MySQL Workbench Release Notes

Abstract

This document contains release notes for the changes in each release of MySQL Workbench.

For additional MySQL Workbench documentation, see MySQL Workbench.

MySQL Workbench platform support evolves over time. For the latest platform support information, see https://www.mysql.com/support/supportedplatforms/workbench.html.

Updates to these notes occur as new product features are added, so that everybody can follow the development process. If a recent version is listed here that you cannot find on the download page (https://dev.mysql.com/downloads/), the version has not yet been released.

The documentation included in source and binary distributions may not be fully up to date with respect to release note entries because integration of the documentation occurs at release build time. For the most up-to-date release notes, please refer to the online documentation instead.

For legal information, see the Legal Notices.

For help with using MySQL, please visit the MySQL Forums, where you can discuss your issues with other MySQL users.

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Table of Contents

Preface and Legal Notices

This document contains release notes for the changes in each release of MySQL Workbench.

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Changes in MySQL Workbench 8.0

Changes in MySQL Workbench 8.0.46 (2026-01-21, General Availability)

This release contains no functional changes.

Changes in MySQL Workbench 8.0.45 (2025-11-25, General Availability)

Functionality Added or Changed

- The MySQL HeatWave Migration Assistant allows you to migrate on-premises databases to MySQL HeatWave DB Systems in Oracle Cloud Infrastructure (OCI). Once you specify the configuration of the MySQL HeatWave DB System and your desired migration method, the assistant automatically migrates the data and provides progress updates for each stage of the migration. The automatic provisioning of MySQL HeatWave DB System components and inbound replication of data enables the switchover to be done quickly and with minimal downtime.

  For more information, see MySQL HeatWave Migration Assistant. (WL #17194)

Changes in MySQL Workbench 8.0.44 (2025-10-22, General Availability)

This release contains no functional changes.

Changes in MySQL Workbench 8.0.43 (2025-07-22, General Availability)

This release contains no functional changes.

Changes in MySQL Workbench 8.0.42 (2025-04-15, General Availability)

Bugs Fixed

- The bundled OpenSSL library has been updated to 3.0.16. (Bug #37618848)

- The bundled libxml2 library has been updated to 2.13.6. (Bug #37519075)

Changes in MySQL Workbench 8.0.41 (2025-01-21, General Availability)

Bugs Fixed

- The **Check for Updates** functionality (under the **Help** menu) failed to function, and instead emitted an error. (Bug #110786)

Changes in MySQL Workbench 8.0.40 (2024-10-15, General Availability)

MySQL Workbench 8.0.40 was originally released on October 15, 2024, without the mysql_native_password authentication plugin. The issue was addressed and Workbench 8.0.40 was re-released with the fix on October 31, 2024. If you installed the original release, then uninstall it before installing the newer version.

This release contains no functional changes.

Changes in MySQL Workbench 8.0.39 (Not released, General Availability)

There was no MySQL Workbench 8.0.39 release.

Changes in MySQL Workbench 8.0.38 (2024-07-01, General Availability)

This release contains no functional changes.

Changes in MySQL Workbench 8.0.37 (Not released, General Availability)

There was no MySQL Workbench 8.0.37 release.

Changes in MySQL Workbench 8.0.36 (2024-01-16, General Availability)

Bugs Fixed

- On macOS 14, MySQL Workbench would unexpectedly halt when attempting to open a model. (Bug #112440, Bug #36123536)

Changes in MySQL Workbench 8.0.35 (Not released, General Availability)

There was no MySQL Workbench 8.0.35 release.

Changes in MySQL Workbench 8.0.34 (2023-07-18, General Availability)

Bugs Fixed

- On Windows, attempting to create a new connection resulted in an exception. (Bug #33659344)

Changes in MySQL Workbench 8.0.33 (2023-04-18, General Availability)

- Packaging Notes

- Bugs Fixed

Packaging Notes

- **Incompatible Change:** An issue isolated within Python causes it to quit unexpectedly, and, in turn, generates errors each time an instance of MySQL Workbench closes. The affected platform is limited to 64-bit ARM CPUs running macOS (Ventura). For a more information about the issue, visit https:// github.com/python/cpython/issues/99663. (Bug #35256009)

- On Windows, the MySQL Workbench MSI file now omits the `.pyc` files previously installed under the `__pycache__` folder. (Bug #35149126)

Bugs Fixed

- When running on some architecture and macOS combinations, MySQL Workbench could exit unexpectedly while attempting to execute a `SELECT` or `SHOW TABLES` statement. (Bug #109671, Bug #35015018)

Changes in MySQL Workbench 8.0.32 (2023-01-17, General Availability)

Functionality Added or Changed

- The `Native Kerberos` connection method now includes the **Kerberos Mode** option that enables the selection between Kerberos authentication using the Windows SSPI Kerberos library or GSSAPI through the MIT Kerberos library on Windows. The mode's value defaults to GSSAPI (see Native Kerberos). (WL #15406)

Changes in MySQL Workbench 8.0.31 (2022-10-11, General Availability)

Functionality Added or Changed

- All editions of MySQL Workbench and the bundled libraries were updated to use SQLite 3.39.2. (Bug #34514470)

- Libxml2 was updated to version 2.10.0 with this release. (Bug #34461996)

- The linked OpenSSL library for MySQL Workbench has been updated to version 1.1.1q on the Windows and macOS platforms. The system-wide location is used on Linux platforms. Issues fixed in the new OpenSSL version are described at https://www.openssl.org/news/cl111.txt and https://www.openssl.org/news/vulnerabilities.html. (Bug #34414696)

Changes in MySQL Workbench 8.0.30 (2022-07-26, General Availability)

Functionality Added or Changed

- The linked OpenSSL library for MySQL Workbench has been updated to version 1.1.1o/3.0.3. Issues fixed in the new OpenSSL version are described at https://www.openssl.org/news/cl111.txt and https://www.openssl.org/news/vulnerabilities.html. (Bug #34330186)

- Libxml2 was updated to version 2.9.13 with this release. (Bug #34053743)

Changes in MySQL Workbench 8.0.29 (2022-04-26, General Availability)

Functionality Added or Changed

- The linked OpenSSL library for MySQL Workbench has been updated to version 1.1.1n. Issues fixed in the new OpenSSL version are described at https://www.openssl.org/news/cl111.txt and https://www.openssl.org/news/vulnerabilities.html. (Bug #33987621)

Changes in MySQL Workbench 8.0.28 (2022-01-18, General Availability)

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- All editions of MySQL Workbench and the bundled libraries were upgraded to use libssh 0.9.6. (Bug #33418517)

- MySQL Workbench now supports the following platform versions: macOS 12, Windows 11, and Windows Server 2022.

