Oracle® Retail Invoice Matching

Installation Guide
Release 13.0.1 Patch

June 2008

ORACLE®

Oracle® Retail Invoice Matching Installation Guide, Release 13.0.1 Patch

Value-Added Reseller (VAR) Language

(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 and Oracle Retail Demand Forecasting 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 Store Inventory Management.

(v) the software component known as **Crystal Enterprise Professional and/or Crystal Reports Professional** licensed by Business Objects Software Limited ("Business Objects") 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 **WebLogic™** developed and licensed by BEA Systems, Inc. of San Jose, California, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

(x) 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.

Contents

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 13.0.1 documentation set:

- Oracle Retail Invoice Matching front-end documentation (for example, the ReIM User Guide and online help)
- Oracle Retail Invoice Matching Operations Guide
- Oracle Retail Invoice Matching Data Model
- Oracle Retail Merchandising Implemenation Guide
- Oracle Retail Merchandising Batch Schedule
- Oracle Retail Merchandising System (RMS) product documentation

Customer Support

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

For a base release (".0" release, such as 13.0), Oracle Retail strongly recommends that you read all patch documentation before you begin installation procedures. Patch documentation can contain critical information related to the base release, based on new information 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:

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.

1

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	UNIX based OS certified with Oracle RDBMS 10gR2 Enterprise Edition ▪ Oracle Enteprise Linux 4 Patch 5 for Linux x86-64 ▪ Solaris 10 (SPARC) ▪ HP-UX 11.23 (Integrity) ▪ AIX 5.3
Database Server	Oracle RDBMS 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	UNIX based OS certified with Oracle Application Server 10g 10.1.3.3. ▪ Oracle Enteprise Linux 4 Patch 5 for Linux x86-64 ▪ Solaris 10 (SPARC) ▪ HP-UX 11.23 (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)	13.0.1
Oracle Retail Data Warehouse (RDW)	13.0.1
SIM (via RMS)	13.0.1

2
RAC and Clustering

Real Application Cluster RDBMS & 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

3
Patch ReIM Database

The ReIM 13.0.1 database schema patch is packaged with the RMS 13.0.1 release. Please obtain the mom-dbpatch.zip file from the RMS 13.0.1 release. If this file was already downloaded and expanded for the RMS patch, the same files can be used for the ReIM patch.

For the rest of this chapter, DB_PATCH_DIR refers to the directory where mom-dbpatch.zip was expanded.

There are two different methods to use for installing the ReIM 13.0.1 database schema patch. Option 1 uses the installer to apply the patch. Option 2 uses SQL*Plus directly. Option 1 is a new option that was added for the version 13 release. Both options are given in this chapter.

Option 1: Installer

The ReIM 13.0 database schema installer may be used to apply ReIM patches. The entire 13.0.1 ReIM patch may be installed by re-running the installer used with the ReIM 13.0 full release.

The installer should only be used to apply patches if the schema being patched does not contain customizations or hotfixes. The patch may also be applied using SQL*Plus. See *Patch ReIM Database Using SQL*Plus* later in this chapter for details on this method.

In this section, INSTALL_DIR refers to the location where the ReIM 13.0 database schema installer was originally expanded. The installer files from the original ReIM 13.0 installation can be re-used or a new directory can be created with a fresh copy of the ReIM 13.0 database schema installer.

Before you apply the ReIM 13.0.1 patch:
- Make a backup of all your objects and database schema.
- Check that ReIM 13.0 is installed.
- Review the enclosed ReIM 13.0.1 Patch Release Notes (reim-1301-rn.pdf).
- Review each of the enclosed SIR documents.

Before copying over any files:
- Note whether customizations have been made to the module. If so, then the customizations must be reapplied over the new version of the module (or the fix may need to be applied to the custom version of the code).
- Copy the original files to a different directory before copying over them in case they need to be referred to at a later date.

Manual Edits to SQL Scripts

Modify the dbstart.sql file that will be used by the installer

Example:	DB_PATCH_DIR/mom-dbpatch/13.0.1/reim/dbstart.sql

Make the following changes:

1. There is a new set of demo data released in the 13.0.1 patch. To insert this new data, uncomment the call to im_demo_data.sql in ReIM's dbstart.sql file. By default this line is commented out so that demo data is not inserted with the patch.

