Zenoss Analytics Release Notes

Release 5.0.0

Zenoss, Inc.

www.zenoss.com

Zenoss Analytics Release Notes

About this document

Zenoss Analytics Release Notes contains important information about Zenoss Analytics (Analytics) the current release.

Scope

This document provides information about the following releases of Analytics:

- Release 5.0.0 (June 2015)

Changes to the release notes

Date	Description
June 2015	New format for release notes.
	Added "Features 5.0.0" section.
	Added "Fixed issues 5.0.0" section.

Supported Software and Environments

The client operating systems and web browser combinations supported in this release.

New installations of Analytics 5.0.0 can be installed on these platforms:

- RedHat Enterprise Linux 7
- CentOS 7 (verified with CentOS 7.1.1503)

You can upgrade to Analytics 5.0.0 on these platforms:

- RedHat Enterprise Linux 5, 6, and 7
- CentOS 5, 6, and 7 (verified with CentOS 5.9, CentOS 6.6, CentOS 7.1.1503)

For each system that will access Analytics through a Web browser, you need:

- Firefox (verified with 38.0.1), Chrome (verified with 43.0.2357.81), or Internet Explorer (verified with 11)
- Adobe Flash Player 11 or later

The following list shows the supported Resource Manager versions during a new Analytics 5.0.0 installation along with the ZenETL 5.0.0 ZenPack:

- Resource Manager 4.1.1 + RPS
- Resource Manager 4.2.3 + RPS
- Resource Manager 4.2.4 + RPS
- Resource Manager 4.2.5 + RPS

In order to upgrade to Analytics 5.0.0 and the ZenETL 5.0.0 ZenPack, you must be currently running Analytics 4.3.0.1.0 (or higher) and the equivalent ZenETL ZenPack. If you are running an earlier version of Analytics, you will need to first upgrade to version 4.3.0.1.0.

Feature changes

Features 5.0.0

Analytics 5.0.0 offers these new features and improvements:

- Analytics 5.0.0 ETLs model, events, and data from one or more Resource Manager 4.x and/or 5.x instances.
- Analytics 5.0.0 can be deployed standalone as in the 4.x version or deployed using containers to allow management by a Resource Manager 5.x Control Center.
- Performance metrics can be extracted from both OpenTSDB and HBase (Resource Manager 5.x) as well as RRD files (Resource Manager 4.x).
- Added ETL of all device and component template bindings so you can determine which monitoring templates are attached to what devices/components.
- Min and Max thresholds for devices and device components are now ETL'ed to a new dimension table named "dim_threshold_values". Even if the threshold definitions are complicated TALES expressions referencing modeled, z-, or c- properties, the ETL will calculate the thresholds (at the time of the ETL) and store the resulting threshold values into the new dimension table so that it can be included in reports. For example, set `/FileSystem/Server/` thresholds high disk usage maximum Value to "here.zCommandLoginTimeout". You can now include the min and max threshold values in your reports by selecting the "threshold_max_value" and "threshold_min_value" columns from the dim_threshold_values table.
- OpenJDK replaces Oracle JRE.
- Uses the TIBCO Jaspersoft 6 solution, which enables Embeddable Dashboards, Interactive Report Workbooks, New Chart Types, and Custom Visualizations. For more information, see *http://www.jaspersoft.com/introducing-jaspersoft-6*.
- All Zenoss 5.x products replace ZenDS (backed by Oracle MySQL) data stores with its derivative MariaDB 10. Analytics follows suit and replaces ZenDS with MariaDB as the ETL data warehouse destination data store. Regardless of whether or not Analytics 5.0 is deployed by Zenoss Control Center or whether it ETLs from Resource Manager 4.x, 5.x, or both, MariaDB will be the only supported Analytics relational database store.

Features 4.4.0

Analytics 4.4.0 offers these new features and improvements:

- Parallelization of the loading of performance data
- Filter performance batches to a list of metrics

Features 4.3.1

Analytics 4.3.1 offers these new features and improvements:

- Easily combine multiple data sources in a single Domain
- Refactored ETL for very large scalability and real-time reports
- Improved monitoring and diagnostics
- Jaspersoft BI engine provides ad-hoc reporting and drag-and-drop workflows
- HTML5 charting, PHP, and custom portal integration
- Support for SSL for both internal and external communication
- Percentile and future value projections
- Business hour aggregation for time zones or different shifts

