Oracle® Retail Advanced Science Cloud Services

Release Notes

Release 16.0.1

E87424-04

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This document highlights the major changes for Oracle Retail Advanced Science Cloud Services Release 16.0.1.

Overview

The Oracle Retail Advanced Science Cloud Services is comprised of the following Cloud Services:

- Oracle Retail Advanced Clustering Cloud Service
- Oracle Retail Assortment and Space Optimization Cloud Service
- Oracle Retail Customer Decision Tree Science and Demand Transference Science Cloud Service

These Cloud Services support the retail business processes of store cluster creation, optimization of item facings to available space, and insights about customer behavior patterns and product preferences. When incorporated within the end-to-end Assortment Planning and Optimization process, retailers can move beyond traditional planning processes and create customer centric and targeted assortments, improving customer satisfaction and overall business profitability.

Oracle Retail Cloud Services and Business Agility

Oracle Retail Advanced Science Cloud Services are hosted in the Oracle Cloud with the security features inherent to Oracle technology and a robust data center classification, providing significant uptime. The Oracle Cloud team is responsible for installing, monitoring, patching, and upgrading retail software.

Included in the service is continuous technical support, access to software feature enhancements, hardware upgrades, and disaster recovery. The Cloud Service model helps to free customer IT resources from the need to perform these tasks, giving retailers greater business agility to respond to changing technologies and to perform more value-added tasks focused on business processes and innovation.

Oracle Retail Software Cloud Service is acquired exclusively through a subscription service (SaaS) model. This shifts funding from a capital investment in software to an operational expense. Subscription-based pricing for retail applications offers flexibility and cost effectiveness.

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Client System Requirements

The following technology is supported:

- Operating system:
  - Microsoft Windows 7 Service Pack 1 or Microsoft Windows 8.1

    Note: Oracle Retail assumes that the retailer has ensured its Operating System has been patched with all applicable Windows updates.

- Web browsers supported on Microsoft Windows 7 and 8.1:
  - Microsoft Internet Explorer 11.0 (32-bit)
  - Mozilla Firefox Version 45+
  - Google Chrome (latest version)

Functional Enhancements

The functional enhancements described below are included in this release.

New Look and Feel

Advance Science Cloud Services has a new look and feel. The user interface uses the new skin, which is tailored to support tablets. A Notification panel has been added that informs the user about activities of interest. For example, when a long running process is complete, a notification is created that informs the user that the process is complete, and the user does not need to navigate to the page itself in order to check the status of the process.

Recommendations

The Advanced Science Cloud Services dashboard now provides the Recommendations link. This link presents recommendations and an entry point to each of the modules that the user has access to. Each application corresponds to an applicable dashboard-tile; the link at the top of the tile invokes the specific module. In addition, each tile contains module information and links. Note that the corresponding view is configured as the default dashboard.

Attribute Extraction

Attribute Extraction is an enterprise-specific solution that uses machine learning to extract product attributes from free-form product description strings. The product attributes can be used by Customer Decision Tree, Demand Transference, and other retail applications that require product attributes in a structured format.

Assortment and Space Optimization

For more information see *Oracle Retail Advanced Science Cloud Services User Guide*.

Product Image Support

Assortment and Space Optimization now includes the ability to display product images when users are viewing a virtual planogram. This functionality helps users to better understand and evaluate product placement on the shelf in an intuitive manner.

Product Family Groupings

This functionality further enhances the existing blocking and sorting visual guidelines. Here, users can specify specific groupings of products for placement on the shelf. This helps to group related products together and allows additional flexibility for placement. Product family groupings allow users to specify a primary block as well as a secondary block per primary block. This functionality allows these related products to be grouped together but also provides the flexibility to be able to cross a shelf.

Customer Segmentation

For more information see *Oracle Retail Advanced Science Cloud Services User Guide*.

Granular Customer Segments and Versioning

Customer Segmentation supports segments at the granular level for marketing and promotion planning. This allows retailers to plan promotions or marketing campaigns for customer segments that are specific to a category or department instead of global segments. It also supports versioning, which allows the user to selectively prepare data for segmentation instead of batch processing. Versioning lets the user decide what specific merchandise, location, and source data to use for filtering and sampling customer and to perform attribute mining to gain knowledge of important attributes and their correlation.

Customer Segment Store Profile Generation

Customer Segmentation calculates the sales share of customer segments for each store. These store profiles can be generated by the user from the user interface for the approved customer segments. These store profiles can then be consumed by Retail Insights to generate business reports. Store Clustering also consumes customer segment profiles distribution for each store to generate customer centric store clusters.

Advanced Store Clustering

For more information see *Oracle Retail Advanced Science Cloud Services User Guide*.

