

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

Configuration Guide

Release 13.2.2

**E22872-01**

April 2011

Copyright © 2011, Oracle and/or its affiliates. All rights reserved.

Primary Author: Judith Meskill

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

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

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

<b>Send Us Your Comments .....</b>	<b>vii</b>
<b>Preface .....</b>	<b>ix</b>
Audience .....	ix
Documentation Accessibility .....	ix
Related Documents .....	x
Customer Support .....	x
Review Patch Documentation .....	x
Oracle Retail Documentation on the Oracle Technology Network .....	xi
Conventions .....	xi
 <b>1 Getting Started</b>	
<b>Introduction .....</b>	<b>1-1</b>
<b>APC-MDO Data Requirements .....</b>	<b>1-1</b>
<b>Configuring APC-MDO .....</b>	<b>1-1</b>
Assigning Attributes to Merchandise .....	1-2
Promotions .....	1-2
Configuring the apc.properties File .....	1-2
Parameter Export .....	1-2
End-of-Week Parameter .....	1-3
Configuring the apcfe.properties File .....	1-3
 <b>2 User Management</b>	
<b>Accessing APC-MDO .....</b>	<b>2-1</b>



---

---

## Send Us Your Comments

*Oracle® Retail Analytic Parameter Calculator for Markdown Optimization Configuration Guide, Release 13.2.2*

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document.

Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

---

---

**Note:** Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Applications Release Online Documentation CD available on My Oracle Support and [www.oracle.com](http://www.oracle.com). It contains the most current Documentation Library plus all documents revised or released recently.

---

---

Send your comments to us using the electronic mail address: [retail-doc\\_us@oracle.com](mailto:retail-doc_us@oracle.com)

Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at <http://www.oracle.com>.





---

---

# Preface

The *Oracle Retail Analytic Parameter Calculator for Markdown Optimization Configuration Guide* enables systems administrators to perform the following configuration tasks:

- Configuring Data Attributes
- Creating and Managing User Accounts

## Audience

This guide is intended for system administrators of the APC-MDO application.

## Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at <http://www.oracle.com/accessibility/>.

### Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

### Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

### Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/support/contact.html> or visit <http://www.oracle.com/accessibility/support.html> if you are hearing impaired.

## Related Documents

For more information about APC-MDO, see the following documents in the Oracle Retail Analytic Parameter Calculator for Markdown Optimization documentation set:

- *Oracle Retail Analytic Parameter Calculator for Markdown Optimization Installation Guide*
- *Oracle Retail Analytic Parameter Calculator for Markdown Optimization Release Notes*
- *Oracle Retail Analytic Parameter Calculator for Markdown Optimization User Guide*

For more information about MDO, see the following documents in the Oracle Retail Markdown Optimization documentation set:

- *Oracle Retail Markdown Optimization Administration Guide*
- *Oracle Retail Markdown Optimization Configuration Guide*
- *Oracle Retail Markdown Optimization Data Model Guide*
- *Oracle Retail Markdown Optimization Grid Designer User Guide*
- *Oracle Retail Markdown Optimization Implementation Guide*
- *Oracle Retail Markdown Optimization Installation Guide*
- *Oracle Retail Markdown Optimization Operations Guide*
- *Oracle Retail Markdown Optimization Release Notes*
- *Oracle Retail Markdown Optimization User Guide*

## Customer Support

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

<https://support.oracle.com>

When contacting Customer Support, please provide the following:

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

## Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 13.2) or a later patch release (for example, 13.2.1). If you are installing the base release, additional patch, and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch and bundled hot fix releases can contain critical information related to the base release, as well as information about code changes since the base release.

# Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:

[http://www.oracle.com/technology/documentation/oracle\\_retail.html](http://www.oracle.com/technology/documentation/oracle_retail.html)

(Data Model documents are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them through My Oracle Support.)

Documentation should be available on this Web site within a month after a product release.

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	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.



---

# Getting Started

The Analytic Parameter Calculator for Markdown Optimization (APC-MDO) is an analytical tool that is used to create demand parameters for the Oracle Retail Markdown Optimization (MDO) application. It performs various calculations on historical data to derive the demand parameters.

This chapter contains the following:

- [Introduction](#)
- [APC-MDO Data Requirements](#)
- [Configuring APC-MDO](#)

## Introduction

The instructions in this guide assume knowledge of application servers, databases, and application installation or administration, 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.

## APC-MDO Data Requirements

APC-MDO requires a minimum of 18 months of historical data, including at least one complete fiscal year.

---

---

**Note:** In order to use the Seasonality Correlation feature, a minimum of two years of historical data is required.

---

---

## Configuring APC-MDO

Once you have installed APC-MDO, you are ready to begin the configuration process. At a high level, the APC-MDO configuration process is as follows:

1. Assign attributes to merchandise at an aggregated level.
2. Create or obtain a file of historical promotions.
3. Define properties within the `apc.properties` file for the following items: parameter export files and the end of week parameter.

