

# Previous Features and Fixed Issues

This page lists all the new features and fixed issues from previous releases for SQL Diagnostic Manager for MySQL:

## 8.8.0 SQL DM for MySQL (March 2019)

### New Features

- SQL DM for MySQL now monitors Google Cloud SQL server Operating System metrics.
- This release includes Google Cloud SQL server file based log monitoring for General query, Slow query, and Error log files.



This release includes new registration keys. The new keys are available for registered users from our [Customer Portal](#).

### Fixed Issues

- Regular Expression can now be used for the "Queries Starting with" filter for Processlist based Sniffer.
- The "Flush Status" query was renamed to "Flush Local Status" in the Monitors tab.
- SQL DM for MySQL is no longer displaying the warning message "User does not seem to have PROCESS privileges on this host. Only user's own processes will be displayed".
- The message "No data to display" in the history trend analysis graph for Monitor InnoDB cache>Free Memory is no longer prompting.
- SQL DM for MySQL is no longer displaying the "Undefined" message when hovering over the trend graph with a Monitor value of zero.
- The SQL Query for the CSO Tables\_Without\_Constraints was modified to excludes the views.
- SQL DM for MySQL now correctly raises SNMP traps/Syslog notifications when a monitor state changes from "Warning" to "Critical".
- The password field value is now correctly shown as a masked value.
- The RDS Log monitoring "Test reading the file" now correctly checks for "DownloadDBLogFilePortion" permissions.

### Miscellaneous

- The double quotes can now be used in the email subject format.
- The MOM variable MemAvailable was added. The Javascript function for the RAM Usage monitor is modified to display appropriate value depending on the kernel.
- The MariaDB C/C connector was upgraded.
- SQL DM for MySQL has included an option to show truncated query/full query in the Threads page.
- All the SQL DM for MySQL passwords are stored encrypted in the SQLite database.

## 8.7.0 SQL DM for MySQL (August 2018)

### New Features

No New Features for this version.

### Fixed Issues

- In some rare-cases SQL DM displayed connection timeout error in Query Analyzer page.
- SQL DM logged error "too many SQL variables" if the Custom SQL Object query returned more than 500 rows
- Auto-Refresh interval was not getting set in Threads page.
- In Query Analyzer, Sniffer Settings gave console error on saving.
- OS metrics monitoring did not work with Aurora instances when the instance was registered with IP address.
- On killing one thread in the Threads page, 2 extra rows got removed.
- Default notification subject is changed to SQL DM for MySQL | [\$ALERT\_TYPE] | [\$SERVER\_NAME] | [\$MSG\_DETAILS].
- Now separate SNMP traps will be sent for each alertable monitor in one collection. Earlier, a single trap contained all alertable monitors.
- When unix\_socket plugin is enabled for a user then all the users were listed under the monitor "Accounts without passwords".
- Added more information in the Query Details popup in Query Analyzer.
- In pages with multi-server selector, on selecting and deselecting the servers in the selector pop-up, the servers are updated/selected in the server selector field in the background.
- In Query Analyzer and Real-Time, the metric value in the UI and in the downloaded CSV report did not match.
- In Query Analyzer and Real-Time, column names were different in CSV report as compared to UI.
- Diagnostic report showed wrong value for "Read file from" parameter, if log monitoring is disabled.

## 8.6.0 SQL DM for MySQL (April 2018)

### New Features:

- A Galera cluster can now be automatically registered specifying any single node in the cluster.
- Optimized counter migration logic. This reduces the migration conflicts on upgrading SQL DM for MySQL tremendously. Post SQL DM for MySQL- 8.6.0, a conflict is raised on upgrade only if any counter definition is modified in the latest release and the user has also customized the same counter.
- Added more columns for Slow Query log (for MariaDB and Percona Server) like full\_scan, full\_join etc. These values are written to Slow query log when 'log\_slow\_verbosity' is set to "Query\_plan".

- Connection timeout (MySQL, SSH and SSH Tunnel) can now be set for servers individually. The default value is 30 second

#### Fixed Issues:

- SQL DM for MySQL logged an SQLite error "Udo.def: not an error" on fresh installation.
- "Create User.." and "Create role.." queries were shown as a schema change in audit log.
- Queries containing '<' or '>' were displayed with their HTML-entities '&lt;', '&gt;' in "Threads" page.
- SQL DM for MySQL failed to read the MySQL log files when 'log\_output' variable was set as both File and Table.
- SQL DM for MySQL failed to connect and displayed "Operations error" when using Active Directory External Authentication.
- In rare cases SQL DM failed to raise alerts for the monitor "Recent entries of type [Error]".

#### Miscellaneous:

- If the server's log query path variable returns a relative path, then SQL DM for MySQL generates the absolute path – required by MONyog – automatically.
- Added the monitor "Most Advanced Node" in the Galera group.

### 8.5.0 SQL DM for MySQL (March 2018)

#### New Features:

- SQL DM for MySQL can now analyze MariaDB and MySQL enterprise Audit log.
- Added support for LDAP with StartTLS and SSL.
- The default path for MONyog.log can be changed using the parameter "MONyogLogPath" from the MONyog.ini file.

#### Fixed Issues:

- SQL DM for MySQL logged bogus SQLite errors on fresh installation.
- SQL DM for MySQL displayed console error if LDAP group name contained inverted comma.
- Changed alert condition for "Seconds behind master" monitor to consider "NULL" as an alertable condition. It considered the value "NULL" stable condition earlier.
- On upgrading, SQL DM for MySQL filled the mail alert field for sniffer with the bogus email id "admin@mydomain.com".
- On selecting a tag in server selector GUI and then returning back to the main list, the default list of tags disappeared.

#### Miscellaneous:

- "MySQL server restarted" alert are shown in table format.
- Added option to view locked and locking queries when hovering over the queries in the Real Time
- Upgraded SQLite library to v3.21.0.

### 8.4.1 SQL DM for MySQL (January 2018)

#### Fixed Issues:

- The Linux command 'ps' failed to identify SQL DM for MySQL process status. This was due to a packaging issue introduced in 8.4.0. Versions before that were not affected.
- The option "Notify when server config change detected" compared in a case-sensitive manner and thus raised false alerts when the value for the MySQL variables changed from lower to upper case and vice versa. This could happen when a MySQL server was upgraded.

### 8.4.0 SQL DM for MySQL (December 2017)

#### New Features:

- Added more notification channels (Slack and Pagerduty) for SQL DM for MySQL alerts.
- Option to write SQL DM for MySQL alerts in the Syslog (of the machine where SQL DM for MySQL is installed). This option is only available for Linux.
- Option to edit the subject line for SQL DM for MySQL alerts.
- Added MONyog API to disable notification for a monitor based on a server/tag.
- Complete re-design of the Settings page.

#### Fixed Issues:

- Export as CSV was downloading sorted based on "Average latency" column, even if sorted based on another column in Query Analyzer.
- Fixed a case where SQL DM for MySQL sent bogus alerts.
- Fixed a bug in reading RDS log files.
- The Query filter "Custom" did not work in "Threads" page.
- In rare cases, SQL DM for MySQL Disk space Monitoring alert gave false alerts.
- The "Table" column returned empty values under "Tables" filter in Real-time.
- SNMPv2 traps were having the same OID for two different objects what caused SNMP alerts failure with SNMPv2 services.

#### Miscellaneous:

- Increased the length of tag and server names to 2048 characters.

### 8.3.2 SQL DM for MySQL (November 2017)

#### Fixed Issues:

- Resolved an issue regarding access to log files on RDS. The issue occurred because the XML response from the RDS REST API has recently changed in some cases. Our XML parsing was improved to handle this.

### 8.3.1 SQL DM for MySQL (November 2017)

#### Fixed Issues:

- When monitoring MariaDB servers from version 10.1, bogus alerts were raised for the 'wsrep\_ready' global status variable, if the server was not a part of a Galera cluster. The wsrep API for Galera is loaded with those servers (with 'wsrep\_ready' returning "OFF") even though it is not used at all.
- Edit server MONyog API did not support data directory number of the registered servers for '\_server' parameter.

### 8.3.0 SQL DM for MySQL (October 2017)

#### New Features:

- Option to set a distinct email distribution list for warning and critical alerts: Now you can define a proper demarcation between the users who receives a particular alert based on the alert status. For instance, if you want only your on-call DBAs to receive critical alerts 24/7, this feature handles that easily.
- Graph Analysis: You can group one single metric (which you find most important) from different servers into one unified chart. This allows you to visually analyse a metric across servers at various points in time.
- Disk monitoring of the system where SQL DM for MySQL is installed: In case the free space on the system where SQL DM for MySQL is installed goes below the threshold value, SQL DM for MySQL raises an alert.
- Filter to exclude unwanted long running queries in Sniffer:
- You can tell SQL DM for MySQL to ignore a particular type of query by specifying a regular expression. SQL DM for MySQL neither would kill nor send an alert for such long-running queries.
- Option to filter queries based on poor indexes, missing indexes, errors and warnings. This feature is available for PERFORMANCE SCHEMA based sniffer in Query Analyzer and "Show details" page in Dashboard. When you choose a filter, SQL DM for MySQL shows queries based on the criterias set.
- Redesigned Server selector
- Redesigned Query Analyzer: a more intuitive view of the top 5 queries based on total time.
- Added proper Y-axis unit for charts, along with the option to define the units and unit-factors.

#### Fixed Issues:

- SQL DM for MySQL was logging "UNIQUE constraint failed.." errors in MONyog.log
- System charts failed to show data for many data collections, when the system metrics was enabled from the Dashboard page.
- In some rare cases, real-time page hanged on switching between real-time sessions.
- Option to plot values based on data collection in History/Trend analysis (For uptime counters). Only Group by option was available for those counters.
- SQL DM for MySQL failed to recognize Aurora instances for OS monitoring. The four required fields for OS monitoring were not displayed.
- Email addresses with + in monitor level notification settings was not accepted.
- Added 'DB' as a column under 'Manage Columns' in Dashboard's 'show details' page in 'Processlist' mode
- SQL DM for MySQL showed the total time and average latency as 0 when the execution time of the query was less than a second for table based slow query log.
- Fixed an issue with Custom SQL Object (CSO) - SQL DM for MySQL logged entries like "not an error" in MONyog.log.

### 8.2.0 SQL DM for MySQL (August 2017)

#### New Features:

- Added option to have same Y-axis scaling for Dashboard charts across all servers.

#### Fixed Issues:

- Query count could return negative value in Overview page due to integer overflow.
- The History/Trend analysis chart for the counter "Free disk space" was not rendering properly.
- The Monyog API for enabling System metrics for RDS instances was not working as expected.
- After zooming into the real-time chart, the Query column was not getting sorted.
- History/Trend could show wrong value for some counters – mainly string based counters.
- In case of RDS servers, rebuild of a server's database, restarting SQL DM for MySQL or using "editserver" API could stop the collection for OS metrics.
- When using cname for RDS servers, SQL DM for MySQL failed to enable system metrics.

#### Miscellaneous:

- Redesigned Time-selector for all the features.

- Upgraded OpenSSL to current v1.0.2l. The version used before had a few non-critical security issues. Also quite a lot of libraries used internally were updated.

### 8.1.1 SQL DM for MySQL (July 2017)

#### Fixed Issues:

- Regression bug introduced in SQL DM for MySQL-8.1.0: SQL DM for MySQL failed to install on Linux machines with no “kernel headers” installed

### 8.1.0 SQL DM for MySQL (July 2017)

#### New Features:

- It is now possible to get OS metrics from Amazon RDS/Aurora (but not Azure, where interface for same is disabled).
- Added an option to generate a token in SQL DM for MySQL to be used with the Monyog API as an alternative to SQL DM for MySQL user and password.
- Added an option to define a “seconds\_behind\_master” setting in Replication page determining if the slave should be considered in sync or not. On some environments, slave is rarely fully in sync and in such cases, the alerting was not really useful before.
- MONyog-bin.pid location on Linux can now be changed from Monyog.ini file.
- Reintroduced the tabular view for Replication overview page. Now, the user can choose between tabular and graphical view.
- Added an option to select the way the server selector should work in SQL DM for MySQL, i.e: same servers across all pages or different across pages.

#### Fixed Issues:

- Seconds behind master could show wrong value in the chart.
- Export as CSV didn't work for “Locked and Locking Queries” in Real-Time.
- On HDMI and higher resolution monitors, overview page could display distorted.
- Extra columns added from manage columns in Real-Time were getting reset to default set of columns on moving away from the page.
- In Dashboard the value of min/max/avg displayed as 0 if number of points was larger than 10,000, Also, if the chart was exploded, the chart would display empty.
- Some counters did not show values formatted properly.
- In mail alerts for counters in multi-replication monitor group a newline character in subject could cause the mail to display unformatted in some mail clients – including gmail web interface.
- In “long running query” alert there was a bare line feed character (\n) which could cause reading failures in some environments.
- History trend reports will show date as well in the timestamp if report spans more days.
- Collection and Purging interval was not setting properly while editing a UDO.

#### Miscellaneous:

- Redesigned the interface for adding new servers.
- It is now possible to display the “Replication Overview” page and set auto-refresh interval similar to SQL DM for MySQL before version 7.0. Different users have different preferences here.
- When installing SQL DM for MySQL on a Linux machine with kernel version less than 2.6.32, an error message will now inform that SQL DM for MySQL needs kernel version 2.6.32 or higher.

### 8.0.4 SQL DM for MySQL (Jun 2017)

#### Fixed Issues:

- In rare cases, Replication Overview page failed to load and a console error appeared.
- SQLite files used by Real-time were not always deleted when they should, resulting in unnecessary disk usage.
- Enabling the error log, slow query log and general query logs through the API for RDS server failed.
- Fixed a crash when connected to Azure MySQL-5.7 servers.
- Some columns were not getting sorted properly in Sniffer.

#### Miscellaneous:

- When stopping SQL DM for MySQL service, all running Real-time sessions will now be saved automatically.
- Upgraded LibSSH and LibCurl to the latest versions (0.7.5 and 7.54.0 respectively).
- SQL DM for MySQL will now only support Linux'es with kernel version equal to or higher than 2.6.32 . This is a consequence of an upgrade of our build environment necessary in order to support recent kernel versions and distributions.
- Upgraded the MariaDB Connector/C to 2.3.3. Due to this the MariaDB auth\_gssapi (Kerberos) plugin is now supported.

### 8.0.3 SQL DM for MySQL (May 2017)

#### New Features:

- Option to export entire Dashboard charts.
- Option to search tags in Server selectors.
- Completely re-designed Servers page.

#### Fixed Issues:

- In monitors page, history chart did not plot for some counters.
- In Firefox browser, Servers page hanged with a large number of servers.
- SQL DM for MySQL failed to connect over SSH tunnel for Ubuntu-16.04.
- If 'show\_compatibility\_56' is off for MySQL-5.7 servers "Slave\_running" counter gave a false alert. It will display "(n/a)" now.

#### Miscellaneous:

- API added to change the mode of Real-time Monitoring.
- Enhanced security measures to avoid vulnerabilities like clickjacking, phishing etc.

### 8.0.2 SQL DM for MySQL (April 2017)

#### New Features:

- Added Dashboard charts and monitors for the Aria storage engine.
- Performance schema can now be used with RDS Aurora (version 5.6.10).

#### Fixed Issues:

- SQL DM for MySQL failed to recognize replication topology in cases when "SHOW SLAVE STATUS" returned master host as an alias name while the master server was registered with an IP address in SQL DM for MySQL.
- Also SQL DM for MySQL could fail to recognize replication topology if SSH-tunnel was used to master.
- The replication monitors stopped updating values, when slaves stopped running as slaves.
- When logging in with LDAP group users, the onboarding tool-tips continued to display when no longer needed.
- Threads page stopped updating data once the custom query filter returned empty list.
- SQL DM for MySQL did not show queries starting with "SHOW.." in slow query log in Query Analyzer.
- "Lock time" column was not getting sorted properly for PS based real-time.
- SQL DM for MySQL returned console error for server name containing single quote(s).
- Deleting server registrations in SQL DM for MySQL could result in high CPU-load and IO. This is now reduced.
- SQL DM for MySQL RPM installer script failed to start SQL DM for MySQL in SUSE Linux Enterprise servers.

### 8.0.1 SQL DM for MySQL (April 2017)

#### Fixed Issues:

- Servers below MySQL-5.1.15 were shown disconnected even when the servers were connected, due to the absence of information\_schema.plugins table.
- In IE 11, servers page gave console error and became unresponsive.

