Oracle® Retail Predictive Application Server

Release Notes

Release 13.1.1

September 2009

The Oracle Retail Predictive Solutions are a set of products used for generating forecasts, developing trading plans, and analyzing customer behavior. These products use predictive technology to examine historical data and to predict future behavior.

The Oracle Retail Predictive Solutions run from a common platform called the Oracle Retail Predictive Application Server (RPAS) that includes features such as:

- Multidimensional databases
- Hierarchical data (product, time, and business location hierarchies)
- Aggregation and spreading of data
- Workbooks and worksheets for displaying and manipulating data
- Wizards for creating and formatting workbooks and worksheets
- Menus, quick menus, and toolbars
- Exception management and user-friendly alerts

Note: The previous release of RPAS was 13.0.4. In order to align the release numbers with the Oracle Retail Enterprise, this release of RPAS is named 13.1.1.

Although the release number is 13.1.1, this is a full base release of RPAS. It is not a patch release.

Hardware and Software Requirements

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

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Functional Enhancements

RPAS 13.1.1 includes the following functional enhancements.

In-Context Launch

RPAS 13.1.1 includes new infrastructure for opening or building a workbook from a given context called In-Context Launch (ICL). The context is provided in an XML file and should include information required for building or opening a workbook. ICL can be used in an integration project to facilitate a planning-centered, integrated UI solution for responding to events by adjusting the affected plans within the context of the changed circumstances and interacting plans. ICL can also be viewed as an extension to RPAS Web Launch, which enables user to launch the RPAS Client from a Web page and then open or build a workbook according to a given launch context. Launch context is an XML based specification which can be constructed and passed to the RPAS Client through a JavaScript code from the active content of the Web page. ICL supports Oracle Single Sign-On and Oracle Retail Workspace integration.

Publishing Measure Changes (PMC)

RPAS Publishing Measure Changes (PMC) provides a mechanism to monitor measure changes and receive notifications through a standard Java Message Service (JMS) in real time. A measure change event is defined as measure data or hierarchical configuration that has been modified by any means, such as committing a workbook, running batch calculations, loading measure data, loading hierarchies, or modifying a hierarchy through Dynamic Position Management (DPM). PMC allows users to configure the set of measures to monitor.

Position Query Manager

In prior versions of RPAS, users were able to save and load a Position Query Definition (PQD) during the workbook build process. This allowed users to save frequently used two-tree wizard selections so that they could be shared by other users or could facilitate future workbook builds for the same user.

RPAS 13.1.1 provides a utility for managing PQDs during the batch operations. The pqdMgr utility creates PQDs from position lists stored in XML format. It can create multiple PQDs for multiple dimensions by reading multiple position lists from a single XML file. An RPAS administrator can use this utility to delete an existing PQD or export existing PQDs to XML files.

Configurable Measure Profiles

Measure profiles allow users to define lists of measures to be displayed in the RPAS Client. When a workbook is built, it contains the measure profiles defined in the RPAS Configuration Tools. The Select Profiles option in the right-click menu allows the client to quickly display a measure profile. The Show/Hide dialog is used to add, remove, and edit measure profiles. Changes to the measure profiles are saved with the workbook as well as within the workbook formatting. If a user-defined order is selected in the Sort/Display Attributes dialog, then the order of the measures in the profile is used.

Commit ASAP Option in Custom Menu

Historically, all commits performed as part of a custom menu action were processed as a Commit Now commit, which caused the RPAS Client to block other actions while the commit was in process. In RPAS 13.1.1 users can mark a menu item as Commit ASAP. This allows the commit to be handled on a Commit ASAP basis, allowing the user to continue working within the Client while the commit is being processed. The custom menu item can only contain a single commit rule group if that item is to be processed as Commit ASAP. It is recommended that the rule group be the last item in the argument list of the custom menu item.

Concurrent User Sessions

The concurrent user session functionality allows the a user to have multiple concurrent logins to the same domain. This allows a user to work on different workbooks in different sessions at the same time. All concurrent sessions share the user's preferences but have their own individual RPAS log file postfixed by a login timestamp and sequence number. A limit on the number of concurrent sessions per user can be configured in the Security Administration workbook.

Support for Incremental Formatting and Upgradability

RPAS 13.1.1 supports upgradability starting in version 13.1.1, meaning that style files created in RPAS 13.1.1 and later versions can be upgraded to the future versions of RPAS.

In the past, users were required to delete the existing formatting when they added or removed windows through the configuration or upgraded to a new version of RPAS. Starting in version 13.1.1, all of these changes are handled behind the scenes. Additionally, there are a number of enhancements that make saved formats easier to use. Previously, everything in the workbook was copied to the domain level, overwriting the entire style information. With the introduction of the Save All and Save Only Changes options, RPAS allows the user to control the changes that are saved to the format. In addition, the Save All option only overwrites the positions and measures that are contained in the workbook itself. This allows users with different position sets to save into the same format without disrupting each others changes.

Saving Print Settings to Formatting Settings

In RPAS 13.1.1, print settings are treated as formatting data and are stored with other formatting information.

Technical Enhancements

RPAS 13.1.1 includes the following technical enhancements.

