Oracle® Retail Predictive Application Server

Release Notes

Release 15.0.1

May 2016

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.

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.

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 wb -force

or

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

Noteworthy Defect Fixes

The following noteworthy defect fixes are included in RPAS 15.0.1:

Affected Component	Fixed Issue/Defect	Defect Number
Classic Client	When there were collapsed positions in the right-hand pane of a wizard and some other position was selected to be removed, the collapsed positions were also getting removed even though they were not selected for removal. This is fixed.	22473498
Config Tools	For picklist measures with workbook-level overrides, translation placeholders were not being generated by the Configuration Tools. This oversight is addressed. In addition, all translations for overridden properties are contained in the file r_measlabel.ovr, unlike normal picklist translations, which are contained in r_measpicklist.ovr.	21028646
Config Tools	Translation resources generated from the configuration (such as measure labels) were not being loaded into the domain at domain build time. This is addressed.	21139587
Config Tools	The task list was not updating to reflect the deletion of elements which had previously been flagged as invalid. This resulted in task list errors on elements that did not exist in the configuration. This is resolved.	21480855, 22081159
Config Tools	Task list errors describing problems with an argument branch did not correctly identify which argument branch contained the error. The problematic argument branch is now specified in the error.	21804858
Config Tools	The Workbook tool did not provide appropriate feedback if the remove position query operation was selected when there was no selected position query. The tool now prompts the user to select a position query before attempting the delete operation.	21882496
Config Tools	Closing and reopening an admin task file in the admin task tool was resulting in some task list errors for the file being lost. This is corrected.	21896866
Config 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 being added to the domain. This is fixed.	22287513
Config Tools	In task list selection, error messages relating invalid rule sets, rule groups, and rules were not informative enough. This is addressed.	22467781
Config Tools	Configuration Tool was not properly loading aspects of some configurations created in older versions of the Configuration Tools. This was resulting in the inability to load translation files created from the configuration at domain build and/or patch time. This is resolved.	22378965
Config Tools	An error in the rule validation system used by the Configuration Tools was resulting in rules that contained the resize or resizeProfile functions being marked as invalid when they were, in fact, valid. This error is corrected.	22598713

Affected Component	Fixed Issue/Defect	Defect Number
Config Tools	A change to the way in which focus traversal keys are supported in the Measure Tool resulted in a condition where it was not possible to enter a string longer than a single character in the Measure Tables, if the cell being edited was navigated to using key presses and not the mouse. Upon typing a second keystroke, the second character would replace the first instead of being appended to it. This is addressed.	22951645
Config Tools	The use of relative paths in the arguments to execplugintask.sh could result in a condition where the configuration was saved below the resources subdirectory of RIDE_HOME instead of below the current working directory. This is resolved.	22952088
Config Tools, rpasConfigMgr	Using rpasConfigMgr's -diff option to compare two domain configs used to result in incorrect comparison results. This is fixed.	22308990
Domain Utilities	Many domain utilities did not use the RPAS_LOG_LEVEL environment variable when it was set and when the -loglevel argument was not passed. This is addressed.	22374000
Domain Utilities, dimensionRegistry	When two positions had the same name, dimensionRegistry's modifyPhysical option modified the names of both the positions when the name was being changed for only one of them. This is addressed by preventing two or more positions from having the same name.	22610622
Domain Utilities, exportMeasure	When the precision (0.01) option was used for a measure while exporting it, incorrect values of the measure were getting exported. Any measure value greater than 21474836.47 was getting exported as 21474836.47. This is corrected.	22607533
Domain Utilities, exportMeasure	Exporting Forced Non-Higher Base Intersection (FNHBI) measures failed. This is fixed.	22609645
Domain Utilities, loadHier	When using loadHier to remove a position on an integrated domain, if the removal included a complete removal of a local domain, loadHier failed with an ORA-01400 error. This is resolved.	23002422
Domain Utilities, loadHier	When an existing directory that was not already part of local domains list was specified in the -defaultDomain argument of loadHier, all local domains got deleted. A validation is now added so that an error is thrown if an existing directory, that is not already part of local domains, is given in -defaultDomain.	23095409
Domain Utilities, regMeasure	Providing an absolute path to the domain when running the regMeasure utility had the potential to subsequently create multiple issues (for example, when running copyDomain). This is fixed by converting an absolute domain path to a relative path before registering a measure.	23002589
Domain Utilities, upgradeDomain	upgradeDomain used to fail if a user name had an uppercase letter in it. This is corrected by using the user ID instead of the user name since user IDs are always in lower case.	23042811
Domain Utilities, wbmgr	An unhelpful exception was encountered when wbmgr was used with the -print argument for a corrupted workbook. This is resolved and, in such cases, the user is shown a message that the workbook is corrupted.	22386363