2. Examine the rest of the SQL script to see all of the files that are included in the patch.

Run the ReIM Database Schema Installer

1. Change directories to INSTALL_DIR/reim/dbschema.

2. Source the oraenv script to set up the Oracle environment variables (ORACLE_HOME, ORACLE_SID, PATH, etc)

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

Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

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

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

Note:	The SQLPATH environment variable is critical for a patch installation to be successful

Variable	Description	Example
SQLPATH	Locations to which SQL*Plus looks for referenced SQL scripts. It is important that SQLPATH include the path to the patch directory where dbstart.sql resides.	SQLPATH=<DB_PATCH_DIR>/mom-dbpatch/13.0.1/reim
NLS_LANG	Locale setting for Oracle database client	NLS_LANG=AMERICAN_AMERICA.UTF8 export NLS_LANG
DISPLAY	Address and port of X server on desktop system of user running install. Optional for dbschema installer	DISPLAY=<IP address>:0 export DISPLAY

4. If you are going to run the installer in GUI mode using an X server, you need to have the XTEST extension enabled. This setting is not always enabled by default in your X server. See Appendix A: Common Installation Errors for more details.

5. If the installer has already been run in this location you may wish to back up the ant.install.properties file. The settings from the ReIM 13.0 full install might be in this file, and running the installer again for the patch will clear out some of the settings that aren't used by the installer's patch mode.

6. Run the install.sh script to start the installer.

> **Note:** Below are the usage details for install.sh. The typical usage for GUI mode is no arguments.
>
> install.sh [text | silent]

If prompted about resuming previous installation, respond with "no".

Select the "Patch" option on the "Full Install or Patch Option" screen.

7. On the "Apply an ReIM DB Patch" page, provide the path to the DB_PATCH_DIR/mom-dbpatch/13.0.1/reim/. This directory should contain a dbstart.sql file, which the installer runs to apply the ReIM 13.0.1 patch.

8. After the installer is complete, you can check its log file: reim-install-dbschema.<timestamp>.log.

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

> **Example:** chmod 600 ant.install.properties

Resolving Errors Encountered During Database Schema Installation

Errors encountered during patch installation should be resolved outside of the installer using SQL*Plus. The installer's resume function is only useful for full installs.

Option 2: SQL*Plus

While the installer can be used to apply the entire ReIM database patch, there are situations in which it is better to use SQL*Plus directly with the scripts released in the patch. The installer calls a single start-all script named dbstart.sql which runs all of the files in the patch. If there are any customizations or hotfixes in the schema then certain statements in the patch may result in errors. In this situation, it is better to investigate where the conflicts are and fix the SQL scripts accordingly.

Before you apply the ReIM 13.0.1 patch:

- Make a backup of all your objects and database schema.
- Check that ReIM 13.0 is installed.
- Review the enclosed ReIM 13.0.1 Patch Release Notes (reim-1301-rn.pdf).
- Review each of the enclosed SIR documents.

Before copying over any files:

- Note whether customizations have been made to the module. If so, then the customizations must be reapplied over the new version of the module (or the fix may need to be applied to the custom version of the code).
- Copy the original files to a different directory before copying over them in case they need to be referred to at a later date.

Steps:

1. Change directories to DB_PATCH_DIR/mom-dbpatch/13.0.1/reim.
2. Source the oraenv script to set up the Oracle environment variables (ORACLE_HOME, ORACLE_SID, PATH, etc)

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

Verify the ORACLE_HOME and ORACLE_SID variables after running this script.

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

3. Set and export the NLS_LANG environment variable.

Example:	NLS_LANG=AMERICAN_AMERICA.UTF8
	export NLS_LANG

4. Log into SQL*Plus as the RMS schema owner (Example: RMSDEV) and run the following command:

```
SQL> @dbstart.sql
```

> **Note:** This dbstart.sql script installs the entire patch. It is recommended that you open this file and review all of the scripts that are being called. Some files may require modification for a successful installation.

Application Installation UNIX

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 back 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 RDBMS 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 *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. 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.

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

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

5. 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

6. 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.

