

Oracle® Retail Invoice Matching

Installation Guide

Release 13.0.2

January 2009

Copyright © 2009, Oracle. All rights reserved.

Primary Author: Wade Schwarz

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

If the Programs are delivered to the United States Government or anyone licensing or using the Programs on behalf of the United States 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, use, duplication, disclosure, modification, and adaptation of the Programs, including documentation and technical data, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement, and, to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software—Restricted Rights (June 1987). Oracle Corporation, 500 Oracle Parkway, Redwood City, CA 94065

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and we disclaim liability for any damages caused by such use of the Programs.

Oracle, JD Edwards, PeopleSoft, and Siebel are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

The Programs may provide links to Web sites and access to content, products, and services from third parties. Oracle is not responsible for the availability of, or any content provided on, third-party Web sites. You bear all risks associated with the use of such content. If you choose to purchase any products or services from a third party, the relationship is directly between you and the third party. Oracle is not responsible for: (a) the quality of third-party products or services; or (b) fulfilling any of the terms of the agreement with the third party, including delivery of products or services and warranty obligations related to purchased products or services. Oracle is not responsible for any loss or damage of any sort that you may incur from dealing with any third party.

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	vii
Audience	vii
Related Documents.....	vii
Customer Support.....	vii
Review Patch Documentation	vii
Oracle Retail Documentation on the Oracle Technology Network.....	viii
Conventions.....	viii
1 Preinstallation Tasks	1
Check Database Server Requirements	1
Check Application Server Requirements.....	2
Verify Single Sign-On.....	2
Check Client PC and Web Browser Requirements.....	2
Supported Oracle Retail Products	3
Supported Oracle Retail Integration Technologies	3
2 RAC and Clustering	5
3 ReIM Database	7
4 Application Installation	9
Create a New OC4J Instance and Group for ReIM.....	9
Expand the ReIM Application Distribution	10
Clustered Installations – Preinstallation Steps.....	10
Run the ReIM Application Installer.....	11
Resolving Errors Encountered During Application Installation	12
Oracle Configuration Manager	12
Clustered Installations – Post-Installation Steps.....	12
Manual Deployment Option	12
Backups Created by Installer.....	13
Test the ReIM Application.....	13
reim.properties	13
integration.properties	14
ReIM Batch Scripts	14
WebHelp Files	14
Single Sign-On.....	14
5 ReIM Reports Installation.....	17
A Appendix: RMS DB Installer Screens	19
B Appendix: ReIM Application Installer Screens	23
C Appendix: Installer Silent Mode	31
Repeating an Installation Attempt.....	31

D	Appendix: URL Reference	33
	JDBC URL for a Database	33
	Deployer URI.....	33
E	Appendix: Common Installation Errors.....	35
	Database Installer Hangs on Startup.....	35
	Unreadable Buttons in the Installer	35
	“Unable to get a deployment manager” Message	35
	“Could not create system preferences directory” Warning	36
	ConcurrentModificationException in Installer GUI.....	36
	“Couldn't find X Input Context” Warnings	36
	Error while unpacking the application archive	37
F	Appendix: Installation Order	39

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 Invoice Matching Release 13.0.2 documentation set:

- *Oracle Retail Invoice Matching Release Notes*
- *Oracle Retail Invoice Matching Operations Guide*
- *Oracle Retail Invoice Matching Data Model*
- *Oracle Retail Merchandising Batch Schedule*

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 Oracle Retail Invoice Matching include:

