

# Oracle® Retail Predictive Application Server

Release Notes

Release 13.0.4.20

January 2010

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This document highlights the major changes for Oracle Retail Predictive Application Server (RPAS) Release 13.0.4.20.

## Packaging and Customer Support Considerations

This section addresses the unique characteristics of the RPAS 13.0.4.20 hot fix.

The initial RPAS 13.0.4 release occurred in July 2009. This release is a hot fix to RPAS 13.0.4, and includes numerous enhancements and defect fixes.

As described in the [Functional Enhancements](#) and the [Technical Enhancement](#) sections in this document, both the RPAS Fusion Client and RPAS Classic Client are packaged with 13.0.4.20. They are defined as follows:

- RPAS Classic Client: A Windows-based thick client that allows users to communicate with the RPAS server.
- RPAS Fusion Client: A Web-based rich client developed using the latest Oracle Application Development Framework (ADF). The Fusion Client provides an enhanced user experience for communicating with the RPAS server.

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**Note:** It is not necessary to upgrade to the Fusion Client as a result of this release. Users can continue to use the Classic Client.

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## Hardware and Software Requirements

See the *RPAS Installation Guide* and *RPAS Installation Guide for the Fusion Client* for the hardware and software requirements.

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**Note:** The Fusion Client and the Classic Client each have its own installation guide. The Fusion Client installation guide is called *RPAS Installation Guide for the Fusion Client*. The Classic Client guide is called simply the *RPAS Installation Guide*, which is a newer version of the installation guides from previous RPAS releases.

See the applicable installation guide for hardware and software requirements.

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## Customer Options

Customers upgrading to 13.0.4.20 have two options for upgrading: apply the hot fix and continue using the Classic Client or apply the hot fix and begin using the Fusion Client. Note that the RPAS Fusion Client does not support non-English languages. Customers who need to use languages other than English must use the Classic Client.

Detailed instructions for these two options can be found in the *RPAS Installation Guide* and the *RPAS Installation Guide for the Fusion Client*.

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**Note:** Customers can continue to use the Classic Client as well as the Fusion Client, but Oracle Retail does not recommend that customers work on the same workbooks using both clients.

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### Option 1: Classic Client

Install RPAS 13.0.4.20 and continue using the RPAS Classic Client.

1. Ensure you are running an RpasInstaller installed RPAS 13.0 or a 13.0.x patch.
2. Apply the RPAS 13.0.4.20 hot fix by extracting the code from the zip file that is typically associated with your platform (for example, ARPOplatform-13.0.4.20.sun.tar.zip).

### Option 2: Fusion Client

Install RPAS 13.0.4.20 and begin using the RPAS Fusion Client.

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**Note:** The RPAS Fusion Client is only certified on AIX and Internet Explorer 7. See the *RPAS Installation Guide for the Fusion Client* for more requirements.

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1. Ensure you are running an RpasInstaller installed RPAS 13.0 or a 13.0.x patch.
2. Apply the RPAS 13.0.4.20 hot fix by extracting the code from the AIX zip file.
3. Install WebLogic 10.3.2 and the ADF extension files on an AIX server.
4. Unzip the FusionClient-13.0.4.20.zip file that is contained in the root of the package zip file you downloaded from My Oracle Support.

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**Note:** An important aspect of patching is upgrading the existing RPAS domain to be compatible with the most recent patch that has been applied. This can be done with the RPAS utility upgradeDomain.

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## Customer Support

When logging a defect in My Oracle Support, the following components are available for RPAS:

- RPAS Client - RPASC
- RPAS Config Tools - RPASCT
- RPAS Fusion Client - RPASF
- RPAS Server - RPASS
- Others - OTHER

Use the RPAS Client - RPASC component when logging defects against the RPAS Classic Client.

Use the RPAS Fusion Client - RPASF component when logging defects against the RPAS Fusion Client.

## Important Steps to Address RMS-RPAS/RDF/MFP Integration

This section describes important steps to address the RMS-RPAS/RDF/MFP integration.

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**Note:** The 13.0.4.20 release of Oracle Retail Merchandise Financial Planning (MFP) introduces Oracle Retail Merchandising System (RMS) integration. For more information about that integration, see the 13.0.4.20 *MFP Release Notes* and the *MFP Operations Guide*.