Bugs Fixed

- Before MySQL Workbench 8.0.27, a connection using SSL attempted to establish an encrypted connection by default if the server supported encrypted connections or to fall back to an unencrypted connection if an encrypted connection could not be established. The default behavior was changed in version 8.0.27 to always require SSL encryption, which could cause a connection test to fail if the server did not support encryption. In addition, the settable values for the **Use SSL** field no longer included `No` or `If available`.

  This fix restores the previous default behavior (`If available`) and also restores the full set of **Use SSL** values for establishing encrypted and unencrypted connections. (Bug #105327, Bug #33507869, Bug #105462, Bug #33541199)

Changes in MySQL Workbench 8.0.27 (2021-10-19, General Availability)

Functionality Added or Changed

- The linked OpenSSL library for MySQL Workbench has been updated to version 1.1.1l. Issues fixed in the new OpenSSL version are described at https://www.openssl.org/news/cl111.txt and https://www.openssl.org/news/vulnerabilities.html. (Bug #33309907)

- Libxml2 was updated to version 2.9.11 with this release. (Bug #32993810)

- All editions of MySQL Workbench and the bundled libraries were updated to use SQLite 3.36.0. (Bug #32765056)

- MySQL Workbench now supports the following new connection methods for use with LDAP pluggable authentication and Kerberos pluggable authentication:

  - The `LDAP User/Password` connection method for simple LDAP authorization on Linux and Windows hosts.

  - The `LDAP Sasl/Kerberos` connection method, which uses GSSAPI/Kerberos to authenticate users and passwords on Linux hosts.

  - The `Native Kerberos` connection method, using authentication tokens generated by the `kinit` command, on Linux and Windows hosts.

  The new authentication-based connection methods are not supported on macOS hosts. For requirement and setup information, see LDAP and Kerberos Connection Methods. (WL #13336)

Changes in MySQL Workbench 8.0.26 (2021-07-20, General Availability)

This release contains no functional changes, and is published to align its version number with that of the MySQL Server 8.0.26 release.

Changes in MySQL Workbench 8.0.25 (2021-05-11, General Availability)

This release contains no functional changes, and is published to align its version number with that of the MySQL Server 8.0.25 release.

Changes in MySQL Workbench 8.0.24 (2021-04-20, General Availability)

- Functionality Added or Changed

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Functionality Added or Changed

- The following third-party libraries were upgraded in this release:

  - AT-SPI

  - Cairo

  - FreeTDS

  - GDAL/OGR

  - HtmlRenderer (System.Drawing.Html)

  - iODBC

  - libgcrypt

  - Libintl

  - libgpg-error

  - Libpng

  - libssh v0.7.5-openssl1.1_patch

  - Libzip

  - PCRE (Perl Compatible Regular Expressions) Library

  - Pixman

  - PROJ.4

  - PyODBC

  - PySQLite (removed)

  - TreeViewAdv for .NET

  - VSQLite++

  (Bug #32317082)

- The linked OpenSSL library for MySQL Workbench has been updated to version 1.1.1K. Issues fixed in the new OpenSSL version are described at https://www.openssl.org/news/cl111.txt and https://www.openssl.org/news/vulnerabilities.html. (Bug #31957287, Bug #32260611)

Bugs Fixed

- MySQL Workbench 8.0.23 closed unexpectedly after starting on macOS systems. This fix adds the Python 3.7 framework as a prerequisite for the installation. (Bug #32395192, Bug #102286)

- Unexpected output was written to the console when MySQL Workbench was started from the command line on Linux. Adjusting the log level did not stop the output. This issue was unrelated to log suppression and was eliminated by resolving a different issue. (Bug #32106379)

Changes in MySQL Workbench 8.0.23 (2021-01-18, General Availability)

In the documentation for MySQL Workbench 8.0.23, we have started changing the term "master" to "source", the term "slave" to "replica", the term "whitelist" to "allowlist", and the term "blacklist" to "blocklist". There are currently no changes to the product's syntax, so these terms are still present in the documentation where the current code requires their use. See the blog post MySQL Terminology Updates for more information.

Known limitation with macOS and MySQL Workbench 8.0.23.   MySQL Workbench closes abruptly when started. To run MySQL Workbench 8.0.23 on macOS without this limitation, install Python 3.7 on your computer.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- MySQL Workbench now uses Python 3 for functionality such as migration, scripting shell, administrative tasks, and its SQL IDE. MySQL Workbench also ensures that installations on macOS (10.15 and later) have a valid version of Python available rather than relying on an operating system to provide the necessary scripting language. (WL #12709)

- MySQL Workbench supports macOS 11 with this release.

Bugs Fixed

- **Known issue:** A change in the `%cmake` macro caused an error to occur when MySQL Workbench was built from source code on Fedora 33 using the RPM package. Use the new `%cmake_build` macro to avoid the error. (Bug #32019872)

Changes in MySQL Workbench 8.0.22 (2020-10-19, General Availability)

Known limitation with Ubuntu 20.04: An error related to FreeTDS/iODBC in Ubuntu prevents the migration of Microsoft SQL Server databases to MySQL using the MySQL Workbench Migration Wizard.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- All editions of MySQL Workbench and the bundled libraries were upgraded to use libssh 0.8.9. (Bug #31358556)

- All editions of MySQL Workbench and the bundled libraries were upgraded to use OpenSSL 1.1.1g. (Bug #31296699)

- For clarity, visual explain diagrams now include the phrase `hash join` within the diamond symbol in place of `block nested loop` when the server version is 8.0.20 or higher. (Bug #30752203)

Bugs Fixed

- The uninstall operation within the `.msi` file returned an invalid error message indicating that a prerequisite, which was not identified as missing during the installation, was required before MySQL Workbench could be removed. (Bug #31533466)

Changes in MySQL Workbench 8.0.21 (2020-07-13, General Availability)

Known limitation with Ubuntu 20.04: An error related to FreeTDS/iODBC in Ubuntu prevents the migration of Microsoft SQL Server databases to MySQL using the MySQL Workbench Migration Wizard.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- A new check box was added to the dialog for resetting an expired password. When selected it indicates that the server version in use precedes MySQL 5.7. (Bug #30799058)

- MySQL Workbench now supports the following MySQL 8.0.19 and 8.0.20 server language features:

  - `DROP CHECK`, `ALTER CONSTRAINT`, and `DROP CONSTRAINT` in `ALTER TABLE` statements.

  - Locking clause for query expressions.

  - Table values constructor.

  - Short table select syntax.

  - New requirements for the `CHANGE MASTER` replication statement (row format, primary key check).

  - Failed login attempts and password lock time in `ALTER USER` statements.

  - Format support for `EXPLAIN ANALYZE` statements.