Supported on:	Versions Supported:
Database Server OS	OS certified with Oracle Database 10gR2 Enterprise Edition. Options are: - Oracle Enterprise Linux 4 Update 5 for Linux x86-64 - Solaris 10 (SPARC) - HP-UX 11.31 (Integrity) - AIX 5.3
Database Server	Oracle Database 10g Release 2 Enterprise Edition (minimum 10.2.0.3 patchset required) with the following patches and components: Patches: 5397953 (ORA-07445: [KKPAPITGETALL()+2152] [SIGSEGV] [ADDRESS NOT MAPPED TO OBJECT] [0X34]) 5648872 (SCHEDULER ORA-07445 [OPIDSA()+321] WHEN SETTING UP CHAIN TEST) 5921386 (WRONG RESULT WITH MERGE JOINT OUTER IN THE EXECUTION PLAN) RAC Only 5721821 (ORA-7445[KGLOBCL] OCCURED AND INSTANCE WENT DOWN) Components: - Oracle Database 10g - Oracle Partitioning - Oracle Net Services - Oracle Call Interface (OCI) - Oracle Programmer - Oracle XML Development Kit ANSI compliant C compiler (certified with OS and database version) Perl compiler 5.0 or later x-Windows interface

Check Application Server Requirements

General requirements for an application server capable of running the Oracle Retail Price Management application include:

Supported on:	Versions Supported:
Application Server OS	OS certified with Oracle Application Server 10g 10.1.3.3. Options are: ▪ Oracle Enterprise Linux 4 Update 5 for Linux x86-64 ▪ Solaris 10 (SPARC) ▪ HP-UX 11.31 (Integrity) ▪ AIX 5.3
Application Server	Oracle Application Server 10g 10.1.3.3 with the following patches: ▪ 5632264 (NEED UPDATED TIMEZONE FILES (VERSION 4) FOR MORE DST RULE CHANGES) ▪ 5398506 (RUNTIME EXCEPTION DID NOT ROLLBACK MESSAGE ON EGATE (SEEBEYOND) TOPIC)

Note: This release of ReIM is only supported in a managed OC4J instance as part of OracleAS 10g. It is not supported on OC4J standalone

Verify Single Sign-On

If ReIM will not be deployed in a Single Sign-On environment, skip this section.

- If Single Sign-On is to be used, verify the Oracle Infrastructure Server 10g version 10.1.2.2 server has been installed. Verify the OAS HTTP server is registered with the Infrastructure Oracle Internet Directory as a partner application.

Check Client PC and Web Browser Requirements

Requirement	Version
Operating system	Windows 2000 or XP
Display resolution	1024x768
Processor	minimum1GHz
Memory	minimum of 512MBytes
Networking	Intranet with at least 10Mbps data rate
Sun JRE	5.0 (1.5.0)
Microsoft Internet Explorer	version 5.5 or higher

Supported Oracle Retail Products

Requirement	Version
Oracle Retail Merchandising System (RMS)/Oracle Retail Trade Management (RTM)/Oracle Retail Sales Audit (ReSA)	13.0.2
Oracle Retail Data Warehouse (RDW)	13.0.2
SIM (via RMS)	13.0.2
Oracle E-Business Suite (Accounts Payable)	12.0.4
	For support in implementing this integration, contact Oracle Customer Support and follow all typical Oracle Retail processes.

Supported Oracle Retail Integration Technologies

Requirement	Version
Oracle Retail Extract, Transform and Load (RETL)	13.0.2
Oracle Retail Integration Bus (RIB)	13.0.2

RAC and Clustering

Real Application Cluster Database and Oracle Application Server Clustering for Oracle Retail Invoice Matching has been validated to run only on Linux:

The Oracle Retail products have been validated against a 10.2.0.3 RAC database. When using a RAC database, all JDBC connections should be configured to use OCI connections rather than THIN connections. It is suggested that when using OCI connections, the Oracle Retail products database be configured in the tnsnames.ora file used by the Oracle Application Server installations.

Clustering for Oracle Application Server 10.1.3 is managed as an Active-Active cluster accessed through a hardware Load Balancer. It is suggested that a VirtualHost be added to the OAS 10.1.3 reflecting the Virtual Server Name configured in the load balancer. It is also suggested that the OC4J select method be configured to prefer the use of local OC4J instances. The Oracle Retail products are currently not validated to be distributable at the application level in an OAS 10.1.3 cluster.

Clustering for Oracle Application Server 10.1.2.2 is managed as an Active-Active cluster accessed through a hardware Load Balancer. It is suggested that the Web Cache installation included with OAS 10.1.2.2 be configured to reflect all application server Mid-Tier installations. Validation has been completed utilizing a RAC 10.2.0.3 Oracle Internet Directory database with the OAS 10.1.2.2 cluster.

