

**Oracle® Retail Promotion Intelligence and
Promotion Planning and Optimization**

Installation Guide

Release 13.0

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Preface

This guide enables you to install the Oracle Retail Promotion Intelligence and Promotion Planning and Optimization application, along with the server-side components required for the application.

Audience

This guide is intended for system administrators and assumes that you are familiar with the following:

- Installing and configuring application server software
- Installing and configuring relational database management systems
- Installing and configuring distributed client/server applications on a UNIX-based local area network

Related Documents

For more information, see the following documents in the Oracle Retail Promotion Intelligence and Promotion Planning and Optimization documentation set:

- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Release Notes*
- *Oracle Retail Promotion Intelligence User Guide*
- *Oracle Retail Promotion Planning and Optimization User Guide*
- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Operations Guide*
- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Configuration Guide*
- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Sample Data Set Guide*

Customer Support

- <https://metalink.oracle.com>

When contacting Customer Support, please provide:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to recreate
- 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

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Overview

This chapter provides an overview of Oracle Retail Promotion Intelligence and Promotion Planning and Optimization. It contains the following sections:

- [Overview of Promotion Intelligence and Promotion Planning and Optimization](#)
- [Overview of Oracle Configuration Manager](#)
- [Roadmap for Implementing Promote](#)

Overview of Promotion Intelligence and Promotion Planning and Optimization

Oracle® Retail Promotion Intelligence and Promotion Planning and Optimization products enable retailers to determine the most profitable way to execute day to day Ad content and promotion pricing decisions. These pricing decisions support the marketing strategy and fulfill the needs at each store to drive higher traffic and more profitable sales.

This product suite includes:

- Promotion Intelligence – Analytic engine
- Promotion Planning and Optimization – User interface that help manage the promotion calendar and other features.

About Promotion Intelligence Application

The Promotion Intelligence application allows the analysis of the historic ad information. It utilizes the Promote Calculation Engine, a Java-based application, run through command-line tools. It can be integrated with customer's tools and utilities for running historical analysis.

- Analyzing the results from past promotions and advertising across merchandise, region, time, and vehicle
- Evaluating the ROI of advertising vehicles.
- Analyzing the affinity effects of products on one another.

This product includes MicroStrategy reports.

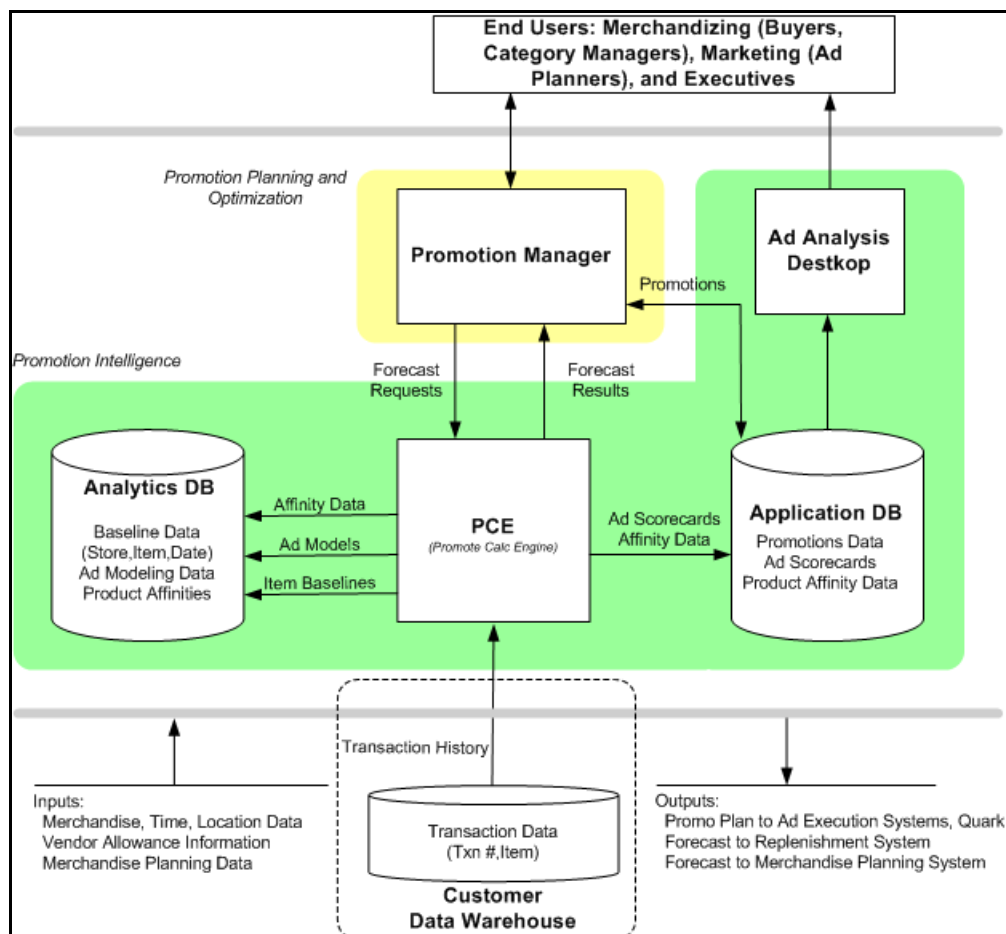
About Promotion Planning and Optimization Application

The Promotion Planning and Optimization application provides a user interface that helps you manage the promotion calendar and perform What-If analysis. This application depends on the installation of the Promote Intelligence application, and uses the Promote Calc Engine API.