  - New and changed keywords:

    - `ARRAY`

    - `FAILED_LOGIN_ATTEMPTS`

    - `MASTER_COMPRESSION_ALGORITHM`

    - `MASTER_TLS_CIPHERSUITES`

    - `MASTER_ZSTD_COMPRESSION_LEVEL`

    - `MEMBER`

    - `OFF`

    - `PASSWORD_LOCK_TIME`

    - `PRIVILEGE_CHECKS_USER`

    - `RANDOM`

    - `REQUIRE_ROW_FORMAT`

    - `REQUIRE_TABLE_PRIMARY_KEY_CHECK`

    - `STREAM`

    - `TIMESTAMP`

- `TIME`

(WL #13836)

Bugs Fixed

- MySQL Workbench Migration Wizard encountered `type -154` (`SQL_SS_TIME2`) while copying Microsoft SQL Server tables, and it returned an error on the unhandled type. This fix adds the following new SQL data types to the wizard: `SQL_SS_TIME2` (supported by MySQL) and `SQL_SS_TIMESTAMPOFFSET` (not supported). (Bug #30884140)

- The `TableRead`, `TableInsert`, `TableUpdate`, and `TableDelete` events for each table touched by a query did not include complete information in the Audit Inspector. (Bug #30807539)

- Valid `TABLE` and `VALUES` statements were identified as having syntax errors in the SQL editor. (Bug #30775372, Bug #98266, Bug #30775008, Bug #98263)

- MySQL accounts created during the prerequisite setup using the **Create MEB Account** button were not granted sufficient privilege to schedule an online backup or to execute a full backup on Windows. (Bug #30774786)

- The Table Data Import Wizard returned an error when used to import a large JSON file, rather than loading the file. (Bug #30733445)

- Text selected in the SQL editor was blocked by the highlight color. (Bug #30369329, Bug #97070)

- A change made to the `CREATE` statement to rename an existing stored procedure did not revise the corresponding name in the generated `DROP PROCEDURE` statement when the change was applied using the editor. This fix modifies the generated statement to no longer drop the original stored procedure after it is renamed. (Bug #30103689, Bug #96289)

- On Windows, statements that do not generate a result set, such as `INSERT` or `UPDATE` statements, caused MySQL Workbench to close unexpectedly after the `EXPLAIN` operation was executed and then the **Result Grid** output type was selected. (Bug #27576669, Bug #89745)

- Although the installation and file path were valid, MySQL Workbench did not find the `ogr2ogr` and `ogrinfo` files when loading spatial data. (Bug #26447395, Bug #87074)

- A column created with `NULL ON UPDATE CURRENT_TIMESTAMP(6)` prevented the MySQL Table Editor from showing table information, such as indexes, views, foreign keys, and so on. (Bug #26388250, Bug #86906)

- Memory use on a Windows host was excessive when a large result set was exported to a file, causing MySQL Workbench to become unresponsive. (Bug #26139027, Bug #86430)

- Synchronizing a database that included a table with JSON fields to the data model produced new, separate tables for the JSON data, instead of updating the original table. In this instance, the target MySQL version set in the modeling preference, 5.6.30 by default, does not support the operation. This fix sets the default version to MySQL 8.0, but the value can be adjusted by selecting **Preferences**, **Modeling**, and then **MySQL** from the **Edit** menu. (Bug #25788105, Bug #85648)

- The zoom-out button did not alter the zoom level of spatial data when viewed from a Linux host, unless the zoom level was reset to the outermost level first. (Bug #25723313, Bug #85444)

- MySQL Workbench became unresponsive for several minutes after a server startup attempt was made on macOS hosts. (Bug #25077227, Bug #83769)

- No errors or warnings were reported when scheduling a backup with MySQL Enterprise Backup, although the backup did not execute as scheduled. (Bug #23562328, Bug #81788)

- A Sybase database migration with the ODBC (FreeTDS) connection method produced an exception when the connection was tested. (Bug #23345282, Bug #81546)

- MySQL Workbench server administration could not acquire management access to Oracle Solaris. For a list of supported platforms, visit https://www.mysql.com/support/supportedplatforms/workbench.html. (Bug #22453133, Bug #72204)

- On Linux, edits made to values in the result grid were lost when using the pointer device to move within the grid, rather than pressing the **Enter** or **Tab** key to change the focus. (Bug #20742151, Bug #76387)

- Forward engineering a valid MySQL Workbench model was unsuccessful when the operation was performed using a MySQL 5.5 server instance. (Bug #20637664)

- On macOS, a query containing `SELECT @@hostname` returned the column header, but the query did not show any visible output unless the first row below the column header was selected. (Bug #20540937)

- After reverting changes made to triggers in a schema that had been saved and synchronized, MySQL Workbench was not able to locate any differences when the reverted schema was re-synchronized with the model. (Bug #20222031)

- A connection saved with MySQL Workbench Migration Wizard was no longer visible in the wizard after MySQL Workbench was upgraded to a later version. An attempt to save the connection again, using the same name, returned an error indicating that the original connection was preserved. (Bug #18454574)

- No connection could be made to the PostgreSQL database system when it was selected as the source in MySQL Workbench Migration Wizard on macOS. (Bug #17299989)

Changes in MySQL Workbench 8.0.20 (2020-04-27, General Availability)

This release contains no functional changes, and is published to align its version number with that of the MySQL Server 8.0.20 release.

Changes in MySQL Workbench 8.0.19 (2020-01-13, General Availability)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- **Important Note:**

  MySQL Workbench 8.0.19 is unable to open a new connection to MySQL Server from the home screen if the server is not started and you cannot start a server by using the Workbench Administration feature. Administrative and SQL editing tasks require an online server for the duration of this issue. Feature tasks that you performed with an offline server in previous releases now return an error message indicating that the server is unreachable.

  This issue is limited to MySQL Workbench 8.0.19. Thank you for your patience.

  Workaround: Start MySQL Server independently before opening the Administration and SQL Query tabs in MySQL Workbench. On Linux, you can replace the MySQL Connector/C++ 8.0.19 library with the 8.0.18 library.

- A new context menu item now copies the headers and rows of queried data with tabs as separators, making it convenient to copy and paste query results into Excel. Thanks to Raj Rao for the patch. (Bug #30568824, Bug #97712)

- The following MySQL server language features are now supported: value references in `INSERT` statements, new options (TLS version, cipher suite, compression, and privilege check) in `CHANGE MASTER TO` replication statements, random passwords in `CREATE USER` and `ALTER USER` statements, `EXPLAIN ANALYZE`, and `binary` collation names. (WL #13491)

- Context help for the keywords and functions in SQL queries now includes updated syntax and usage information. (WL #13255)

- MySQL Workbench 8.0.19 requires Microsoft Visual C++ Redistributable for Visual Studio 2019 on Windows.

- MySQL Workbench now supports macOS 10.15 Catalina.

