

Oracle® Retail Predictive Application Server
Release Notes
Release 11.1.14.1

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Primary Author: Gary O'Hara

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Preface

A Release Notes document can include some or all of the following sections, depending upon the release:

- Overview of the release
- Functional, technical, integration, and/or performance enhancements
- Assumptions
- Fixed and/or known issues/defects

Because of their brevity, Release Notes do not include chapters, appendices, or a table of contents.

Audience

Release Notes are a critical communication link between Oracle Retail and its retailer clients. There are four audiences in general for whom a Release Notes document is written:

- Retail clients who wish to understand the contents of this release.
- Integrators and implementation staff who have the overall responsibility for implementing Oracle Retail Predictive Application Server (RPAS) into their enterprise.
- Business analysts who are looking for high-level functional information about this release.
- System analysts and system operation personnel who are looking for high-level functional and technical content related to this release.

Related Documents

Each patch release references the appropriate documentation that pertains to the release.

Customer Support

- <https://metalink.oracle.com>

When contacting Customer Support, please provide:

- Product version and program/module name.
- Functional and technical description of the problem (include business impact).
- Detailed step-by-step instructions to recreate.
- Exact error message received.
- Screen shots of each step you take.

Release Notes

The following section describes the RPAS 11.1.14 patch. This includes issues that have been addressed in this patch, enhancements and new functionality, changes to existing functionality, and known issues. This information covers the RPAS server, RPAS client, and Configuration Tools components of RPAS 11.1.

RPAS OS Certification Strategy

Oracle Retail Product Strategy has provided clear direction on Operating System certifications in order to better support our customer's OS upgrade plans. As of this release, the following OS certifications are completed:

- **Sun Solaris 9**
- **AIX 5.3 (TL5 or greater)**
- **HP-UX 11.23 (PA-RISC)**

Previous versions of the above Operating Systems will no longer be certified, however the release may be backwardly compatible. Backward compatibility verification is not included in Oracle's OS certification methodology. The RPAS Server will no longer be certified or packaged for Windows NT, however OS support will continue for the RPAS Client and RPAS Configuration Tools on Windows NT, XP and 2000.

For any questions or concerns about Oracle Retail's OS certification strategy, please contact your Oracle Retail Customer Support Representative.

Current Patch – RPAS 11.1.14.1

Release Information

The following table provides information about the current patch release.

Application	Oracle Retail Predictive Application Server (Client, Server, and Configuration Tools)
Version Number	11.1.14
Code Cut Off Date	3-23-07
Release Date	3-23-07
Type of Release	Hotfix
Base	11.1
Patch	14.
Supported OS, Server and Compilers	Sun Solaris 9 - gcc 4.1.1 AIX 5.3 (TL5 or greater) - g cc 4.1.1 HP-UX 11.23 (PA-RISC) - aCC 03.70
Supported OS, Client	Windows NT, XP, 2000
Required 3rd Party Software	JRE 1.4.2 (installed on client and server machines); 1.4.2_10 is recommended for IBM installations
Related Documentation	RPAS 11.1 Installation Guide RPAS 11.1.7 Administrators Guide RPAS 11.1 Users Guide RPAS 11.1 Configuration Guide RPAS 11.1 Rule Functions Reference Guide RPAS 11.1 Calculation Engine Users Guide

RPAS 11.1.14.1 Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issues	Defect
<code>reshapeArrays</code> was failing due to maximum number of file handles are reached in 11.1.13. It was also failing when fixing the inconsistent na values due to unremoved database/array entries in change arrays. Third failure was encountered when all the above issues are fixed due to contention issue of meta database. All of these issues have been resolved.	5915395
Resolved an issue in the RPAS client that caused an erroneous DLL message to display during startup.	5939101

RPAS 11.1.14 Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issues	Defect
Added an optional argument to the <code>reshapparrays</code> utility. – <code>forceNAConsistency</code> will allow measure data cells for new positions to be populated with the NA value of the measure in cases when a measure array has both mismatched NA values and new positions.	5671921
Corrected an issue that caused workbooks that have been saved using “Save As” to ignore locks on measures.	5639837
Added a new argument to the <code>loadHier</code> utility. – <code>noSort</code> is added for special cases when the RPAS process of sorting the hierarchy file prior to loading the values is not needed due to preprocessing (external to RPAS). The use of this flag will prevent the input <hier.dat> file from being sorted while loading the hierarchy.	5557888

Previous Patch Information

RPAS 11.1.13 Release Information

The following table provides information about the 11.1.13 patch release.

Application	Oracle Retail Predictive Application Server (Client, Server, and Configuration Tools)
Version Number	11.1.13
Code Cut Off Date	10-2-06
Release Date	10-13-06
Type of Release	Patch
Base	11.1
Patch	13
Supported OS, Server	Sun Solaris 8, AIX 5.1/5.2/5.3, HP-UX 11i (11.11), Windows NT
Next Patch Version Supported OS, Server (11.1.14)	Sun Solaris 9, AIX 5.3 (TL 4 or greater), HP-UX 11.23 (PA-RISC)
Supported OS, Client	Windows NT, XP, 2000
Required 3rd Party Software	JRE 1.4.2 (installed on client and server machines); 1.4.2_09 is recommended for IBM installations CVS (installed on server - if using integrated Source Control)
Related Documentation	RPAS 11.1 Installation Guide RPAS 11.1 Administrators Guide RPAS 11.1 Users Guide RPAS 11.1 Configuration Guide RPAS 11.1 Rule Functions Reference Guide RPAS 11.1 Calculation Engine Users Guide

RPAS 11.1.13 Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issues	Defect
Corrected an issue that caused the client to crash in cases when saving relatively large workbooks on a server that is low on memory.	5073448
Resolved an issue that caused the client to crash in instances when an alert is inserted into a workbook.	5081886
Corrected an issue in global domain environments that caused alert workbooks to fail in instances when the workbooks were not built using the Alert Manager.	5087091
RPAS is now generating the following Warning message when a rule group is being executed that has a measure on both the LHS and RHS of the expressions: "Measure <xxx> on LHS and RHS of Expression <xxxx>. Results may not be as expected." If such condition is encountered, the warning message is printed out on the screen when mace is run with " <code>-loglevel</code> " option.	4846758
Corrected an issue that caused a measure to be deleted upon patching when the configuration is updated such that the same measure is realized in another solution.	5396627
A fix was made in the client to resolve an error message which was occurring when trying to use the edit-> clear content feature if the dimension is COLLAPSED.	4852288
In instances when a user saves a workbook, reopens the workbook, and saves with a new workbook label, RPAS corrected an issue that allowed changes in subsequently saved workbooks to be applied in the original workbook saved.	5374016
Corrected an issue with attribute measures that prevented the values from being loaded into workbooks when the measure is not configured as a default in the workbook. Now RPAS will automatically include a load rule for attribute measures added to a workbook during the wizard process, however ignoring this additional step if the attribute is already configured in the workbook.	5230647
An RPAS performance issue was fixed with <code>reshapeArrays</code> . In simple domain environments, measures should be registered with the most frequent value as the NAVALUE such that the NAVAL will always match the NAVALUE.	5354687
An issue was fixed with <code>copyDomain</code> in global domain environments that caused each subdomain to be copied twice, rather than one time only.	5343319
Corrected an issue that caused an invalid date and time to be displayed for a workbook in instances when a previously saved workbook is opened, modified, and then saved.	5141450
Corrected an issue that caused the version property file accessed in the foundation.exe to have an incorrect version number.	5381094

Resolved Issues	Defect
Corrected an issue in User Administration that prevented the deletion of a user from the system in instances when the user has a corrupted workbook saved. The fix also includes support for proper deletion of corrupted workbooks.	5409225
Corrected a refresh issue in the client in the instances when the values in the cell have been changed, calculated and refreshed in that order. The refresh value is now properly restored.	5349911
Resolved an issue that caused the copyDomain to core dump when using it with -clone option.	5534343

RPAS 11.1.12 Release Information

The following table provides information about the RPAS 11.1.12 patch release.