References for Configuration:

- Oracle® Application Server High Availability Guide 10g Release 3 (10.1.3) Part Number B15977-02
- Oracle® Application Server High Availability Guide 10g Release 2 (10.1.2) Part Number B14003-05
- Oracle® Database Oracle Clusterware and Oracle Real Application Clusters Administration and Deployment Guide 10g Release 2 (10.2) Part Number B14197-03

ReIM Database

The ReIM database objects are bundled with the RMS database schema installer. To install the ReIM database objects see the *Patch RMS Database* chapter in the *RMS Installation Guide*. Run the database schema installer, and select the ReIM option on the product selection page.

Note: Appendix A contains details on screens and fields in the RMS database schema installer.

Application Installation

These instructions apply to new installations and upgrades. If you are upgrading a previous 13.0.x installation, the application installer upgrades the application and backs up certain files from the previous installation (see *Backups Created by the Installer* from this section). To ensure that the previous installation is properly undeployed, you must provide the same application deployment name and context root as the previous installation.

Before proceeding you must install Oracle Application Server 10g 10.1.3.3 plus the patches listed in the Chapter 1 of this document. The ReIM application is deployed to an OC4J instance within the OracleAS10g installation.

It is assumed Oracle Database has already been configured and loaded with the appropriate ReIM schema for your installation.

Create a New OC4J Instance and Group for ReIM

Skip to the next section if you are redeploying to an existing OC4J group in Oracle Application Server 10.1.3.3

The ReIM application must be deployed to its own dedicated OC4J group. For instructions on how to create a new OC4J group and instance(s), see the *Adding and Deleting OC4J Instances in the Reconfiguring Application Server Instances* chapter of the *Oracle Application Server Administrator's Guide*.

1. Log in to the server that is running your OracleAS installation. Set your ORACLE_HOME environment variable to point to this installation.
2. Choose a name for the new OC4J instance and group.

Example: reim_oc4j
 reim_group

Create this OC4J instance and group as documented in the *Oracle Application Server Administrator's Guide*.

Example:
\$ORACLE_HOME/bin/createinstance
-instanceName reim_oc4j -groupName reim_group

3. (Required only if ReIM is being installed on AIX 5.3) Be aware that ReIM requires an upgrade of the Java version when running on AIX 5.3. The version must be at least JRE version 1.5 SR7. If ReIM will be installed on AIX 5.3, then you will need to modify the \$ORACLE_HOME/opmn/conf/opmn.xml to upgrade the Java version that ReIM uses. Locate the OC4J instance you just created for ReIM, and add or modify the "java-bin" within the "start-parameters" section

Example:

```
<process-type id="reim_oc4j" module-id="OC4J"
status="enabled">
  <module-data>
    <category id="start-parameters">
```

```
<data id="java-bin"
value="path/to/JAVA_HOME/bin/java"/>
...
</category>
...
</module-data>
...
</process-type>
```

4. Force OPMN to reload the configuration file.

Example: \$ORACLE_HOME/opmn/bin/opmnctl reload

5. When prompted for the oc4jadmin password, provide the same administrative password you gave for the AS10g installation. All OC4J instances running Oracle Retail applications must have the same oc4jadmin password.
6. 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=reim_group

7. Verify that the OC4J group is fully started. If you are using the Enterprise Manager web interface, the instance(s) should have a green arrow indicating that they are running. On the command line, verify that each instance has a status of "Alive".

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

8. If you are unable to start an OC4J instance after several attempts, try increasing the startup timeouts in ORACLE_HOME/opmn/conf/opmn.xml. If that does not help, consult the Oracle Application Server documentation for further assistance.

Expand the ReIM Application Distribution

1. Log in to the UNIX server as the user who owns the OracleAS 10g installation. Create a new staging directory for the ReIM application distribution (reim13application.zip). There should be a minimum of 50 MB disk space available for the application installation files.