Bugs Fixed

- When attempting to export MySQL 5.7 data using MySQL Workbench 8.0, the server returned an error indicating that `INFORMATION_SCHEMA.COLUMN_STATISTICS` was an unknown table. Consistent parameter use with `mysqldump` now skips the table as expected. (Bug #30515899, Bug #97520)

- The SQL editor applied syntax-error highlighting to the `EXPLAIN` keyword in a valid statement prefixed with `EXPLAIN ANALYZE`, but the statement executed as expected. (Bug #30478023, Bug #97416)

- A syntax error was generated for valid `ANALYZE TABLE` statements with either the `UPDATE HISTOGRAM` or `DROP HISTOGRAM` clause. (Bug #30449796, Bug #97281)

- Storage engines not supported by MySQL were listed as possible engines that could be selected for tables. Unsupported storage engines now are removed from the suggestion list. (Bug #30338754, Bug #96968)

- An existing stored connection could not be replaced with a new connection having the same name when the attempt was made from the **Source Selection** step of the MySQL Workbench Migration Wizard. (Bug #30269513)

- Identical text and highlighting colors used in the panel showing the steps of MySQL Workbench Migration Wizard made the current step unreadable. (Bug #30269474)

- On macOS, the **Cancel** and **Export** buttons in the Export Recordset context window (for SQL `INSERT` statements) were mostly hidden. (Bug #30244028, Bug #96689)

- If the `ls` command produced an error message together with a list of files, no audit log for the error appeared in the Enterprise MySQL Audit Log Inspector. (Bug #30135391)

- An original SQL Server record (for example, 1020.6) was copied inaccurately to the corresponding MySQL column (1020.0) when migrated using the `DECIMAL` data type. Similarly, data migrated using the `NUMERIC` type generated a type-conversion error. Now, both decimal and numeric values are stored as `DECIMAL` types to fix the resolution of the decimal value or to fix the type conversion. (Bug #30062094, Bug #96230, Bug #30263415, Bug #96744)

- The `uniqueidentifier` data type in a SQL Server source table was interpreted during migration as type `VARCHAR(64) UNIQUE` in the MySQL target column, instead of a `VARCHAR` column to represent a GUID (UUID) that is not unique. (Bug #29355468, Bug #94066)

- The relationship arrows within an EER diagram were not visible when the Dark Mode theme was enabled on a macOS host and the diagram was exported as a single page PDF file. This fix disables the

theme in models to prevent conflicts with the colors assigned by the model editor. (Bug #29307893, Bug #94174)

- An empty file list was shown when the `audit_log_file` value was set to any location other than the MySQL server data directory. (Bug #22673089)

Changes in MySQL Workbench 8.0.18 (2019-10-14, General Availability)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- MySQL Workbench now uses C++17. (WL #12850)

- An upgrade of the Scintilla library to the latest version (4.x) resolves a number of display problems observed on macOS Mojave. (WL #12904)

- RapidJSON, which is the parser used by other MySQL products, now replaces the native JSON solution. (WL #13021)

- Casmine, a custom behavior-driven development framework for unit and integration testing of MySQL Workbench code, replaces the TUT unit-test framework. (WL #11572)

- Previously, MySQL Workbench required access to the EPEL repository on enterprise Linux systems, such as Oracle Linux and Red Hat. Access to EPEL is no longer needed by MySQL Workbench for general use, but the repository is still required to use the spatial-data features in MySQL Workbench. The repository can be installed manually, if needed (see Installing Oracle Enterprise Linux and Similar).

Bugs Fixed

- An inaccurate text message warned that tables, views, stored procedures, and functions could not be fetched when a MySQL account with limited administrative permissions on the server accessed a valid schema. (Bug #30105715, Bug #96357)

- The visual SQL editor reported a false error on the `RENAME COLUMN` clause of a valid statement. (Bug #29938388, Bug #95901)

- An error was generated when an attempt was made to add a new account or schema privileges after MySQL Enterprise Firewall was installed and enabled successfully. (Bug #29931969)

- MySQL Workbench exits unexpectedly during an editing session of trigger code if the focus was shifted away from the **Triggers** tab and the trigger code contained an error. (Bug #29898662, Bug #95742)

- The **Firewall Rules** tab was not shown as expected for any user account after the MySQL Enterprise Firewall plugin was installed and enabled successfully. Instead, MySQL Workbench had to be restarted to fully activate the feature when using either a local or remote-management connection. (Bug #29771365, Bug #29894485)

- Partition details were not visible within the **Partitions** tab of Table Inspector when MySQL Workbench (on Windows) was connected to a MySQL server instance running on Linux. (Bug #29746607)

- Underscore (_) characters in a schema name were converted to the equivalent wildcard characters when schema privileges were applied to a user account in MySQL Workbench. (Bug #29692955, Bug #95131)

- The Ubuntu 19.04 distribution did not include MySQL Workbench support as expected. (Bug #29690500, Bug #95118)

- The reset operation for MySQL Enterprise Firewall rules produced an exception, instead of resetting the rules. (Bug #29681550)

- The informational message shown when removing MySQL Enterprise Firewall was corrected. (Bug #29681305)

- A blank MySQL Enterprise Firewall rule could be submitted, which generated an exception. (Bug #29680813)

- MySQL Enterprise Firewall could not be enabled from MySQL Workbench after it was uninstalled and then reinstalled. (Bug #29547778)

- Error messages within the **Administration - Online Backup** tab used incorrect characters to represent versions of MySQL Server. (Bug #29455453)

- On computers running MacOS, the up and down arrow keys, at times, reversed direction or moved to the next (or previous) query, instead of to the next (or previous) line. (Bug #29394563, Bug #94430)

- Content within the input area of a **Query** tab did not scroll with the cursor when the cursor was moved beyond the current display range (up or down) using the keyboard on MacOS hosts. (Bug #29290375, Bug #94151)

- Unexpected cursor movement occurred within the query editor when using up and down arrow keys on computers running macOS 10.14 (Mojave). (Bug #29049404, Bug #93576)

- The model icons that represent relationship notations in an EER diagram, as well as the optional grid, were not visible in Dark Mode with macOS. (Bug #29049379, Bug #29049224)

- On macOS, the code normally shown with **View Source** was not visible when **Execution Plan** was selected from the Result Grid side menu and Dark Mode was set. Similarly, code in the Workbench Scripting Shell was not visible. (Bug #29024631, Bug #29127415)

- Connections made to 5.6 and 5.7 server instances used the `utf8` character set, instead of `utf8mb4.` (Bug #28912563, Bug #93136)

- The opening and closing brackets were missing from the Type column output within the **Administration - Server Logs** tab. (Bug #28686449)

- On computers running Windows, scrolling up and down with a pointer device was impaired. (Bug #28686322)

- **Test Connection** functionality remained enabled for stored connections after they were deleted. (Bug #28672121)

- On Windows, a query made on a table with exceptionally large column data, such as a `BLOB` column exceeding 5 MB, caused MySQL Workbench to stop working (client ran out of memory). On restart of the program, a locked file prevented additional queries until the computer was restarted. (Bug #27785104, Bug #89866)

- The `PYC` file associated with a plugin remained in the `modules` directory after the plugin was uninstalled. (Bug #24522488)

