSTALL_DIR/rwms/bdump (owner=oracle group=dba permissions=775)
 - h. INSTALL_DIR/rwms/cdump (owner=oracle group=dba permissions=775)
 - i. INSTALL_DIR/rwms/create (owner=oracle group=dba permissions=775)
 - j. INSTALL_DIR/rwms/pfile (owner=oracle group=dba permissions=775)
 - k. INSTALL_DIR/rwms/udump (owner=oracle group=dba permissions=775)
 - l. INSTALL_DIR/rwms/extras (owner=oracle group=dba permissions=775)

RWMS Forms Installation

1. Copy all libraries (.pll files) from the INSTALL_DIR/rwms/forms/src directory to the INSTALL_DIR/rwms/forms/bin directory.
2. Change directories to INSTALL_DIR/rwms/forms/bin.
3. Run forms.pll.sh to compile all RWMS .pll's.
4. Check to make sure that each .pll file has a corresponding .plx (to ensure that all .pll's compiled successfully).

Note: message36.pll and stand36.pll do not create plx files.

5. Copy all forms (*.fmb files) from the INSTALL_DIR/rwms/forms/src directory to the INSTALL_DIR/rwms/forms/bin directory.
6. Run forms.fmb.sh to generate RWMS runtime forms – .fmx's.
7. Check to make sure that each form .fmb file has a corresponding .fmx file.
8. Copy all menus (*.mmb files) from the INSTALL_DIR/rwms/forms/src directory to the INSTALL_DIR/rwms/forms/bin directory.
9. Run menus.mmb.sh to generate RWMS runtime menus (.mmx's).

10. Check to make sure that each .mmb file has a corresponding .mmx file.
11. Remove all .mmb files from INSTALL_DIR/rwms/forms/bin.

Reports (*.rdf)

1. Verify all *.rdf files are located in INSTALL_DIR/rwms/reports/bin directory.
2. Copy label.prt from INSTALL_DIR/rwms/reports/bin to INSTALL_DIR/rwms/extras.

Help Installation

RWMS 13 Web Help gets installed in an OC4J instance running under OAS. Since the RWMS application runs on 10.1.2 OAS the help is in the same Oracle Application Server.

If you know the Enterprise Manager address, skip this step.

To find the Enterprise Manager you need the server name and the HTTP port.

1. Once you have the server name, go to the ORACLE_HOME/Apache/Apache/conf directory.
2. In the file httpd.conf, search for "Port". Note the port number being used.
3. Using a web browser, type in the address `http://<server>:<port>`.
Substitute valid values for <server> and <port>.
4. The browser should display the OAS Welcome page.
5. Towards the lower right, there is a section called Oracle Application Server Logins. Click on the hyperlink "log on to Oracle Enterprise Manager 10g Application Server Control:"
6. Login using "ias_admin"
7. Select the appropriate standalone instance (OIDinfra is LDAP, Midtier is for forms, typically choose the Midtier)

If the instance for rwms help has been created and running, skip this step.

To create the instance for rwms help.

1. Click on Create OC4J Instance.
2. Enter "rwms_help_instance" (or other descriptive name) in the OC4J Instance Name box.
3. Click Create.
4. Click OK when complete.
5. Put a check in the box next to the rwms help instance.
6. Click Start to start the instance.

To deploy the rwms war file.

1. Click on the rwms help instance.
2. Click on the Applications tab.
3. Click on Deploy WAR file.
4. For "J2EE Application" enter the location of the war file or use the browse feature.
Note this is from the PC and not from the server.
5. Enter "rwms-help" for the Application Name.
6. Click Continue.
7. Enter "/rwms-help" for the Map to URL.
8. Click Finish.
9. Accept Defaults and click Deploy.

Configure Oracle Application Server 10g for RWMS

Note: The proper Oracle Application Server 10g (10.1.2.3) components must be started in order to run Oracle Forms applications.

Note: ORACLE_HOME refers to the location where Oracle Application Server 10g (10.1.2.3) Forms and Reports Services is installed.

Note: Prior to modifying Oracle Application Server 10g (10.1.2.3) Forms and Reports Services files, a backup of original files should be made.

1. Navigate to ORACLE_HOME/forms/admin/resource/US/ and copy the fmrweb.res file to a location that can easily be referenced from the location of the formsweb.cfg file.
2. Rename the fmrweb.res file. It is referred to as <key_mapping>.res file for the rest of this document.
3. Update the contents of the key_mapping.res file as specified below. Please note in a future step the <key_mapping>.res will be specified in the formsweb.cfg for all three RF devices and are accessed by the otherparams variable. The URL for the non RF portion of the application should not specify a key mapping file. The location of the <key_mapping>.res file must be specified by the otherparams variable in the formswebcfg file in order for it to be utilized. In order for key mapping changes to take effect the application server should be stopped and then restarted again. Changes to the <key_mapping>.res are as follows

The key mapping file is not capable of allowing users to utilize the function keys by pressing the actual function keys on the devices due to the interface layer of the remote desktop session. Instead users must press a combination of keys such as *ctrl+number* to access a function key. Below the key mapping file is for setting up the RF devices to require users to press *ctrl+number* in order to access the function keys. The combination of *key+#* can be changed to something other than what is provided below depending upon user preference and device limitations. The key for mapping keys is specified in the fmrweb.res file under the JAVA MODIFIERS NUMBERS. (In there the "0" states "None" but it actually is used for "ESC".)