Example: \$ORACLE_HOME/j2ee/reim_oc4j/reim-staging

This location is referred to as INSTALL_DIR for the remainder of this chapter.

2. Copy reim13application.zip to INSTALL_DIR and extract its contents.

Clustered Installations – Preinstallation Steps

Skip this section if you are not clustering the application server.

There are no additional steps to take before running the installer for ReIM.

Note: Previous releases of ReIM required the OC4J instance names and OC4J group name to be identical. This is no longer the case, as OC4J grouping has changed between OAS 10.1.3.0 and 10.1.3.3.

Run the ReIM Application Installer

Once you have an OC4J instance that is configured and started, you can run the ReIM application installer. This installer configures and deploys the ReIM application.

Note: Appendix B contains details on every screen and field in the application installer.

Note: It is recommended that the installer be run as the same UNIX account which owns the application server ORACLE_HOME files. This method takes full advantage of the installer's capabilities. If the installer is run as a different user, the Manual Deployment Option must be selected.

1. Change directories to `INSTALL_DIR/reim/application`.
2. Set the `ORACLE_HOME` and `JAVA_HOME` environment variables. `ORACLE_HOME` should point to your AS10g installation. `JAVA_HOME` should point to the Java 5.0 (1.5.0) JDK located at `$ORACLE_HOME/jdk`.
3. If you are using an X server such as Exceed, set the `DISPLAY` environment variable so that you can run the installer in GUI mode (recommended). If you are not using an X server, or the GUI is too slow over your network, unset `DISPLAY` for text mode.
4. Run the `install.sh` script. This launches the installer. After installation is completed, a detailed installation log file is created (`reim13install.<timestamp>.log`).

Resolving Errors Encountered During Application Installation

If the application installer encounters any errors, it halts execution immediately. You can run the installer in silent mode so that you don't have to retype the settings for your environment. See Appendix C of this document for instructions on silent mode.

See Appendix E of this document for a list of common installation errors.

Since the application installation is a full reinstall every time, any previous partial installs are overwritten by the successful installation.

Oracle Configuration Manager

The Oracle Retail OCM Installer packaged with this release does not install the latest version of OCM. Oracle Retail recommends that retailers upgrade to the latest version of OCM from ARU. See OCM documentation for further instructions on how to automatically upgrade.

For more information, see the following:

My Oracle Support Note: 559539.1

The Oracle Configuration Manager Installer Guide describes the procedures and interface of the Oracle Retail Oracle Configuration Manager Installer that a retailer runs near the completion of its installation process.

OCM Documentation Link

<http://www.oracle.com/technology/documentation/ocm.html>

Clustered Installations – Post-Installation Steps

If you are installing the ReIM application to a clustered Oracle Application Server environment, there are some extra steps you need to take to complete the installation. In these instructions, the application server node whose ORACLE_HOME you used for the ReIM installer is referred to as the *master node*. All other nodes are referred to as the *remote nodes*.

1. The ReIM batch files should be copied from the master node to each of the remote nodes under the same path as on the master node. You should take the `$ORACLE_HOME/j2ee/<reiminstance>/reim-batch` directory and copy it onto the remote nodes under the same path.
2. All of the OC4J instances in the group should be restarted for the `jndi_providers.xml` changes to be picked up.

Example: `$ORACLE_HOME/opmn/bin/opmnctl @cluster
restartproc ias-component=reim_group`

Manual Deployment Option

Skip this section if you chose the default option of allowing the installer to complete installation to the application server.

The installer includes the option to configure the application locally and skip deployment to the application server. If this option is chosen, the installer makes the configured application files available under `<INSTALL_DIR>/reim/application/reim13/configured-output/`.

If you chose this installer option, you can complete the installation by following these steps:

1. Inspect the contents of the <INSTALL_DIR>/reim/application/reim13/configured-output/appserver/ORACLE_HOME directory, and then overlay the files in the application server's ORACLE_HOME, using the same directory structure. This installs library files required by the application, any required application server configuration changes, and the ReIM batch programs.
2. Restart the OC4J instance where ReIM will be deployed.

