

Oracle® Retail Invoice Matching

Installation Guide

Release 13.1

June 2009

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Preface

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

Audience

This Installation Guide is written for the following audiences:

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

Related Documents

For more information, see the following documents in the Oracle Retail Invoice Matching Release 13.1 documentation set:

- *Oracle Retail Invoice Matching Data Model*
- *Oracle Retail Invoice Matching Online Help*
- *Oracle Retail Invoice Matching Operations Guide*
- *Oracle Retail Invoice Matching Release Notes*
- *Oracle Retail Invoice Matching User Guide*

See also:

- *Oracle Retail Merchandising Batch Schedule*
- *Oracle Retail Merchandising Implementation Guide*
- *Oracle Retail Merchandising Licensing Information*
- Oracle Retail Extract, Transform, and Load documentation

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

<https://metalink.oracle.com>

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Review Patch Documentation

If you are installing the application for the first time, you install either a base release (for example, 13.0) or a later patch release (for example, 13.0.2). If you are installing a software version other than the base release, be sure to read the documentation for each patch release (since the base release) before you begin installation. Patch documentation can contain critical information related to the base release and code changes that have been made since the base release.

Oracle Retail Documentation on the Oracle Technology Network

In addition to being packaged with each product release (on the base or patch level), all Oracle Retail documentation is available on the following Web site (with the exception of the Data Model which is only available with the release packaged code):

http://www.oracle.com/technology/documentation/oracle_retail.html

Documentation should be available on this Web site within a month after a product release. Note that documentation is always available with the packaged code on the release date.

Conventions

Navigate: This is a navigate statement. It tells you how to get to the start of the procedure and ends with a screen shot of the starting point and the statement “the Window Name window opens.”

Note: This is a note. It is used to call out information that is important, but not necessarily part of the procedure.

This is a code sample
It is used to display examples of code

A hyperlink appears like this.

Preinstallation Tasks

Note: The database portion of ReIM can be upgraded from release 13.0.2 to release 13.1. The upgrade process is performed during installation of RMS 13.1. See the *RMS 13.1 Installation Guide* for complete upgrade instructions. Use the procedures in this guide to perform the application installation. Also see the following document at My Oracle Support (formerly MetaLink):

Oracle Retail Upgrade Guide (Doc ID 837368.1)

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

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 11gR1 Enterprise Edition. Options are: <ul style="list-style-type: none">▪ Oracle Enterprise Linux 5 Update 2 (OEL 5.2) for Linux x86-64▪ AIX 6.1 TL1
Database Server	Oracle Database 11g Release 1 Enterprise Edition (minimum 11.1.0.7 patchset required) with the following patches and components: Patches: <ul style="list-style-type: none">▪ 7036284 (LOADJAVA RUN IN A DV ENVIRONMENT CANNOT LOAD CLASSES WITH A NAME LONGER THAN 128)▪ 7378322 (ORA-00600: internal error code, arguments: [6704], [1], [532241], [532237])▪ 6800649 – (AIX only) when non-oracle user uses client utilities sqldr/sqlplus/impdp/expdp, core dump is generated. Need to “relink all” after applying the patch RAC only <ul style="list-style-type: none">▪ 7697360 ORA-00600: internal error code, arguments: [k2vcbk_6], Database crashed during transaction recovery. Components: <ul style="list-style-type: none">▪ Oracle Database 11g▪ Oracle Partitioning▪ Oracle Net Services▪ Oracle Call Interface (OCI)▪ Oracle Programmer▪ Oracle XML Development Kit▪ Examples CD (Formerly the companion CD) 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 Invoice Matching application include:

Supported on:	Versions Supported:
Application Server OS	OS certified with Oracle Application Server 10g 10.1.3.4. Options are: <ul style="list-style-type: none"> Oracle Enterprise Linux 5 Update 2 (OEL 5.2) for Linux x86-64 AIX 6.1 TL1
Application Server	Oracle Application Server 10g 10.1.3.4 with the following patches: <ul style="list-style-type: none"> 7408340 TRACKING BUG FOR CUMULATIVE MLR#2 ON TOP OF 10.1.3.4.0

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 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	minimum 1GHz
Memory	minimum of 512MBytes
Networking	Intranet with at least 10Mbps data rate
Sun JRE	5.0 (1.5.0)
Microsoft Internet Explorer	version 6.0 or higher

Supported Oracle Retail Products

Requirement	Version
Oracle Retail Merchandising System (RMS)/Oracle Retail Trade Management (RTM)/Oracle Retail Sales Audit (ReSA)	13.1
Oracle Retail Data Warehouse (RDW)	13.1
SIM (via RMS)	13.1

Supported Oracle Retail Integration Technologies

Requirement	Version
Oracle Retail Extract, Transform and Load (RETL)	13.1
Oracle Retail Integration Bus (RIB)	13.1

RAC and Clustering

Oracle Retail Invoice Matching has been validated to run in two configurations on Linux:

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

The Oracle Retail products have been validated against a 11.1.0.7 RAC database. When using a RAC database, all JDBC connections should be configured to use OCI connections rather than THIN connections. It is suggested that when using OCI connections, the Oracle Retail products database be configured in the tnsnames.ora file used by the Oracle Application Server installations.