- The MySQL Enterprise Firewall plugin was not recognized by MySQL Workbench when MySQL was installed from source. (Bug #23617930)

Changes in MySQL Workbench 8.0.17 (2019-07-22, General Availability)

- Functionality Added or Changed

- [Bugs Fixed](#)

Functionality Added or Changed

- All editions of MySQL Workbench and the bundled libraries were upgraded to use OpenSSL 1.0.2r. (Bug #29489010)

- MySQL Workbench grammar updates now enable the language features of each supported MySQL server version from MySQL 5.6 to MySQL 8.0, including the new language features in MySQL Server 8.0.17 (see MySQL). (WL #13049)

- The implementation for SSH connections now uses libssh version 0.8.7, which replaces the previous version of libssh. (WL #13073)

Bugs Fixed

- An empty page was shown when **Show License Info** was selected from the **Help** menu. (Bug #29821258)

- Remote management did not work after the SSH port number on the destination computer was changed; instead, it continued to use the default port number. (Bug #29784254, Bug #95221)

- On Windows, an error at startup prevented the successful fetching of database objects for display in the **Schemas** tab. (Bug #29772769, Bug #95335)

- The informational dialog box did not open after **About Workbench** was selected from the **Help** menu on hosts running Ubuntu 18.04.2 LTS. (Bug #29754218)

- Database objects were not fetched as expected when any schema shown in the **Schemas** tab (located in the Navigator sidebar panel) for a valid connection was expanded. (Bug #29752794)

- The Reverse Engineering Database wizard stopped working during the final step and generated an error message on hosts running Fedora 29. Also, general editing activities were affected. (Bug #29598807, Bug #94894, Bug #29528028, Bug #94757)

- A syntax error in a view that was generated using the `view` tool within an EER model caused MySQL Workbench to stop working when the view was closed. (Bug #29558534)

- An attempt to create an EER model by reverse engineering a script and selecting a dump file generated errors instead of creating the model. (Bug #29535589)

- The `copy_migrated_tables.cmd` batch file, generated by the Migration Wizard, closed without performing the expected tasks after file was executed properly. (Bug #29516531)

- The online backup operation returned an error indicating insufficient privileges for an account with sufficient privileges. (Bug #29515528)

- An exception was raised when a new firewall rule was added without also selecting the option to indicate that the rule (or SQL statement) is a normalized rule. (Bug #29514458)

- An exception resulted when any variable category was right-clicked within the **Administration – Status and System Variables** tab. (Bug #29509495)

- An exception resulted when **Show Columns** was selected (right-clicked) to enable a column for any of the cache entries shown in the **Administration - Audit Inspector** tab. (Bug #29508773)

- Backup files (`.ibd`) generated with the compression option enabled were not compressed (`.ibz`) after the operation finished. (Bug #29253624)

- On Windows, SSH connections in combination with MySQL Enterprise Backup operations are available for use only when the server is local. (Bug #29215730)

- The text for advanced options (**Data Export** from the **Server** menu) was modified to remove errors. (Bug #29024143, Bug #93508)

- An incorrect password did not disable the **Next** button during the forward-engineering of a valid model, but then the next step generated an access-denied error while permitting the next action to continue after the error. Now, a valid password is required before the next step in the operation is available to select. (Bug #25951080, Bug #86064)

- Regardless of the source objects selected (and displayed) during the migration operation, all objects were migrated if the steps of the wizard were repeated with the **Next** and **Back** buttons. (Bug #25121122, Bug #83876)

Changes in MySQL Workbench 8.0.16 (2019-04-25, General Availability)

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- The script editor now highlights matching pairs of parentheses when one of the pair is selected. (Bug #27473434, Bug #73167)

- Microsoft Visual Studio support was upgraded from Visual Studio 15 to Visual Studio 17. (WL #12401)

- Previously, the output from running schema validation plugins on a MySQL model was distributed to different areas of MySQL Workbench, making portions of the information easy to miss. The same functionality now is shown in a single location and reorganized to provide informational, warning, and error messages by category. A new **Validate** tab also provides a simple way to reselect and rerun validation tests from the output area in the right side panel (see Schema Validation Plugins). (WL #12823)

Bugs Fixed

- MySQL Workbench stopped working when an existing table with an expression in a column of type `BINARY` was selected for editing. (Bug #29449200)

- MySQL Enterprise Firewall could not be installed from the Enterprise Edition of MySQL Workbench. (Bug #29359957, Bug #94335)

- An incorrect-integer-value error resulted when the Table Data Import Wizard attempted to import CSV data to a valid database table. (Bug #29348922)

- MySQL 5.7 tables exported to MySQL 8.0.14 or 8.0.15 produced the following error: Unknown table 'COLUMN_STATISTICS' in information_schema. (Bug #29344344, Bug #94294)

- A successful connection made with SSH tunneling from a Linux host produced an ongoing loop of errors if an attempt was made to close the connection. (Bug #29342871, Bug #94212)

- The `LATERAL` keyword now conforms with the SQL editor convention to highlight and indent the words considered keywords by MySQL. (Bug #29251184, Bug #94012)

- An exception was raised when a valid path to the MySQL Enterprise Backup 8.0.14 or 8.0.15 executable was provided in the prerequisite settings. To back up MySQL 8.0.14 or 8.0.15 data, upgrade to MySQL Workbench 8.0.16 or use MySQL Enterprise Backup 8.0.14 or 8.0.15 directly (see Introduction to MySQL Enterprise Backup). (Bug #29246551)

- An error in the generated `mysql_rdbms_info.xml` file caused MySQL Workbench to stop working. (Bug #29237703, Bug #93987)

- The size of the Table Data Import Wizard window changed unexpectedly between steps, causing the navigation buttons to vanish from visible range unless the window was expanded to include them. (Bug #29200662, Bug #93869)

- With the GNOME desktop theme set to Adwaita (*default*) or Adwaita-dark, text selected within the SQL editor was invisible. (Bug #29184506, Bug #93847)

- The **Command**-V keyboard shortcut on macOS returned an error indicating that a paste-row operation was attempted, rather than the single-value paste used to edit a field within the result grid following a successful query. (Bug #29137004, Bug #93710)

- Executing a function or stored procedure caused an unexpected program shutdown on Linux hosts. (Bug #29134435)

- The SQL beautifier feature produced no change when it was executed within the **Triggers** tab of the table editor. (Bug #29133592)

- The table inspector did not start properly and produced an error on macOS when it was selected from the context menu of a valid table within the **Schema** tab. (Bug #29128333)

- An exception was generated when the results of a query was toggled between visual explain and tubular explain formats within the **Execution Plan** tab. (Bug #29121364)

- A user account that was deleted properly from Users and Privileges remained visible until the **Administration** tab closed and reopened. (Bug #29061678)

- New tables added to the canvas of an EER diagram displayed the table name bar only, without columns, when the table tool (**Place a New Table**) from the vertical toolbar was used to add each table. (Bug #29056873)