### 8.0.0 SQL DM for MySQL (March 2017)

#### New Features:

- Added support for Multi-Source Replication.
- SNMP v2 is now supported.
- Added new Monitors for a number of plugins (Failed to load plugin list, Non mature plugin, Audit log enabled, Audit log load\_option FORCE\_PLUS\_PERMANENT, Password verification enabled).

#### Fixed Issues:

- The Galera counter "Total number of bytes replicated to other nodes" now uses "wsrep\_replicated\_bytes" and not "wsrep\_replicated" variable as before.
- The Logrotate script shipped with SQL DM for MySQL failed to rotate the SQL DM for MySQL log in some cases.
- In some cases Top-5 tables in Disk Info page were not showing tables sorted based on total size.

#### Miscellaneous:

- Overview will now show top 10 queries only for the selected servers and not for all the registered servers in SQL DM for MySQL.
- Overview, Dashboard, Monitors, Threads and Server Config (Compare Config) pages will have their own separate server selector.
- Now the maximum no of servers that can be selected in each page is limited. Default is 10, but the number can be configured in Monyog.ini. On most systems we don't advise raising the value as it may increase the time for loading pages.

### 7.0.5 SQL DM for MySQL (March 2017)

#### Fixed Issues:

- Fixed a crash occurring when upgrading SQL DM for MySQL from Ultimate/Trial to Enterprise/Professional.
- In rare cases dashboard failed to load charts.
- In some cases SQL DM for MySQL could fail to analyse the sniffer and returned error "Integer overflow" instead.
- Additional InnoDB deadlock information from SHOW ENGINE INNODB STATUS available in MySQL 5.6+ was not displayed in Monitors page.
- Fixed an issue where log analysis wasn't working with Aurora instances.

- RDS servers were not being detected as RDS instances because of change in 'basedir' variable for RDS.
- In Monitors page, it could happen sometimes that some charts were not displayed in 'history' timeframe.
- The 'Minimum time taken' -setting for Processlist-based sniffer also affected Performance\_Schema-based sniffer. This is wrong and has been corrected.
- In some cases the Overview page loaded slowly if the request for checking any unresolved counters, functions or UDOs responded late.
- Login to Monyog failed if the password had any of the characters "%", "&", "+" and "?".
- A few UI/display fixes.

## 7.0.4 SQL DM for MySQL (February 2017)

### Fixed Issues:

- In rare cases SQL DM for MySQL would hang while editing a server.
- Enabling "Monitor locked queries" switched back to off state after editing settings for the actual MySQL server.
- Regression fix: Monyog-v7.x releases had a higher load average than 6.x predecessors.

### Miscellaneous:

- When upgrading, migration will be much faster.
- Improved Dashboard charts loading speed.

## 7.0.3 SQL DM for MySQL (February 2017)

### New Features:

- Dashboard charts now load faster.

### Fixed Issues:

- When editing an existing LDAP group/user, changes were not getting saved in some cases.
- When using proxy-based Query Sniffer, it could happen that some queries were not displayed in the Query Analyzer.

## 7.0.2 SQL DM for MySQL (January 2017)

### New Features:

- Added two new monitors for monitoring Binary Log volume in Linux monitor group. Please note that this will work only for MySQL 5.6.2 and above.

### Fixed Issues:

- For RDS instances, the Error Log files were not getting fetched. This was introduced in 7.0.
- When upgrading from a pre-7 release, LDAP settings could be overwritten. Also this was introduced in 7.0.\*
- Queries containing '<' or '>' were not displayed properly in Overview, Real-time and Query Analyzer pages. Instead the HTML-codes '&lt;', '&gt;' displayed. Also a 7.0 bug.
- When running 7.01 as a non-registered TRIAL some pages could 'hang' in rare cases. 7.0 was not affected.

## 7.0.1 SQL DM for MySQL (January 2017)

### Fixed Issues:

- In some cases overview page loaded slowly and would even sometimes seem to remain in "Fetching details" state forever.
- Security: Fixed an issue where a user could escalate his privileges by manipulating cookies. Though fixed already in 7.0, this is listed here for completeness.

## 7.0 SQL DM for MySQL (January 2017)

### New Features:

- Overview page giving the top-level picture of all the servers running, down, critical alerts, warnings and the top 10 queries across all the servers registered with SQL DM for MySQL.
- Option to create customized dashboard with specific charts with the ability to explode a chart
- Search option for servers registered with SQL DM for MySQL.
- Query Analyzer will now show the top 5 queries based on execution time in a separate window.
- Replication overview page showing the replication hierarchy in a clean graphical way.
- Servers page providing an overview of all the servers registered and their status in one place.

## 6.63 SQL DM for MySQL (October 2016)

### New Features:

- Monyog API now supports LDAP users and groups.

#### Fixed Issues:

- In rare cases SQL DM for MySQL failed to connect to SSH and returned the error “failed to connect to SFTP: SshConnect: Error while connecting to ssh server –kex error”.
- SQL DM for MySQL failed to authenticate as required when using the authentication mode “Comparison” for LDAP users and groups.
- Some galera charts were not loading due to the syntax error in the chart definition.
- SQL DM for MySQL was allowing users to add/edit the server using the API even if the user did not have privilege to add/edit the server.

### 6.62 SQL DM for MySQL (September 2016)

#### New Features:

- Charts are now loading faster with large time range.
- Added more pre-configured Galera charts and Performance\_Schema Custom SQL Objects.
- Improved the performance of SQL-query in CSO 'Tables\_Without\_Constraints'.
- Added a new API “\_disabledmonitorgroups” for enabling and disabling Monitor Groups at server-level.

#### Fixed Issues:

- Support for the ‘clear-text plugin’ (used by Oracle/MySQL LDAP authentication) and the ‘dialog plugin’ (used for MariaDB PAM authentication) was broken.
- With RDS servers SQL DM for MySQL could fail to detect log file content and size and would display the error “No queries found” and “Unable to fetch file size”. It happened because of recent changes in the XML-response of Amazon’s REST API.
- Slow query log/General query log paths were not always setting properly when adding/editing a server using the Monyog API.
- MySQL InnoDB-related charts displayed empty with MySQL 5.6+. The reason was removal of the ‘have\_innodb’ server variable in MySQL 5.6. Now these charts don’t depend on this variable.

### 6.61 SQL DM for MySQL (September 2016)

#### Fixed Issues:

- When user logged in to SQL DM for MySQL with an account other than the built-in admin account, tabs were hidden.

### 6.6 SQL DM for MySQL (September 2016)

#### New Features:

- SQL DM for MySQL user management was enhanced with a ‘roles’ feature.
- LDAP role based access: users can now map External LDAP roles to SQL DM for MySQL roles.
- Added option to restrict access to specific tabs for specific users.
- SNMP traps will now have “Tag” and the “MySQL hostname” in the message.
- Now SQL DM for MySQL will show the number of servers selected in the tag along with the total servers in that tag.
- Added a message in the charts page if system charts are enabled and SSH settings are not enabled.

#### Fixed Issues:

- When adding a server through Monyog API, sniffer was not enabled by default.
- The setting for “Override send notification when alertable?” was ignored if the value specified was greater than the setting for “Send notification when alertable”.
- In rare cases Real-Time failed to start a new session and showed a random number.

### 6.55 SQL DM for MySQL (August 2016)

#### Fixed Issues:

- The “Explain Query” dialog box in Real Time and Query Analyzer returned the message “Extended is deprecated” for MySQL 5.7.3+ servers. Now (plain) “EXPLAIN” is used to fetch the value.
- In rare cases some monitor groups were not getting Enabled/Disabled at “Manage Monitor groups” page when using Internet Explorer.
- The fields “SeriesCaption” and “SeriesValues” in “Edit chart” page did not give any error on saving when having different number of arguments, but a console error showed up while loading the charts.
- SQL DM for MySQL was not able to connect to RDS instances using SSL encryption. Attempting to do so returned the error “Failed to connect to MySQL: SSL connection error: certificate verify failed”.

#### Miscellaneous:

- The option “Notify when server configuration changes” will be enabled by default when notification is enabled.
- Now counters may be customized from “Events” tab as well.

### 6.54 SQL DM for MySQL (July 2016)

#### Fixed Issues:

- Monyog.log file logged bogus SQLite errors like “not an error” if UDOs were enabled in SQL DM for MySQL in some cases.
- The definition for the counter “Free disk space” in the “Linux” group was misleading as we were giving the free disk space of the volume where MySQL binary resided given by “basedir”, instead of giving the free disk space on the volume where data directory resides given by “datadir”.
- The column “Rows examined” in Performance\_Schema based sniffer printed negative values, if the number of “Rows examined” exceeded the value 2G.
- In Real-Time, charts for Tables tab were not displayed in some rare cases.
- We are now discarding GTID-related system variables that are changed by MySQL server itself from the “Track Config” tab. These system variables (gtid\_executed, gtid\_owned, gtid\_purged etc.) change if a new transaction occurs in Master and considering them would raise bogus alerts that configuration was changed.

#### Miscellaneous:

- SQL DM for MySQL will now have sniffer enabled by default for newly registered MySQL servers. If Performance\_Schema is enabled for the MySQL server then Performance\_Schema mode will be used, else Processlist mode will.
- Improved the load time of Monitors page. It is noticeable in particular when “History” timeframe is used with a large range (several hours or more).

## 6.53 SQL DM for MySQL (April 2016)

#### Fixed Issues:

- “Count” column did show empty value in Processlist based Real-time.
- Performance\_Schema based Real Time failed if global sql\_mode included “ONLY\_FULL\_GROUP\_BY”.
- Clicking on locked queries were not showing its corresponding locking query and vice versa for Performance\_Schema based Real Time.
- The counter “General Log Enabled?” was showing incorrect value for MySQL 5.6.1+ versions.
- In rare cases, SQL DM for MySQL would show only time with no date in x-axis if the chart was plotted for multiple days.
- Editing LDAP group was not always working as expected.
- With RDS servers SQL DM MySQL could fail to detect log files and would display the error “log file not present”. It happened because of changes in the XML-response of Amazon’s REST API introduced since we started supporting logs with RDS.

#### Miscellaneous:

- The default filter for “show queries only” in processlist now includes ‘Command=Execute’. Also ‘Command=Execute’ is now included in processlist-based Real Time and Query Analyzer interfaces.

## 6.52 SQL DM for MySQL (March 2016)

#### New Features:

- Added an option to choose data collection mode for Real-Time, Users can now choose between ‘Performance schema’ or ‘Processlist’. Old versions used ‘Processlist’ what we replaced with ‘Performance schema’ recently for servers running with needed P\_S instruments enabled. However due to the aggregation and truncation of queries recorded in P\_S we had several requests that both options should be there.
- Information whether a query is performing a full table scan available in Query Analyzer, Wayback Machine and Real-time. This information will help to identify queries which are not using Indexes. Note: this is available only for Performance Schema mode.
- Added a new monitor group ‘sys schema’. It contains various CSOs (Custom SQL Objects) utilizing the “sys schema” database introduced in MySQL 5.7.7.
- Added an option to either have a fixed length height or dynamic (full screen) height for Processlist in SQL DM for MySQL GUI. We have been using each in earlier versions, but it seems impossible to make everyone happy with a single solution. Now user can choose what display/design that fits him best.

#### Fixed Issues:

- The Monyog API failed to set the error log path.
- With MySQL 5.7+ Query Analyzer was displaying seemingly random values for the column “first seen” and “last seen” when using server logs (slow query log, general query log) as data source. This happened because of change of Timestamp format in the logs in MySQL 5.7.
- The filter “doesn’t contain” was not working properly in Real-time.
- Fixed an issue where UDOs were displaying incorrect values after running for some time.
- While editing the server using Monyog API, SSH settings were automatically set to disabled (even if it was enabled earlier).
- For RDS/Aurora servers, “Apply the above settings to all the servers with same tags” (Edit server -> Advanced settings) was not working.
- SQL DM for MySQL was giving the error “Log file not present” if either one of the slow query log or general query log was disabled for RDS servers.
- Fixed JavaScript errors and optimized the charts for Real-time page for IE8 browser.

#### Miscellaneous:

- The Y-axis in Charts had just “values” written, now it shows relevant units like percentage, seconds etc. and option is provided to customize the Y-axis value.

## 6.51 SQL DM for MySQL (December 2015)

#### New Features:

- RDS log monitoring feature can now be configured using the Monyog API.

#### Fixed Issues:



- The query SHOW ENGINE INNODB STATUS fails for MySQL version less than 4.1.2. and resulted in a SQL DM for MySQL crash. Even though we don't recommend MySQL 4.1 (and not at all such early beta of it), we should not crash.
- Fixed JavaScript errors for Query Analyzer and Real Time tab in Internet Explorer 8 (WinXP, Win2003).
- With MariaDB 10.1.x SQL DM for MySQL erroneously listed all user accounts as having no password.
- The curl library used could crash, and thus crash SQL DM for MySQL, when resolving too many hostnames at the same time.
- SQL DM for MySQL failed to send 'stable alert' when both "notify till stable" and "notify when stable" options were enabled and if different values were set for the "send notification when alertable" and "remind me after every ..".
- Fixed the height of the Processlist display for each server. Each server's processlist window is now displayed as scrollable window of fixed height. This is a regression fix and a revert of the page design to that of older versions. With recent versions it was necessary to scroll the browser window.

#### Miscellaneous:

- Upgraded SQLite library to v3.9.1. This results in ~25% performance improvement on most environments.
- Renamed the "Row Access Statistics" counter to "Queries Executed" as it actually uses the 'queries' status variable. The old term confused some users.

## 6.5 SQL DM for MySQL (November 2015)

#### New Features:

- On Amazon RDS and Aurora, MySQL log files (Slow Query Log, General Query Log and Error Log) can now be read by SQL DM for MySQL. So Error Log monitoring is now possible here, and the Query Analyzer does not require logging to tables anymore. For this the Amazon "REST" API (and not SFTP) is used. Client functionalities for this API have been integrated into SQL DM for MySQL.
- Added monitors for Galera: "Presence of non-InnoDB tables" and "Tables without a primary/unique key".

#### Fixed Issues:

- Monitors and Real-time page failed to load on Internet Explorer 8 (highest IE option on WinXP) due to JavaScript errors.
- Fixed a rare crash when connected to MySQL 5.7.6+.
- Accessing Realtime interface could cause a crash if connection to the server was not available.

## 6.4 SQL DM for MySQL (October 2015)

#### New Features:

- Performance Schema is now available in Realtime. SQL DM for MySQL can now capture all queries and display it in realtime which was not possible earlier with SHOW FULL PROCESSLIST output. To view all queries in realtime, make sure Performance\_schema and 'statements\_digest' table is enabled. If not, SQL DM for MySQL will display the output of SHOW FULL PROCESSLIST in realtime. Note: Performance\_schema is available with MySQL 5.6.14 and above.

#### Fixed Issues:

- Users with MySQL v5.6.3+ will now see explain plan for Insert, Update and Delete queries in Wayback Machine and Query analyzer.

## 6.34 SQL DM for MySQL (September 2015)

#### New Features:

- Added more monitors and charts for monitoring a galera cluster. By default, these monitors are hidden. To display these monitors in Monitors page you can enable "Galera" monitor group from Customize -> Manage Monitor Groups. Charts for these new monitors can be enabled from Customize -> Manage charts.
- Optimized system charts for faster loading.

#### Fixed Issues:

- EXPLAIN option was not available in Wayback Machine.
- In some rare cases, SQL DM for MySQL logged SQLite errors if deadlock details contained double quotes.
- In Wayback Machine interface, SQL DM for MySQL showed wrong time in queries tab when a point was selected in the chart.

## 6.33 SQL DM for MySQL (July 2015)

#### New Features:

- Added monitoring of the MySQL –tmpdir volume with the "Free Disk Space" Monitor for Linux (introduced in 6.32).
- Added an option to view X-Axis labels for large time based charts.
- The Performance\_Schema -based "query sniffer" has been optimized.

#### Fixed Issues:

- Fixed a rare case, where "Charts" page was not loading properly.

## 6.32 SQL DM for MySQL (July 2015)

### New Features:

- Added a "Free Disk Space" Monitor for Linux. This new feature will collect information directly from the file system (unlike the existing 'Disk Info' that uses MySQL "SHOW TABLE STATUS"). Information is collected from volumes storing both MySQL data directory and InnoDB data directory (if different), and user will be alerted if either crosses a specified threshold.
- In Charts page added an option to select a time interval for display by zooming a chart using mouse and similar input devices (touchpad etc.). Note that zooming one chart will change the timeframe of all the charts displayed.
- Added an option to view queries for a selected time range in time range based charts in Charts page.