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

Clustering for Oracle Application Server 10.1.2 is managed as an Active-Active cluster accessed through a hardware Load Balancer. It is suggested that the Web Cache installation included with OAS 10.1.2 be configured to reflect all application server Mid-Tier installations. Validation has been completed utilizing a RAC 11.1.0.7 Oracle Internet Directory database with the OAS 10.1.2 cluster.

References for Configuration:

- Oracle® Application Server High Availability Guide 10g Release 3 (10.1.3) Part Number B15977-02
- Oracle® Application Server High Availability Guide 10g Release 2 (10.1.2) Part Number B14003-05
- Oracle Real Application Clusters Administration and Deployment Guide 11g Release 1 (11.1) Part Number B28254-07

Database Installation Tasks

The ReIM database objects are bundled with the RMS database schema installer. To install the ReIM database objects follow the *RMS Installation Guide* to run the database schema installer, and select the ReIM option on the product selection page.

Application Installation Tasks

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 10.1.3.4 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 10.1.3.4

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. 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 10.1.3.4.

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 A 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 B of this document for instructions on silent mode.

See Appendix D 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 installs the latest version of OCM.

The following document is available through My Oracle Support (formerly MetaLink). Access My Oracle Support at the following URL:

<https://metalink.oracle.com>

Oracle Configuration Manager Installer Guide (Doc ID: 835024.1)

This 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.
4. Deploy the ReIM help ear file to the OC4J group using the Enterprise Manager web interface. The ear file is located at <INSTALL_DIR>/reim/application/reim13/online-help/reim-help.ear. When deploying the ear file, you should provide the same application name you gave to the installer, appending -help. In other words, if you provided "reim131" to the installer, you should provide reim131-help when deploying the online-help ear file.

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; Doc ID 838623.1 on My Oracle Support (formerly MetaLink).

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`.

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`

Online Help

The application installer automatically installs Online Help to the proper location. It is 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>

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

Appendix: RMS Database 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

The screenshot shows a window titled "Oracle Retail Merchandise Operations Management" with the Oracle logo. Below the logo is a section titled "Full Install or Patch Option". The text inside the window explains the installer's capabilities: "This installer can create the full 13.0.1 baseline schema or apply a patch." It then lists three options: "Full: Run the bundled scripts to create the 13.0.1 baseline schema.", "Patch: Run a user-provided patch that was downloaded separately.", and "Full+Patch: Run both of the above options to create a new schema up to a certain patch level." Below this text, there is a "Select your choice" label and three radio buttons: "Full", "Patch" (which is selected), and "Full+Patch". At the bottom of the window, there are four buttons: "Cancel", "Back", "Next", and "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	<p>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.</p> <p>Note: The directory you choose must contain an reimdbstart.sql file.</p>
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

The screenshot shows a window titled "Invoice Matching 13 Installer – Oracle Retail". Inside, there's a section titled "Application Server Details". Below this, there are two input fields: "Hostname" with the value "mspdev27" and "OPMN request port" with the value "6004". A text label states "The OPMN request port is found in ORACLE_HOME/opmn/conf/opmn.xml". At the bottom, there are four buttons: "Cancel", "Back", "Next", and "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: <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.

Screen: Application Deployment Details

Invoice Matching 13 Installer – Oracle Retail

ORACLE®

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:

Buttons: Cancel, Back, Next, Install

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	<p>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.</p> <p>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.</p>
Example	reim_group

Screen: OC4J Administrative User

The screenshot shows a window titled "Invoice Matching 13 Installer – Oracle Retail". Below the title bar is the Oracle logo. The main heading is "OC4J Administrative User". Below this, a message states: "Enter the administrative user and password for the OC4J instance to which the application will be deployed." There are two input fields: "OC4J admin user" with the value "oc4jadmin" and "OC4J admin password" which is empty. At the bottom, there are four buttons: "Cancel", "Back", "Next", and "Install".

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 reiml3.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 10.1.3.4. 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.

Note: The installation order is not meant to imply integration between products.

Enterprise Installation Order

1. Oracle Retail Merchandising System (RMS), Oracle Retail Trade Management (RTM), Oracle Retail Sales Audit (ReSA)
2. Oracle Retail Service Layer (RSL)
3. Oracle Retail Extract, Transform, Load (RETL)
4. Oracle Retail Active Retail Intelligence (ARI)
5. Oracle Retail Warehouse Management System (RWMS)
6. Oracle Retail Allocation
7. Oracle Retail Invoice Matching (ReIM)
8. Oracle Retail Price Management (RPM)

Note: During installation of RPM, you are asked for the RIBforRPM provider URL. Since RIB is installed after RPM, make a note of the URL you enter. If you need to change the RIBforRPM provider URL after you install RIB, you can do so by editing the `jndi_provider.xml` file.

9. Oracle Retail Central Office (ORCO)
10. Oracle Retail Back Office (ORBO) or Back Office with Labels and Tags (ORLAT)
11. Oracle Retail Store Inventory Management (SIM)

Note: During installation of SIM, you are asked for the AIP provider URL. Since AIP is installed after SIM, make a note of the URL you enter. If you need to change the AIP provider URL after you install AIP, you can do so by editing the `jndi_providers_ribclient.xml` file.

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

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