**Oracle® Retail Analytic Parameter Calculator Markdown Optimization**

Installation Guide

July 2009

ORACLE®

Oracle® Retail Analytic Parameter Calculator Markdown Optimization Release 13.1

**Value-Added Reseller (VAR) Language**

**Oracle Retail VAR Applications**

The following restrictions and provisions only apply to the programs referred to in this section and licensed to you. You acknowledge that the programs may contain third party software (VAR applications) licensed to Oracle. Depending upon your product and its version number, the VAR applications may include:

(i) the software component known as **ACUMATE** developed and licensed by Lucent Technologies Inc. of Murray Hill, New Jersey, to Oracle and imbedded in the Oracle Retail Predictive Application Server - Enterprise Engine, Oracle Retail Category Management, Oracle Retail Item Planning, Oracle Retail Merchandise Financial Planning, Oracle Retail Advanced Inventory Planning, Oracle Retail Demand Forecasting, Oracle Retail Regular Price Optimization, Oracle Retail Size Profile Optimization, Oracle Retail Replenishment Optimization applications.

(ii) the **MicroStrategy** Components developed and licensed by MicroStrategy Services Corporation (MicroStrategy) of McLean, Virginia to Oracle and imbedded in the MicroStrategy for Oracle Retail Data Warehouse and MicroStrategy for Oracle Retail Planning & Optimization applications.

(iii) the **SeeBeyond** component developed and licensed by Sun MicroSystems, Inc. (Sun) of Santa Clara, California, to Oracle and imbedded in the Oracle Retail Integration Bus application.

(iv) the **Wavelink** component developed and licensed by Wavelink Corporation (Wavelink) of Kirkland, Washington, to Oracle and imbedded in Oracle Retail Mobile Store Inventory Management.

(v) the software component known as **Crystal Enterprise Professional and/or Crystal Reports Professional** licensed by SAP and imbedded in Oracle Retail Store Inventory Management.

(vi) the software component known as **Access Via™** licensed by Access Via of Seattle, Washington, and

imbedded in Oracle Retail Signs and Oracle Retail Labels and Tags.

(vii) the software component known as **Adobe Flex™** licensed by Adobe Systems Incorporated of San Jose, California, and imbedded in Oracle Retail Promotion Planning & Optimization application.

(viii) the software component known as **Style Report™** developed and licensed by InetSoft Technology Corp. of Piscataway, New Jersey, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

(ix) the software component known as **DataBeacon™** developed and licensed by Cognos Incorporated of Ottawa, Ontario, Canada, to Oracle and imbedded in the Oracle Retail Value Chain Collaboration application.

You acknowledge and confirm that Oracle grants you use of only the object code of the VAR Applications. Oracle will not deliver source code to the VAR Applications to you. Notwithstanding any other term or condition of the agreement and this ordering document, you shall not cause or permit alteration of any VAR Applications. For purposes of this section, "alteration" refers to all alterations, translations, upgrades, enhancements, customizations or modifications of all or any portion of the VAR Applications including all reconfigurations, reassembly or reverse assembly, re-engineering or reverse engineering and recompilations or reverse compilations of the VAR Applications or any derivatives of the VAR Applications. You acknowledge that it shall be a breach of the agreement to utilize the relationship, and/or confidential information of the VAR Applications for purposes of competitive discovery.

The VAR Applications contain trade secrets of Oracle and Oracle's licensors and Customer shall not attempt, cause, or permit the alteration, decompilation, reverse engineering, disassembly or other reduction of the VAR Applications to a human perceivable form. Oracle reserves the right to replace, with functional equivalent software, any of the VAR Applications in future releases of the applicable program.

# Contents

# 5 Installing APC MDO on OAS

# 6 Installing APC MDO on WebLogic

# Index

# Preface

This guide enables you to install the Oracle Retail Analytic Parameter Calculator Markdown Optimization (APC MDO) application.

## Audience

This document 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

## Related Documents

For more information, see the following documents in the Oracle Retail Analytic Parameter Calculator Markdown Optimization Release documentation set:

- *Oracle Retail Analytic Parameter Calculator Markdown Optimization Release Notes*

- *Oracle Retail Analytic Parameter Calculator Markdown Optimization Configuration Guide*

- *Oracle Retail Analytic Parameter Calculator Markdown Optimization User 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 at the following website:

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. |
| *italic* | Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values. |
| monospace | Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter. |

# 1

# Overview

This chapter provides an overview of the Oracle Retail Analytic Parameter Calculator Markdown Optimization (APC MDO) and a roadmap for implementing the application. It contains the following:

- Overview of the Analytic Parameter Calculator Markdown Optimization on page 1-1.

- Overview of the Oracle Configuration Manager on page 1-1.

- APC MDO Implementation Roadmap on page 1-2.

## Overview of the Analytic Parameter Calculator Markdown Optimization

APC MDO is a single-user application that calculates the demand parameters required to perform forecasting. It uses the historical data to calculate and derive the demand parameters.

APC MDO generates a set of text files that contain the calculated demand parameters. These parameters are loaded into the MDO schema during implementation.

## Overview of the 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 system configuration settings 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 for Oracle Retail applications is in development. Oracle Retail recommends that retailers download OCM 13.0 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 provides instructions for the installation of the OCM.

> **Important:** If you choose to install the OCM collector, ensure that you have your Metalink user account name, customer support identification number, and the country code (where the support agreement was issued) ready for use during the OCM installation.

## APC MDO Implementation Roadmap

At a high-level, the APC MDO installation process is as follows:

*Table 1–1    APC MDO Implementation Roadmap*

| Task | Description |
|------|-------------|
| *Pre–installation tasks* | |
| 1. | Plan your installation. For more information, see Chapter 2, "Planning Your Installation". |
| 2. | Set up your application database. For more information, see Chapter 3, "Setting Up the Database". |
| 3. | Set up your application server. For more information, see Chapter 4, "Setting Up Your Application Server". |
| *Installation Task* | |
| 4. | Access the APC MDO installation software. For more information, see either Chapter 5, "Installing APC MDO on OAS" or Chapter 6, "Installing APC MDO on WebLogic". |
| *Post–Installation Tasks* | |
| 5. | Configure APC MDO. For more information, see the *Oracle Retail Analytic Parameter Calculator Configuration Guide.* |

# 2

# Planning Your Installation

Before installing the Analytic Parameter Calculator Markdown Optimization (APC MDO), you must first determine the performance and availability goals for your business, and then plan the hardware, network, and storage requirements accordingly. This chapter contains some basic considerations for the implementation of the APC MDO application.

This chapter contains the following topics:

- Overview of the Planning Process on page 2-1.
- Supported Configurations on page 2-2.

## Overview of the Planning Process

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

The section contains the following topic:

- Planning Your Environment on page 2-1.
- Sizing Considerations on page 2-2.

## 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 required software (and licensing).
   - Gathering capacity data.
   - Planning the data security policies.
   - Designing the backup and recovery strategies.

2. Determine the size of the implementation. For more information, see Sizing Considerations on page 2-2.

3. Identify source systems. Identify the systems that will exchange data with APC MDO.

## Sizing Considerations

The APC MDO schema (see Creating the APC MDO Database on page 3-1) is installed under the User tablespace. Sizing considerations for this tablespace should use the following variables and formulas as a guideline.

***Table 2–1    Sizing Variables***

**A** = number of activities (also known as item-weeks).

**M** = number of nodes in the merchandise hierarchy that are in the Raw-AP calculation.

**L** = number of nodes in the location hierarchy that are in the Raw-AP calculation.

**SC** = number of year-independent season codes. For example, if your implementation uses monthly season codes, this value is 12.

### Sizing Formula

Number of gigabytes = (A * 4.16 / 10 million) + (M * L * SC * 1.4 / 1 million)

# Supported Configurations

This section describes the hardware and network requirements for the APC MDO application and includes the following topics:

- Network Requirements

- Database Requirements

- Application Server Requirements

- Client System Requirements

## Network Requirements

This section describes basic requirements for your network infrastructure:

- For connections between servers use the following:

    - Minimum: 100 MBps switched ethernet

    - Recommended: 1000 MBps

- For connections to the desktop, 100 MBps is sufficient.

