

Oracle® Retail Predictive Application Server

Release Notes

Release 14.0.3

June 2015

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.

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
```

Noteworthy Defect Fixes

The following noteworthy defect fixes are included in RPAS 14.0.3:

Affected Component	Fixed Issue/Defect	Defect Number
Classic Client	When a user selected a region of cells to copy and that selection scrolled off the screen, only the visible part of the selection was actually copied to the clipboard. This is corrected.	20532890
Classic Client	Attempting to sort a column of dates by clicking on the column header could cause an exception to be thrown. This happened when the date measure had a special value NULL type. This is corrected.	20631170
Classic Client	RPAS now warns, but does not forbid, users from saving a workbook with an existing name.	20638146
Classic Client, Charting	In most cases, users are able to drag points around on a measure in the grid view and have the results saved to the underlying measure. This fix addresses an infrequent scenario where this was not the case.	20659651

Affected Component	Fixed Issue/Defect	Defect Number
Config Tools	There are many updates and improvements with Java 8. Some of these affect how certain things within the Configuration Tools are handled. The Configuration Tools are updated to work with both Java 7 and Java 8.	20421040
Config Tools	In some cases, the Configuration Tools did not recognize a copy of a rule (to a new rule group) as an edit, so the changes were not retained on a save. This is fixed.	20521608
Config Tools	Running the rules validation in Configuration Tools could sometimes cause a valid rule to be flagged as invalid. This is corrected.	20611667
Config Tools	Under some conditions, using the filter in the column header of the measure interface could produce inaccurate results. This is corrected.	20695377
Config Tools	Even though the Configuration Tools allow rule names to include an underscore ("_"), the filter on the Add Existing Rules popup did not allow users to actually use that character to search for existing rules. This is corrected.	21035338
Config Tools	Trying to load a configuration in the Configuration Tools caused an error when a position query in the solution was based on a measure that existed in a separate solution, and that measure had not been imported from the first solution. This condition no longer causes an error, and loads correctly allowing the underlying cause to be addressed.	21135626
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.	21157252
Fusion Client	Cells in a pivot table can potentially have more than one style that applies. The order in which these styles are evaluated to be applied was sometimes obscuring information important to the user. The evaluation of the order in which styles are applied is adjusted.	18898454
Fusion Client	In a wizard, selecting all calendar positions prior to the elapsed threshold incorrectly resulted in data for that time frame being editable. This is no longer the case.	20229634
Fusion Client	In some cases, it was possible to get Fusion Client into a nonresponsive state by editing a cell, clicking Enter, and then clicking Calculate. This is no longer possible.	20306848
Fusion Client	Opening a workbook at the global level that was intended to be used in a local domain could sometimes cause an initialization error in the Fusion Client at workbook build time. The conditions that lead to this error are now checked for and handled.	20343412
Fusion Client	In a workbook with multiple views and level splits, the edit dialog did not keep track of what splits were applied to which views. This is corrected.	20355322

Affected Component	Fixed Issue/Defect	Defect Number
Fusion Client	In a workbook wizard, the Find Next arrow was forgetting its place, preventing further searching for a value. This is corrected.	20501382
Fusion Client	The wizard for the Measure Analysis workbook was incorrectly remembering the user's selections for measures. This is fixed.	20554415
Fusion Client	Previously, when dealing with a picklist-type measure, it was not clear whether the user was saving the picklist NA value or the configured special value. This is clarified to be the NA value.	20557438
Fusion Client	A measure with aggState read only could still appear as editable on a worksheet with a base intersection higher than that of the measure. Fusion Client now detects this case and correctly does not allow editing of the measure in the workbook.	20604671
Fusion Client	A very particular set of steps could cause a Java exception in Microsoft Internet Explorer 10 when resizing a row or column. The underlying code gap is closed.	20709662
Fusion Client	When adding a position through Dynamic Position Maintenance (DPM), the code was incorrectly clearing associated formatting information. The formatting is now retained.	20778987
Fusion Client	When a measure has a set of picklist values defined by another measure with a special value defined, it was often showing blank instead of the selected option or the assigned special value. This behavior is updated to show the selected option, or if that is the null value, show the measure's special value.	20894926
Fusion Client	In the ant.install.properties file used for Fusion Client installation, if the /logs and /tmp directories were specified to be the same directory, the install failed. The installer now checks for this condition and warns the user when it is detected.	20989505
Fusion Client	In the dimension popup boxes on a worksheet, the validation code was being called repeatedly when the user clicked Ok or Apply. This resulted in the same warning being displayed multiple times to the user. The code now only calls the validation code once in this circumstance.	21088904
Fusion Client	In the dimension popup box, making changes in the Attributes and Sort tab and clicking Apply resulted in attributes, selected to be visible attributes, not actually being visible. This is fixed.	21155400
RPAS Installer	This issue is a follow-on to the Config Tools fixed defect 21157252. It addresses a fix for an issue found during testing in another part of the product.	21263912
RPAS Server	References to extended measures could persist in saved formats even after the extended measures had been deleted. This resulted in the extended measures still being available in the workbook. Patching now updates the saved formats to match the actual extended measure definitions.	20103069

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Server	The domain utility copyDomain was running instances of mapData sequentially, even with the maxProcesses parameter set greater than one. Other sub-processes invoked by copyDomain were running in parallel. With this fix, mapData is executed in parallel as expected.	20431817
RPAS Server	Running copyDomain with the -skipInput or -clone parameter did not create either the input or output directories in the destination domain. This might have caused problems when attempting to run batch on the cloned domain. The copyDomain utility is updated to create the input, input/processed, and output directories in the destination domain if they do not already exist.	20517437