### Fixed Issues:

- In rare cases, Monitors page could show wrong data for Linux counters if the HISTORY timeframe was selected for the page. Other available timeframes were not affected.
- When monitoring a MariaDB server using a galera-based replication setup we will now execute SHOW ALL SLAVES STATUS rather than just SHOW SLAVE STATUS. Before this Monyog replication page showed an empty result and alerts were not sent. However due to limitations with current SQL DM for MySQL architecture we are only able to handle the first row of SHOW ALL SLAVES STATUS with this release, if more are returned, and only information from one slave node will be available.

## 6.31 SQL DM for MySQL (June 2015)

### New Features:

- What is plotted in "Charts" (formerly "Dashboard") page may now be specified as a time interval and not only as a number of latest sample points. This increases usability of the page.
- Long running query log now includes action (kill/notify/notify and kill) and the time of action.
- Locked and locking queries tab in Real-Time interface is optimized and loads faster.
- Added Wildcard filtering using the "\*" character as wildcard for user and host in Query Analyzer for Slow Query Log.

### Fixed Issues:

- SQL DM for MySQL failed to send notification for an InnoDB deadlock if deadlock details (as recorded by SHOW ENGINE INNODB STATUS) contained double quotes.

## 6.3 SQL DM for MySQL (May 2015)

### New Features:

- A log of long running queries can now be generated and downloaded as CSV in Sniffer interface (applies only to Processlist mode of sniffer).
- Real-Time is optimized and loading a session is much faster now. Further it shows only data from top 200 open tables and databases.
- Wayback Machine now includes user and host information as well.
- Queries in Wayback Machine can now be exported as CSV.
- SQL DM for MySQL can now send long running query notification to specific selected users only.
- Wildcard filtering using the "\*" character as wildcard for user and host is introduced in Sniffer (applies only to Processlist mode of sniffer).
- Same wildcard filtering implementation is also introduced for Ignore user and host in Long running query options in Sniffer (applies only to Processlist mode of sniffer).
- SQL DM for MySQL now logs what user killed a thread in Processlist tab.
- SQLite library bundled in SQL DM for MySQL is now upgraded to the latest version. This results in performance improvement for sniffer in particular where it can be up to ~50%.

### Fixed Issues:

- In some cases, SQL DM for MySQL logged SQLite errors when CSOs (Custom SQL Objects) were enabled even when the CSO worked as expected.
- Small UI fixes.

## 6.27 SQL DM for MySQL (April 2015)

### Fixed Issues:

- SQL DM for MySQL no longer prompts the user to re-type the admin password while upgrading on Windows.
- In Edit Server page it was possible to retrieve the MySQL password by inspecting JSON with browser's JavaScript debugging module/plugin.
- SQL DM for MySQL was not able to authenticate a user from LDAP group consisting of linked users (i.e. users with membership of more than one group).
- Monitors page failed to load in case an empty group (with no counters) existed.
- Replication tab failed to load after restart of a server when monitoring a master-master replication setup.

## 6.26 SQL DM for MySQL (March 2015)

### Fixed Issues:

- When monitoring MySQL 5.6.3 and higher, SQL DM for MySQL reported false notification alert for 'innodb\_thread\_sleep\_delay' when notifications for change in server configuration was enabled.
- Replication page failed to show data if SHOW SLAVE STATUS on one server was hanging.
- Server Config page was not always showing proper data when "show only changed values" is selected.
- In some rare cases Monitors page was not displaying data after editing SSH tunnel details.
- SQL DM for MySQL 32 bit build was not accepting port beyond 16-bit limit ( $> 2^{16} - 1$ ). This limit has been increased to handle full 32-bit range (up to  $2^{32} - 1$ ).

#### Miscellaneous:

- Email Alerts in SQL DM for MySQL now contain Tag(s) and MySQL host of the corresponding server.

### 6.25 SQL DM for MySQL (February 2015)

#### New Features:

- Optimized Monitors page to populate faster. In particular in history/trends timeframe this is a dramatic performance improvement, as it will now populate 50 or more times faster than before with large data series.

#### Fixed Issues:

- An incorrect (JavaScript) monitor definition could cause a yellow bar-shaped area to appear instead of a proper error in Monitors page for the affected counter.
- Setting 'Notify Till Stable' using the Monyog API was not working as expected.
- Fixed a rare crash with a large number servers monitored. It would require more than 300 servers registered for this crash to occur on an average system.
- Minor UI fixes.

### 6.24 SQL DM for MySQL (February 2015)

#### Fixed Issues:

- SQL DM for MySQL was resetting "Monitor long running queries" to NO after editing a server.
- SQL DM for MySQL failed to show servers in the UI after upgrading from a pre-5.57 version.
- "Critical", "Warning" and "Stable" icons were not showing in Events tab when SQL DM for MySQL was running behind a proxy.
- SQL DM for MySQL sometimes logged an SQLite locking protocol error while opening internal database(s). But as this is handled it should not be logged as an error.
- SQL DM for MySQL allowed for saving of server registration details when "Long running query time" was specified smaller than "Minimum time taken" in sniffer settings. This makes no sense and will not save now.
- SQL DM for MySQL was not considering buffers and cached values from meminfo while calculating RAM usage. The formula for the same is updated now.

#### Miscellaneous:

- Charts are now enabled by default for all monitors which include MySQL status variables. For example: "Seconds behind master" in replication group.

### 6.23 SQL DM for MySQL (January 2015)

#### New Features:

- Added support for the 'clear-text plugin' (used by Oracle/MySQL LDAP authentication) and the 'dialog plugin' (used for MariaDB PAM authentication). There is no user setting for either. SQL DM for MySQL will transparently for user detect how to communicate with the server during authentication.

#### Fixed Issues:

- When data collection was stopped for a server then, in some cases, user was not able to delete that server.
- In 'Wayback Machine' interface, the plotted values were sometimes not visible due to how axes were scaled in the chart displayed.
- If data collection for a server was stopped, then after restarting SQL DM for MySQL and enabling data collection for that server, the values displayed in the Monitors tab were not getting updated in some cases.

#### Miscellaneous:

- UI changes for 'long running queries' and counters with CSO disabled to make it more intuitive how to fully enable those features.
- SMTP and SNMP alerts will now as default be sent first time an alertable counter has exceeded the 'critical' setting.
- Formula of a monitor will now be displayed in event detail dialog in Events tab.

### 6.22 SQL DM for MySQL (December 2014)

#### New Features:

- SQL DM for MySQL can now resend alert notifications till a counter becomes stable based on a reminder interval setting.

### Fixed Issues:

- 'Upgrade check' link in 6.21 informed that an "undefined" upgrade was available even though it was not the case.
- Performance-schema based sniffer failed if global sql\_mode included "ONLY\_FULL\_GROUP\_BY".

## 6.21 SQL DM for MySQL (November 2014)

### Fixed Issues:

- In Monitors page, the small trend charts in current and delta timeframes were not displayed for some monitors.
- Charts were not displayed in Monitors page- History/Trend if data series contained "N/A" values.
- SQL DM for MySQL was not able to connect to MySQL server if password contained a leading or a trailing empty space.
- In rare cases, some server(s) could stop showing in the UI after SQL DM for MySQL restarts.
- Fixed a rare irresponsiveness ("hang") occurring when starting data collection after editing server details.
- The option to stop the current running saved session was not available in Real-Time in some cases.
- A number of minor GUI fixes.

## 6.2 SQL DM for MySQL (October 2014)

### New Features:

- The Real-Time interface in SQL DM for MySQL has been completely rewritten. In addition to a more consistent/intuitive GUI it is now able to collect data from multiple MySQL servers simultaneously ( one collection of Real-Time data per server). Once data collection for a server has been started it will continue until stopped by user, also if browser connection is closed in between. The sole exception is that Real-Time data collection for a server will stop after 3 days if no activity has happened inside the particular Real-Time session.
- Added an option to set line terminator for csv reports.

### Fixed Issues:

- Renaming a registered server to a new name already in use would not raise any error. Instead data for the affected server would not display anymore.
- In rare cases clicking 'test SSH settings'-button would not display any response.
- When registering a 'Postmaster Enterprise SMTP server' in SQL DM for MySQL, mail notifications failed to be sent.
- 'Diagnostics report' failed to download when SQL DM for MySQL was running behind a HTTP ('reverse') proxy server.
- Clicking on editing SMTP settings from server registration page did not redirect to tools page and thus editing was not possible from here. The problem was alone a problem with the particular hyperlink. From the tools page everything worked as expected.
- The following gtid-related variables in MariaDB 10 could trigger false notifications: gtid\_binlog\_pos, gtid\_binlog\_state, gtid\_current\_pos, gtid\_slave\_pos and last\_gtid.
- SQL DM for MySQL failed to establish SSH connection to Linux servers using the "OpenSSH-HPN" SSH implementation..
- When an identifier contained digits (such as 'abc12', 'ab12ab' etc.), the Query Analyzer, the WayBack Machine and Real-Time interface would consider these digits literals, and they would be replaced with '?'.  
If SQL DM for MySQL did not have sufficient privileges to the MONyog/Data folder, adding a new server could crash SQL DM for MySQL.

### Miscellaneous:

- Dashboard page was renamed to 'Charts'.
- The tab-order of SQL DM for MySQL interface has been rearranged.
- Also note that 'WayBack machine' interface is still available (unlike what was the case with the 6.2 beta, where we experimentally removed it).

## 6.1 SQL DM for MySQL (June 2014)

### New Features:

- Added more counters and advisors for MySQL 5.6 configuration.
- Added an extensive set of counters for monitoring the TokuDB storage engine. The monitor groups for this are not visible as default, but can be enabled from the 'Customize' interface

### Fixed Issues:

- Fixed a rare SQLite database corruption under very heavy load and with Custom SQL Objects enabled.
- Changing refresh interval setting for Processlist page was not possible for non-admin users.

### Miscellaneous:

- SQL DM for MySQL installed on the Amazon Cloud from the Amazon Machine Image ("AMI") we provide as an option, will now start first time with the Amazon instance ID as the admin password and not an empty password as before. This change could take some days to propagate across the Amazon Cloud.

## 6.02 SQL DM for MySQL (June 2014)

### Fixed Issues:

- CSV exports from Query Analyzer did not include the 'Db' (database) column when the Query Analyzer was used with Processlist-based sniffer or with slow log when stored in a table.

## 6.01 SQL DM for MySQL (June 2014)

### Miscellaneous:

- Cleaned up the User Interface in Real-Time page. This includes removing the option to restore saved sessions for 'all selected servers'. Saved sessions for individual servers can still be restored.
- OpenSSL is updated to version 1.0.1h in all packages distributed.

## 6.0 SQL DM for MySQL (June 2014)

### New Features:

- The Monyog API is enhanced with more options to manage servers registered in SQL DM for MySQL. Options now include calls to add/edit/remove servers. Refer documentation for full details.
- SQL DM for MySQL now supports Query analysis using Performance Schema tables (events\_statements\_summary\_by\_digest and events\_statements\_history\_long tables). This feature is supported only for MySQL 5.6.14 and MariaDB 10.0 and above.
- Explain plan is available in Query analyzer for Slow\_log table based logging and Processlist sniffer.
- An example query is now shown in detailed query view in Query analyzer if queries replaced with literals is selected.
- SQL DM for MySQL now has a configurable option to define the max. query length displayed. Beyond this SQL DM for MySQL will truncate. The setting has effect for Query Analyzer, Real-time and Way Back Machine interfaces. Default is now 10000 characters and maximum setting is 64000 characters). However please note that this does not apply when Performance\_Schema is used with the Query Analyzer as P\_S itself truncates.

### Fixed Issues:

- Explain option was not available in locked and locking queries for Real-Time sessions.
- In some rare case SQL DM for MySQL logged SQLite errors while running Real-Time sessions.
- SQL DM for MySQL could crash when connecting using a 'Named Pipe' on Windows.
- When monitoring MySQL v5.6 with replication using GTIDs (global transaction IDs), SQL DM for MySQL reported false notification alert for the 'gtid\_purged' variable, when notifications for change in server configuration was enabled. This particular variable was overlooked in 5.72 where there was a similar fix.
- Query literals with hex values were not replaced with '?' in Query analyzer.
- When using SSH-tunnel, connections created by the CSO (Custom SQL Object) feature were not always closed properly, and the MySQL error log as well as 'aborted\_clients' status variable would record aborted connections.

### Miscellaneous:

- When GTID's (Global Transaction ID's) were used with replication, SQL DM for MySQL replication page would display a lot of information about changing GTIDs. This is now hidden in the primary interface, but can still be displayed in detailed view.
- SQL DM for MySQL now displays the binary version on commandline when the command switch -version (or -v) is used.

## 5.72 SQL DM for MySQL (April 2014)

### Fixed Issues:

- In rare cases, SQL DM for MySQL could not close alerts from Monitors page.
- When monitoring MySQL v5.6 with replication using GTIDs (global transaction IDs), SQL DM for MySQL reported false notification alert for GTID counters when notifications for change in server configuration was enabled.

### Miscellaneous:

- Upgraded libraries that theoretically could be vulnerable to the 'Heartbleed' OpenSSL bug.

## 5.71 SQL DM for MySQL (March 2014)

### New Features:

- With only one MySQL server selected, Dashboard page will now display charts in such a way that whitespace and the need of scrolling are reduced. With more than 1 servers selected, the Dashboard charts are drawn using a vertical layout as before.
- Real-Time interface can now show the actual query in addition to replacing literals with the "?" wildcard.

### Fixed Issues:

- Using TAGS for registered servers in order to manage access for non-admin users did not always work as expected when multiple TAGS were used.
- Yet another fix for a LDAP group authentication issue.
- In Real-Time interface EXPLAIN option was not available if query length was greater than 5000.
- In Real-Time interface database and user@host were not available for aggregating queries. They are now.

### Miscellaneous:

- MySQL availability and System availability charts in Dashboard are now disabled by default. Users who want them can enable from Dashboard Customize page. We removed them primarily as they consume space in the interface and have little information that is not obvious from other charts.

## 5.7 SQL DM for MySQL (March 2014)

### Fixed Issues:

- 5.69 introduced an issue causing LDAP authentication to fail in some cases.

### Miscellaneous:

- Code cleanups and internal optimizations. Users having a large number of MySQL servers registered will observe a lower system load with this version due to this.

## 5.69 SQL DM for MySQL (February 2014)

### Fixed Issues:

- LDAP search for user in group authentication could fail with Active Directory.
- Real-time sessions could fail under rare circumstances when two or more sessions were started at the same time.
- Fixed a crash introduced in version 5.68.

## 5.68 SQL DM for MySQL (February 2014)

### New Features:

- Sniffer now shows database name in long running query notification and also in Query Analyzer interface when Processlist based sniffer is selected. Please note that Processlist only exposes this information if a USE statement is associated with the query. If a 'fully qualified tablename' is used in the query this information will be empty.

### Fixed Issues:

- Monitor's trend charts and history report charts were not displayed. This was introduced in version 5.67 of SQL DM for MySQL.
- Significantly improved the speed of replacing literals for queries with wildcards in Query Analyzer.
- Connection to MySQL via SSL encryption could fail with valid parameters. This bug was introduced in version 5.61 of SQL DM for MySQL.

## 5.67 SQL DM for MySQL (February 2014)

### Fixed Issues:

- Fixed a rare crash occurring in CSO's (Custom SQL Objects).
- Fixed a UI issue in Realtime's lower pane. Only Safari browsers were affected.
- SQL DM for MySQL did not retain LDAP group authentication details after restart.
- The SQL DM for MySQL interface for specifying LDAP groups did not allow for more than 64 characters.
- Query Analyzer did not show queries when time range was selected with slow log and general log tables (log files were not a problem) as the source for Query Analyzer.
- CSV-reports exported from Monitors page could show wrong values for a few monitors.

### Miscellaneous:

- SQL DM for MySQL now loads list of servers interface faster.

## 5.66 SQL DM for MySQL (November 2013)

### New Features:

- SQL DM for MySQL can now authenticate users using LDAP user groups without the need to add them in SQL DM for MySQL.
- Explain plan for Insert, Update and Delete queries is now available in SQL DM for MySQL Processlist page for MySQL 5.6+ servers.

