Oracle® Retail Advanced Inventory Planning

Release Notes

Release 16.0.2

March 2018

This document highlights the major changes for Release 16.0.2 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

Date	Version Category	AIP Version	RPAS Version
October 31, 2008	Patch Update (AIX)	13.0.1.1	13.0.1.11
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

Date	Version Category	AIP Version	RPAS Version
December 19,2014	Full Release (AIX 7.1,HP-UX 11.31, OEL 6.3, Solaris 11)	14.1	14.1
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

Upgrade Steps for AIP 16.0.2

Follow these instructions to upgrade to AIP 16.0.2:

1. To upgrade to AIP 16.0.2 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

Note: For 16.0.2. 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
RPAS Platform	The exportMeasure utility out has been changed when the `-upperCase` flag is used. It now only uses upper cases in the intersection fields. This causes a problem when the data field is a single hier select because the data should be the same as the intersection data for case.	26051878
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

Affected Component	Fixed Issue/Defect	Defect Number
Integration	Specific errors were found in order exporter package while running AIP Daily batch.	25232493
User Interface	The Store_format_code shows Nullable in the hier_ store.xml.	25487785
User Interface	The Warehouse Receipt Plan is getting constrained without any reason.	25487799
User Interface	In Data Management , there is a performance issue when related event are set up.	25487802
User Interface	The Boundary Stock (Exception) is not considered as Low Variability in Str RP - What If and RUTL - What if.	25487861
User Interface	The Store User Specified Allocation measure is editable in Network Replenishment workbook.	25659052
Operations & Maintenance	WRP is not available to plan before product on-supply-date.	25659316
Batch	Performance issue in StockingPointLinks for Replenishment Planning Horizon.	25659324
Operations & Maintenance	Run replenishment time is degraded around store projected inventory	25662590
User Interface	The script, scrp_replPH consumes a large amount of process memory when running.	25662637
User Interface	The Data Management batch fails due to the hard coded calendar value.	25662794
Batch	AIPONLINE fails to load the Store Open Date and calculate the Store Copy Date when position is capitalized.	25662841
Batch	If USA is larger than the Warehouse Projected Inventory, then the Store Receipt Plan does not reflect any portion of USA that is still left available in the warehouse inventory.	25663031
Batch	The High Projected Out of Stock Alert alert is being triggered for items that have less than one unit in projected stock.	25663112
User Interface	Performance issue with the scrp_post1 rule group.	25663590
Batch	The numbers in Store Non-Capped Demand On Source measure are not in sync with Non-Capped URP - Store.	25717254
User Interface	The cron_export_imtermediate_sched.sh program running for time due to long running queries and a large UNIX sort process.	25717294
User Interface	AIP pre-release is running for 60 hours in the performance environment.	25819966
User Interface	ShortFall Reconciliation is not working. Unconstrained Total Forecast Demand at the warehouse is incorrect. AIP should prioritized the shipments to the stores by the Store Priority matrix.	25820008
User Interface	The Save button is unavailable for Warehouse to Store Defaults in Data Management, even after users set all of the fields correctly.	25820092

Affected Component	Fixed Issue/Defect	Defect Number
User Interface	The Scheduling Location and SKU fields are not allowing users to type more than 10 characters, even if the SKUs and locations with codes bigger than 10 characters are in the Order Groups tab.	25901720
Batch	When trying to create a manual order in Order Management, a warning message appears indicating that the destination cannot receive on the selected delivery date when the Source=Vendor and Destination=Warehouse.	25919056
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.	25919159
Batch	An IllegalParse: exception occurs when the What If - Constrained or What If - Unconstrained menu is used.	25919343
Batch	When checking the measure Automatic Order Approval Global Default in the workbook of Product & Location, the value is being displayed as -1 and the measure description only states values for TRUE or FALSE behaviors.	25919416
Batch	Network Replenishment workbook has measures at the skug intersection on the Warehouse Replenishment Plan worksheet while the worksheet is at the SKU level.	25919436
Batch	Supplier compliance safety stock is starting to calculate too early when the Delivery-Day Demand Percentage (DDP) is zero.	26404175
User Interface	In SRP Interactive Evaluation, the wizard selection for stores is not honored in the workbook. All stores are available in Show/Hide regardless of any store selected in the wizard.	26515855
Batch	The Discontinuation Date is not displayed in the Data Management screen - Ranging by SKU Pack Size, after loading the dmx_dscdt_ file into online.	26593888
Batch	The Stockless warehouse with a holdback quantity is unable to holdback the merchandise quantity.	26790168
Batch	The Need Above Order Commit is calculated incorrectly for both Network Replenishment workbook and WRP Interactive Evaluation workbook.	26871302
Batch	Inventory Capping workbooks errors the following, while opening in local domain. To fix this, the taskflow for these workbooks should be updated to have the Task Type set to Master.	26928778
User Interface	The Projected Stock Out - Store and Projected Stock Out (What-If) - Store values are different when Replenishment Method is No Replenishment.	26953828
Batch	The Warehouse Capped Demand What if is zero (0) for all days which is not equal with Warehouse Capped Demand.	27010085

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 16.0.2 documentation set:

- *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

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, 16.0.2