Application	Oracle Retail Predictive Application Server (Client, Server, and Configuration Tools)
Version Number	11.1.12
Code Cut Off Date	May 24, 2006
Release Date	June 23, 2006
Type of Release	Patch
Base	11.1
Patch	12
RPAS Client Build Number	1.1899.2.69
Supported OS, Server	Sun Solaris 8, AIX 5.1/5.2/5.3, HP-UX 11i (11.11), Windows NT
Supported OS, Client	Windows NT, XP, 2000
Required 3rd Party Software	JRE 1.4.2 (installed on client and server machines); 1.4.2_09 is recommended for IBM installations CVS (installed on server – if using integrated Source Control)
Related Documentation	RPAS 11.1 Installation Guide RPAS 11.1 Administrators Guide RPAS 11.1 Users Guide RPAS 11.1 Configuration Guide RPAS 11.1 Rule Functions Reference Guide RPAS 11.1 Calculation Engine Users Guide

Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issues	Defect
Corrected issues in loadmeasure and splitMeasureData that caused the data load to error when the input (.ovr) file is larger than 2GB. For Solaris and AIX systems, no changes are required by the customer. For HP-UX, large files must exist on a volume that has been marked as a large file volume. An HP-UX administrator has to run a command to mark a volume as large files enable. For example: 'fsadm -F hfs -o largefiles /dev/vg02/lvol1'. For Windows NT the volume must be formatted with a file system that supports 64 bits files, fat32, and fat16 and the files system must be converted to NTFS.	4846673
An issue was identified with the <code>indexlast</code> function that caused a valid index to be returned in cases where a Boolean condition in the expression should not have returned the index. To prevent this from occurring, the behavior of the function was modified such that if the navalue of <code><boolexpr></code> is true, the value is set to NA rather than 0.	5063276
New functionality was added that gives you the ability to add new local domains to RPAS. New positions can be added by using the <code>reconfigGlobalDomainPartitions</code> utility. A new subdomain path may be specified by using <code>-sub</code> parameter. The utility detects if there is a domain at the specified path, and it creates one if one does not already exist. In instances when all of the partition positions are removed from a subdomain using <code>-remove</code> parameter, the <code>reconfig</code> utility deletes that domain.	5159377

Known Issues

The following table provides information about known issues.

Known Issues	Defect
In some instances of workbooks built using Dynamic Template, '12310001' is incorrectly displayed as a value for Date type measures that should contain no value.	5055074
Although Measure Attributes are displaying properly in wizards, the proper values are not displayed in workbooks. The workaround is to insert the measure into the workbook either using the Extra Measure wizard or Insert Measure to view the attribute.	5230647
Range By Alert functionality is not properly ranging when used on User-Defined Hierarchies.	5231008
Refresh is not functioning properly in the following scenario: 1. Change a cell value then calculate. 2. Refreshing the workbook and then change the same value again. The system does not recognize this value as 'changed'.	5349911
When saving a workbook template, an invalid data/time stamp is being populated in the Modified Date.	5141450
RPAS Security Administration Workbook Template is not refreshing properly.	5261397

RPAS 11.1.11 Release Information

The following table provides information about the RPAS 11.1.11 patch release.

Application	Oracle Retail Predictive Application Server (Client, Server, and Configuration Tools)
Version Number	11.1.11
Code Cut Off Date	February 6, 2006
Release Date	February 24, 2006
Type of Release	Patch
Base	11.1
Patch	11
RPAS Client Build Number	1.1899.2.60
Supported OS, Server	Sun Solaris 8, AIX 5.1/5.2/5.3, HP-UX 11i (11.11), Windows NT
Supported OS, Client	Windows NT, XP, 2000
Required 3rd Party Software	JRE 1.4.2 (installed on client and server machines); 1.4.2_09 is recommended for IBM installations CVS (installed on server – if using integrated Source Control)
Related Documentation	RPAS 11.1 Installation Guide RPAS 11.1 Administrators Guide RPAS 11.1 Users Guide RPAS 11.1 Configuration Guide RPAS 11.1 Rule Functions Reference Guide RPAS 11.1 Calculation Engine Users Guide

The following section contains information about enhancements, changes, and fixes that are available in this RPAS patch. This includes changes to the RPAS server, RPAS client, and the Configuration Tools.

Overview

Notes about Upgrading

- **Deletion of workbooks** – Each RPAS patch updates the domain version information and often includes changes to the structure of the RPAS domain that require all workbooks to be rebuilt. Existing workbooks cannot be opened after a domain is upgraded. Make sure all data has been committed for existing workbooks where desired before applying this patch. This includes workbooks that need to be committed manually and any workbooks waiting to be committed in the “commit later” queue.
- **New RPAS client** – Each RPAS patch contains a new RPAS client that must be installed after upgrading a domain to the new version of the server.
- Styles defined in the RPAS Security Administration workbook are automatically deleted during an upgrade.

Upgrading Instructions for Global Domain Environments

Follow the instructions below when upgrading Global Domain environments if it is desired to create a backup of the domains prior to the upgrade.

- Download the new version of the RPAS platform (Server, Client, and Configuration Tools if applicable).
- Copy the directory of the Global Domain environment using the UNIX copy command (cp).
- Upgrade the original domain or the copied domain.
- Rename the upgraded domain using the RPAS utility for copying domains (copyDomain).

Enhancements and Notes

Java 1.4.2

Oracle recommends the use of Java 1.4.2 for all operating systems when running any 11.x version of the RPAS Configuration Tools. Furthermore, Oracle recommends the use of a specific version of Java, version 1.4.2_09, for IBM's AIX UNIX operating system due to a technical issue with JVM on IBM hardware and AIX.

Creating a subset of a domain environment

The RPAS utility `copyDomain` is used to perform a number of tasks related to moving and copying domain environments. This utility was enhanced with a new argument (`-clone`) to copy a subset of a domain environment. Using this parameter, you can specify individual positions along multiple hierarchies. These positions and their corresponding data will be copied to the new domain.

Usage

```
copydomain -clone dimposlist
```

Where *dimposlist* is a list of positions in the format:
`dim1,pos1,...,posn:dim2,pos1,...,posn:...`

Notes

- Only one dimension for each hierarchy can be specified.
- The `-clone` argument is supported in both global domain environments and simple domains.
- Existing hierarchy input files can be backed up in the same directory if `-skipInput` is not specified.
- The `-copyWorkbooks` argument can be used with `-clone`. If `copyWorkbooks` is not specified, all workbooks are copied.
- Local domains that do not contain any of the specified positions will not be included in the copy.
- Which workbooks are copied is not dependent on the specified positions when using `-clone`, but rather only the options that are specified with `copyWorkbooks`.

reshapearrays log files in each local domain

`reshapeArray` now creates separate log files for each subdomain and master domain if it is run in parallel using `-processes` option. The log file is created in each domain's `scripts/logs` directory, and `reshapeArrays` return a code other than 0 (0 is used for success) when it detects a failure in any of the subprocesses, and it reports which subdomain had the problem.

Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issues	Defect
An update to the RPAS Server was made so that when a user is deleted from the system, all workbook builds that the user has staged for batch operations (using the auto-workbook build wizard and the <code>wbatch</code> utility) will also be deleted. This ensures that the system will not encounter an error when running the batch process for workbooks.	5012230
An update was made to RPAS to ensure that the system will correctly handle integer values that are entered in conjunction with the “+” sign. Previously, the system was returning zero when attempting performing this operation for measures with a navalue of zero.	5009986
The utility for loading hierarchies (<code>loadhier</code>) was updated to return more descriptive warnings and/or error messages when there are issues in the hierarchy input data files.	4965351
A change was made to the RPAS server so that errors no longer occur when a Forecast Approval workbook (for Retail Demand Forecasting) is saved with all items/locations/weeks in the domain.	4944691
The Measure Analysis workbook template was updated so that refreshing works correctly after saving the workbook and adding it to the queue to commit later.	4939272
A change was made to the utility for exporting data (<code>exportData</code>) so that prefix names of positions are being exported as they were in previous versions of this utility.	4914370
The Security Administration workbook template was updated to fix an error that occurred when sorting measures on the Measure Right worksheet.	4899520
A change was made to the RPAS Server to ensure that newly added positions (products) are not incorrectly assigned to a certain grouping (referred to as “ranging” by the customer that reported this issue).	4898850
A fix was made to the utility for loading measures (<code>loadmeasure</code>) to allow a certain measure file (.ovr file) to be loaded into a local domain without having to break the file into two smaller files.	4874639
A fix was made to RPAS to ensure that an exception will be thrown when attempting to register a measure with a range value (measure property) that exceeds the limits for that measure type. The Configuration Tools and RPAS client were also updated so that values entered that are out of range will be set to the high or low limit depending on whichever limit was exceeded.	4865667
An update was made to utility for loading hierarchies (<code>loadhier</code>) to clean up excessive messages that are displayed in the log file when the domain build process (<code>rpasInstall</code>) is executed.	4857212
A number of fixes were made to RPAS to address problems with time series functions such as <code>tssum</code> , <code>tsavg</code> , and so on. The problems occurred when running calculations with time series functions involving measures with NA values of zero and no populated values.	4855363
A fix was made to RPAS client to address a problem that occurred when toggling measures when synchronized scrolling is enabled.	4854366