RPAS Server	Due to the discovery of vulnerabilities, support for several SSL protocols is discontinued. Updating to Java 7 update 75 or later is also strongly recommended.	20531711
RPAS Server	Attempting to sort a column of dates by clicking on the column header could cause an exception to be thrown. This happened when the date measure had a special value NULL type. This is corrected.	20567775
RPAS Server	The wbmgr utility was interpreting a supplied value as a user name for the -list argument, but as a user ID (internal RPAS user identifier) for the -remove argument. This was resulting in inconsistent and confusing behavior in the utility. This is corrected to be consistent in interpreting the supplied value as a user name.	20616541
RPAS Server	A new environment variable, RPAS_ALERTNAVIGATIONTHRESHOLD, is added to specify the override for the default threshold in the alertMgr utility. This should help with some usability issues with alertMgr.	20866174
RPAS Server	In some cases, reclassing part of the hierarchy from one local domain to another could result in the loss of some measure data. This is corrected.	20926427
RPAS Server	In some cases, reclassifying positions was running much more slowly than expected. The speed of this operation is sensitive to the selection of the iteration method done by the code. With this fix, the formula that controls the selection of the iteration method is tuned.	21217258
RPAS Server	The regMeasure utility was not respecting the environment variable RPAS_PROCESSES, and was instead running serially over each local domain. This could result in a performance hit when dealing with a significant number of local domains. RPAS_PROCESSES is now utilized by regMeasure.	21235517
RPAS Server, Alert Manager	A new environment variable is added to allow more control over the alert navigation threshold in the Alert Manager.	20866185

Affected Component	Fixed Issue/Defect	Defect Number
RPAS Server, Classic Client	When adding a DPM position in the Classic Client, the system auto-advanced to the next DPM position when the user clicked Apply. If the user subsequently clicked OK, two positions were created. This behavior is revised so that the dialog does not auto-advance to the next DPM position.	20644341
RPAS Server, Formatting	Users may occasionally have experienced a style format exception when trying to open a saved workbook. This was due to some style elements being saved with inconsistent names. This should no longer occur.	21129787
RPAS Server, Mace	Occasionally, running a rule group in a local domain would fail, while running each expression in the rule group individually would succeed. This was due to some array metadata being out of date. This is corrected.	20702363
RPAS Server, Mace	Mace was sometimes reporting a failed rule group evaluation due to being unable to remove directories used in a calculation.	21092115
RPAS Server, Mace	In some cases where an expression contained a javaexpression, running that expression in mace could succeed while running a rule that contained that expression might fail. This was because of slight variations in how RPAS managed the locking of the measure arrays involved. The locking strategies are updated to allow these types of expressions to run regardless of context.	21104972
RPAS Server, Rules	The attribute function was sometimes calculating an incorrect value at an aggregate level. This calculation is adjusted to give the correct value in this case.	21065197

Known Issues

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

Known Issue/Defect	Defect Number
The number of rows selected is truncated when more than three digits are entered in the Fusion Client wizard. This requires an ADF fix.	19149826
Row misalignment occurs after scrolling with a browser zoom greater than 125%. This requires an ADF fix.	19501266
Users are not able to move tiles without an error occurring. A workaround is available, but the issue is still being investigated.	20992568

Related Documentation

For more information, see the following documents in the Oracle Retail Predictive Application Server 14.0.3 documentation set:

- *Oracle Retail Predictive Application Server Administration Guide for the Classic Client*
- *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 14.0.3 Cumulative Fixed Issues (Doc ID 1663326.1)

This document details the fixed issues and defects for all RPAS patch releases prior to and including the current release for the 14.0 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.

Copyright © 2015, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Value-Added Reseller (VAR) Language

Oracle Retail VAR Applications

The following restrictions and provisions only apply to the programs referred to in this section and licensed to you. You acknowledge that the programs may contain third party software (VAR applications) licensed to Oracle. Depending upon your product and its version number, the VAR applications may include:

- (i) the **MicroStrategy** Components developed and licensed by MicroStrategy Services Corporation (MicroStrategy) of McLean, Virginia to Oracle and imbedded in the MicroStrategy for Oracle Retail Data Warehouse and MicroStrategy for Oracle Retail Planning & Optimization applications.
- (ii) the **Wavelink** component developed and licensed by Wavelink Corporation (Wavelink) of Kirkland, Washington, to Oracle and imbedded in Oracle Retail Mobile Store Inventory Management.
- (iii) the software component known as **Access Via™** licensed by Access Via of Seattle, Washington, and imbedded in Oracle Retail Signs and Oracle Retail Labels and Tags.
- (iv) the software component known as **Adobe Flex™** licensed by Adobe Systems Incorporated of San Jose, California, and imbedded in Oracle Retail Promotion Planning & Optimization application.

You acknowledge and confirm that Oracle grants you use of only the object code of the VAR Applications. Oracle will not deliver source code to the VAR Applications to you. Notwithstanding any other term or condition of the agreement and this ordering document, you shall not cause or permit alteration of any VAR Applications. For purposes of this section, "alteration" refers to all alterations, translations, upgrades, enhancements, customizations or modifications of all or any portion of the VAR Applications including all reconfigurations, reassembly or reverse assembly, re-engineering or reverse engineering and recompilations or reverse compilations of the VAR Applications or any derivatives of the VAR Applications. You acknowledge that it shall be a breach of the agreement to utilize the relationship, and/or confidential information of the VAR Applications for purposes of competitive discovery.

The VAR Applications contain trade secrets of Oracle and Oracle's licensors and Customer shall not attempt, cause, or permit the alteration, decompilation, reverse engineering, disassembly or other reduction of the VAR Applications to a human perceivable form. Oracle reserves the right to replace, with functional equivalent software, any of the VAR Applications in future releases of the applicable program.