Oracle® Retail Predictive Application Server

Release Notes

Release 16.0.2

January 2018

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

> **Note:** The RPAS Open Database Connectivity (ODBC) driver has been used to support on-demand data extract use cases. In conjunction with on-going efforts to evolve the RPAS integration architecture to align with market needs, RPAS now supports these use cases through on-demand Online Administration Tasks and Excel exports.
>
> The RPAS ODBC driver will be supported in the current 16.0.2 release and all previous releases. Support will be removed for all subsequent releases. It is recommended that alternatives to the RPAS ODBC driver be leveraged in future implementations. In support of this recommendation, references to the RPAS ODBC driver have been removed from the RPAS platform documentation.

Hardware and Software Requirements

> **Note:** After the 16.0.2.x releases, AIX 7.1 will no longer be supported. Starting with the 16.0.3 release, RPAS will support AIX 7.2.

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

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. For information on upgrading, see the *Oracle Retail Predictive Application Server Administration Guide for the Classic 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
```

Functional Enhancements

The functional enhancements described below are included in this release:

Pivot Swap using Keyboard

RPAS Fusion client is enhanced to support drag/drop functionality using the keyboard. This also improves the accessibility of the Fusion Client for drag/drop functionality. With this alternate approach, the user can achieve similar results using the keyboard.

For more information, see the *Oracle Retail Predictive Application Server User Guide for the Fusion Client*.

Support for Asynchronous Transactions

Asynchronous transactions are now supported to ensure robustness in longer operations. This helps to run the jobs in the background.

For more information, see the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

Toggle between Client Side and Server Side Editing

RPAS Fusion Client allows users to toggle between client side editing (for faster edits for input text) and server side editing (for better scrolling experience) depending on the need.

For more information, see the *Oracle Retail Predictive Application Server User Guide for the Fusion Client*.

Dimension Tile Swapping

RPAS Fusion Client supports dimension tile swapping to improve the accessibility of the application. A context menu has been added on each dimension tile in the page edge section to perform a Pivot swap or to move to a row/page edge/column.

For more information, see the *Oracle Retail Predictive Application Server User Guide for the Fusion Client*.

Noteworthy Defect Fixes

The following noteworthy defect fixes are included in this release:

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Batch Control Framework	The hierarchy loading batch task now supports the loading of multiple files into the same hierarchy with header lines.	27029651

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Batch Control Framework	The LoadMeas task with the Validate flag should work after Unpack by checking for input files already in the domain/input location, as well as, in the FTP incoming directory. The Enterprise Edition Batch measload task with Validate files option now correctly detects data files already placed in the domain input directory by a prior unpack task. The documentation change is outlined below: In the Implementation chapter, the Extract Input Files and Load Measure: measload sections are updated. See the *Oracle Retail Merchandise Financial Planning Enterprise Edition Cloud Service and Assortment Planning Enterprise Edition Cloud Service Implementation Guide*, Release 16.0.2.	27036792
RPAS Server	Mace did not validate an expression with same measure in RHS and LHS. It now throws an exception.	25950898
RPAS Server	The loadmeasure utility did not throw any warning on invalid measure data format. This issue has been fixed by including a check to not allow all as the recordLogLevel.	25636072
RPAS Server	The domain property enable_real_division is now used to determine the output of a division operation between two integers.	25965661
RPAS Server	The RPAS ServerLoad measure with splitprocesses is now respected when the argument has a value different than -process.	26121353
RPAS Server	Duplicate rules are displayed, after running the RDF Cloud Service prep Demand Automation.	26222254
RPAS Server	MACE command performance has been improved on equation A=B by clearing A for evaluation and not clearing A for load and commit.	26275240
RPAS Server	Exportdata has the -noConCat option to avoid merging the local domain output files. This option improves performance when more local domains exist.	26275708
RPAS Server	The user-saved format was having issues after an upgrade as updatestyles was referring to the dimension attributes that no longer existed in the domain. The issue fixed by modifying the updatestyles so that dimension attributes that are no longer present in the domain will be removed from saved styles.	26275754
