

# Oracle® Retail Predictive Application Server

Release Notes

Release 16.0.1

May 2017

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

An example of this situation is presented in bug 9680094 which was fixed in release 13.1.2.

### Chart Formats

Bugs 9297192 and 9837542, which were fixed in release 13.2, 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:

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**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 as the issue does not occur in more recent releases.

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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, Oracle Retail Predictive Application Server*

## 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 <dopath> -dimSpec rule -force
```

or

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

or

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

or

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

or

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

or

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

## Noteworthy Defect Fixes

The following noteworthy defect fixes are included in RPAS 16.0.1:

Affected Component	Fixed Issue/Defect	Defect Number
Classic Client	When a user entered NA as the measure value in Classic Client, the wrong percentage value was calculated for the % measure with a scale factor. The issue is fixed by not allowing the data value to be set to NA.	25338744
Classic Client	In Graph mode, the graph is refreshed when toggling so that the old information is destroyed.	25431986
Classic Client, Alert Management	The performance of navigating through the occurrences of alerts on Classic Client when more than one hierarchy exists in one axis is improved by considering the two hierarchy groups separately for iteration.	25776463
Classic Client, Grid Display and Edit Cells	In Classic Client, the disappearance of text entered in a writable string type measure when the cell focus changed is fixed.	25504642

<b>Affected Component</b>	<b>Fixed Issue/Defect</b>	<b>Defect Number</b>
Classic Client, Locking Positions	In Classic Client, the locking of selected positions at non-base dimensions positions was not working as expected. This is fixed by adding validation to skip dimensions that are not in the workbook context.	25561535
Config Tools, Domain Build	When plug-in labels are greater than 255 characters, an exception is thrown. rpaInstall will catch this exception, skip the label, and continue the process. At the end, it will list the skipped labels as a warning.	25049550
Config Tools, Domain Patch	The RPASCONGIFMGR utility is fixed to merge the configurations as expected when one of the configurations has a step in the taskflow without any assigned worksheets.	24340246
RPAS Server	RPAS_TCPNODEALY and FC_TCPNODEALY are set to off by default in the RPAS configuration. This enables the selection of Nagle's Algorithm based on what results in the best performance.	24490450
RPAS Server	When spreading using the Period end method, the data spreading was not working as desired. The spreading behavior is modified to exclude the inner dimension only if the CLND dimension is present in the source array's intersection.	24905229
RPAS Server	upgradeDomain did not store passwords in correct order. For example, a 13.4 user was created with password1 and on login, it was changed to password2. After an upgrade to 14.1.3 or higher version, the user could log in with password1, but not with password2. This issue is fixed.	24906235
RPAS Server	When a user switched local domains between workbook builds, an error message was shown and the workbook could not be built. This occurred because of the cached pointers used by prerange on the partition dimension. This issue is fixed.	24906569
RPAS Server	When a value disappeared from a measure range, a picklist measure displayed an ID instead of a label in the cell which was previously populated with that value. It works fine if there is at least one value in the measure range. But, if the measure range contains no values, the picklist measure does not display the saved ID. This issue is fixed.	24961393
RPAS Server	To ensure the correctness of Extended Measure Labels, sequence numbers are used to identify the extended measures.	24972033
RPAS Server	When a new ASAP commit task is submitted, a folder is created for it under the commitAsapQueue/queuing folder. But if the commitAsapQueue/queuing folder was not present, then an error would be thrown. This is fixed by creating the commitAsapQueue/queuing folder, if not present when submitting a new ASAP commit task.	24978331
RPAS Server	The Real Time Alert count showed an incorrect value in one of the corner cases. The issue is fixed by correcting the logic to calculate the hit count in that case.	25062740
RPAS Server	The Open Workbook dialog hung in the second session when the same user had an existing session that had the workbook building. This issue is fixed.	25077083

<b>Affected Component</b>	<b>Fixed Issue/Defect</b>	<b>Defect Number</b>