## Database Requirements

APC MDO requires the use of the Oracle database as described in the following table:

***Table 2–2    Database Requirements for APC MDO***

| Software | Requirement | |
|---|---|---|
| Database (64-bit) | Oracle 10g Release 2 (10.2.0.3) (64-bit) | |
| Operating System (64-bit) | ■ Oracle Enterprise Linux 4.0 (64-bit)<br>■ HP-UX 11iv2 (11.23) Itanium (64-bit)<br>■ IBM AIX 5.3.0, TL5, APAR IY75211<br>■ Sun Solaris 10 (SPARC platform), with timezone patch 122032-01 or later and libc patch 119689-07 or later. | |

*Table 2–2   Database Requirements for APC MDO*

| Software | Requirement |
|---|---|
| Utilities | file transfer protocol utility (ftp or ssh/scp/rsync)<br>sudo utility |

## Application Server Requirements

The APC MDO requires the use of the Oracle 10g Application Server or the WebLogic application server. The following table lists the supported operating systems and the associated application server versions:

*Table 2–3   Application Server Requirements for APC MDO*

| Application Server | Operating System(64-bit) | JVM (32-bit) |
|---|---|---|
| OAS 10.1.3.3 (32-bit) | HP-UX 11iv2 (11.23)Itanium | HP JDK 1.5.0.03 build 1.5.0.03-13_feb_2006_16_39 |
| | Oracle EnterpriseLinux 4.0 | Sun JDK 1.5.0_6 - OAS |
| | IBM AIX 5.3.0, TL5,APAR IY75211 | IBM JDK 1.5 - build pap32dev-20051104 |
| | Sun Solaris 10(SPARC) | Sun JDK 1.5.0_6 |
| WebLogic 10.0 mp1(ADF is a prerequisite for installing APC MDO) | HP-UX 11iv2 (11.23)Itanium | HP-UX JDK for the Java 2 Standard Edition platform version 5.0.08 with Java HotSpotTM Server VM and all later JDK 5.0.* service packs for development and production deployment on HP-UX |
| | Oracle EnterpriseLinux 4.0 | JRockit 5.0 R27.3.1 JDK and all later 5.0 releases of Jrockit |
| | IBM AIX 5.3.0, TL5,APAR IY75211 | IBM Java 5 JDK (Service Refresh 9)-Java version 1.5.0, JavaTM 2 Runtime Environment, Standard Edition (build pap32devfix-20081129 (SR9)) |
| | Sun Solaris 10(SPARC) | Sun Java 2 JDK 5.0 Update 11 with the Java HotSpotTM Client and Server VMs and all later service packs of 5.0 |

For Solaris, the following timezone and libc patches are required:

- On SPARC platform, with timezone patch 122032-01 or later and libc patch 119689-07 or later.

## Client System Requirements

The following table lists the supported client system options:

*Table 2–4   Client System Environment*

| Software | Requirements |
|---|---|
| Windows XP Pro SP2 (with Office 2003) | ▪ Microsoft Internet Explorer 7.0 |
| Windows XP Pro SP2 (with Office XP) | ▪ Microsoft Internet Explorer 7.0 |

*Table 2–4   Client System Environment*

| Software | Requirements |
|---|---|
| Windows XP Pro SP2 (with Office 2000) | ■   Microsoft Internet Explorer 7.0 |

# 3

# Setting Up the Database

This chapter describes how you can set up your database and the various database components. It contains the following:

- Creating the APC MDO Database

## Creating the APC MDO Database

The APC MDO database can be created as another instance on an existing Oracle Database Server.

> **Note:** When AP MDO is running, it will consume application server resources such as memory and CPU. These are important considerations if your application server has additional instances.

The ASDS schema must have Select privileges on the v$parameter table. The DBA should grant these privileges when she creates the ASDS schema.

The ASDS schema, as installed by the installer, uses only a single tablespace, DATA_01. The DBA should decide whether or not to move the objects in the ASDS schema to different tablespaces.

### Installing the ASDS Schema

The schema for the APC MDO is referred to as the "ASDS Schema". The APC MDO installer will automatically create and install the ASDS database schema. The database will be created under the User Tablespace.

The ASDS schema must be installed on the same Oracle Database Server instance as the Oracle Retail Markdown Optimization (MDO) product. APC MDO will use this schema to obtain historical data from MDO.

### loadSchema.sh

The loadSchema.sh -u script does not drop any tables except the tables that belong to APC MDO.

Here is a description of the loadSchema.sh functionality. To use the script, you must have an Oracle instance, an MDO schema, and an ASDS schema. Both schemas must be in the same Oracle instance. You must set up the tablespace and the indexspace.

This script is specifically used to load data from a MDO schema into an ASDS schema. It has several restrictions:

- The ASDS and MDO schemas must be located in the same Oracle instance for this script to work, because this script creates synonyms that point to the MDO schema without using db links.

- This script cannot be used to update an existing ASDS schema. This script can only be used to drop an existing ASDS schema, re-create the ASDS schema, and then load MDO data into the ASDS schema.

- This script does not automatically drop an existing ASDS schema. You need to use the -u option to first drop an existing ASDS schema. Then re-run the script once more to re-create the ASDS schema and load data from MDO. Note that the -u option will drop only ASDS tables; if there are other tables in the schema, those tables will not be dropped. You need to drop those manually if you want them dropped. In addition, the -u option does not drop the temporary tables that APC MDO creates while it runs. There should be no need to drop these, since APC MDO overwrites these tables once the script runs.

# 4

# Setting Up Your Application Server

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

This chapter describes how to set up the Oracle Application Server (OAS) and the WebLogic application server. It contains the following sections:

- Installing Oracle Application Server on page 4-1.
- Installing WebLogic Application Server on page 4-1.
- Restarting the Application Server on page 4-1.

## Installing Oracle Application Server

The APC MDO application requires the use of Oracle Application Server 10g Release 3 (10.1.3.3) or WebLogic 10.0 mp1. To install OAS, refer to the Oracle Application Server documentation.

## Installing WebLogic Application Server

The APC MDO application requires the use of Oracle Application Server 10g Release 3 (10.1.3.3) or WebLogic 10.0 mp1. To install WebLogic, refer to the WebLogic Application Server documentation.

## Restarting the Application Server

If the application server needs to be re-started, you must kill and re-start the back-end process. To do this:

1. Obtain the process ID (PID) for that process.

2. Run the command:
   **kill -9** *<PID1>*

3. Re-start the back-end process.

**5**

# Installing APC MDO on OAS

APC MDO can be installed on either the Oracle Application Server (OAS) or the WebLogic application server. This chapter contains instructions for installing APC MDO on OAS. For instructions on installing APC MDO on WebLogic, see Chapter 6, "Installing APC MDO on WebLogic"

This chapter contains the following:

- "Overview of the Installation Process" on page 5-1
- "Accessing the Installation Software" on page 5-1
- "Setting Up the Installation Properties File" on page 5-2
- "Setting Up Environment Variables" on page 5-3
- "Preparing the Unix Terminal Emulator and SSH Client" on page 5-4
- "Installing APC MDO in Silent Mode" on page 5-4
- "Installing Using the Installer" on page 5-5
- "Post–Installation Tasks" on page 5-13

## Overview of the Installation Process

The installation procedure for OAS consists of the following tasks:

- accessing the installation software
- setting up the installation properties file
- setting up the environment variables
- preparing the UNIX terminal emulator and the SSH client
- installing APC MDO in silent mode
- installing APC MDO using the installer

## Accessing the Installation Software

The APC MDO installation software is bundled with the Oracle Retail Markdown Optimization (MDO) product software. The software media is available from the Oracle E–Delivery site.

To download the software:

1. From the application server where you will be installing APC MDO, open a browser and navigate to the following URL:

http://edelivery.oracle.com/

The **Oracle E-Delivery** download page displays.

> **Note:** Installation media files for an Enterprise release (13.0) are available on the *Oracle Electronic Delivery* Web site (http://edelivery.oracle.com) and Patch releases (13.0.x) and Hot Fixes (13.0.x.y) are available on the *My Oracle Support* Web site (https://metalink.oracle.com).

2. Select a language and click **Continue**.

   The **Export Validation** screen displays.

3. Complete the following and click **Continue**.

   - **Full Name** – enter your full name.
   - **Company Name** – enter your company name.
   - **E-mail Address** – enter your e-mail address.
   - **Country** – select your country.
   - **License Agreement** – select the License Agreement check box.
   - **Export Restrictions** – select the Export Restrictions check box.

   The **Media Pack Search** screen displays.

4. Respond to the following prompts and click **Go**.

   - **License List** – review the list to determine which Product Packs you need to download.
   - **Product Pack** – select **Oracle Retail Applications.**
   - **Platform** – (optional). Select the desired operating system.

   The **Oracle Retail Markdown Optimization Media Pack** screen displays.

5. In the Select column, click **Download**.

   Oracle E-Delivery writes a Zip file to the default location you have selected for downloads.

6. Unpack the Zip file to a temporary directory.

# Setting Up the Installation Properties File

In order to install, you first need to specify the properties to use during the installation process.

## Creating the Installation Properties File

To create the installation properties file, do the following:

1. Make a copy of the **reference..install.properties** file.

2. Rename the copy to **.install.properties.**

3. Save this file in the same directory as the **reference.install.properties** file.

4. Define the properties specific in the following sections listed below.

### Defining File Directories

Use the **basedest.basedest.dir** property to specify the directory where the files will be copied.

### Defining the Application Server

Define the application server being used for the installation.

install.appserver = oracle

### Defining the Administrative User ID and Password

Define the Oracle Application Server administrative user id and password using the following properties:

oracle.admin.userid

oracle.admin.password

> **Note:** The userid and password should be the same as the oc4jadmin userid and password of the Oracle Application Server installation.