Upgrading to RPAS Release 13.1.1

For new customers, RPAS 13.1.1 is a base release (a full product installation). Current customers who have installed RPAS 13.0.4 also have the option to upgrade to Release 13.1.1. For information about upgrading, see the following document at My Oracle Support (formerly MetaLink) at the following URL:

https://metalink.oracle.com

Oracle Retail Upgrade Guide (Doc ID 837368.1)

Because the upgrade process varies among Oracle Retail applications, the *Oracle Retail Upgrade Guide* describes the approach that each Oracle Retail application takes for the upgrading process, as well as product-specific upgrade assumptions and considerations. Actual procedures for the upgrade may be included in the application's Installation Guide.

ODBC Upgrade

The ODBC/JDBC driver contains the following upgrades in the RPAS 13.1.1 release:

- The previous Admin Tool has been replaced with a more user-friendly, uniformed GUI server configuration tool called the Management Console. It operates on Windows and manages the ODBC servers on all supported platforms.
- The ODBC server process is implemented as a service. The actual server process name is hidden from administrators and users.
- The previous ODBC Client Administration Tool has been eliminated. On Windows, the ODBC client is now managed by the Windows ODBC Manager. On all Unix and Linux platforms, it is managed by the odbc.ini file.
- The JDBC Client now contains only Java libraries, no C libraries. This allows for a simpler configuration.
- The ODBC Server on a Windows platform now accepts multiple connections, just as it does on Unix and Linux platforms. Previously, it could only accept a single connection on a Windows platform.

For more information about the ODBC upgrade, see the *Oracle Retail Upgrade Guide* (Doc ID 837368.1) at My Oracle Support and the *RPAS Administration Guide*.

Mace Parallelization

The mace utility has been enhanced so that it executes in parallel under the following circumstances:

- The utility is invoked on a master domain.
- Parallelization is only applicable to single expression evaluation (-run -expression argument). Parallelization does not apply to rule group evaluation.

- The evaluated expression is not a SpecialExpression.
- All measures appearing on the left-hand side of the expression must be non-HBI, which means that the base intersection of the measures must be below the partition level.

In such situations, mace creates multiple child processes based on the -processes argument. Each child process evaluates the expression in one local domain. This functionality allows mace to achieve higher levels of CPU-utilization using parallelization on systems with multiple CPUs. It also simplifies the user script when the same expressions must be evaluated in all local domains.

Disaster Recovery: Domain Verification and Repair (scanDomain)

The scanDomain utility is implemented for detecting data loss or repairing data corruption in an RPAS domain. Data loss may occur when an RPAS process is abnormally terminated. This can occur when there is a power failure or when another external mechanism causes sudden termination of an RPAS process. Data loss can also occur due to an unexpected program breakdown.

Data corruption occurs if an external program modifies the RPAS database files. Another cause of data corruption may be an unforeseen defect in the processes using RPAS databases (an extremely rare event).

The scanDomain utility can detect both corruption and data loss, but it only fixes corruption. This utility can operate on global, non-partitioned, and local domains and is designed to support parallelization when repairing databases in a global domain. It provides command-line options for backing up the data in the repair mode and verifying the domain data without changing any of the domain databases.

Integration Enhancements

RPAS 13.1.1 includes the following integration enhancements.

Support for Batch Data Integration through ODI

RPAS 13.1.1 supports Oracle Data Integrator (ODI) as the data integration platform for integration between RPAS domains and other data stores. This feature enables RPAS to send and receive data across heterogeneous hardware platforms and software systems. Specifically, it facilitates integration between RPAS and other relational databases, such as Oracle Database Management System (DBMS). ODI's declarative design approach to data integration can result in faster and simpler integration across different RPAS applications and other applications based on other database systems.

> **Note:** The scope of the ODI/RPAS integration in RPAS 13.1.1 includes batch data integration only. Support for Changed Data Capture (CDC) and real-time integration is not provided in this release.

Performance Enhancements

RPAS 13.1.1 includes the following performance enhancements.

RPAS Server Optimizations

RPAS 13.1.1 includes several enhancements that affect the performance of the hierarchy load process and the overall size of the domain. Compared to earlier versions of RPAS, the dimension dictionary data is stored more efficiently in global domains. Workbook hierarchy information is managed centrally to avoid replication of dimension information across workbook measures. This eases the requirements on workbook sizes. The loadHier utility is enhanced to perform more efficiently by utilizing more efficient data structures and optimizing the position sorting process.

Known Issues

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

Known Issue/Defect	Defect Number
Non-partition dimensions are no longer stored in local domains, and therefore, loadHier does not mark them as changed in the local domain. As a result, after non-partition hierarchies such as location are loaded, the reshapeArrays utility does not reshape store level arrays that reside in the local domain.	8885361

Related Documentation

For more information, see the following documents in the Oracle Retail Predictive Application Server 13.1.1 documentation set:

- *Oracle Retail Predictive Application Server Installation Guide*
- *Oracle Retail Predictive Application Server Licensing Note*
- *Oracle Retail Predictive Application Server Administration Guide*
- *Oracle Retail Predictive Application Server User Guide*
- *Oracle Retail Predictive Application Server Online Help*
- *Oracle Retail Predictive Application Server Configuration Tools Online Help*
- *Oracle Retail Predictive Application Server Configuration Tools User Guide*

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 releases.