RPAS Server	Loadhier failed when a new partition position was added. This is fixed by adding a domain property, auto_subdom_pattern, that will assign a new partition to a new sub-domain based on pattern.	25184259
RPAS Server	Attribute Values were changing to mismatched values after performing a DPM calculate activity and clicking the Update Attribute Values and Level Splits icon. This is fixed.	25221608
RPAS Server	A cache is used to hold the result of a ranged position if a selection was not changed. This cache is disabled so that the correct positions are displayed.	25248005
RPAS Server	Cumulative percentage was not calculated as expected. This is fixed by changing CellFloat.java to preserve the exact value in order to pass it to Bridge.	25263226
RPAS Server	Copying from display-only measures was being done at the current selected level. This is changed to copy at the base level.	25438389
RPAS Server	Aggregation with methods firstpop and last pop threw an unexpected error. This is fixed by using the source array type to do cell value conversion.	25671576
RPAS Server	Copy/Paste special on the aggregated levels All-Products was not working as expected. It is fixed by changing the getlevelname() method to fetch the rollupName.	25882167
RPAS Server, Calc Engine	The performance of functions dateDiff and addPeriods was very slow. Now, caching the dimension map results in better performance.	25160227
RPAS Server, Calc Engine	MACE command performance is improved by optimizing the divide operation to run only when the numerator has a non-zero value or navalue.	25160739
RPAS Server, Domain Installation and Patching	The Multi-Language setting cannot be changed for an existing domain. If the property was changed from FALSE to TRUE and patched, rpaInstall was throwing an error instead of ignoring the property change. This is fixed so that RpaInstall ignores the Multi_Language setting when patching a domain.	24462510
RPAS Server, Domain Installation and Patching	A particular insert statement was spread across more than 2499 characters in a single line and SQLPlus did not parse this line correctly into BuildRDM/ReBuildRDM functions. This line is broken down into multiple lines to fix this issue.	24956368
RPAS Server, Utilities	A MACE issue is fixed by correcting the measure suffix array per the available instance during copyDomain's cloning.	24350240
RPAS Server, Utilities	When using the -uppercase option with exportMeasure, the position names should be converted to upper case before writing the output data file. String measure values were also being converted to upper case, but should not be. This is fixed.	24786339
RPAS Server, Utilities	The Priority Code for the ASAP Commit folders was not set up correctly. Now while purging, only the timestamp information is used, instead of priority and timestamp.	25035874
RPAS Server, Utilities	In reconfigGlobalDomainPartitions, while adding new positions using the input file reconfigpartdim.xml, if the user-defined dimension that rolls up to the partition dimension existed, an exception was thrown. This is fixed.	25204278

<b>Affected Component</b>	<b>Fixed Issue/Defect</b>	<b>Defect Number</b>
RPAS Server, Utilities	loadHier -forceNAConsistency was not updated correctly in domains when the array's navalue changed. This is fixed.	25364725
RPAS Server, Utilities	When an HBI measure had an HBI clear intersection, the clear operation did not propagate properly to other local domains. This issue is fixed.	25497367
RPAS Server, Utilities	While loading a fixed width file, loadhier checks the domain property fixedwidth_utf8. If it is set to true, the character count is used to get the start position and width of fields. If it is set to false or not set, the byte count is used.	25732730
RPAS Server, Wizard	Fusion Client receives sub domains as ldom0, ldom1, and so on, instead of as domainidx_0, domainidx_1, and so on. To fix this issue, in MultiSolutionBundle.properties, use ldom0, ldom1, and so on.	25561334
RPAS Server, Workbook Build	Security Administration is an RPAS Template Workbook. If the dimension attribute being brought into the workbook was a picklist measure with rangemeas which is a measure, then the rangemeas measure was not selected into the workbook.  If the dimension attribute being brought into the workbook is a picklist measure with rangemeas, then the rangemeas measure is also brought in automatically.	24949340
RPAS Server, Workbook Build	As issue was caused by a user not having access to any positions of a dimension. A fix is made to throw the correct error message immediately if the user does not have access to any positions of a dimension which is part of the workbook intersection.	24971139
RPAS Server, Workbook Open	In the case of dynamic picklists, a restriction is added to ensure that the NA value is actually part of the picklist values. If the NA value does not match any of the picklist values, then one of the picklist values is used as the NA value.	25290795