Resolved Issues	Defect
A fix was made in the client to allow the selection of positions in the wizard when different rollups are used.	4853547
The RPAS client was fixed so that it properly displays special characters (problem was reported with Japanese) in the chart view.	4853477
An RPAS error was fixed that was occurring when building a workbook in the master domain of a global domain environment. The error occurred due to a file locked in a local domain even though the workbook was being built in the master domain. This error should no longer occur when building, saving, committing, and refreshing workbooks in the master domain.	4850595

Known Issues

There is currently an issue with the information returned by the utility for copying domains (`copyDomain`). The utility reports the number of directories, files, and bytes that were copied when the utility is executed. Currently, the utility is incorrectly reporting that the number of files copied is less than the total available files. This reporting issue will be fixed in a future patch.

RPAS 11.1.10 Release Information

Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
Changes were made to the two tree wizard pages to address an issue that occurred when the right and left hand sides were out of sync. When you make or remove selections from the left hand side of the wizard page, you will be displayed or removed correctly from the right hand side.	395783
An update was made to the utility for copying a domain (copydomain) to use the more descriptive argument " -force " (instead of " -f ") as specified by the usage page.	397177
A fix was made to the utility for loading hierarchies (loadhier) in order for hierarchy structures to be able handle records containing more than 8,000 characters.	397215
A fix was made to the RPAS client to address a problem with saved styles and windows for extra measures.	397243
The RPAS client was fixed so that the workbook build limit is cleared when you exit the wizard process (by selecting the Cancel button in the wizard). Note: See write-up "Exceeding the workbook limits with auto-workbook build wizard and alert workbook template" in the "Enhancement and Notes" section above for additional information.	397258
An update was made to the user manager utility (usermgr) to ensure that the user's password is not displayed when the -print argument is specified.	397313
The RPAS client was fixed so that the show/hide dialog will now initially sort in ascending order by the first column. It thereafter re-sorts whenever items are added to the hidden measures list. The sort maintains the current sort column and sort order.	397319
The utility for loading hierarchies (loadhier) now validates that all hierarchy input files are lower case. Although this was required for several years, loadhier was not validating this in previous patches of 11.1.x. The lowercase requirement is due to the inconsistency between the case sensitivity of file names in Windows (case insensitive) and UNIX (case sensitive). Requiring lower case file names ensures that loadhier will work correctly and consistently on the different platforms.	397369
A new argument (-useArrayNaValue) was added to the utility for exporting data (exportdata). This addresses the problem where exportData produced unexpected results when the NA value is changed from its initial value for efficiency purposes. The NA value is specified when using the array or measure specification argument (-array or -meas). Adding this new argument will ensure the NA value is properly exported.	397372
An issue was fixed in the RPAS client that occurred when running certain calculations with custom menus. The calculations were not properly being handled under specific circumstances.	397473
An issue was fixed in the RPAS Installer that resulted in the error, "The process file table is full" when building a global domain. This error should no longer occur.	397518

Resolved Issue	Defect
The utility for loading hierarchies (loadhier) was changed to avoid checking the parent-child relationships for user-defined dimensions. This was previously resulting in an invalid error.	397522
Enhancements were made to the alert manager utility (alertmgr) that will decrease the time it takes to find alerts in the domain (using the -findalerts argument).	397830
The utility for copying and moving data (mapData) was updated so that the -srcDom argument is no longer required since the -d option is all that is needed.	397841

RPAS 11.1.9 Release Information

Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
Several contention issues were addressed that were occurring in a Global Domain environment.	396954
An issue with password history was fixed that was not preventing you from using previous passwords as it should.	396567
This was an issue that was caused by too many measures being inserted into a single database. The customer that encountered the issue was provided instructions for making this change. The default value was 100 and was changed to 5.	396416
An issue was fixed with the utility for exporting data (exportdata) that occurred under very specific circumstances.	396385
An issue with the RPAS Security Administration workbook template was fixed when the setting for a given user is set to "?" the system will treat it as denied.	395056
An issue with attribute measures was addressed that was not properly functioning when updating the position labels for dimensions.	378182

RPAS 11.1.8 Release Information

Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
An issue was fixed that was occurring when performing a specific sequence of updates and calculations in a saved workbook in conjunction with locking and unlocking measures.	376827
An issue was fixed that was occurring when attempting to sort a workbook that contained dimension attributes.	392797
The utility for registering a custom library (regfunction) is now providing the correct output when run on a Global Domain.	393439
A very specific issue was fixed that occurred when performing a specific sequence of updates and calculations with recalc measures at an aggregated level.	393467
RPAS added some error checking to catch scenarios with cycle groups for expressions using time series functions.	393571
The option "Commit ASAP" was fixed so that it forces you to save the workbook before attempting to Commit ASAP.	393588
The uninstall process for RPAS server on Windows was updated to handle multiple versions of RPAS installations on the same machine. Previously, the server was registering only a single registration key. You are now able to distinguish which version is being uninstalled.	393605
The RPAS client was updated to better handle invalid hierarchy rollups. The client now disables a rollup if it is not valid. This can be caught when loading the hierarchy using the "checkparents" utility.	393662
The system was updated to correctly respect defined workbook limits (to limit the number of workbooks that you can build) when saving workbooks.	394618
RPAS fixed a problem with extra measures that are selected in wizards for workbooks built in Global Domains.	394723
When a custom menu option processes, the popup message that appears will no longer display a warning triangle since the message is only informational.	394855
A problem was fixed that allows the update of special values of non-stored higher-base-intersection measures (in Global Domain environments). Previously, the process was failing.	394894
The "find" feature in the two tree of the wizard process was fixed when searching "up" and "down" for a given value.	394989
The measure load utility (loadmeasure) was fixed so that characters do not get truncated when loading measure files with Japanese characters. Note: This problem only occurred on Windows XP.	395062
When hiding the year in a workbook, the client no longer jumps to the last week of the last year the workbook was built.	395064
The RPAS client correctly displays any date values. Dates greater than 12/31/2200 were previously not displaying correctly.	395066

Resolved Issue	Defect
The RPAS client was updated so that locked cells for a given measure are consistent across worksheets.	395116
The formatting option for the length of string type measures was disabled in the RPAS client.	395140
Workbooks built from the Hierarchy Maintenance workbook template should no longer fail to build when set up for auto-build and then manually run using the workbook batch utility <code>wbbatch</code> .	395243
A specific problem in the client was fixed so that special values are correctly displayed.	395267
The client was updated so that when a measure is formatted to show a \$ in front of a value the \$ will show even if the value is set to 0 or no value is entered. This had previously been addressed in a different version of the client.	395280
When the multi language option is true in the configuration tools, the template group name and type will display correctly when opening the list of saved workbooks.	395315
The utility for copying domains (<code>copyDomain</code>) was updated to update the Global Domain configuration file (<code>globaldomainconfig.xml</code>) when building or patching a domain.	395375
Performance improvements were made to speed up the addition of extra measures in the wizard process.	395429
The RPAS client was fixed so that errors no longer occur when a user selects next or previous pages on a print preview screen, or when toggling back and forth on graph views. This was specific to certain versions of Microsoft Windows.	395433 395535
The RPAS client was updated to correctly handle when a user is copying to or pasting from a clipboard a negative value with a prefix such as a \$ (for instance, \$-100.00).	395496
A fix was made that allows similar workbooks to be built simultaneously. You were receiving a lock error due to a lock on an RPAS metadata file (<code>measdata.gem</code>) when multiple users were trying to build workbooks.	395511
A problem was addressed that occurred when loading positions that have changed order. This problem occurred when generating a forecast in Demand Forecasting but was related to an internal RPAS utility that refreshes hierarchy data.	395517
The utility for loading measures (<code>loadmeasure</code>) was fixed to handle large data files (over 120 MB).	395518
A problem was addressed when running the Curve batch process. Certain expressions were not being evaluated when they should have been. This was resulting in a "database full" error.	395564
The Translation Administration workbook was updated so that labels for hierarchies can be updated (in the Hierarchy Labels worksheet).	395755
You were experiencing an error when attempting to refresh a specific workbook. Some additional error checking was added and the problem no longer appeared after applying the patch.	395775

