Oracle® Retail Advanced Inventory Planning

Release Notes

Release 13.1.2

March 2010

This document highlights the major changes for Release 13.1.2 of Oracle Retail Advanced Inventory Planning (AIP).

Overview

Oracle Retail Advanced Inventory Planning (AIP) 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.

- 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 Online 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

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generation of orders, which can then be shared with collaborative planning partners.

> **Note:** The integration interface between RDF and AIP is not fully certified.

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 in-transit orders.

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 RPAS foundation to which it is tied. For more information on compatibility and integration with RPAS, refer to the section, "Compatibility and Hardware Requirements" in the *Oracle Retail Advanced Inventory Planning Installation Guide*.

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
December 19, 2008	Patch Update (AIX)	13.0.2	13.0.2.1

Date	Version Category	AIP Version	RPAS Version
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

Hardware and Software Requirements

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

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

Functional Enhancements

AIP 13.1.2 includes the following functional enhancements.

Re-plan

Improvement to Reconciliation functionality in AIP that triggers the re-planning of store orders in the event of a shortage inside the Fixed Period. This enables stores to more fully consider the impact of a shortage on subsequent order opportunities. For additional information, refer to the section on "Reconciliation" in the *Oracle Retail Advanced Inventory Planning Store Replenishment Planning User Guide*.

Orders in the Well

Allows AIP to properly consider future allocations, created by other systems, when projecting future inventory positions upon which orders are generated.

 For additional information, refer to the sections on "Replenishment Calculation Variables: Net Inventory" and "Replenishment Calculation Variables: Projected Inventory" in the *Oracle Retail Advanced Inventory Planning Warehouse Replenishment Planning User Guide*. For general information on load files and file formatting, refer to the *Oracle Retail Advanced Inventory Planning Implementation Guide*.

Zero Boundaries

This functionality revises and significantly improves the way in which inventory is shared when it needs to be pushed from a stockless source. The old metric only considered inventory at a destination as a function of what that destination needed when determining how much inventory to give that destination.

The new metric used when determining how much inventory a destination should receive (in comparison to others) is based upon the total inventory in and below that destination in the supply chain as a function of the forecast sales of those stores served directly and indirectly by that destination.

For more details, refer to the section on "Stockless Basics: Approach to Stockless Processing" in the *Oracle Retail Advanced Inventory Planning Warehouse Replenishment Planning User Guide*. For general information on priority matrix, refer to the *Oracle Retail Advanced Inventory Planning Implementation Guide*.

Technical Enhancements

AIP 13.1.2 includes the following technical enhancements.

Security and User Administration Updates

Password security has been upgraded for the RPAS modules of AIP.

For more details, refer to the chapter on "Security and Administration" in the *Oracle Retail Predictive Application Server Administration Guide*.

Support Oracle 10g Database

AIP supports Oracle 10g Enterprise Release 2 (10.2.0.4) in standalone configuration.

Customized Partition Numbers

AIP Oracle scripts can now handle a large number of partitions.

Oracle Application Clustering

The AIP Online application can now be run on Oracle Application Server (10.1.3.4) in clustered topology. For more details, refer to the chapter on "Installing AIPOnlineApp on OAS 10.1.3.4" in the *Oracle Retail Advanced Inventory Planning Installation Guide*.

Performance Enhancements

AIP 13.1.2 includes the following performance enhancements.

AIP Oracle Performance Improvements

The post release script, cron_post_release.sh, is now a mandatory script that must be run after releasing orders. The input parameters to this script have changed. For more details about these input parameters, refer to the chapters on "AIP Java/Oracle Batch Process" and "AIP Java/Oracle Daily Batch Scripts" in the *Oracle Retail Advanced Inventory Planning Operations Guide.*

For more details about new partitioning methods used on key Oracle tables, refer to the chapter on "AIP Java/Oracle Batch Process" in the *Oracle Retail Advanced Inventory Planning Operations Guide.*

Integration Enhancements

AIP 13.1.2 includes the following integration enhancements.

Load Calendar from RMS

This enhancement enables AIP to receive a calendar load from RMS.

For more details, refer to the chapters on "AIP Calendar Hierarchy" and "RMS Integration and Data Mapping" in the *Oracle Retail Advanced Inventory Planning Implementation Guide*.

Handle AIP-RO prefix manipulation on the AIP side

This enhancement places the responsibility of synchronizing AIP and RO position names upon AIP rather than RO.

For technical details, refer to the chapters on "RO Integration" and "AIP to RO Interfaces" in the *Oracle Retail Advanced Inventory Planning Implementation Guide*.