Replace the entire mappings section with the following:

```

9      : 0 : "Tab"           : 1 : "Next Field"
9      : 1 : "Shift+Tab"     : 2 : "Previous Field"
85     : 2 : "Ctrl+U"        : 3 : "Clear Field"
38     : 0 : "Up"            : 6 : "Up"
80     : 2 : "Ctrl+P"        : 6 : "Up"
40     : 0 : "Down"          : 7 : "Down"
76     : 2 : "Ctrl+L"        : 7 : "Down"
33     : 0 : "PageUp"        : 12 : "Scroll Up"
34     : 0 : "PageDown"      : 13 : "Scroll Down"
69     : 2 : "Ctrl+E"        : 22 : "Edit"
10     : 0 : "Return"        : 27 : "Return"
81     : 2 : "Ctrl+Q"        : 32 : "Exit"
112    : 2 : "Ctrl+k"        : 35 : "Show Keys"
49     : 2 : "Ctrl+1"        : 83 : "F1"
50     : 2 : "Ctrl+2"        : 84 : "F2"
51     : 2 : "Ctrl+3"        : 85 : "F3"
52     : 2 : "Ctrl+4"        : 86 : "F4"
53     : 2 : "Ctrl+5"        : 87 : "F5"
54     : 2 : "Ctrl+6"        : 88 : "F6"

```

```

55 : 2 : "Ctrl+7"      : 89 : "F7"
56 : 2 : "Ctrl+8"      : 90 : "F8"
57 : 2 : "Ctrl+9"      : 91 : "F9"
27 : 0 : "Esc"          : 82 : "F10"
86 : 1 : "Shift+V"      : 29 : "List of Values"

```

4. Update the ORACLE_HOME/Apache/Apache/conf/httpd.conf file by adding a listener for the port that your URL's will be accessing the environment through. Then list out the values for the alias's that the environment needs. Listed below is an example of what this should look like. The rwms_reptemp alias needs to match the value of REPORTS_TEMP that is set up in the .env file. All of these Alias's are referenced by the application and should not be renamed. Also the modules needed for launching and closing the RF devices need to exist in the path of the alias for rf_launch_value. The alias <icon_path> is dependent on the value for default.icons.iconpath=/<icon_path>/ in the ORACLE_HOME/forms/java/oracle/forms/registry/registry.dat file.

Listen 7878

```

<VirtualHost *:7878>
    ServerName <SERVER_NAME>
    ServerAlias <ServerName>.*
    DocumentRoot "<ORACLE_HOME>/Apache/Apache/htdocs"
    Alias /web_html/ "INSTALL_DIR/web_html/"
    Alias /<icon_path>/ "INSTALL_DIR/gif/"
    Alias /temp/ "INSTALL_DIR/temp/"
    Alias /rwms_reptemp/ "INSTALL_DIR/reptemp/"
    Alias /rf_launch_value/ "INSTALL_DIR/rf_launch/"
</VirtualHost>

```

5. Make a copy of the file ORACLE_HOME/forms/server/default.env and name it rwms.env (for example).
6. Modify the new file rwms.env by appending the location of the RWMS forms modules to the FORMS_PATH variable setting, and by adding the NLS_DATE_FORMAT and NLS_LANG variables to the end of this file. Additionally, the variable FORMS_REJECT_GO_DISABLED_ITEM=FALSE must also be added to rwms.env due to changes between Oracle Forms 6i and Oracle Forms 10g. Below are environmental specific values that need to be set. This file is referenced in the formsweb.cfg file for each URL specified by the envfile value. The REPORTS_TEMP value must match the value for the alias rwms_reptemp that is set in the httpd.conf file. The ORACLE_RWMS_REPORTS_SERVER needs to have a value that has to be the same as the name of environments intended reports .conf file. This file needs to be placed in the location specified in the formsweb.cfg file in order for it to be utilized.