Resolved Issue	Defect
The Hierarchy Maintenance workbook template was fixed so that changes can be made to dimensions below the partition level when run in the master domain of a Global Domain environment.	396046

RPAS 11.1.7 Release Information

RPAS Server and Client Resolve Issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
Several issues were addressed with measure security. Currently, if you are granted read-only access to a workbook template, all measures are properly respected as read-only. Previously, there were certain scenarios when the measure access rights in the Security Administration workbook template were overriding the measure security as defined in the configuration of the template, which ultimately controls measure security.	376123
An issue was addressed with the base RPAS procedure "lookup." Previously, there was a problem with the mapping measure where the expressions using the lookup procedure were not getting evaluated when the mapping measure was modified.	392912
The usage for the RPAS utility <code>updateArray</code> was updated to explain that either the <code>-srcArray</code> or <code>-srcScalar</code> parameters may be used. If neither is specified, it is the same as if <code>-srcScalar "NA"</code> was provided.	393097
The RPAS client was updated so that vertical scroll bars should no longer disappear when scrolling through a list.	393227
The RPAS client fixed an issue with the "Find" functionality (from the right-click menu) so that all data in a workbook remains in the correct cells.	393458
An issue was addressed so that there is no longer an error when attempting to sort data in a saved workbook.	393592
The RPAS client was updated so that entries in a drop down list are no longer being crunched together, which was making the list unreadable to the user.	393615
The RPAS client was updated so that entries in a drop down list are no longer corrupted when scrolling up and down.	393616
The RPAS client was fixed so that the black outline around entries in a drop down list remains intact when navigating through the list.	393617
A fix was introduced in the client so that when you select the Show/Hide options for measures or hierarchies, the workbook cells do not become non-editable (or hatched out).	393854
RPAS fixed an issue with the utility for the calculation engine (mace) that resulted in lock contention and prevented multiple uses of the utility. Specifically, RPAS is no longer writing to the <code>store.gem</code> file unless necessary.	394095
RPAS fixed an issue when running multiple process of the utility for reshaping arrays in the domain (<code>reshapeArrays</code>). The system no longer writes to the <code>store.gem</code> database unless necessary.	394110

Resolved Issue	Defect
An issue was addressed in the RPAS client that was causing combo boxes to get corrupted under certain circumstances. The issue was encountered in RDF when attempting to assign a sister store and like item. Currently, when a combo box is protected, it will not display the popup window.	394670
The RPAS client was fixed to address an issue with saved styles. Specifically, the client now allows a new window to be added to a workbook built from a workbook template where the style has been saved for that template. A common scenario for this condition is when you add an extra measure in the wizard process. If that measure is placed in a new window, this was previously a problem if the template for the given workbook has a saved style.	376843
The client was updated so that style formats are no longer causing errors after a domain has been patched.	394150

Configuration Tools Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
The Rule Tool now prevents you from reordering rules when rule filtering is enabled. Previously, the Tools were incorrectly allowing re-sequencing when rule filtering was enabled.	394529
An issue was fixed in the Rule Tool that was causing the wrong rule name to be displayed when attempting to rename a rule.	394522
An issue was addressed that was causing security settings for workbooks to reset after patching a domain (using <code>patchinstall</code>). Previously an administrator could grant users access to workbook templates, but the settings got deleted after patching the environment.	393433
A new field named, "Workbook Group Label," was added to the General tab of the Workbook designer. This allows you to select the same name and label as other pre-existing groups and labels. Previously, you could not add a new workbook to an existing tab.	393423
Service Pack 2 of Windows XP is not compatible with the old version of MKS, which was used when running RPAS server on Windows. This caused a number of issues; specifically "Dynamic Template" of the Configuration Tools was failing to execute batch scripts. Installing the new version of MKS has corrected the problem.	393282
Added some content to the RDF configuration. There is a new measure along with the load and commit rules for it.	No Defect #
Some customers with large configurations have run into issues involving memory when trying to patch a domain. Previously, to address this, the customers have added the argument <code>[-Xmx + some number]</code> to the call made to <code>rpasInstall</code> . An optional environment variable was introduced named "RIDE_OPTIONS" that can be set in a profile using a value of <code>"-Xmx + some number"</code> ; for example, <code>-Xmx512m</code> . The <code>rpasInstall</code> script has been modified to include <code>\$RIDE_OPTIONS</code> in the command line call to java. Note: This variable is optional and will not affect the system if not defined. When defined, the variable will be used during each call to <code>rpasInstall</code> . Additionally, install scripts will no longer need to be modified after receiving a new version of the software.	No Defect #
Two timestamps (Task Begun and Task Ended) were added to the <code>rpasInstall</code> logs for the Installer.	No Defect #

RPAS 11.1.6 Release Information

RPAS Server and Client Resolved issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
A complex issue with user-defined hierarchies was addressed that was occurring when new positions are added to a domain. Note: There are a number of complex issues that require the administrator / implementer to perform some manual steps to avoid running into problems.	375837
A few issues with beginning of period and end of period calculations were addressed in the calculation engine.	375864
The exportData utility no longer fails when both the -wide and -skipNA options are used together.	375889
An issue was addressed where alert workbooks were not building in new domains with registered alerts but when the alert finder had not been run.	376238
Some issues with very large input measure files (greater than 2 gigabyte) were fixed for the loadmeasure and splitmeasuredata utilities. Note: There are some technical details that should be noted, all of which are included in the actual defect notes and resolution.	376413
A problem was fixed so that the count of alerts in alert workbooks is based on the number in the workbook and not the domain.	377080
When working with position queries and trying to find a hierarchy that is empty or not found the RPAS Client, this no longer crashes or produces errors.	377108
The problem in the Hierarchy Maintenance template was fixed to correctly handle using the back button to go back and choose a different dimension.	377186
The Hierarchy Maintenance Template was changed so that it will properly add the new positions to the workbook as well as the domain.	377320
A problem with percent to parent measures was fixed so that the behavior is consistent when making edits to percent to parent measures.	377356
A number of minor display issues have been fixed in the RPAS client for the graphing functionality.	377815
A fix was made to the RPAS client that corrects a navigation issue when using the forward arrow keys (>>) when viewing data in the graph mode.	377864
When logging into the RPAS Client, if you entered an incorrect login or password, you receive a new window asking for the correct login. If you select cancel on that window, the client used to be left in a state where all you could do is shut it down and start over. This was corrected so that the menu options and toolbar are reset when the user selects cancel.	377916
There was a problem where the standard RPAS wizard "Edit User" was always resetting the permissions of the user based on the administration flag only. This was fixed so that the permissions are changed only if the administration flag is changed.	377931