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## Change of Class and Subclass Naming

Oracle Retail Merchandising System (RMS) sends hierarchy files to Oracle Retail Demand Forecasting (RDF) and Oracle Retail Merchandise Financial Planning (MFP). RMS ensures that a class is unique to only its department and a subclass is unique to only its own class. In other words, Dept10 and Dept 20 both can contain Class 100. However, within RPAS, unless class names are unique across the domain, it results in a multi-parent problem. Until this release, RDF and MFP tried to ensure uniqueness by concatenation of positions as follows:

- RDF/MFP Class = RMS Dept + RMS Class
- RDF/MFP Subclass = RMS Dept + RMS Class + RMS Subclass

However, this can result in a multi-parent problem. For example:

RMS Department	RMS Class	RPAS Class
10	110	10110
101	10	10110

In this scenario, Cls10110 rolls into both Dept10 and Dept101. This is not acceptable in any RPAS application.

## Resolution

Position names are made unique by adding an underscore. In the example above, the classes would be named Clss 10\_110 and Clss101\_10. However, when these position names are corrected and new hierarchy files are created, the existing class/subclass name no longer exists. Therefore, if the upgrade process is not specifically followed, any data that was stored at the class or subclass level (such as Clss10110 above) is erased.

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**Important:** Failure to follow these upgrade instructions could result in data loss.

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The following upgrade process needs to be followed only by the customers who:

- Use standard integration between RMS and RPAS based applications (other than AIP).
- Have stored data at class or subclass levels.
- Upgrade from a version prior to 13.0.4.18 to 13.0.4.18 or later. Those customers must apply the process described below. In the future, customers already on 13.0.4.18 or later do not need to use this process again.

### Upgrade Process

1. Point the environment variable RPAS\_HOME to the new RPAS\_HOME.
2. Run the script \$RPAS\_HOME/rfx/src/rmse\_rpas\_merchhier.ksh to generate the rmse\_rpas\_merchhier.dat file. This is how the new position names are generated.
3. Run repos.ksh with the -a n flag to produce the position rename file and run renamePositions **without** applying the changes. Examine the log file PRODrename.log for errors.
4. When ready, run the repos.ksh script without the -a y flag to apply the changes.

## Change of Position Label Widths

Fields lengths for RDF and MFP hierarchies were increased to accept wider labels from RMS. These new field lengths are currently not patchable directly in any RPAS domain. Therefore, the following upgrade process must be followed:

### Upgrade Process

All customers applying 13.0.4.18 and above should perform the steps below every time a new hot fix is applied.

1. Export the following environment variables in the environment before running the upgrade scripts.
  - UPGRADE\_HOME: This variable should point to the path of upgrade scripts where environment.ksh, updateschemafiles.ksh, updatetoolsconfiguration.ksh, and other configuration files are present.
  - RDF\_DOMAIN\_PATH: The path of RDF domain which you are going to patch. The dimension field length of this RDF domain is taken and applied to the configuration and schema files.