Affected Component	Fixed Issue/Defect	Defect Number
Fusion Client, Administration	In Fusion Client, the locked user was not shown an appropriate error message. To correct this issue, a proper message is shown.	22891548
Fusion Client, Alerts	Users were seeing a null pointer exception when the user did not have access to the alert manager workbooks in Fusion Client. Additional checks are added to fix the issue.	23097981
Fusion Client, Charting	When editing a node on the treemap (size or color), the edits were not reflected in the pivot as soon as ok was clicked on the chart editor. The issue is fixed.	22537557
Fusion Client, Charting	In a bubble chart, it was possible for the chart to display spurious values that were not reflective of the underlying data. This usually happened when attempting to chart a measure containing one or more values with a large number of digits. If observed, this issue can be controlled by adjusting a new parameter, maxIntegerDigits, in the configuration file GraphConfig.xml.	22705950
Fusion Client, Consumer Decision Tree Editor	The CDT Editor in Fusion Client is fixed so that the child node created with all selected attribute names and values and all options is clearly visible.	23045446
Fusion Client, Cut, Copy, and Paste External	When pasting values from external, Fusion Client was not honoring the CCP.MAX.SELECTION.SIZE limit. This issue is addressed.	22507597
Fusion Client, Drag and Drop	On an iPad only, limitations of the tablet UI made it difficult to select multiple tiles for drag and drop. Checkboxes have been added to each tile header that show up on an iPad. These checkboxes are used to specify a multiple tile selection, which can then be dragged and dropped as a unit.	21774850
Fusion Client, Drag and Drop	On an iPad only, dragging and dropping tiles from one worksheet to another would occasionally not work. The problem underlying this behavior is fixed, and drag and drop should work as expected on the iPad.	21788641
Fusion Client, Export to Excel	Exporting large volumes of data (more than 1,048,576 rows or 16,384 columns) to Microsoft Excel resulted in a file that could not be opened by Excel. This limit is removed; now volumes exceeding the limits are continued on a new Excel workbook tab.	22173474
Fusion Client, Format UI	In Fusion Client, the exported Excel spreadsheet had incorrect background colors and font styles. This is fixed so that the background color of a measure remains the same as other measures, when only the header/cell style is applied.	22863496
Fusion Client, Formatting	Changing the configured format for the date attribute measure was not reflected in Fusion Client. This manifested in Fusion Client as a dimension with a date-type attribute displaying, for example, "Thu Jul 30 00:00:00 CEST 2015" rather than the desired "30/07/2015."	22645809
Fusion Client, Measure Profiles	Users got a division by zero error when opening a workbook, where some formatting/style was saved for the user but missing in the domain. The issue is fixed. If the measures in the profile do not match with the measures in the domain, measures are then taken from the available list.	22688778

Affected Component	Fixed Issue/Defect	Defect Number
Fusion Client, Measure Profiles	Users were seeing out of range errors in Fusion Client for measures that had style as a percentage and a range defined as 0 to 1 with a scale factor, when a user entered a value within 1 to 100 which is an allowed value for a percentage measure with a range of 0 to 1. Additional checks are added to fix this issue.	23025742
Fusion Client, Mobile	Fusion Client is enhanced to handle the situation for iPad where the contents of the detail pop-up were scrolled and overflowed outside the window size. The formatting is fixed.	23037596
Fusion Client, Online Help	Online help was not displaying properly when using Microsoft Internet Explorer versions 9 through 11. Online help now displays properly in these browsers.	22099613
Fusion Client, Pivot Table	Fusion Client was unable to recover when a measure was inserted as the JSON string of measure data that was not updated. Additional safeguards are introduced on the insertion of a measure so that the measure data and base measure map JSON strings are updated.	22467234
Fusion Client, Show/Hide Measure Positions	Fusion Client was not handling add/addAll cases for the tree shuttle component of the dimension pop-up. The code is enhanced to fix this issue.	22608438
Fusion Client, Single Hierarchy Select	Fusion Client is enhanced to display the picklist range label for the NA value instead of number.	22866487
Fusion Client, Tiled View	Due to a client refresh issue, cells were not being properly locked due to protection processing in the tiled view (only). Even though a measure was marked as protected, it was editable. This issue is fixed.	22222266
Fusion Client, View/Manage Images Dialog	In the view/manage images dialog, Fusion Client was not validating if the actual file path entered was correct. Additional checks are added to validate and warn the user.	22537879
Fusion Client, Workbook	Users were unable to save a workbook with language accented characters in the workbook name when the browser language was Spanish. An invalid format error was encountered. The issue is fixed to handle regular expressions for language-specific characters.	22460749
Fusion Client, Workbook	Users saw inconsistent behavior on launching Fusion Client when using a desktop in a clustered setup with a managed server. The application rendered like it would appear for a tablet device. The issue is fixed.	22465583
Fusion Client, Worksheet PQD	In Fusion Client, if the filtered worksheet view had a dimension with AutoPQD enabled, the contents were not getting filtered until the user clicked the Next button on the page edge. A check is added that takes care of the case so that the position filtering is corrected.	22311285
Fusion Client, Worksheet PQD	In Fusion Client, switching on Automatically Evaluate Position Queries was executing the position queries, but failed to update the results for the custom menu fired. The issue is fixed.	22645622