Daily Sales Load from RMS

This enhancement allows AIP to receive an actual sales feed directly from RMS as opposed to RDF.

For technical details, refer to the chapter on "RMS Integration and Data Mapping" in the *Oracle Retail Advanced Inventory Planning Implementation Guide*.

RDF to AIP Forecast Export

This enhancement allows the revision of data fed to AIP from RDF to support the replenishment methods in AIP that use standard deviation.

Note that the default load intersection of Weekly Store Demand Forecast is now SKU/store/day instead of SKU/store/week. Although the intersection is at day, AIP is expecting the entire forecast for the week to be on one day of that week.

For details, refer to the section on "Dynamic Replenishment Method" in the *Oracle Retail Advanced Inventory Planning Store Replenishment Planning User Guide* and the chapter on "RDF Integration" in the *Oracle Retail Advanced Inventory Planning Implementation Guide*.

Fixed Issues/Defects

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

Fixed Issue/Defect	Defect Number
WRP Workbook - Incorrect case measure display Corrected the conversion from units to cases. The appropriate "in cases" measures for the WRP Interactive Evaluation and WRP Network Throughput Plan workbooks now displays the correct value in cases.	8525139
Mace caught unknown exception when running LOAD_ONLINE_ MEASURE.SH of AIP The dmassignprf binary was producing data up to the end of the calendar which caused ExtendExpr to fail. The binary was corrected to produce data only through the planning horizon as ExtendExpr expects.	8817637
History maintenance within SCRP Post Local does not perform Scrp_post_local.sh was taking a long time to run because of the scrp_ histmaint rule group. Tuned this rule group to improve execution performance.	8820974
Historical Lost Sales calculation does not consider RALT Lost Sales now factors in RALT. For details, refer to the section on " SRP Alerts" in the *Oracle Retail Advanced Inventory Planning Store Replenishment Planning User Guide.*	8835987
ReshapeARRAYS fails but returns Code 0 When an array is corrupted and a normal reshapeArrays with -registered options runs during hierarchy load, it fails to reshape that array and states so in the log file. However, the return code of the binary is still 0 (success). The proper return code is now being returned.	9016571
IPNUMACTRPL problems Corrected the calculation of the Numeric Actively Replenished measure.	9027952
DMMAXHZN.SH runs XMACE commands in serial instead of parallel Modified dmmaxhrzn.sh such that it now executes its commands in parallel.	9030484
SR0_FCTERRLVL2 is divided by 7 when used to populate SR0_ DMDERR Corrected the calculation of Store Standard Deviation for Review Time and Warehouse Standard Deviation for Review Time. For details, refer to the section on "Dynamic Safety Stock" in the *Oracle Retail Advanced Inventory Planning Store Replenishment Planning User Guide.*	9040467
Purchase Order scaling - Container Minimum quantities not adhered is greater than one Corrected the Container Minimum and Maximum functionality when the SKU Packsize is greater than one.	9060668

Fixed Issue/Defect	Defect Number
WRP Interactive Evaluation Workbook: What If - Unconstrained Doesn't Include Inventory Capping Inventory Capping is now called in SRP Constrained, SRP Unconstrained, WRP Constrained and WRP Unconstrained menu options within the appropriate Interactive Evaluation workbooks. The WRP Constrained menu option also calls substitution and push to store now.	9091477
Pallet rounding does not round to Cases per Pallet value Pallet rounding is now rounding according to the Cases per Pallet measure.	9134788
AIP Store Projected Inventory is wrong The Projected Inventory calculation was modified to take RALT into account. For details, refer to the sections on "Projected Inventory" in the "Calculations" chapters of the *Oracle Retail Advanced Inventory Planning Store Replenishment Planning User Guide* and the *Oracle Retail Advanced Inventory Planning Warehouse Replenishment Planning User Guide.*	9145720
Sales Credit Multi Day Stocked Alert generates mistakenly A problem existed that if no thresholds were set, the Sales Credit alerts were triggering. This is corrected so that if no thresholds are set, the alert will not trigger.	9180134
Demand Credit Multi Day Stocked Alert generates mistakenly A problem existed that if no thresholds were set, the Demand Credit alerts would trigger. This is corrected so that if no thresholds are set, the alert should not trigger.	9202033
Stockless Surplus Single Day Alert Intersection Several functional changes have been made to WRP Item and Network alerts. For details, refer to the section on "WRP Alerts" in the *Oracle Retail Advanced Inventory Planning Warehouse Replenishment Planning User Guide.*	9436505
Should the Warehouse Net Inventory - Pre Scaling measure be calculated/displayed for a non ATP day? For Warehouse Net Inventory, pre-scaling is only displayed for ATP days.	9436530
Issues in SPQ Worksheet/Calculation Need Above Order Commit - What if and Remaining Order Commit Quantity:What if measures were added to the WRP Interactive Evaluation workbook. For details, refer to the section on "WRP Interactive Evaluation Workbook" in the *Oracle Retail Advanced Inventory Planning Warehouse Replenishment Planning User Guide.*	9436550

Known Issues

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

> **Note:** AIP 13.1.2 supports English only. When integrated with Oracle Retail Merchandising System (RMS) 13.1.2, some hierarchy description values are partially truncated.