Example:

```

FORMS_PATH=INSTALL_DIR/forms/bin:$ORACLE_HOME/forms
ORACLE_RWMS_REPORTS_HOST=http://<server_name>:7878/

ORACLE_RWMS_RWSERVER=reports/rwervlet

ORACLE_RWMS_REPORTS_SERVER=<report_server>+envid=<rwms>

REPORTS_TEMP=INSTALL_DIR/rwms/reptemp

REPORTS_PATH=INSTALL_DIR/rwms/reports/bin:$ORACLE_HOME/forms

```

```
ORACLE_RWMS_EXTRAS_PATH=INSTALL_DIR/rwms/e
xtras
NLS_DATE_FORMAT=DD-MON-RR
NLS_LANG=AMERICAN_AMERICA.UTF8

FORMS_REJECT_GO_DISABLED_ITEM=FALSE
```

7. Make an entry in the file ORACLE_HOME/network/admin/tnsnames.ora for the Oracle 11g database that was created in Chapter 2 (where the RWMS 13 schema resides). Appendix C: Sample Oracle Net Files for the Server contains a sample tnsnames.ora file entry for an Oracle 11g database; refer to the sample or following example for a proper entry in file ORACLE_HOME/network/admin/tnsnames.ora.
8. Modify the file formsweb.cfg located at ORACLE_HOME/forms/server. Create the RWMS environment section at the end of this file. Brackets ([] in the example below) distinguish a separate environment in this file. Variables to be set in the RWMS environment section of formsweb.cfg are: envfile (from step 2 above); width, height, and separateFrame applet parameters; and starting form for the RWMS application. There are a total of four environments that need to be created in the formsweb.cfg:
 - rwms
 - rwms_hh
 - rwms_tm
 - rwms_wr

Each URL has a separate launch form. The Hand Held, Wrist Mount and Truck Mount URLs have separate resource files. The resource files setup key mappings for each device to interact properly with RWMS. Each resource file needs to be created by copying the text for the specific resource file to a file and saving it.

When updating the formsweb.cfg to create the URLs, modify the variables below. All other variables need to be set as they are in the samples below:

- **userid** – The connection string intended for the applications to access
- **envfile** – Has to match the location of the environment file intended to be used
- **otherparams** – Has to match the location of the key mapping file intended to be used for the device. It also has a variable called usesdi that needs to be set YES in order to remove the title bar from the RF screens. NOTE: The GUI portion of the application will not set this and will use system defaults

GUI Example:

```
[rwms]
envfile=$ORACLE_HOME/forms/server/rwms.env
width=950
height=685
form=logon_scr.fmx
separateFrame=true
lookAndFeel=Oracle
colorScheme=swan
userid=rwms13dev/password@oracle_sid
```

Note: In the examples below, the otherparams variable will point to the .res file that you renamed and copied to a new location in Step 1.

Handheld Example:

[rwms_hh]

```
envfile=$ORACLE_HOME/forms/server/rwms.env
width=100%
height=100%
form=hh_intro_s.fmx
separateFrame=false
lookAndFeel=Oracle
colorScheme=swan
Logo=false
background=false
ShowMenuBar=false
ShowStatusBar=false
baseHTMLjinitiator=basejini.htm
baseHTML=base.htm
otherparams=term=$ORACLE_HOME/forms/server/ke
y_mapping.res usesdi=YES
splashScreen=false

HTMLbodyAttrs=scroll="no" topmargin="0"
leftmargin="0" marginheight="0" marginwidth="0"
onload="window.moveTo(0,0);"

userid=rwms13dev/password@oracle_sid
```

Truck Mount Example:

[rwms_tm]

```
envfile=$ORACLE_HOME/forms/server/rwms.env
width=100%
height=100%
form=tm_intro_s.fmx
separateFrame=false
lookAndFeel=Oracle
colorScheme=swan
```

```

Logo=false
background=false
ShowMenuBar=false
ShowStatusBar=false
baseHTMLjinitiator=basejini.htm
baseHTML=base.htm
otherparams=term=$ORACLE_HOME/forms/server/k
eymapping.res usesdi=YES
splashScreen=false

HTMLbodyAttrs=scroll="no" topmargin="0"
leftmargin="0" marginheight="0" marginwidth="0"
onload="window.moveTo(0,0);"

userid=rwms13dev/password@oracle_sid

```

Wrist Mount Example:

```

[rwms_wr]

envfile=$ORACLE_HOME/forms/server/rwms.env
width=100%
height=100%
form=wr_intro_s.fmx
separateFrame=false
lookAndFeel=Oracle
colorScheme=swan
Logo=false
background=false
ShowMenuBar=false
ShowStatusBar=false
baseHTMLjinitiator=basejini.htm
baseHTML=base.htm
otherparams=term=$ORACLE_HOME/forms/server/k
eymapping.res usesdi=YES
splashScreen=false

HTMLbodyAttrs=scroll="no" topmargin="0"
leftmargin="0" marginheight="0" marginwidth="0"
onload="window.moveTo(0,0);"

userid=rwms13dev/password@oracle_sid

```

If Oracle Single Sign-On is to be used with RWMS, then

- Set ssoMode to true.
- If Resource Access Descriptors are allowed to be dynamically created, then set ssoDynamicResourceCreate to true.

