

Oracle® Retail Advanced Inventory Planning

Release Notes

Release 16.0

E85728-02

March 2017

This document highlights the major changes for Release 16.0 of Oracle Retail Advanced Inventory Planning (AIP).

Overview

Oracle Retail Advanced Inventory Planning is a suite of modules designed to manage the supply chains of large retailers at the supplier, warehouse, store, and e-commerce levels. The system couples time-phased replenishment and allocation algorithms to produce an actionable receipt plan over time. This plan is based on demand forecasts, replenishment parameters, and inventory availability at the numerous supply points within the supply chain.

The user interacts with the AIP system through a number of modules:

- Store Replenishment Planning (SRP) Workbooks are used to maintain the replenishment characteristics for stores. These workbooks allow the user to analyze system output and perform what-if style analysis when replenishment parameters are changed.
- Warehouse Replenishment Planning (WRP) Workbooks are used to maintain the replenishment characteristics for warehouses. These workbooks allow the user to analyze system output and perform What-if style analysis when replenishment parameters are changed.
- Data Management is used to maintain the supply chain and network flow information. Sourcing links, lead times, and other data are managed in this module.
- A significant portion of supply-chain related data is now set in Central Supply Chain Maintenance Workbooks. This includes data like Delivery Demand Percent, Planning Horizon, Receiving Calendar. For more details, refer to "[Functional Enhancements](#)."
- The Network Replenishment Workbook combines worksheets containing warehouse-specific replenishment data with those containing store-specific replenishment data into one workbook. This allows users to view a more complete picture of the replenishment plan within a supply chain without having to switch between workbooks. Users are also able to perform What-if analysis on the replenishment plan by changing various replenishment parameters.
- AIP Dashboard for the Fusion Client allows users to view AIP receipt plan data without having to build a workbook.

- Using the receipt plan, Order Management formally prepares those orders that need to be fulfilled. This preparation includes the assignment of an order number.

Note: AIP Java/Oracle, AIP on Oracle, and AIP Oracle are often used interchangeably to refer to those parts of AIP that access the Oracle relational database. This includes the Data Management and Order Management GUI components and a host of UNIX shell scripts and PL/SQL modules.

AIP Within the Oracle Retail Suite

AIP is one of several integrated applications within the Oracle Retail Suite. The suite allows a retailer to manage its supply chain from demand forecasting to the generation of orders, which can then be shared with collaborative planning partners.

Viewed at a high level, the process across the Oracle Retail Suites takes the following form:

1. Oracle Retail Demand Forecasting (RDF) provides a forecast of consumer demand. This data is made available to AIP.
2. The AIP batch run produces an actionable receipt plan using replenishment parameters maintained inside AIP. Hierarchy and inventory data are provided by a merchandising system such as Oracle Retail Merchandising System (RMS).
3. The receipt plan is then sent to the Order Management module within AIP, where those orders that need to be fulfilled are formally prepared for execution. This preparation includes the assignment of an order number.
4. Order Management then submits the appropriate orders to the merchandising system, where purchase orders and transfers are communicated to other systems. These orders are returned to AIP in subsequent batch runs as on-order or in-transit quantities.
5. Sales forecasts and order plans can then be shared at the appropriate level with suppliers by using a collaborative planning, forecasting, and replenishment (CPFR) product, so that trading partners can prepare for the forthcoming orders.

AIP Versions and Corresponding RPAS Versions

The following table provides a history of AIP since the 13.0 release. The table lists each version of AIP together with the version of the Retail Predictive Application Server (RPAS) foundation to which it is tied.

Date	Version Category	AIP Version	RPAS Version
June 9, 2008	Full Release	13.0	12.1.2.21
August 15, 2008	Patch Update (AIX, HP-UX)	13.0.1 Patch	13.0.1.2
August 22, 2008	Full Release (Solaris)	13.0.1	13.0.1.2
October 31, 2008	Patch Update (AIX)	13.0.1.1	13.0.1.11