### Fixed Issues:

- The fix for failing alerts for InnoDB deadlocks with MySQL 5.6 servers in 5.65 introduced a new issue where the time for the occurrence of the deadlock reported was wrong.
- When monitoring a Galera cluster and when cluster nodes failed to connect to each others, the error sent by cluster nodes ("unknown command") could cause SQL DM for MySQL to crash.
- When a server was deleted from SQL DM for MySQL in rare cases the corresponding data directory was not removed.

### Miscellaneous:

- Linux versions of SQL DM for MySQL now include a script that can be used for log rotation of the Monyog.log.

## 5.65 SQL DM for MySQL (November 2013)

### Fixed Issues:

- Parsing the output of SHOW ENGINE INNODB STATUS for InnoDB deadlocks if server was MySQL 5.6.x. For same reason alerting also failed.
- Some counters failed to report alert conditions. This bug was introduced in version 5.62 of SQL DM for MySQL.

## 5.64 SQL DM for MySQL (October 2013)

### Fixed issues:

- This release includes fixes for a rare crash when deleting servers and when trying to access a SQLite database that could not be accessed for some reason.

## 5.63 SQL DM for MySQL (September 2013)

### Fixed Issue:

- If SQL DM for MySQL was not able to connect to a MySQL server, replication page would 'hang' and even crash in rare cases. This was introduced in version 5.62.

## 5.62 SQL DM MySQL (September 2013)

### New Features:

- Removed a hard coded limit (of 512) of the number of MySQL servers that could be registered with an 'unlimited server'-license. Now the restriction is solely with the implementation of the license in the license key.
- Added and updated a few counters in order to provide more specific support for MySQL 5.6 and MariaDB 10.

### Fixed Issues:

- Cleaned up JavaScript execution running in the background that was not needed. With a large number of servers registered (from around 150 on a typical system) this could result in some slugginess in interactive parts of SQL DM for MySQL due to CPU contention.
- Explain option was not present in processlist page for queries starting with comment.
- On Windows 'Real\_time' monitoring did not work since 5.61.
- Rendering of replication page failed if GTID (Global Transaction ID) mode was enabled for MySQL Slaves.
- Resolving the IP from a host name happened multiple times during display of replication page what could slow down rendering of replication page noticeably on some environments.
- Some Dashboard charts could show incorrect data.
- Dashboard failed to render charts when based on a counter saved without caption, series caption and series values.
- When restarting SQL DM for MySQL it would perform a SQLite Schema upgrade even if it was not required. Version 5.61 was affected.

## 5.61 SQL DM for MySQL (August 2013)

### Miscellaneous:

- MySQL 3.23 and 4.0 servers are no longer supported and an attempt to register such will be denied.

## 5.6 SQL DM for MySQL (August 2013)

### New Features:

- SQL DM for MySQL supports LDAP authentication for login into SQL DM for MySQL interface. This is available only in Ultimate version of SQL DM for MySQL.
- Added a feature in Query Analyzer to include or exclude queries based on the search string / regular expression.

### Fixed Issues:

- Monitor trend charts were not updating in realtime.
- Tooltips were truncated in DiskInfo's table information.
- In Sniffer, "Queries starting with" option was not working properly if query started with comment.
- Queries starting with a comment did not show EXPLAIN option in the Real Time interface.
- Fixed a crash when viewing replication page if slave details were not properly specified (any detail NULL).

## 5.58 SQL DM for MySQL (April 2013)

### New Features:

- Added a feature in realtime to include or exclude queries based on the search string / regular expression.

#### **Fixed Issues:**

- Purging mechanism was not working properly (this bug was introduced in version 5.57 of SQL DM for MySQL).
- Tag/Group names are in alphabetical order now.
- SQL DM for MySQL can now "Kill query" on Amazon RDS instances.
- The rendering of Dashboard page is further improved.

### **5.57 SQL DM for MySQL (March 2013)**

#### **Fixed Issues:**

- The rendering of Monitors and Dashboard page was slow with large number of servers both registered and selected and when multiple users were connected simultaneously displaying the page. It could take one minute or more in some cases. It is now a matter of seconds.
- With a large number of servers registered, editing details for one was slow. Also this could take around 1 minute, and the improvement is in the same range as above.
- Event manager's database (Events.data) is now moved from global level to server level in order to prevent locking problems with a large number of servers. SQL DM for MySQL will migrate data first time it starts after the upgrade.
- Fixed a multi-threading issue that in rare cases could crash SQL DM for MySQL while registering more than one server at the same time.
- Fixed a rare crash in SQL DM for MySQL while viewing replication tab.
- Fixed a rare crash in SQL DM for MySQL while resolving CSOs ("Custom SQL Objects").
- SQL DM for MySQL could fail to send mail alerts if a single mail contained alerts for more than one monitor.
- SQL DM for MySQL was showing errors in Query Analyzer, Realtime and Processlist pages when a query contained characters used for specifying HTML tags.
- If a registered server was not a slave but marked as such in Advanced Settings .. Replication, SQL DM for MySQL was leaking connections every time it was collecting data and finally connections (from SQL DM for MySQL as well as other clients) could fail due to 'max\_connections' setting being exceeded.
- For MySQL InnoDB-related monitors were showing "(n/a)". The reason was removal of the 'have\_innodb' server variable in MySQL 5.6.

### **5.56 SQL DM for MySQL (December 2012)**

#### **Fixed Issues:**

- Fixed a memory leak when reading MySQL server logs through SFTP.
- Fixed a multi-threading issue that in rare cases could crash SQL DM for MySQL running on Linux while reading the MySQL error log.
- "Apply settings to all the servers with same tags" was not working when data collection was disabled globally.
- The fix in 5.55 for indented display of a slave compared to its master was not complete. Proper indentation could still fail.

### **5.55 SQL DM for MySQL (December 2012)**

#### **Fixed Issues:**

- In the replication page a slave was not displaying indented compared to its master as it should if slave and master were running on same host.
- Fixed a multi-threading issue that in rare cases could crash SQL DM for MySQL if the Monitors page was viewed simultaneously in multiple browsers.
- Stability fixes for issues found during internal stress-testing and code review. No crash, slowdown ('hang') or similar was reported due to any of those, but it could theoretically happen under specific and rare circumstances.

### **5.54 SQL DM for MySQL (November 2012)**

#### **Fixed Issues:**

- Sometimes SQL DM for MySQL could hang while editing server's tag.
- Processlist did not show "view query" for prepared statements.

### **5.53 SQL DM for MySQL (November 2012)**

#### **New Features:**

- Added monitors for monitoring a galera-based cluster. These monitors do not display as default but there is a 'Galera' monitor group that can be unhidden from Tools .. Manage Monitor Groups.

#### **Fixed Issues:**

- Authentication to SMTP servers could fail with very long passwords. Also authentication with Amazon SES could fail.
- When saving a connection Monyog could apparently 'hang' for a while.
- With a large number of sample points displayed in Dashboard, loading of the page was slow. It could take up to around 1 minute in some cases. Now it is a few seconds.
- SSH keys could be 'forgotten' after a Monyog restart.
- Fixed a rare crash when editing server details.
- In the 'Real Time' interface the option to EXPLAIN queries did not display in Internet Explorer 8.
- For non-admin users, the replication tab was displaying all slave servers instead of showing only those servers which the user has access to.
- Internal optimizations, library upgrades etc.



## 5.52 SQL DM for MySQL (October 2012)

### Fixed Issues:

- When upgrading to SQL DM for MySQL 5.51 admin rights for users with such failed to be migrated. This release fixes this for both users that have already upgraded to 5.51 and those that have not.

## 5.51 SQL DM for MySQL (October 2012)

### New Features:

- Added a number of monitors and advisors - mostly based on metrics exposed by MySQL 5.5+.
- In the 'Real Time' interface user may now define the threshold for when a query should be considered slow. Lowest possible setting is 1 second.
- In the 'Real Time' interface queries are now truncated after 5000 characters. Before it was 1000.
- 'queries' and 'slow queries' can now be exported to CSV in the 'Real Time' interface.
- Original query formatting is now retained in 'Real-Time'.
- User Manager has added a privilege to allow (or not) to 'view literals' in Query Analyzer page for non-admin users. This can be used for blocking access to read sensitive data for such users and still giving them access to use the Query Analyzer.
- Multiple saved Real-Time sessions can now be viewed at a time.
- Added a 'thread count' showing number of currently running threads on 'Processlist' page.

### Fixed Issues:

- In the 'Real Time' interface displaying large BULK INSERTS was slow.
- Logging out from SQL DM for MySQL while 'Real Time' was populating could crash SQL DM for MySQL. Linux - and not Windows - was affected.
- In the replication overview page SQL DM for MySQL will now show 'binlog' file name and it's position wherever it applies (where binlogging is enabled). Before it was showing only for master servers.
- In the Monitors page the percentage of SELECTS did not display. This was unlike INSERTS, DELETES and UPDATES .
- A 'Long running query' email alert has added a note clarifying that when the alert was sent the query may still be running. Before it could be understood like the alert was sent after query had completed.

## 5.5 SQL DM for MySQL (September 2012)

### New Features:

- Added a new major feature called 'Real-Time' to monitor MySQL. This feature details the top 200 queries, slow queries, locked queries, locking queries, tables, databases, users, hosts and query states in real time. Information is retrieved from MySQL every one second. Queries taking more than 10 seconds to execute are considered as slow queries. Note that SQL DM for MySQL depends on the 'InnoDB Plugin' (optional with recent MySQL 5.1 versions, standard with higher MySQL versions) to get information on locked and locking queries. Refer [MySQL docs](#) for more information on InnoDB plugin. Also note that constants listed here are currently 'hard-coded' but we plan to implement user settings. 'Real-Time' is an Enterprise and Ultimate feature.
- Optimized Monitors page to retrieve and display data approximately 10 times faster than before
- Added an option to choose verbosity of email notifications. 'lesser verbosity' is in particular relevant if you receive mails on a mobile phone or another small handheld device.
- Added 'Monitor level' email-address alert setting. If an email address is specified for a specific monitor, notification will be sent to that particular email-address when the monitor is alertable in addition to the email address specified globally for the server.
- In the MySQL query log settings page, the 'file path' field for general query as well as slow query log was disabled for MySQL versions lesser than 5.1.6.

## 5.3 SQL DM for MySQL (July 2012)

### New Features:

- Introduced support for 'native' MySQL SSL-encryption with direct MySQL connections.
- SQL DM for MySQL now fully supports IPv6 (Internet Protocol Version 6).
- History-trends have been optimized to retrieve data faster than it was before. With large data sets this results in a speed improvement in the range of a factor ~25.
- Passwords for SQL DM for MySQL users are no longer stored in clear text. A hash is stored (for admin user in MONyog.ini - for other users in the embedded database). Also MySQL passwords as well as SSH/SSL keys, certificates and passphrases are now stored obfuscated. First time SQL DM for MySQL starts after upgrading from a version using clear text storage it will rewrite passwords etc. to the hashed/obfuscated representation.
- Added a Linux counter "Load Average" as exposed by the Linux kernel in /proc/loadavg.

### Fixed Issues:

- Fixed a memory leak with SSH key based authentication.
- If HTML tags were a part of long running query, the notification email format was getting distorted.
- MySQL connection through SSH tunnel never re-established connection in Sniffer module when the connection failed for the first time
- Filter settings in the sniffer defined on a (MySQL) user with a SPACE character in its name did not work as expected.
- UI fixes.

## 5.21 SQL DM for MySQL (June 2012)

### New Features:

- The Monyog API was rewritten and enhanced with more options. Options now include calls to enable/disable data collection, sniffer, notifications etc. for servers by either specifying a server name or a server tag. The old API calls have been blocked.

#### Fixed Issues:

- Notification emails were not being sent when the number of file descriptors used by SQL DM for MySQL exceeded a certain number.
- Fixed a bug with the Custom SQL monitor where no data was being displayed in the Monitors page when all the columns retrieved by the Custom SQL were specified as Key Columns.
- Increased readability by improving SNMP trap format.
- UI fixes and enhancements.

#### Miscellaneous:

- Testing slave connections has been moved to replication monitoring settings. Prior to this release it was in 'MySQL settings' tab making it necessary for users to switch between tabs for testing slave connections.

## 5.2 SQL DM for MySQL (May 2012)

#### IMPORTANT note:

- This release requires a new registration code. Neither the 5.1x nor the pre-5.1x key will work with this. Registered customers will get the new code from our Customer Portal. Please have the new code available before installing. Until SQL DM for MySQL is registered with new keys, it will not be collecting data from your servers.

#### New Features:

- Added filter for including or excluding specific hosts and(or) users in Slow log analysis.
- Added and modified a few Monitors related to Replication, InnoDB and Security. Most of this utilizes metrics exposed by MySQL from version 5.5 .
- Added a preconfigured Custom SQL Object (CSO) for Percona Servers exposing the most written and most read tables.
- There is now session-wide persistence while sorting columns in Query Analyzer.
- Improved error messages in Query Analyzer and Wayback machine.
- Usability enhancements, GUI fixes and internal optimizations.

#### Fixed Issues:

- SQL DM for MySQL was not working while behind Apache configured as a reverse proxy. This bug was introduced in version 5.0 of SQL DM for MySQL.

## 5.12 SQL DM for MySQL (April 2012)

#### Fixed Issues:

- Sometimes the default landing page failed to load after a log in. A refresh was necessary. This was introduced in version 5.0 of SQL DM for MySQL.
- Closed alerts could reappear in the Monitors page after an unsuccessful data collection and MySQL restart.

## 5.11 SQL DM for MySQL (April 2012)

#### IMPORTANT note:

- This release requires a new registration code. Registered customers will get the new code from our Customer Portal. Please have the new code available before installing. Until SQL DM for MySQL is registered with new keys, it will not be collecting data from your servers.

#### New Features:

- Introduced tag level customization in SQL DM for MySQL Monitors. SQL DM for MySQL tags for servers are now available as Monyog Object Model variable (MONyog.Connections.TagName returns an array of tag names defined for a server). Documentation has examples on how to use it in scripting. Also see the note on 'Native JavaScript properties' support in next point below.
- Native JavaScript properties (like length, indexOf, splice etc) are now fully supported in Monitors and Dashboard. Note that 'indexOf' is required to check for individual tags from the array exposed by Monyog.Connections.TagName (see point above) in case there is more than one tag.
- Optimized Dashboard page to retrieve information faster.
- Auto-registered slaves will now have server names as their host names as default.
- Auto registering slaves will now assume the SSH host name of the slaves to be same as that of MySQL host. Before this the slaves' SSH hosts were assumed to be the same as that of the master.

#### Fixed Issues:

- On SQL DM for MySQL restart, server edit, SQLite vacuum and MySQL restart there were 2 consecutive data collections with a short time interval. This could skew charts and MySQL metrics. Now SQL DM for MySQL collects data 2 consecutive times only when required - i.e during the first collection and after an unsuccessful data collection.
- Exporting charts as PNG exported as JPEG instead in Monitors page. This bug was introduced in version 5.0 of SQL DM for MySQL.
- UI fixes.

### Miscellaneous:

- Increased SQL DM for MySQL session timeout from 30 minutes to 8 hours (the MySQL default).

## 5.1 SQL DM for MySQL (March 2012)

### IMPORTANT note:

- This release requires a new registration code. Registered customers will get the new code from our Customer Portal. Please have the new code available before installing. Until SQL DM for MySQL is registered with new keys, it will not be collecting data from your servers.

### New Features:

- In the 'Disk Info' page, clicking on a donnut chart in the Database level of a server will now drill down to table level.
- Query Analyzer' now has information on Average rows sent & examined while analyzing Slow Query Log. Those options has been hidden in version 5.0 and seen only in "Query details" pop up, now in v5.01 users can view those columns in QA output along with "Query details" pop up.
- Comparison of MySQL server configuration of multiple servers side by side is now faster in the 'Server Config' page.

### Fixed Issues:

- The 'login' page sometimes did not work in some 'minor' IE 8 builds (if not updated with latest patches from Microsoft). Same could happen with Google Chrome that were not up to date. This happened due to 'Google Gears' (that is no long part of Chrome). It now will work with all IE8 builds and Chrome from version 9.x (current is 17.x) - also with 'Gears'.
- MySQL server configuration could show incorrect values if MariaDB Servers were compared in the 'Server Config' page.
- A MySQL server that was a master and a slave at the same time was not showing the slave status in the 'Replication' tab even if it was marked as a slave in 'Register Server'.
- In the 'Replication' tab of SQL DM for MySQL the display of binlog\_do\_db and binlog\_ignore\_db settings were interchanged.
- On a fresh installation the default SQL DM for MySQL port was 8888. This was introduced in 5.0. Its now reverted back to 5555.
- Sometimes queries could fail to display in 'Wayback Machine' interface.
- In 'Monitors' page - History/Trend view charts did not plot if data series contained '(n/a)' value(s).