Note that the APC-MDO UI uses the "Used" column in `asds_client_hierarchy_tbl` to determine which merchandise hierarchy and location hierarchy levels to display in the

Raw AP stage display. The "Used" column is configurable. A value of N indicates the levels that are at or below the optimization level.

## Assigning Attributes to Merchandise

Within APC-MDO, attributes are used to segregate merchandise. These attributes ensure that different kinds of merchandise are not aggregated within the same seasonality curve.

To assign attributes to merchandise, do the following:

1. Open the **asds\_item\_level\_user\_attrs\_tbl** within the asds schema.
2. Using SQL statements, update the **user\_attr\_text\_1** column with one of the following values:
  - Basic – specifies basic merchandise.
  - Regular – specifies regular, or non-basic merchandise.
  - Blank – the field is empty and no attribute is specified. Merchandise given an attribute of this type have a value of "None".

## Promotions

Optionally, APC-MDO can use information from significant promotions; this data is stored within the **asds\_event\_promos\_tbl** table and is used within the Raw AP and Corrections stages. [Table 1–1, "The asds\\_event\\_promos\\_tbl Table"](#) lists the table fields and field descriptions.

Implementors of APC-MDO should fill this table with data using a SQL query.

**Table 1–1 The asds\_event\_promos\_tbl Table**

Field	Description
EVENT_KEY	Promotional Event Key.
EVENT_DESC	Promotional Event Description.
EVENT_START_DT	Promotional Event Start Date.
EVENT_END_DT	Promotional Event End Date.
ATTRIBUTE1	Usage (Y or N).
ATTRIBUTE2	Baseline (linear, max, average).

## Configuring the apc.properties File

The following properties within the **apc.properties** file must be configured.

### Parameter Export

Locate the following properties and enter the required information:

- **pe.output.dir** – specify the installation path of APC-MDO on the computer where APC-MDO is installed.
- **pe.company.name** – (optional). APC-MDO uses the value entered in this field within the titles of the generated parameter files. By default, this property is defined as "CompanyName".
- **pe.parameter.file.name** – specifies the name of the file that holds the scalar demand parameters. By default, this property is defined as "apc\_output\_scalar\_

parameters\_v". The full name of the scalar demand parameter file when using the default setting is `apc_output_scalar_parameters_vXX_CompanyName.zip`, where XX is a version number generated by APC-MDO.

- **pe.seasonality.file.name** – specifies the filename for the file that holds the seasonality curves. By default, it is "apc\_output\_seasonalities\_v". When generated, the full name of this file using the default setting is "apc\_output\_seasonalities\_vXX\_CompanyName.zip", where XX is a version number generated by APC-MDO.

### End-of-Week Parameter

The End-of-Week parameter specifies which day of the week is used as the end of the week.

Locate the **rawap.end.of.week** parameter. Acceptable values for this field are as follows:

- SAT
- SUN
- MON
- TUE
- WED
- THU
- FRI

---

**Note:** The default value for this field is "SAT".

---

## Configuring the `apcfe.properties` File

The `apcfe.properties` file contains an entry for each parameter that is displayed in the APC-MDO UI. You can use this file to customize both the default values for each of the UI parameters and the acceptable range of values for each of the UI parameters.

---

**Note:** If you make changes to the `apcfe.properties` file, you must restart the WebLogic server in order for the changes to take effect.

---

The new default values will display when you log in for the first time and when you click Restore Defaults. However, if you have previously performed a stage run, any changes you have made to the default values will be overwritten with the values in the XML configuration file. In order to restore the new default values, click Restore Defaults from any screen.

The following examples demonstrate the results of changing a parameter:

If you change the value of the property `Preprocessing.lowEndSalesPercentage` from 2 to 3, the parameter Life Cycle Sell Through % Start field will display a default value of 3.

If you change the following two parameters as shown:

`Preprocessing.lowEndSalesPercentage.minimum=0`

`Preprocessing.lowEndSalesPercentage.maximum=50`

you will change the acceptable range of values for the parameter `LifeCycleSellThrough` %Start to a minimum of 0 and a maximum of 50. If the user enters a value that does not fall within this range then the stage run will not complete.



---

## User Management

This chapter contains the following section:

- [Accessing APC-MDO](#)

### Accessing APC-MDO

No user accounts need to be specified for APC-MDO. As a single-user application, only one user may access APC-MDO at a time.

A user accesses APC-MDO by logging into the application asds database. For information about setting up database passwords, see the *Oracle Retail Analytic Parameter Calculator for Markdown Optimization Installation Guide*.

Once APC-MDO is installed, you can access the application using the following URL:  
`http://server:port/apc/faces/Client/Client_Select.jspx`