Date	Version Category	AIP Version	RPAS Version
December 19, 2008	Patch Update (AIX)	13.0.2	13.0.2.1
August 7, 2009	Full Release (Solaris, OEL, AIX, HP-UX)	13.1.1	13.0.4
March 31, 2010	Full Release and Patch Update (AIX 5.3, AIX 6.1, HP-UX 11.31, OEL 5.2, Solaris 10)	13.1.2	13.1.2.3
August 31, 2010	Patch Update (AIX 5.3, AIX 6.1, HP-UX 11.31, Linux 5.2, Solaris 10)	13.1.3	13.1.2.19
October 29, 2010	Full Release (AIX 5.3, AIX 6.1, HP-UX 11.31, OEL 5.3, Solaris 10)	13.2	13.2
January 31, 2011	Hot Fix (AIX 5.3, AIX 6.1, HP-UX 11.31, OEL 5.3, Solaris 10)	13.2.0.2	13.2.1
July 8, 2011	Full Release (AIX 5.3, AIX 6.1, HP-UX 11.31, OEL 5.3, Solaris 10)	13.2.2	13.2.2.9
November 4, 2011	Patch Update (AIX 6.1, HP-UX 11.31, OEL 5.5, Solaris 10)	13.2.3	13.2.3
April 13, 2012	Patch Update (AIX 6.1, HP-UX 11.31, OEL 5.5, Solaris 10)	13.2.4	13.3
May 3, 2012	Full Release (AIX 6.1, HP-UX 11.31, OEL 5.5, Solaris 10)	13.3	13.3
December 21, 2012	Full Release (AIX 6.1, HP-UX 11.31, OEL 5.8, Solaris 10)	13.4	13.4.0.1
August 23, 2013	Patch Update (AIX 6.1, HP-UX 11.31, OEL 5.8, Solaris 10)	13.4.1	13.4.1
December 14, 2013	Full Release (AIX 6.1, 7.1, HP-UX 11.31, OEL 6.3, Solaris 11)	14.0	14.0
August 15, 2014	Patch Update (AIX 6.1, 7.1, HP-UX 11.31, OEL 6.3, Solaris 11)	14.0.1	14.0
December 19, 2014	Full Release (AIX 7.1, HP-UX 11.31, OEL 6.3, Solaris 11)	14.1	14.1

Date	Version Category	AIP Version	RPAS Version
August 21, 2015	Patch Update (AIX 7.1, HP-UX 11.31, OEL 6.3, Solaris 11)	14.1.1	14.1.1
December 15, 2015	Full Release (AIX 7.1, HP-UX 11.31, OEL 6.x, OEL 7.x, Solaris 11.2)	15.0	15.0
May 20, 2016	Patch Update AIX 7.1, OEL 6.x, OEL 7.x	15.0.1	15.0.1
December 16, 2016	Full Release (AIX 7.1, HP-UX 11.31, OEL 6.x, OEL 7.x, Solaris 11.2)	16.0	16.0

Upgrade Steps for AIP 16.0

Follow these instructions to upgrade to AIP 16.0:

1. To upgrade to AIP 16.0 you must first upgrade to the latest patch of AIP 15.0. Follow the instructions in the *Oracle Retail Advanced Inventory Planning Installation Guide*.

Caution: Before any upgrade is performed, back-up Database, AIP Online Integration Home, AIP RPAS Domain and RPAS/RIDE HOME.

2. If needed, upgrade the AIP Oracle Database to version 15.0 using the AIP 15.0 database installer. Follow the database patch steps in the 15.0 *Oracle Retail Advanced Inventory Planning Installation Guide*.

With the manual receipts feature, there are new files expected from RMS.

For example, `rmse_aip_tsf_in_well_w.dat` and `rmse_aip_tsf_in_well_s.dat`. If these are not available, the `aip_t_master_rms.ksh` script will not create the following files and may cause failures later in the batch run:

- `sr0_it.txt`
- `sr0_oo.txt`
- `wr1_it.txt`
- `wr1_oo.txt`
- `wr1_tiw.txt`
- `wr1_aiwld.txt`
- `wr1_aiwld_pon.txt`
- `wr1_it_pon.txt`
- `wr1_oo_pon.txt`
- `sr0_tiw.txt`

-
-
3. Install AIP 16.0 Online Application and Online Integration Home using the AIP 16.0 Online Installer. Follow the Online integration install steps from the 16.0 *Oracle Retail Advanced Inventory Planning Installation Guide*.
 4. Verify the Database and alias details are set correctly in `aip_env_online.sh` and `config.xml` under `<INTEGRATION_HOME>`.
 5. It is required that store status must be set manually.
 6. Verify RETL is installed and configured correctly.
 7. Log in as the AIP daily batch user and navigate to: `<INTEGRATION_HOME>/scripts/16.0.0_upgrade`.
 8. Run the upgrade script `migrate_16_0_data.sh`.
 9. Check the log files in `<INTEGRATION_HOME>/logs` to ensure the upgrade script completed successfully.
 10. The upgrade script creates data files in the directory specified by parameter `$ONL_OUTBOUND_DIR`. This is typically `<INTEGRATION_HOME>/outbound`.