### Miscellaneous:

- Internet Explorer 6.x and 7.x are no longer supported. And actually this should have been announced in 5.0 GA release notes, but it was missed (it was announced in 5.0 beta1 release notes however).

## 5.0 SQL DM for MySQL (February 2012)

### UI Enhancements:

- Introduced a left panel that contains the list of servers registered in SQL DM for MySQL, 'Tools' & 'Customize'. The 'List of servers' page has been removed. Users can now select/unselect servers from this panel.
- Previously available icons for Edit server/Duplicate server/Diagnostic reports etc now appear as a drop down menu next to each server.
- Previously the 'Customization' page appeared under 'Tools', now it appears as 'Customize' on the left panel.
- 'Manage changed Monitor/Advisors & Dashboard charts' are now available as 'Manage changes' under 'Customize'.
- 'Manage Custom SQL Objects' are now available under 'Manage changes'.
- The Global Notifications come on the top right hand corner before the help button.
- Pagination in Query Analyzer page. This removes the limitation of 200 queries in the result set.
- 'Monitors' is now the default landing page.

### New Features:

- Added an option to add users to admin group.
- Columns in the replication tab can now be sorted.
- Register/Edit server page now has tabbed interface which eases navigation.

### Enhancement:

- Improved browser level caching.

### Miscellaneous:

- The Monyog API responses are now in the following JSON format: {"STATUS": "SUCCESS/FAILURE", "RESPONSE" : ""}
- Query Analyzer will now display query text up to 5000 characters. (before it was 2000)

## 4.81 SQL DM for MySQL (January 2012)

### Fixed Issues:

- Custom SQL Objects (CSO) with a large result set could fail to display content in Monitors/Advisors page.
- Specifying the "Key Column" field has now been made mandatory while adding a new CSO. If not specified the CSO will not save.
- Small UI fixes.

## 4.8 SQL DM for MySQL (December 2011)

### **New Features:**

- This release adds a new major feature to SQL DM for MySQL: Custom SQL Counters and Custom SQL Objects. A Custom SQL Object is an object populated from a user-defined SQL-query returning a result set. It is exposed as a JavaScript array for defining counters (Custom SQL Counters) in SQL DM for MySQL.

### **Fixed Issues:**

- If a query contained the literal substring 'connect' SQL DM for MySQL could hang during general log analysis.
- SQL DM for MySQL returned a garbage string to the Linux 'ps' command.
- Drastically improved performance in log analysis if the option to 'replace literals' was selected.
- Some of the Monitors/Advisors were not updating in All Time/Current and Delta timeframe.

## **4.72 SQL DM for MySQL (October 2011)**

### **Fixed Issues:**

- When connected to Linux distributions with a 3.x kernel the information about Disk I/O could fail to display properly in Dashboard and Monitors /Advisors pages of SQL DM for MySQL.

## **4.71 SQL DM for MySQL (October 2011)**

### **Fixed Issues:**

- Accessing the replication tab could crash SQL DM for MySQL in rare cases with specific replication setups and where SHOW MASTER STATUS returned an empty result.
- Fixed an issue where user defined generic (JavaScript) functions added for use by customizations did not work as expected.
- Small UI fixes.

## **4.7 SQL DM for MySQL (October 2011)**

### **New Features:**

- Added a MySQL replication overview page. Here SQL DM for MySQL shows the replication topology of all registered MySQL servers, as well as SLAVE STATUS and MASTER STATUS where it applies. The display gets updated at user-specified interval. (Note: This is available only in Ultimate version of SQL DM for MySQL)
- Added a 'Wayback Machine'. In this interface a graph displaying - as per user's choice - either of the status variables 1) Threads connected or 2) # of slow queries. The graph displays aggregated values on years/months/days/hours/ minutes depending on the data. If sniffer was running during this interval, aggregated sniffer information will be displayed. Also you can see first and last value of (optionally) all or changed variables aggregated values. The graph is zoomable by selecting a sub-interval with the mouse along with aggregated sniffer and changed variables you can also get point-in-time information by clicking on a point on the graph. When user clicks on a row in the query list of the Wayback machine a pop-up opens with information about thread-id, user and host along with full query. The list of queries in Wayback Machine will not be rendered if there are more than 2000 queries in the time period. There is a user control that can be activated in such case. The reason is that every 1000 queries take around 1 seconds to render on an average desktop system. This also means that we can now display the list of queries before zooming (provided still that there not more than 2000 queries to display). When we do a point in time select of one of the points on the graph, we get a bar chart that displays number of queries.
- With this release the dependency on Flash has been removed. Charts are now rendered using a JavaScript library. Accordingly SQL DM for MySQL can now be handled from a browser on a device not supporting Flash (such as Ipad). These charts can be exported like was the case with Flash-based charts of previous versions. Conversion to various formats uses a web service.

### **Fixed Issues:**

- Fixed an issue where SQL DM for MySQL did not logout user successfully.
- If the time is set to 12:XX:XX in Custom filter it resets to 00:XX:XX.

### **Miscellaneous:**

- Instructions to setup MySQL Proxy was added to SQL DM for MySQL interface.

## **4.62 SQL DM for MySQL (July 2011)**

### **Fixed Issues:**

- The counter for 'thread cache hit rate' could display incorrect values.
- Authentication with the admin password could fail in some cases on Windows. This bug was introduced in 4.61.

## **4.61 SQL DM for MySQL (July 2011)**

### **Fixed Issues:**

- In Dashboard & Monitors/Advisors page, the Delta & All-time/Current charts were showing incorrect values when values were plotted per second. This was introduced in version 4.51 of SQL DM for MySQL.
- While connecting using SSH with key based authentication in Windows, the temporary file which contains the SSH private key was not being deleted. Before this release, the temporary files could run out of names which made it impossible to create new temporary files and hence the SSH tunnel was not being created.
- SQL DM for MySQL now writes default data into MONyog.ini file on all platforms when SQL DM for MySQL starts for the first time. Before this release SQL DM for MySQL for Linux did not write default data into MONyog.ini file.
- Fixed a crash occurring when there was no data directory path mentioned in the MONyog.ini file.

## 4.6 SQL DM for MySQL (June 2011)

### New Features:

- SQL DM for MySQL is now bundled with a bunch of useful dashboard charts which can be enabled/disabled from the 'manage dashboard charts' in the Dashboard page. These charts can even be re-ordered.
- Added an option to 'Alert on change in server configuration'. These alerts in the form of email's and/or SNMP traps are sent by SQL DM for MySQL whenever SQL DM for MySQL detects a change in the server variables using SET GLOBAL statements or in the MySQL configuration file.
- Added an option to copy/duplicate advisors. This is available when clicked on an advisor in the 'Monitors/Advisors' page.

### Fixed Issues:

- Export as CSV in the 'Monitors/Advisors' page was showing '0' for some of the advisors when the group to which they belong was disabled.
- GUI fixes, including an issue where clicking a 'next'-link in the 'register server' page did nothing.

## 4.51 SQL DM for MySQL (May 2011)

### New Features:

- This release focuses on improving performance of the SQL DM for MySQL built-in HTTP daemon. You will find up to 10 times performance improvements for most SQL DM for MySQL pages. This has been achieved by internal code optimizations, use of compression (if browser supports) and minification/optimization of HTML, JavaScript, CSS and graphics.

### Fixed Issues:

- Prepared statements were not handled properly by the Query Analyzer.
- Events (as introduced in 4.5) stored in the SQL DM for MySQL embedded database did not purge as specified in the 'retention time frame' setting.
- Charts could display decimal numbers with a large number of decimals that made no sense and made charts less readable. We now round to 3 decimals.

## 4.5 SQL DM for MySQL (May 2011)

### New Features:

- Added an EVENTS overview. An EVENT happens when any counter is changing its status to (yellow) WARNING alert level or to (red) CRITICAL alert level. An 'alert condition' (WARNING or CRITICAL) can be temporarily disabled (and re-enabled) for a specific server from the new EVENTS overview page as well as the Monitors/Advisors page. This can be disabled for non-admin users.
- Replication slaves can now be automatically registered. SQL DM for MySQL will detect the host/IP of active slaves. MySQL (port,username & password) and the SSH details of the slaves are assumed to be the same as that of its master. Connection details of the slaves can be edited if different from master. A slave will indent with its master in a hierarchy while displaying in the list of servers page. Auto-registering of slaves is also extended to multiple levels. 'Test Connection' in the 'Register/Edit server page' will test the slave connection details of that server in recursion, when 'Auto-register all slaves' is checked.
- In the process-list based sniffer there is now an option to alert (using mail and/or SNMP) for long-lasting LOCKs.
- Monitors/advisors groups can now be enabled/disabled on a per server basis. Before this release it was only possible to have same setting for all servers registered in SQL DM for MySQL in this respect.
- Added monitors/advisors for innodb\_force\_recovery, log\_warnings, log\_output, expire\_logs\_days, max\_binlog\_size and flush\_time variables.
- Query Analyzer can now filter slow logs based on host and user information.
- The standard Linux daemon PID file is now created for SQL DM for MySQL. (If tools like 'Monit' are being used, then the PID file of SQL DM for MySQL would be required.)

### Fixed Issues:

- Padding while exporting slow log as CSV was incorrect.
- SQL DM for MySQL could hang while parsing a log file with binary data.
- With SQL DM for MySQL running behind a Load Balancer and similar network management system, user login to SQL DM for MySQL could fail.
- SQL DM for MySQL could hang while downloading slow or general logs from a server if the server wrote new entries to the log at download-time.
- The emails sent by SQL DM for MySQL were missing the date header.
- Monitors/advisors page was displaying error for MySQL 5.5.x when Innodb engine was disabled.
- Fixed an UI issue with the Group level display of alerts (red/yellow) in monitors/advisors page.
- Fixed a bug with the system graphs in the 'dashboard' feature where the graphs were not plotting the current values.
- Lots of GUI fixes and small GUI enhancements.

## 4.2 SQL DM for MySQL (January 2011)

#### **Fixed Issue:**

- SQL DM for MySQL could crash while monitoring hundreds of servers through SSH tunneling with a small data collection interval. (1 or a few seconds)
- Charts in the I/O section under Monitor's/Advisors or Dashboard displayed wrong history. (last 14 seconds had the same values as the value in the 15th second)
- Sometimes, while analyzing the slow query log, some timestamps contained the default unix time stamp.
- If the name of a counter or caption of dashboard chart contained single quotes, the chart displayed "Invalid XML Data".
- Filtering while displaying the Sniffer output was not working when there was a change in the filter conditions.
- The Linux command 'Service MONyogd status' did not display the correct result.
- The 'Processlist page' in SQL DM for MySQL threw 'constraint failed' error when the process ID was a large number.
- At times, the 'Query Execution Time' of Query Analyzer displayed incorrect values for the milliseconds field.
- SQL DM for MySQL was not closing the file descriptors after reading from MySQL error log (introduced in 4.12) and sending SNMP traps.

#### **Miscellaneous:**

- Every time SQL DM for MySQL (re)starts it logs "MONyog has started" in MONyog.log.

### **4.12 SQL DM for MySQL (December 2010)**

#### **Fixed Issues:**

- SQL DM for MySQL was leaking memory while connecting through SFTP to analyze Slow/General logs.
- SQL DM for MySQL also leaked memory when 'Processlist' page was open.
- Stopping of Data collection could crash SQL DM for MySQL.
- Sometimes SQL DM for MySQL service could not be stopped gracefully.
- SQL DM for MySQL was not able to read the Error log via SFTP for data collection interval less than 25 seconds.
- Max open .idb files counter under Innodb-Others group sent a false 'warning alert'. (Yellow light would turn on even though the value of innodb\_open\_files did not exceed the threshold)

### **4.11 SQL DM for MySQL (November 2010)**

#### **Fixed Issues:**

- Email alerts or SNMP traps related to counters were not sent. This was introduced in 4.1.
- Minor usability fixes.

### **4.1 SQL DM for MySQL (November 2010)**

#### **New Features:**

- Implemented an easy-form based interface for customizing helper functions. Any customization of helper functions or user defined functions being used with earlier versions have to be migrated manually to this version. From this version and onwards a GUI-'conflict resolver' will guide the users very similar to how it works for customized counters.
- SQL DM for MySQL now has an option to apply a group of settings to all the servers with a specific tag. (Please note: New servers registered later with the same tag are not considered)
- Moryog logs from now on contain the server name along with error, making it easy to backtrack.
- We have automated deleting dump files of size zero.
- Earlier multiple alerts for same issue would be sent if the counter was alertable for more than the specified number of data collections. Now we only send once. Settings in register server page has been updated accordingly.
- Added an option to change the refresh interval from the processlist page.
- Processlist-based sniffer will no longer show the query 'SHOW FULL PROCESSLIST' executed by SQL DM for MySQL (Please note: This only applies to the processlist-based sniffer and not to the processlist page where user has configurable filtering options).

#### **Fixed Issues:**

- Fixed a (SQLite) database lock resulting in failure to update Dashboards and Monitors/Advisors pages.
- When SFTP option was chosen to analyze 'MySQL general query log' and SSH was disabled, SQL DM for MySQL used SFTP to analyze the logs with out throwing any error.
- Small GUI enhancements.
- Resolved crashes found internally.

### **4.02 SQL DM for MySQL (September 2010)**

#### **Fixed Issues:**

- Fixed a performance regression issue (introduced in 4.0) in HISTORY/TREND analysis.
- Fixed an issue where Dashboard charts were not always populated properly with 'old' data when the Dashboard page was opened. The chart itself and the data-series for the chart are independent data streams which were not always 'combined' correctly.
- The process-level SQL DM for MySQL stack size on Linux is now always expandable up to 10 MB (Linux kernel default) even if the user has defined another value. We had a report where SQL DM for MySQL would crash with a very low user setting (and this is basically an OS issue and not a SQL DM for MySQL issue).

- If a SQL DM for MySQL build with a 'lower' license than ULTIMATE was installed 'on top' of the TRIAL some ULTIMATE functionalities would still run in the background - but not controllable by user. MONyog continued to collect data internally for counters not applicable to ENT or PRO edition and the Monyog.log would log errors irrelevant for the license model

## 4.01 SQL DM for MySQL (August 2010)

### Fixed Issues:

- Implemented code that makes OpenSSL (which is used by our SSH library) explicitly thread-safe, thus fixing an issue where specific cryptographic function calls under very heavy load could cause a crash.
- Fixed a SQLite corruption issue on Windows due to which SQL DM for MySQL service failed to stop.
- If both values for 'user' and 'host' were filtered in processlist-based sniffer the interface would display NULL for both.

## 4.0 SQL DM for MySQL (August 2010)

### New Features:

- Compare Configuration: This feature enables the user to compare changes in configuration between two instances of MySQL. Through this feature, the user will gain a greater insight on why one server is performing better than the other as far as server configuration is concerned.
- Track Changes: This feature enables users to track changes to my.ini/my.cnf of a MySQL server over a period of time and compare changes between revisions.
- Added a new interface for customizing Monitors/Advisors and Dashboard charts requiring less knowledge of JavaScript than what was the case before.
- When upgrading an installation with customized Monitors/Advisors and Dashboard charts a 'conflict resolver' will now guide user to either migrate his old changes or discard them.
- All cache hit rate related monitors/advisors have been changed to display cache miss rate information as it more relevant when tuning databases. Also the advisor text for these monitors/advisors has been improved.

### Fixed Issues:

- Fixed some issues with specific counters including issues where 'undefined' or 'NaN' were returned incorrectly.
- Graphs in 'all time' and 'delta' timeframes for the counter 'Cache Misses' for as well InnoDB Cache, MyISAM key cache and Query cache groups were not displaying but threw the error "Invalid XML data" (these counters were added in beta 1).
- Previously accepted values for the "ChartValue" property in Dashboard charts were "Current" and "Latest". This has caused confusion since both terms mean the same thing in this context, although technically "Current" refers to the current value of the metric and "Latest" to the "Delta" value. Moreover, the documentation mentions "Actual" and "Delta" as accepted values. To eliminate this confusion, the "ChartValue" property now accepts the values "Current" and "Delta" - "Current" referring to the current value of the metric, and "Delta" to the difference in the metric between the previous two collections.
- Monitors/Advisors Customization: The Group Name of a Monitor/Advisor can now be changed only when a new, custom, counter is created; once set it cannot be changed. Changing Group Names of Monitors/Advisors shipped with SQL DM for MySQL is not allowed.
- All cache hit rate related monitors/advisors have been changed to display cache miss rate information as it more relevant when tuning databases. Also the advisor text for these monitors/advisors has been improved.

