Oracle® Retail Regular Price Optimization

Release Notes

Release 13.2.2

E17853-01

January 2011

Oracle Retail Regular Price Optimization (RPO) assists retail price mangers in pricing hard-line and grocery items. It is suited for long lifecycle items with infrequent price changes. It recommends permanent prices based on initial estimates of an item's total sales volume over a planning period and on price-related sales of items and related items.

RPO includes grouping in its pricing analysis because it considers cross-item elasticities; that is, RPO considers how price changes for one item may affect the sales volume of other items. Users can input objective functions and pricing constraints that define the optimization problem. Once these inputs are defined, the pricing optimizer recommends prices. Multiple scenarios can be created and evaluated side by side, and what–if analysis can be performed within the context of a pricing scenario. After analyzing the what-if results and recommended prices, the user can make a final decision to submit the recommended prices for the given set of merchandise items and locations.

Beginning with the 13.2.2 release, RPO integrates with a new application called Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO). APC-RPO calculates self and cross-item elasticities, which RPO uses to make price recommendations. APC-RPO is a separate application with its own installer, but it is available as an additional component in the RPO 13.2.2 installation media pack.

Hardware and Software Requirements

See the *RPO Installation Guide* for information about the following:

- Hardware and software requirements
- Oracle Retail application software compatibility information

> **Note:** After the 13.2.2 release, MKS will no longer be supported as a requirement for operating demonstration configurations on all versions of Windows operating systems. Use of Cygwin is in development as a replacement.

Upgrade Note

Due to changes in the product hierarchy, RPO is not upgradeable from previous versions to 13.2.2 and later versions. You must perform a full installation of RPO in order to accommodate these changes. For information on performing a full installation, see the *RPO Installation Guide*.

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Functional Enhancements

RPO 13.2.2 includes the following functional enhancements.

RPO on the RPAS Fusion Client

With the introduction of the Oracle Retail Predictive Application Server (RPAS) Fusion Client, customers have a choice to use RPO with either the RPAS Fusion Client or the RPAS Classic Client.

For details on the features of the RPAS Fusion Client, see the 13.2.2 *Oracle Retail Predictive Application Server User Guide for the Fusion Client*. RPO has been preconfigured to contain a default taskflow. The only change made to the RPO solution in order to use the solution with the Fusion Client was the addition of the taskflow.

When using the Fusion Client for RPO, the users can utilize the new taskflow feature to understand and follow the RPO business process. This taskflow shows the overall business process and allows the users to understand the tasks they must complete in order to finish the business process.

The taskflow components are described in the table below.

Name	Description
Activity	High level business process or solution. An activity provides visibility to the full business process, supports application navigation, and drives end user activities. Tasks and steps are assigned to an activity to further describe the business flow.
Task	The second level of an activity flow. A task is associated with a single RPAS workbook template. Steps are assigned to a task.
Step	The lowest level of an activity flow. A step is associated with an RPAS worksheet or set of worksheets to achieve a specific action.

The setup of the taskflow is accomplished within the RPAS Configuration Tools. Workbook information is mapped to activities, tasks, and steps. For additional details on this process, see the taskflow section of the Configuration Manager chapter of the *RPAS Configuration Tools User Guide*.

Improved Workflow

RPO now has an improved and simplified data and workflow model that better supports attribute-based merchandise grouping. It also has a more streamlined, all-group-based constraint creation that allows for easier, more intuitive scenario modeling.

Running Optimization in Batch

RPO can now run optimization for select scenarios in batch mode. After users have created scenarios within RPO, they can select the specific scenarios they want to optimize and schedule them to run overnight. In the morning, users can review the results by comparing multiple scenarios to each other.

To select the scenarios to optimize in batch mode, users should access the Batch Job Setting worksheet in the Business Administration workbook. There, users can select the scenarios to optimize as well as view the date of the last optimization run for each scenario.

For more information about this feature, see the Business Administration chapter in either the *RPO User Guide for the RPAS Classic Client* or the *RPO User Guide for the RPAS Fusion Client*.

Forecasting Capabilities

Prior to the 13.2.2 version, RPO relied on forecasts from external applications to perform price optimization. With the 13.2.2 release, RPO can generate its own forecasts at the optimization level, the item/price intersection.

Price Ladder Creation

With the 13.2.2 release, users can now generate price ladders within RPO using the price ladder worksheets in the Business Administration workbook. Users can set the range of prices for the price ladder, specify the price steps (the required difference in amount between consecutive price points), and select the ending digits of the price points. After RPO generates the price ladder and price points using these inputs, users can edit individual price price points as needed.

For more information about this feature, see the Business Administration chapter in either the *RPO User Guide for the RPAS Classic Client* or the *RPO User Guide for the RPAS Fusion Client*.