Resolved Issue	Defect
The Alert Manager wizard process was changed so that information is updated when going backwards and forward in the wizard process. Previously, certain information was not updated unless the process was restarted.	378124
The utility for building workbooks in batch (wbbatch) was updated so that a message is displayed to the administrator when running the utility when there are no scheduled workbook operations (for instance, no workbooks scheduled to be built). Administrator will now see a message like "no workbooks have been scheduled for auto build."	378127
The RPAS client was updated to allow measures with a data type of "real" and a NA value with decimals to correctly display the values with decimals.	392819
An issue was fixed that was causing an error when aggregating scalar measures in the master domain of a Global Domain environment.	392885
The aggregation method to find the minimum of populated values (min_pop) was fixed to work properly in the master domain when aggregating data for measures with a higher base intersection than the partition level (only applicable in Global Domain environments).	392904
The Help files were updated and should contain all the correct information.	392922
The utility for loading measures (loadmeasure) was fixed so that data can be purged in configurations/solutions using different formats for the position names of day. The format is set by the dimension information. For example, now "DAY19970101" is now functional. Previously, it had to be in the format "D19970101."	392960
The exportData utility was enhanced so that it now exits if one of the exported dimensions does not exist in one of the export arrays.	392969
A new validation was put in place that checks to make sure that a user group name does not match a user name. This was causing a workbook to hang when trying to commit data.	393017

Configuration Tools Resolve Issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
In the Data Interface Manager inside the Tools workbench, the Load Intersection buttons were displaying in RED color if the base intersection did not match the base intersection of the measure being interfaced. This was fixed so that it checks if the base intersection is a descendant of the load intersection.	376660
Previously, if a rule set had empty rule groups, the TemplateCfg Generator did not load an entry for that rule group in the workbook's tmpl.cfg file. This is now fixed.	377612
Under certain conditions, there were issues when running custom menus that contained rule groups and shell scripts. The issue was that the system did not release locks on some of the database (.gem) files, which caused the script to fail. This issue is fixed.	377813
Dynamic picklists ranged by dimension in workbooks will now use external position names.	377968
Previously, some workbook builds were failing in global domains. We have now implemented a check to verify if what was returned is a valid dimension or null or ""	378064
Fixed issue to restrict the ability to set a security dimension for the Calendar (CLND) hierarchy.	378081
On the General tab in the Workbook template properties, a hierarchy will no longer turn red if placed on the Unassigned axis. Previously, if a hierarchy was on the Unassigned axis in the worksheet, it caused that hierarchy to be red when set to the Unassigned axis on the workbook template.	378090
Previously, when using the Show / Hide option in the workbook, duplicate values were displayed for a measure if the measure's aggregation method was changed during a patch install. The way to get rid of duplicate measures is to make sure the allowed aggs is set to the default agg for the measure <Config Tools - Measure Definition Tool>.	378098
A Null Pointer Exception error was thrown when a workbook tab was copied and you then click on the worksheet.	378208
You will no longer receive the error dialog, "The measure name is in use," if they double-click in the Identifier field on the Components tab in the Measure Tool.	392994
Fixed the issue regarding an "Index Out of Bounds" error being thrown when large scale rule deletions were made within the same rule group.	393107
Inside the Hierarchy Tool, the Database name for dimension "User" was wrongly stated as HMAINT. This was corrected to display 'ADMIN' as the Database.	393228

RPAS 11.1.5 Release Information

Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
Loadmeasure was throwing an Exception error when loading measure r_msglabel. The load file needed a blank line in the end in some of the platforms and not necessary in others. This was fixed so that it always has a blank line in the end. For some reason, 'Default Language' was displayed in the r_msglabel.ovr.english file instead of the actual default language=English; quotations were also stripped from the default language loaded in this file. Also, if a message does not have a label, it will not be populated in the file.	377716
RPAS has addressed issues encountered sometimes when rolling up to user-defined hierarchies when building certain workbooks. These issues were visible in the Assortment Planning solution.	377593
Deleting an application (solution) was not flagging the domain as dirty. This was fixed. The domain will now recognize the change with the little yellow caution icon to the left of the application name, and you will get the save dialog if you try to close the configuration.	377568
Issues were addressed that were causing errors when copying data to the clipboard in the RPAS client.	377440 375861 375420
In previous versions, you were able to add a solution without a solution name by either hitting Escape and clicking the close window object(X) or clicking the close window object (X) from the new Solution dialog. This problem was fixed.	377417
Previously, a Null Pointer Exception error was thrown if no configurations were selected in the Configuration Manager and you tried to create a new solution using the File menu. Now, the Solution option will be disabled in the File menu until a project is selected in the Configuration Manager tree.	377415
You will no longer receive error messages when trying to commit data in workbooks built from the standard RPAS template Translation Administration. This issue was only valid for multi-lingual domains.	377357
An "ArrayOutOfBoundsException" error will not be thrown anymore when you create measure components / measures. It was experienced previously if the following steps were taken: 1. add a measure component 2. realize a measure 3. use that measure in a rule 4. create a workbook and use that rule group Then start the process over again with adding a new measure component, and so on.	377355
Select hierarchies can now be chosen to not display in a workbook. These hierarchies will be placed on the Unassigned axis within the worksheet. Previously, the Configuration Tools displayed the hierarchies in red if they were placed on the Unassigned axis.	377328

Resolved Issue	Defect
Measures no longer disappear from the Measure Analysis wizard after being inserted into a Measure Analysis workbook.	377325
Measures must have a data type specified when the measure is being registered. Previously, the system did not indicate which measures did not have a valid type specified and the interface crashed. Currently, the system indicates which measure could be registered.	377271
The measure name will now appear in its entirety on the Percent of Parent pop up window in the RPAS client.	377202
An issue with print preview (worksheet) was corrected. Under certain conditions the RPAS client was crashing when attempting to preview a worksheet.	377078
Measure label names in multi-lingual configurations were increased from 80 characters to 255 characters.	376876
Added scroll pane and split pane to standard wizard dialog to view all hierarchies / dimensions when a configuration consists of several hierarchies.	376781
Edits to a pick list were not previously recognized in the Client when the domain was patched because there was a space(s) in the Range(s). Currently, leading and trailing spaces in the Range selections are being stripped and the patched domain will reflect the changes properly.	376658
The insert measure functionality was fixed to work correctly with the RDF workbook "Forecast Approval."	376647
Performance improvements were made to the utility for loading measures (loadMeasure).	376412
Performance improvements were made to the splitMeasureData utility. This utility is only used in a Global Domain environment, and it is used for splitting measure files from a single file in the master domain to multiple files into the local domains.	376411
Previously, the encoding type for all .xml files was reported as UTF-8, regardless of the actual encoding type. Due to some configurations that use non-standard characters, we now force the encoding type of UTF-8 so the file will be loaded and interpreted properly. Configurations with these non-standard characters will now save and load properly.	376256
Previously, filtering on positions was not working properly in the client. You should now be able to filter on positions using a Boolean measure and the position query functionality.	376055
Error messages were improved for errors received when trying to run functions or procedures in an RPAS extension that has not been registered.	376042
The Configuration Tools now validate that only a single dynamic hierarchy can be defined for a given hierarchy.	375984
When building a workbook, the Position Query Definition's in the wizard will now validate against the domain that all of the positions are valid.	375966
A fix to the client was added to correctly show symbols (for instance, \$ or %) for measures with a value of zero.	375939
A few issues with beginning of period and end of period calculations were addressed in the calculation engine.	375864

