Oracle® Retail Advanced Inventory Planning

Release Notes

Release 16.0.3

August 2018

This document highlights the major changes for Release 16.0.3 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.
- 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
May 26, 2017	Patch Update (AIX 7.1, Oracle Linux 6,7)	16.0.1	16.0.1
March 30 2018	Patch Update (AIX 7.1, Oracle Linux 6,7)	16.0.2	16.0.2
August 17, 2018	Patch Update (AIX 7.1, 7.2, Oracle Linux 6,7)	16.0.3	16.0.3

Upgrade Steps for AIP 16.0.3

Follow these instructions to upgrade to AIP 16.0.3:

1. To upgrade to AIP 16.0.3 you must first upgrade to the latest patch of AIP 15.0 and then AIP 16.0. 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

Note: For 16.0.3. some implementation parameters are now manually set in aip_env_rpas.sh. Refer to the *Oracle Retail Advanced Inventory Planning Implementation Guide* for additional information.

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
    - ipclrsrcinvflgi.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
- ipchgsrci.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

Noteworthy Defect Fixes

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

Affected Component	Fixed Issue/Defect	Defect Number
Batch	Projected Inventory is not correct for some departments because the Projected Inventory's iterator source IpActStkI is flipping the NA value.	26133193
User Interface	In AIP Online -> Order Management -> Order Review -> Select Search Criteria, the Display Quantity In Transit Quantity and Received Quantity are incorrectly mapped in the drop-down option.	26144891
User Interface	Upon changing the Baselines stock, it did not impact the safety stock measures, as expected, regardless the value of Baseline Safety Stock (Units) Override the Safety Stock does not change for What-if calculations.	26794449

Affected Component	Fixed Issue/Defect	Defect Number
User Interface	The measure Supplier Residual Excess Quantity - What If is updated to an incorrect value in the SPQ Analysis worksheet when the SPQ Commitment Type is changed to Fixed and a value is entered into Order Commit Quantity.	26824461
Batch	The calculation that is performed that loads this data to the STORE_ORDER and NON_CONTENTS_ORDER table however is incorrect as the RECEIVED_QTY values do not update in the STORE_ORDER and NON_CONTENTS_ ORDER tables.	26824476
User Interface	The System SKU Caps (Units) results are not the same when multiple stores or single store with Inventory Capping is brought in into the workbook.	26859233
User Interface	Unable to use the FindAlert functionality in the workbook when the alerts count is more than the default navigation threshold of 5000.	26885230
User Interface	When accessing the Store Replenishment Workbook, the measure Yesterdays Availability is never calculated.	26914233
User Interface	At the aggregated level, SPQ Order Commit Quantity appears to be a negative value since its NA value is -1 and defagg is total. It should be fixed to the total_pop instead.	27366193
Batch	Allocation purge purges all pre-allocations and not just closed pre-allocations.	27395476
User Interface	The Store Receipt Plans are generated despite having a past or ended Off Supply Date.	27395508
User Interface	After running What-if Unconstrained, there are unconstrained receipt plans generated for the ATP Dates, but they are removed in reconciliation.	27395515
User Interface	USA AOI Allocation Index measure (sr0_usaaoiidx) from Dynamic Rule Based Index USA workbook does not reflect the decimal points that exist in Store Forecast Demand or Store Adjusted Sales.	27395534
User Interface	The measure USA AOI Allocation Index appears to be only considering integer values and not decimal values as seen in the calculation of USA Allocation on Dynamic Rule Based Index workbook for the value of Store User Specified Allocation.	27409835
Performance	Enhanced the smart caching mechanism of storeProjectedinventory to handle large volumes of stores.	27409844
User Interface	When opening the NRP workbook or WRP workbook, the refresh button shows an error.	27427277
Batch	Memory is exhausted when running aipcmd for purgeTruncateHistory .	27516491
Alerts	After moving a subclass to a new local domain, the scrp_ srp_alerts.sh failed execution.	27533895
System	Unable to find the table RELEASE_WAVE_ASSIGNMENT	27611261
User Interface	When searching for a valid order number, the system does not retrieve the information.	27649139

Affected Component	Fixed Issue/Defect	Defect Number
Installation	Updated the installer so that it should retrieve credentials of DB and WL Admin server from wallet in order for the AIP Online Installer to work in silent mode.	27649158
User Interface	Workbook measures Receipt Point (sr0_rcppt_) and Receipt up to level (sr0_rcvutl) are not calculated or loaded in SRP Evaluation workbook.	27669359
User Interface	When searching for No SKU Map Alert in DM, the list is showing the item with the internal code and not the code that is sent from RMS/Legacy.	27740447
User Interface	In the AIP Online - DM - General - Alerts -> Alert Type LOV, the Add All button only adds one value. It does not add all of the values.	27740455

Known Issues

The following table contains known issues for the current release.

Affected Component	Known Issue/Defect	Defect Number
Batch Process	The ULR is not cleared after the Working Plan is set as the Receipt Plan,	22157758
Translations	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. 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: `native2ascii -encoding UTF8 aipBundle_xx.properties multisolutionBundle_xx.properties` 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 16.0.3 documentation set:

- *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 Installation Guide*
- *Oracle Retail Advanced Inventory Planning Release Notes*

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

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