Store Clustering ODM Support

Store Clustering supports hierarchical clustering that allows the user to group data objects into a hierarchy of clusters. Hierarchical methods rely on a distance function to measure the similarity between clusters and provide a robust method to cluster when both numeric and discrete attributes (mixed attributes) are included as part of the clustering criteria. This method selects the most significant attributes when grouping stores on the fly by looking at the goodness of match for the distribution of the attribute values.

Forecast-Based Clustering

Store Clustering supports the generation of store clusters based on forecast sales. This allows the retailer to use predicted sales instead of historical sales to group store clusters. The solution determines the most meaningful attributes, which are used as leverage for the store clustering process using forecast data. It also determines if it is worth creating store clusters for a particular category/location, using forecast data. The system allows the user to identify key store and product attribute values for a particular store cluster using forecast data.

Advanced Store Clustering - Export to Excel

Advanced Clustering allows the user to export clusters, their attributes and stores to Excel from the user interface. The exported Excel maintains the hierarchical relationship between clusters and stores, so the user can analyze nested clustering results and their aggregates. The Export to Excel action can be performed for each scenario that has successfully executed from scenario list. These exports adhere to the configured format and internalization guidelines already supported in the user interface. The exported clusters can then be further consumed by external visualization tools to generate graphs such as geographic maps, scatter plots with centroid, and so on.

Auto Cluster/Segment Rename

Both Cluster Segmentation and Store Clustering now support the auto renaming of a cluster/segment based on rules. These rules are defined based on the centroid of the cluster/segment and help in cluster name generation without user intervention. The names generated are based on the abbreviations of the centroid values. These abbreviations can be overridden by the retailer when setting up the application. The system still supports system-generated names that can be overridden by a user and that reflect ancestor names that contain hierarchy name prefixes.

Technical Enhancements

The technical enhancements described below are included in this release.

E-mail Notification for Automated Batch Processing

This release provides the ability to enable e-mail notifications for different stages of automated batch processing. By using the Manage Configuration it is possible to configure e-mail notifications for different processes. By default, an installation has a single e-mail distribution list defined (see table RSE_EMAIL_DISTR_LIST). This list can be edited so that the DISTR_LIST column contains the e-mail addresses for all e-mail communications for all batch processes. By editing this single default distribution list (where the DEFAULT_FLG=Y), the list only has to be maintained once.

It is also possible to have different e-mail lists receive different messages by is setting up multiple lists in the RSE_EMAIL_DISTR_LIST table, and then associating each list with the appropriate e-mail notifications that the list wants to receive. To do this, the RSE_EMAIL_CFG_DISTR table must be populated with the appropriate information. The EMAIL_NOTIF_CFG column has a reference to an ID in the RSE_EMAIL_NOTIF_CFG table, which has a list of all the notifications supported by the application.

For example, PROCESS_NAME=RSE_DAILY_BATCH is related to the execution of the daily batch processing tasks. A separate ID exists for Successful and Failed completion. In order to send those messages to a non-default e-mail distribution list, the IDs must be added to the RSE_EMAIL_CFG_DISTR table with an appropriate reference to the ID from the RSE_EMAIL_DISTR_LIST table. A different ID can be provided in the EMAIL_TO, EMAIL_CC, or EMAIL_BCC columns if necessary.

It is possible to have one entry in the RSE_EMAIL_DISTR_LIST setup as the default distribution list. This list receives messages for any entry in RSE_EMAIL_NOTIF_CFG that does not have an entry defined in RSE_EMAIL_CFG_DISTR.

For more information about the Manage Configuration screen, see the *Configuration* chapter in *Oracle Retail Advanced Science Cloud Services Implementation Guide*.

Application Startup File Testing

When first using the application, most customers will find it helpful to test the load of files until they get the data formatting and the content correct. To facilitate this, it is now possible to transmit a file to the FTP server that will trigger some application processing. This functionality is not expected to be used once the normal daily batch processing has been started, but should be helpful initially.

For more information, see the "Custom Batch Requests" chapter of the *Oracle Retail Advanced Science Engine Cloud Services Implementation Guide*.

Related Documentation

For more information, see the following documents in the Oracle Retail Advanced Science Cloud Services documentation set:

- *Oracle Retail Advanced Science Cloud Services Administration Guide*
- *Oracle Retail Insights Cloud Services Suite /Oracle Retail Advanced Science Cloud Services Data Interface*
- *Oracle Retail Advanced Science Cloud Services Implementation Guide*
- *Oracle Retail Advanced Science Cloud Services Release Notes*
- *Oracle Retail Advanced Science Cloud Services User Guide*

Supplemental Training

The following documents are available through My Oracle Support. Access My Oracle Support at the following URL:

https://support.oracle.com

Transfer of Information (TOI) Material (Doc ID 732026.1)

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