Fixed issues

Fixed issues 5.0.0

ID	Description
ZEN-7993	Not able to tell which monitoring template is attached to what devices/components in Analytics.
ZEN-8712	Create a new way to handle deleted entities.
ZEN-10804	The zenperfetl extracts data for a different time than the extract window had specified.
ZEN-13383	Create a dimension table representing time for raw data queries.
ZEN-14164	Analytics batches do not load in the UI on Resource Manager 4.2.5.
ZEN-14612	Cannot determine if aggregation is currently running.
ZEN-14616	Add ability to define business hours to include day of week as a qualifier.
ZEN-14626	Business Hours aggregation does not correctly calculate for a start time that is in the middle of an hour.
ZEN-14771	The Nth percentile and projection calculation can create table names that are too long.
ZEN-14789	Performance batches created through the UI stay in a permanent `STAGING` state.
ZEN-14994	Aggregation fails when the raw table corresponding to meta_metric does not exist.
ZEN-15018	The extract_count and staging_count/load_count for model batches are different.
ZEN-15094	A zenperfetl recovery swamps the host with multiple logical collector installs.
ZEN-15718	The meta_batch.extract_end is set to 0 if max-batches is set to 1 in `zenperfetl.conf`.
ZEN-15766	The group_filter for the Analytics aggregation configuration does not apply to the entire group hierarchy below the path provided.
ZEN-15791	When the Analytics server gets shut down, any batches in the `LOADING` state permanently stay in that state.
ZEN-16299	The meta_batch, meta_batch_file and meta_etl tables grow uncontrollably and should be partitioned and purged by the daily purging process.
ZEN-16437	Batch cancellation logic was changed so that they are no longer permanently cancelled.
ZEN-16610	The RotateAndPrunePartitionsTrigger does not log completion, thus there is no way to tell how long it takes.
ZEN-16906	The percentile and projection tables are not pruned.
ZEN-16910	The Nth percentile calculations fail when nth_percentile_config.period is set to 1.
ZEN-16999	The dim_rrd_datapoint does not contain a foreign key to dim_rrd_template. It should contain an rrd_template_key column.
ZEN-17139	Enable zenperfetl to use a MAX rather than an AVERAGE consolidation function for extracting performance data.
ZEN-17542	Add ETL of threshold expression evaluations.
ZEN-17650	Custom event fields that contain a period cause Event ETL load to fail, since periods are not valid characters in names of mysql table fields.

ID	Description
ZEN-17707	The dimension table creation fails for tables with 60 attributes.
ZEN-17830	The mem__pct alias is not correct for `/Server/SSH/AIX`

Fixed issues 4.4.0.0.5

ID	Description
ZEN-14777	zenperfetl does not log when extraction is completed
ZEN-15029	When dropping partitions, zends exhibits a memory leak
ZEN-15129	Aggregation consumes all available database connections. The number of connections should be limited to the parallelization level set for aggregation.
ZEN-15177	Aggregation fails when column or table names contain certain characters.
ZEN-15221	During zenperfetl recovery, all extractors begin extracting simultaneously leading to high disk IO

Fixed issues 4.4.0.0.4

ID	Description
ZEN-14675	Business hours aggregation does not correctly calculate for a start time in the middle of an hour. This fix allows for aggregation to respect non-zero shift start and end times in business hour configurations
ZEN-14770	Liquibase changeset 0016 does not restrict test to current DB schema
ZEN-14781	Performance batches created through the UI stay in a permanent staging state. This fix sets the batch state to `LOADING` when the data load process for that batch begins and Analytics no longer relies on the value of the load_start field to identify batches to load
ZEN-14927	Aggregation fails when raw table for meta_metric entry does not exist
ZEN-14956	Projections do not work for nth percentile/business hours/metric combinations

Fixed issues 4.4.0.0.3

ID	Description
ZEN-13478	Quartz jobs missed start immediately on an Analytics service restart
ZEN-13773	Zenmodeletl uses too much memory
ZEN-14178	Analytics External Authenticator creates invalid User IDs
ZEN-14292	Analytics `"ROLE_USER"` can only log in to the system. They cannot create new reports or run old reports
ZEN-14360	Some Analytics aggregations data is missing
ZEN-14374	Cannot create manual batches
ZEN-14382	Error found in log files right after installation

ID	Description
ZEN-14446	Out-of-the-box aggregation configuration produces no data
ZEN-14449	Performance batch load always fails when the number of attempts is equal to the maximum batch attempts

Known issues

Release 5.0.0

The following issues are known for this release of Analytics:

- Due to slightly different time windows and different resolutions in the data, Zenoss and Analytics reports may vary slightly.
- Default accounts are not locked, disabled, or set-to-good-default-passwords on initial installation.
- Full access controls (device ACLs, roles, and groups) are not supported.
- Sometimes the data set being used for projections may not be appropriate for the projection algorithm producing a situation where the projection is marked as UNRUN with the projection table created, but empty.

Installation and Implementation Notes

For complete installation and implementation instructions, refer to the *Zenoss Analytics Installation and Administration Guide*.

Additional information

Documentation feedback

Zenoss welcomes your comments and suggestions regarding our documentation. To share your comments, please send an email to `docs@zenoss.com`. In the email, include the document title and part number. The part number appears at the end of the list of trademarks, at the front of PDF versions of a document.