Example: [rwms]

```
envfile=$ORACLE_HOME/forms/server/rwms.env
width=950
height=685
form=logon_scr.fmx
separateFrame=true
lookAndFeel=Oracle
colorScheme=swan
userid=rwms13dev/password@oracle_sid
ssoMode=true
ssoDynamicResourceCreate=true
```

9. Create a reports .conf file called rwms_reports_server.conf based on the <default_report_server>.conf file located in the following directory: ORACLE_HOME/reports/conf/. This file is used to set the REPORTS_PATH and NLS_LANG environment variables. In this file create the environment specific information listed below for the rwms environment. Multiple environments can access this .conf file to set specific settings for their reports. To do this – the .env files from the different environments have to reference the same reports .conf file and specify their own envid value.

```
<environment id="rwms">
  <envVariable name="REPORTS_PATH"
value="/projects/rwms13.0/dev/reports/user1:/projects/rwms13.0/dev/reports/bin
:/u00/webadmin/product/10.1.2.0.2_FULL/midtier/reports"/>
  <envVariable name="NLS_LANG" value="AMERICAN_AMERICA.UTF8"/>
</environment>
```

10. The close.htm, oracle_logo.jpg, and rwms_rf_menu.htm all need to be placed in the location specified by the rf_launch_value alias in the httpd.conf. The rwms_rf_menu.htm then needs to be configured to point to launch the correct URL's based on the names of the URL's in the formsweb.cfg file, and the port specified in the httpd.conf file. The variables that need to be changed are listed below.

```
var hh_device = "http://<Server_Name>:<port>/forms/frmservlet?config=rwms_hh";
var tm_device = "http://<Server_Name>:<port>/forms/frmservlet?config=rwms_tm";
var wr_device = "http://<Server_Name>:<port>/forms/frmservlet?config=rwms_wr";
var exit_script =
"http://<Server_Name>:<port>/rf_launch_value/close.htm";
```

11. Restart the Oracle HTTP Server through Oracle Enterprise Manager (OEM) for the new listener settings to take effect. The OEM URL was presented in the End of Installation window at the conclusion of the Oracle AS 10gR2 Forms and Reports Services installation. The default OEM URL should be http://server:1810.
12. Load RWMS in Forms 10gR2 mode by entering the following URL in a browser. Prior to testing, the Sun JRE 1.4.1+ plug-in needs to be installed on the client machine. The plug-in can be downloaded from <http://java.sun.com/>.
 - <http://<server>:<port>/forms/frmservlet?config=<env>>

- server = name or IP address of server where Oracle AS 10gR2 is running
- port = Value of the "Listen" setting in AS10G_ORACLE_HOME/Apache/Apache/conf/httpd.conf (default value is 7778)
- env = name of the environment in brackets in formsweb.cfg (from step 7 above).

Example:

<http://server:7778/forms/frmservlet?config=rwms>

Note: The first time RWMS is accessed, the user will be prompted with the following security warning. Click Yes.



13. On the RWMS logon form, enter the appropriateUsername/Password@Connect String information in the corresponding fields:
- Username = RWMS Schema Owner or additional Oracle user created
 - Password = Username password
 - Connect String = Oracle database created in chapter 1

Example: Username: RWMS13DEV
 Password: retek
 Connect String: prod_db1

Install Oracle Configuration Manager

This Oracle Retail product has been instrumented for configuration discovery and collection by Oracle Configuration Manager (OCM). It is recommended that you take advantage of OCM in your environment. Please see the *Oracle Configuration Manager Installer Guide* (Doc ID: 835024.1) for more information about OCM instrumentation in Oracle Retail products.

Installing OCM for RWMS:

1. Add this new RWMS application to the retail inventory:

Create or modify the

\$ORACLE_HOME/retail_inventory/oracle_retail_RWMSApp.properties file. Add the following lines to this file, substituting where appropriate:

```
<IAS_name>.<RWMS_name>+RWMS_INSTALL_DATE=<yyyy-MM-dd
HH:mm:ss>
```

```
<IAS_name>.<RWMS_name>+RWMS_VERSION=13.1.0
```

Example:

```
OH101202_MIDTIER.mspdev69.rwms13inst1+RWMS_INST
ALL_DATE=2007-11-10 09:51:50
```

```
OH101202_MIDTIER.mspdev69.rwms13inst1+RWMS_VERS
ION=13.1.0
```

<IAS_name> refers to the name of the OAS 10.1.2.x application server. This name was set when the application server software was installed and can be found in the \$ORACLE_HOME/config/ias.properties file in the IASname property.

<yyyy-MM-dd HH:mm:ss> refers to the date of RWMS installation. See example value above.

