

Oracle® Retail Predictive Application Server

Release Notes

Release 13.4.3

June 2014

The Oracle Retail Predictive Solutions are a set of products used for generating forecasts, developing trading plans, and analyzing customer behavior. These products use predictive technology to examine historical data and to predict future behavior. The Oracle Retail Predictive Solutions run from a common platform called the Oracle Retail Predictive Application Server (RPAS) that includes features such as:

- Multidimensional databases
- Hierarchical data (product, time, and business location hierarchies)
- Aggregation and spreading of data
- Workbooks and worksheets for displaying and manipulating data
- Wizards for creating and formatting workbooks and worksheets
- Menus, quick menus, and toolbars
- Exception management and user-friendly alerts

Hardware and Software Requirements

See the *Oracle Retail Predictive Application Server Installation Guide* for hardware and software requirements.

Note: The Web Tunneling functionality, currently available with the RPAS Classic Client, will no longer be supported starting with the next release of RPAS. This is a setting that is configured in the Advanced Settings of the EConfigure utility. Clients should be using VPN technology instead of Web Tunneling. All Web Tunneling functionality will also be removed from the RPAS Classic Client Web Deployment.

Note: The non-SSO version of RPAS Classic Client Web Deployment no longer supports the web-based administration interface which allows configuring domains from a web browser. Instead, all domains have to be set up on the server by editing a properties file.

The SSO version is not affected.

Cygwin

Cygwin is required if the RPAS Server is to be installed on Windows operating systems. You can find more information about downloading this product at <http://www.cygwin.com>.

For installation guidance, see the following note on My Oracle Support (<https://support.oracle.com>):

Cygwin Setup Guide for RPAS (Doc ID 1333398.1)

This document details necessary options you should select when installing Cygwin to make it function properly with RPAS.

Upgrade Notes

When upgrading RPAS, note the following issues:

Patching Domains

When applying any RPAS server upgrade, you should also run a configuration patch over the domains that are upgraded. There are times where the configuration resources have been updated and the domain must be patched to reflect those changes. An example of this situation is presented in bug 9680094.

Chart Formats

Bugs 9297192 and 9837542 describe problems with uninitialized chart formats saved with saved formats. This leads to potential issues such as unavailable legends to intermittent crashing. It also prevents chart formats from being inherited from a higher level saved format. These issues have been fixed for uninitialized chart formats created in the future, but the solution does not resolve issues with preexisting saved formats.

Because the RPAS Classic Client uses a third party chart control, it cannot be determined which chart formats have been initialized and which ones are invalid. The only solution is to determine if the window is in grid or chart mode.

A saved format schema update has been introduced that erases any chart formats for all windows in grid mode. This is a one-time update, and once completed, the user does not need to save the windows in chart mode again.

To keep a template with saved styles containing chart formats, perform the following steps:

Note: These instructions are required if you are upgrading from a version of RPAS prior to 13.2. If you are upgrading from 13.2, these instructions do not apply.

1. Before upgrading, create or open a workbook for that template.
2. Navigate to the windows with chart formatting you want to preserve.
3. Toggle the window to chart mode.
4. Save the formats to the level (user, group, or template) in which you want the chart formats.

5. After upgrading, create a new workbook for that template.
6. Optional: Toggle the windows back to grid mode.
7. Save the formats as described in Step 4.

For more information about the patching process, see the *Oracle Retail Predictive Application Server Installation Guide*, the *Oracle Retail Predictive Application Server Administration Guide for the Classic Client*, and the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

Default bitSizes

The rule, expr, meas, wb, and wbq dimensions come with a default bitSize. Their bitSizes should not be increased after a new domain is built. When the domain is upgraded and/or patched, these dimensions were found to get fragmented and eventually hit the threshold level for the available address space. The user gets a message to reindex them. There is no need to increase the bitSize for these dimensions and only defragging is sufficient to bring the address space back to the required level.