- Promotion Calendar
- Event Planning
- Whitespace Allocation
- Vehicle Design
- Forecasting
- What-If
- Workflow

The following figure outlines the both the products and the relation between them. The Promotion Intelligence product includes the green area (analytics DB + PCE + Ad Analysis Desktop), and the Promotion Planning and Optimization product includes the yellow area (Promotion Manager).

Figure 1–1 Promotion Intelligence and Promotion Planning and Optimization Architecture



Overview of Oracle Configuration Manager

Oracle Premier Support offers an automated support capability through the Software Configuration Manager and Oracle Configuration Manager (OCM). OCM is a configuration data collector that provides continuous tracking of key Oracle and system configuration settings for machines on which it is installed. This tool collects configuration details for customer environments and uploads it to a repository that is viewable through the Software Configuration Manager Metalink Web site.

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.

Important: In case you choose to install the OCM collector, ensure that you have the Metalink user account name, customer support identification number, and the country code (where the support agreement was issued) for the OCM installation.

Roadmap for Implementing Promote

This guide explains how you can install and set up the Promotion Intelligence and Promotion Planning and Optimization application, along with the required and optional software.

The instructions in this guide assume knowledge of application servers, databases, and application installation, and are intended for system administrators and experienced IT personnel. Before carrying out any of these activities, ensure that you understand UNIX commands (including shell configuration and scripting), directory operations, and symlinks.

In order to implement Promotion Intelligence and Promotion Planning and Optimization for production, you must perform the following tasks in a sequence:

Table 1–1 Roadmap for Implementing Promote

Task	Description
<i>Pre-installation Tasks</i>	
1.	Plan your environment, based on your business needs. For more information on the planning process and the supported configurations, see Chapter 2, "Planning Your Installation" .
2.	Set up your application database. For more information, see Chapter 3, "Setting Up the Database" .

Table 1–1 Roadmap for Implementing Promote

Task	Description
3.	Set up your application server. For more information, see Chapter 4, "Setting Up Your Application Server" .
Installation Task	
4.	Access the Promote installation software, set up the install.properties file, and run the Oracle installer. For more information, see Chapter 5, "Installing Promote" .
Post-installation Tasks	
5.	Configure your business rules and user accounts. For more information, see the <i>Promotion Intelligence and Promotion Planning and Optimization Configuration Guide</i> .
6.	Modify the Promotion Intelligence and Promotion Planning and Optimization user interface to accommodate your business needs, as described in the <i>Promotion Intelligence and Promotion Planning and Optimization Configuration Guide</i> . Concurrent with this activity, complete the remaining steps in this roadmap. You can continue refining the user interface iteratively, as needed (optional).
7.	Set up user accounts and introduce the end users to the application.
8.	Perform and schedule the necessary data loads, as described in the <i>Promotion Intelligence and Promotion Planning and Optimization Operations Guide</i> .

Planning Your Installation

Before installing the Promotion Intelligence and Promotion Planning and Optimization applications, you must first determine the performance and availability goals for your business, and then plan the hardware, network, and storage requirements accordingly. This chapter provides some basic considerations for the implementation. It also includes the list of hardware and software requirements.

This chapter includes the following sections:

- [Overview of the Planning Process](#)
- [Supported Configurations](#)
- [Setting Up Shell Limits on Linux-based Systems](#)

Overview of the Planning Process

Planning your implementation prior to an installation also gives you a better understanding of the environment, and enables you to adapt faster to any future changes in the environment setup.

This section contains the following topics:

- [Planning Your Environment](#)
- [Planning for Optimal Promote Performance](#)

Planning Your Environment

Use the following steps to plan and prepare the product environment:

1. Plan and design the infrastructure, based on your business needs, for the installation. This includes:
 - Meeting the hardware and associated software requirements.
 - Acquiring the prerequisite software (and licensing).
 - Setting up the load balancers and clusters.
 - Gathering the capacity data.
 - Planning the data security policies.
 - Designing the backup and recovery strategies.
2. Determine the size of the implementation.
3. Identify source systems. Identify the systems that will exchange data with Promotion Intelligence and Promotion Planning and Optimization.

Planning for Optimal Promote Performance

Consider the following steps to plan and prepare the product environment.

1. Determine the Promotion Intelligence and Promotion Planning and Optimization metrics relevant to your business needs.
2. Determine your relevant business policies. The business policy is a statement of what rules govern the application processes. You need to develop a business policy based on your business rules. For more information about business rules, see the *Promotion Intelligence and Promotion Planning and Optimization Configuration Guide*.
3. Plan the periodic batch loading of business and historical databases. This also includes the data feeds needed from the external systems for nightly, weekly, and periodic batch updates and recycling.

