

What's New in SAS[®] IT Resource Management 3.3



The correct bibliographic citation for this manual is as follows: SAS Institute Inc 2012. *What's New in SAS® IT Resource Management 3.3*. Cary, NC: SAS Institute Inc.

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SAS Institute Inc., SAS Campus Drive, Cary, North Carolina 27513.

1st electronic book, June 2012

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Chapter 1

What's New in SAS IT Resource Management 3.3

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Overview

SAS IT Resource Management 3.3 runs on SAS 9.3. Among the key features of SAS IT Resource Management 3.3 is its ability to efficiently handle high volumes of data. Enhancements were also made to the SAS IT Resource Management client and Gallery Manager interfaces.

SAS IT Resource Management 3.3 has the following changes and enhancements:

- [system management changes and enhancements to SAS IT Resource Management](#)
- [enhancements to aggregation functionality](#)
- [enhancements to Gallery Manager processing](#)
- [changes and enhancements to adapters](#)
- [new user-written templates](#)
- [documentation enhancements](#)

System Management Changes and Enhancements to SAS IT Resource Management

The following enhancements are introduced with SAS IT Resource Management 3.3 to improve the solution's management and maintenance.

User credential information is no longer embedded in the underlying code that is associated with deployed SAS IT Resource Management jobs. As such, special considerations are no longer necessary to accommodate user ID changes or password updates.

For all jobs created by the Adapter Setup wizard, the default name of each job contains the name that matches the subfolder where the job is located in addition to the domain category that you specify with the Adapter Setup wizard. This change enables jobs and deployed jobs to be easily associated with the IT data mart for that adapter.

MXG views are registered in SAS IT Resource Management metadata to help create jobs that include those views as input. These views are registered:

- staged tables that are supported by MXG
- simple aggregation tables that are based on input staged tables that are supported by MXG

SAS IT Resource Management 3.3 introduces macros to support staging and aggregation transformation level backup and restore options. These macros aid the recovery of SAS IT Resource Management staging and aggregation metadata and physical data when a staging or aggregation job fails.

Report packages stored in the SAS Content Server were renamed to improve recognition and usability.

Duplicate-data checking options were added to the staging transformation and to the Adapter Setup wizard.

Enhancements to Aggregation Functionality

The performance of the Aggregation transformation is significantly improved through the use of hash objects. In addition, input data to aggregations are now sorted. This step improves the input and output processes, which are used by the underlying SAS and operating system technologies that aggregate IT data.

Moving averages and moving standard deviations are now available as statistics that can be included in aggregations. These moving statistics make SAS IT Resource Management more useful because they enable IT organizations to truly identify and establish baseline and threshold measurements for the many performance metrics that they want to measure. These statistics can also be used to monitor characteristics of the SAS IT Resource Management system. For example, they can help monitor the growth in the number of systems for which data is analyzed. They can also monitor the volume of reports created by each SAS IT Resource Management report job (if measures on those items are retained and managed using SAS IT Resource Management).

SAS IT Resource Management 3.3 delivers support for calculating and including percentiles for measurements within the IT data mart. Percentiles can be specified and

calculated over designated time periods for those aggregation tables that are produced by the system. Percentile measurements in SAS IT Resource Management enable IT organizations to quantify and analyze utilization, availability, performance, and capacity characteristics of IT infrastructure components. These measurements can be compared with other components in the infrastructure so that IT organizations can prioritize and resolve current and potential problems.

Cloning is a new function that is available from the list of options that appears when you right-click on an existing aggregated table of a job that is open in the **Diagram** tab of the Job Editor window. Many IT organizations establish separate IT data marts for different IT resources based on their use by different business organizations or to support production, testing, or development. The cloning feature is useful because it allows Aggregation transformation definitions to be created once and then copied and reused across other IT data marts.

The Summarized Aggregation Table wizard is modified to simplify the specification of an aggregation.

- The Select Analysis Column page is eliminated. In all the pages where an analysis column is requested, the list of all available columns is displayed. For example, to specify percent change columns, you can select the analysis columns from the list of class, ID, statistics, and percentile columns.
- The pages that specify additional columns, such as statistics, percentiles, and so on, have a new, standardized appearance. The information about the columns is displayed in a grid format. The grid contains a row that describes the characteristics of each column (class, ID, statistic, percentile, and so on) that is specified. The row typically contains the name of the column, the target column name, the target column description, and the target column format. Additional information is displayed depending on the type of column being described. For example, a row that describes a statistic column displays its Weight By value, if weighting is specified. In addition, a row that describes a percentile column displays its Round To value.

Adding and deleting columns from the aggregation table is accomplished by clicking the **New** and **Delete** buttons, respectively.