The following commands must be run on the domain after it is upgraded and/or patched if the message to reindex appears on any of these dimensions:

```
reindexDomain -d <dompath> -dimSpec rule -force
```

or

```
reindexDomain -d <dompath> -dimSpec expr -force
```

or

```
reindexDomain -d <dompath> -dimSpec meas -force
```

or

```
reindexDomain -d <dompath> -dimSpec wb -force
```

or

```
reindexDomain -d <dompath> -dimSpec wbq -force
```

or

```
reindexDomain -d <dompath> -dimSpec rule,expr,meas,wb,wbq -force
```

Technical Enhancements

The technical enhancements described below are included in this release:

Software Operating Environment Upgrades

Note: The list below announces the addition of Oracle Retail support for the technology described. See the Installation Guide requirements section for critical information, such as whether the enhancement below replaces previous versions or is supported in addition to already existing versions.

Fusion Client

The following technology has been upgraded:

- Application Server: Oracle WebLogic 10.3.6
- Java 1.6:
 - JDK 1.6 update 71 for IBM AIX and HP-UX
 - JDK 1.6 update 75, JRockit 6 R28.3.2 for Oracle Linux and Sun

For more information, see the *Oracle Retail Predictive Application Server Installation Guide*.

Noteworthy Defect Fixes

The following noteworthy defect fixes are included in RPAS 13.4.3:

Affected Component	Fixed Issue/Defect	Defect Number
Classic Client	Navigating through tabs was causing worksheets to appear under the wrong tabs. The client is modified to fix this problem.	18331989
Classic Client	Classic Client fails to build a workbook when the first worksheet that gets shown is in the chart mode whose zorder is -1. The client code is fixed to handle the zorder of -1.	18391951
Classic Client - Measure Profiles	Measure Profiles were coming out sorted in the show/hide dialog, but were found to be unsorted in the right click context menu for selecting profiles. The client code is modified to display the profiles in the sorted order to resolve the issue.	18346795
Classic Client - Single Hier Select	For single hierarchy select measures, the Export to Excel feature of Classic Client was not exporting the position labels, but position names were getting exported. This occurred because the position names were being fetched by the client code. The client code is fixed to fetch the position labels.	18748477
Fusion Client - Alert Workbook	When a user created a new Alert workbook, the menu item Select Active Alert under the View menu was disabled. Only upon performing any action, such as clicking Find Next Alert, would the menu item then be enabled. This is fixed.	18166350
Fusion Client - Auto PQD	Auto Position Query Definitions (PQD) is now working correctly in combination with synchronized scrolling.	18267379
Fusion Client - Auto PQD	Automatically evaluate PQD was not working when switching between tabs. This issue is fixed.	18911043
Fusion Client - Localization/ Internationalization	Traditional Chinese characters were showing up as Simplified Chinese in the Fusion Client user interface. This language issue is resolved.	16552922
Fusion Client - Logging	Connection spec logging got accidentally checked in as "error." This is rectified.	18376622

Affected Component	Fixed Issue/Defect	Defect Number
Fusion Client - Position Maintenance	The Position Maintenance option was running into a null pointer exception when incorrectly available in the context menu, for example, after deleting dynamic positions. Users now do not see the Position Maintenance option when it is not available.	18854665
Fusion Client - Session Timeout	Users can now click OK to dismiss the session expiry popup in Microsoft Internet Explorer and Mozilla Firefox and continue working. With Google Chrome, there is an additional popup. The Page Unresponsive popup comes up after the user clicks OK in the Session Expiry Warning popup. To dismiss the Page Unresponsive popup, the user has to click Wait. On clicking Wait, the user can see the desired result.	18421932
Fusion Client - Show/Hide	The IndexOutOfBounds exception with collapsed levels and executing Show/Hide is fixed.	18638446
Fusion Client - Synchronize Page Edge	Synchronize page edge is now working as expected with Dynamic Position Maintenance (DPM)-enabled workbooks.	18589200
Config Tools	Users would notice that saving a workbook would result in the loss of all Axis Info configuration for the worksheets of that workbook. A change to the way Axis Info is saved resulted in an error in which only the Unassigned axis would make it into the XML files used to persist the workbook. When the workbook was reloaded, the missing entries in the XML would result in missing information within the Configuration Tools. The error has been corrected. All axes should now be saved to the XML and properly restored when the workbook is loaded.	18969915
Config Tools - RpasInstall	RpasInstall patching was failing while trying to patch a new user-defined dimension. This occurred because the reguserdim call from RpasInstall was using the tools name for the user-defined dimensions instead of the RPAS name. The call to reguserdim is fixed to use the RPAS name.	18313146
Config Tools - Validation	Configuration tools was throwing an exception while trying to reopen a configuration after deleting a hierarchy. A null check on a hierarchy object was not being done inside the tools code and hence the exception. The null check is added to resolve the issue.	16886480
Domain Utilities - DimensionMgr	Patching a domain failed while trying to modify the size of a system dimension by adding new positions. The default bit size assigned at the time of domain conversion was found to be less than the bit size required at the time of patching as, normally, system dimensions are not modified. The dimension manager utility is fixed to allow resetting of the bit size for system dimensions.	18828048
Domain Utilities - LoadHier	LoadHier with the -loadAll option was not sending a warning when no data files were present in the input directory. The LoadHier code is modified and now logs a message to warn the user that input files are missing.	18687662