### Miscellaneous:

- Windows 2000 is no longer supported.

## 3.8 SQL DM for MySQL (August 2010)

### Fixed Issues:

- Monitors/Advisors on InnoDB Deadlocks were truncating the output message and hence in some cases, users were unable to view both queries involved in the deadlock. This has been changed such that the first 2048 characters of both queries are displayed.
- On Windows 7 systems changes to Monyog's .INI file from external programs had no effect upon restart (as Windows reverted the changes). Now throughout SQL DM for MySQL lifetime the .INI file will be locked so that a user may only edit the file manually when SQL DM for MySQL is not running (but users can use the SQL DM for MySQL interface to change any setting while SQL DM for MySQL is running). Any changes made to the file when SQL DM for MySQL is not running will be reflected by it once it is restarted.
- If MySQL Error Log monitoring was enabled for a particular server, the first two data collections for that server would cause large network traffic to occur if the MySQL error log was very large. This was because the entire log file is read in the first collection. Now only the last 1MB of the file is read.

### Miscellaneous:

- All libraries have been upgraded to their latest versions. Although, from a user-perspective, the changes are minimal, this has alleviated several memory leaks and other performance issues.
- This release has been checked in depth with the best leak-detection tools available for both Linux and Windows. All discovered leaks have been fixed.
- The cache parameters for the SQLite library have been modified with this release to allow for registering more servers on the same system as before. Before SQL DM for MySQL memory usage used to grow continually with time as each open SQLite handle has an associated cache which could grow to any size, irrespective of system capacity. The cache size per handle has been reduced and the total SQLite cache size will never exceed 1 GB with this build.

## 3.77 SQL DM for MySQL (July 2010)

#### **Fixed Issues:**

- Problem with SQLite where journal files were not being handled correctly leading to corruption of SQLite databases.

### **3.76 SQL DM for MySQL (May 2010)**

#### **Miscellaneous:**

- Added a ten server license.

### **3.75 SQL DM for MySQL (April 2010)**

#### **Fixed Issues:**

- Failure to open the SQLite resource DB located in SQL DM for MySQL installation directory could result in a crash. This crash has been fixed, but note however that SQL DM for MySQL is unable to function without this resource DB and will log an error message and perform a graceful exit.
- The Monitor/Advisor "Binary Log" --> "Transactions that got saved in temporary file" displayed "NaN" (JavaScript for Not-a-Number) for non-zero values of the associated MySQL counter.

#### **Miscellaneous:**

- Internet Explorer 6.2800 on Windows 2000 may hang when trying to display SQL DM for MySQL interface. The behavior is not seen in the next iteration of IE6.

### **3.74 SQL DM for MySQL (April 2010)**

#### **Fixed Issues:**

- Log analysis could use high CPU if the option to replace literals with a placeholder was not selected and the literal string ' ' (space + doublequote) occurred in the log file.
- CSV-export from Query Analyzer only exported 200 rows (the same number as displayed in the browser view). Now CSV-export will export all rows. Also the UI makes it now clear that the browser displays the 200 uppermost rows according to current sort criteria.
- An error message regarding an integer overflow could occur in Monitor/Advisors page for some values. The SQLite datatype used could be too short for some specific data.
- Login to SQL DM for MySQL could fail if SQL DM for MySQL was running behind a proxy.

### **3.73 SQL DM for MySQL (March 2010)**

#### **Fixed Issues:**

- If SHOW ENGINE INNODB STATUS returned an error that was not privilege-related, SQL DM for MySQL reported MySQL as non-available. That could happen for instance if MySQL was started with --skip-innodb option. This bug was introduced in 3.71 with the support for InnoDB deadlock detection.
- A bug in the SQL DM for MySQL startup script could on Linux have the result that SQL DM for MySQL was still reported as running if it had been killed or had crashed.

### **3.72 SQL DM for MySQL (February 2010)**

#### **New Features:**

- The number of builds for Linux has been increased to the double number of what it was before. In addition to the builds based on glibc version 2.3 we now distribute builds based on glibc 2.5. We had a few reports of random crashes (typically occurring up to a few times per week) occurring on recent 64 bit CentOS servers and in one case also a RHEL5. The glibc 2.5-based build fixes this. Although we only had such reports on 64 bit Linux of 'Red Hat Family' we also included 64 bit tar.gz for all Linux platforms and 32 bit RPM builds. The general advice on which build (glibc 2.3-based versus 2.5-based) should be used in every case would be that if glibc 2.5 or higher is available on the system you should use the 2.5-based build. Or simply use the one based on 2.5 if it installs and starts on your system. Upgrading users that are in doubt can continue with 2.3-based builds if they have no stability issues.

#### **Fixed Issues:**

- When SQL DM for MySQL encountered an SSH error while trying to read a file using SFTP it could crash. This has been fixed.
- Redundant "Server Restarted" alerts concerning monitored Linux systems could be sent by SQL DM for MySQL. Now SQL DM for MySQL will notify users only once when a system is restarted, and alert will be sent as soon as SQL DM for MySQL detects it.
- When restarting SQL DM for MySQL an error message could be written to the log indicating that an ALTER TABLE SQLite query failed to execute. Technically, it was an issue with a Schema version table in the SQL DM for MySQL database.

### **3.71 SQL DM for MySQL (February 2010)**

#### **New Features:**

- Added a monitor for InnoDB deadlocks (as exposed by SHOW ENGINE INNODB STATUS - statement).



- In case of a program crash on Linux, SQL DM for MySQL will save a core dump like the Windows version already does. The dump is saved in ... /MONYog/bin folder.

#### Fixed Issues:

- EXPLAIN from Processlist page could fail with syntax error due to a missing SPACE character in the statement.

### 3.7 SQL DM for MySQL (February 2010)

#### New Features:

- The SQL DM for MySQL 'admin' user can now create other users having access to a subset of available servers only. For those non-admin users access to edit server settings, to KILL queries and to execute FLUSH STATUS is optional. Also note that only 'admin' is allowed to create/delete server and user registrations.
- Monitors/Advisors page can now be exported as CSV.
- Some counters in Monitors/Advisors page were rearranged. Details about this:
  1. "Security" and "Excessive Privileges" groups have been moved to the top.
  2. "Table Cache" and "Table Locks" have been merged to a single group "Table Cache & Locks".
  3. "Thread Cache" and "Slow Launch Threads" have been combined to a single group named "Threads".
  4. "Commands" and "Schema Changes" have been merged to a single group "Commands & Schema Changes".
  5. Counters in "Network Traffic" have been moved to "Connection History".
  6. Counters in "Sort Buffers" have been moved to "Misc.".

#### Fixed Issues:

- FLUSH STATUS was not working for servers having space(s) in their names.
- Warning also displayed when global notifications are disabled.
- Duplicate 'Server restarted' messages were sometimes sent when SQL DM for MySQL is restarted.

#### Miscellaneous:

- SQL DM for MySQL is now available in three different editions: Professional, Enterprise and Ultimate (full-featured).

### 3.65 SQL DM for MySQL (December 2009)

#### New Features:

- You can now specify a comma-separated list of users to be ignored/excluded by notify and/or kill actions for long-running queries in 'query sniffer' interface.
- Added a 'diagnostic info' icon to servers in 'list of servers' page. Clicking this will generate a report in plain text with the most basic information about the server.
- Added an option to stop/start data collection for a server in 'list of servers' page (without opening the detailed pages for this server).
- Enabling/disabling data collection from and/or alerting about all servers can be done from tools .. preferences .. maintenance.
- Enabling/disabling data collection from and/or alerting about specific servers can be done by calling the SQL DM for MySQL URL with parameters. This can be scripted and scheduled using any standard method available with the OS. Please refer to documentation for details.
- Mail alerts will now have a direct link to open SQL DM for MySQL login page.
- Added an option to customize colors used in Dashboard.
- If global wait\_timeout setting for a server is lower than the sample interval we will now increase session wait\_timeout setting in order to avoid the MONYog.log to grow with a "MySQL server has gone away" message for each data retrieval.

#### Fixed Issues:

- Fixed some issues with validation of user input. For specific data invalid and unusable input could be saved by SQL DM for MySQL. This includes 1) invalid separator between email addresses 2) Entering a decimal where an integer is required.
- SMTP return codes were neither logged nor were specific messages displayed to the user based on them.
- In history/trends an empty graph would display if server details were wrong. Now proper JavaScript errors are displayed.
- In connection details page for a server the previous/next links would hide with specific menu items selected.
- In History/Trends, warning message ("No data found in this range, try changing history range!") didn't show up for the time-frame in which server data collection was disabled.
- If Adobe Flash was not installed, the message to "install the latest Adobe Flash Player" was displayed more than once.
- Small GUI improvements and fixes.

### 3.62 SQL DM for MySQL (December 2009)

#### Fixed Issues:

- When using the option (introduced in 3.6) to alert for long-running queries from the Query Sniffer interface, such long-running query could raise multiple alerts.

#### Miscellaneous:

- Added 'User and Host' information for long running query alert.

### 3.61 SQL DM for MySQL (December 2009)

#### Fixed Issues:

- If notifications were enabled, program threads were not always closed properly what ultimately could lead to a program 'hang'. This bug was introduced in 3.6.

### 3.6 SQL DM for MySQL (November 2009)

#### New Features:

- Delayed alert notifications. It can now be defined that a problem must have existed for a number of sample intervals continuously ('in a row') for an alert to be sent. A global setting for each server is available from GUI. For individual counters the global setting can be overridden by defining the RetryOverride (like 'RetryOverride:3') property of the (JavaScript) counter definition in Tools... Customize interface.
- Added counters for monitoring I/O parameters on Linux systems (similar to 'iostat').
- Host and user information is added (optionally) to the Query Analyzer output. Note: This option is currently not available for proxy based sniffer.
- Duplicate/Clone Server functionality added to GUI.
- Added direct link to customize counters from the Monitors/Advisors page.
- Grouping of servers: one or more 'tags' can now be specified for a server. In 'register servers' page the list of servers are grouped as per tags. As more tags may be specified for a server, it may appear in more groups. A group established this way can be selected in one operation.
- Added an option to send alert if server was restarted between two data retrievals. With managed hosting the MySQL server may be restarted automatically as part of routine maintenance or after a server crash. Knowing when this has occurred can be useful.
- Process-list based sniffer now has an option to notify about and kill long running queries.
- New and updated counters/advisors.
- Added automatic and manual update check.

#### Fixed Issues:

- Notifications did not take 'base time' setting and/or 'uptime\_since\_flush-status' status variable into account.
- If SSH setting for retrieving Linux system information were once selected and later deselected again, graphs without any information would appear in Dashboard and in MONyog.log errors were recorded.
- Now "busy" icon is displayed while saving/deleting a connection. When SQL DM for MySQL was controlled from a browser running on a remote machine the absence of this could cause confusion about if change had effect.
- A garbage string like "ONaN/ONaN/NaN ONaN:ONaN:ONaN" could be displayed when editing log analyzer filter settings.
- With specific settings Dashboard graphs could hide other displayed dialogs.
- Notification mails now have information about the value that triggered the alert.
- In log analysis a divisor '1024' was use for calculation of 'kilo rows'. Now the divisor '1000' is used.
- Exporting charts as graphics did not use a consistent naming convention. Now files will be named 'MONyog\_chart\_ConnectionName\_Chart\_Title.file\_extension'.
- For slave servers process-list options to "Kill", "Copy", "View Query" and "Explain" were not always accessible.
- GUI improvements, improved error messages etc.

#### Miscellaneous:

- Added a warning in Disk Info page that the calculation may be expensive. In particular with databases with thousands of objects the calculations may cause unacceptable load.
- Default data collection interval is 5 minutes.

### 3.5 SQL DM for MySQL (October 2009)

#### New Features:

- Alerts can now be sent as SNMP traps.
- Support for MySQL error log. An alert can be sent when the error log has an entry of type [ERROR] and the error log entry can be viewed in SQL DM for MySQL web interface as well.
- Query Analyzer data can now be exported as CSV.
- Updated and added advisors.
- EXPLAIN/View query from Processlist page will now open in a new browser tab.
- Alerts (mails or traps) will now list the IP of the machine running the SQL DM for MySQL instance (request from users who had more than one SQL DM for MySQL instance).
- Graphs/charts will now have new colors that make the graphs more readable.
- Added next/previous links in register/edit servers page.

#### Fixed Issues:

- Lots of fixes for browser-specific issues.
- If identical queries were logged from more clients with same timestamp, Query Analyzer/slow query log would only count that query once.
- Long BULK INSERTS would not display properly in Query Analyzer if the option to 'replace literals' was selected.
- Deleting a server registered as number '0001' did not delete the sniffer.data file for that server.
- Windows Vista and higher could warn that SQL DM was not properly installed due to lack of an Application Manifest. It was false alarm but now such Manifest is included with the installer.

### 3.16 SQL DM for MySQL (September 2009)

#### **Fixed Issues:**

- Some queries were not parsed correctly from server logs. Affected queries were queries enclosed in (brackets) and some queries with comments. Known issues still are: 1) queries starting with a conditional comment. 2) queries containing a 'quoted string' with a " ; " (semicolon) followed by a line-break.
- Query time could fail to be read correctly from logs.
- Fixed a memory issue when parsing logs.

### **3.15 SQL DM for MySQL (August 2009)**

#### **Fixed Issues:**

- More CPU optimizations with processlist-based sniffer.
- When installing Windows version a js32.dll - error could stop installation (after waiting a few seconds and clicking 'retry' it installed successfully).
- Some counters of YES|NO type had an icon for displaying graph what made no sense.

### **3.14 SQL DM for MySQL (August 2009)**

#### **Fixed Issues:**

- Significant CPU optimization with processlist-based sniffer.
- Saving mail settings with Linux version could cause a program 'hang'.

### **3.13 SQL DM for MySQL (August 2009)**

#### **Fixed Issues:**

- Fixed a major memory leak issue in processlist based sniffer. Also some other small leaks were fixed.
- Using the option to 'show only changed values' in HISTORY/TRENDS would show an empty result for counters having non-integer values.
- On systems running Kaspersky security software 'test connection' could show an empty message box. Kaspersky filtered. We have changed the text of the message so that it does not happen now.

### **3.12 SQL DM for MySQL (July 2009)**

#### **New Features:**

- All charts displayed by SQL DM for MySQL can now be exported as PDF/JPG/PNG (from chart context menu).
- Query Analyzer will now sort in descending order as default first time (before it was ascending).

#### **Fixed Issues:**

- Validation of connection details was not proper when saving.
- In Query Analyzer options that do not apply for sniffer and log files are now disabled where they do not apply.
- In Query Analyzer 'show details' did not preserve the original formatting of a query.
- Max column in sniffer output in Query Analyzer could show erroneous values in some cases.
- Mail alerts sent by SQL DM displayed TRIAL at bottom even after registration of SQL DM for MySQL.
- Various errors like "ErrCode:-1 ErrMsg:PathMgr::GetExeName readlink failed" could occur in MONyog.log. In some cases the error would cause failure to register.
- Sniffer data are purged automatically as per the server 'retention timeframe' setting, but it could also happen that Sniffer data that were not old enough to qualify for purging were deleted automatically. This would result in some queries missing after analyzing.
- Wrong error was logged by sniffer if MONyog.lua version 3.0 was used with SQL DM for MySQL version 3.1. However in connection details section, on "Test Proxy", proper error was thrown.

#### **Miscellaneous:**

- Due to a bug in specific builds of the MySQL proxy version 0.72 (it returns incorrect version) Monyog Query Analyzer will not work with those builds affected. Affected builds include versions for Windows and OS-X (but not Linux where this Monyog release works fine with proxy 0.72). We hope that MySQL will fix this soon, but if not we will consider a patch in SQL DM for MySQL itself.
- With Internet Explorer versions 8.0.6001.18783 and higher (latest available for Vista and Win7) exporting graphics will not work. The 'Save' button (a FLASH object) does nothing in those browsers. We will release again as soon as a fix is possible.