RPAS Server	The attribute pick list expression no longer fails with errors when Java's default consolehandler conflicts with RPASloghandler.	26283067
RPAS Server	exportData by default uses the Array NA Value to skip values while exporting measure data. A new option, useMeasNaValue, has been added so that users can choose to use the Meas Spec NA Value so that exportData exports the correct NA Values instead of the optimized Array NA Values.	26304875
RPAS Server	On a workbook build, the custom attribute was populated from the source measure array at the agg level. If that was empty, the custom attributes appeared as blank. The custom attributes are now correctly updated.	26521314
RPAS Server	In the Assortment Setup workbook, DPI is now populated when DP code is provided and Calculate is clicked.	26416461

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Server	The position label in the single hier select dialog that the user selected was not shown in the grid cell when the dialog exited. The position name is now shown instead.	26572163
RPAS Server	Mapdata was not working as expected on Boolean measures as the overlayNa was used instead of overlay. This issue has been fixed.	26623102
RPAS Server	The HBI masking measure now correctly ranges the local workbook template wizards for the partition dimension.	26801874
RPAS Server	A process has been added for the RPAS Server and SAAS to purge old input/processed files.	26893907
RPAS Server	Multilevel Display Measure (MLD) was showing inconsistent behavior as it was not creating a measure instance above the measure's baseint for MLD measure. Subsequently, it was not populating with the data at the agg level. This issue has been fixed.	26929679
RPAS Server	The range measure, below the workbook intersection with add state write, is now editable.	27058362
RPAS Server	In a specific scenario, RDF_Gen_Forecast.ksh failed with a non-zero exit due to the begin error. This issue has been fixed.	27104769
RPAS Server	Upon opening workbooks built by WbBatch, users could only save them with a Save As dialog even when they tried to do a normal Save. This occurred because the workbook built by scheduling an Auto Workbook and building it with WbBatch was treated as a new workbook because the server was sending the newworkbookflag as true. This issue is fixed by setting the newworkbookflag flag in the code to false.	27150281
RPAS Server	Scrolling performance has been improved in a specific scenario by using the cache special value.	26782566
RPAS Server	Endbatch no longer fails with a deadlock error in an RDM integrated environment.	26810271
RPAS Server	Java expression can now be suspended for debugging by setting the environment variable RPAS_JAVA_DEBUG_PORT.	27062872
RPAS Fusion Client	In a corner case scenario, when the Synchronize option was deselected, the selected hierarchy values were not shown in the wizard when Previous was clicked. The issue has been fixed.	21265334
RPAS Fusion Client	Real time alerts now work if the alert measure is not viewable.	24795496
RPAS Fusion Client	Tooltips appeared only when the user hovered exactly on the label text and not anywhere else in the cell. This has been fixed by adding a configuration property, header.tooltip.enabled, in the rpasConfig.properties file to turn the tooltip on and off. The documentation change is outlined below: Updates are made in the Fusion Client Properties Files appendix. See the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*, Release 16.0.2.	25598449
RPAS Fusion Client	An issue has been fixed in Firefox with the inputBox after an edit was made and the components were not showing italicized after the edit.	25747922

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Fusion Client	During translation conversion, date formats were getting switched to English formatting rather than the date format for the countries. This has been fixed.	25830681
RPAS Fusion Client	An error in the Fusion Client Managed server log appeared repeatedly due to an issue with the web.xml file. This has been fixed.	25893873
RPAS Fusion Client	On selecting the find button within the pivot table, a searched for position was not getting highlighted properly. This has been fixed.	25958567
RPAS Fusion Client	While using the Find to move the measures to a hidden list, the visible measures were reordering in alphabetical order. This issue has been fixed.	25981190
RPAS Fusion Client	A warning message "Nothing is selected. Would you like to clear the entire page slice?" is now displayed when a user clicks on clear from the Menu without selecting any cell.	26006069
RPAS Fusion Client	The background color of an edited cell has been fixed to show the color specified in PivotTableStyles.properties after the Tab.	26042595
RPAS Fusion Client	Alert Navigation has been fixed to properly navigate when the user creates a view by using copy view.	26098968
RPAS Fusion Client	The icons to load/save favorites are now visible in the workbook wizard window.	26109565
RPAS Fusion Client	The Tile View node now displays placeholder attributes.	26126658