The following files are created:

- `dm0_splodgpsz_i.dat`
- `dm0_spopszexc_i.dat`
- `dm1_od_untpll.dat`
- `ipclsrcinvflgi.dat`
- `ipactcominvprdi.dat`
- `dm0_defodgpsz_i.dat`
- `dm0_sodpszexc_i.dat`
- `dm0_strplnhzn.dat`
- `ipevtstso.dat`
- `ipnondeldatl1i.dat`
- `ipstrnondeldatl4i.dat`
- `ipwhnondeldatl4i.dat`
- `ipstrnonorddatl3i.dat`
- `ipwhnonorddatl3i.dat`
- `ipexcdsti.dat`
- `iplstorddati.dat`
- `ipfstorddati.dat`
- `ipchgsrsci.dat`
- `ipstrrcvcall2i.dat`
- `ipstrrcvcall1i.dat`

- ipwhrcvcall2i.dat
- ipwhrcvcall1i.dat

Note: Depending on your data setup, some of these may be 0-byte files.

11. The AIP Oracle Database can now be upgraded to version 16.0 using the AIP 16.0 database installer. Follow the database patch steps in the 16.0 *Oracle Retail Advanced Inventory Planning Installation Guide*.
12. You can upgrade AIP RPAS domain to 16.0 using this data. Copy the exported migration data files from <INTEGRATION_HOME>/outbound to <AIPDOMAIN>/input directory.
13. Upgrade the AIP RPAS Domain to version 16.0 by following the instructions in the chapter, “Installing AIP RPAS-Upgrade Version” from the 16.0 *Oracle Retail Advanced Inventory Planning Installation Guide*.

Hardware and Software Requirements

See the *Oracle Retail Advanced Inventory Planning Installation Guide* for information about the following:

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

Functional Enhancements

AIP 16.0 includes the following functional enhancements.

Data Management Data Re-platformed to RPAS

In an effort to simplify the user experience a significant portion of supply-chain related data has been moved from Data Management to new RPAS-based workflows and workbooks. A complete review of the data was performed to identify opportunities to improve the definition and maintenance the data.

Data	Description of Change
Delivery Demand Percent	Store and Warehouse Delivery Demand Percent moved to RPAS
Event Management	<p>All aspects of Events have moved to RPAS. This includes the:</p> <ul style="list-style-type: none"> ■ Interfaced data. ■ Batch process to create events, spread a pack change, and close an event. ■ UI for manual entry and update of events. Due to the nature of an RPAS UI, the format of assignments have changed.