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 first OCM collector distribution that will be aware of the Oracle Retail applications is in development. This version of OCM is scheduled to be posted for download but is not yet available. Oracle Retail recommends that retailers download OCM 10.3.0 from ARU and use the "emCCR update_components" command to upgrade installed OCM collectors. See the OCM Installation and Administration Guide for further instructions. The Retail OCM Installer released with Oracle Retail 13.0 applications will install OCM 10.2.7. If the collector remains at version 10.2.7 and is installed in connected mode, an automatic update to version 10.3.0 is expected to occur later this year, the time at which 10.3.0 becomes a mandatory upgrade.

For more information, see the following:

Metalink 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.

Clustered Installations – Post-Install 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/retek/reim.

See the *ReIM Operations Guide* regarding the settings in reim.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 regsso.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>
```
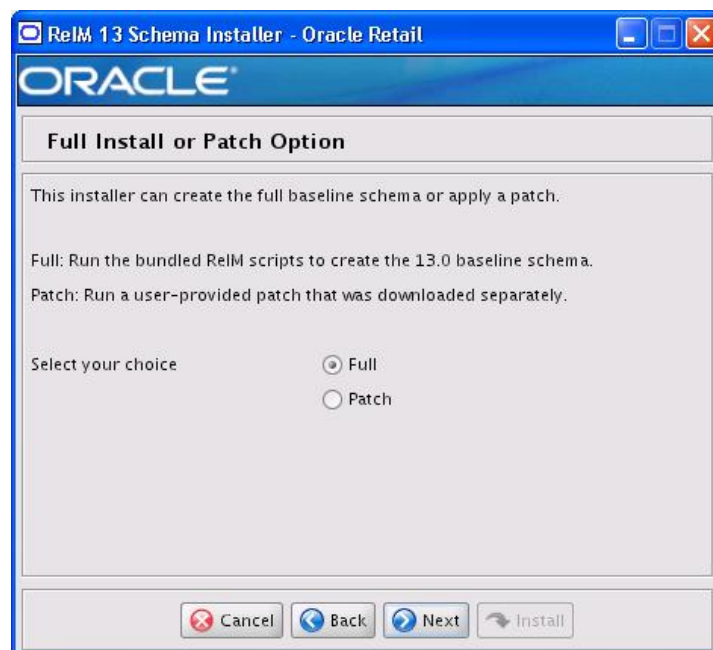
Appendix: ReIM Database Schema Installer Screens

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

Screen: Full Install or Patch Option

Fields on this Screen:

Field Title	Full or Patch
Field Description	The installer can create the full baseline schema or apply a patch. For the ReIM 13.0 release, select Full. If installing a patch released after 13.0, select Patch and the installer prompts for the location of the patch files on the next screen.
Example	Full

Screen: Apply ReIM DB Patch

Fields on this Screen:

Field Title	Patch Directory
Field Description	This page appears if the Patch option is selected on the previous 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 a dbstart.sql file.
Example	/my/reim/patch/dir

Screen: Database Schema Details

Fields on this screen:

Field Title	RMS 13 schema
Field Description	The RMS schema in your database. This should be an existing RMS 13.0 schema in which the ReIM tables are to be installed.