Example: \$ORACLE_HOME/opmn/bin/opmnctl @cluster
restartproc ias-component=reim_group

3. Deploy the ReIM war file to the OC4J group using the Enterprise Manager web interface. The configured war file is located at <INSTALL_DIR>/reim/application/reim13/configured-output/reim13.war. When deploying the war file, you should provide the same application name you gave to the installer. These values were stored in the <INSTALL_DIR>/reim/application/ant.install.properties file by the installer for later reference.

Backups Created by Installer

The ReIM application installer backs up a previous batch script installation by renaming it from reim-batch to reim-batch.<timestamp>. This is done to prevent the removal of any custom changes you might have. These backup directories can be safely removed without affecting the current installation.

Example: reim-batch.200803011726

Test the ReIM Application

After the application installer completes you should have a working ReIM application installation. To launch the application, open a web browser and go to <http://host:httpport/contextroot/index.jsp>.

Example: <http://myhost:7777/reim/index.jsp>

Oracle Retail provides test cases that allow you to smoke test your installation. Refer to the *Oracle Retail Merchandising Installation Test Cases* document; Metalink Note 559560.1.

reim.properties

The reim.properties file contains most of the settings for the ReIM application. Many properties in this file are set by the installer to get a working application up and running, but you may want to modify other settings in this file.

You can find this file under

ORACLE_HOME/j2ee/<instancename>/applications/<appname>/<appname>/WEB-INF/classes/com/retex/reim.

See the *ReIM Operations Guide* regarding the settings in reim.properties.

integration.properties

The integration.properties file contains most of the settings for the webservice financial integration. This file is set in place by the installer, however, it must be manually configured in order for webservices to function properly.

You can find this file under

ORACLE_HOME/j2ee/<instancename>/applications/<appname>/<appname>/WEB-INF/classes/com/retex/reim.

See the *ReIM Operations Guide* regarding the settings in integration.properties.

ReIM Batch Scripts

The ReIM application installer configures and installs the batch scripts under ORACLE_HOME/j2ee/<instance>/reim-batch.

The batch scripts are copies of the same generic file. Their file names determine which functionality is run.

The two settings that are needed for the scripts to run correctly are the REIMHOME and JAVA_HOME variables.

- REIMHOME = application directory created during deployment
- JAVA_HOME = Java 5.0 (1.5.0) installation located at \$ORACLE_HOME/jdk

Example: REIMHOME=J2EE_HOME/applications/reim
JAVA_HOME=/u00/webadmin/product/10.1.3/OracleAS_1/jdk

WebHelp Files

The application installer automatically copies the web help files to the proper location. They are accessible from the help links within the application.

Single Sign-On

Skip this section if ReIM is not used within an Oracle Single Sign-On environment.

Note: This section assumes the Oracle Application Server HTTP Server has already been registered with the Oracle Single Sign-On server via the regssso.sh script. See the Oracle Single Sign-On documentation for details.

If you are using ReIM in an Oracle Single Sign-On environment, then the ReIM root context must be protected. Edit the mod_osso.conf file, \$ORACLE_HOME/Apache/Apache/conf/mod_osso.conf. The following lines should be inserted immediately before the line consisting of </IfModule>

```
<Location /reim>
    require valid-user
    AuthType Basic
</Location>

<Location /reim/javascript>
    require valid-user
    AuthType Basic
    Allow from All
    Satisfy any
</Location>
```

```
<Location /reim/images>  
  require valid-user  
  AuthType Basic  
  Allow from All  
  Satisfy any  
</Location>
```

ReIM Reports Installation

ReIM Reports are included in the reim13reports.zip archive. To install the reports files, unzip reim13reports.zip and copy its contents to the reports directory created during RMS installation. See the *RMS 13.0 Installation Guide* for the instructions for initial setup of Oracle BI Publisher for ReIM reports

Appendix: RMS DB Installer Screens

You need the following details about your environment for the installer to successfully patch the ReIM database schema. Depending on the options you select, you may not see some screens or fields. Starting with the RMS 13.0.1 release, the RMS database schema installer also includes the option to install the database schema objects for the ReIM and Allocation products.