- `RDF_SCHEMA_DIR`: The RETL RDF schema files directory. This must be the latest release directory, which you use for patching. It points to the SCHEMA files location in the release, which you use for patching the RDF domain.
  - `TOOLS_CONFIG_DIR`: The Configuration Tools XML files directory. It points to the directory where the `hierarchy.xml` file is present. It must be the latest release directory which you use for patching.
  - `UPGRADE_BACKUP_DIR`: A backup of SCHEMA and `hierarchy.xml` files is kept in this directory.
2. Set up the following upgrade scripts:
    - `updateschemafiles.ksh` script updates the dimension field length of schema files to the length as available in the domain.
    - `updatetoolsconfiguration.ksh` script updates the dimension field length of configuration files to the length as available in the domain.
  3. Change the directory to UpgradeScripts directory.

```
$ cd UpgradeScripts
```
  4. Run `updatetoolsconfiguration.ksh`. This updates the `hierarchy.xml` file.

```
$ ./ updatetoolsconfiguration.ksh
```
  5. Run `updateschemafiles.ksh`. This updates the RETL RDF schema files.

```
$ ./ updateschemafiles.ksh
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**Note:** For added visibility for retailers, these instructions are included in the *RPAS Release Notes* and the *RDF Installation Guide*. In the future, see the *RDF Installation Guide* for more information.

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## Functional Enhancements

The following functional enhancements are included in RPAS 13.0.4.20.

### RPAS Fusion Client

With this release of RPAS, customers have a choice of using the RPAS Classic Client or using the new RPAS Fusion Client. The Fusion Client is a Web-based rich client developed using the latest Oracle Application Development Framework (ADF). It uses the same RPAS server as the RPAS Classic Client, but provides an enhanced user experience.

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**Note:** It is not necessary to upgrade to the Fusion Client as a result of this release. Users can continue to use the Classic Client.

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The Fusion Client provides the same core functionality that the Classic Client provides today. A user has visibility into a multidimensional pivot table that they can customize. The customization includes features such as pivoting the dimensions from one axis to another, editing multidimensional data, and formatting.

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**Note:** There are some key terminology differences between the Fusion Client and Classic Client. Two important differences are as follows: where the Classic Client refers to "hierarchies," the Fusion Client uses the term "dimensions." Where the Classic Client refers to "dimensions," the Fusion Client uses the term "levels." For more information, see the Getting Started chapter of the *RPAS User Guide for the Fusion Client*.

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In addition to core features from the Classic Client, the Fusion Client introduces a new taskflow feature. This feature provides a more robust workflow capability within RPAS-based solutions. This taskflow helps users of the Fusion Client understand the tasks they must complete to meet the business process. The taskflow consists of the following components:

Name	Description
Activity	High level business process or solution. An activity provides visibility to the full business process, supports application navigation, and drives end user activities. Tasks and steps are assigned to an activity to further describe the business flow. An example of an activity is "Create Merchandise Financial Plan."
Task	The second level of an activity flow. A task is associated with a single RPAS workbook template. Steps are assigned to a task. An example of a task is "Develop Department Plans."
Step	The lowest level of an activity flow. A step is associated with an RPAS worksheet or set of worksheets to achieve a specific action. An example of a step is "Getting Started - Seed Plan."

The setup of the taskflow is accomplished within the RPAS Configuration Tools. Workbook information is mapped to activities, tasks, and steps. For additional details on this process, see the *RPAS Configuration Tools User Guide*.