Supported Configurations

This section describes the hardware and software requirements for the Promotion Intelligence and Promotion Planning and Optimization application, and includes the following topics:

- [Application Server Requirements](#)
- [Database Requirements](#)
- [Reporting Tool Requirements](#)
- [Client System Requirements](#)

Application Server Requirements

Promotion Intelligence and Promotion Planning and Optimization application requires the use of Oracle Application Server 10g as described below:

- **Application Server** – Oracle Application Server 10g Release 3 (10.1.3.1)
 - *Operating System*: Red Hat Enterprise Linux Release 3.0, Taroon Update 8, tzdata-2007c-1.el3
 - *Java Development Kit*: Sun JDK 1.5.0_6 (Also for the Installer and PCE)

Important: Ensure that the Oracle Database 10g Client Release 2 (10.2.0.3) is installed on the system hosting the application server.

Database Requirements

Promotion Intelligence and Promotion Planning and Optimization application requires the use of Oracle Database 10g as described below:

- **Database** – Oracle 10g Release 2 (10.2.0.3)
 - *Operating System*: Red Hat Enterprise Linux Release 4.0, Nahant Update 4, tzdata-2006a-2.el4

Reporting Tool Requirements

Promotion Intelligence and Promotion Planning and Optimization requires the use of Microstrategy 8 for the reports as described below:

- **Reporting Tool** – Microstrategy 8
 - *Operating System*: Microsoft Windows Server 2003

Client System Requirements

The following table lists the supported client system options:

Table 2–1 *Client System Environment*

Software	Requirements
Windows XP Pro SP2	<ul style="list-style-type: none"> ■ Microsoft® Internet Explorer® 6.0

Setting Up Shell Limits on Linux-based Systems

You can improve the performance of the software on Linux systems by increase the following shell limits for the default ORACLE user account set up in the system:

- Maximum number of open file descriptors (*nfile* parameter in **limits.conf**)
- Maximum number of processes available to a single user (*nproc* parameter in **limits.conf**)

To set up these shell limits:

1. Log on to the system as *root* user, and navigate to the following location:

```
/etc/security/
```

2. Edit the **limits.conf** file to include the following lines:

```
oracle soft nproc 2047
oracle hard nproc 16384
oracle soft nfile 1024
oracle hard nfile 65536
```

3. Navigate to the following location:

```
/etc/pam.d/
```

4. Edit the **login** file to include the following line (if it does not already exist):

```
session required /lib/security/pam_limits.so
```

5. Based on the user's default shell, make the following updates in the shell start-up file:

- For the Bourne, Bash, or Korn shell, add the following lines to the **profile** file (in **/etc** directory):

```
if [ $USER = "oracle" ]; then
  if [ $SHELL = "/bin/ksh" ]; then
    ulimit -p 16384
    ulimit -n 65536
  else
    ulimit -u 16384 -n 65536
  fi
fi
```

- For the C or tcsh shell, add the following lines to the **csh.login** file (in **/etc** directory):

```
if ( $USER == "oracle" ) then
  limit maxproc 16384
  limit descriptors 65536
endif
```

Setting Up the Database

Before you run the Oracle installer to install the application, you must set up the database to include certain necessary tablespaces, and a database user account. This chapter describes how you can set up your database, and the various database components. It contains the following sections:

- [Installing the Database](#)
- [Creating the Default Tablespaces](#)
- [Creating the Default Data User Accounts](#)

Note: If your database requires multi-byte support, specify the following properties in your `init.ora` file:

```
CHARACTER_SET=AL32UTF8  
NLS_LENGTH_SEMANTICS=CHAR
```

Installing the Database

The application requires the use of the Oracle® 10g Database Release 2 (10.2.0.3) and the Natively Compiled Java Libraries (in the Oracle Database Companion CD).

Ensure that the Oracle Database software is installed along with the Natively Compiled Java Libraries. For more information, see the *Oracle Database Installation Guide, 10g Release 2 (10.2)* and *Oracle Database Companion CD Installation Guide, 10g Release 2 (10.2)*.

Note: Information from the Promote Calc Engine gets stored in the analytics database in a binary file format. Ensure that a proper capacity planning is done, based on your business needs, to determine the disk storage requirements to support the analytics database.

Creating the Default Tablespaces

When you run the Oracle installer, schemas and tables for the application get installed on the database you create. For the schemas and tables to install successfully, the database must include certain default tablespaces.

Use the Oracle 10g Database Configuration Assistant to create a default database with the tablespaces mentioned in [Table 3–1, Business Database Tablespaces](#). For more information on using the Oracle 10g Database Configuration Assistant, see the Oracle 10g Release 2 Installation documentation.

Table 3–1 Business Database Tablespaces

Tablespace	Description
DATA_01	Required. Application tablespace for Promote. Recommended size: 5 GB.
INDEX_01	Required. Application tablespace for the indexes of Promote. Recommended size: 5 GB.

Note: The sizes of tablespaces depend on the amount of data being stored. For any sizing recommendations, see [Table 3–1, Business Database Tablespaces](#).

Creating the Default Data User Accounts

You must also create two default database user accounts (*Promote* and *RDM*) that will be used during the installation to access the application database and Retail Data Mart (RDM).

