

Oracle® Retail Assortment and Space Optimization

Release Notes

Release 14.0

E50586-01

December 2013

This document announces the first release of Oracle Retail Assortment and Space Optimization (ORASO, also known as ASO). ASO is one application in the Oracle Retail Advanced Science Engine (ORASE) suite. ORASE is the centralized science engine that supports retail business processes by driving analytics for both the Oracle Retail Modeling Engine (ORME) and for ASO.

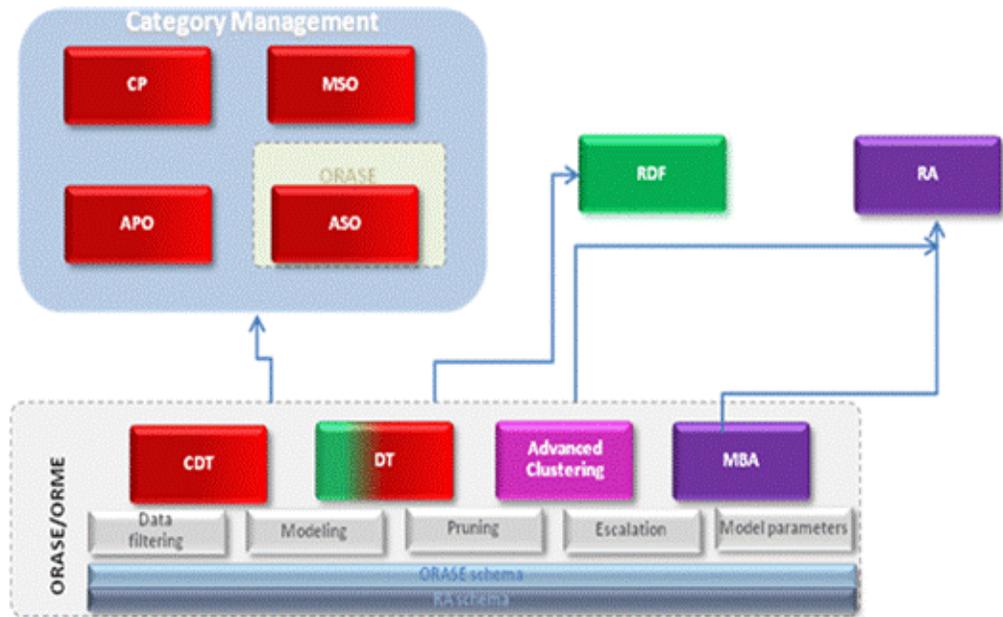
ORASE is architected in a modular fashion to serve as a centralized science engine supporting multiple solutions. Note that the applications within ORASE may be licensed separately.

Solution Overview

ORASE Delivers Centralized Science with Modular Packaging

The figure below and the discussion that follows illustrate the interaction among the various components that comprise ORASE. The four acronyms shown within Oracle Retail Category Management are the following:

- Category Planning (CP)
- Assortment Planning and Optimization (APO)
- Macro Space Optimization (MSO), formerly known as ASOSpace (Macro)
- Assortment and Space Optimization (ORASO, also known as ASO)



Note: The MSO libraries are packaged with Oracle Retail Predictive Server (RPAS), Release 14.0. However, the configuration of a workflow is considered to be a custom effort on the part of the retailer and partner and is **not** packaged with this release. See the *Oracle Retail Category Management Configuration Guide, Release 13.3* for reference information as to how a retailer/partner could configure the MSO libraries and special expressions into a workflow. Note that MSO was formerly known as ASOSpace (Macro).

Single Extraction, Transform, and Load (ETL) and a Shared Schema

ORASE shares an ETL and schema with Oracle Retail Analytics, Oracle Retail's data warehouse solution. In addition ORASE has its own schema that has been optimized for analytical processing needed for its science modules.

The Oracle Retail Merchandising System (RMS)/RA ETL is available to ORASE retailers, so that they can load ORASE data from RMS into the RA and ORASE schemas. See the RA and RMS documentation sets for more information on the ETL associated with RMS and RA.

Assortment and Space Optimization Overview

ASO provides a way for planners to make optimized assortment decisions. The product uses a science-based method to account for varying amounts of space available for the assortment, and to account for the effects of adding or dropping products from the assortment.

