# **Oracle® Retail Merchandising System**

Release Notes

Release14.1

E58972-01

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This document highlights the major changes for Release 14.1 of the Oracle Retail Merchandising System.

## Overview

RMS is used to execute core merchandising activities, including merchandise management, inventory replenishment, purchasing, vendor management, and financial tracking.

Oracle Retail Sales Audit (ReSA) provides the tools to evaluate point-of-sale data to ensure the accuracy and completeness of information exported to downstream systems used in optimization processes, financial reporting, and analysis.

Oracle Retail Trade Management (RTM) is used to manage the import process, including automating the steps necessary to import goods, managing file exchanges with trading partners, and providing a central database of critical import order information.

# **Hardware and Software Requirements**

See the *Oracle Retail Merchandising System Installation Guide* and the *Oracle Retail Sales Audit Installation Guide* for information about the following:

- Hardware and software requirements
- Oracle Retail application software compatibility

## **Functional Enhancements**

The functional enhancements below are included in this release.

### Item Induction

For many retailers, item creation is initiated in a system external to RMS. Some retailers receive item information from their vendors; others initiate items in a planning application; and still others use a product lifecycle management (PLM) or a product information management (PIM) application. In this release of RMS, Item Induction functionality introduces a new flexible method of managing items that are created or maintained in those external systems.

This functionality allows for items to be sent to RMS with minimum data and provides a working area for the further enrichment of items. This functionality also supports item maintenance, either of item information from an external system or of RMS item



data, which provides additional mass maintenance options, including support for cost changes.

There are three methods for importing or updating items using this functionality: via a bulk load, via the Oracle Retail Integration Bus (RIB), or manually, using a spreadsheet upload process. The bulk upload replaces the EDI Catalog Upload batch process that was utilized in previous releases. The Item Subscription API has been changed to require fewer item attributes be included in the integration and to write either to the staging area or directly to RMS. For more information, see the *Oracle Retail Merchandising System Operations Guide* and the Oracle Retail Merchandising System Item Induction Overview Whitepaper at Documentation Enhancements.

### **Item Number Reservation**

In conjunction with the Item Induction enhancements, RMS added a Web service that can be used for reserving item numbers. This functionality allows an external system, such as a planning application, to be able to request a set of item numbers from RMS for use when initiating or planning the item, such that the item, when created in RMS, uses the same number throughout its lifecycle. For more information, see the *Oracle Retail Merchandising System Operations Guide*.

#### **ReSA Re-Platform**

With this release, the ReSA user-interface has been re-written to use Oracle's Application Development Framework (ADF). The existing Oracle Forms framework for ReSA has been deprecated.

Although the look of the new user interface differs significantly from previous versions, the underlying application, including the core data model, business logic, batch processing and integration remains largely the same as in previous releases. The new technology provides an enhanced user experience through a re-architecting of the application screens, the embedding of in-context business intelligence (BI), and the building of role-based dashboards.

#### **Enhanced User Interface (UI)**

By moving to the ADF platform, ReSA provides several new features that were not previously available. These include the following:

- Enhanced search capabilities, including the support for both basic and advanced search modes.
- Configurable tables, which support more robust filtering and sorting capabilities, as well as the ability to export to a spreadsheet.
- Revisions view, which supports the ability to group related data in a table, such as the revisions for totals and audit rules.
- Collapsible containers, which allow users to minimize the data displayed on a screen to only the area they are interested in seeing.
- Consolidation of screens, which allows related screens to be displayed as tabs in a single screen rather than forcing users to open multiple windows. This functionality is also facilitated through the streamlining of the ReSA Task List, which is used to present to users the screens to which they have access.

For more information, see the Oracle Retail Sales Audit User Guide.

#### **Operational Insights**

Along with the re-architecture to ADF, ReSA now delivers a role-based dashboard and contextual business intelligence (BI). The dashboard and contextual reports were built using Oracle Business Intelligence Enterprise Edition (OBIEE), which provides the ability to build interactive dashboards and reporting, the ability to invoke business processes from within those dashboards and report, and the ability to support mobile analytics.