### Oracle.Home

Use the **oracle.home** property to define the location of the J2EE Home folder within the Oracle Application Server installation. An example is listed below.

oracle.home=/home//OAS_AIX/oracle/product/10.1.3/OracleAS_1/j2ee/home

### Defining Ports

Specify the following port property:

oracle.admin.port=12401

### Defining Database Properties

Specify the following database properties:

- database.db.oracle.create=yes
- database.db.oracle.upgrade=no
- database.db.oracle.address
- database.db.oracle.dbalias
- database.db.oracle.dbname
- database.db.oracle.dbport
- database.db.oracle.auth.oracleauth.user
- database.db.oracle.auth.oracleauth.password

## Setting Up Environment Variables

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

- JAVA_HOME

■ PATH

Note the following:

■ ORACLE_HOME must be set for all supported platforms.

■ LD_LIBRARY_PATH must be set for OEL, HP, and Solaris.

■ LIBPATH must be set for AIX.

■ $ORACLE_HOME/bin should be added to the user's PATH variable.

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/jdk1.5

**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*

# Preparing the Unix Terminal Emulator and SSH Client

In order to run the installer, you will need to use a Unix terminal emulator. In addition, the SSH Client must be configured to allow x-forwarding. Refer to the documentation for the SSH Client for instructions on how to enable x-forwarding.

# Installing APC MDO in Silent Mode

To install APC in silent mode:, complete the following steps:

1. Make sure that you have completed "Setting Up the Installation Properties File" on page 5-2.

2. Make sure that the application server is running.

3. From the application server machine, **enter** the following command:

   **bash** *install.sh*

### install.sh
The install.sh command enables you to install APC MDO.

### Syntax
**install.sh [-s] [-p** *<path-to-install.properties-file>*]

### Arguments
Use any arguments listed below as needed.

| Argument | Description |
| --- | --- |
| **-s** | Optional. Silent mode. If you omit this option, the Oracle Installer user interface displays. |

| Argument | Description |
| --- | --- |
| **-p** *<path-to- install.properties>* | Optional. Specifies an alternate path to the install.properties file. Defaults to ./install.properties. |
| **-x** *<.xml>* | Specifies an alternate XML install script file within the ./InstallScripts directory. |
| **-h** | Optional. Prints a help message. |

**Return Value**

When run in silent mode (install.sh -s), the script displays a trace message to stdout (the console). When run in Installer mode (the default), the script displays a graphical user interface.

# Installing Using the Installer

To install interactively using the Installer, complete the following steps:

1. Make sure that you have completed Setting Up the Installation Properties File on page 5-2.

2. From the Windows client, start the Unix terminal emulator.

3. Make sure that the application server software is running.

4. Navigate to directory that contains the installer shell script.

5. Start the installer by issuing the following command:

   **bash install.sh -p** */.install.properties* **-x** *.xml*

6. The installer opens and displays the **Installer Welcome Screen**. Click **Next**.

*Figure 5–1    Installer Welcome Screen*
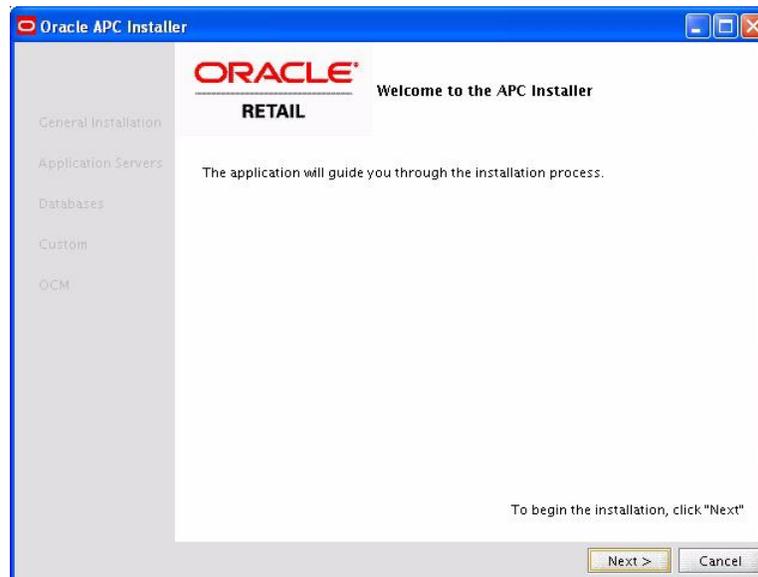


7. The **Installation Destination** screen opens.

*Figure 5–2    Installation Destination Screen*
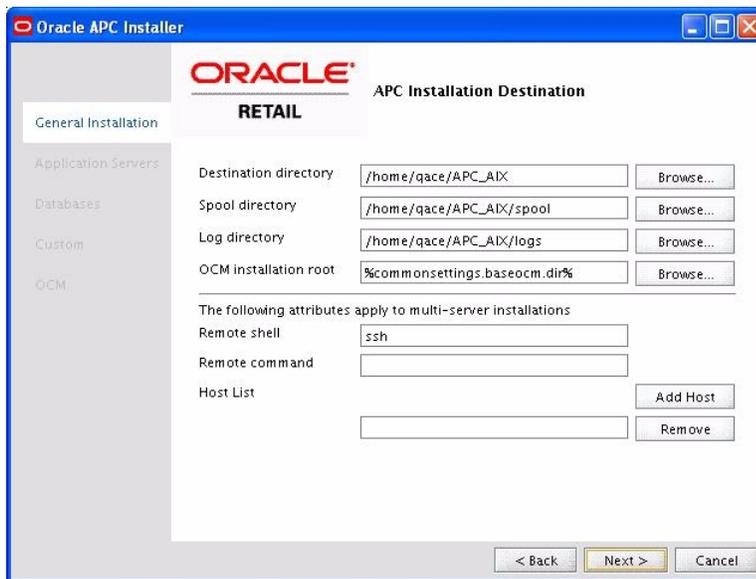


- **Destination Directory** – enter the path to the installation target directory.

- **Spool Directory** – enter the path to the spool directory.

- **Log Directory** – enter the path to the log files.

- **OCM Installation root** – enter the path where the Oracle Configuration Manager (OCM) is installed.

- **Remote shell** – this field is populated by default.

- **Remote command** – leave blank.

- **Host List**—leave blank.

- Click **Next**.

8. The **Application Server Selections** screen opens.

*Figure 5–3    Application Server Selections*



- Select **Oracle Application Server**.
- Click **Next**.

**9.** The **Oracle Application Server** screen appears.

*Figure 5–4    Oracle Application Server Screen*
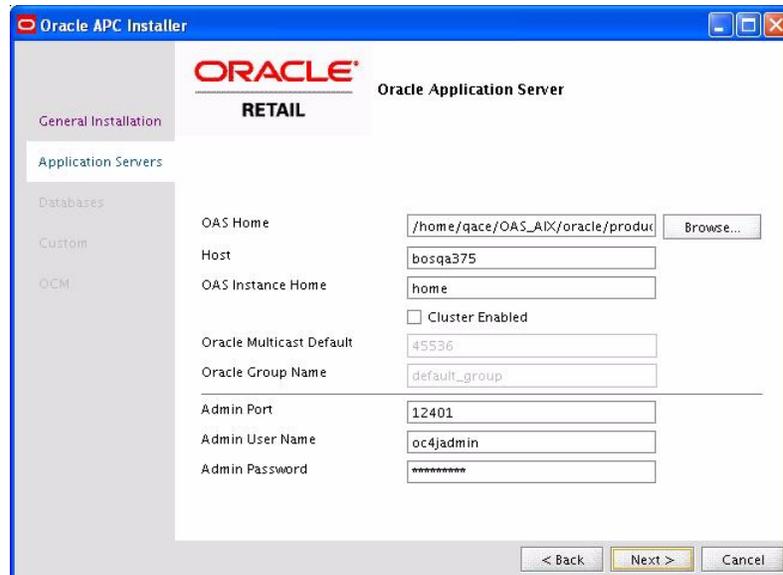


- **OAS Home** – enter the location of the OAS installation.
- **Host** – enter the host name for the OAS installation.
- **OAS Instance Home** – enter the OAS Instance Home location.
- **Oracle Multicast Default** – leave blank.
- **Oracle Group Name** – leave blank.
- **Admin Port** – enter the administrative port for the OAS installation.

- **Admin User Name** – enter the administrative user name for the OAS installation.

- **Admin Password** – enter the administrative password for the OAS installation.

- Click **Next**.

---

**Note:** If the installation does not continue to the next step, check the application server information and/or the status of the application server.