Affected Component	Fixed Issue/Defect	Defect Number
Domain Utilities - ReindexDomain	Forced Higher Based Intersection (FnHBI) measures, having one of the dimensions from a partitioned hierarchy, were not getting reindexed properly. The reindexDomain utility is fixed to properly set the dimension registry path.	18672797
Doman Utilities - RenamePositions	When using renamePositions to update the position name on a partition dimension, the name was not getting updated in globaldomainconfig.xml. The utility is modified to update the globaldomainconfig.xml file when positions are getting renamed on the partition dimension.	18512551
Domain Utilities - MoveDomain	MoveDomain was not updating the sub-domain index arrays maintained in the configmeasdata database which indirectly affects loadmeasure from functioning properly. When an absolute path was passed in to the xml file as an input to MoveDomain, the path was not getting mapped to the relative path stored inside the domain. The utility code is fixed to properly convert the relative path to an absolute path.	18596427
Domain Utilities - RPAC	The RPAC utility was not allowing the setting of values at aggregate levels. The RPAC utility is fixed to allow value setting at aggregate levels.	18961552
Domain Utilities - wbbatch	Parallel auto workbook builds using wbbatch from the same domain were failing due to lock contention when multiple -maxProcesses options were used. There was a deadlock situation between two processes where each process was waiting on the other to release a lock. The server is modified to allow exclusive access of the locks to each process separately to resolve the issue.	18679724
Platform - Alert Manager	Hierarchy ranging during an Alert Manager workbook build was taking a long time to finish causing delays to the workbook build. Alert Manager code is now optimized to efficiently iterate over the alerted cells during ranging.	18682164
Platform - Dimension Attributes	Dynamic attributes were being looked up using the user name instead of user ID which was causing an exception to be thrown. The dimension attribute manager is fixed to use user ID instead of user name.	18168253
Platform - RpasFunctions	The RPAS attribute function was taking a long time to execute. The reason was that the meta database was opened and closed several times during the function evaluation. The database access is optimized to resolve the problem.	18178132
Platform - Scripts	In the patchWbq script (which is used to decentralize the wbq dimension), fetching the dim registry path was subsequently causing an exception to be thrown. The script is fixed to properly parse the dim registry path.	18482437