Although the Fusion Client contains the same core functionality as the Classic Client, there is certain functionality that is different or new in addition to the taskflow. The table below highlights some of the major differences. See the *RPAS Users Guide for the Fusion Client* for additional details.

Functionality	Classic Client	Fusion Client
Commit	Classic Client provides three commit options. They are Commit Now, Commit ASAP, and Commit Later. If a user wants to see the Commit ASAP status, they must go to the Commit ASAP status dialog.	Fusion Client offers one commit option: Commit ASAP. The status of the commit is updated automatically to the user in the user interface while in the workbook.
Formatting	To make measure, cell, exception, or other formatting changes to a single measure, the user must go to each worksheet to apply the same changes.	The Fusion Client formatting dialog allows a user to select which views (all or a subset) that they want to apply the formatting changes to.

<b>Functionality</b>	<b>Classic Client</b>	<b>Fusion Client</b>
Page Edge Scrolling	When multiple dimensions are on the page edge, the scrolling is across all dimensions. If a user reached the last position in a dimension, the next scroll moves to the next position of the other dimensions.	Scrolling in the page edge is independent by level. The user selects which level to scroll in.
Cut/Copy/Paste	There are two options for cut, copy, and paste. One is to use the clipboard, and the other is to do a server copy.	Cut, copy, and paste is always to the clipboard. Copying and pasting date measure's NA value pastes a blank.
Split View	The only way to view a chart is to toggle the view and only see either the chart or the pivot table in a single worksheet.	The Fusion Client has a new option called split view that allows a user to see the pivot table and chart in the same view.
Block Mode	Unlike outline mode, there is no way to expand and collapse in block mode. If a user is showing multiple levels, the only way they can show data at a higher level in block mode is to remove the lower level from the view.	Within block mode, the user can expand and collapse the levels. If they are showing multiple levels and want to see the data for a higher level, they can collapse the lower level and see the higher level data.
Undo	The user can select cells to undo or can undo all cells.	An undo list shows a list of edits that can be undone. This list shows the user the intersection where the edit took place and the value they entered.
Show Images	Users can see the images at the level they are assigned.	Images are displayed in a carousel. The user can also select to view all images for a parent level.
Find	The find operation is used to find along a particular axis.	The Fusion Client has more sophisticated find functionality. In addition to allowing the user to select which axis to find along, the user can also find within levels.
Measure Profiles	Users can create a measure profile that is a duplicate of another profile.	Duplicate measure profiles cannot be created. The user is shown which profile they are using when in the measure show/hide dialog.
Percent-of-Parent Measures	Relative percent-of-parent measures are always relative to the configured next level, not the next level shown. Also, a user must manually show the % attribute to distinguish the percent of parent measure from the source measure.	Relative percent-of-parent measures are relative to the next level shown. The value changes based on that level which is shown. Also, the % attribute is automatically displayed when a percent-of-parent measure is created.

## Taskflow Configuration in RPAS Configuration Tools

Within the RPAS Configuration Tools, the user can use the taskflow tool to configure a taskflow to be used within the RPAS Fusion Client. The taskflow directs users through various tasks and steps that have been setup to help them accomplish a business process. The user can create a default taskflow or create a customized taskflow to meet their specific business needs.

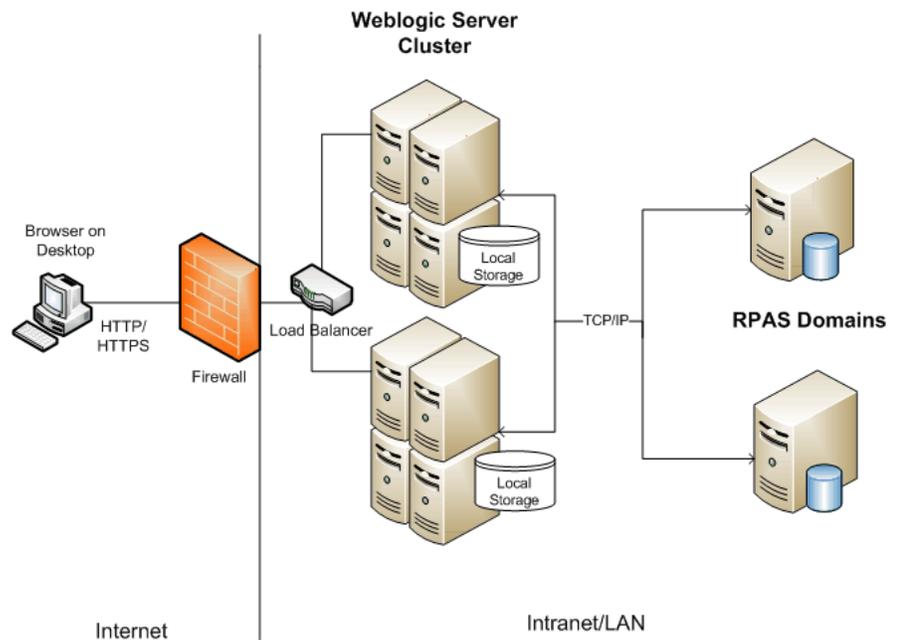
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**Note:** The taskflow is only for the RPAS Fusion Client.

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## Technical Enhancement