---

**10.** The **Java Message Server Properties** screen appears.

*Figure 5–5   Java Message Server Properties Screen*
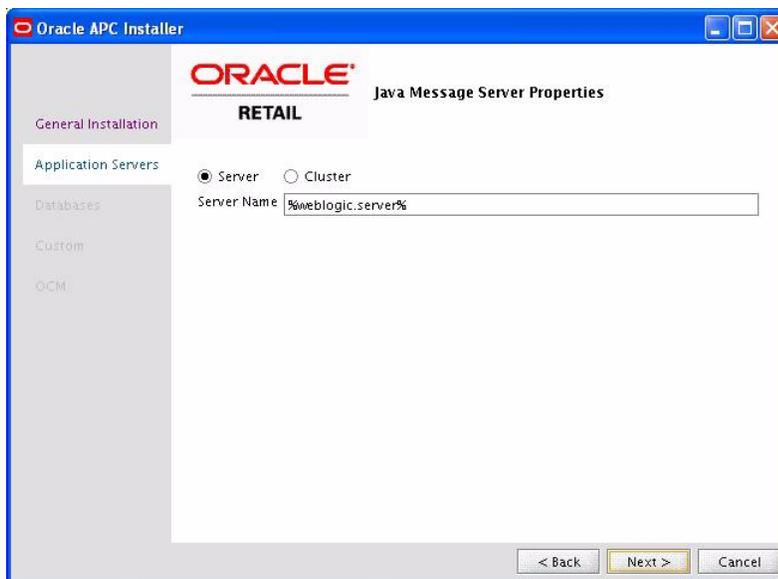


- Select **Server**.

- **Server Name Field** – enter the name of the server that you may have set up as a Java Message Server (JMS).

- Click **Next**.

**11.** The **Database Selections** screen appears.

**Figure 5–6   Database Selections Screen**
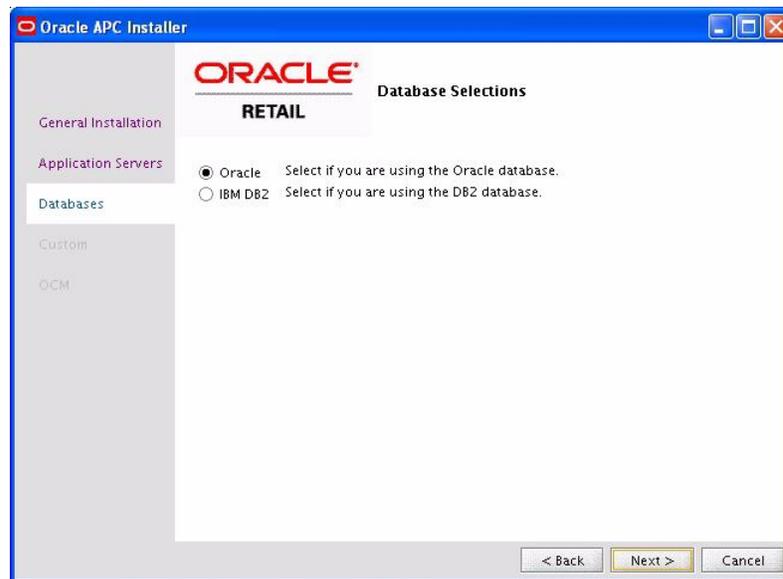


- Select **Oracle**.

> **Note:**    does not support the use of DB2.

- Click **Next**.

**12.** The **Database Properties** screen appears.

**Figure 5–7   Database Properties Screen**
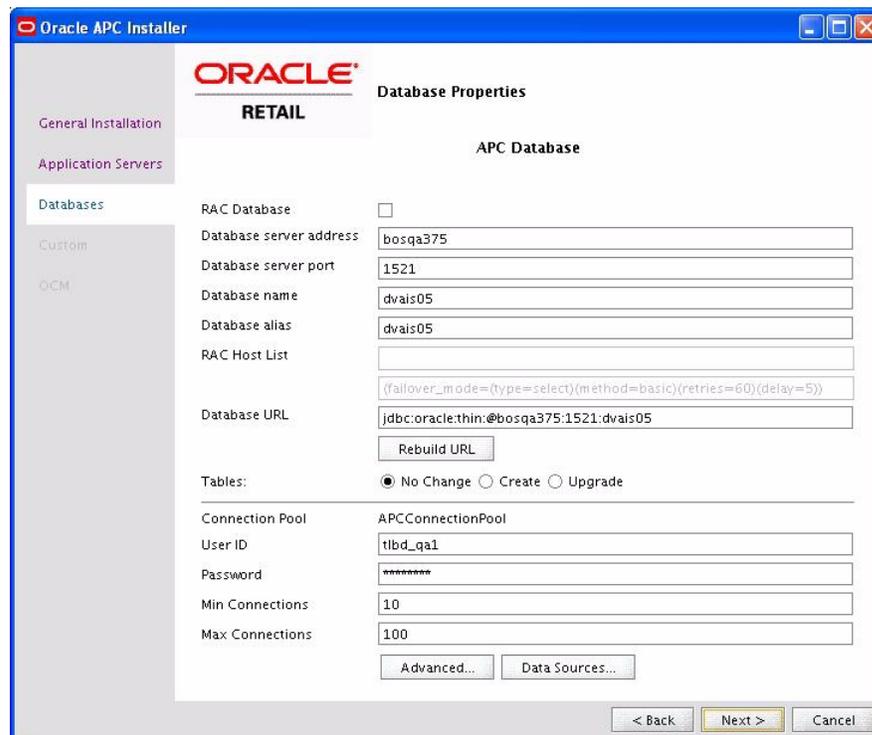
- **RAC Database** – leave this field blank. There is no support for Oracle RAC in this release of.

- **Database server address** – enter the address of the database server.

- **Database server port** – enter the server port number associated with the database.

- **Database name** – enter the name used to identify the database.

- **Database alias** – enter the database alias.

- **RAC Host List** – leave this field blank.

- **Database URL** – (optional). Enter the database's URL.

- **Tables** – select one of the following options:

  - **No Change** – select this option if you have an existing database schema that you do not want to modify. This enables you to configure data sources and EAR files without affecting the database.

  - **Create** – select his option if you are installing a new database schema for. The Oracle Installer drops all the schemas and creates new ones.

  - **Upgrade** – select this option if you have an existing database schema that you want to update. Any existing data remains intact. It is modified on a row–by–row, column–by–column basis, depending on the actions specified in the database patches.

- **Connection Pool** – this field is not editable.

- **User ID** – enter the user name associated with the database.

- **Password** – enter the password associated with the database.

- **Min Connections** – accept the default value.

- **Max Connections** – accept the default value.

- Click **Next**.

13. The **Oracle Configuration Manager Registration** screen opens.

*Figure 5–8   Oracle Configuration Manager Registration*
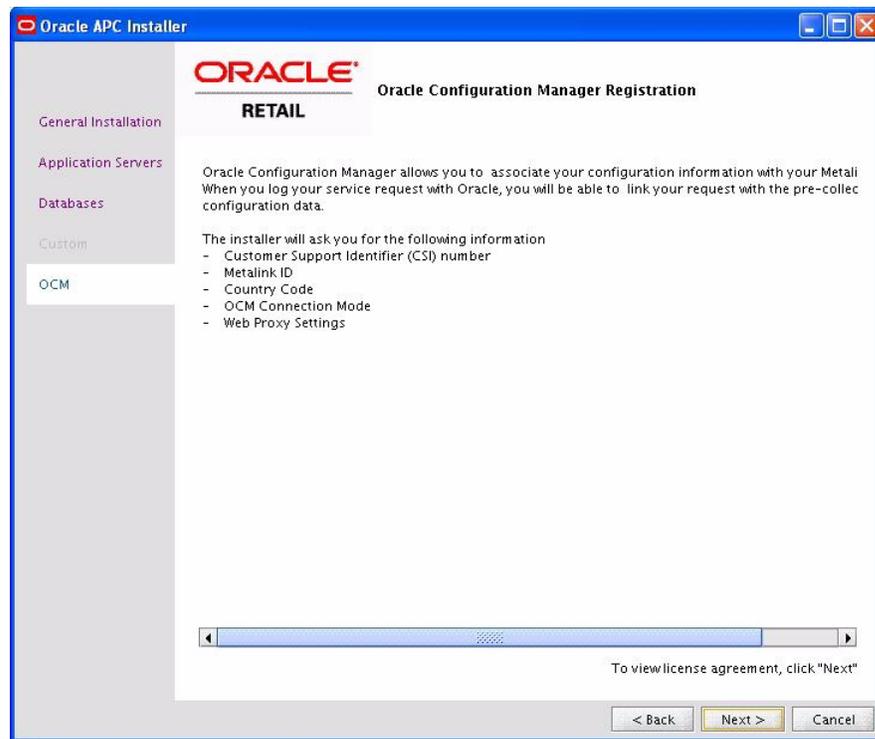


> **Note:**   For more information about the Oracle Configuration Manager
> (OCM), see Overview of the Oracle Configuration Manager on
> page 1-1 in Chapter 1, "Overview".

- Click **Next**.