Price Drift

RPO now allows users to specify how much the recommended price can drift from the original price. The setting is not an absolute or percentage value, but a picklist with choices ranging from low (meaning small change from original value) to unconstrained (meaning change in price can be unlimited). RPO recommends the optimized price based on the goal, constraints, and drift setting. Users can set the price drift for each scenario in the Price Analysis workbook.

For more information about this feature, see the Price Analysis chapter in either the *RPO User Guide for the RPAS Classic Client* or the *RPO User Guide for the RPAS Fusion Client*.

Improved Diagnostic Messages

RPO now has more detailed, user-friendly messages that explain the results of the optimization and validation runs. These messages are displayed in one location, the Optimization/Validation Status worksheet in the Price Analysis workbook, making them easier to find.

In addition, users can see what constraints were relaxed or violated for items in the optimized scenario using the Item Constraints Diagnostics worksheet in the Price Analysis workbook. If a constraint was relaxed or violated, users can return to the Item Group Level worksheet (also in the Price Analysis workbook) for more detailed information about why this occurred.

Post Price Analysis Workbook

A new workbook has been added to allow users to compare the performance of recommended, approved, and executed prices in a scorecard layout. This workbook is called the Post Price Analysis workbook, and it contains time-phased historical data of items.

For more information about this workbook, see the Post Price Analysis chapter in either the *RPO User Guide for the RPAS Classic Client* or the *RPO User Guide for the RPAS Fusion Client*.

Technical Enhancements

RPO 13.2.2 includes the following technical enhancements.

Retail Enabled ODI Integration

Oracle Retail Enabled ODI Integration is a set of packages that allows users to easily execute data transfers among select RPAS applications.

Oracle Retail Enabled ODI Integration leverages Oracle Data Integrator (ODI) to store information about data interfaces among RPAS applications. ODI presents a user-friendly graphical interface for user-initiated data transfers and runtime monitoring. It also provides the ability to host application domains on different machines on a network, an ability not available with prior non-ODI integration strategies.

Retail Enabled ODI Integration can be used to integrate Regular Price Optimization (RPO) and Analytic Parameter Calculator for Regular Price Optimization (APC-RPO).

For more information on the version of ODI compatible with the Oracle Retail Enabled ODI Integration, see the *Oracle Retail Regular Price Optimization Installation Guide*.

Running Optimization for a Subset of Price Zones

Previously, an optimization run had to include all price zones, regardless of the fact that often users need to optimize only a few price zones. Now, users can select a subset of price zones to optimize using the Select Price Zones worksheet in the Price Analysis workbook. Since the run time increases linearly with the number of price zones, a considerable amount of run time is now potentially saved.

Integration Enhancement

RPO 13.2.2 includes the following integration enhancement.

Integration with APC-RPO

RPO now integrates with the new Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO) application. APC-RPO sends RPO the following data:

- Minimum prices
- Maximum prices

- Anchor prices
- Self and cross elasticities

RPO uses the APC-RPO data to recommend prices according to a specific optimization goal.

The APC-RPO to RPO integration can be implemented either with Retail Enabled Oracle Data Integrator (ODI) integration or with script integration. For more information, see the *RPO Implementation Guide* and the *Retail Enabled ODI Integration Implementation Guide*.

Known Issues

The following table contains issues that have been identified for the current release.

Known Issue/Defect	Defect Number
Simple (non-global) domains cannot be upgraded to 13.2.2.	11677741
Due to floating point rounding errors, the equals (=) operator does not always work as expected.	10640089
The RPO libraries are not registered correctly. After a domain is built, the libraries must be loaded manually.	10275534
Default parameter values are preset to values reasonable for commercial use. Due to size and other limitations of the sample data set provided with RPO, when users attempt to optimize prices using the default parameter values, the "Max allowed standard error for raw self-elasticities" setting must be relaxed for elasticities to be generated.	NA

Related Documentation

For more information, see the following documents in the Oracle Retail Regular Price Optimization 13.2.2 documentation set:

- *Oracle Retail Regular Price Optimization Installation Guide*
- *Oracle Retail Regular Price Optimization User Guide for the RPAS Classic Client*
- *Oracle Retail Regular Price Optimization User Guide for the RPAS Fusion Client*
- *Oracle Retail Regular Price Optimization Implementation Guide*

For more information about the Analytic Parameter Calculator for Regular Price Optimization (APC-RPO) application, see the Oracle Retail Analytic Parameter Calculator for Regular Price Optimization documentation set.

For more information about the RPAS Fusion Client, see the Oracle Retail Predictive Application Server documentation set.

For more information about RPAS and the ODI Enabled Integration, see the following documentation sets:

- Oracle Retail Enabled ODI Integration documentation
- Oracle Data Integrator documentation
- Oracle Retail Predictive Application Server documentation

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Value-Added Reseller (VAR) Language

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