Screen: Full Install or Patch Option

Oracle Retail Merchandise Operations Management

ORACLE

Full Install or Patch Option

This installer can create the full 13.0.1 baseline schema or apply a patch.

Full: Run the bundled scripts to create the 13.0.1 baseline schema.

Patch: Run a user-provided patch that was downloaded separately.

Full+Patch: Run both of the above options to create a new schema up to a certain patch level.

Select your choice

☐ Full

☒ Patch

☐ Full+Patch

Cancel Back Next Install

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. For the RMS 13.0.2 patch release, select Patch
Example	Patch

Screen: Product Selection

The screenshot shows a window titled "Oracle Retail Merchandise Operations Management" with the Oracle logo. Below the logo is a section titled "Product Selection". Inside this section, there is a text prompt: "Please select which product or products you would like to install." Below the prompt are three options, each with a checkbox: "RMS/RPM" (unchecked), "ReIM" (checked), and "Allocation" (unchecked). At the bottom of the window are four buttons: "Cancel" (with a red X icon), "Back" (with a left arrow icon), "Next" (with a right arrow icon), and "Install" (with a circular arrow icon).

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	ReIM

Screen: Database Schema Details

Oracle Retail Merchandise Operations Management

ORACLE

RMS Database Schema Details

Please provide information on a pre-existing database user for this RMS installation. The installer will authenticate as this user and create the RMS database objects.

RMS schema

RMS schema password

RMS Oracle SID

Cancel Back Next Install

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: Apply an RMS DB Patch

Oracle Retail Merchandise Operations Management

ORACLE

Apply ReIM DB Patch

You have chosen to apply a patch. The installer will run the reimdbstart.sql script provided with the patch you have downloaded separately.

The directory provided here must contain an reimdbstart.sql script

Patch Directory

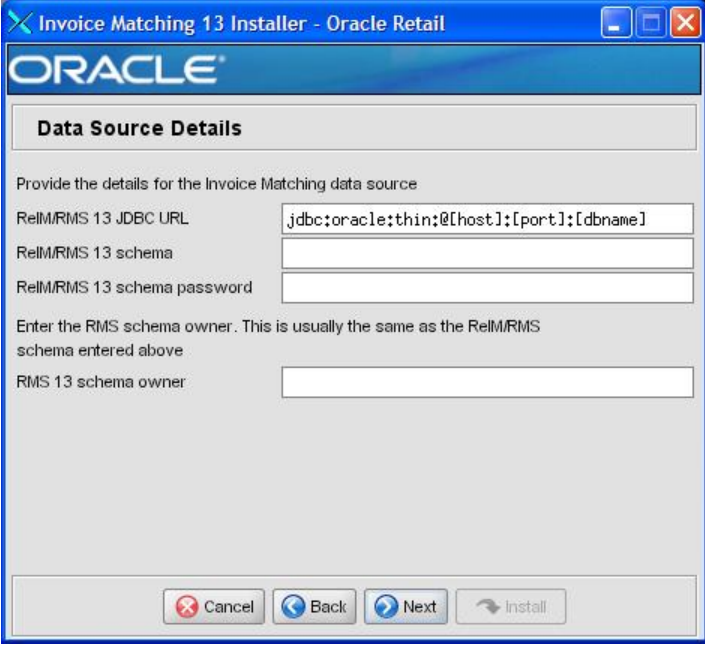
Fields on this screen:

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 patch you want to install. The installer runs only the patch you provide. Note: The directory you choose must contain an reimdbstart.sql file.
Example	/path/to/mom-dbpatch/for all 13.0.x patches

Appendix: ReIM Application Installer Screens

You need the following details about your environment for the installer to successfully deploy the ReIM application. Depending on the options you select, you may not see some screens or fields.