RPAS Fusion Client	The formatting of Real Time Alerts now correctly reflects when Calculate is clicked in the Assort Cases workbook.	26142371
RPAS Fusion Client	In a Pivot table cell, if the final edited value is the same as the original value, clicking on the Calculate action now calculates the cell and other depend cells are no longer protected.	26166494
RPAS Fusion Client	When a value disappeared from a measure range, a picklist measure displayed the ID instead of the label in the cell which was previously populated with that value. This has been fixed.	26245519
RPAS Fusion Client	Worksheets opened with errors after removing any dimension attribute from a measure. This issue has been fixed.	26245738
RPAS Fusion Client	While using the Firefox browser, images in the Z axis were hidden during page edge operation. This issue has been fixed.	26256382
RPAS Fusion Client	Auto PQD now correctly evaluates when switching between workbook tabs.	26256743
RPAS Fusion Client	Every Fusion Client operation was cluttering the log file by writing the warning message for the version hidden in production mode. This issue has been fixed.	26257625
RPAS Fusion Client	When a user copied and pasted from one measure to another float type measure, an exception was displayed. This issue has been fixed.	26258410
RPAS Fusion Client	In the workbook creation wizard in the case of building the workbook for the master domain, when the dimension level changed and the user clicked OK, the system displayed an exception. This issue has been fixed.	26301425

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Fusion Client	When an empty object was represented in the list of Single Hierarchy Selection values, an error message was displayed while selecting a position. This has been fixed.	26309965
RPAS Fusion Client	When auto PQD is enabled on the worksheet, the find operation now runs on the result of the PQD.	26387708
RPAS Fusion Client	While creating a new workbook with images as header attributes (that have multiple other header attributes as children), misalignment occurred in the pivot table grid. This issue has been fixed by invoking the resize event.	26474712
RPAS Fusion Client	When the real time alert was already fetched, but was not a part of the visible window, the "Find Next Alert" was not directing to the fetched alert. This issue has been fixed.	26535916
RPAS Fusion Client	For the OAT tasks that are writing to log files, the user is now allowed to view the log while the task is in progress by showing the updates in real time through the client.	26550919
RPAS Fusion Client	In a corner case scenario, the stretching of the position cells was not properly reflecting on the measure cells causing row misalignments. This is now resolved.	26567428
RPAS Fusion Client	While working on Assortment cases, workbook tiles were not visible completely in the IPAD Safari and personal computer Chrome browsers due to the way the tree table translates. This issue has been fixed.	26575054
RPAS Fusion Client	Cell edit required multiple clicks to focus a cell that contained images. The issue has been fixed by removing the explicit call to focus on the pivot table for every user click. Now, the focus stays on the input component of the cell after edit.	26615899
RPAS Fusion Client	Single/double quotes in number formats caused an error. The issue has been fixed by converting prefix/suffix strings to Unicode characters in Java.	26638773
RPAS Fusion Client	Alerts were highlighted during edit and not for the calculate operation. This issue has been fixed by using Boolean in the condition check to allow the partial refresh to occur for both Edits and Calculate operations.	26664622
RPAS Fusion Client	Performance has been improved while exporting to Excel with hundreds of images by using a map of the URL string to index.	26664695
RPAS Fusion Client	The decimal and grouping symbols can now be configured similar to date formats from their defaulted assignments.	26664727
RPAS Fusion Client	With level splitting set on the product hierarchy and selecting picklist, calculating, and then updating the product to expand all products was resulting in error. This issue has been fixed.	26709283
RPAS Fusion Client	An error occurred while entering single precision floating point numbers in a worksheet. This issue has been fixed.	26747583
RPAS Fusion Client	Data fetch was hanging and Fusion Client locked up after an Administration user had saved a format for a template on a computer at high resolution, and then a user logged in and built a workbook with a lower resolution machine. This has been fixed.	26770110
RPAS Fusion Client	The CDT editor workbook now displays the loaded attribute weights.	26834584

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Fusion Client	The Online Administration Tools standard administration task has been modified to display the Select Domain popup for global domains.	26880376
RPAS Fusion Client	When searching for measures in the Show and Hide dialog box, the sequence in which measures are found is now based on the measure name, not the label.	26912428
RPAS Fusion Client	Revert cell now works as expected for unsaved workbooks.	26930869