ASO takes as its input the collection of planograms and the assortments that are mapped to the planograms across a set of stores. A planogram, abbreviated as POG, is a collection of fixtures of various lengths. Fixtures include shelves, pegboards, freezer cabinets, and so on. Stores may be grouped together into "clusters" of stores that share some important user-defined characteristics. ASO provides the user the means to

optimize the assortment and the space allocated to it to meet a variety of business goals.

The ASO process is flexible enough to allow retailers to have various degrees of planogram variation by store. Retailers may prefer to have fewer different planograms in order to reduce the workload for planogram management or to ensure a common presentation in their stores. On the other hand, retailers may be willing to manage various planograms at the store level in order to capitalize on store-specific demand and fixtures.

The level of variation defined by the user determines the result. Three examples follow.

- All stores in a cluster (cluster is used in a generic sense) must have the exact same POG category planogram at any given time, so there is only one POG option for all stores in the cluster. In this case, ASO optimizes at the cluster.
- A cluster can have various length planograms for a given POG category at one time, but the only variation is in the planogram length (thus, the size of the POG can vary by store, but there is only one choice of POG for any given length for that cluster). In this case, ASO optimizes at the cluster and for various lengths.
- Every store can have a unique planogram. In this case, ASO optimizes at the store.

Given the vast number of optimizations possible, intelligent alerts are provided to direct the user to specific locations that need attention. Alerts have configurable definitions and threshold values.

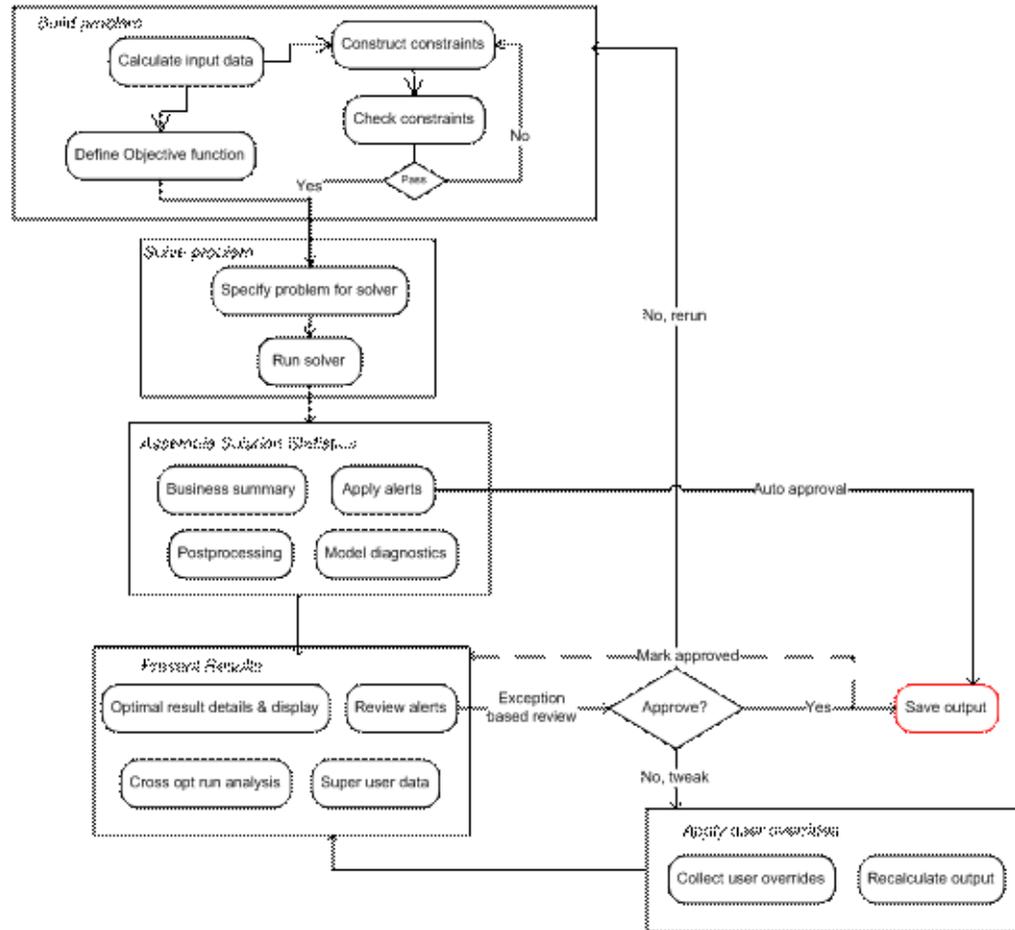
Users are provided the ability to visualize and evaluate the results of space optimization with interactive report screens that take advantage of business intelligence (BI) and virtual planogram (VPOG) visualizations.