Screen: Data Source Details



Fields on this screen:

Field Title	ReIM/RMS 13 JDBC URL
Field Description	URL used by the ReIM application to access the ReIM/RMS database schema. See Appendix D: URL Reference for expected syntax.
Destination	reim.properties
Examples	jdbc:oracle:thin:@myhost:1525:mydatabase jdbc:oracle:oci:@mydatabase

Field Title	ReIM/RMS 13 schema
Field Description	RMS database user for accessing the ReIM tables. This should match what was given in the <i>RMS 13 schema</i> field of the ReIM database installer.
Destination	reim.properties
Example	RMS13USER
Field Title	ReIM/RMS 13 schema password
Field Description	Password for the JDBC username. This should match what was given in the <i>ReIM 13 schema password</i> field of the ReIM database installer.
Destination	reim.properties
Field Title	RMS 13 schema owner
Field Description	Database user which owns the RMS and ReIM tables. This usually has the same value as the <i>ReIM/RMS 13 schema</i> field above.
Destination	reim.properties
Example	RMS13USER

Screen: Application Server Details

Invoice Matching 13 Installer - Oracle Retail

ORACLE

Application Server Details

Hostname

The OPMN request port is found in ORACLE_HOME/opmn/conf/opmn.xml

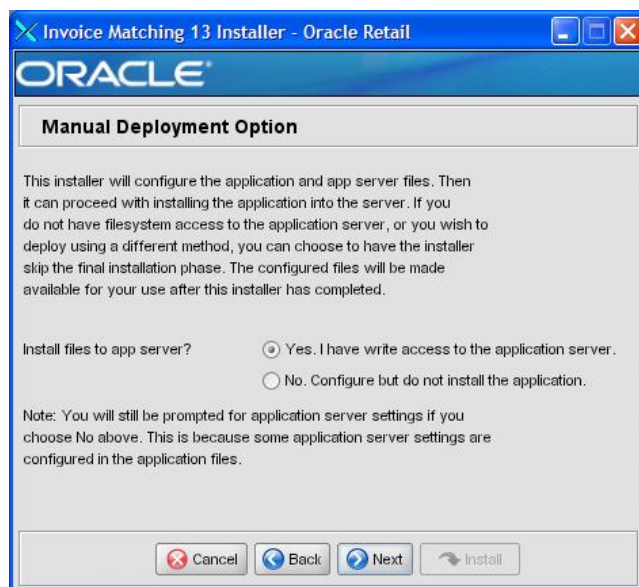
OPMN request port

Cancel Back Next Install

Fields on this screen:

Field Title	Hostname
Field Description	Hostname of the application server
Example	myhost
Field Title	OPMN request port
Field Description	Port on which OPMN listens for requests to forward on to OC4J instances. This port can be found in the ORACLE_HOME/opmn/conf/opmn.xml file: <pre><port local="6100" remote="6200" request="6003"/></pre> Note: The installer attempts to present a valid default value based on the ORACLE_HOME given.
Example	6003

Screen: Manual Deployment Option



Fields on this screen:

Field Title	Install files to app server?
Field Description	If you do not have write access under ORACLE_HOME, you can still use the installer to gather your settings and configure the ReIM files locally in the staging area. Then, at a later time, an administrator can manually copy over the ReIM files and deploy the war file. If you select this option, instructions are printed to the console and the installer log file for the steps needed to complete the installation.

Screen: Application Deployment Details

Application Deployment Details

The default values shown below are examples

ReIM 13 app deployment name:

ReIM 13 context root:

ReIM 13 OC4J instance:

The OC4J instance(s) for ReIM must belong to an OC4J group created specifically for this ReIM deployment. This installer will deploy the ReIM application into all instances in the group. If you are not clustering the application across multiple OC4J instances then you should have a ReIM group with just one member OC4J instance. Do NOT use default_group in this field.