RPAS Fusion Client	Timeout issues that occurred on Internet Explorer with Cloud Services have been fixed by adding support for asynchronous transactions. Customers can enable this by the configuration property, asynchronous.task.execution in the rpasConfig.properties file. More details on this and other related properties can be found in the Administration Guide. The documentation change is outlined below: Updates are made in the Fusion Client Properties Files appendix. See the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*, Release 16.0.2.	26938183
RPAS Fusion Client	For all percentage measures, the user is now able to insert a value greater than one using edit/fill operation.	26993909
RPAS Fusion Client	Manage alert now works as expected when a workbook is selected.	27014605
RPAS Fusion Client	After sorting visible measures in the Measure Wizard in ascending or descending order, it was then no longer possible to move the measures up or down in the list. This has been fixed.	27017424
RPAS Fusion Client	The default value of admintask.log.limit in rpasConfig.properties has been increased.	27033510
RPAS Fusion Client	When using the Auto PQD option with position queries, an error occurred when the off-grid position displayed both the level at which the pos query was defined and also at lower levels. This has been fixed.	27040694
RPAS Fusion Client	When a favorite was selected and there was a mismatch between the saved positions from favorites and the available position in the wizard, the "No data to display" message was displayed. This has been fixed.	27040745
RPAS Fusion Client	When the format was saved, position information, such as Cell widths and heights about all positions, was saved in the style XML causing RPASDBSERVER to grow larger than expected. This has been fixed by skipping the positions with default windows position information saving space and reducing network traffic.	27046616
RPAS Fusion Client	When using the Chrome browser, the right click menu did not render properly. This happened when the grid was fully spanned for the entire page where the right click menu options were not getting opened. This has been fixed.	27053192
RPAS Fusion Client	When advancing to the next alerted item after resizing the column in another view and clicking the next alert, the alert arrows sometimes grayed out unexpectedly. This issue has been fixed.	27059607

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Fusion Client	In a specific scenario, the position query definition filter did not work. This issue has been fixed.	27079181
RPAS Fusion Client	The pivot table refreshed on an SSH edit operation. This issue has been fixed.	27100785
RPAS Fusion Client	Position sorting on the product hierarchy was using custom alphanumeric ordering which caused it to not work as expected. This has been fixed by adding the configurable property, alphanumeric.compare.enabled, in the rpasConfig.properties file and setting the default to True. The documentation change is outlined below: For the property added to the rpasConfig.properties file, see the Fusion Client Properties Files appendix. See the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*, Release 16.0.2.	27101588
RPAS Fusion Client	In the Wizard Page or in Location Dialog box, the scrolling on the list of positions was unresponsive after expanding and collapsing the list. This has been fixed.	27106580
RPAS Fusion Client	When exporting data into Excel from a workbook, the Formatted option could result in incorrectly formatted values in the Excel spreadsheet. This has been fixed.	27107698
RPAS Fusion Client	Translation files have been updated to include newly added properties in configuration.	27121464
RPAS Fusion Client	The width of the Visible Measure Label column kept on shrinking back to original size. This has been fixed.	27122426
RPAS Fusion Client	After creating a PQD, the Automatically Evaluate Position Queries option was incorrectly disabled. This has been fixed.	27143911
RPAS Fusion Client	The find feature within workbooks from page edge was displaying an "Operation failed" message when executed. This issue has been fixed.	27184099
RPAS Fusion Client	Within the Fusion Client, when scrolling and the system needed to do a fetch, the performance degraded. This issue has been fixed.	27210574
RPAS Fusion Client	While a asynchronous task of the wizard submit was executing, a error occurred if the wizard page tried to invoke the application. This issue has been fixed.	27212565
RPAS Fusion Client	In a newly created unsaved workbook, protection processing now works as expected when the Client Side Editing option is turned on.	27244722
RPAS HSA	When an RPAS domain connected to HSA, the commit failed due to a buffer size that was not large enough. This issue has been fixed.	26758400
RPAS HSA	LOADDIMDATA performance has been improved in the case of a huge input file with many duplicate entries.	26968224
RPAS HSA	The RDM purging operation has been made more robust and now tackles abrupt termination by checking and dropping indexes before running the operation.	26975826