The RPAS Fusion Client is a Web-based user interface to RPAS. It is based on Oracle Middleware Fusion architecture with the RPAS server at the back end instead of a traditional RDBMS.



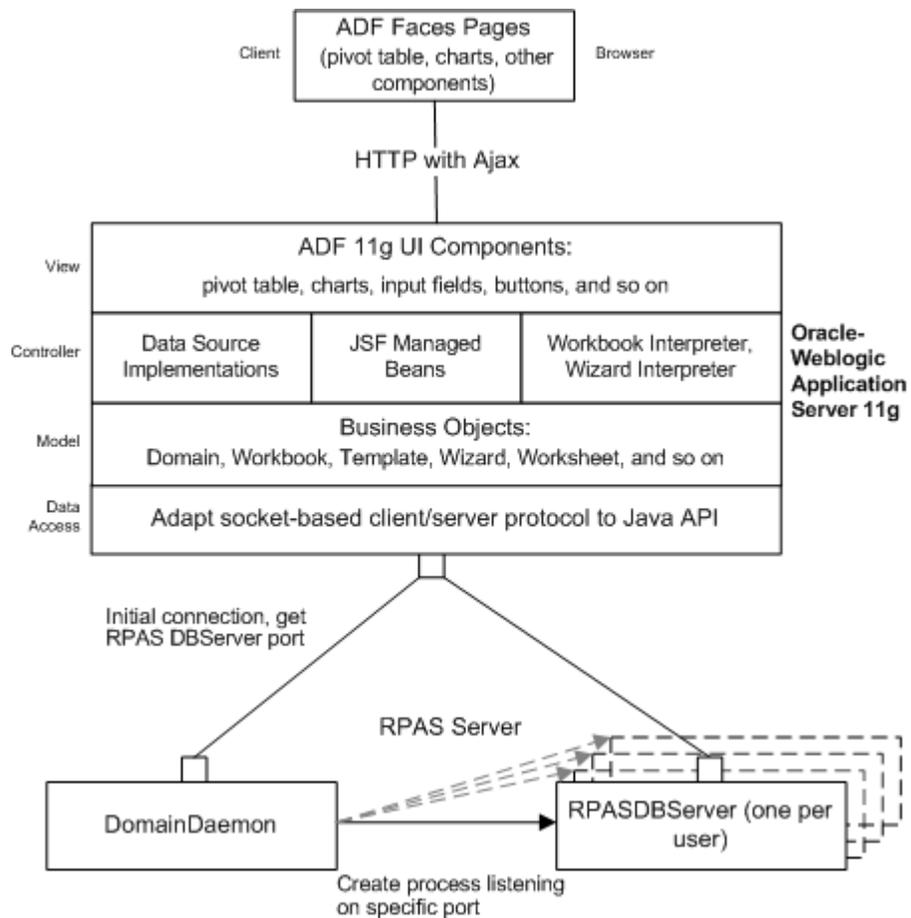
The deployment topology above highlights the main aspects of the three-tier deployment architecture.

1. The user accesses the application from a Web browser on their personal computer using a standard HTTP/HTTPS protocol.
2. The request is forwarded to a hardware load balancer which forwards it to one of the middle-tier application servers (WebLogic).
3. The fusion client application deployed in the middle-tier processes the requests and if necessary delegates it to the RPAS server using TCP/IP.
4. The RPAS server processes the requests and acts as the datastore, returning a response, which is passed back to the middle tier and then to the user's browser. No data is persisted in the middle tier, besides the data cached for the user session.

## Architecture

The RPAS Fusion Client is a J2EE application built using a three-tier architecture. The user interface is based on Oracle's Application Development Framework (ADF 11g). The framework is based on Java Server Faces (JSF) and provides the underlying library of components (pivot table, charts) that define the user interface. The main aspects of this architecture are outlined below.

- Client tier: Browser with DHTML/ AJAX capabilities. In addition to standard HTML/DHTML, pages contain JavaScript for client side operations and Flash components for charting.
- Middle tier: J2EE application server (WebLogic) with ADF runtime infrastructure. The main functions of the middle tier are to create the Web-based RPAS user interfaces driven by the RPAS configurations and to invoke RPAS server functions using the TCP/IP-based RPAS client/server protocol.
- Data store tier: RPAS server with multidimensional data and metadata. All calculations are performed in the RPAS server.



## Noteworthy Defect Fixes

RPAS 13.0.4.20 contains the RPAS Fusion Client. Since this is a new feature and contains only new functionality, there are no noteworthy defects resolved in the hot fix.

However, all defect fixes for releases 13.0.4.1 through 13.0.4.19 are also included in Release 13.0.4.20 and can be applied through the installation of this hot fix.

For more information about the defect fixes in hot fixes 13.0.4.1 through 13.0.4.19, refer to the README file of the particular hot fix.

## Known Issues

The following table contains known issues that have been found during testing of the RPAS Fusion Client. Note that some Known Issues/Defects do not yet have a Defect Number.

Known Issue/Defect	Defect Number
The RPAS Fusion Client does not support workbooks that contain a view that has only scalar measures. All views must have a measure that contains one level in its intersection.	9211990
If a user pivots the table while the pivot table is refreshing as the result of another pivot, the dimension tile remains with the mouse pointer. When this occurs, the user should refresh the browser in order for the dimension tile to not be attached to the pointer.	7827983
If a user commits a workbook without saving the workbook and closes the workbook without saving, the commit state may not be updated correctly.	9065938
There is no data in the saved chart when the chart is saved for the second time. If a user refreshed the chart, the next save of the chart contains the data.	8851248
When exporting data using a separator value, there is no limit to the value that is entered in the field separator.	9225418
The Edit/Fill command does not work correctly for picklist measures. The values in the Fill dialog are blank.	9174094
The selections within a wizard can get hung if additional selections are made prior to the previous selections being refreshed in the wizard. The user must refresh the browser in order to resolve this issue.	9232198
Very large values in the Fusion Client do not show up with exponential notation. Instead, the exact value is shown.	9218544
Color based graph formatting properties (such as background color and series color) do not persist in AIX environments as they persist on Windows. All other known graph formatting seems to work.	9251236
When exporting or printing a view that contains one dimension in outline view and one in block view along the same axis in the Fusion Client, both dimensions are in outline mode in the exported file.	9270507