The quality of the optimization result depends on how well the problem is defined by the user. ASO provides several features to assist the user in describing the problem and interpreting the results:

- A built-in Validation Report searches for obvious conflicts in business constraints before sending the problem to the solver.
- Support for real-time optimization on a single location (a store or a cluster) is provided, checking results prior to a sizable batch run.
- The user is allowed to generate and evaluate, in a real-time iteration, cluster-level optimization results even if the user is optimizing at store. The cluster level results can be used for the following:
 - The validation of the optimization setup.
 - The direct input into the optimization.
 - The evaluation of the results.

Assortment and Space Optimization Workflow

The figure below gives a visual representation of the business processes and workflow within Assortment Space Optimization.



Gurobi and the Optimization Process

The key to the optimization process is the mathematical model developed by Oracle Retail. To ensure the best results, Oracle uses a state-of-the-art solver licensed from Gurobi to carry out optimization calculations.

For more information, see the *Oracle Retail Assortment and Space Optimization Installation Guide*.

Hardware and Software Requirements

See the *Oracle Retail Assortment and Space Optimization Installation Guide* for information about the following:

- Hardware and software requirements
- Oracle Retail application software compatibility

Product Support Considerations

For product support and logged defects, the new product identifier for Oracle Retail Assortment and Space Optimization is 10510. Each logged defect will be analyzed to determine the source of the reported issue.

Known Issues

The Known Issues described below are included in this release.

- Translation: Not all labels and strings were translated prior to the 14.0 Release. As a consequence, some screens and pop-ups may show some English words and phrases even after correctly configuring the application to use a different language.
- Translation: The Optimization List tab does not display correctly for the Turkish and German languages.
- The *Oracle Retail Advanced Science Engine (ORASE) Implementation Guide* is in development. Partners and retailers are encouraged to check the Oracle Retail documentation site to locate the latest version of the guide once it is published: <http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html>
- Known Issues in Virtual Planogram (VPOG) Viewer
 - The VPOG does not display correctly in the Internet Explorer (IE), Version 8 browser. This problem exists in both "Fixture and Product Data train-stop" for displaying the fixtures and in "Result Analysis train-stop" when viewing historical VPOGs and/or editing them to apply "user overrides". This issue does not occur with the IE9 or the other supported browsers.
 - The historic VPOG viewer Fixture and Product Data train-stop and Result analysis train-stop can close unexpectedly if the user performs actions on the parent page. For example, bringing up a results visualization or editing a results visualization has the effect of automatically closing the historic VPOG viewer.
 - In a mixed-fixture run, the pegboard and shelf VPOGs are scaled differently. The scaling is normal when viewing shelf and pegboard fixtures separately.
 - When applying VPOG User Overrides in Result Analysis train-stop, dropping a product and then later adding it back in, may cause the product ID to appear as a negative number.
- In some cases, after using the "export to excel" feature in Result Analysis train-stop, using the pivot table filter drag and drop actions can result in an exception error.
- In the assortment to POG (a2p) area of the application, changing the POG node causes an abnormal demand spread factor and displays an exception error upon Save.
- In some cases, overrides to fixtures of type "freezer chest" are not reflected correctly in the Result Analysis train-stop pivot table. Products dropped in the user override are still shown in the pivot table.
- The sales and inventory calculation over-counts finger spacing "above" for items stacked on top of each other. The finger spacing "above" is applied to each item in the stack instead of the last one.

- In the Included Products pivot table in ts4, the pegboard elevation is the opposite of that for shelves. For example, in a shelf display, an elevation of 0 correctly indicates the item is at the bottom of the display; for pegboards, an elevation of 0 indicates the item is at the top of the display.

Related Documentation

For more information, see the following documents in the Retail Assortment and Space Optimization, Release 14.0 documentation set:

- *Assortment and Space Optimization Installation Guide*
- *Assortment and Space Optimization User Guide*
- *Oracle Retail Advanced Science Engine Security Guide*

Supplemental Training on My Oracle Support

Transfer of Information (TOI) Material (ID 732026.1)

Online training is available to Oracle supported customers at product release. These online courses provide release-specific product knowledge that enables your functional and technical teams to plan, implement and/or upgrade and support Oracle Retail applications effectively and efficiently.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

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Value-Added Reseller (VAR) Language

Oracle Retail VAR Applications

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- (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.
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