**14.** The **Oracle Configuration Manager Licensing Agreement** screen opens.

*Figure 5–9*
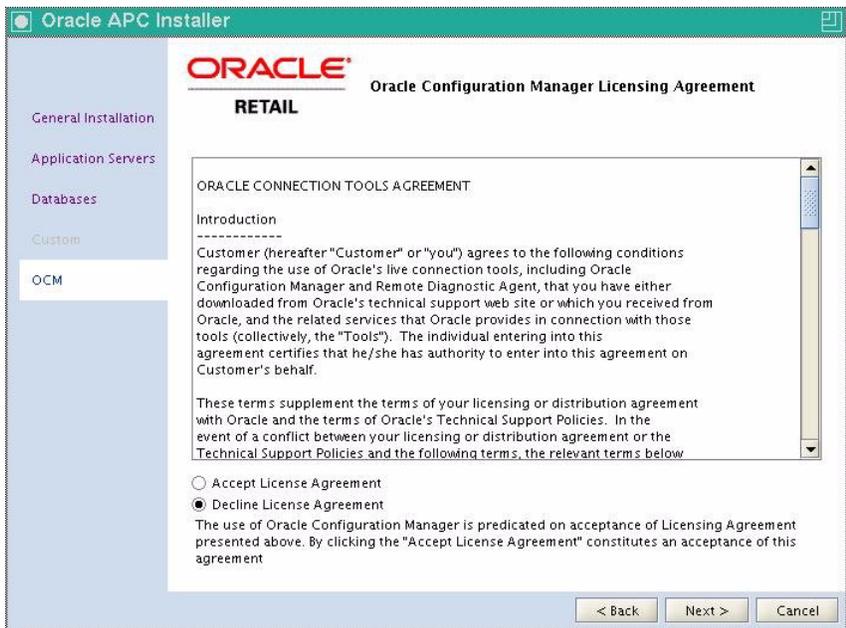


- To decline the License, select **Decline License Agreement**.
- Click **Next**.

15. The **Selection Verification Screen** opens.

*Figure 5–10    Selection Verification Screen*
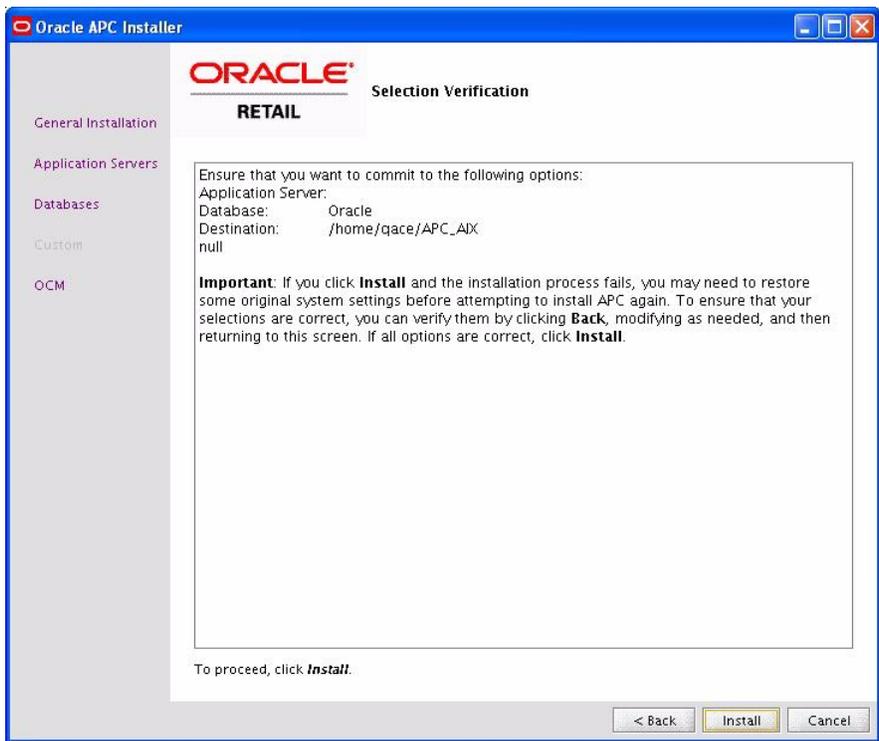


- Review this screen, and then click **Install**.

**16.** The **Installation Status** screen opens.

*Figure 5–11    Installation Status Screen*
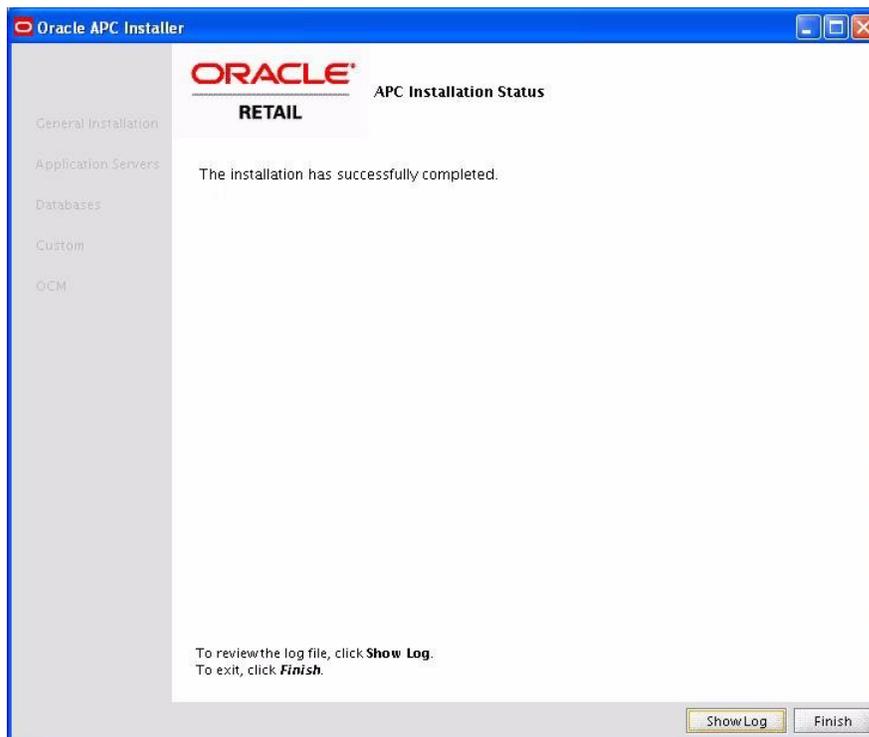


**17.** To complete installation:

- Click **Finish** to exit.

- Click **Show Log** to view the installation log file.

**18.** The following procedure should be completed as part of the installation process when installing on OAS 10.1.3.3 (Linux only). Complete these steps to edit the following configuration parameter on the server:

   **1.** Go to the Application Server... > OC4J: ...home > Server Properties page.

   **2.** Go to Command Line Options -> Start-parameters:Java Options

   **3.** Add: -XX:CompileCommand=exclude,oracle/sql/NUMBER,toBytes

## Post–Installation Tasks

After the installer has finished, complete the following steps:

**1.** Navigate to the directory where is installed. This is the directory you defined using the basedest.basedest.dir within the.install. properties file.

**2.** Edit the config/ecf.conf within the following directory:

...//modules//config/ecf.conf

**3.** Within the ecf.conf file, update the user name and password with the oracle.admin.userid and oracle.admin.password as specified in Defining the Administrative User ID and Password on page 5-3.

**4.** Next, navigate to the bin directory.

5. Within this directory, issue the following command:

**nohup runAPC.sh -l** *http://<host>:<rmiPort> > BackEndLog &*

where <host> is the machine where OAS is running and <rmiPort> is the oracle.admin.port as defined in Defining Ports on page 5-3.

6. The only way to shut down the back-end process is to manually kill the process. When you start, using run.sh, it spawns a child process. To stop you must kill the run.sh process and the java process. To do this manually:

1. Log into the server where the back end is running.

2. Enter the command:
   **ps -ef | grep** *run*

3. Obtain the process ID (PID) for that process.

4. Enter the command:
   **ps -ef | grep** *java*

5. Identify the correct java process associated with run.sh and obtain the PID for that process.

6. Run the command:
   **kill -9** *<PID1>*

# 6

# Installing APC MDO on WebLogic

APC MDO can be installed on either the Oracle Application Server (OAS) or the WebLogic application server. This chapter contains instructions for installing APC MDO on WebLogic. For instructions on installing APC MDO on OAS, see Chapter 5, "Installing APC MDO on OAS".

> **Note:** You must install ADF prior to installing APC MDO.

This chapter contains the following:

- "Overview of the Installation Process" on page 6-1
- "Accessing the Installation Software" on page 6-2
- "Setting Up the Installation Properties File" on page 6-2
- "Setting Up Environment Variables" on page 6-4
- "Preparing The Unix Terminal Emulator and SSH Client" on page 6-4
- "Prerequisite for Installing APC MDO on WebLogic" on page 6-4
- "Installing APC MDO in Silent Mode" on page 6-5
- "Installing APC MDO Using the Installer" on page 6-6
- "Post–Installation Tasks" on page 6-15

## Overview of the Installation Process

The installation procedure for WebLogic consists of the following tasks:

- accessing the installation software
- setting up the installation properties file
- setting up the environment variables
- preparing the UNIX terminal emulator and the SSH client
- installing APC MDO in silent mode
- installing APC MDO using the installer

## Accessing the Installation Software

The APC MDO installation software is bundled with the Oracle Retail Markdown Optimization (MDO) product software. The software media is available from the Oracle E–Delivery site.