ReIM 13 OC4J group:

Fields on this screen:

Field Title	ReIM 13 app deployment name
Field Description	Name by which this ReIM application is identified in the application server
Example	reim13
Field Title	ReIM 13 context root
Field Description	Path under the HTTP URL that will be used to access the ReIM application. For example, a context root of 'reim' results in the application being accessed at http://host:port/reim/index.jsp.
Example	reim
Field Title	ReIM 13 OC4J instance
Field Description	Name of the OC4J instance that was created for this ReIM application.
Example	reim_oc4j

Field Title	ReIM 13 OC4J group
Field Description	Name of the OC4J group that was created for this ReIM application. The OC4J instance given for the ReIM OC4J Instance field should be a member of this group. The installer will deploy the ReIM application to all OC4J instances which are members of this group. For this reason, you should not use default_group. A new group dedicated to ReIM should be created instead.
Example	reim_group

Screen: OC4J Administrative User

Fields on this screen:

Field Title	OC4J admin user
Field Description	Username of the admin user for OC4J instance to which the ReIM 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 (managed OC4J) or when you started the instance for the first time (standalone OC4J).

Appendix: Installer Silent Mode

Repeating an Installation Attempt

In addition to the GUI and text interfaces of the ReIM installer, there is a silent mode that can be run. This mode is useful if you wish to run a repeat installation attempt without going through the installer screens again.

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 the previous run.
2. Run the installer again with the **silent** argument.
`install.sh silent`

Appendix: URL Reference

Both the database schema and application installers for the Invoice Matching product asks for certain URLs. These include the following.

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

Deployer URI

The Deployer URI is used by the Oracle ANT tasks to deploy an application to an OC4J group. The application installer does not ask the user for this value; it is constructed based on other inputs and written to the ant.install.properties file for input to the installation script. For repeat installations using silent mode, you may need to correct mistakes in the deployer URI.

Note: There are several different formats for the deployer URI depending on your cluster topology. Consult the *Deploying with the OC4J Ant Tasks* chapter of the *OC4J Deployment Guide* for further details.

Syntax (managed OC4J): deployer:cluster:opmn://<host>:<port>/<group>

- <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.
- <group>: Name of the OC4J group where the application will be deployed.

Example:
deployer:cluster:opmn://myhost:6003/reim_group

Syntax (standalone OC4J): deployer:oc4j:<host>:<port>

- <host>: hostname of the OracleAS environment
- <port>: RMI port of the OC4J server. This can be found in the ORACLE_HOME/j2ee/home/config/rmi.xml file.

Example: deployer:oc4j:myhost:23791

Appendix: Common Installation Errors

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

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 could mean that your JAVA_HOME is pointed to an older version of the JDK than is supported by the installer. Set JAVA_HOME to \$ORACLE_HOME/jdk from the Oracle Application Server 10.1.3 installation and run the installer again.

“Unable to get a deployment manager” Message

Symptom:

The application installer quits with the following error message:

```
[oracle:deploy] Unable to get a deployment manager.
[oracle:deploy]
[oracle:deploy] This is typically the result of an invalid deployer URI format
being supplied, the target server not being in a started state or incorrect
authentication details being supplied.
[oracle:deploy]
[oracle:deploy] More information is available by enabling logging -- please see
the Oracle Containers for J2EE Configuration and Administration Guide for details.
```

Solution:

This error can be caused by any of the following conditions:

- OC4J instance provided is not running.
- Incorrect OC4J instance name provided
- Incorrect OC4J administrative username and/or password
- Incorrect OPMN request port provided.

Make sure that the OC4J instance is running, and then check the **ant.install.properties** file for entry mistakes. Pay close attention to the input.deployer.uri (see Appendix D: URL Reference), input.oc4j.instance, input.admin.user, and input.admin.password properties. If you need to make a correction, you can run the installer again with this file as input by running silent mode (see Appendix C of this document).

“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.

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.

“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.

Error while unpacking the application archive

Symptom:

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

```
07/12/19 10:53:17 Notification ==>Error while unpacking reim13.war  
java.util.zip.ZipException: error in opening zip file
```

Solution:

This is a known bug (BugID 6330834) related to Solaris and NFS in Oracle Application Server 10.1.3.3. Follow the workaround documented for this bug: in the opmn.xml file in \$ORACLE_HOME/opmn/conf to add the following parameter to the java-options for the instance you are installing.

```
-Doc4j.autoUnpackLockCount=-1
```

After making this change you should reload OPMN, restart the affected OC4J instance(s), and retry the retail application installation.

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.

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)