Known Issue/Defect	Functional Impact	Mitigation
9301685	SRP Evaluation and SRP Interactive Evaluation workbooks	Stock cover days (SR0_STKCVRDAY) is not being populated. Stock Cover Days is not being calculated in the SRP Evaluation and SRP Interactive Evaluation workbooks. Install the AIP 13.1.2.1 hot fix.
9306280	AIP hierarchy descriptions	AIP hierarchy descriptions are trimmed after being received from RMS. The column length on the primary tables needs to be expanded and the trim operation should be removed for these two fields: ■ Super-Category Description ■ Supplier Name Install the AIP 13.1.2.1 hot fix.
9310195	Expected Receipts	Expected receipts is not correctly aggregating in transits and on orders for non-ATP days. Expected Receipts are not calculated for non-active commodity/location combinations. When this is the case, on orders and in transits should also display empty values.
9321241	Out of Stock Alert	The Out of Stock Alert is not generated if the alert masks were turned off for previous days and turned on for today. Use the following workaround until a solution is delivered: Write a script to run the following expressions from the root of each local domain. This script needs to be executed before alerts are executed each batch run. mace -d . -run -expression "sr0_tmpmsk__1 = true" mace -d . -run -expression "sr0_tmpmsk__2 = true" mace -d . -run -expression "sr0_tmpmsk__3 = true" mace -d . -run -expression "sr0_tmpmsk__4 = true" mace -d . -run -expression "sr0_tmpmsk__5 = true" mace -d . -run -expression "sr0_tmpmsk__6 = true" mace -d . -run -expression "sr0_tmpmsk__7 = true" mace -d . -run -expression "sr0_tmpmsk__8 = true" mace -d . -run -expression "sr0_tmpmsk__9 = true" mace -d . -run -expression "sr0_tmpmsk__10 = true" mace -d . -run -expression "sr0_tmpmsk__11 = true" mace -d . -run -expression "sr0_tmphrdmsk = true" mace -d . -run -expression "sr0_tmphdymsk = true"

Known Issue/Defect	Functional Impact	Mitigation
9351518	SRP pack quantity	SRP pack quantity being converted to negative packsize. PACK_QUANTITY needs to be converted from int8 to int16. Install the AIP 13.1.2.1 hot fix.
9436564	WRP Sales Forecast Alert and WRP Sales Forecast Alert - What If measures	The WRP Sales Forecast Alert and WRP Sales Forecast Alert - What If measures are not being populated when the WRP Sales Forecast Detailed Alert measure is loaded from RDF.
9436587	Reconciliation	Reconciliation should not consider stores as valid destinations during stockless push processing when a SKU is subject to a SKU Cap.
9436616	SRP Overstock Alert	SRP Overstock Alert should not limit cover days to the fixed period.
6932301	RMS purchase orders	RMS purchase orders not interfacing correctly from AIP. When an order, which is already in transit, is partially cancelled in AIP via the Order Management screen, the message is failing to cancel the order quantity in RMS with EXCEED_MAX_QTY failure message.
8287906	Order Management	In Order Management front end outstanding quantity changes when double-clicking on field. This defect occurs on one of the AIP Oracle Order Management screens. For an order where an outstanding quantity is greater than the in-transit quantity, double-clicking on the outstanding quantity changes the value even if no edit is made.
8372145	CRON_EXPORT	Restartability of CRON_EXPORT is a problem when compiling the TAR.Z files. The usage of symbolic links for the directories instead of the actual directories on Unix compounded with abnormal end of Unix process causes the problem of restart ability of cron_export.
8574264	Order Management	Purchase Order modification to same destination as earlier location raises exception ORD_LOC_EXIST at RMS. This defect occurs on one of the AIP Oracle Order Management screens. When the user moves the order quantity back to the original location with new delivery date, the resulting message travelling through RIB to RMS raises the exception ORD_LOC_EXIST at RMS.
8727390	Purchase Orders	RECEIVED_QTY column is not being updated for a purchase order that is re-routed. When a purchase order is re-routed while some quantity is in transit, the quantity received at old location is not updated in the non_contents_order or store_order table against that order.