- Records imported from an external file, such as a CSV file, generated an exception when the operation was attempted from a macOS host. (Bug #29048933)

- Each step shown in MySQL Workbench Migration Wizard was masked and unreadable while the individual operation executed. This fix modifies the contrast between the text of the current step and the box used to highlight it. (Bug #29048871)

- On Windows 10, the scroll wheel (or mouse wheel) did not respond when used to scroll in any on-screen area with a scroll bar. (Bug #29035906, Bug #93541)

- Some keyboard shortcuts, such as **Command**-C, did not work within the SQL and model editors on macOS 10.14 hosts. (Bug #29034285, Bug #93186)

- Rather than generating a warning or error when it detected an unknown SSH option in the `~/.ssh/config` file, MySQL Workbench became unresponsive. (Bug #29016708, Bug #92972)

- The **column-statistics** option (**Advanced Options**) was selected by default in the **Administration – Data Export** tab, which prevented the successful export of databases from the 5.6 and 5.7 servers. (Bug #28918423, Bug #92928)

- The SQL editor and the **Alter Table** operation both reported errors on indexes with valid functional key parts and on expressions that were used as default values. (Bug #28832740, Bug #92908, Bug #28831069, Bug #92900)

- The actions selected from the history-palette context menu did not produce any results. (Bug #28721233)

- The code auto-completion feature in the query editor did not provide the expected behavior. (Bug #28443700, Bug #91859)

- The **Close Other Tabs** action closed all tabs in the SQL editor when it was selected from the context menu of the **New table - table** tab. (Bug #28257404)

- MySQL Workbench stopped working on Linux hosts after a long period of use that included adding new tables to an existing model. (Bug #28257141)

- With a set of objects selected to import from the dump project folder, only the first object of the set was shown in the **Schema Objects** list, instead of all selected objects. In addition, the first object was repeated multiple times in the list. (Bug #28222744)

- MySQL Workbench was unable to start a session to the server on MacOS hosts until a successful login was performed at the command line first. (Bug #28165625)

- Some keyboard shortcuts were unsuccessful when used properly. (Bug #28108104, Bug #91090)

- A valid query using an appropriate server version for window functions displayed a syntax error at the opening parenthesis of the first `OVER` clause in the query editor. (Bug #27922827, Bug #90620)

- The template that was generated for a table of a model did not include type values within the `Datatype` column. (Bug #27025456)

- Items listed within the **Schemas** tab were not visible when selected on Linux. (Bug #26579157, Bug #87321)

- The test-connection action in older versions caused MySQL Workbench to stop working when it was used to test standard TCP/IP over SSH connections during the initial setup. (Bug #21144432)

- A warning was generated during attempts to migrate source tables from Microsoft SQL Server with a valid ODBC driver if a column name included unrecognized characters. The reverse engineering operation reported that an impacted table had no column attributes, and the migration stopped with errors later in the process. (Bug #18109616, Bug #71336)

- The operation to check for MySQL Workbench updates (from **Help**) returned an error when used behind a proxy server with authentication. (Bug #13864621, Bug #64308)

Changes in MySQL Workbench 8.0.15 (2019-02-01, General Availability)

This release contains no functional changes, and is published to align its version number with that of the MySQL Server 8.0.15 release.

Changes in MySQL Workbench 8.0.14 (2019-01-21, General Availability)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The following new functions were added to the Workbench GRT module:

  - `activateDiagram(<Diagram>)`

    Opens the selected EER diagram for use with the `exportPNG`, `exportSVG`, `exportPS`, and `exportPDF` functions.

  - `exportDiagramToPng(<Diagram>, <path>)`

Performs a PNG export of an EER diagram to the path provided without activating it.

(Bug #28853802, Bug #92985)

- MySQL Workbench now supports macOS 10.14 Mojave, including full compatibility with the Dark Mode color scheme. (Bug #28831956, Bug #92902, WL #12402)

- The **Adv. Find** tab operation that searched an open EER diagram by database objects only was removed. (Bug #28740047)

- All editions of MySQL Workbench and the bundled libraries were upgraded to use OpenSSL 1.0.2q. (Bug #28695759)

- Keyboard access was added to the home screen tab to enable navigation using the **Tab** and **Enter** keys. In addition, the screen view now scrolls to display a selected item if the item was off-screen when highlighted with the **Tab** key.

  On Windows and Linux hosts, the Application key and **Ctrl+F10** now open a menu of commands (context menu) related to the selection. (WL #12381)

- Two redundant features were removed from all platforms:

  - The connection information pop-up sheet on the home screen tab

    Instead, open **Manage Connections** from the **Database** menu (or **Edit Connection** from the context menu of each connection) to view connection details.

  - The merge icon (two arrows pointing at each other) located in the Navigation area of the side panel

    Content from the **Administration** and **Schemas** tabs were merged or split when this icon was toggled. Now, the administration section links and schema tree appear in separate tabs only.

  (WL #12402)

Bugs Fixed

- Valid decimal data within a Microsoft SQL Server table generated an error when used with MySQL Workbench Migration Wizard. (Bug #28962023, Bug #93293)

- The InnoDB status shown within the **Administration – Dashboard** tab displayed the wrong usage percent. (Bug #28919419)

- A conflicting dependency was removed that prevented the `mysql-connector-c++-devel` package installation when MySQL Workbench was installed first. (Bug #28915929, Bug #93172)

- The on-screen process of editing a stored procedure did not prompt to save the changes. (Bug #28880743, Bug #93068)

- A new table added to an existing model caused MySQL Workbench to stop working. (Bug #28879925, Bug #93067)

- The alter-table operation when applied to partitioned tables on Windows caused MySQL Workbench to stop working. (Bug #28856542, Bug #92990)

- Characters from Cyrillic character sets when included in the path to SSH key files caused valid connection attempts to fail without producing a clear error message. These characters now are permitted within the path. (Bug #28814329, Bug #92847)

- Connections made to a remote MySQL server over SSH did not recover properly after the network was interrupted temporarily. (Bug #28806660, Bug #90884)

- New accounts created to use standard authentication were instead created to require strong password encryption when the `default_authentication_plugin` server system variable was configured with the `caching_sha2_password` value. (Bug #28777856, Bug #92740)

- The default user name, `newuser`, was not accepted when it was used to create a new account. (Bug #28776902, Bug #92738)

- The operation to migrate a Microsoft SQL Server schema produced an error when it encountered problematic tables during the reverse-engineering step. (Bug #28747888, Bug #92659)

- A table editor tab that was opened by clicking the table icon from within the sidebar (**Schemas** tab) displayed the correct `SELECT * FROM` query and results, but the query text did not line up along the left margin as expected. (Bug #28730407)

- Context-menu actions (**New Tab**, **Save Tab**, or **Copy Path to Clipboard**) when applied to an open SQL editor tab caused the tab to close unexpectedly on Linux. (Bug #28721377)