To create the user accounts:

1. At the SQL prompt, type the following statement to create the users, and set the DATA_01 as the default tablespace:

```
CREATE USER Promote IDENTIFIED BY <PASSWORD>
DEFAULT TABLESPACE DATA_01;
CREATE USER RDM IDENTIFIED BY <PASSWORD>
DEFAULT TABLESPACE DATA_01;
```

2. Once the users are created, use the Oracle 10g Database Configuration Assistant and grant the relevant access privileges to both the users. The following table lists the access privileges you must assign to the users:

Table 3–2 Access Privileges for the Users

User	Privileges
Promote	Connect
	Resource
	Create/drop table
	Create/drop/rebuild index
	Select any table
	Query rewrite
	Create materialized view
	Create/recompile/drop trigger
	Create/recompile/drop package
	Create view
	Execute any procedure
	getClassLoader Java Runtime permission*
RDM	Connect
	Resource
	Create/drop table
	Create/drop/rebuild index
	Select any table
	Select any table at Promote User schema
	Query rewrite
	Create materialized view
	Drop any table
	Create/recompile/drop trigger
	Create/recompile/drop package
	Create view
	Execute any procedure
	Execute any procedure at Promote User schema

Note: To assign the getClassLoader Java Runtime privilege, at the SQL prompt, run the following command:

```
exec dbms_java.grant_permission(
'<USERNAME>', 'SYS:java.lang.RuntimePermission', 'getClassLoader', '' )
```

Setting Up Your Application Server

Before installing the application, you must set up an instance on the application server. Based on your business need, you must set up the application server to include one or more server instances, and logically related resources and services.

This chapter describes how you can set up the application server. It contains the following sections:

- [Installing the Oracle Application Server](#)
- [Configuring the Oracle Application Server](#)

If you plan to use clusters for the installation, Oracle recommends that you create the clusters before setting up the instance. Otherwise, the managed servers must be added manually. For information about managing clusters, see the documentation for your application server.

Installing the Oracle Application Server

The Promotion Intelligence and Promotion Planning and Optimization applications require the use of the Oracle Application Server 10g Release 3 (10.1.3.1). Install the Oracle Application Server, referring to the Oracle Application Server documentation for guidance.

During the installation, accept the default values for the multicast IP address and port settings; these settings will be automatically updated, as needed, when you run the Promotion Intelligence and Promotion Planning and Optimization Installer. If you want your OAS instance to be part of a cluster, specify the information relevant to your cluster topology.

In this guide, the Oracle Application Server installation directory is referred to as the <OAS_HOME>.

Configuring the Oracle Application Server

Before you start the application server instance, you must set up the configuration properties XML files to include JVM properties and enable global JNDI look ups.

To configure the Oracle Application Server:

1. Navigate to the following location in the Oracle Application Server installation folder:

```
<OAS_HOME>/opmn/conf/config/
```

2. Edit the **opmn.xml**, and modify the value property of the **category id** tag (in the **ias-component id** section) to include JVM arguments that specify the configuration root and the JVM switches to increase JVM-accessible memory.

For example:

```
<category id="start-parameters">
  <data id="java-options" value="-Xrs -server
    -Djava.security.policy=$ORACLE_HOME/j2ee/home/config/java2.policy
    -Dcom.profitlogic.configroot= <path-to-config-root>
    -Djava.awt.headless=true -Xmx512m -Xms256m -XX:MaxPermSize=256m
    -Dhttp.webdir.enable=false
    -Xrunjdpw:transport=dt_socket,server=y,suspend=n,address=5005"/>
</category>
```

3. Navigate to the following location in the Oracle Application Server installation folder:

```
<OAS_HOME>/j2ee/home/config/
```

4. Edit the **server.xml** file, and in the **application-server** section, add a new attribute **global-jndi-lookup-enabled** attribute, and set it to **true**.

For example:

```
<application-server xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="http://xmlns.oracle.com/oracleas/schema/application-server-10_1.xsd"  localhostIsAdmin="true"
  application-directory="../applications"
  check-for-updates="adminClientOnly"
  deployment-directory="../application-deployments"
  connector-directory="../connectors"
  global-jndi-lookup-enabled="true"
  schema-major-version="10" schema-minor-version="0" >
```

Installing Promote

After you have set up your database and application server, you can install the applications using the guidelines provided in this chapter. This chapter contains the following sections:

- [Overview of the Installation Process](#)
- [Setting Up Install.properties File](#)
- [Setting Up Environment Variables](#)
- [Installing the Promotion Intelligence Application](#)
- [Installing the Promotion Planning and Optimization Application](#)
- [About install.sh](#)
- [Post-Installation Tasks](#)

Overview of the Installation Process

Note: Although the options for BEA WebLogic Server, IBM DB2, and IBM WebSphere display on the Oracle Installer, they are not supported in this release.

In order to install Promotion Planning and Optimization, your first task is to obtain the installation media. You can then choose the installation mode you prefer. Whichever mode you use, you first need to set up the Promotion Planning and Optimization properties file. The installation modes are as follows:

- **Graphical mode** – In the graphical mode, the Oracle Installer displays a graphical user interface and prompts you to enter or modify the value of the properties specified in the properties file.
- **Silent mode** – In the silent mode, the installer processes the properties file without any manual intervention.

Setting Up Install.properties File

In order to install the Promotion Intelligence and Promotion Planning and Optimization applications, you first need to specify the properties to use during the installation process. The `install.properties` file, available for each installation, helps you specify the necessary properties for the installation.

To set up your `install.properties` file:

1. From the installation media, copy the **sample.install.properties** file to your system, and rename the file to **install.properties**.
2. Edit the `install.properties` file, specifying values as described within the file, and save it. For more information on the properties included in the `install.properties` file, see [Install.properties Parameters Reference](#).