RPAS Enterprise Engine	Loadhier and loadmeasure utilities now include the capability of reporting stats with the count of records loaded and rejected.	25386513
RPAS Enterprise Engine	A new design on labeling domains to have a fixed association between a label and a local domain is provided.	25408196
Hybrid Storage Architecture	In integrated domains, an conditional commit is used to commit measures into the database. The expectation is to commit values when the commit Boolean is checked and not commit values if the commit Boolean is unchecked. But this did not work correctly if the NA value was TRUE for the mask measure. This issue is fixed.	24941707
Hybrid Storage Architecture	When removing a fact from a fact group, a temporary table is created and insert is used to store the data. This insert failed only in rare occasions such as a space issue. After resolving the space issues, rerunning patchRDM threw an error. This error is fixed by adding code to remove the temporary table, if it already exists.	25031972
Fusion Client, ADF/Fusion UI	When two views were displayed side by side with the same axes and intersections but different measures, editing a cell in one view affected the other when both views were visible. This issue is fixed.	25339454

<b>Affected Component</b>	<b>Fixed Issue/Defect</b>	<b>Defect Number</b>
Fusion Client, Alert Management	In order to fix the issue of additional alerts showing up in the workbook, only active and optional alerts selected are inserted into the respective worksheets and the rest of the alerts are filtered out.	25265762
Fusion Client, Alert Management	Alerts at sub-levels were not sorted along with the parent alert levels. The issue is fixed by using a map to retain the child list instead of rebuilding every time.	25562741
Fusion Client, Alert Workbook	The auto workbook build was missing the alert worksheet selection window at the end. This is fixed.	25438751
Fusion Client, Alerts	In a specific scenario, real time alerts were not triggered. This issue is fixed.	24835842
Fusion Client, Cut Copy and Paste - External	Copying a picklist measure column to another measure column was not working as expected. This is fixed.	25245277
Fusion Client, Display and Sort Attributes	The Label attribute for sort was returned when DPM was used. This is fixed	25094884
Fusion Client, Dynamic Attributes	The editing dynamic attribute exception is fixed by displaying a warning message to the user for selecting the dimension level for calendar.	25644834
Fusion Client, Edit, Revert Cell, Undo	A measure with a percent style was rounded to three decimal places even when a higher precision was given. This is fixed.	25081674
Fusion Client, Edit, Revert Cell, Undo	A real measure could not be populated in any locale other than the English locale. This is fixed by adding special characters in language support.	25545155
Fusion Client, Find	When a measure was searched through find, it was highlighted under a hidden list even after the measure was moved from the hidden list to visible. This issue is fixed.	25187495
Fusion Client, Format	The font color change for a read-only measure was not respected. This is fixed.	25514454
Fusion Client, Format	Choosing exception formatting with changing text color did not work. This is fixed.	25803549
Fusion Client, Formatting	Save format was not working as expected if there was more than one hierarchy in the x-axis. This issue is fixed.	25469006
Fusion Client, Formatting	The scale factor is now honored in the case of % measures.	25836571
Fusion Client, Grid Display	In a specific scenario, after using the custom menu, a blank grid was displayed. This issue is fixed.	25060044
Fusion Client, Grid Edit Cells	When a single cell was edited in a workbook, after running calculate, the cell was still italicized. This is fixed.	25305610
Fusion Client, Grid Edit Cells	While running the calculation and using the keyboard, the focus moved to the Oracle pane. This is fixed.	25746781
Fusion Client, Grid Scrolling and Fetch	When the mouse was clicked and dragged down to select multiple positions, all the selected items were not being moved to the correct tree. This is fixed.	23512153
Fusion Client, Grid Scrolling and Fetch	The hierarchy position was missing when reopening the hierarchy after scroll down and pressing ok. This is fixed.	25094925

<b>Affected Component</b>	<b>Fixed Issue/Defect</b>	<b>Defect Number</b>
Fusion Client, Installer	The default weblogic-application.xml in rpas.ear is modified to use the merge option instead of overwrite.	25505518
Fusion Client, Locking - Measures	The protection processing data on unlock is updated to fix the error message that was occurring when the calc rule was run with a locked cell and later unlocked and edited.	25450475
Fusion Client, Miscellaneous	After exceeding the user session limit, the proper exception message is displayed.	25212954
Fusion Client, Miscellaneous	When creating a new workbook in a domain containing multiple local domains, the first step is Select Domain. The "In domain" box was not the same size as the "Available" box. The issue is fixed by setting the size of boxes the same.	25245057