Known Issue/Defect	Defect Number
<p>Formatting applied to dimensions on the page edge is not displayed until the user moves the dimension from the page edge to either the row /column edge. Moving the dimension back to the page edge displays the format. Performing a position navigation in the page edge does not resolve the issue. The only way to make the formatting display in the page edge is to move it away from the page edge to one of the other edges and put it back.</p>	8571585
<p>The range of time periods by using Relative Calendar is not auto-loaded in the Selected Items pane of a wizard when user saves the PQD. The user must load the favorite to have the number of periods based on the selection relative to the current date in Selected Items pane from Calendar Dimension.</p>	8560764
<p>The label attribute is hardcoded to always be shown a wizard regardless of whether the user is showing the label attribute or not.</p>	8862738
<p>The name of a view is not being persisted when the workbook is saved. If a user builds a workbook and renames a view, the new name of the view will not persist once the workbook is saved and re-opened.</p>	9087318
<p>When a user drags and drops the order of the attributes in a wizard, the same order is not reflected in the show /hide dialog.</p>	9242166
<p>Users receive an incorrect message when their user account is locked. The message indicates that the user login has failed and redirects to the login screen. The message does not state that the account is locked.</p>	9183983
<p>When starting the WebLogic Server, an error is output in the log file. This error is benign and can be ignored. The error starts as follows:</p> <pre> Registering Application: rpas &lt;Dec 11, 2009 2:31:31 PM EST&gt; &lt;Error&gt; &lt;oracle.adf.share.jndi.MDSBackingStore&gt; &lt;JBO-1400&gt; &lt;Exception while getting mutable object oracle.mds.core.MetadataNotFoundException: MDS-00013: no metadata found for metadata object "/META-INF/adf-config.xml"     at oracle.mds.core.MetadataObject.getBaseMOFromC ache(MetadataObject.java:1717)     at oracle.mds.core.MetadataObject.getBaseMO(Meta dataObject.java:985)     at oracle.mds.core.MDSSession.getBaseMO(MDSSessi on.java:2769) </pre>	N/A
<p>For picklist measures, if the result of an aggregation results in an ambiguous value, the cell is blank instead of the configured ambiguous value (for instance, ?).</p>	7672088
<p>Sorting measures in the Visible Measure area of the Measure Show/Hide dialog does not reorder the measures in the worksheet. The user must use the First, Up, Down, and Last buttons.</p>	N/A

Known Issue/Defect	Defect Number
If a user has one dialog open and then receives a popup message, the user is able to interact with the dialog without first having to close the popup. They cannot interact with the main application.	7691045
The calculate button the menu bar is always enabled instead of only being enabled once a cell has been edited.	N/A
When performing a Cut Special over cells that are read-only when you have a pending edit, a pop-up is displayed after the dialog, asking what you want to do with the pending edits. Once you click OK in the pop-up that states you cannot cut read-only cells, the original dialog is still open. The user must cancel that dialog box to return to the view.	9293469
If two users access the same RPAS domain through two different DomainDaemon ports using the Fusion Client, it is possible for a user to be locked out of the domain if the connection is lost. For this release, it is recommended that for the Fusion Client the users accessing a domain do so over the same DomainDaemon port.	9279639
Users are not able to export to Microsoft Excel when using the option of showing the headers on the topmost and leftmost pages only.	9288811
When the file name of an image file changes, an error message is not displayed. The user must use the Delete button to remove the invalid link to the image and enter the correct link to the image file.	9304415
A workbook does not recognize changes to its commit status until after it is saved for the first time.	9294553
The revert cell option is not available when clicking the header of a measure. The option is available only when selecting cells by themselves and not through the header.	8671704