RPAS Classic Client	The disappearance of text entered in a writable string type measure when the cell focus changed has been fixed.	25884009

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Classic Client	The data editor in the workbook has been fixed to retain changes made to selected measures even after the view is switched from chart view to normal view.	26019658
RPAS Classic Client	On selecting a picklist measure of type string as a display attribute, "Invalid Attribute Type" was displayed as a prefix to the actual value. This issue has been fixed.	26583780
RPAS Classic Client	In a specific scenario, Preferences for the save format option did not get saved. This issue has been fixed.	26587053
RPAS Classic Client	After using the Hide Selection option to hide positions, selecting the Display and Sort Attributes from the right mouse pop-up, and clicking OK without making changes, resulted in all the hidden positions being visible in the worksheet when it refreshed. This issue has been fixed.	26591563
RPAS Classic Client	When a user registered a dimension attribute without any attribute label, the user was not able to see the translated string of the corresponding user language for the dimension attribute. This issue has been fixed.	26480499
RPAS Classic Client	Un-translated text in the security admin, translation admin, and measure analysis workbooks is now translated.	26664016
RPAS Classic Client	Classic Client no longer crashes when doing a find with no active node.	27152820
RPAS Configuration Tools	Deletion of a measure component from the measure configuration was resulting in the corruption of the measure data model for any measures that used the deleted measure component. This resulted in improperly configured measures added to the domain. This has been fixed.	22934139
RPAS Configuration Tools	An error that caused the RPAS Configuration Manager to be unable to load configurations when running on a Linux system has been corrected.	24599907
RPAS Configuration Tools	The RPAS Configuration Manager would encounter an exception when working with configurations that contained more than one measure component with a given name across multiple solutions (which is valid). Now, the Configuration Manager handles this condition without exception.	24803928
RPAS Configuration Tools	In the globaldomainconfig.xml file, when the subdomain path sits outside the globaldomain path and rpasInstall tries to build the domain, rpasInstall first builds the global domain. It then copies this global domain to its local domains, and updates/removes unnecessary data in local domains. When it copies from one domain to the other domain, if the target domain path does not exist, it assumes that the target domain path's parent folder exists. This issue has been fixed by making sure the above assumption is correct and creating a subdomain path's parent folder before the domain copy operation.	24970813
RPAS Configuration Tools	The function of the home/end keys, when in a field such as the measure description, now take the cursor outside of the measure management pane.	25064952
RPAS Configuration Tools	When using the deployment tool to create translation resources for administration task files, it is possible that the files can be created either as truncated so that they miss one or more entries or as empty zero-length files.	25796067

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Configuration Tools	During the configuration merge operation, the viewable profile was not saved as the default profile. This has been fixed.	26181449
RPAS Configuration Tools	The configuration manager tool was not working as expected in the merge operation when the refresh rule was set to null. This has been fixed.	26876981

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	While deleting the content of a Date type cell using the Delete key, the workbook throws a exception. However, it allows the user to delete the date by using clear from the Edit Menu.	27286642
Grid Display & Scroll	The Fusion Client shows scroll bars on Chrome and Internet Explorer, but not on Firefox in areas where it makes no sense to have scroll bars. It looks as if the icons are sized too large for the area they are in and the browser automatically brings in the scroll bar.	26623891

Related Documentation

For more information, see the following documents in the Oracle Retail Predictive Application Server 16.0.2 documentation set:

- *Oracle Retail Predictive Application Server Administration Guide for the Classic Client*

- *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*

- *Oracle Retail Predictive Application Server Configuration Tools User Guide*

- *Oracle Retail Predictive Application Server Installation Guide*

- *Oracle Retail Predictive Application Server User Guide for the Fusion Client*

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 16.0 Cumulative Fixed Issues (Doc ID 2202682.1)

This document details the fixed issues and defects for all RPAS patch releases prior to and including the current release for the 16.0 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.

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 Predictive Application Server Release Notes, Release 16.0.2