- The MACHINE column is removed from the class list of these Key Metrics Disk aggregations:
 - SAR
 - HP Perf Agent
 - HP Reporter
 - BMC Perf Mgr

Note: If the machines that are being monitored use the preceding adapters and are attached to a storage area network, then each disk within that storage area network appears as if it were installed locally on that machine. Aggregating such data from the perspective of the host system is of little, if any, value. Therefore, the MACHINE column has been removed from the class list of the Key Metric Disk aggregations for these data sources.

- The retention period for the DayHour, DayShift, and DayShiftHour aggregations has changed from 92 to 45 days. The retention period remains the same for other aggregation tables.

Enhancements to Gallery Manager Processing

Gallery Manager's performance has improved. Retrieving 50,000 reports for the primary filters when you are creating a gallery takes around 1.5 minutes, if the middle tier is well-equipped. This improved level of performance justified the following changes to the Gallery Manager application:

- The default for the maximum number of reports to include in a gallery is increased tenfold, from 2,000 to 20,000. This number is the maximum number of reports that a customer would realistically include in a SAS IT Resource Management gallery.

Changes to the primary and secondary filter limits impact all new and existing galleries. Here are the new default values:

- Primary Filter: 30,000 reports
- Secondary Filters: 20,000 reports

Note: The value for these parameters can be any valid integer.

- The gallery owner is removed from the Gallery Manager tree view, which enables you to navigate galleries more easily.
- The Gallery Manager has improved error messages. In addition, it has improved how it handles discrepancies between filter settings and the number of reports in a gallery.

Changes and Enhancements to Adapters

MXG Adapters at Level 29.07

MXG adapters are updated to level 29.07. Earlier and later releases of the MXG software should be compatible with the SAS IT Resource Management adapters for MXG data sources.

New Adapters: RRDTool and CSV

SAS IT Resource Management 3.3 supports two new adapters:

- RRDTool Adapter for Round Robin Databases (RRDs), which enables IT administrators to create IT data marts for the analysis of those IT measurements retained in RRDs. The SAS IT Resource Management implementation lets you create staging code, sets of standard aggregations, and information maps for that data.
- CSV (Comma Separated Values) adapter, which enables IT administrators to create IT data marts for the analysis of those IT measurements retained in CSV files. The SAS IT Resource Management implementation lets you create staging code, sets of standard aggregations, and information maps for that data.

SAR Adapter

Performance of the SAR adapter when processing a large number of log files is increased. The adapter now more efficiently reads the SAR log files and then uses the SAS MPCONNECT procedure to stage data in parallel using multiple processors. Other changes include:

- The SAR adapter has been tested and works with SAR data collected from z/Linux systems.
- The SAR adapter has a simplified process for adding new columns and tables to accommodate SAR log file changes.
- The SAR adapter enables you to easily change duplicate checking parameters through the SAS IT Resource Management user interface.

New CICS Reports

CICS reporting jobs for the CicsApplid and CicsAppliedTrans domain subcategories are included in the supplied reports for SAS IT Resource Management 3.3.

These reports pertain to the DayHour time period.

VMware vCenter Updates

Overview of Updates to VMware

The analysis of VMware data collected in the vCenter database is one of the fastest growing uses of SAS IT Resource Management. SAS IT Resource Management 3.3 introduces data model and intelligence reports to reflect the popularity of this feature.

New Cluster Measurements

VMware vCenter is updated to provide additional capacity planning intelligence. The VMware data model now supports total cluster measurements for CPU and memory metrics.

New Domain Intelligence Reports

The new reports for this adapter communicate the processing and memory capacity aspects of VMware clusters. The reports also communicate intelligence that is useful in identifying possibly unused, zombie, and abandoned virtual machines within the VMware infrastructure. The reports can also show the percentage of cluster resources that are consumed by guest systems that are allocated to those clusters.

New Formulas for VMware

Two new formulas are available in SAS IT Resource Management 3.3. Both of these formulas use a measure (or load factor) that is intended to estimate the CPU and memory consumed by the host system, not resources made available to the VMware system. A default load factor of 20% is used by the reports supplied by SAS IT Resource Management. Instructions to modify the load factor are included in the projects for reports that use that metric.

New Web Log Reports

New reports are available for the Web Log adapter.

New User-Written Templates

SAS IT Resource Management 3.3 enables you to create user-written templates for the staged and aggregated tables. The **Publish as Template** option on the Properties dialog box of a staged or aggregated table enables you to store your table as a template. You can then use it as input to another transformation.

Documentation Enhancements

The following enhancements were made to the documentation for SAS IT Resource Management 3.3:

- *SAS IT Resource Management: Administrator's Guide* is available only at the [SAS IT Resource Management Web site](#). It is no longer available from the Help panel of the SAS IT Resource Management user interface.
- The glossary for SAS IT Resource Management is no longer a separate document. It is now included in *SAS IT Resource Management: Overview*.