Data	Description of Change
Non-order / Non-Delivery Non-release / Non-Receipt	<ul style="list-style-type: none"> Non-release / Non-receipt have been renamed Non-order / Non-delivery respectively. A non-order date for a store functions the same as a past non-release date—namely it causes the lead time at the store to increase to an order-able day. Non-order and Non-delivery dates for store and warehouse have been totally revamped. Temporary un-Orderable retains the same function for a warehouse but has been expanded to store destinations and is renamed to fall under the Non-delivery Date (Non-delivery Date by source/destination/day/SKU) banner.
On-supply / Off-Supply	On-Supply and Off-supply dates are now defaulted, based on the configured off-set, in the RPAS load. Users also maintain the dates in the RPAS UI.
Pack Breaking	All aspects of pack breaking are maintained in the RPAS UI.
Planning Horizon	All aspects of Planning Horizon are maintained in the RPAS UI.
Receiving Calendar	Store and warehouse receiving calendars are maintained in the RPAS UI.
Reconciliation Flag	<p>The Reconciliation Flag:</p> <ul style="list-style-type: none"> Is maintained in the RPAS UI. Has been migrated from Warehouse-chamber to Warehouse/SKU-type level. Includes a new Warehouse/SKU level setting.
Release Schedule Exceptions	With the improvement of non-order dates and non-delivery dates all store lead time exceptions (also known as. release schedule exceptions) have been removed except for SKU/Store/Order Cycle which is the API interface level.
Release Wave	All aspects of release waves are maintained in the RPAS UI
Schedules	The store and warehouse lead time schedules display is in the RPAS UI. The calculation of the schedule is also an RPAS procedure.
Scheduling Location Maintenance	<p>The warehouse-chamber has been deprecated from RPAS. Instead the data that was maintained against chamber has been migrated to a warehouse/SKU-type level. Chamber remains in the Data Management UI but is innocuous. One chamber is automatically created per warehouse. The control of valid SKU-types per warehouse is now controlled through Warehouse Status</p> <p>Also refer to Reconciliation Flag, and Stockless And Stockless Override.</p>
Secondary Source	All aspects of Secondary Sources are maintained in the RPAS UI.
Stockless And Stockless Override	<p>All aspects of the stockless indicator are maintained in the RPAS UI. The stockless default has migrated to a Warehouse/SKU-type level.</p> <p>Also refer to Stockless Push Type, which describes the replacement of the Stockless Indicator.</p>

Data	Description of Change
Store Priority	<ul style="list-style-type: none"> All aspects of Store Priority are maintained in the RPAS UI. The SKU/store priority now has standard UI access.
Store Status	A new store status has been introduced to aid the store open and close process.
Warehouse Receipt Availability	<ul style="list-style-type: none"> All aspects of Warehouse Receipt Availability are maintained in the RPAS UI. Warehouse Receipt Availability is renamed Available-to-Pick
Warehouse-chamber Status	<ul style="list-style-type: none"> The status has migrated to Warehouse/SKU-type The status is maintained in the RPAS UI.

Stockless Push Type

Stockless Push Type replaces the former stockless indicator and stockless override. Stockless is a mechanism for pushing excess stock out of a warehouse. When an item is set to either first day or last day stockless at a warehouse the excess inventory is pushed out of the warehouse to its destinations. First day means inventory is pushed out on the first day of availability. Last day means the excess is pushed out by the end of the reconciliation period. For Last-day stockless all ship opportunities with the reconciliation period are candidates for receiving excess.

Note: The reconciliation method must be set to 'Over-time' in order for Last Day Stockless to perform differently than First Day.

Use First Day stockless to achieve the same results as setting the former Stockless indicator or override to True.

Sales Credit Alerts

In light of the enhancements to Stockless the sales credit alerts were reviewed and rationalized. The following alerts were removed or revamped:

- Sales Credit Stockless
- Sales Credit, Stocked
- Sales Credit Multi-Day, Stocked

The new Sales Credit and Sales Credit Multi-Reconciliation Period Alerts are based on a significant number of stores (set in a user-specified threshold) falling short of meeting Minimum Sales Stock and falling short by a percent that exceeds a user defined threshold. The new metrics of the alerts can be viewed in the Credit Details worksheet and related summary worksheets of the Reporting or Analyzing activities' Warehouse Replenishment > Alerts and Exceptions step.

Stockless Surplus Alerts

In light of the enhancements to Stockless the Stockless Surplus single and multi-day alerts were reviewed and rationalized. The alerts were revamped such that the Stockless Surplus alerts are based on a significant number of stores (set in a

user-specified threshold) are pushed an amount of stock that puts them more than a user-specified percent above their upper inventory boundary (typically RUTL).

The new metrics of the alerts can be viewed in the Overstock Details worksheet and related summary worksheets of the Reporting or Analyzing activities' Warehouse Replenishment > Alerts and Exceptions step.

Manual Receipts

Manual Receipts introduces the ability to create a manual transfer quantity from any warehouse or store to any warehouse or store. This introduces the capability for re-balancing inventory, or any other exception based inventory movements. For example, beginning of life allocation, end of life, manual substitution for shortage, and so on.

Any manual receipt quantity that is approved will be incorporated into the inventory projections (both at the sending and receiving locations) and receipt plan until the point that the transfer is executed and becomes an in-the-well and/or expected receipt quantity. In order to support this enhancement AIP now loads store Transfer-in-the-well quantities from Oracle Retail Merchandising System (RMS).