When a user deselects all attributes in the Visible and Sort Attributes dialog on the Show Attributes and Sort dialog, the system still uses the default attributes. When returning to the dialog, the user sees the default attribute in the visible dialog but not in the sort attributes dialog.	8827468
After creating a new measure profile, the user may see the default and new measure profiles selected when looking in the measure profile option of the toolbar. The view correctly shows only the new measure profile.	9074027
If a tab for a given step has gone into the overflow area, it is possible that the browser may close without error when returning to this step.	9176859
If users receive a RuntimeException after editing a cell, they must close the browser and log back in.	9199520
If a view is expanded enough to go into the overflow area and the view is moved, the browser closes without any error message.	9232940
The formats from the RPAS Configuration Tools are not applied when building a domain. The -updatestyles flag should be used when building.	9235873
Read-only cell formatting overrides any cell exception formatting.	9239187

Known Issue/Defect	Defect Number
Users cannot select a date from the calendar pop-up if that date is from a month that is not shown. Users must manually enter the date instead of using the pop-up.	9252132
When creating a percent-of-parent measure when the measures are in the page axis, the measure name is not auto populated in the pop-up dialog.	9257047
The user can make a view extremely small and the resize gripper is no longer available. To resize the window, the user should go to the toolbar and select to tile the windows.	9259705
The user must explicitly select a measure for a Fill / Clear operation. Trying to Fill / Clear without selecting a measure causes the application to create a null pointer exception in the log. Nothing happens in the user interface. It behaves as if the user had not initiated any action.	9255021
Users cannot export or print a view if there is an exception format present on that view. In order to export/print, the exception formats must be cleared prior to the export/print.	N/A
Save a chart with its size set to Current Size. The resulting *.PNG file is 0 bytes in size, and has no data in it. Users must choose a resolution or set a Custom Size for the chart and save it.	9259347
This release of the Fusion Client does not support the following functionality that is currently supported within the Classic Client: <ul style="list-style-type: none"> <li>■ Alert Management</li> <li>■ Dynamic Position Maintenance</li> <li>■ Dimension Splitting</li> <li>■ Dynamic Attribute Creation</li> <li>■ Insert Measure</li> <li>■ Single Hierarchy Select Measures</li> </ul>	N/A

## Related Documentation

For more information, see the following documents in the Oracle Retail Predictive Application Server Release 13.0.4.20 documentation set:

- *Oracle Retail Predictive Application Server Licensing Information*
- *Oracle Retail Predictive Application Server Installation Guide*
- *Oracle Retail Predictive Application Server Installation Guide for the Fusion Client*
- *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*
- *Oracle Retail Predictive Application Server User Guide for the Fusion Client*
- *Oracle Retail Predictive Application Server Fusion Client Online Help*
- *Oracle Retail Predictive Application Server Configuration Tools User Guide*
- *Oracle Retail Predictive Application Server Configuration Tools Online Help*

For more information about Oracle Retail Merchandise Financial Planning (MFP) on the RPAS Fusion Client, see the following documents in the MFP Release 13.0.4.20 documentation set:

- *Oracle Retail Merchandise Financial Planning Release Notes*
- *Oracle Retail Merchandise Financial Planning Retail Installation Guide*
- *Oracle Retail Merchandise Financial Planning Cost Installation Guide*
- *Oracle Retail Merchandise Financial Planning Operations Guide*
- *Oracle Retail Merchandise Financial Planning Retail User Guide for the RPAS Fusion Client*
- *Oracle Retail Merchandise Financial Planning Cost User Guide for the RPAS Fusion Client*

## **Previous Releases**

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

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

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