Resolved Issue	Defect
Changes were not being displayed properly in the client when a configuration with five or more hierarchies was patched and two hierarchies were chosen not to display in the workbook. A hierarchy can now be set on the Unassigned axis so it will not display in the workbook <similar to defect 377328>.	375843
The utility for performing workbook operations in batch (wbbatch) was fixed to properly run processes in parallel.	375841
Workbook formatting was fixed so that if the user saves the workbook format, additional measures can be reselected in a new workbook build wizard process.	375759
Measures that are standard within a workbook are no longer available for insertion via the wizard that builds the workbook.	375501
Several issues were addressed when running custom menus. One issue was that after executing the menu option, the name of the rule group was getting displayed instead of the label. The other issue was a documentation omission (the path to the script must still contain the "/").	375440
A "-precision" argument was added to the exportData utility. This argument may be used to ignore exporting numeric values, which only differ from the navalue less than the precision value specified. The precision value is designed to be a number less than one. If the precision value is greater than one, the user will see a warning message.	375433
Client change so that the Edit Controls in a wizard page will now remember the previous contents when the wizard screens are accessed a second time.	375367
An error that would occur when trying to scroll through a workbook with hidden dimensions was fixed. When scrolling the page hierarchy of a workbook, only position queries that contain the changed dimension as one of their parameters will execute.	375356
When running a shell script from the menu in a workbook, the messages were updated and the checks have been corrected.	374965
The duplication of drop down list entries was corrected.	374535
A new environment variable, "RPAS_LOCK_TIMEOUT" was created to allow users to set the timeout period length when write-lock errors occur during simultaneous commits.	374102
The Config Tools no longer opens a save dialog when a widget is clicked inside the Wizard Designer, but no changes have been made.	372687
Changed the workbook template generation algorithm to be more robust to boundary conditions involving empty workbooks or tabs. Currently, a workbook with no sheets will no longer result in the template entry 'sheet =', now that entry will be absent.	No defect #
A performance improvement was made after selecting a Worksheet from the tree to display in the Tools.	No defect #
Fixed a bug that made 'Label' appear as the Label for an Edited Measure that did not have a Label specified in the Tool.	No defect #
Previously, when adding a function library to use in the Tools workbench <Utilities menu/Function Library Manager>, the generated applibs.xml file was being created in the /bin directory of the Tools build. It was fixed to write the file to its correct location in the /resources directory.	No defect #

New Functionality

The following is a list of platform enhancements that were available in the patch except where noted as available in a previous patch.

Filtering out Values when Exporting Data

An enhancement was made to the RPAS utility `exportdata` (new parameter `-precision`) that allows you to ignore (not export) values that differ from the NA value less than a specified value.

The purpose of this enhancement is for the export utility not to export values that vary only slightly from the NA value, most commonly very small values close to zero. For example, consider a numeric measure with a NA value of zero. If the precision value is specified as 0.01, any number smaller than that is ignored, so 0.0034 would be ignored while 0.34 would be exported.

The precision value must be less than one. If a value greater than one is provided, the utility returns a warning.

RPAS Lock Timeout Variable

RPAS has introduced a new environmental variable named `"RPAS_LOCK_TIMEOUT."` This variable was added to allow an administrator to set the length of time they want to wait before timing out when there are lock contention issues. This most commonly occurs when two users attempt to simultaneously commit/save the same data.

This environment variable is set on the back end to the number of milliseconds to wait for a file lock before returning a lock contention error. The default value is 60000 milliseconds (one minute). As with any environmental variable, the variable must be set prior to starting the process that uses that variable. The variable was introduced for use with the RPAS database server, which means that the variable is set for the `DomainDaemon`.

For example, the two lines below indicate how an administrator would tell RPAS to wait two minutes before returning a lock contention error with the `RpasDbServer` after launching the client and logging in. Any client that connects to that domain daemon would see lock contention after a two minute delay.

```
Export RPAS_LOCK_TIMEOUT=120000  
DomainDaemon -port 55123 -start -debug &
```

Normalization and Resizing Functions – `norm`, `resize`, `resizenorm`

The above functions are now available in RPAS. The syntax for configuring and using these functions is documented in the RPAS 11.x Rule Functions Reference Guide.

The `norm` function is used for normalizing a time series of values. It recalculates the values for the individual time periods to a new total, but while retaining the "shape" of the data.

The `resize` function uses the "shape" of a function to produce another function of a different length but with the same shape.

The `resizenorm` function uses the "shape" of a time series to produce another time series of a different length, but with the same shape normalized to a specific total.

Changes to Existing Functionality

The following section identifies changes to the RPAS server, RPAS client, or the Configuration Tools:

Note: The RPAS utility for running workbook operations in batch (`wbbatch`) had a parameter that was incorrectly documented in RPAS 11.1 GA and in the usage of the utility. The parameter for building or refreshing workbooks in parallel is “-processes” and not “-parallel” as previously documented and communicated.

RPAS 11.1.2 Release information

RPAS Server and Client Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
A client fix was made to correct the incorrect cell displays when collapsing and expanding product dimensions.	373612
The utility for building workbooks in batch (wbbatch) was fixed so that the same workbook can be built multiple times. There is a new issue related to auto-workbook build that is specific to building an RDF Forecast Approval workbook in batch mode (Defect 37563).	374637
All RPAS utilities have had their error return codes changed from negative to positive numbers.	374101
All token measures are now registered as not "insertable." The "insertable" measure property allows measures to be optionally included by selecting them in the Extra Measures wizard page. Token measures will no longer appear on this wizard page.	374804
An Extra Measures wizard page now only displays measures with the 'insertable' property set to true.	374531
All workbook templates now accept the insertion of all upper and lower bound measures.	374207
A development parameter for wizard pages (AlwaysRefresh) was fixed so that when it is set to "true," the page will always refresh its contents each time it is displayed.	373758
Certain changes were made to the calculation engine so that calculation errors no longer occur on saved, and then re-opened workbooks.	374694
The "transform" custom extension is now working correctly in upgraded 11.1 domains.	374231
During a domain upgrade process, style settings in the Security Administration workbook are now automatically deleted.	375076
The Security Administration Template (including Measure Rights worksheet) does not function correctly after a domain has been upgraded if a style has been saved for the template. The workaround is to delete the database that stores the styles (rpas_sec*.gem in the domain/styles directory). In the future, this style will be deleted during the upgrade process (see defect 375076).	374359
Multiple issues have been addressed that occurred when adding measures to worksheets in alert workbooks.	375051
RPAS is now throwing an exception if all the entries in an input file are erroneous when loading a hierarchy file (using the loadhier utility). RPAS will return these errors with a non-zero status code.	348977

Resolved Issue	Defect
Previously, if you added or deleted positions for a partitioned dimension, loadHier was failing when trying to load a non-partitioned hierarchy. loadHier was modified so that you are now able to successfully load non-partitioned hierarchies without any errors. The utility provides the following warning when it encounters these related problems: You are either trying to load a position which does not exist in map array or you are purging a position which still exists in map array. You can resolve this problem either by using reconfigGlobalDomainPartitions utility or by changing your input file data.	374050
There is a new argument option to loadHier , " -logLoadedPositions " , that creates "loaded[HIERNAME].dat" files in the input/processed directory when specified. Additional information about this enhancement is available in the enhancements section of this patch.	374143
The setting for "synchronized page scrolling" is now respected when formatting is saved in a workbook.	374247
The Commit ASAP functionality is now working correctly with "refresh" in domains upgraded from 11.0.4 to 11.1.	375089
The copyDomain utility was fixed when copying Global Domain environments. The master and all associated local domains are properly handled.	375809
The exportData utility was modified to export calendar data to display in the format of a week ending date: 20040101 (to be in sync with the date format in the RMS product) when used in conjunction with a new function indextoenddate (see above section in release notes).	373218
The exportData utility was fixed to display an error message with using incorrect formats for date measures.	375263
The exportData utility has been fixed to function correctly with the parameter " -array ."	375777
The exportData utility was fixed to export all records when specifying a range.	374710
The help files for the RPAS client can now be correctly accessed from the Windows Start Menu.	374537
The calculation engine utility (mace) was fixed to display an error message when running with both a group name and expression string in the same call.	375239
The performance of an AIP binary is improved.	375543
The utility for registering templates (regtemplate) was fixed to successfully register TemplateLib in all domains of a Global Domain environment.	375830
The utility for updating/reshaping arrays (reshapeArrays) was fixed to allow the specification of an absolute or relate path when specifying the path to the database. Previously, this was causing messages for custom menus to be incorrectly displayed.	373170
Several internal RPAS components were updated to address issues with memory management and performance when attempting to copy and paste at aggregated levels.	373377
The RPAS Client was fixed so that saved workbooks are not displayed in duplicate in the "open" window. This situation occurred under certain rare circumstances.	374741

Resolved Issue	Defect
The optimized/release version of RPAS was updated to throw an exception if there are errors when running certain off-line RDF binaries.	374756
Token measures are now allowed to have the same base intersection of the partition dimension.	372236
Several performance issues were addressed with expressions that were encountered when evaluating expressions using the standard RPAS functions "leadl" and "lag."	373608
The workbook limit per user group and template in the RPAS Security Administration workbook is now committing successfully.	374169

Configuration Tools Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
Previously, the domain build process would error if the Load Range name for a dynamic picklist measure contained spaces.	375182
RPAS does not support position level security on the calendar hierarchy. This feature was disabled in the Configuration Tools (Hierarchy Definition Tool).	375101
Filtering by measure in the Measure Definition Tool works according to what tree nodes are selected in the class tree. Previously, it only worked if all major and minor components were selected	374780
Fixed issue when clicking on a wizard widget (without making any changes) that caused the Tools to prompt the user to save changes before closing the configuration.	372687
Two issues fixed: 1. Rule filtering is no longer turned off when switching rule groups. 2. Measure label concatenation correctly inserts spaces between minor classes when measures are auto-generated.	373376
The context menu no longer goes off the screen if it is opened near the bottom of the screen when using the Tools on Windows XP.	373130
No longer see the following output regarding the construction of measure names using the component scheme when executing the Installer: RkWPAdjStrR = LVL:Rk Vers:WP Metr:AdjStr UOM:R RkWPAdjStrU = LVL:Rk Vers:WP Metr:AdjStr UOM:U	373114

New Functionality

The following is a list of platform enhancements that are available in this patch except where noted as available in a previous patch.