Overstock & Overstock Re-balance Alert

The existing store Overstock alert has been slightly modified to:

- Incorporate a horizon over which to perform the alert. This helps constrain the user's focus and system resources to a period of time that is considered stable and actionable.
- Incorporate a user-set flag which indicates when the alert has been reviewed and resolved. The Resolve Overstock flag has the effect of turning off the alert for the resolved days. This is useful when the user has done the necessary analysis and determined that the most viable course of action is either:
 - Nothing or
 - An action outside of AIP that will take time to resolve.

Users will not continue to be alerted to any issues that they have already analyzed.

- Consider the new Overstock Re-balance Alert. An Overstock Alert is not triggered if the re-balance alert is triggered.

The new Overstock Re-balance alert is must like the overstock alert. The stock cover days must be exceeded along with a minimum number of units. In addition Users will specify the rebalance locations to check for need. These can be stores within a certain area of the store hierarchy or the source warehouse. This alert drives the user into the Manual Receipts workbook where they will analyze the viability of a re-balance and either perform a rebalance and/or resolve the overstock alert.

Other Enhancements

AIP 16.0 also includes these functional enhancements:

- 28-day Order Cycles are de-supported. 7-day cycles with exception weeks should be used in place of 28-day patterns.
- Placement lead time and exceptions are fully deprecated

- The Missing Order Groups alert has been removed. Order Groups are not proposed for the future state of AIP, so RPAS is decoupled from Order Groups and will no longer generate the alert.

Noteworthy Defect Fixes

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

Affected Component	Fixed Issue/Defect	Defect Number
Batch Process	The purging script, <code>aip_purge.sh</code> on. fails to remove SKU pack-sizes.	22191130
Batch Process	Interutil incorrectly transforms RMS SKU ID for pack item in <code>dmx_prdspllks.txt</code> .	23066532
Batch Process	AIP RPAS batch failure due to navalue flip on <code>ipactcmdi</code> .	24363020
Calculation	Projected Inventory now takes into account the post-scaled Receipt Plan.	21825695
Calculation	Store pallet rounding is occurring without setting up percent of pallet.	22934895
Calculation	Event measures are incorrectly expanding throughout the whole horizon.	23066887
Calculation	SPQ Order Commit Quantity not being honored in Warehouse Replenishment workbook.	24440040
Calculation	Modified WRP Net Inventory Post Replenishment and What-if to no longer include the planned receipt on that day.	24582371
Calculation	Increment percent expanded NA value should be showing as 1 and not 0.	24586935
Configuration	When old files exist in the <code>\$INTERFACE_RMS_DIR</code> folder, new files are now copied correctly to this folder.	21569864
Configuration	Modified the path in <code>upgrade.list</code> to correct RMSE related errors.	21960700
Forecast	The excess push logic corrected to rank destinations and distribute inventory if the destination ultimately has no aggregated forecast period sales.	24582165
Integration	Pre-allocations not consumed by RIB.	24408485
Measure	A new exception level measure for reconciliation is now available in Central Supply Chain Management workbook.	19579443
Measure	SRP alerts measures are included in Overstock Alert and Overstock Detail worksheets.	21627171
Orders	Unapproved orders are scaled in advance of their release date/release wave.	22365906
Workbook	WRP Interactive Evaluation workbook is not bringing in correct supplier as part of workbook build.	23329656

Affected Component	Fixed Issue/Defect	Defect Number
Workbook	Network Replenishment workbook build fails with error message, "illegalParseLtoLabelExpr execution failed" for a supply chain with valid lead time, but changes in store source in future (without a corresponding lead time from that source). This issue is resolved.	25092598
Workbook	<p>Previously in the Maintenance Parameters workbook, when users clicked Refresh this error message displayed:</p> <p>The refresh rule group CSCMSCM_load (IpStrNonDelDatL2I <- strToDstk(IpStrNonDelDatL2StrI)) is not consistent with the current rule group.</p> <p>Note: For this workbook, Commit worked fully. Only Refresh was not operating as expected. Users could rebuild the workbook to view any updated data.</p> <p>This issue is resolved as Refresh is operating as expected.</p>	25072489

Known Issues

The following table contains known issues for the current release.