Affected Component	Fixed Issue/Defect	Defect Number
Platform - Server	While copying and pasting values from one POP measure to another POP measure where both the measures were non-conforming, an exception was getting thrown. The auxiliary intersection levels were not properly maintained for the POP measures. This is corrected.	18301548
Platform - Server	While reconfiguring a global/local domain, the new local domains created were found to contain one of the existing local domain's user selections and workbooks. The server is fixed to disregard existing selections and workbooks, while trying to create new domains, by making a copy of the existing domain.	18340635
Platform - Server	During workbook save, while sending the position and cells format from the client to the server, whenever the format was empty, Classic Client was exiting. This happened when an empty string was getting transcoded. The socket layer is fixed to detect and filter empty strings from getting transcoded.	18391786
Platform - Server	A performance hit was observed while running A=B kind of expressions where the source array was empty but the destination array contained values. The calc engine is modified to clear the destination array when the source array is empty. This fixes the issue.	18601109
Platform - Server	The Resize and ResizeProfile functions were throwing an exception and exiting when the destination length was less than or equal to zero. The modified functions now trap such conditions without exiting, return an NA value for the measure, and log a message.	18780044
Platform - Server	Committed values were not showing up in the workbook when it was built from the master domain. This is a side effect of the fix made for defect 18601109. The server code is fixed to consider the corner case where the destination array need not be cleared.	18819296
Platform - Tools Validation	Configuration tools validation was throwing a CalendarPositionMapException. This occurred because there was no proper context available for doing such validation. The JNI code is fixed to exclude this validation.	17435369
Platform - Workbook, Custom Menu, DPM	During the concurrency testing of workbook build, custom menu, and DPM operations, the Hmaint and Language databases were getting locked by one process while forcing other processes to wait for the locks to be released until the lock time-out and then to throw contention errors. Optimizing the duration of these locks during all of the three operations resolves the issue.	18761844
In Context Launch	During In Context launch, the login credentials were not getting cleared after logging off. The In Context code is fixed to clear the login details.	18441532

Affected Component	Fixed Issue/Defect	Defect Number
RpasTemplates - Auto Workbook Maintenance	On one of the wizards of the Auto Workbook Maintenance template, the radio buttons were not properly centered. The Auto Workbook Maintenance template code is fixed to resolve the issue.	16606117
Special Expression - MultiSource	The MultiSource special expression was not clearing the Left Hand Side (LHS) measure and, since only the populated cells in the Right Hand Side (RHS) measure were iterated upon at the time of setting the LHS measure, some of the existing LHS measure values were not matching with the RHS measure values. The LHS measure is cleared before executing the expression to resolve the problem.	18238072
Special Expression - RankSort	A bad allocation error was getting thrown by Mace while executing a rule group. The issue was found to be in the RankSort special expression which gets used in one of the rules of the rule group. The RankSort code is fixed to resolve the issue.	17860491

Known Issues

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

Affected Component	Known Issue/Defect	Defect Number
Fusion Client - Login	Users are often times unable to log in using Google Chrome. This is due to network latency. This issue is being researched with the ADF team.	18808035
Platform - Wizard PQDs	Wizard PQDs are not working properly when the domain is upgraded from 13.4.1.HF to 13.4.3. This issue is fixed in 13.4.3.1 which will be released after the 13.4.3 release.	18801561
Platform - Workbook, DPM, Custom Menu	Performance improvements are needed to reduce lock contention during the concurrent execution of workbook build, DPM, and custom menu. This issue is fixed in 13.4.3.1 which will be released after the 13.4.3 release.	18914006
Workbook - Format	While trying to patch a domain with a modified configuration where the default aggregation of one of the measures used in the template level styles is modified, the user and group level styles are not getting updated with the modified configuration. This results in a workbook build error. This issue is fixed in 13.4.3.1 which will be released after the 13.4.3 release.	18886407

Related Documentation

For more information, see the following document in the Oracle Retail Predictive Application Server 13.4.3 documentation set:

- *Oracle Retail Predictive Application Server Installation Guide*

Supplemental Documentation at My Oracle Support

The following document is available through My Oracle Support. Access My Oracle Support at the following URL:

<https://support.oracle.com>

Cygwin Setup Guide for RPAS (Doc ID 1333398.1)

This document details necessary options you should select when installing Cygwin to make it function properly with RPAS.

Oracle Retail Predictive Application Server 13.4.3 Cumulative Fixed Issues (Doc ID 1677113.1)

This document details the fixed issues and defects for all RPAS patch releases prior to and including the current release for the 13.4 code line.

Previous Releases

For information on previous Oracle Retail Predictive Application Server release enhancements and additional information, refer to the release notes and documentation that accompany the previous releases.

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