<RWMS_name> refers to a unique name to identify this RWMS forms installation. This is arbitrary and can be chosen at the time that this oracle_retail_RWMSApp.properties file is created.

Note: If there are multiple installations of RWMS using the same application server ORACLE_HOME, then there may be multiple sets of properties oracle_retail_RWMSApp.properties with different <RWMS_name> values.

The <IAS_name>.<RWMS_name> string used in this file becomes the OCM *target name* for this RWMS installation.

2. Determine whether or not the OCM collector has been installed in the application server ORACLE_HOME. Check for the existence of an \$ORACLE_HOME/ccr directory containing the collector software. If there is already an OCM collector installed in this location then the rest of these steps can be skipped.
3. If there is not yet an OCM collector installed in the application server ORACLE_HOME, the Retail OCM Installer should be used to install it. Use the retail-OCM-withAnt.zip file included with the RWMS release and follow the instructions in the *Oracle Configuration Manager Installer Guide* (Doc ID: 835024.1) to run the Retail OCM Installer independently.

Appendix: Oracle 11G Database Parameter File

```
#####
# Oracle 11.1.0.x Parameter file
#
# NOTES: Before using this script:
#       1. Change <datafile_path>, <admin_path>, <utl_file_path>, <diag_path>
#       and <hostname>
#       values as appropriate.
#       2. Replace the word SID with the database name.
#       3. Size parameters as necessary for development, test, and production
#       environments.
# -----
# MAINTENANCE LOG
#
# Date      By      Parameter      Old/New      Notes
# +-----+ +-----+ +-----+ +-----+ +-----+
#
# #####
# -----
# The policy is to give 60% for sga and 40% for PGA out of Memory Target at
# startup
# -----
memory_target = 2000M
# -----
audit_file_dest = <admin_path>/adump
compatible = 11.1.0
control_files = (<datafile_path>/control01.ctl
                 ,<datafile_path>/control02.ctl)
db_block_size = 8192 # Default is 2k; adjust before db creation,
cannot change after db is created
db_file_multiblock_read_count = 16 # Platform specific (max io
size)/(block size)
db_name = SID
diagnostic_dest = '<diag_path>'
java_pool_size = 100M
job_queue_processes = 5 # Oracle Retail required; number of
cpu's + 1
local_listener =
"(ADDRESS=(PROTOCOL=TCP)(HOST=<hostname>)(PORT=1521))"
nls_calendar = GREGORIAN
nls_date_format = DD-MON-RR # Oracle Retail required; if RDW
database see later entry for proper format
nls_language = AMERICAN # Default
nls_numeric_characters = "., " # Should be explicitly set to ensure all
users/batch get the same results
nls_sort = BINARY # Should be explicitly set to ensure all
sessions get the same order
nls_territory = AMERICA # Default
open_cursors = 900 # Oracle Retail required (minimum=900);
default is 50
optimizer_features_enable = 11.1.0.7
optimizer_mode = CHOOSE # Oracle Retail required
```

```

plsql_optimize_level          = 2           # 10g change; use this setting
to optimize plsql performance
processes                     = 500         # Max number of OS processes that can connect
to the db
query_rewrite_enabled         = TRUE        # Oracle Retail required for function-
based indexes
session_cached_cursors       = 900         # Oracle Retail required;
undo_management               = AUTO
undo_retention                 = 1800       # Currently set for 30 minutes; set to avg
length of transactions in sec
undo_tablespace               = undo_ts
user_dump_dest                 = <admin_path>/udump
utl_file_dir                  = <utl_file_path>
workarea_size_policy          = auto        # Should be set to auto
when pga_aggregate_target is set
#
# *** Set these parameters for Oracle Retail Data Warehouse (RDW) database ***
#nls_date_format              = DD-MON-RRRR # Required by MicroStrategy
#query_rewrite_integrity      = TRUSTED
#star_transformation_enabled  = TRUE
#utl_file_dir                 = <Windows_utl_file_path>,
<UNIX_util_file_path>
#
# *** Archive Logging, set if needed ***
#log_archive_dest_1            = 'location=<admin_path>/arch/'
#log_archive_format            = SIDarch_%r_%s_%t.log
#log_buffer                   = 10485760    # Set to (512K or 128K)*CPUs
#log_checkpoint_interval      = 51200       # Default:0 - unlimited
#log_checkpoint_timeout       = 7200        # Default:1800 seconds