The ReSA dashboards and contextual BI were designed specifically for the primary ReSA user, a sales auditor, to help focus the work effort on the highest priority items and allow for the quick identification of areas of concern. In-context launch from the dashboard directly into ReSA screens also streamlines work efforts and increases productivity. The Operation Insights functionality is an optional component for the ReSA application.

The contextual reports launch from the ADF screen is iFrame based, leveraging ADF contextual event infrastructure. The following ReSA screens were enabled for in-context launch and/or contextual BI:

- Store Day Search in-context launch and contextual BI
- Store Day Summary contextual BI
- Transaction Maintenance in-context launch and contextual BI
- Transaction Search in-context launch
- Tender Summary contextual BI

For more information, see the Oracle Retail Sales Audit Operational Insights User Guide.

## **Foundation Data Management**

There are many foundational data elements used by ReSA that are set at initial implementation and are rarely if ever updated after. Additionally, many of these are data intensive and tend to be updated via scripts, rather than via existing screens. Therefore to support this method of update and to simplify the application, the screens for these areas were replaced by a spreadsheet upload process that is accessed from the Manage Data option on the ReSA Task List.

Using this screen, the information currently held in the ReSA tables can be downloaded to a spreadsheet for maintenance, which can include adding new records, updating existing records, or deleting existing records. The function also supports re-uploading that spreadsheet to update the ReSA tables.

The data elements that are managed in this manner in ReSA include:

- General Ledger (GL) account mapping, which is used to map totals in ReSA to GL accounts
- Currency rounding rules
- Error codes
- Reference fields, which allow a retailer to configure data elements to be stored with a transaction at each level of the transaction. For example, at the customer level of the transaction, a reference field might be used for a loyalty number.
- Import/Export systems, which designate the systems that will either import data to ReSA or receive an export from ReSA by store.

For more information, see the Oracle Retail Sales Audit User Guide.

**Note:** In previous versions, this designation was defined via the RMS Store screen in previous versions.

#### **Externalized Role-Based Access Control**

The existing security functions in ReSA that were based on a database user ID have been replaced with the ADF security model, which is based on an application user ID and user role. ReSA now uses the ADF-based authentication and authorization framework. The users are maintained in LDAP compliant authentication provider and the privileges/ policies are maintained in an Oracle Fusion-standard based Oracle Platform Security Services (OPSS) schema.

#### **Declarative Customization and Personalization**

ReSA leverages ADF Metadata Services (MDS), which provides user personalization. This functionality provides more flexibility to the ReSA user to save searches and set user preferences, such as accessibility settings, language, and locale preferences.

#### **RASRM Integration**

ReSA is integrated with the Retail Application Security Roles Manager (RASRM) which provides retailers the ability to align the security model for Retail Fusion applications (Allocation, ReSA) with their own business model. RASRM accomplishes that through the Manage Roles Mapping and Manage Duty Roles features.

## Warehouse to Warehouse (WH-to-WH) Allocations

In conjunction with enhancements developed in the Oracle Retail Allocation 14.1, RMS includes modifications to better support warehouse to warehouse allocations. RMS has had the ability to support warehouse to warehouse allocations in previous releases, but did not support the ability to manage an allocation where two different virtual warehouses were in the same physical warehouse on the allocation.

For this functionality, RMS underwent two modifications. First, if the source warehouse and the destination warehouse are in the same physical warehouse, then processing of the virtual allocation occurs automatically on the allocation release date or based on the occurrence of the necessary dependent event, such as the receipt of a purchase order (PO) into the warehouse (similar to a book transfer). No notification of this allocation is sent to the physical warehouse for processing because there is no need for any action to be taken. Secondly, if one or more of the destination warehouses on the allocation are in the same physical warehouse, the allocation quantity for these two locations are combined when sending the details to the warehouse for processing.

#### **VAT Enhancements**

Some enhancements were included in this release of RMS to the value added tax (VAT) functionality. Some of these changes modify the processing of VAT in RMS, while others were made to support changes in Oracle Retail Invoice Matching (ReIM).

#### **VAT Rounding**

The first modification addresses the integration of VAT information between ReSA and RMS. Previously, when ReSA sent VAT information to RMS, the actual amount of VAT from the point-of-sale (POS) system was not used by RMS. Instead, RMS recalculated the amount based on the VAT information in RMS for the items. Given that ReSA

aggregates sales data before sending it to RMS, the VAT values that RMS computed occasionally differed from the aggregate sent by ReSA due to rounding.