To download the software:

1. From the application server where you will be installing MDO, open a browser and navigate to the following URL:

   http://edelivery.oracle.com/

   The **Oracle E-Delivery** download page displays.

   > **Note:** Installation media files for an Enterprise release (13.0) are available on the *Oracle Electronic Delivery* Web site (http://edelivery.oracle.com) and Patch releases (13.0.x) and Hot Fixes (13.0.x.y) are available on the *My Oracle Support* Web site (https://metalink.oracle.com).

2. Select a language, and click **Continue.**

   The **Export Validation** screen displays.

3. Respond to the following and click **Continue.**

   - **Full Name** – enter your full name.
   - **Company Name** – enter your company name.
   - **E-mail Address** – enter your e-mail address.
   - **Country** – select your country.
   - **License Agreement** – select the License Agreement check box.
   - **Export Restrictions** – select the Export Restrictions check box.

   The **Media Pack Search** screen displays.

4. Respond to the following prompts, and then click **Go.**

   - **License List** – review the list to determine which Product Packs you need to download.
   - **Product Pack** – select **Oracle Retail Applications.**
   - **Platform** – (optional). Select the desired operating system.

   The **Oracle Retail Markdown Optimization Media Pack** screen displays.

5. In the **Select** column, click **Download.**

   Oracle E-Delivery writes a Zip file to the default location you have selected for downloads.

6. Unpack the Zip file to a temporary directory.

## Setting Up the Installation Properties File

In order to install APC MDO, you first need to specify the properties to use during the installation process.

## Defining File Directories

Use the **basedest.basedest.dir** property to specify the directory where the APC MDO files will be copied

## Defining the Application Server

Define the application server being used for the installation.

install.appserver = weblogic

## Defining the Administrative User ID and Password

Define the WebLogic administrative user id and password using the following properties:

weblogic.admin.userid

weblogic.admin.password

> **Note:** The userid and password should be the same as the WebLogic server administrator username and password.

## WebLogic Properties

Set the following properties in the WebLogic Properties section of the install.properties file.

The value for the WebLogic server must be the name you assigned to the server. The default value is AdminServer.

The weblogic.home value must be ${bea.home}/wlserver_10.0/server. That is, wlserver_10.0 must be a subdirectory of bea.home, and wlserver_10.0 must contain the server directory of the WebLogic installation. The APC MDO installer does not support arbitrary weblogic.home placement. So, if you have already installed WebLogic and the installation does not follow this directory structure, then you must re-install WebLogic.

Set the WebLogic domain name to the domain you created for APC MDO when you set up WebLogic.

weblogic.server=<server name>

weblogic.domain

weblogic.home

bea.home

## Defining Ports

Specify the following port property:

weblogic.admin.port=41001

## Defining Database Properties

Specify the following database properties:

- database.apcdb.oracle.create=yes
- database.apcdb.oracle.upgrade=no

- database.apcdb.oracle.address

- database.apcdb.oracle.dbalias

- database.apcdb.oracle.dbname

- database.apcdb.oracle.dbport

- database.apcdb.oracle.auth.apcoracleauth.user

- database.apcdb.oracle.auth.apcoracleauth.password

## Setting Up Environment Variables

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

- JAVA_HOME

- PATH

Note the following:

- ORACLE_HOME must be set for all supported platforms.

- LD_LIBRARY_PATH must be set for OEL, HP, and Solaris.

- LIBPATH must be set for AIX.

- $ORACLE_HOME/bin should be added to the user's PATH variable.

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/jdk1.5

**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*

## Preparing The Unix Terminal Emulator and SSH Client

In order to run the APC MDO installer, you will need to use a Unix terminal emulator. In addition, the SSH Client must be configured to allow x-forwarding. Refer to the documentation for the SSH Client for instructions on how to enable x-forwarding.

## Prerequisite for Installing APC MDO on WebLogic

APC MDO requires ADF, so before installing APC MDO on WebLogic, you must install ADF.

To install ADF on the WebLogic server, complete the following steps:

1. Locate the ADF v10 archive, adfinstaller.zip. An example of the location of the Price CD image is:

Price-13.0.3-29-200901150300-232542/APC/lib/adfinstaller.zip

2. Unpack the archive in an appropriate directory (for example, /home/qace/ADF). The archive contains the README.html file. If you need to, you can refer to this file for additional information regarding the installation of ADF.

3. Edit the file adfinstaller.properties to make the following changes:

   ■ Set **DesHome** to the bea.home directory. (For more information about bea.home, see the README.html file.)

   ■ Set **type** to WEBLOGIC.

   ■ Set **UserHome** as the full path to the domain for APC MDO that you created in WebLogic (For example, /home/qace/wls/user_projects/domains/apc_domain).

4. Shut down the WebLogic server if it is running

5. Run the ADF installer.

   **java -jar** *runinstaller.jar adfinstaller.properties*

6. Edit the file setDomainEnv.sh, located in the bin directory of the APC MDO domain (for example, /home/qace/wls/user_projects/domains/apc_domain/bin/setDomainEnv.sh). You are going to edit the contents of this file directly below the SET THE CLASSPATH comment, as follows:

   ■ Immediately after the SET THE CLASSPATH comment, add the following command, which runs the setupadf.sh file. You should substitute the values appropriate to your system for {bea.home} and {weblogic.domain}.

   ```
   .{bea.home)/user_projects}/domains/{weblogic.domain}/setupadf.sh
   ```

   ■ Modify the JAVA_OPTIONS line by adding -Djava.awt.headless=true to the end of the line (but inside the double quotes). The entire line, after your modification, should appear as:

   ```
   JAVA_OPTIONS="${JAVA_OPTIONS} ${JAVA_PROPERTIES}
   -Dwlw.iterativeDev=${iterativeDevFlag}
   -Dwlw.testConsole=${testConsoleFlag}
   -Dwlw.logErrorsToConsole=${logErrorsToConsoleFlag}
   -Djava.awt.headless=true"
   ```

   ■ Modify the line that sets the class path. This involves appending ${CLASSPATHSEP}${CLASSPATH} to the end of the line. After you edit the line, it should appear as follows:

   ```
   CLASSPATH="${PRE_CLASSPATH}${CLASSPATHSEP}${WEBLOGIC_
   CLASSPATH}${CLASSPATHSEP}${POST_CLASSPATH}${CLASSPATHSEP}${WLP_POST_
   CLASSPATH}${CLASSPATHSEP}${CLASSPATH}"
   ```

7. Restart the WebLogic server. When the WebLogic server starts up, examine the console output. The class path should contain all the elements listed in setupadf.sh. If it does not, then the APC MDO installer will not work properly, as the apcfe.ear file requires these elements.

## Installing APC MDO in Silent Mode

This section describes how to install APC MDO in silent mode. Silent mode is non-interactive.

> **Note:** You must install ADF on the WebLogic server before you can install APC MDO.

To install APC MDO in silent mode, complete the following steps:

1. Make sure that you have completed "Setting Up the Installation Properties File" on page 6-2.

2. Make sure that the application server is running.

3. From the application server machine, enter the following command:

   **bash** *install.sh*

### install.sh

The install.sh command enables you to install APC.

### Syntax

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

### Arguments

Use any arguments listed below as needed.

| 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. |
| **-x** *<APC.xml>* | Specifies an alternate XML install script file within the ./InstallScripts directory. |
| **-h** | Optional. Prints a help message. |

### Return Value

When run in silent mode (install.sh -s), the script displays a trace message to stdout (the console). When run in the Installer mode (the default), the script displays a graphical user interface.

## Installing APC MDO Using the Installer

> **Note:** You must install ADF on the WebLogic server before you can install APC MDO.