```

Appendix: Tablespace Creation Script

```
PROMPT Creating Tablespace 'DATA_SMALL'
CREATE TABLESPACE DATA_SMALL
DATAFILE '<datafile_path>/data_small_01.dbf' SIZE 15M AUTOEXTEND ON MAXSIZE 2000M
EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K
SEGMENT SPACE MANAGEMENT AUTO
;

PROMPT Creating Tablespace 'INDEX_SMALL'
CREATE TABLESPACE INDEX_SMALL
DATAFILE '<datafile_path>/index_small_01.dbf' SIZE 15M AUTOEXTEND ON MAXSIZE 2000M
EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K
SEGMENT SPACE MANAGEMENT AUTO
;

PROMPT Creating Tablespace 'DATA_MEDIUM'
CREATE TABLESPACE DATA_MEDIUM
DATAFILE '<datafile_path>/data_medium_01.dbf' SIZE 40M AUTOEXTEND ON MAXSIZE 2000M
EXTENT MANAGEMENT LOCAL UNIFORM SIZE 4M
SEGMENT SPACE MANAGEMENT AUTO
;

PROMPT Creating Tablespace 'INDEX_MEDIUM'
CREATE TABLESPACE INDEX_MEDIUM
DATAFILE '<datafile_path>/index_medium_01.dbf' SIZE 40M AUTOEXTEND ON MAXSIZE
3000M
EXTENT MANAGEMENT LOCAL UNIFORM SIZE 4M
SEGMENT SPACE MANAGEMENT AUTO
;

PROMPT Creating Tablespace 'DATA_LARGE'
CREATE TABLESPACE DATA_LARGE
DATAFILE '<datafile_path>/data_large_01.dbf' SIZE 32792K AUTOEXTEND ON MAXSIZE
5000M,
      '<datafile_path>/data_large_02.dbf' SIZE 32792K AUTOEXTEND ON MAXSIZE
5000M
EXTENT MANAGEMENT LOCAL UNIFORM SIZE 32M
SEGMENT SPACE MANAGEMENT AUTO
;

PROMPT Creating Tablespace 'INDEX_LARGE'
CREATE TABLESPACE INDEX_LARGE
DATAFILE '<datafile_path>/index_large_01.dbf' SIZE 32792K AUTOEXTEND ON MAXSIZE
5000M,
      '<datafile_path>/index_large_02.dbf' SIZE 32792K AUTOEXTEND ON MAXSIZE
2000M
EXTENT MANAGEMENT LOCAL UNIFORM SIZE 32M
SEGMENT SPACE MANAGEMENT AUTO
;

PROMPT Creating Tablespace 'RETEK_INDEX'
CREATE TABLESPACE RETEK_INDEX
DATAFILE '<datafile_path>/retek_index01.dbf' SIZE 500M
      AUTOEXTEND ON NEXT 500M MAXSIZE 2000M
      EXTENT MANAGEMENT LOCAL
      SEGMENT SPACE MANAGEMENT AUTO
;
```

```
PROMPT Creating Tablespace 'RETEK_DATA'
CREATE TABLESPACE RETEK_DATA
DATAFILE '<datafile_path>/retek_data01.dbf' SIZE 500M AUTOEXTEND ON NEXT 500M
MAXSIZE 2000M
EXTENT MANAGEMENT LOCAL
SEGMENT SPACE MANAGEMENT AUTO
;

PROMPT Creating Tablespace 'LOB_DATA'
CREATE TABLESPACE LOB_DATA
DATAFILE '<datafile_path>/lob_data01.dbf' SIZE 50M AUTOEXTEND ON NEXT 100M
MAXSIZE 2000M
EXTENT MANAGEMENT LOCAL
SEGMENT SPACE MANAGEMENT AUTO
;

PROMPT Creating Tablespace 'USERS'
CREATE TABLESPACE USERS
DATAFILE '<datafile_path>/users_01.dbf' SIZE 100M AUTOEXTEND ON NEXT 100M MAXSIZE
2000M
EXTENT MANAGEMENT LOCAL UNIFORM SIZE 512K
SEGMENT SPACE MANAGEMENT AUTO
;
```

Appendix: Sample Oracle Net Files for the Server

listener.ora

Below is a sample listener.ora file.

\$SID represents the name of the Oracle instance that contains the RWMS schema.

Note: This example illustrates the listener configuration required for external procedures. It does not include environment specific settings that may be needed. Consult Oracle Net Services guides for additional information.

```
#####
# File: listener.ora
# Desc: Oracle Net8 listener file.
# Notes: Modify <hostname>
#####

LISTENER =
  (DESCRIPTION_LIST =
    (DESCRIPTION =
      (PROTOCOL_STACK =
        (PRESENTATION = TTC)
        (SESSION = NS))
      (ADDRESS =
        (PROTOCOL = tcp)
        (HOST = <hostname>)
        (PORT = 1521))
      (ADDRESS =
        (PROTOCOL = IPC)
        (KEY = extproc_key))
    )
  )

SID_LIST_LISTENER =
  (SID_LIST =
    (SID_DESC =
      (PROGRAM = extproc)
      (SID_NAME = extproc_agent)
      (ENVS='EXTPROC_DLLS=ANY')
    )
    (SID_DESC =
      (SID_NAME = <$SID>)
      (ORACLE_HOME = <$ORACLE_HOME>)
    )
  )
)
```

tnsnames.ora

A tnsnames.ora file is required to connect to any Oracle database on your network. A sample tnsnames.ora is illustrated below. You need to modify it appropriately to your environment. The extproc_connection_data entry is required along with the LISTENER_EXTPROC entry in the listener.ora file to allow Oracle to access a UNIX shell library that is required by one of the stored procedures in the database.

retek01 specifies the name of the server where the listener is located.