Install.properties Parameters Reference

The following table describes the parameters in the `install.properties` file that you must set up before you install the Promotion Intelligence and Promotion Planning and Optimization applications:

Table 5–1 *Install.properties Parameters Reference*

Parameter	Description
<code>installdir</code>	Use this parameter to specify the path to the default base installation folder (includes modules, configuration root, and logs).
Promote Analytic Engine Parameters	
<code>KDE_NUM_CPUS</code>	Use this parameter to specify the number of CPUs that host the analytics engine.
<code>KDE_RMI_SERVER_PORT</code>	Use this parameter to specify the port to access the RMI server.
<code>KDE_RMI_SERVER_ADDRESS</code>	Use this parameter to specify the URL where the RMI server is installed.
<code>KDE_HOME</code>	Use this parameter to specify the default base folder for the analytics engine.
<code>KDE_TMP_DIR_PATH</code>	Use this parameter to specify the default temporary folder for the analytics engine.
Application Server Details	
<code>app.server</code>	The application server used for the application. The current release supports Oracle Application Server 10g Release 3 (10.1.3.1).
<code>install.appserver.default</code>	The default application server for the application.
<code>oracle.home</code>	The default base folder for the Oracle application server.
<code>oracle.server.address</code>	The base URL for the Oracle application server instance.
<code>oracle.admin.port</code>	Use this parameter to specify the port to connect to the Oracle application server.
<code>oracle.admin.userid</code>	Use this parameter to specify the administrative user name for the application server.
<code>oracle.admin.password</code>	Use this parameter to specify the password associated with the administrative user.
<code>oracle.instance.name</code>	Use this parameter to specify the name of the application server instance.

Table 5–1 Install.properties Parameters Reference

Parameter	Description
oracle.opmn.enabled	Use this parameter to specify whether you want to use the OPMN server service. Set the value to 'Yes' for Oracle Application Server, and 'No' for OC4J instance.
oracle.multicast.default	Use this parameter to specify the multicast port number, when the application is installed over a clustered environment.
oracle.group.name	Use this parameter to specify the group name, that is 'default_group' in a standard OAS installation.
host list	Use this parameter to specify the list of nodes in the cluster.
suite.host	Use this parameter to specify the URL where the application server is installed. This value is used for the suite.properties file.
suite.port	Use this parameter to specify the port to connect to the application server. This value is used for the suite.properties file.
http.protocol	Use this parameter to specify the HTTP protocol that must be used to connect to the server.
Parameters for the Log and Spool Files	
basedest.basedest.dir	Use this parameter to specify the path to the default base installation folder.
basedest.baselog.dir	Use this parameter to specify the path to the folder where the installation log files get stored.
basedest.basespool.dir	Use this parameter to specify the path to the folder where the installation spool files get stored.
install.command.shell	Use this parameter to specify the command shell to be used for the installation.
install.properties.savefile	Use this parameter to specify the path to the folder where you want to store the properties file (last-session.properties) that contains the parameter values used in the last installation session.
missing.properties.savefile	Use this parameter to specify the path to the folder where you want to store the properties file (missing-entries.properties) that contains the parameter values the Oracle installer tried to use during installation.
Oracle Configuration Manager (OCM) Properties	
basedest.baseocm.dir	Use this parameter to specify the path to the folder that contain the OCM files. Oracle recommends that this path be in the base installation folder.
product.ocm.install	Use this parameter to accept or decline the OCM license agreement. The value defaults to <i>no</i> and indicates that OCM will not be installed (rest of the OCM properties are ignored).
ocm.distribution	Use this parameter to specify the architecture of the operating system on which OCM is being installed.

Table 5–1 Install.properties Parameters Reference

Parameter	Description
ocm.disconnected	Use this parameter to specify one of the following OCM connection mode: <ul style="list-style-type: none"> Connected – to proceed installing OCM. You must also procure the Customer Support Identifier, Metalink user account name, and the country code to install the OCM. Disconnected – to skip the OCM configuration.
ocm.csi_id	Use this parameter to specify the Customer Support identification number.
ocm.metalink_id	Use this parameter to specify the Metalink user account name associated with the Customer Support identification number.
ocm.country_code	Use this parameter to specify the country code where the support agreement was initiated.
ocm.http.proxyenabled	Use this parameter to indicate that the system will connect to the Internet using proxy. Valid values are <i>yes</i> or <i>no</i> .
ocm.http.proxyhost	Use this parameter to specify the host name of the proxy server.
ocm.http.proxyport	Use this parameter to specify the port number of the proxy server.
ocm.http.proxyuser	Use this parameter to specify the user name to connect to the proxy server.
ocm.http.proxypassword	Use this parameter to specify the password associated with the user name to connect to the proxy server.
Oracle Database Configuration	
install.database	Use this parameter to specify the database you want to use for the application.
database.commondb.oracle.create	Use this parameter to specify that a new database schema must be created. Valid values are Yes or No.
database.commondb.oracle.upgrade	Use this parameter to specify that the existing database schema be upgraded. Valid values are Yes or No.
database.commondb.oracle.address	Use this parameter to specify the URL where the Oracle database is installed.
database.commondb.oracle.dbalias	Use this parameter to specify the database alias name.
database.commondb.oracle.dbname	Use this parameter to specify the database name.
database.commondb.oracle.dbport	Use this parameter to specify the port to connect to the database.
database.commondb.oracle.auth.commonoracleauth.user	Use this parameter to specify the user name to connect to the database.
database.commondb.oracle.auth.commonoracleauth.password	Use this parameter to specify the password to connect to the database.
database.auditdb.oracle.address	Use this parameter to specify the URL where the Audit database is installed.
database.auditdb.oracle.dbalias	Use this parameter to specify the Audit database alias name.
database.auditdb.oracle.dbname	Use this parameter to specify the name of the Audit database.