To install APC MDO interactively using the Installer, complete the following steps:

1. Make sure that you have completed Setting Up the Installation Properties File on page 6-2.

2. From the Windows client, start the Unix terminal emulator.

3. Make sure that the application server software is running.

4. Navigate to directory that contains the installer shell script.

5. Start the installer by issuing the following command:

   **bash install.sh -p** *APC/apc.install.properties* **-x** *APC.xml*

6. The installer opens and displays the **APC Installer Welcome Screen**. Click **Next**.

*Figure 6–1    APC Installer Welcome Screen*
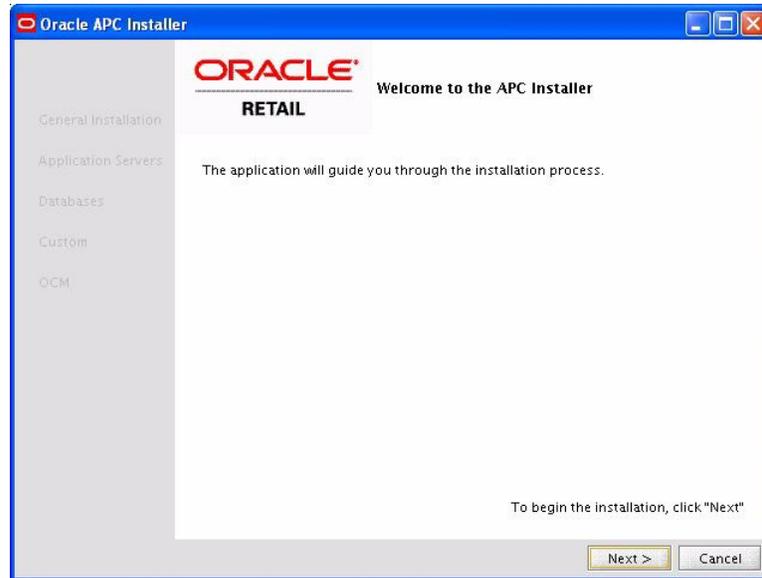


7. The **APC Installation Destination** screen opens.

*Figure 6–2    APC Installation Screen*
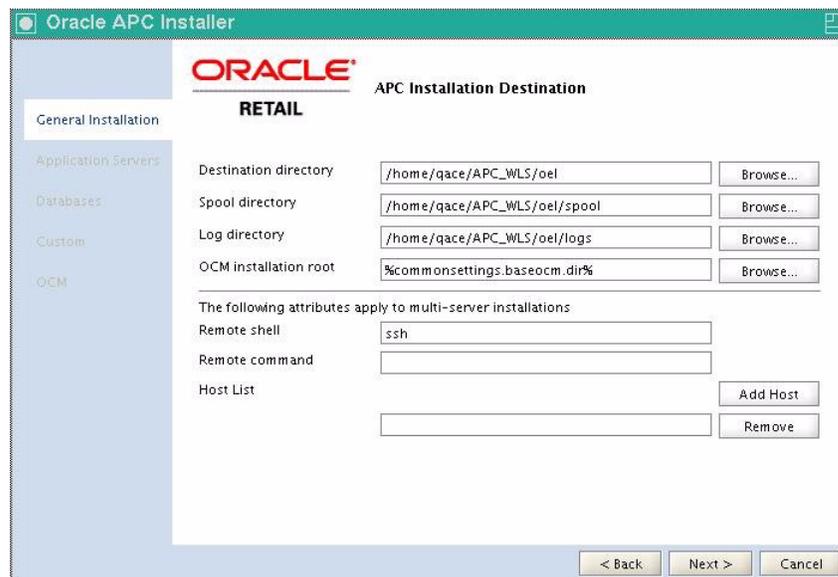


- **Destination Directory** – enter the path to the APC MDO installation target directory.

- **Spool Directory** – enter the path to the APC MDO spool directory.

- **Log Directory** – enter the path to the APC MDO log files.

- **OCM Installation root** – enter the path where the Oracle Configuration Manager (OCM) is installed.

- **Remote shell** – this field is populated by default.

- **Remote command** – leave blank.

- **Host List** – leave blank.

- Click **Next**.

8. The **Application Server Selections** screen opens.

*Figure 6–3   Application Server Selections*



- Select **BEA WebLogic**.

- Click **Next**.

9. The **BEA WebLogic** screen appears.

*Figure 6–4   WebLogic Application Server Screen*



- **WebLogic Home** – enter the location of the WebLogic installation.

- **Domain Name** – enter the domain name for the WebLogic installation.

- **Server Name** – enter the server name for the WebLogic installation.

- **Host Name** – enter the host name for the WebLogic installation.

- **Startup** –left blank

- **Admin Port** – enter the administrative port for the WebLogic installation.

- **Admin User Name** – enter the administrative user name for the WebLogic installation.

- **Admin Password** – enter the administrative password for the WebLogic installation.

- Click **Next**.

> **Note:**   If the installation does not continue to the next screen, check the application server information and/or the status of the application server.

10. The **Java Message Server Properties** screen appears.

*Figure 6–5   Java Message Server Properties Screen*
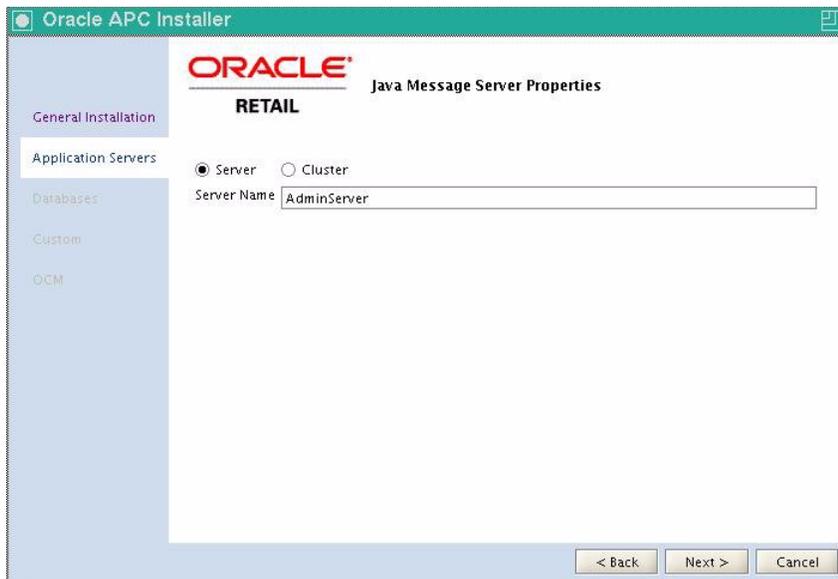


- Select **Server**.
- **Server Name Field** – enter the name of the server that you may have set up as a Java Message Server (JMS).
- Click **Next**.

11. The **Scope Properties** screen appears.

*Figure 6–6   Scope Properties Screen*
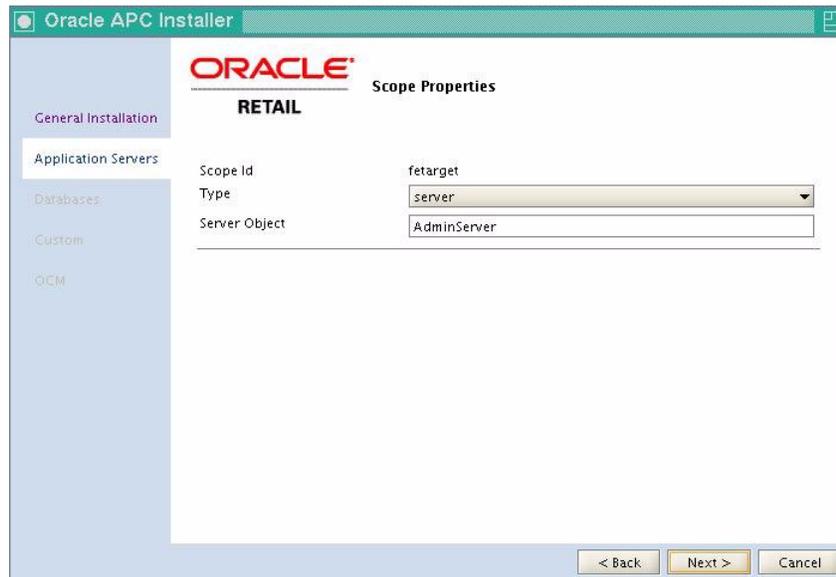


- Enter the server name.
- Click **Next**.

12. The **Database Selections** screen appears.

*Figure 6–7   Database Selections Screen*
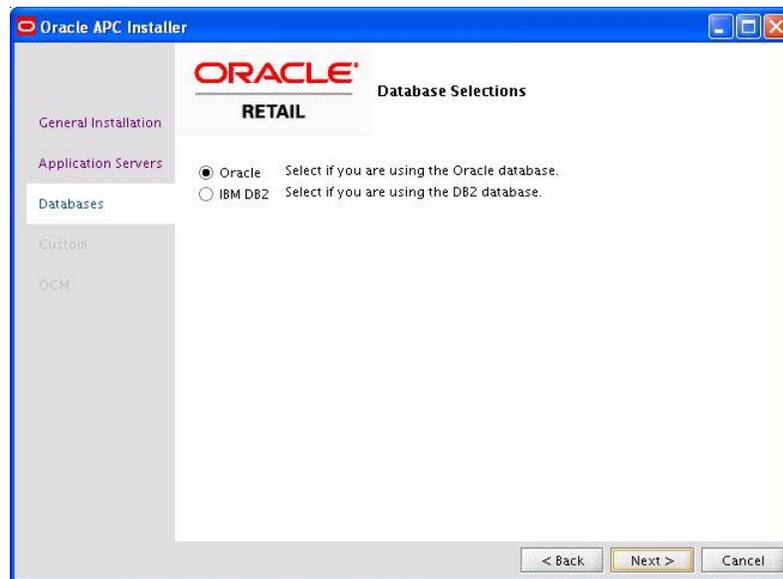


- Select **Oracle**.

> **Note:**   APC MDO does not support the use of DB2.

- Click **Next**.

13. The **Database Properties** screen appears.

*Figure 6–8   Database Properties Screen*



- **RAC Database** – leave this field blank. There is no support for Oracle RAC in this release of APC MDO.

- **Database server address** – enter the address of the database server.