Fusion Client, Miscellaneous	The need to bounce the WebLogic server after the taskflow changed when the solution was undeployed is fixed.	25328106
Fusion Client, Performance Problem	Navigation between cells using the Ctrl and arrow keys performance is improved.	25672060
Fusion Client, Print Export	When a worksheet was exported to Excel, the attribute labels were missing. This issue is fixed.	25096115
Fusion Client, Print Export	Export to Excel was failing with a corrupted Excel file. This is fixed.	25564715
Fusion Client, Print Export	The Export to Excel feature is enhanced by adding the multi-select drop down which holds the dimension list for row and column edges along with ability to select any/all/none levels of those dimensions.	25571946
Fusion Client, Print Export	Negative values were not exported to Excel correctly when Export to Excel was performed. This is fixed.	25682190
Fusion Client, Print Export	Export to Excel was not working as expected when the worksheet was in block view. This is fixed.	25698283
Fusion Client, Save Hide Meas Positions	The Save profile in a measure's show and hide menu did not update the selected profile list. This is fixed.	25682271
Fusion Client, Show/Save Images	When a repository was not configured, the view/manage images were not behaving as expected. This is fixed.	25164566
Fusion Client, Single Hierarchy Select	Single hierarchy select was not working as expected when setting a value back to NA. This is fixed.	25405617
Fusion Client, Single Hierarchy Select	When selecting a value from the search dialog box of a measure with a single select hierarchy, it remained open after clicking ok in a specific scenario. This is fixed.	25407859
Fusion Client, Sorting	Sorting was not retained when the user switched the tiles across edges. This is fixed by not clearing the sort definition during the pivot operation.	25840772
Fusion Client, Workbook Calc	Changes in the measure range did not reflect to a picklist at once. This issue is fixed.	24714059
Fusion Client, Workbook Calc	Users were able to edit cells in a workbook while the calculation was running. That caused protection inconsistencies. This is fixed.	25473018



<b>Affected Component</b>	<b>Fixed Issue/Defect</b>	<b>Defect Number</b>
Fusion Client, Workbook Calc	A cell remained in Italic for a measure that used a thousand separator when entered with a comma separator. This is fixed.	25699206
Fusion Client, Workbook Open	When a user tries to create a workbook that exceeds the workbook limitation number, an error message is now displayed.	25682093
Fusion Client, Workbook Save	Users were not able to insert a floating value greater than 1. This is fixed.	25679671
Fusion Client, Workbook Save	RPAS failed to autosave newly created unsaved workbooks if the user clicked the browser back button. This is fixed.	25873859
Other	The default log level of the -recordLogLevel parameter is changed from warning to information. Also, a fix is made in places where the -recordLogLevel parameter was not being respected.	24957664
Other	A fix is made to use the correct range of dimension positions for the Lower Bound settings.	24971831

## Known Issues

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

<b>Affected Component</b>	<b>Known Issue/Defect</b>	<b>Defect Number</b>
Classic Client	Exporting the worksheet to file is slow when more than one hierarchy exists in both the X and Y axis.	25778491
Config Tools	In a specific case, while comparing the configurations using rpassconfigmgr.sh, an error occurs.	24317800
Config Tools	RPAS configuration manager has an issue with load configurations when running on a Linux system.	24599907
Config Tools	The RPAS Configuration Manager is encountering an exception when working with configurations that contain more than one measure component with a given name across multiple solutions.	24803928
Config Tools	Function Manager utility has a validation problem with the RdfFunctions library.	24912747
Config Tools	Keyboard Home/End keys do not navigate within the measure label/description cell.	25064952
Server	Standardize the sorting algorithm across attribute and simple data sort.	21170649
Server	Percentage measures are not displayed with a % symbol along with the value in a workbook.	25606215
Server	In the case of invalid data formats, LoadMeasure does not give the correct message.	25636072
Server, Formats	In a corner case scenario, save format not working as expected with PATCHINSTALL.	25789934

## Related Documentation

For more information, see the following document in the Oracle Retail Predictive Application Server 16.0.1 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 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

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#### **Value-Added Reseller (VAR) Language**

##### **Oracle Retail VAR Applications**

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