Affected Component	Fixed Issue/Defect	Defect Number
Hybrid Storage Architecture	Shared measures were not getting refreshed at the aggregate level. This occurred because the base version and aggregate version stayed at the same value after a refresh and hence the support arrays were not getting refreshed. This is resolved.	22652944
Hybrid Storage Architecture	The timeshift function was not working correctly for shared measures. This is resolved.	22653128
Hybrid Storage Architecture	When the timestamp header was turned on in a server, the output of rdmMgr -listProperties had a timestamp in the beginning that was not expected by the prepareRDM script. prepareRDM script is updated so that it can handle the output of rdmMgr -listProperties irrespective of whether the timestamp header is on or off.	22761802
Hybrid Storage Architecture	Renaming a fact group using patchRDM and then building a workbook containing a measure from the renamed factgroup used to throw the error "table or view does not exist." This is corrected.	22782504
Hybrid Storage Architecture	Shared measures configured with a dimension of base intersection in an alternate hierarchy were not getting committed. This is addressed.	22811043
Hybrid Storage Architecture	The RPAS Data Mart (RDM) repository's schema creation used to fail without explanation if any schema name specified in schemaInfo.xml exceeded 26 characters. An error message is now shown if any schema name exceeds 26 characters.	22889680
Hybrid Storage Architecture	If all the schemas shared a common tablespace, quotas on tablespaces were not getting correctly granted. This occurred because some of the quota was being used to support partition exchange. This is fixed by doing away with a separate quota for partition exchanges in cases where the tablespace is common for all schemas.	22889946
Hybrid Storage Architecture	The use of materialized views in RDM caused failures in workbook commit and transferFactData because some materialized views were not getting refreshed as expected. This is addressed by replacing materialized views with regular views.	23022586
Hybrid Storage Architecture, loadDimData	When the database parameter SQL92_SECURITY was set to TRUE, loadDimData failed. This occurred because SQL92_SECURITY=true requires an explicit privilege to run Select even if the user already has Insert, Update, and Delete privileges and the Select privilege was missing for the dimension translation table. This is addressed.	22745996
Hybrid Storage Architecture, loadFactData	loadFactData for shared measures gave errors when running in a Hybrid Storage Architecture (HSA) environment with RDM partitioning. This occurred because the factload user did not have the desired quota on data_mart tablespace and vice-versa. This is fixed.	22560949
Hybrid Storage Architecture, loadFactData	loadFactData used to insert 0.00000, or large negative values, if the fact value (of real type) was left empty in the input file (such as the fourth fact in this record: "0000211505,50.00,10.900,,1"). This is corrected.	22808848
Hybrid Storage Architecture, patchRdm	Any change made to purgeAge in the integration configuration was not getting reflected in RDM after running patchRdm. This is now handled.	22462983