### **3.11 SQL DM for MySQL (June 2009)**

#### **Fixed Issues:**

- Fixed a bug when converting timestamp format (human readable timestamp, unix\_timestamp) when reading server logs. The bug could result in time being displayed 1 hour wrong in Query Analyzer if server was in a timezone using 'daylight saving time'.
- A SQLite database LOCK could prevent access to the 'system' database. Linux Operating System counters would then not be available.
- Fixed a GUI issue with IE browser in licensing form page (command button behavior while a command was in process).
- SQL DM for MySQL could crash when user saved specific details (port and password) from 'preferences'.

### **3.1 SQL DM for MySQL (June 2009)**

## Packaging:

- The same binary/installer is now used for any license model (whether TRIAL or whatever number of servers). A license key defines and controls how many servers can be registered. You may retrieve your license key from our Customer Portal. Before installation please ensure that you have registration details available and also soon after installation has completed please connect to SQL DM for MySQL from your browser and enter registration details. This change of packaging concept simplifies the release cycle for us, as there are now much fewer installers that will need to be built and tested.
- Also now all distributed builds will run as a TRIAL will run for a month (not till a fixed date) and in the TRIAL period an unlimited number of servers can be registered.
- Unfortunately and as a consequence of the changed packaging concept it is not possible to install a 3.1 RPM build on top of a previous version as the file name format (ie. version substring) will need to change to be functional by RPM installers ('rpm' console command and various distribution-specific commands and GUI tools). Previous RPM versions installed must be uninstalled this time before installing 3.1 (but note that previously collected data will still be preserved and available after this). For Windows .exe and Linux .tar.gz builds there is no such issue.

## New Features:

- Added option to purge all stored sniffer data. Also sniffer default settings were changed. Quite a lot of evaluating users experienced an empty report due to previous default settings.
- Added support for MySQL Proxy version 0.7.1. A new MONyog.lua script is shipped with this build. The old script must be replaced with this one if you use the proxy-based sniffer option. This new script also works with MySQL Proxy 0.61.
- Filtering options were re-arranged in Query Analyzer as per user requests.
- Lots of GUI fixes, clarifications, usability improvements etc.

## Fixed Issues:

- On RedHat type Linux 'service MONyogd start' command would sometimes not start SQL DM for MySQL in first attempt if SQL DM for MySQL process had been killed or had crashed.
- The mail header of SQL DM for MySQL mail alerts did not handle unicode. Now utf8 encoding is used everywhere.

## Miscellaneous:

- Do not forget to replace the MONyog.lua script if you use the Query Analyzer with proxy-based sniffing!
- RPM users must uninstall previous versions before installing this one!

## 3.09 SQL DM for MySQL (June 2009)

### Fixed Issues:

- If SQL DM for MySQL user for monitoring a replicating slave did not have 'replication client' privilege, MySQL availability would be shown as 'No' in Monitors/Advisors page (even though 'test connection' was successful).
- If mail alerts were enabled, a syntax error in customized JavaScript could cause a crash.
- Charts for a server in Dashboard page would not resume updating after a disconnect and reconnect to that server. A browser refresh was required.
- The chart 'popups' from Monitors/Advisors page would not populate with historical data from the SQL DM for MySQL database but only with fresh data sampled.
- After sorting in Query Analyzer the expand/collapse state was lost.

## 3.08 SQL DM for MySQL (May 2009)

### Fixed Issues:

- Query Analyzer did not show correct output when displaying a sorted result. A wrong LIMIT clause was generated when querying the temporary database containing queries.
- Fixed a bug in checksum calculation on 64 bit builds. The checksum is used by Query Analyzer for indexing. On 64 bit wrong sort order could result from this.
- If SSH-tunneling to a MySQL server had been used and later the setting for 'Use SSH' was changed to "No", SQL DM for MySQL would continue to use SSH tunnel as long as valid tunneling details were available.

## 3.07 SQL DM for MySQL (May 2009)

### Fixed Issues:

- With SMTP notifications turned "ON" various issues (connection failure, program crash) could occur if SMTP authentication was not used. This bug was introduced with SMTP authentication support in 3.05.
- Fixed a crash with SSH tunneling. Only 64 bit build for Linux was affected.
- Counters "cache hit rate", "pruned as percentage of inserts" and "queries not cached" reported wrong in 'History/trends' timeframe.

## 3.06 SQL DM for MySQL (April 2009)

### Fixed Issues:

- Installation on Windows could fail with a js32.dll-related error. Waiting a few seconds and 'retry' would solve this but now the error does not come.

- Fixed a 'false alert' related to settings for temporary tables (the error occurred because of comparing an integer with a non-integer).
- With slow query logs generated from servers greater than 5.1 Query Analyzer "Max" column would show a value without decimal point if the query count was greater than 1.
- Chart pop ups from Monitors/Advisors page would sometimes only populate from next time data was sampled (it was a concurrency issue in code).
- 32 bit builds for Linux failed to populate the Monitors/Advisors page. This bug was introduced in 3.05.
- 3.05 TRIAL build for Windows would expire at a fixed date and not after one month as it should.

### 3.05 SQL DM for MySQL (March 2009)

#### New Features:

- SSL/TLS mail encryption is now supported for mail alerts.
- Added an option to rebuild SQL DM for MySQL databases. Using this option periodically may result in better performance - including shorter startup time when OS is rebooted. Basically using this option will defragment the database including indexes. It is not possible to provide an 'absolute' advice on how this option should be used. But the larger the databases and the shorter the sample interval the faster there is a chance of fragmentation occurring after a huge amount of INSERT's and DELETE's to the database (note that only with databases files of around 1 GB and larger we have seen the need for this. A 'general' advice could be to execute monthly with large database files).
- Improved error messages for Query Analyzer.

#### Fixed Issues:

- When "Test Connection" or "Test Path" was clicked SQL DM for MySQL seemed inactive. Now the mouse cursor will change to an 'active state cursor' indicating that SQL DM for MySQL is performing the requested operation.
- With query sniffer enabled the 64 bit Linux build could crash. Reports about this include RedHat and Ubuntu Linux distributions with very recent Linux Kernels.

### 3.04 SQL DM for MySQL (March 2009)

#### New Features:

- In case of invalid JavaScript in a counter definition, SQL DM for MySQL will now tell details about this error.
- Optimizations in the handling of the SQL DM for MySQL embedded database. In particular users with a very large retention timeframe setting and rather short sample interval (resulting in large databases) will benefit from that.

#### Fixed Issues:

- The above will also fix an issue where SQL DM for MySQL seemed to 'hang' when saving connection details for a connection having large database files.

### 3.02 SQL DM for MySQL (February 2009)

#### Fixed Issues:

- The alerts and advisors for slave 'read-only' mode were in conflict. We will now advise for a slave (in production) that 'read-only' mode should be ON (only the replication thread can write) and alert accordingly.
- Add/Edit connection failed with connection names using SPACE character.
- Proxy connection was not established when proxy was started for a server present in a remote system.

### 3.01 SQL DM for MySQL (February 2009)

#### Fixed Issues:

- For 5.1.x server SQL DM for MySQL was not fetching the log details like slow query log and general query log file path in Connection details section.

### 3.0 SQL DM for MySQL (February 2009)

#### New Features:

- The 'query sniffer' can now connect to and retrieve data from a running instance of the MySQL-proxy program used by one or more clients to connect to MySQL. A LUA script for controlling the proxy for use with is provided with this build. With this sniffer option the SHOW FULL PROCESSLIST statement will not be sent and thus use of 'query sniffer' will not put any load on MySQL.
- SSH connections will now attempt more authentication methods in case the first method attempted failed. This will solve problems reported with tunneling to MySQL on FreeBSD that as per default does not support the full range of SSH authentication methods (and possible similar problems).
- Updated advisors. This is a complete and major revamp of advisors in . It is still in progress (around 80% is finished).
- Log Analyzer will expose call statements.
- In Log Analyzer "Rows Sent" and "Rows Examined" column will be displayed as KBs/MBs.
- Connection Details (Connection name, MySQL user, SSH user, SSH tunneling user which are saved in connection details are exposed for customization in Monitors/Advisors. (For instance 'connection name' can be accessed using MONyog.Connections.ConnectionName, 'MySQL

user' as MONyog.connections.MySQLUser etc. Please refer documentation for more detailed list of all counters exposed.). Using this option counters can be made specific for specific SQL DM for MySQL connection details. For instance you can have two connections defined to the same server that will display each their set of counters.

- SQL DM for MySQL now has an ability to fully utilize the caching abilities of modern browsers. Now when refreshing a page where there is no change there will be almost no network traffic generated and the page will refresh almost instantaneously.
- SQL DM for MySQL is able to read microseconds from proxy and if available in slow query log and will (for readability) show in milliseconds.
- Sniffer output will now display MAX, first seen time, last seen time, query occurrence %. Also query occurrence % and Lock Time for a query was added to slow query log and query occurrence % for a query was added to general query log displays.
- Added an option to execute FLUSH STATUS from inside SQL DM for MySQL.

#### Fixed Issues:

- Once a connection in connection page was defined ssh = 'yes' for a Linux server and changed on 'no' then the GUI would not update with proper information.

#### Miscellaneous:

- Grouping of queries is now case insensitive for all forms of query analysis.
- The browser cache support added in beta2 has been temporary removed. There is a problem with Firefox3 with cache and AJAX (update requests were not sent from a cached page - only current cache content was reloaded). Note that FF3 users who had beta2 installed will need to clear the browser cache after installing this beta3.
- Note that the qd.lua script for PROXY-based sniffer has been updated and renamed to 'MONyog.lua'. For use with this SQL DM for MySQL version the old script must be replaced.
- Also note that Log Analyzer has been renamed to 'Query Analyzer'.

## 2.9 SQL DM for MySQL (December 2008)

#### New Features:

- This release adds a 'base time' setting in SQL DM for MySQL. This setting (if defined by user) will be used for calculation of uptime-based counters. The reason for this implementation is that if FLUSH STATUS is executed with a MySQL server, specific server status variables will be reset to the same value as would be after a server restart. However the 'uptime' status variable itself is not affected by FLUSH STATUS. And as uptime-based counters will relate the value of cumulative status variables with some initial time, using the 'uptime' variable as the initial time will result in calculation of misleading values if FLUSH STATUS was executed. So to get true uptime-based counters in SQL DM for MySQL with servers that do not support the 'uptime\_since\_flush\_status' variable (and currently only 5.0 COMMUNITY servers from 5.0.37 do - not ENTERPRISE servers and not any other major branch than 5.0 and also not 5.0 before 5.0.37) you will need to define a 'base time' in SQL DM for MySQL greater than or equal to the time where FLUSH STATUS was executed last time. Also you can now discard data older than a specific time by using this setting. Refer to documentation for full details.
- Improved the purging logic with the Monyog embedded database. Now also system CPU load is considered and purging operations will be skipped if CPU is high. This is a further improvement to the change in purging logic introduced in version 2.5.
- SQL DM for MySQL can now be running behind an Apache server configured as 'reverse proxy'. Before this release SQL DM for MySQL JavaScript was not accessed due to absolute paths, as a result SQL DM for MySQL pages were not displaying properly.

#### Fixed Issues:

- Fixed high CPU usage in the 'query sniffer' if sniffer "Minimum time taken" value was set to "0" (or left blank).

## 2.83 SQL DM for MySQL (November 2008)

#### Fixed Issues:

- SFTP log downloads used excessive memory on Linux.
- Version 2.82 introduced an unresolved dependency with a libcrypt library on some Linux distros (including some CentOS and OpenSuSE distros).
- Installation on Windows 2000 could fail due to a dependency on a .dll not standard on this Windows version. Also this was introduced in 2.82.
- The status indicator for log downloads could display wrong for large files (> 2 GB).

## 2.82 SQL DM for MySQL (October 2008)

#### Fixed Issues:

- SFTP log downloads failed with the Bitwise 'WinSSHD' SSH implementation for Windows.

## 2.81 SQL DM for MySQL (October 2008)

#### Fixed Issues:

- Fixed an issue where data collection would continue to fail with 'database locked' error message in the log. We now roll back the query generating the lock and collection can continue (this was reported happening by a single user (only) after SQL DM for MySQL upgrade).

## 2.8 SQL DM for MySQL (September 2008)

#### New Features:

- Added new monitoring module displaying disk usage information for databases and tables.
- Display of slow log data in Log Analyzer had added more information (about when query occurred, information about number of rows examined and sent).

#### Fixed Issues:

- When a multibyte character was used in a connection name the display would garble and also the connection could not be deleted from GUI.
- When connection was not available the caption for counters should display "n/a". Since 2.71 it would instead display a string exposing an internal value (example: "NumCounterWithSeconds").

## 2.72 SQL DM for MySQL (September 2008)

#### Fixed Issues:

- On 64 bit Linux systems running SQL DM for MySQL 64 bit builds queries could be considered identical by Log Analyzer even if they were not.
- Authentication failed if the "#" character was used in password.

## 2.71 SQL DM for MySQL (September 2008)

#### Fixed Issues:

- Fixed some issues with JSON strings that could prevent objects in the SQL DM for MySQL browser interface to populate with data. Most important 'Monitors/Advisors' page would fail to display if a username contained a doublequote character.

## 2.7 SQL DM for MySQL (September 2008)

#### New Features:

- CPU optimizations in both SQL DM for MySQL (server) process (in particular when 'Monitors/Advisors' page was being viewed) and browser processes (viewing Dashboard could cause high CPU usage in Firefox browser in particular).

#### Fixed:

- Fixed a dependency with the SSH library that could cause failure to install in Win2K. This was an issue with the updated SSH library introduced with version 2.5.

#### Miscellaneous:

- The RPM installer scripts for Linux was updated in various ways. This solves issues on specific distributions including: 1) Uninstall with the SuSE /YaST 'software management' GUI was not possible. 2) It was not always possible to install on top of a running SQL DM for MySQL service - sometimes it was necessary to stop service manually before upgrading. Also note: when updating from trial to single/multi server or from single server to multi server it is still necessary to uninstall the old version first. And when installing this version any older version will have to be removed with the "rpm -e ..." command in advance (distribution-specific GUI tools may not work with versions before this one, so please use the RPM console command). We apologize for this but there is no other way.

## 2.6 SQL DM for MySQL (August 2008)

#### New Features:

- Log Analyzer code has been completely refactored resulting in better performance and stability and more maintainable code.
- The progress indicator for downloads in Log Analyzer page is now a true quantitative progress bar.
- Error messages in Log Analyzer were rewritten. Every single possible error is now differentiated by a specific message providing help for the situation.

#### Fixed Issues:

- With SFTP connection to the log file selecting "ALL" for log size to be downloaded in Log Analyzer page could have the result that the log file download would last forever.
- Analyzing log chunks containing BULK INSERT statements could in special situations cause a program crash.
- "Group by" option in history/trends page could deliver incorrect results if MySQL and SQL DM for MySQL were using different time-zones.
- Fixed a bug with resolution of time in log analyzer that could result that no queries or less queries than what should be were returned. The most recent queries would sometimes not be shown. Issue was only if log was retrieved with SFTP.
- When retrieving logs stored in tables the substitution of literals would fail for binary data .
- Installing a RPM multi/single server builds on top of a trial build (and vice versa) resulted in that they were installed in parallel. Also on SUSE SQL DM for MySQL was not registered with the correct run level. The RPM has been updated to fix this.
- When downloading a log SQL DM for MySQL would continue to download in the background until end of file even after STOP button was clicked.
- In the display of queries from the Processlist page special characters could garble.
- Also in Log Analyzer page special characters would not always be identified correctly. This bug also affected records with binary data. Both display and grouping was affected (depending on where those occurred - in plain strings or in identifiers).
- Repeatedly switching between sorting and show details for a slow query log in Log Analyzer could in certain situations crash SQL DM for MySQL.

#### Miscellaneous:

- Display of servers is now sorted in the order of the server/connection name. Earlier the internal ID was used for sorting. Also note that now no SQL DM for MySQL restart is required for changing sort order. A connection rename alone will do.

## 2.51 SQL DM for MySQL (July 2008)

### Fixed Issues:

- Depending on the chosen installation environment and the Linux distro, the RPM build might not install 'on top' of a previous installation. Before installing a new version it was necessary to uninstall the previous version. This is a limitation with all RPM builds released till now. From this build and onwards it will always be possible to 'upgrade on top' of a previous version. Note: this was an issue with the RPM installer - not the program binary. There is no change in the binary as such and also no change in the Windows installer and the .gz build for Linux.