Affected Component	Known Issue/Defect	Defect Number
Workbook	Some AIP libs under the \$RPAS_HOME/applib folder have incorrect file permissions that prevents users from building workbooks. Users receive a file not found error during workbook wizard process.	23514233
Workbook	<p>Some AIP libs under \$RPAS_HOME/applib folder have incorrect file permissions that prevent users from building workbooks. Users receive a file not found error during workbook wizard process.</p> <p>Note: You can change the file permissions to 755 (or similar to other RPAS libraries) in order to build the workbook.</p>	23514233
Translation	Text received from the RPAS Fusion platform files displays English instead of Spanish.	23298809
Batch Process	The ULR is not cleared after the Working Plan is set as the Receipt Plan,	22157758

Affected Component	Known Issue/Defect	Defect Number
Translations	<p>Language Bundle files for AIP Fusion clients are in Native character encoding. After configuring the AIP-RPAS Fusion Client solutions, use the following steps and command for conversion from Native to ASCII.</p> <ol style="list-style-type: none"> 1. Create a directory and copy all the language aipBundle_xx.properties files (where xx=language extensions). 2. Ensure that environment variable JAVA_HOME is pointing to JDK instead of JRE. 3. Navigate to the new directory created in Step 1. 4. Use the following command per language to convert Native to ASCII: <pre>native2ascii -encoding UTF8 aipBundle_xx.properties multisolutionBundle_xx.properties</pre> 5. Copy the new ASCII converted language files (multisolutionBundle_xx.properties) to the \${FUSION_CLIENT_INSTALL_DIR}/config/MultiSolution/resources directory. 6. Restart the WebLogic server. 	21614034
Batch Process	Warehouse inventory is not cleared after store reconciliation.	19767480

Related Documents

For more information, see the following documents in the Oracle Retail Advanced Inventory Planning Release 16.0 documentation set:

- *Oracle Retail Advanced Inventory Planning Administration Guide*
- *Oracle Retail Advanced Inventory Planning Data Management Online Help*
- *Oracle Retail Advanced Inventory Planning Data Management User Guide*
- *Oracle Retail Advanced Inventory Planning Data Model Volume 1—Oracle Database Data Model*
- *Oracle Retail Advanced Inventory Planning Data Model Volume 2—Measure Reference Guide*
- *Oracle Retail Advanced Inventory Planning Implementation Guide*
- *Oracle Retail Advanced Inventory Planning Installation Guide*
- *Oracle Retail Advanced Inventory Planning Operations Guide*
- *Oracle Retail Advanced Inventory Planning Order Management Online Help*
- *Oracle Retail Advanced Inventory Planning Order Management User Guide*
- *Oracle Retail Advanced Inventory Planning Release Notes*
- *Oracle Retail Advanced Inventory Planning Security Guide*
- *Oracle Retail Advanced Inventory Planning Store and Warehouse Replenishment Planning Online Help*
- *Oracle Retail Advanced Inventory Planning Store and Warehouse Replenishment Planning User Guide for the RPAS Fusion Client*

The following documentation may also be needed when implementing AIP:

- Oracle Retail Predictive Application Server Batch Script Architecture (RPAS BSA) Implementation Guide
- Oracle Retail Integration Bus (RIB) documentation, based on type of deployment
- Oracle Retail Extract Transform and Load (RETL) documentation
- Oracle Retail Predictive Application Server (RPAS) documentation

My Oracle Support Documents

These Oracle Retail Advanced Inventory Planning Release 16.0 documents are available on My Oracle Support:

<https://support.oracle.com>

- *Oracle Retail Advanced Inventory Planning Calculations for Store and Warehouse Replenishment Planning* (Doc ID 2075628.1)
- *Oracle Retail Supply Chain Creation AIP White Paper 16.x* (Doc ID 2184447.1)
- *Oracle Retail AIP Order Review and Approval Workbook Configurations* (Doc ID 2076972.1)

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.

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

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

Access to Oracle Support

Oracle customers that have purchased support 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.

Oracle Retail Advanced Inventory Planning Release Notes, 16.0

Copyright © 2017, Oracle and/or its affiliates. All rights reserved.

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

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware 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 that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about 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 unless otherwise set forth in an applicable agreement between you and Oracle. 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, except as set forth in an applicable agreement between you and Oracle.

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.