

Oracle® Retail Advanced Inventory Planning

Release Notes

Release 16.0.1

May 2017

This document highlights the major changes for Release 16.0.1 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
May 26, 2017	Patch Update (AIX 7.1, Oracle Linux 6,7)	16.0.1	16.0.1

Upgrade Steps for AIP 16.0.1

Follow these instructions to upgrade to AIP 16.0.1:

1. To upgrade to AIP 16.0.1 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 16.0.1, 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_sposzexc_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
- ipstrnonorrdatl3i.dat
- ipwhnonorrdatl3i.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
SRP/WRP	The Receiving calendar merge and replicate are not working correctly. This is due to indexing issue when a SKU is in one local domain and not the other.	25186050
SRP/WRP	The AsPositionIndex did not transform correctly between index -1 and NAVALUE of Date measure.	25129650
DM Batch	The dmb_master_post.sh program aborts due to memory issues.	25129382
Workbook	The Network Replenishment workbook build fails with error message, <i>IllegalParseL toLabelExpr execution failed</i> .	25092598

Affected Component	Fixed Issue/Defect	Defect Number
Batch	For measures with a date value, the copy Sister Warehouse functionality does not work.	25078622
Workbook	In Central Supply Chain Maintenance, the Supply Chain Setup Refresh fails in the Maintenance Parameters workbook.	25072489
DM Batch	Some cases allow users to inadvertently set up the schedule data such that a normal warehouse schedule and a cross-dock schedule into the warehouse would conflict.	25071375
DM Batch	When the stop receiving date and discontinuation date NA (Not Applicable) values are different, poor results occur.	25071364
Workbook	The measure, <code>srx_dlwupper</code> , is used as an upperbound for the measures <code>sr0_dlw</code> and <code>sr1_usaavgdlw</code> . When these measures are used in the <code>usaAoi</code> rule sets, the value for <code>srx_dlwupper</code> is not calculated or loaded.	25041439
Workbook	Users do not have visibility to the data they are trying to create a manual receipt for from the Order Up To menu options.	24951719
Batch	Projected Stock Out - Store and Projected Stock Out (What-if) - Store should be in sync when taking Store Back Order into the calculation.	24847221
SRP/WRP	Boundaries that change over time are not creating the correct effective boundaries.	22205197

Known Issues

The following table contains known issues for the current release.

Affected Component	Known Issue/Defect	Defect Number
RPAS Platform	The <code>exportMeasure</code> utility out has been changed when the <code>-upperCase</code> 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 <code>\$RPAS_HOME/applib</code> folder have incorrect file permissions that prevents users from building workbooks. Users receive a file not found error during workbook wizard process.	23514233
Workbook	Some AIP libs under <code>\$RPAS_HOME/applib</code> folder have incorrect file permissions that prevent users from building workbooks. Users receive a file not found error during workbook wizard process. Note: You can change the file permissions to 755 (or similar to other RPAS libraries) in order to build the workbook.	23514233
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 16.0.1 documentation set:

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

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