## 2.5 SQL DM for MySQL (July 2008)

### New Features:

- MySQL Server Log Analysis: SQL DM for MySQL is now able to retrieve (completely or partially) the General Query Log and the Slow Query Log (whether stored as files or tables on the server) from the MySQL servers it connects to and analyze them.
- Query Sniffer: A 'query sniffer' is implemented that will record a 'pseudo log' on the client (SQL DM for MySQL) side. The sniffer is useful when 'real logs' are not available, but also the sniffer has various filtering options what will sometimes make it more useful than the 'real server logs' also when they are available.

The log analysis component will (whether operating on a 'real log' or a 'sniffer pseudo log') only display identical queries once but print a 'count' for every query. Important information (like execution time, number of instances for this query etc.) will be displayed in a sortable table view.

In the log analyzer 'Filter settings' (not to be confused the filter settings of the 'query sniffer') there further is an option to 'replace literals'. The purpose of this option is to eliminate small differences between 'almost identical' queries. Currently 'quoted strings' and numbers are replaced with the dummy string 'XXX' only. We may extend this feature to support more (like special keywords and functions (like NULL, now()), operators etc.) in the next releases. It will depend on the demand for this as compared to the demand for other features. Also note that the current implementation has the 'imperfection' that also numbers that are not values (like the '1' in identifiers like column1) will be replaced.

- More Linux system counters added: Counters related to Linux memory (including swap) usage added.
- RPM build now supports SUSE and Mandrake/Mandriva Linux distributions.

### Fixed Issues:

- Under specific circumstances the SQL DM for MySQL service would stop very slow.
- If network connection was temporarily unavailable the first CPU value after network came back told 100% CPU load.
- The temporary files for storing public/private keys are now being created with very restrictive file permission in Linux. So only the owner will be able to read/write these temporary files. Although these files would exist only for a fraction of second, in earlier versions of SQL DM for MySQL other users in the same Linux system could get access to them within that small timeslice.
- Fixed an issue with trending where graphs would not always display properly for uptime-based counters.
- MONyog.ini file and SQL DM for MySQL database files on Linux are now only readable for user who starts/installs (.gz and RPM build respectively) SQL DM for MySQL (and of course for any user too that was given access by a root user). Before the files were world-readable. This applies to fresh installations only - there is no change with existing installations.
- Solved an issue where slow startup could occur if lots of servers were registered (Technical: If SQL DM for MySQL had not been running for a while, large amounts of data could require deletion from the Monyog database. The queries used to identify those data would generate significant I/O at startup. The retention process is now 'smoothed over time' and indexes have been added for more efficient deletions).

## 2.06 SQL DM for MySQL (June 2008)

### Fixed Issues:

- Fixed: The new version 3 release of Mozilla Firefox (now in RC) has a flickering issue with SQL DM for MySQL and the login page did not load correctly in that browser version.

## 2.05 SQL DM for MySQL (May 2008)

### Fixed Issues:

- Fixed: OS monitoring issue in Fedora Core 6 Zed.

## 2.04 SQL DM for MySQL (May 2008)

### Performance improvement:

- Earlier SQL DM for MySQL was semaphore intensive. That could result in reaching the 'limit of semaphores that can be created by the kernel' in some systems. SQL DM for MySQL 2.04 will use less semaphores. Another symptom was that a large number of small and zero-size files could be left behind (in system TEMP folder on Windows and in MONyog/bin folder on Linux). This is also solved with this.

## 2.03 SQL DM for MySQL (May 2008)



### Fixed Issues:

- In some situations where SSH connections failed (including if SQL DM for MySQL was not able to connect to MySQL through tunnel, wrong SSH authentication details for tunneling etc.), sockets were not being closed and it could result in that many sockets were kept in CLOSE\_WAIT state. (Note: Connections to MySQL not using SSH were not affected!)

## 2.02 SQL DM for MySQL (April 2008)

### Fixed Issues:

- In the 'delta' timeframe CPU load displayed was incorrect.

## 2.01 SQL DM for MySQL (April 2008)

### Fixed Issues:

- Whenever Dashboard was drawn for the first time or redrawn with new configuration settings all nodes displaying CPU load were erroneously drawn with the latest available value. New values appearing after that were drawn correctly. Only CPU load counter was affected.

## 2.0 SQL DM for MySQL (March 2008)

### New Features:

- SSH tunneling to MySQL servers.
- Analysis of historical data (trends).
- Dashboard graph size is now configurable.
- You can choose to display x-axis values or not in Dashboard (in 'large' display mode). Also remember that no matter if axis-values are displaying you can retrieve values by pointing the mouse to a node in the charts.
- The no. of samples displayed in dashboard is configurable.
- Above dashboard settings can be changed from the dashboard page itself.
- 64 bit binaries for Linux included.
- Option to display counters as 'value/sec'.
- Reorganized the connection page for better clarity.
- Performance improvements.
- JavaScript code was 'broken down' to smaller units for easier customization. Every counter group now has its own 'custom' script.
- The menu was reorganized and other GUI improvements for easier navigation between the different functionalities.
- The 'looks and feel' (of graphics in particular) has been vastly improved.
- Documentation/help was updated and reorganized with better structure, more hyperlinks - and also now much more better looking.

### Fixed Issues:

- SQL DM for MySQL would not install on some older Linux distro's (including RHEL3).
- In Linux it was possible to start more identically named Monyog instances. This is now prevented.
- When stopping SQL DM for MySQL service it could happen that the service was reported to be stopped before the task was complete. Starting service in this situation would return an error. Now it will report 'running' as long as it is not fully stopped.
- Fixed an issue with the shell script for non-RPM Linux where it could be reported that service had started when it had not.
- Fixed some calculation bugs (affected 'hit rate' and 'percentage of used blocks' counters).

### Miscellaneous:

- Help/documentation page will open in a separate browser window or tab (depending on browser setting).
- 'Show All' page was renamed to 'Monitors/Advisors'.
- System counters have been renamed to 'Linux counters'.

More details on implementation of SSH-tunneling and History/Trends analysis:

- SSH-tunneling: The implementation does (unlike current SQLyog implementation) not start any external process and does not occupy a local port. The performance for this 'home grown' SSH-tunnel wrapper is very high (you may find it faster than direct connection to MySQL on a remote host)!
- History/Trends analysis: This is implemented in the 'Monitors/Advisors' page. You can select whatever time interval you want for the analysis. Counters that are UPTIME based (or if you like: CUMULATIVE counters as opposed to SNAPSHOT counters) can be aggregated using SUM function and common time intervals (HOUR, DAY, MONTH etc.). This is semantically similar to the query "SELECT SUM () ... GROUP BY " (but the real query behind this interface is much more complex of course!).

## 1.52 SQL DM for MySQL (February 2008)

### Fixed Issues:

- Installing recent versions on top of 1.1 or earlier could disable connection to the OS (not to MySQL) of servers already registered (this bug was introduced when we started supporting key authentication with 1.5).
- Alert icons (red and yellow circles) were disappearing from the group in 'Show All' interface if the user clicked the next group.

## 1.51 SQL DM for MySQL (January 2008)

### Fixed Issues:

- Adding a server with notification enabled was storing wrong information in the 'connection.data' configuration file. After a restart of the SQL DM for MySQL service the wrong information that was read from that file would cause notifications to stop working. Note that if a connection was configured in 'two steps' where notification settings were added to an existing connection there was no error.
- Fixed a memory leak occurring with public/private key authentication when connection was unsuccessful (server not available, invalid key pair etc.).
- The shortcuts installed by SQL DM for MySQL installers now point directly to '127.0.0.1' (and not 'localhost'). This solves an issue with Firefox on Windows Vista where resolution of the URL 'localhost' was very slow.

## 1.51 SQL DM for MySQL (January 2008)

### Fixed Issues:

- Adding a server with notification enabled was storing wrong information in the 'connection.data' configuration file. After a restart of the SQL DM for MySQL service the wrong information that was read from that file would cause notifications to stop working. Note that if a connection was configured in 'two steps' where notification settings were added to an existing connection there was no error.
- Fixed a memory leak occurring with public/private key authentication when connection was unsuccessful (server not available, invalid key pair etc.).
- The shortcuts installed by SQL DM for MySQL installers now point directly to '127.0.0.1' (and not 'localhost'). This solves an issue with Firefox on Windows Vista where resolution of the URL 'localhost' was very slow.

## 1.5 SQL DM for MySQL (December 2007)

### New Features:

- Major speed improvements (in both data collection and as regards browser responsiveness).
- Private/Public key authentication is now supported with SSH connection to remote hosts. Key format must be OpenSSH standard key format - special formats (like the one used by the 'Putty' program) are not supported.
- Added security-related counters and advisors.
- Added counters and advisors for schema and table operations.
- PROCESSLIST display will not by default 'filter out'. A button has been added in the 'Change Filter' dialog to switch between a non-filtered result and the (old) filtered result for the PROCESSLIST page.
- PROCESSLIST can be paused/resumed.
- Default SSH timeout (3 minutes) was replaced with 30 seconds.

### Fixed Issues:

- Fixed some small memory leaks.
- Deleting a connection did not remove all the files belonging to that connection.
- Fixed a rare issue where browser could report that the page cannot be displayed while saving/editing server details or connection (IE issue only).
- Fixed an issue with system counters where 100% CPU usage erroneously could be reported when SQL DM for MySQL started.

## 1.11 SQL DM for MySQL (October 2007)

### Fixed Issues:

- HTML formatting of queries in the PROCESSLIST tab was not correct. As a result display of queries could be truncated.

## 1.1 SQL DM for MySQL (October 2007)

### New Features:

- Support for SHOW FULL PROCESSLIST - SQL DM for MySQL monitor processes on the servers in real time. Various filtering options for PROCESSLIST are available. Further displays, copy and EXPLAIN (EXTENDED) a running query from inside SQL DM for MySQL.
- Documentation was updated - including information about the PROCESSLIST feature, up-to-date screenshots etc.
- Counters and Advisors - Small adjustments!
- Debug DUMP facility - SQL DM for MySQL (Windows version) has an ability to store crash-dumps fit for debugging similar to SQLyog as explained here: [Debug Facility](#).
- Menu rearrangement etc. - or clarity we have decreased the number of menus displaying. Those that 'went away' are available as links or submenus.

## 1.04 SQL DM for MySQL (August 2007)

### New Features:

- Improved counters and advisors.
- Customize page now will show the .js-components that user changed with a red \* (star). Note that existing .js-components will be overwritten when you upgrade. The red star will help you to see what you need to back up before upgrading.
- Default port is now 5555. With certain names used for the connections there was a conflict with a standard 'rule' of Norton Internet Security when port 9999 was used.
- The option to display graphs from the 'monitors/advisors... custom timeframe' interface was temporarily removed.

#### Fixed Issues:

- Fixed a crashing bug in mailing section if a .js-component was corrupted.
- Adding the option to send mail after registering a server required SQL DM for MySQL service to be restarted.

### 1.03 SQL DM for MySQL (August 2007)

#### New Features:

- A BELL icon displays in the 'Monitors/Advisors' page for alertable counters.
- Various small GUI improvements.
- Documentation updated with details about system Objects + various small corrections.

#### Fixed Issues:

- %age of queries doing full table scan metric was incorrect.
- With very small mail interval setting it could occur that selected servers became deselected.
- Fixed a bug in the calculation of full table scans.

### 1.02 SQL DM for MySQL (August 2007)

#### Fixed Issues:

- Fixes an issue in previous 1.x releases that may result in too early expiry of the TRIAL.

### 1.01 SQL DM for MySQL (August 2007)

#### Fixed Issues:

- Replication counters did not display in LINUX builds (both .rpm and .tar.gz).

Additional note on file storage positions and upgrading:

Version 1.0 RC changed the storage position for various files used by SQL DM for MySQL. This release is in this respect identical to 1.0 RC and 1.0.

By default the embedded database is now stored:

- Windows 2K/XP/2003: {System\_drive}:\Documents and Settings\All Users\ApplicationData\Webbyog\MONyog\Data
- Windows Vista:{System\_drive}:\ProgramData\Webbyog\MONyog\Data

... but user can specify another location if for instance she does not want to store on the system disk/partition at all.

Also the monyog.ini file and the log file is now no longer stored in 'program files' file tree (or whatever localized name it has). The storage position is:

- Windows 2K/XP/2003: {System\_drive}:\Documents and Settings\All Users\ApplicationData\Webbyog\MONyog
- Windows Vista:{System\_drive}:\ProgramData\Webbyog\MONyog

Users upgrading from 0.9 who want to use existing data must after installing this version:

1. Stop SQL DM for MySQL service.
2. Copy the folders containing databases named with a number like "0001" or "0002".
3. Start SQL DM for MySQL service.

No such intervention is required when upgrading from version 1.0 RC or 1.0 (unless storage position is changed again, of course!).

Upgrading from versions before 0.9 is not possible. These versions must be uninstalled and installation folder deleted or this version must be installed to another folder.

### 1.0 SQL DM for MySQL (August 2007)

#### New Features:

- Installs and runs on Windows 2000.
- Every counter is available in every timeframe.
- User can specify where the embedded database is stored.

#### Fixed Issues:

- Retrieval of memory information from Linux servers was broken in 1.0 RC.
- Windows version: Solved an issue with a dependency on a .dll file that was reported missing on some systems.

Additional note on file storage positions:

Version 1.0 RC changed the storage position for various files used by SQL DM for MySQL. This release is in this respect identical to 1.0 RC.

By default the embedded database is now stored:

- Windows 2K/XP/2003: {System\_drive}:\Documents and Settings\All Users\ApplicationData\Webuyog\MONyog\Data
- Windows Vista:{System\_drive}:\ProgramData\Webuyog\MONyog\Data

... but user can specify another location if for instance she does not want to store on the system disk/partition at all.

Also the monyog.ini file and the log file is now no longer stored in 'program files' file tree (or whatever localized name it has). The storage position is:

- Windows 2K/XP/2003: {System\_drive}:\Documents and Settings\All Users\ApplicationData\Webuyog\MONyog
- Windows Vista:{System\_drive}:\ProgramData\Webuyog\MONyog

Users upgrading from 0.9 who want to use existing data must after installing this version.

1. Stop SQL DM for MySQL service.
2. Copy the folders containing databases named with a number like "0001" or "0002".
3. Start SQL DM for MySQL service.

No such intervention is required when upgrading from version 1.0 RC (unless storage position is changed again, of course!).

Upgrading from versions before 0.9 is not possible. These versions must be uninstalled and installation folder deleted or this version must be installed to another folder.

## 0.9 SQL DM for MySQL Beta1 (July 2007)

Note that this release is a TRIAL build. It has the restrictions that,

1. Maximum 2 servers can be registered.
2. It will expire on August 15th 2007.

Before expiry of this beta we plan to release version 1.0 FINAL and publish purchasing and licensing terms.

Also notice that the schema of the embedded database has changed compared to previous versions. With this beta we will not provide a database upgrade script. If you have a previous version installed you must either,

- install to another folder.
- or uninstall the old version.

### New Features:

- Authentication is in place. SQL DM for MySQL pages can be watched from another machine where SQL DM for MySQL service is running. SQL DM for MySQL pages can be watched from another machine where SQL DM for MySQL service is running.
- Two-level alerts (WARNING/CRITICAL).
- Mail alerts.
- Various timeframes available for display of data in 'Monitors/Advisors'.
- Replication counters.
- Documentation (1st version) included.
- And lots of minor improvements.

Known issues:

- Installation on Windows 2000 is (still) not possible (due to a dependency in the SSH library that we use). We hope to fix this soon.
- We are aware of some (rare) problems that can occur on Windows Vista including:
  1. Graphs will not populate with old (stored) data.
  2. Pages will not update properly.

## 0.20 SQL DM for MySQL (May 2007)

### Fixed Issues:

- Fixed a crashing issue while installing the SQL DM for MySQL over existing SQL DM for MySQL installation.
- Introduced locks to make thread safe.
- Fixed a leak of GDI's (Graphics Device Interfaces). Number of open GDI's would increase and when SQL DM for MySQL was running for very long time, SQL DM for MySQL service could ultimately crash.
- Fixed few JavaScript issues.

## 0.16 SQL DM for MySQL (March 2007)

### Fixed Issues:

- AJAX is now fully implemented in the Monyog main screen.
- Improved advisors - in particular regarding the Query Cache.
- Fixed all reported (and some non-reported) GUI issues.
- Lots of code changes for better structure, performance and maintainability.