Known Issue/Defect	Functional Impact	Mitigation
9440442	Exception measures	ExtendExpr should not clear out all measures data beyond the planning horizon.
		For certain exception measures, AIP Online only sends information over to AIP RPAS once it is created, regardless of whether this information exists within the planning horizon or not.
		For example if a Placement Schedule exception is created in AIP Online somewhere in the future beyond a sku's planning horizon, it is sent to AIP RPAS and loaded, however extendExpr deletes this information.
		AIP Online does not send it again.
9440451	Incorrect error message displays	Incorrect error message displaying for dm_on_supply_off_supply_in.sh.
		While running cron_import.sh, if the on supply/ off supply data import fails for any specific reason, an incorrect error message displays on logs.
9440549	Automation procedure in the RETL_LOAD	Ensure consistent online automation.
		Three automation procedures in the RETL_LOAD package can produce different results if they run on different servers.
		In these cases there may be more than one right answer, and the system selects the first result.
9440480	RETL Displays Warning Messages	After executing cron_import, harmless warning messages are present on the hierarchy supplier import logs.
9440551	Optional hierarchies	Advertising and Interval hierarchies are optional but RPAS batch script tries to process them without existence check.
		AIP batch halts with an error if had.txt and intv.txt don't exist when these files are supposed to be optional.
		Clients are instructed to touch had.txt and intv.txt when building their production domain.
		For a workaround to this issue at domain build time, refer to the section "Insert External System Data into the AIP RPAS Domain" in the *Oracle Retail Advanced Inventory Planning Implementation Guide*.
9440568	Unselected values are retained	This defect occurs on one of the AIP Pallet and Order Multiple screens. Initial values entered in Set Pallet and Set Order to text fields are retained when unchecked.
9440630	Pull forward	Pull forward working incorrectly when there is two delivery date from the same release date.
9440651	WRP Overstock alert	WRP Overstock alert should not limit days of stock cover to those days in the fixed period.
9440657	PL/SQL procedure	PL/SQL procedure RETL_LOAD.assign_profiles is slow.
		Profile assignments procedure is not performance optimized for volume test environments.

Known Issue/Defect	Functional Impact	Mitigation
9440671	Purchase Order update message	Purchase Order update message not published from AIP to RMS.
		Under very isolated circumstances, some Purchase Order update message from Order Management screen are not published from AIP to RMS.
9440652	PO_TSF_EXPORT script	PO_TSF_EXPORT should function smoothly with the rest of the release approach which allows businesses to time releases based on order type and destination type.
		Based on the RIB Bypass module, AIP batch has the capability of executing the import of orders and the release of orders based on order type and destination type.
		The po_tsf_export.sh script still inefficiently operates on both the queue tables.
9440609	Missing Data Alert binary	DM RPAS batch Missing Data Alert binary using one day old data (dm1_prdalwsts_t).
		Missing Data Alert binary calculates dm1_msgdat "Missing Data" measure based on 1-day old data in dm1_prdalwsts_t "Product Allowable Status Temp" measure.
9440599	BCS entries	BCSWizardController only allocates BCS indices to new BCS entries without clearing or deleting aged BCS entries.
		An appropriate error message should be displayed when there are no BCS positions to allocate new BCS entries.

Related Documentation

For more information, see the following documents in the Oracle Retail Advanced Inventory Planning 13.1.2 documentation set:

- *Oracle Retail Advanced Inventory Planning Installation Guide*

- *Oracle Retail Advanced Inventory Planning User Guide*

- *Oracle Retail Advanced Inventory Planning Implementation Guide*

- *Oracle Retail Advanced Inventory Planning Operations Guide and Administration Guide*

- *Oracle Retail Advanced Inventory Planning Store Replenishment Planning User Guide*

- *Oracle Retail Advanced Inventory Planning Warehouse Replenishment Planning User Guide*

- *Oracle Retail Advanced Inventory Planning Data Management Online Help*

- *Oracle Retail Advanced Inventory Planning Data Management User Guide*

- *Oracle Retail Advanced Inventory Planning Order Management Online Help*

- *Oracle Retail Advanced Inventory Planning Order Management User Guide*

- *Oracle Retail Advanced Inventory Planning Data Model Volume 1: Oracle Data Model*

- *Oracle Retail Advanced Inventory Planning Data Model Volume 2: Measure Reference Guide*

Oracle® Retail Advanced Inventory Planning Release Notes, Release 13.1.2

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Value-Added Reseller (VAR) Language

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