With this release, two different approaches have been taken, based on the level at which POS sent VAT information. If at item level, the information is passed directly as is to RMS. If at the transaction level, the tax is prorated to the item level using the tax information in RMS prior to the export to RMS. RMS in turn uses the information sent from ReSA, rather than performing its own calculations.

#### **General Ledger Mapping**

Another modification is related to how VAT information is mapped to the General Ledger from RMS. Retailers operating in VAT countries must be able to report VAT amounts and VAT bases by the different VAT rates or statuses that are applied. In RMS, these are represented by VAT codes. In RMS 14.1, RMS provides the ability to map the Input and Output VAT transactions, represented by tran codes 87 and 88 in the stock ledger, by VAT code, which allows each VAT code to be mapped to different GL accounts, if desired.

#### **ReIM Suport**

The last two VAT-related changes in RMS were primarily to support processing in ReIM. The first of these is for support of Acquisition VAT, which is used for situations where a company purchases goods from a foreign vendor, and the company is liable for VAT on the purchase even though the invoice from the vendor may not include VAT. An indicator was added in RMS to be used to flag for which VAT regions acquisition VAT applies.

Additionally, in the European Union (EU), legislation exists regarding specific items where, under specific conditions, the seller does not include VAT on the invoice, but the purchaser is liable to pay VAT directly to the government. This is referred to as Reverse Charge VAT. In RMS, changes were made to the VAT/item relationship to flag which items are subject to reverse charge VAT. An indicator was also added at the VAT/department level, which can be used to default to items in the department. Finally, a Reverse VAT threshold was added for each VAT region, which defines the value limit that must be exceeded on an invoice in order for reverse charge VAT to apply.

For more on the ReIM changes related to Acquisition VAT and Reverse Charge VAT, see the *ReIM 14.1 Release Notes*.

# RDF/AIP Integration

RMS underwent modifications to the way that it sends information to Oracle Retail Demand Forecasting (RDF) and Oracle Retail Advanced Inventory Planning (AIP) to better support processing of simple packs.

#### **Substitution Reason**

The first of these changes necessitated adding a new attribute, called Substitute Reason, to the replenishment substitute item relationships that can be created in RMS for items. The values for the reason code can be either Transitional or Promotional, indicating the type of relationship of the between the main item and its substitute pack item. RMS has modified its integration to AIP to send this information for AIP to use, along with the substitution start and end dates in its replenishment processing. If not using AIP, then use of this new attribute is optional. Additionally, this information is

used to determine how to send data to RDF during either a promotional or transition period.

For promotional periods, when sales history is sent to RDF, sales information for the 'main item' and the 'substitute item' is consolidated against the 'main item'. Additionally, when stock out information is sent to RDF, if an item relationship exists that is promotional, then RMS sends stock out information for the 'substitute item' as if for the 'main item'. If there is a stock out, inventory of 'main item' is not considered.

For transitional periods, when sales history is sent to RDF, the 'substitute item relationship' in RMS is ignored and each item will have sales history information sent independently. Similarly, when stock out information is sent to RDF, the 'substitute item' relationship in RMS is ignored and each item will have stock out information sent independently. For both scenarios, for simple packs, all the information will continue to be shared with RDF at the component level.

#### **Banded Items**

Other changes in AIP and RMS integration include the removal of the banded item attribute that was held in RMS for AIP (because it is no longer used by AIP) and the removal of the associated extract.

#### Removal of Pack 1 Items

Lastly, the concept of a "pack 1" to designate the 'each' was removed, because this is no longer required by AIP. Instead only the formal and informal pack classifications are used to communicate between the two applications. Informal and formal pack classifications are made at an item level in RMS and determine how information is sent to AIP to define the item's orderable case configurations. Formal indicates that a unique simple pack item will be created for each valid configuration, while informal indicates that the inner, case, and pallet sizes defined for an item/supplier/country of origin will be used to determine the orderable configurations.