Platform – Server and Client

- RPAS has a new version of the RPAS client configuration utility (not related to the Tools) that stores encrypted passwords (available in 11.1 GA).
 1. RPAS has created a new version of the utility used to configure the RPAS client. This new version encrypts user passwords and is called "**EConfigure.exe**".
 2. It is functionally and visually identical to the previous "Configure.exe" utility.
 3. It is located in the main directory of an RPAS client installation, which is the same directory as "Foundation.exe" and the old utility "Configure.exe."
 4. The previous "Configure.exe" utility will be supported in 11.1, but is scheduled to be deprecated in 11.2.
- RPAS provides the ability to spread measures proportionally that have an aggregation type of average - previously RPAS only supported replicate to be used with average (available in 11.1.1).
- All user passwords are now encrypted within the RPAS data structures. They are encrypted in the arrays admin.userinfo and admin.passwordhistory (available in 11.1.1).
- New function `indextoenddate` that returns the end date of a period where the index number is supplied. See sections below for additional information and the function syntax.
- Utility to split measure data (`splitMeasureData`) from input files in master domain to multiple input files in local domains - beginning with 11.1.1 it is no longer necessary to copy the measure data files to the local domains. Input files only need to be loaded into the master domain.
 1. Utility takes input files located in the master domain and splits them into multiple input files in the local domains based on the location of positions. HBI measures are maintained in the master domain.
 2. Utility can process multiple input files (for instance, sales.ovr, sales.ovr.1, sales.inc) for the same measure in a single call.
 3. `splitMeasureData` should be called prior to running `loadMeasure` in each local domain.
 4. Syntax: `splitMeasureData -d pathToGlobalDomain -measure measureName`.
- Enhancement to the hierarchy loading utility (`loadhier`):
 1. There is a new parameter for `loadhier` (`-logLoadedPositions`) that creates "loaded[HIERNAME].dat" files in the input/processed directory when specified.
 2. File contains line of the original input file that loaded successfully. The default behavior of `loadHier` is not to create these files. Additionally, RPAS is no longer creating the "[HIERNAME]DeletedPositions.log" file. This has been resolved by creating "loaded[HIERNAME].dat" files. Currently, there is no need for these "[HIERNAME]DeletedPositions.log" files.

Configuration Tools

The 15 character restriction on custom menu labels has been removed. Additionally, non-alphanumeric characters can be used in the labels.

Alternate ways of Exporting Date Values

RPAS has implemented a feature that provides the ability to export date values in a format other than the name of the position. Many customers want to see dates exported as a date value (such as week ending "20040105") rather than the position name (such as "W01_2004").

This is now possible with the availability of a function `indextoenddate` that returns the index of a given period. When combined with the previously available function `indexfirst/last`, the function can be used to create a mapping measure that can be referenced when exporting data.

To meet this requirement there are several steps that must be followed:

- Create a mapping date measure (for instance, "mapmeas") that has a base intersection of the CLND dimension that is being mapped (the week dimension in the above example)
- Create and evaluate an expression for that measure using the `indextoenddate` and `indexfirst` functions
 1. For example: `mapmeas=indextoenddate(indexfirst([clnd].[week]))`
 2. The expression can be evaluated directly by using the **mace** calculation engine utility or in a workbook.
- Run the `exportdata` utility using the array mapping technique, referring to the underlying array name of the mapping measure (see the RPAS 11.1 Administrator's Guide for additional information on `exportdata`).

To clarify this approach, a simple example follows.

Exporting Date Values as End of Week

Consider an example where the data to be exported is stored at sku-store-week (for instance, W01_2004 sku1 str1). Imagine that you desire to see the value of week as YYYYMMDD instead of the position name.

First, it is necessary to create a date measure that will store the mapping data between the position names and the date of the last day in the week. For example, register the following measure:

```
regmeasure -d . -add mapmeas - type date - baseint week - nvalue 2000020313200000
-db testdb
```

Next, the values of the mapping measure needs to be updated with the correct date values. This can be done by executing an expression in the **mace** utility using the `indextoenddate` and `indexfirst` functions (or combinations thereof depending on how the dates should be mapped). For example:

```
mace -d . -run -expression 'mapmeas=indextoenddate(indexfirst([clnd].[week]))'
```

After the mapping measure/array has been created and values have been populated, run the `exportdata` utility such as the following:

```
exportData -d . -out test.out -array "data/pos|pos%1 %13f 0 %13f" -dim "week
testdb|mapmeas%1 %8s 1"
```

In this example, the date values would be formatted as YYYYMMDD.

Calendar Index Function – `indextoenddate`

Returns the end date of the period whose index number is supplied.

Syntax

`indextoenddate(<index>[ , [<cldnhierarchy>].[<dimension>] | current])`

- Where <cldnhierarchy> is the name of the calendar (time) hierarchy, and <dimension> is the name of a dimension in the calendar hierarchy. `current` is a keyword that implies the current dimension in the calendar hierarchy. If <dimension> is not a valid dimension in the calendar hierarchy, an **error** is generated. If the calendar hierarchy and dimension are not supplied, the default is the current calendar dimension.

Note: This function requires that the day dimension of the calendar hierarchy be included in the workbook. If the lowest dimension of the calendar hierarchy is above the day dimension the function will not be able to return a valid date.

- <index> is an expression that returns an index number in the indicated calendar dimension. If <index> is non-integer, only the integer portion is used. If <index> is not a valid index number for the specified dimension, an **error** is generated. An **error** is generated if the measure being evaluated does not have a base intersection in the calendar hierarchy and the `current` option is used.
- The function returns a date that is the end date of the period indicated by the dimension and index number. If the period being evaluated is at or below the day level, the end date is the date of the whole of the period. If the period being evaluated is above the day level, the end date is the date of the last child position at the day level of the period being evaluated.

Inverse: The `indextoenddate` function does not have an inverse.

Examples:

- `indextoenddate(current)`
Returns the end date of the current time period
- `indextoenddate (indexfirst([cld].[qtr]))`
Returns the end date of the last period in the current time dimension in the current quarter
- `indextoenddate (index([cld].[week], openweek), [cld].[week])`
Returns the end date of the period at the week level whose name is held in the `openweek` measure.

Changes to Existing Functionality

Platform – Server and Client

The following section identifies changes to the RPAS server or client, and potentially the Configuration Tools as well.