- The color used to highlight a query in the SQL editor was the same color used for the text, which made the selected query appear to be missing when it was highlighted. (Bug #28691256, Bug #92535, Bug #28715080)

- The **Report a Bug** action from the **Help** menu returned an error instead of opening the MySQL bug database on macOS systems. (Bug #28612380, Bug #92327)

- The last file selected from a previous directory during any browse operation was carried over after navigating to a new directory and without selecting a new file from the directory. Files now must be selected explicitly within the browse dialog box. (Bug #28608962, Bug #92104)

- Some columns within a Microsoft SQL Server database table were not migrated as expected. The operation returned an error when copying mixed data types. (Bug #27838190, Bug #84777)

- Multiple SQL queries executed sequentially in separate tabs did not resolve as expected on Windows. The first query ran to completion, but the tab would not close. The second query never finished. Thereafter, no additional queries could run and the program would not exit. (Bug #25965655, Bug #86090)

- The Migration Wizard was unable to retrieve a schema list from source when the source RDBMS was Microsoft SQL Server and a valid FreeTDS driver (required by Linux) was provided. (Bug #25457611)

- No context help was displayed with a view or stored procedure in the SQL editor. (Bug #24697574)

Changes in MySQL Workbench 8.0.13 (2018-10-22, General Availability)

- Server Support

- Functionality Added or Changed

- Bugs Fixed

Server Support

- Support for MySQL 5.5 by MySQL Workbench 8.0 was removed. If you still need to use MySQL Workbench on a MySQL 5.5 server, you can use MySQL Workbench 6.3, which is available from MySQL Product Archives (see https://downloads.mysql.com/archives/workbench/).

Functionality Added or Changed

- MySQL Workbench on macOS 10.14 Mojave was tested with positive results. The new Dark Mode feature is not yet compatible with all screens and should not be enabled for this release.

Bugs Fixed

- With valid geometry points inserted, the option to open the points in a browser failed on macOS hosts because the URL was improperly formed. (Bug #28587193, Bug #92266)

- An apostrophe character (`'`) within a table comment generated a parsing error when an attempt was made to alter the table. (Bug #28552873, Bug #92191)

- Insufficient privilege was granted during the attempt to create a new MySQL Enterprise Backup user account. Although valid prerequisite backup information was provided, the validation script returned the following error message: `Access denied for backup account`. (Bug #28536272, Bug #92115)

- When remote management with SSH was enabled, attempting to insert the required passwords in the `Options` file produced an error message. After the error was closed, the **Administration** tab became unresponsive and MySQL Workbench did not shut down properly. (Bug #28519087, Bug #92061)

- An error with the following message was generated when the export operation was executed on tables from an earlier server version: `Unknown table 'COLUMN_STATISTICS' in information_schema (1109)`.

  Because the version of `mysqldump` used with the operation can differ from that of the target server, some features may not be exported as expected when the versions are mismatched. A warning message now provides a description of the condition, along with instructions to resolve the version mismatch, or the option to continue anyway. (Bug #28471433, Bug #91640)

- On Windows hosts, the history of scheduled MySQL Enterprise Backup jobs was not persisted in the dashboard between MySQL Workbench sessions. This fix eliminates the issue; however, the existing `mysqlwbmeb.vbs` file must be removed before scheduling new backup jobs. (Bug #28430457)

- The default target version of MySQL to use with MySQL Workbench models was set to MySQL 5.6.30 and did not increment automatically. With this fix, the value now defaults to the latest version. The default target version can also be set manually (see Preferences: Modeling: MySQL). (Bug #28397515, Bug #91782)

- Executing queries over an period of time caused the existing result grid in each query tab to be hidden when the grid was previously visible and prevented the results grid in new tabs from showing. (Bug #28361489, Bug #91265)

- After copying a query into a second query editor, auto-completion did not display the related column names. Instead, when auto-completion was engaged, MySQL Workbench stopped working. (Bug #28312867, Bug #91559)

- The operation to compare schemas did not appear in the menu after a valid model was opened on Linux hosts. (Bug #28249454)

- The filter arrows that select objects for forward or reverse engineering within wizards generated an error instead of moving the objects as expected. (Bug #26435349, Bug #26922638, Bug #87980, Bug #25921645, Bug #86013, Bug #25852505, Bug #85837, Bug #25741519, Bug #85522)

- Schema privileges in the **Administration – Users and Privileges** tab (Object Rights, DDL Rights, and Other Rights) were not visible with all screen resolutions. (Bug #25584920, Bug #85079)

- The color used to highlight a selected item in the schema tree view did not provide enough contrast from the background color to distinguish it from the other items easily. The new highlight color makes it easy to see which item is selected. (Bug #25456216)

Changes in MySQL Workbench 8.0.12 (2018-07-27, General Availability)

Known limitation of this release: Importing spatial data into a MySQL 8.0 server does not work currently, due to an outstanding library update. Older versions of the server are not affected.

- Deprecation and Removal Notes

- Installation Notes

- Functionality Added or Changed

- Bugs Fixed

Deprecation and Removal Notes

- `OGRFree()` was deprecated and replaced with `CPLFree()`. Thanks to Christian Hesse for the patch. (Bug #26086599, Bug #86339)

Installation Notes

- Because the Microsoft Visual C++ 2017 Redistributable installer deletes the Microsoft Visual C++ 2015 Redistributable registry keys that identify its installation, standalone MySQL MSIs may fail to detect the Microsoft Visual C++ 2015 Redistributable if both it and the Microsoft Visual C++ 2017 Redistributable are installed. The solution is to repair the Microsoft Visual C++ 2017 Redistributable via the Windows Control Panel to recreate the registry keys needed for the runtime detection. Unlike the standalone MSIs, MySQL Installer for Windows contains a workaround for the detection problem. (Bug #28345281, Bug #91542)

Functionality Added or Changed

- **Important Change:** MySQL model files last saved before MySQL Workbench 6.3 are no longer supported unless the models can be upgraded for use with the 6.3 release series.

- All editions of MySQL Workbench and the bundled libraries were upgraded to use OpenSSL 1.0.2o. (Bug #27829782, Bug #28326884)

- `libgnome-keyring` was depreciated and replaced with `libsecret` in this release on Linux platforms. Some users with existing stored passwords will be prompted to enter a password after upgrading. (Bug #27635281, Bug #89898, Bug #20291538, Bug #75345, WL #11747)

- SSH tunneling support was added to MySQL Workbench Migration Wizard and also to the `wbcopytables` command-line utility for copying data. (Bug #27556268, Bug #89671, WL #11507)

- The Commercial releases of MySQL Workbench were upgraded to uses OpenSSL 1.0.2n (see https:// www.openssl.org/news/openssl-1.0.2-notes.html). (Bug #27272707, Bug #88938)

- Performing multiple data export operations while the **Administration - Data Export** tab stays open now preserves custom file paths, rather than switching to the default paths for re-export operations. Exported files are automatically renamed with an incremental numeric suffix to enable repeated export.