RETEK specifies the name of the Oracle instance that contains the RWMS schema.

```
#####
# File: tnsnames.ora
# Desc: Oracle Net8 TNS Names file.
#####
RETEK =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP)(HOST = retek01)(PORT = 1521))
    (CONNECT_DATA = (SID = RETEK))
  )

RETEK.WORLD =
(DESCRIPTION =
  (ADDRESS = (PROTOCOL = TCP)(HOST = retek01)(PORT = 1521))
  (CONNECT_DATA = (SID = RETEK))
)

EXTPROC_CONNECTION_DATA =
(DESCRIPTION =
  (ADDRESS = (PROTOCOL = IPC)(Key = extproc_key))
  (CONNECT_DATA = (SID = extproc_agent))
)
```


Appendix: Web Browser Configuration

This appendix provides information on configuring Internet Explorer and Mozilla Firefox Web browsers for operation with RWMS.

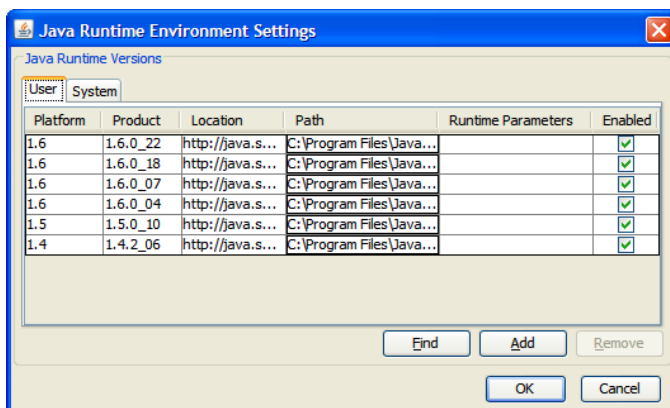
Note: The Oracle's Java Runtime Environment (JRE) is required to support Applets within a sandboxed security environment in the Web browser. The security architecture of the JRE has changed from JRE1.6.0_18 and requires additional configuration in Windows.

Microsoft Internet Explorer Versions 7 and 8

Note: Before proceeding, ensure that you have the JRE 1.6.0_22 installed.

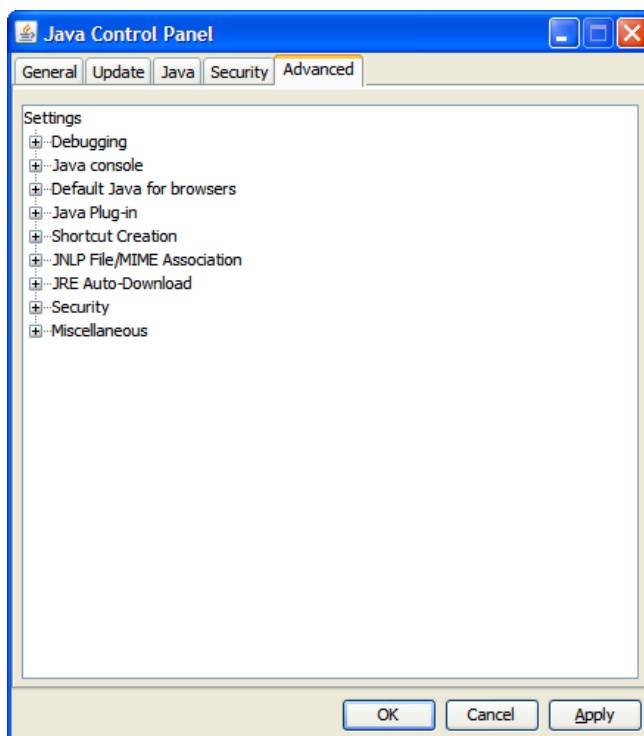
To configure the latest JRE for Internet Explorer 7 and 8, do the following.

1. Use the Windows Control Panel and open the **Java** Control Panel.
2. Select the **Java** tab in the Java Control Panel, and click the **View** button to confirm that the JRE1.6.0_22 product is installed and enabled.