- "none" is not a valid aggregation type in RPAS, and RPAS no longer allows measures to be registered with this aggregation type (available in 11.1 GA).
- Edited cells always calculated – Previously RPAS did not recognize an edit to a cell unless the value was changed. This caused issues in situations, such as scaling (for instance, scale to 1000 so a value of 1200 is shown as 1). The behavior has been changed so that any edit is considered a change and the new value is sent for calculation (available in 11.1.1).
- The following utilities (`upgradeDomain`, `inithier`, `createRpasDomain`, `createGlobalDomain`) were updated to error out if hierarchies are loaded with the same names as dimensions. You can override this behavior with the parameter `-ignoreSharedNames` (it is `-s` in `createRpasDomain` and `createGlobalDomain`).
- Enhancement to output for the `-specs` parameter for the `printMeasure` utility – If the measure is a date-type measure, the NA value will be formatted as a date (yyyy/mm/dd hh:mm:ss.ss). Additionally, the type field shows the type name (int, date, bool, etc.) as well as the integer code.
- Enhancement to output for `-specs` parameter for the `printArray` utility – The NA value of the array is now displayed on the line with the NOBS and NODS values. Furthermore, if the `-format` parameter is present; it will be used to format the NA value as a date.
- The following RPAS utilities have been centralized when used in a Global Domain environment. These utilities need be run only in master domains and not in local domains (except the `wbmgr` utility as noted):
 1. `inithier` – for setting position-level security and increasing the width of positions (since position names can be longer than 24 characters with the implementation of position name indirection)
 2. `regmeasattr` – registering measure attributes
 3. `datrmgr` – registering dimension attributes
 4. `wbmgr` – for listing and removing workbooks in a domain; this utility can be run in the master domain and local domains
 5. `changedomainsparseness` – changing domains to/from the use of hypersparse databases

Configuration Tools

The following section identifies changes that relate only to the Configuration Tools:

Measure Tool

1. Attribute inheritance was restored in the Measure Tool to distinguish which measure attributes of minor components are inherited from the major components vs. overwritten. Values are gray if inherited and black if manually overwritten. This behavior was lost in 11.1 GA.
2. Tabbing off the bottom of a table in Configuration Tools – There was at least one case in which an error could be thrown if you initiated an edit using the mouse on the bottom row of the table. Once the edit was complete, an attempt to tab around the table would result in an exception. A mechanism was added so that the exception will be handled without interrupting use of the table.
3. Several issues with persistent picklists that caused undesirable behavior were resolved. The picklist editor automatically disposes of itself upon the selection of an item from the picklist. Examples of issues include:
 - The failure of a set value to be saved because the Save option was selected immediately after the edit
 - The wrong measure having a value set because the class membership of the table was changed directly after the edit (through the measure selector)
 - At least one case of an exception being thrown when attempting to tab out of an editor that was a picklist
 - Improper reaction of the table to arrow keys due to the fact that the picklist was 'catching' them

RPAS 11.1.1 Release Information

RPAS Server and Client Resolved Issues

The following table provides information about issues that have been resolved.

Resolved Issue	Defect
When building global domains, you can now register higher base intersection (HBI) measures with the special values option using regmeasure without specifying a database. The special value option was trying to register the HBI measures with special values in the sub domains, which is not valid functionality. Now these measures are only registered in the global domain.	373773
Formerly, passwords for the RPAS client in the admin.userinfo array were not stored as encrypted files. Changes have been implemented into 11.1.1 for storing user passwords in the admin.userinfo array and the admin.passwordhistroy array (if it exists) in encrypted format for any newly registered users. Although the current authentication mechanism works with an older domain that has passwords stored in plain text, it is recommended to either create a new domain or upgrade the domain to the current version to enable password encryption.	373672
You can now export workbooks to Excel using the File Export Sheet command with their calendar hierarchy rolled up to the "All" level in the workbook without any error messages.	373198
In global domains, you can now successfully register and un-register measures. Previously, when measures were unregistered in global domains, the empty database was left undeleted, which forced the application developer to loop through every partition in the domain to delete the empty database.	373045
RPAS 11.1.1 now enforces the restriction that position-level security is not allowed for the CLND hierarchy. RpasInstall was failing when the security dimension and the database were changed for the CLND hierarchy.	372886
Within the wizard process of building a workbook, the back button is now available to move back to previous wizard pages when there are no selections made at the current page. You can change previous wizard page selections and then move forward through the wizard.	372765
You can now register alert measures with higher base intersections than the partitioning level of the global domain and run alertmgr with the -findAlerts flag.	372665
You can now register measures (regmeasure) and insert them into workbooks without errors using Edit – Insert Measure in simple and global domains.	372560
When copying and pasting cells, RPAS code was only checking for cells protected by user locks or by the Calc. Rule Engine. RPAS now checks if any of the cells are read-only. A new error message states: "All measures must be writeable for paste operation" when copying and pasting to read-only cells in a workbook.	372010

Resolved Issue	Defect
Displayed attribute measure position information within a workbook will now be correctly updated if they are part of the refresh rule group. In addition to the position label, it is possible within RPAS to use a measure to contain a position description. This measure is populated in a new workbook and defaults to the label for non-placeholders. For placeholder positions it is possible to overwrite its description. The attribute measure is one-dimensional and registered as an attribute measure. If the values for the measure are changed through another workbook and the current workbook is refreshed, the attributes in the product hierarchy will get updated even though the measure has the new values.	363462

Configuration Tools – Defects Fixed, Enhancements, and Changed Functionality

The following changes have been made to the Configuration Tools:

1. Made a change to the converter. Now when attempting to convert a pre 11.1.1 configuration, you will be prompted to save a backup of your configuration.
2. Made changes to `rtkappconfigmeas`, to utilize new RPAS API for batch measure registration. This was especially important for global domain creation.
3. When building or patching domains, you will no longer see messages in the Installer log for registering measures, unless it was unsuccessful. However, you will still see messages regarding updating measures.
4. Remedy defect 372786 – When patching a domain, an error message is displayed when the Installer invokes the RPAS utility `reguserdim` when re-registering a user-maintained dimension, since it already exists in the domain; however, this message is informational only. The wording of the message was changed to say “Warning” instead of “Error.”
5. Remedy defect 373229 – Corrected a problem with empty rule sets getting into a domain. There is now a check to prevent this.
6. Remedy defect 372881 – Corrected a problem that was resulting in a Java error when a dimension was removed in the Hierarchy Tool for which a measure was setup in the Data Interface Tool that had that particular dimension as part of its `loadintersection`.
7. Remedy defect 373824 – Corrected a problem that was resulting in an `IndexOutOfBoundsException` when filtering by size in the rule tool and clicking promote/demote arrows to move rules up or down. The up/down arrows are now disabled when a filter is active.
8. Remedy defect 372879 – The Refreshable measure property was removed from the Measure tool as the platform no longer supports it.
9. Remedy defect 373166 – Corrected a problem that was causing changes to not be saved in the rule tool if the only change that was made was to rename all rules.
10. Remedy defect 372718 – “None” has been removed from the list of agg types in the measure tool as it is not supported by the platform.
11. Remedy defect 372928 – In Workbook tool, changed “Meas” to default to Y axis for new Workbooks and Worksheets.
12. Remedy defect 372164 – Corrected refresh problems in the Workbook tool.
13. Remedy defect 371798 – In the Workbook tool, added validation between the worksheet `baseintersection` and the hierarchies on the axes.

14. Remedy defect 373786 – Corrected a problem in the Data Interface tool that was causing the measure start positions to not be calculated correctly.
15. Remedy defect 373604 – Corrected a problem that was causing the wrong expression to be displayed for editing when a rule filter was being used in the Rule tool.
16. Remedy defect 373384 – Corrected a problem that was resulting in the Meas hierarchy not staying on the correct axis.
17. Remedy defects 373087 and 372941 – Corrected problems in the Workbook and Measure tools with dialog boxes not being “fixed” (for instance, if a dialog box was left open then switched to another application then came back to the Workbook tool, the dialog was “hidden”).
18. Remedy defect 372940 – If using multiple refresh rule groups in a workbook, the rule group description in the rule tool is used as the rule group label within the RPAS client. Previously, RPAS allowed a maximum of 20 characters for the rule group label to be viewable within the RPAS client; however, the rule tool allowed rule group descriptions of 60 characters. The limit in RPAS has been changed to 60 characters.
19. Remedy defect 373304 – Corrected a problem that was preventing Data Interface to be viewed after modifying hierarchies.
20. Remedy defect 373847 – Fixed a problem in the Measure Tool with Allowed Aggs getting not being populated when the measure data type changed.
21. Remedy defect 348977 – When building a domain with hierarchy data files that are inconsistent with the configuration as specified in the Dimension Tool, such that the files will not load, then the domain creation process will abort with an ERROR message correctly in the Measure tool.