## **Currency Rounding**

In previous releases, whenever RMS posted financial information to TRAN\_DATA, it used 2 decimal places regardless of the currency of the location for which the posting was made. However in some countries, such as Japan, where no decimal places are used for currency, this causes issues. Therefore, changes were made in this release to post all cost and retail information to TRAN\_DATA in the cost and retail precisions of the currency as indicated in the CURRENCIES table in RMS.

## Franchise Store Customer Order Fulfillment

Commerce Anywhere functionality that was introduced in version 14.0 added support for the end-to-end management of customer orders sourced from suppliers, warehouses, or stores. However, support of fulfilling these customer orders was limited to fulfillment from a retailer owned stores. This limitation meant that for retailers with franchise store locations, those locations were not considered in the fulfillment process.

In RMS 14.1, support for fulfillment of customer orders from stockholding franchise stores was added, to provide flexibility to retailers who wish to do this type of fulfillment of customer orders. The changes to support this include the inclusion of stockholding franchise stores in inventory views in the data access schema, or DAS, used for integrating inventory information to an order management system, and the

ability to handle processing orders to these locations as part of customer order fulfillment for all store-based fulfillment methods.

## **Technical Enhancements**

This section addresses the technical enhancements included in Oracle Retail Merchandising System (RMS) Release 14.1.

## **Software Operating Environment Upgrades**

**Note:** The list below announces the addition of Oracle Retail support for the technology described. See the Installation Guide requirements section for critical information, such as whether the enhancement below replaces previous versions or is supported in addition to already existing versions.

## **Database Server Support**

Oracle Retail Merchandising System (RMS) Release 14. 1 is supported for use with the following database server:

■ Oracle Database Enterprise Edition 12cR1 (12.1.0.1.4)

## **Browser Support**

Oracle Retail Merchandising System (RMS) Release 14. 1 is supported for use with the following browser:

Microsoft Internet Explorer 11

#### **Oracle Forms Server**

Oracle Retail Merchandising System (RMS) Release 14.1 is supported for use with the following Oracle Forms Server:

■ Oracle Forms Server 11.1.2.2

# **Security Technologies**

Oracle Retail Merchandising System (RMS) Release 14.1 is supported for use with the following security technologies:

- Oracle Access Manager (OAM) 11.1.2.2
- Oracle Identity Management 11g Release 1 (11.1.1.7)

## **Oracle Fusion Middleware (for ReSA only)**

Oracle Retail Sales Audit (ReSA) Release 14.1 is supported for use with the following version of Oracle Fusion Middleware:

Oracle Fusion Middleware 11g (11.1.1.7)

### **ReST Web Services**

RMS and ReSA ReSTful Web Services were built based upon a mobile application point of view as defined by Oracle Retail for specific functional areas. The services are designed to support the application functionality defined in this point of view.

The functional areas are the following:

- Mobile Audit Dashboard similar to the dashboards designed for the ReSA desktop application, this mobile application is intended to highlight key areas of concern for an Audit Manager and provide the ability to communicate key problem areas to auditors to take action.
- Create Transfers allows users to create and approve transfers, including intercompany transfers, from their mobile device and transmit this transfer to RMS for execution.
- Create POs allows users to create and approve POs from their mobile device and transmit this PO to RMS for execution.

Because the main objectives of the ReSTful Web Services are to support mobile applications, some of the services functionalities may not be useful for general use. However, the services can be used as is for a retailer's custom mobile application. The ReSTful Web Services Java code cannot be customized, but the mobile PL/SQL functions and object types can be customized for a retailer's use. In addition, the retailer can use the Oracle Retail SOA Enabler (RSE) tool to create their own custom services in place of the ReSTful Web Services.