Table 5–1 Install.properties Parameters Reference

Parameter	Description
database.auditdb.oracle.dbport	Use this parameter to specify the port to connect to the Audit database.
database.auditdb.oracle.auth.auditoracleauth.user	Use this parameter to specify the user name to connect to the Audit database.
database.auditdb.oracle.auth.auditoracleauth.password	Use this parameter to specify the password to connect to the Audit database.
database.auditdb.oracle.create	Use this parameter to indicate that a new Audit database must be created.
database.auditdb.oracle.upgrade	Use this parameter to specify that the existing database be upgraded to include the Audit schema.
common.feschema	Use this parameter to specify the database schema name for the application front end schema.
common.dblink	Use this parameter to specify the database link to access the common schema through the audit schema. If the schema exists in the same instance, specify <i>none</i> .
database.rdmdb.oracle.create	Use this parameter to indicate that a new Retail Data Mart (RDM) database must be created.
database.rdmdb.oracle.upgrade	Use this parameter to specify that the existing database be upgraded to include the RDM schema.
database.rdmdb.oracle.dbname	Use this parameter to specify the name of the RDM database.
database.rdmdb.oracle.dbalias	Use this parameter to specify the RDM database alias name.
database.rdmdb.oracle.address	Use this parameter to specify the URL where the RDM database is installed.
database.rdmdb.oracle.dbport	Use this parameter to specify the port to connect to the RDM database.
database.rdmdb.oracle.auth.rdmoracleauth.user	Use this parameter to specify the user name to connect to the RDM database.
database.rdmdb.oracle.auth.rdmoracleauth.password	Use this parameter to specify the password to connect to the RDM database.
rdm.feschema	Use this parameter to specify the RDM database schema name associated with the application front end schema.
database.elmdb.oracle.create	Use this parameter to indicate that a new ELM database be created. Valid values are Yes or No.
database.elmdb.oracle.dbname	Use this parameter to specify the ELM database name.
database.elmdb.oracle.dbalias	Use this parameter to specify the ELM database alias name.
database.elmdb.oracle.address	Use this parameter to specify the URL where the ELM database is installed.
database.elmdb.oracle.dbport	Use this parameter to specify the port to connect to the ELM database.
database.elmdb.oracle.auth.elmoracleauth.user	Use this parameter to specify the user name to connect to the ELM database.
database.elmdb.oracle.auth.elmoracleauth.password	Use this parameter to specify the password to connect to the ELM database.

Table 5–1 Install.properties Parameters Reference

Parameter	Description
database.elmdb.oracle. elm_main_dblink	Use this parameter to specify the database link name for the ELM schema to access the main database. If they exist in the same instance, specify <i>none</i> .
database.CommonDB.oracle. main_elm_dblink	Use this parameter to specify the database link to access the ELM schema through the common schema. If the schema exists in the same instance, specify <i>none</i> .

Setting Up Environment Variables

Before you start the installation, ensure that the following environment variables are set in the system:

- JAVA_HOME
- ORACLE_HOME
- PATH
- LD_LIBRARY_PATH (applies to Linux, HP-UX, Solaris based systems)
- LIBPATH (applies to IBM AIX based systems)

Although it is recommended that these variables be set up in relevant bash shell startup files (*.bash_profile*) of the system, you can also set up the variables using the *EXPORT* command at the UNIX prompt. For more information on setting up these variables in the startup files, refer to the operating system documentation.

To set up the environment variables for the current session, at the UNIX prompt type the following commands in sequence:

```
export JAVA_HOME=<path where JVM is installed>
```

For example, /usr/lib/java/jdk1.4

```
export ORACLE_HOME=<path where the Oracle database is installed>
```

For example, /u01/app/oracle/product/10.2.0/db_1

```
export PATH=$ORACLE_HOME/bin:$PATH
```

```
export LD_LIBRARY_PATH=$ORACLE_HOME/lib:$LD_LIBRARY_PATH
```

In case of AIX, export LIBPATH=\$ORACLE_HOME/lib;\$LIBPATH

Installing the Promotion Intelligence Application

To install the Promotion Intelligence application:

1. Insert the Promotion Intelligence Installation CD, and navigate to the installation root folder.
2. Set up the `install.properties` file. For more information, see [Setting Up Install.properties File](#).
3. From the installation root folder, run the installer in the mode you want.