- **Database server port** – enter the server port number associated with the database.

- **Database name** – enter the name used to identify the database.

- **Database alias** – enter the database alias.

- **RAC Host List** – leave this field blank.

- **Database URL** – (optional). Enter the database's URL.

- **Tables** – select one of the following options:

  - **No Change** – select this option if you have an existing database schema that you do not want to modify. This enables you to configure data sources and EAR files without affecting the database.

  - **Create** – select his option if you are installing a new database schema for APC MDO. The Oracle Installer drops all the schemas and creates new ones.

  - **Upgrade** – select this option if you have an existing database schema that you want to update. Any existing data remains intact. It is modified on a row–by–row, column–by–column basis, depending on the actions specified in the database patches.

- **Connection Pool** – this field is not editable.
- **User ID** – enter the user name associated with the database.
- **Password** – enter the password associated with the database.
- **Min Connections** – accept the default value.
- **Max Connections** – accept the default value.
- Click **Next**.

14. The **Oracle Configuration Manager Registration** screen opens.

*Figure 6–9   Oracle Configuration Manager Registration*
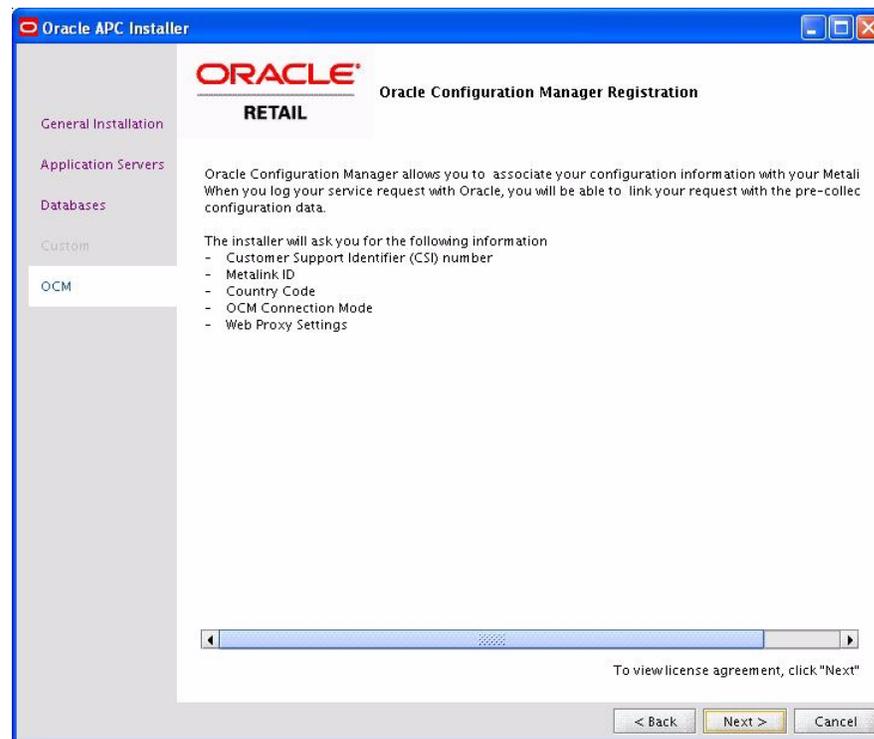


> **Note:**   For more information about the Oracle Configuration Manager (OCM), see Overview of the Oracle Configuration Manager on page 1-1 in Chapter 1, "Overview".

- Click **Next**.

15. The **Oracle Configuration Manager Licensing Agreement** screen opens.

*Figure 6–10   Oracle Configuration Manager Licensing Agreement Screen*
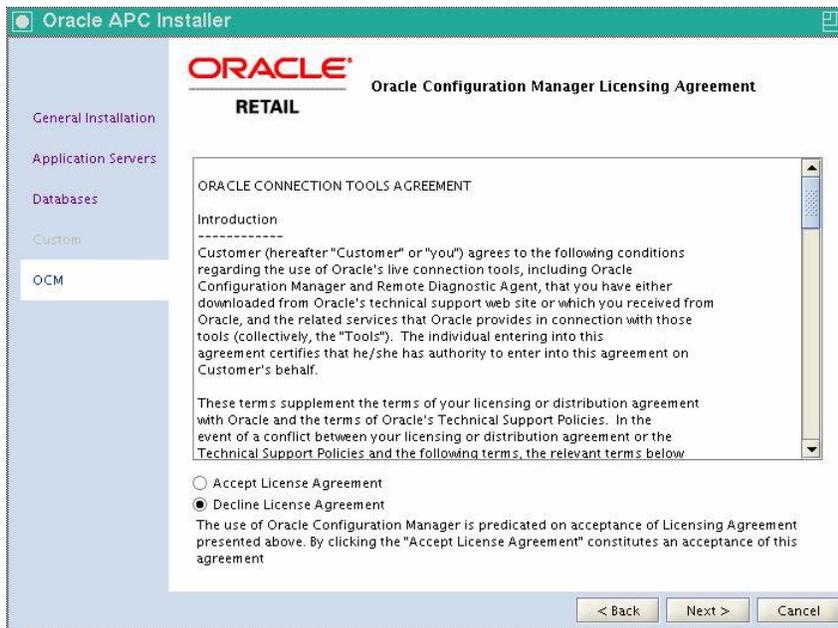


- To decline the License, select **Decline License Agreement**.
- Click **Next**.

**16.** The **Selection Verification Screen** opens.

*Figure 6–11   Selection Verification Screen*



- Review this screen, and then click **Install**.

**17.** The **APC Installation Status** screen opens.

*Figure 6–12   APC Installation Status Screen*
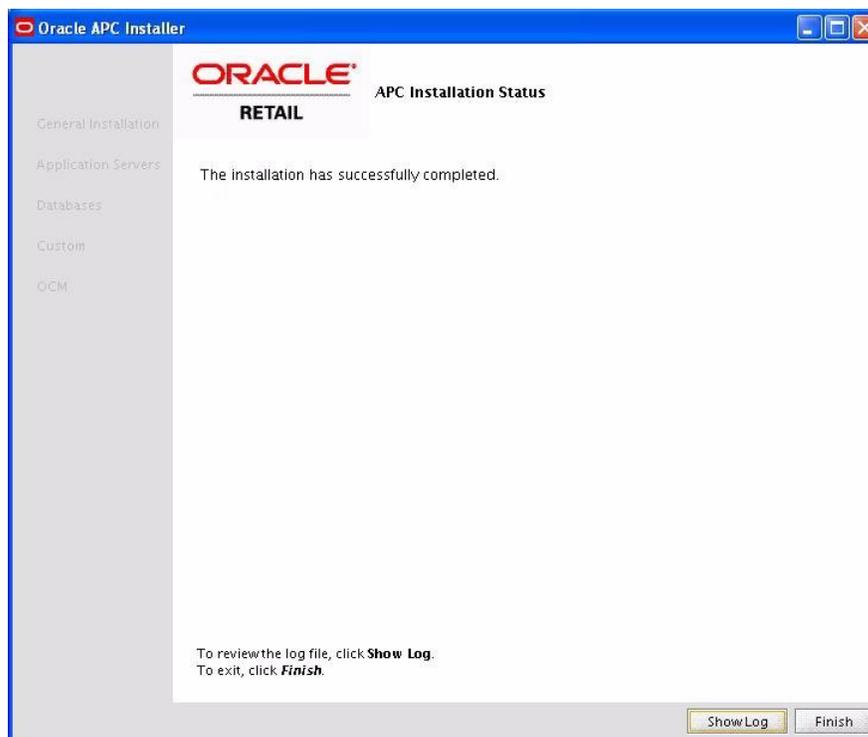


18. To complete installation:

   ■   Click **Finish** to exit.

   ■   Click **Show Log** to view the installation log file.

## Post–Installation Tasks

After the installer has finished, complete the following steps:

1. Navigate to the directory where APC MDO is installed. This is the directory you defined using the basedest.basedest.dir within the apc.install. properties file.

2. Edit config/ecf.conf within the following directory:

   ./modules/APC/config/ecf.conf

3. Within the ecf.conf file, update the user name and password with the weblogic.admin.userid and weblogic.admin.password from the install.properties file.

4. Next, navigate to the bin directory, located in

   ./modules/APC/bin

5. Within this directory, issue the following command:

   **nohup runAPC.sh -l** *t3://<host>:<Port> > APCBackEnd &*

   where <host> is the machine where WebLogic is running and <Port> is 41001.

6. The only way to shut down the APC MDO back-end process is to manually kill the process. When you start APC MDO, using runAPC.sh, it spawns a child process. To stop APC MDO you must kill the runAPC.sh process and the java process. To do this manually:

1. Log into the server where the APC MDO back end is running.

2. Enter the command:
   **ps -ef** | **grep** *runAPC*

3. Obtain the process ID (PID) for that process.

4. Enter the command:
   **ps -ef** | **grep** *java*

5. Identify the correct java process associated with runAPC.sh and obtain the PID for that process.

6. Run the command:
   **kill -9** *<PID1>*

# Index