## **Translation Support for Seed Data Entities**

A number of seed data entities have been modified in this release to better align with Oracle Retail's translation strategy. In RMS, most translated data is held on a single table (TL\_SHADOW). In this release, description columns have been removed from the base entity tables for several data elements. Then, a separate translation table was created per base entity to hold the translation. The change applies to the following seed data entities:

- ADD\_TYPE
- COST\_CHG\_REASON
- DEAL\_COMP\_TYPE
- INV\_ADJ\_REASON
- INV\_STATUS\_CODES
- INV STATUS TYPES
- NON\_MERCH\_CODE\_HEAD
- ORDER\_TYPES
- UOM\_CLASS
- TERMS\_HEAD
- FREIGHT SIZE
- FREIGHT\_TERMS
- FREIGHT\_TYPE

## **PLSQL Logging**

A PLSQL logging utility, Logger, was added to RMS in this release. It has configurable logging levels, so logging that is valuable in development and support can be turned off in production and turned back on if a retailer encounters issues. This functionality can be achieved by calling logger.set\_level() at run-time. Also related to instrumentation, Oracle Retail has added logging to RMS's standard error handling library (SQL\_LIB). When an error is encountered, the entire call stack is logged.

## **Documentation Enhancements**

The documentation enhancements described below are included in this release.

# Oracle Retail Merchandising System Item Induction Overview Whitepaper (ID 1944651.1)

Retailers today need to manage significant volumes of foundation data together with an increasing set of attributes that are relevant to various aspects of retailing, such as planning, management, operations, analytics, and so on. This requirement has led Oracle Retail to develop item data management frameworks that are more flexible and more universally compatible. This whitepaper describes the Item Induction framework for the import and the management of item data into the Oracle Retail Merchandising System.

## **Integration Enhancements**

The integration enhancements described below are included in this release.

# Replaced RSL Integration Between RMS/SIM with Web Service

The RSL integration between SIM and RMS for store orders has been changed into a web service to remove RSL from the integration footprint. SIM now invokes the StoreOrder Web service to create, update, delete a store order, and query its related details, deals and item sales information.

## **Related Documentation**

For more information, see the following document in the Oracle Retail Merchandising System Release 14.1 documentation set:

- Oracle Retail Enterprise Integration Guide
- Oracle Retail Merchandising Batch Schedule
- Oracle Retail Merchandising Data Conversion Operations Guide
- Oracle Retail Merchandising Implementation Guide
- Oracle Retail Merchandising Security Guide
- Oracle Retail Merchandising System Custom Flex Attribute Solution Implementation Guide
- Oracle Retail Merchandising System DAS Data Model
- Oracle Retail Merchandising System Data Model

- Oracle Retail Merchandising System Installation Guide
- Oracle Retail Merchandising System Operations Guide
- Oracle Retail Merchandising System Reports User Guide
- Oracle Retail Merchandising System User Guide
- Oracle Retail POS Suite/Merchandising Operations Management Implementation Guide
- Oracle Retail Sales Audit documentation
- Oracle Retail Trade Management documentation

## **Supplemental Documentation on My Oracle Support**

The following documents are available on the My Oracle Support Web site. Access My Oracle Support at the following URL:

https://support.oracle.com

# Enterprise Integration Guide (located in the Oracle Retail Integration Suite library on the Oracle Technology Network)

The Enterprise Integration Guide is an HTML document that summarizes Oracle Retail integration. This version of the Integration Guide is concerned with the two integration styles that implement messaging patterns: Asynchronous JMS Pub/Sub Fire-and-Forget and Web Service Request Response. The Enterprise Integration Guide addresses the Oracle Retail Integration Bus (RIB), a fully distributed integration infrastructure that uses Message Oriented Middleware (MOM) to integrate applications, and the Oracle Retail Service Backbone (RSB), a productization of a set of Web Services, ESBs and Security tools that standardize the deployment.

# Oracle Retail Merchandising Operations Management 14.1 Upgrade Guide (ID 1595732.1)

This guide describes the approach that each Oracle Retail Merchandising Operations Management application takes for the upgrading process, as well as its upgrade assumptions and considerations. Actual procedures for the upgrade may be included in the application's Installation Guide.

## Oracle Retail Merchandising Mock Installation Test Cases, Release 14.1 (1597813.1)

The tests in this document have been created to assist in verifying (smoke testing) that the installation of the following products was successful: RMS, ReSA, RTM, Oracle Retail Allocation, ReIM, ARI, and RPM. These tests are not intended to verify all functionality in the suite of products previously listed.

# **Supplemental Training on My Oracle Support**

The following document is available on the My Oracle Support Web site. Access My Oracle Support at the following URL:

https://support.oracle.com

## 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

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#### **Access to Oracle Support**

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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.

(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.

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