To run the installer in Silent mode, enter the following command:

```
bash install.sh -p <path-to-install.properties> -s
```

To run the installer in GUI mode, enter the following command:

```
bash install.sh -p <path-to-install.properties>
```

For more information on the `install.sh` script, see [About install.sh](#)

4. Once the installation completes, restart the application server.

Installing the Promotion Planning and Optimization Application

To install the Promotion Planning and Optimization application:

1. Insert the Promotion Planning and Optimization Installation CD, and navigate to the installation root folder.
2. Set up the `install.properties` file. For more information, see [Setting Up Install.properties File](#).
3. From the installation root folder, run the installer in the mode you want.

To run the installer in Silent mode, enter the following command:

```
bash install.sh -p <path-to-install.properties> -s
```

To run the installer in GUI mode, enter the following command:

```
bash install.sh -p <path-to-install.properties>
```

For more information on the `install.sh` script, see [About install.sh](#)

4. Once the installation completes, restart the application server.

About install.sh

The install.sh script enables you to launch the Oracle installer, and install the application.

Syntax

```
install.sh [-s] [-p <path-to-install.properties-file>]
```

Arguments

The following table describes the arguments you can use along with the install.sh:

Argument	Description
-s	Optional. Silent mode. If you omit this option, the Oracle Installer user interface displays.
-p <path-to- install.properties>	Optional. Specifies an alternate path to the install.properties file. Defaults to ./install.properties.
-l, --log-config	Optional. Specifies an alternate log4j configuration file (to change the verbosity level or the log file output location). Defaults to ./Install/conf/log4j.properties. The log4j log file is used for troubleshooting.
-y -n	Optional. Specifies whether or not to overwrite existing files. Defaults to -y (overwrite).
-d <XML path>	Optional. Specifies an alternate path to the XML install scripts. Defaults to ./InstallScripts.
-x <filename.xml>	Optional. Specifies an alternate XML install script file within the ./InstallScripts directory.
-i, --websphere -b, --weblogic	Optional. For specifying your application server.
-h	Optional. Prints a help message.

Post-Installation Tasks

This section includes the following tasks you can perform after the installation:

- [Installing the Adobe Flex License](#)
- [Restart the Application Server](#)
- [Installing the Sample Dataset](#)
- [Start the RMI Engine](#)
- [Verify the Promote URL](#)

Installing the Adobe Flex License

Adobe® Flex™ is an Independent Development Environment (IDE), based on Adobe® Flash framework, that enables you to create scalable and rich Internet applications (RIAs) within your enterprise or the Web.

To install the Adobe Flex license:

1. Navigate to the following location in the application installation folder:

```
<Promote_Installation>/modules/tools/
```

2. Run the following script, with the appropriate syntax:

```
bash license-flex.sh <OAS_HOME>/j2ee/home <Flex License Number>
```

Note: You can also install the Adobe Flex license, as part of the application installation.

Restart the Application Server

Once you install the Adobe Flex license, you must restart the application server.

To restart the application server:

- At the command prompt, run the following command:

```
opmnctl stopall
```

followed by,

```
opmnctl startall
```

Installing the Sample Dataset

The Promotion Intelligence and Promotion Planning and Optimization installation comes along with a sample dataset that can be used during implementation and demonstrations. This dataset contains generic data and is designed to work along with the default product configuration. The data files, along with the necessary data load scripts, are included as part of the installation media.

When you run the Oracle Installer, the sample dataset does not get installed by default. You must manually access and run the data load script to load the sample data.

You can find the sample dataset and the data load scripts at the following location in your Promotion Intelligence and Promotion Planning and Optimization installation directory:

```
<Promote_Installation>/modules/pce/sample/
```

To load the sample data:

1. Navigate to the following location in the Promotion Intelligence and Promotion Planning and Optimization installation directory:

```
<Promote_Installation>/modules/pce/sample/
```

2. Run the following script, with a relevant syntax:

```
bash deploy.sh
```

You can use one of the following syntax:

- `bash deploy.sh all` – For the Promotion Planning and Optimization application. Use this syntax to load the data, templates, users, computed statistics, and so on.
- `bash deploy.sh pce_all` – For the Promotion Intelligence application. Use this syntax to load the data, computed statistics, and so on (does not include users, templates, and images).

About Deploy.sh Script

The `deploy.sh` script enables you to load sample data, and has the following features:

- It works without any dependencies on the environment variables and the `PATH`
- It can load promotion templates, users, roles, Adobe Flex serial number, and so on.

Start the RMI Engine

Once you load the sample data, you can run start the Java Remote Method Invocation (RMI) engine.

To start the RMI engine:

1. Navigate to the following path in the installation folder:

```
<Promote_Install>/modules/pce/bin
```

2. Run the following script:

```
bash rmiServer.sh
```

Note: You can incorporate this script into your system startup procedure. The script assumes that the Java interpreter is set in the `PATH` variable.

Verify the Promote URL

In a Web browser, type the following link to verify the Promote application installation:

```
http://host:port/promote/
```

Setting up Single Sign-On

This chapter describes how you can set up the Single Sign-On plugin and integrate Promotion Intelligence and Promotion Planning and Optimization as part of the Oracle Application Server Single Sign-On (OSSO) implemented with Oracle Retail Workspace.