Example	RMS13

Field Title	RMS 13 schema password
Field Description	Password for the RMS schema

Field Title	Oracle database SID
Field Description	Oracle System Identifier for your database instance
Example	mydatabase
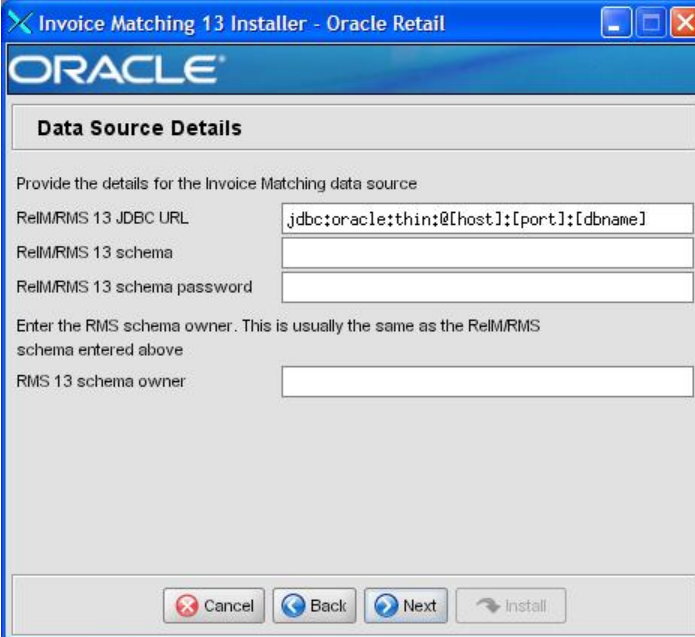
Screen: ReIM Demo Data (optional)
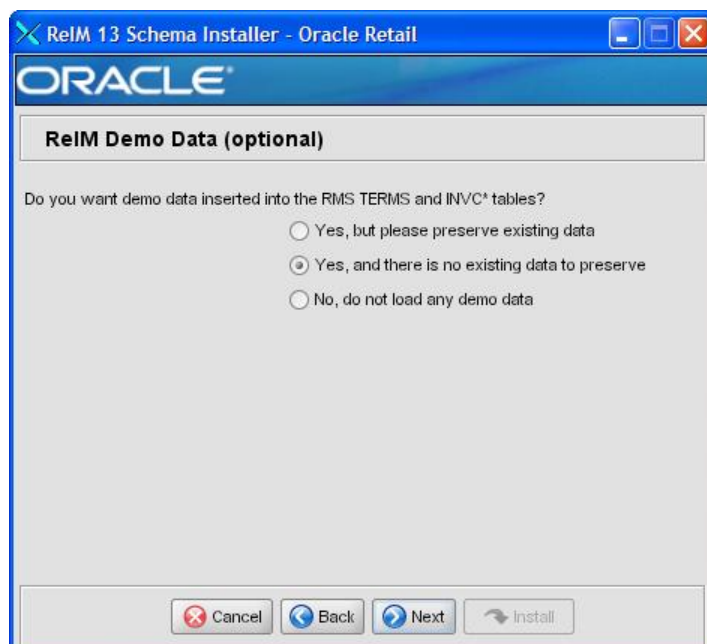
Fields on this screen:

Field Title	Do you want demo data inserted into the RMS TERMS and INVC* tables?
Field Description	There are demo data scripts which are included with ReIM 13.0. Their use is optional. Warning: If you choose not to load demo data by selecting "No", then you will not be able to log into the ReIM application until you add users to the IM_USER_AUTHORIZATION table.

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 *RMS 13 schema* 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 *ReIM 13 schema password* 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 will usually have the same value as the *ReIM/RMS 13 schema* field above.
Destination	reim.properties
Example	RMS13USER

Screen: Application Server Details

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: <port local="6100" remote="6200" request="**6003**"/> Note: The installer attempts to present a valid default value based on the ORACLE_HOME given.
Example	6003

Screen: Manual Deployment Option
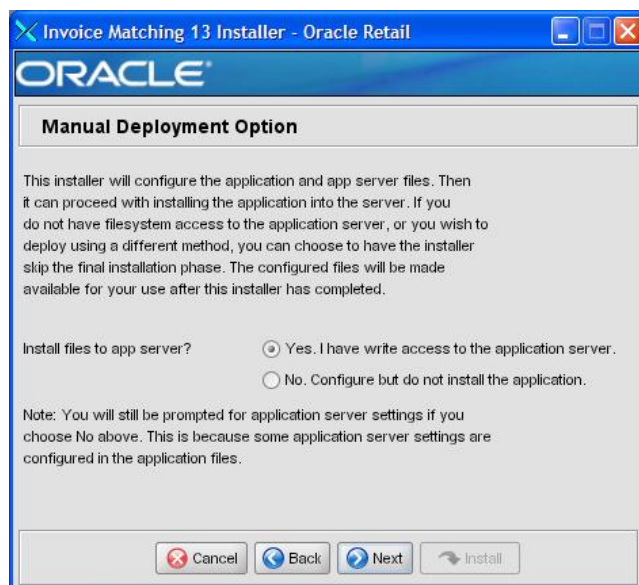
Fields on this screen:

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.
Destination	
Example	

Screen: Application Deployment Details

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).

C

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 will ask 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

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.

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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 Advanced Inventory Planning (AIP)
14. Oracle Retail Integration Bus (RIB)
15. Oracle Retail Point-of-Service (ORPOS)
16. Oracle Retail Mobile Point-of-Service (ORMPOS)
17. Oracle Retail Analytics Applications
18. Oracle Retail Data Warehouse (RDW)
19. Oracle Retail Workspace (ORW)