Affected Component	Fixed Issue/Defect	Defect Number
Hybrid Storage Architecture, rdmMgr	rdmMgr's -name parameter was somewhat ambiguous and seemed to indicate that the HSA Configuration name should be used while registering a domain with RDM. The usage is now updated to indicate that the name means any domain name used in the integration configuration.	22889937
Hybrid Storage Architecture, rdmPartitionMgr	rdmPartitionMgr, after running for long in a particular instance, returned an error. To resolve it, the earlier single update for re-partition is now broken into multiple smaller updates with individual commits.	23087915
Hybrid Storage Architecture, rpasInstall	rpasInstall -buildRDM allowed users to build an RDM with a partition position that did not exist in the integration configuration. An error is now shown if the RDM partition dimension specified in partitionInfo.xml does not exist in the integration configuration.	22913422
Hybrid Storage Architecture, rpasInstall	rpasInstall -buildRDM failed when a fact group was stated in different cases while describing two shared fact entries in integration.xml. In other words, the fact group was in lower case for one shared fact entry and in upper case for another shared fact entry. rpasInstall was trying to create two different tables with the same name in such cases. This is fixed by converting all fact group entries to lower case.	23121017
Hybrid Storage Architecture, upgradeRDM	RDM Utilities could have been run on an older version of RDM even when the RPAS version was a newer one. In other words, RDM Utilities could have been run without upgradeRDM being run. This is resolved by adding a check for the version of RPAS code.	22959572
Online Admin Tools	Newly created workbooks were not getting listed in the wizard pages of the Online Admin Tools Workbook Manager task unless the user logged out and logged back in again. This is fixed.	21801892
Online Admin Tools	In some of the wizard pages (for tasks such as Domain Information and Fix Domain) of the Online Admin Tools, there were text boxes that were not required. These redundant text boxes are removed.	22339234
Online Admin Tools	The Previous button used to be enabled on the first page of Online Admin Tools Submit an Admin Task wizard. This did not make any sense since there were no previous pages to go to. The Previous button in now disabled on the first page of wizard.	22967666
RPAC	The RPAC utility was case sensitive to the wizard IDs used in the .xml files. This is corrected.	22124328
RPAS Server	Building a domain failed at the measure registration stage when a label field was empty for a measure. This is corrected by replacing an empty label with an empty string.	23021268
RPAS Server, Calc Engine	In rare cases, it was possible to have the outcome of a calculation dependent on the order in which edits were made. The cause of this discrepancy has been identified and removed.	22314674
RPAS Server, Calc Engine	Workbook calculation generated incorrect values if a Left Hand Side (LHS) measure was involved with different level modifiers. This is resolved.	22385873

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Server, Calc Engine	The transition from a custom rule group to a calc rule group failed in some instances with an error that said it could not find the recalc expression for some measures. This is addressed.	22813942
RPAS Server, Mace	When a domain was integrated with RDM, mace was no longer processing rule groups in that domain. This is fixed.	23098788
RPAS Server, Translations	A previous fix allowed picklist ranges of scalar string measures to be translatable. However, the fix did not extend to using the range or the translation in a Custom Menu Message Measure. This gap is corrected.	22338121
RPAS Server, Workbook	While creating Hierarchy Maintenance or Location Maintenance workbooks, the wizards showed incorrect values for attribute measures, such as Product/Location Status, although the workbooks themselves displayed the correct values for these measures. This is addressed.	22343930
RPAS Server, Workbook	When an attribute was created from a measure that used a picklist, it did not display the item label. This is addressed.	22370771
RPAS Server, Workbook	The Workbook Limit Per Group/Template setting in the Security Administration Workbook was not limiting the number of workbooks that users belonging to specified group could create. This is now handled.	22571069
RPAS Server, Workbook	The building of the Auto workbook maintenance workbook failed. This was caused by a change in the date format of NextBuildDate between older and newer RPAS versions. This issue is fixed.	22915744
RPAS Server, Workbook	RpasTask used to core dump when an Aggregation and Spreading workbook was committed after changing some measure values. This was caused by the logging procedure encountering an empty masks vector while it was expecting a non-empty one. This is resolved.	23099881
RPAS Test Driver	When foundation.fcf contained multiple domain names, RTD_LOGON used to work only for the first domain mentioned in foundation.fcf and failed for other domains. This is now corrected.	22473531
RSC - Java Bridge API	The RPAS Simulated Client, that simulates Fusion Client, was failing if the Logon secure parameter was set to true (<logon)="" 2="" 4.="" domaindaemon="" even="" is="" issue="" or="" resolved.<="" secure="true" ssl="" started="" td="" the="" this="" was="" when="" with=""><td>22746954</td></logon>	22746954

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, Editing	When using any browser on Fusion Client in RPAS release 15.0, read-only measures become editable when another writable measure in the same row is updated. Once a commit is performed, the read-only measures regain their read-only state.	23103206

Affected Component	Known Issue/Defect	Defect Number
Fusion Client, Formatting	When viewing a worksheet in Outline mode, making all levels visible, and then saving the format, the row height changes are not retained.	23201549
Fusion Client, Installer	On Solaris (only), the Fusion Client Installer fails to run and throws a memory fault error. The installation proceeds normally for all other operating systems.	23021401
Fusion Client, Wizards	A certain combination of events can prevent a workbook from being built. This happens when attempting to build a workbook in a local domain, making some selections in the wizard, cancelling the wizard, and then attempting to build the workbook on a different local domain.	23119951

Related Documentation

For more information, see the following documents in the Oracle Retail Predictive Application Server 15.0.1 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 15.0 Cumulative Fixed Issues (Doc ID 2075633.1)

This document details the fixed issues and defects for all RPAS patch releases prior to and including the current release for the 15.0 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.

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For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

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Oracle® Retail Predictive Application Server Release Notes, Release 15.0.1

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Value-Added Reseller (VAR) Language

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