It contains the following sections:

- [About the Single Sign-On Plugin](#)
- [Installing the Single Sign-On Plugin](#)
- [Integration with Oracle Retail Workspace](#)

About the Single Sign-On Plugin

The current User Management module provides single sign-on capabilities between the two applications—Promotion Intelligence and Promotion Planning and Optimization and Markdown Optimization. Once you install the Single Sign-On cookie plugin, you can achieve a one-way interoperability of these applications with other Oracle Retail applications (such as Workspace) implemented on Oracle Application Server Single Sign-On (OSSO).

When you log on to the OSSO server using a user account configured at both the systems, a User Management cookie gets registered in your browser session. This enables you to access the Promote URL directly. If you access the Promote application first and then later attempt to access the OSSO URL, you will need to log on to the OSSO system because the User Management module cannot create an SSO cookie.

For more information on Oracle Application Server Single Sign-On and Oracle Internet Directory, refer to the *Oracle Application Server Single Sign-On Administrator's Guide* and *Oracle Internet Directory Administrator's Guide*.

Installing the Single Sign-On Plugin

To install the Single Sign-On plugin on the Oracle Application Server implementing Single Sign-On:

1. Copy the SSO Plugin JAR or ZIP file to the following location on the OSSO infrastructure application server:

```
$ORACLE_HOME/sso/plugin
```

2. Use one of the following commands, and extract the SSO Plugin contents:

```
jar -xvf plsso_plugin.jar
```

OR

```
unzip plsso_plugin.zip -d $ORACLE_HOME/sso/plugin
```

3. Review the `/sso/plugin` directory and verify that following classes and property files exist in this location:
 - `plsso.properties`
 - `PLSSOCustomCookie.class` (in `com/profitlogic/common/security/ssoplugin`)
 - `PLSSOPlugin.class` (in `com/profitlogic/common/security/ssoplugin`)
 - `PLSSOHelper.class` (in `com/profitlogic/common/security/util`)
 - `HexEncoder.class` (in `com/profitlogic/common/util`)
4. In the `plsso.properties` file, enter relevant information for the following properties
 - **domain** – indicates the domain within which the cookie is created for the browser session.
 - **timeout** – indicates the number of minutes the Single Sign-On plugin is valid.
 - **plssoplugin.log.file** – [Optional] indicates the location of the Single Sign-On plugin log file.
5. In the `$ORACLE_HOME/sso/conf/` directory, edit the **policy.properties** to include the following entries:

```
CustomCookie_ProviderPlugin
=com.profitlogic.common.security.ssoplugin.PLSSOCustomCookie
CustomCookieAuthLevel=MediumSecurity
```

Important: Ensure that the domain value includes both the systems (Promotion Intelligence and Promotion Planning and Optimization and OSSO) and is more specific than a top-level domain name (such as `.com`).

For example, if the Promotion Intelligence and Promotion Planning and Optimization system is hosted on **ppo.mydepartment.mycompany.com** and the Oracle Single Sign-On system is hosted on **osso.mydepartment.mycompany.com**, the domain value must be specified as **mydepartment.mycompany.com**.

Integration with Oracle Retail Workspace

The Oracle Retail Workspace installer prompts you to enter the URL for your supported Oracle Retail applications. However, if you install an application after the Oracle Retail Workspace installation, you must update the *retail-workspace-page-config.xml* file to reflect the new application.

The file as supplied comes with all the appropriate products configured, but the configurations for the products not installed are switched off (**rendered** parameter set to **false**).

To make the Promotion Intelligence and Promotion Planning and Optimization URL available through Workspace:

1. In the *retail-workspace-page-config.xml* file, navigate to the **secure-work-item id** entry with the value **priceopt**, and set the **rendered** parameter value to **true**.
2. Specify the application URL within the **<url>** tags as illustrated in the example below.

For Promotion Intelligence and Promotion Planning and Optimization there are no other application configuration parameters.

Example

Suppose Promotion Intelligence and Promotion Planning and Optimization is installed on **mycomputer.mycompany.com**, port **7777**, using a standard install and the Promotion Intelligence and Promotion Planning and Optimization application is configured with the application name of **p4pgui**. If you were to access Promotion Intelligence and Promotion Planning and Optimization directly from your browser, you would type in:

```
http://mycomputer.mycompany.com:7777/p4pgui
```

The entry in the *retail-workspace-page-config.xml* file after installation would resemble the following:

```
<url>http://mycomputer.mycompany.com:7777/p4pgui</url>
<parameters>
</parameters>
```

Configuring the Logout Page

Once you set up the Promotion Intelligence and Promotion Planning and Optimization URL in the Workspace page configuration file (*retail-workspace-page-config.xml*), you must also enable the Promotion Intelligence and Promotion Planning and Optimization Logout page. This page enables you to log out of the system completely by ending the browser session.

To enable the Logout page, in the **suite.properties** file (in the *<PPO-PI_Installation>/config/suite* directory), set the **suite.logoutpage.show** parameter to **true**. For more information on this parameter, refer to the chapter User Management in the *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Configuration Guide*.

Installation Order

This section provides the order in which the Oracle Retail applications should be installed. If a client 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 the 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)
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 Integration Bus (RIB)
13. Oracle Retail Point-of-Service (ORPOS)
14. Oracle Retail Analytics Applications
15. Oracle Retail Advanced Inventory Planning (AIP)
16. Oracle Retail Predictive Application Server (RPAS)
17. Oracle Retail Data Warehouse (RDW)
18. Oracle Retail Workspace (ORW)

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