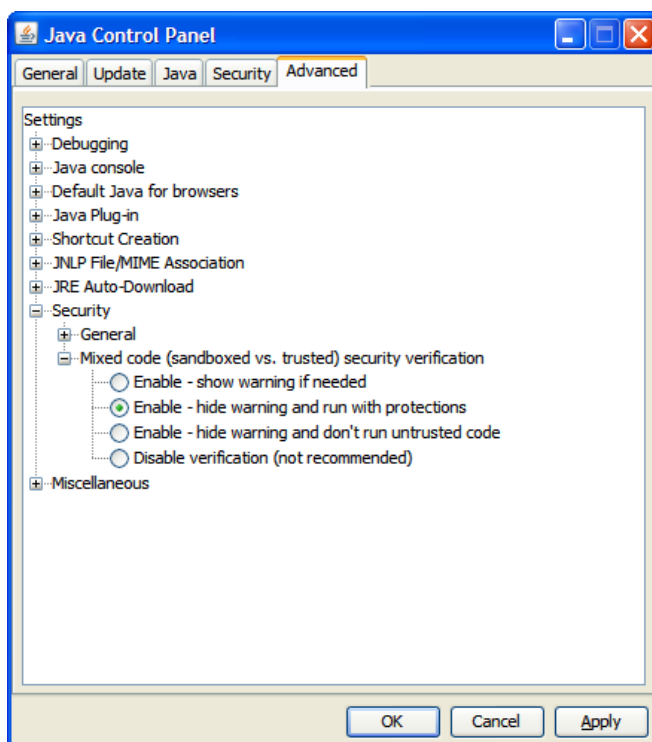
Java Runtime Environment Settings Window

3. Click **OK** and return back to the Java Control Panel.
4. Click the **Advanced** tab.



Options in the Advanced Tab

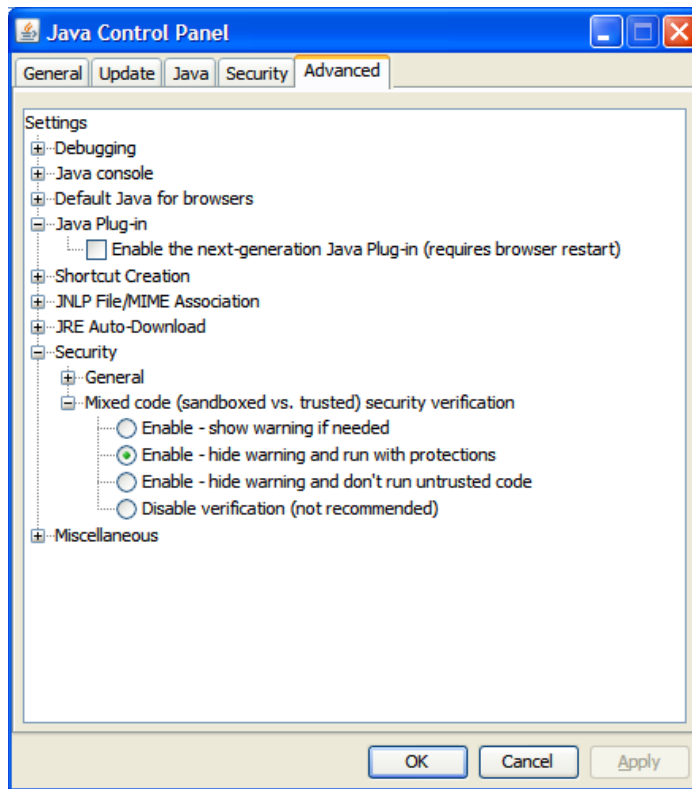
5. Click the Plus (+) icon and expand **Security**, and then expand **Mixed code**.



Mixed Code Settings in Java Control Panel

6. Click the **Enable – hide warning and run with protections** option to stop warning popup messages from appearing, but still enables the Java applet code to execute with protection.

7. Disable the next generation Java Plug-in option by expanding **Java Plug-in**, and then clearing the **Enable the next-generation Java Plug-in** check box.



Java Plug-in Option in Java Control Panel

Restart your Web browser to run the RWMS Forms displays.

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 Back Office (ORBO) or Back Office with Labels and Tags (ORLAT)
11. 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.

12. Oracle Retail Predictive Application Server (RPAS)
13. Oracle Retail Merchandise Financial Planning (MFP)
14. Oracle Retail Size Profile Optimization (SPO)
15. Oracle Retail Assortment Planning (AP)
16. Oracle Retail Item Planning (IP)
17. Oracle Retail Item Planning configured for COE (IPCOE)
18. Oracle Retail Advanced Inventory Planning (AIP)
19. Oracle Retail Integration Bus (RIB)
20. Oracle Retail Point-of-Service (ORPOS)

- 21.** Oracle Retail Mobile Point-of-Service (ORMPOS)
- 22.** Oracle Retail Analytics Applications
- 23.** Oracle Retail Data Warehouse (RDW)
- 24.** Oracle Retail Workspace (ORW)