  In addition, a new dialog box prompts for confirmation before overwriting an existing exported file when the same path and file names are reused. (Bug #27029840)

- The SWIG prerequisite listed in the INSTALL document provided with source distributions was updated to the latest version. (Bug #25811732, Bug #85717)

- Support for the `--incremental-with-redo-log-only` option was added to create backups directly from the redo log. (Bug #24960233)

- The option to skip secure authorization is no longer available in the advanced options that apply to data import and export operations. The `--skip-secure-auth` option was removed in the MySQL 5.7 release. (Bug #21697062, Bug #78060)

- The character set and collation pairings available after selecting **Create a new schema in the connected server** (from the main toolbar) now are sorted alphabetically in lists. (Bug #21681041, Bug #78079)

- A new SQL export option in the Forward Engineering SQL Script wizard sorts tables alphabetically in the generated script, rather than sorting tables according to foreign-key references by default. (Bug #18551598, Bug #72289)

- MySQL Workbench now supports the Chinese character set `gb18030`. (Bug #18547307)

- The SQL editor supports online renaming of indexes with the `ALTER TABLE` statement. For example:

```
ALTER TABLE `sakila`.`actor` RENAME INDEX `idx_actor_last_name` TO `idx_actor_last_xxxx`;
```

  (Bug #18547288)

- MySQL Workbench now uses `utf8mb4` as the connection and client character set, replacing `utf8mb3`.

Bugs Fixed

- Some of the controls and data were not shown within the **Administration-Users and Privileges** tab. (Bug #28246905, Bug #91414)

- An attempt to add a column to an existing multicolumn index (primary key) of a table caused MySQL Workbench to stop working. (Bug #28244024, Bug #91371)

- On Windows platforms, pasting valid content into the SQL editor was followed by the operating system becoming unresponsive. (Bug #28184916, Bug #91249)

- A query containing `SELECT COUNT(*) FROM DUAL`, when saved to a script file and then opened, caused MySQL Workbench to exit. (Bug #28101684, Bug #91070)

- With auto-completion enabled, defining a custom variable within a subquery caused an unexpected exit. (Bug #28040983, Bug #90915)

- With an active MySQL 8.0.11 server connection, MySQL Workbench displayed an error message when a valid attempt was made to open **Performance Reports** or **Performance Schema Setup**. (Bug #28034685, Bug #90889)

- Attempting to open a new query tab from the home screen (**File**, **New Query Tab** from the menu) returned an error message and closed MySQL Workbench. (Bug #28032431, Bug #90885, Bug #27781092)

- The `binlog-format` option was not listed as expected within the **Administration – Options File** tab. (Bug #28008041)

- When **Alter Stored Procedure** was selected from the context menu, MySQL Workbench stopped working. (Bug #28006985, Bug #90830, Bug #23259608, Bug #81334)

- The advanced option, **$internal$show-internal-schemas**, within the **Administration – Data Export** tab did not expose internal schemas as expected. (Bug #27938719, Bug #90665)

- MySQL Workbench stopped working when the `CHANGE MASTER TO` statement was typed directly into the SQL editor, followed by options. (Bug #27910024, Bug #90568)

- A stored procedure without a parameter direction (`IN` or `OUT`) caused MySQL Workbench to exit when it attempted to create or alter the procedure. (Bug #27908753, Bug #90555)

- The source-database connection password used to reverse-engineer a database was not requested and the connection failed if the password was not stored in the vault. (Bug #27882813)

- With SSH enabled, all new connections were made to the same MySQL server instance, regardless of the port number specified. (Bug #27882278)

- The operation that synchronizes tables with the MySQL database produced an error message when an existing column was moved to a position after a newly added column. This fix ensures that `ADD COLUMN` always precedes `CHANGE COLUMN` within the script when both are used together. (Bug #27871632, Bug #90459)

- The table editor did not apply any changes made in the order of an index to the generated `ALTER TABLE` statement. (Bug #27868813)

- Snippet execution finished with an error when the scripting shell was used. (Bug #27746883)

- An unclear error message was displayed during the table-export operation when the file path was invalid or left empty. (Bug #27746585)

- The shell script for copying bulk data was not generated as expected. Instead, an error message was displayed. (Bug #27745372)

- Setting a valid command-line path for remote-server access using SSH tunneling in MySQL Enterprise Backup (on Linux) caused the validation step to fail when both the SSH and `sudo` users were the same. (Bug #27745200)

- MySQL Workbench model files (`.mwb`) did not open as expected when double-clicked from File Explorer on Windows platforms. (Bug #27739848)

- MySQL Workbench editors displayed text from the standard exception in the action output, rather than using an error message when SQL syntax errors were discovered. (Bug #27730102)

- Two terminals opened when **Start Command Line Client** was selected from the context menu on the home screen (right-click an existing MySQL connection). (Bug #27721918)

- Text objects when double-clicked within an EER diagram caused MySQL Workbench to stop working. (Bug #27711642, Bug #90119)

- The shell script created during the **Data Transfer Setup** step of the migration process from a MySQL local connection to a MySQL SSH connection produced errors that prevented the copying of data from outside MySQL Workbench. (Bug #27670242)

- Modifying the column order within an existing index on a table caused MySQL Workbench to exit unexpectedly. (Bug #27627986, Bug #89886)

- The Audit Inspector cache process failed when the connection was within a group. (Bug #27567546)

- When using the `'OmitSchemata':1` parameter in a Python script to generate a schema from an `.mwb` file automatically, the resulting SQL script still included the schema in each table name. This fix introduces the `OmitSchemas` option, which replaces both the `UseShortNames` and `OmitSchemata` options, to eliminate the schema name as expected. (Bug #27557537, Bug #84390)

- The work area within an EER diagram was hidden after double-clicking one of the table objects to open the table editor. (Bug #27436624)

- When two schemas were compared with **Synchronize Models** (from the **Database** menu), differences were reported consistently for stored procedures and functions even though the compared items were identical. (Bug #27436115, Bug #82151)

- An existing MySQL model file, when selected from the home screen, generated an error (Error unserializing GRT data string too long) and did not open. (Bug #27420297, Bug #89257)

- The sidebar panel of the EER diagram editor was cut off, making the leftmost subtabs inaccessible and forcing the diagram-zoom area to shift to the right. (Bug #27330971, Bug #89072)

- An incorrect `INSERT` statement was generated when a value was inserted into a `BIT` column. This fix now prefixes all `BIT` data-type values with the character `b` (for example: `b'0'`). (Bug #27320396, Bug #89068)

- When using the Reverse Engineer Database wizard, the objects selected during the **Select Objects** step could not then be deselected. (Bug #27319905, Bug #89064)

- Column-collation changes, when made using the table editor, could not be applied. Instead, a message indicating that no changes were detected was displayed. (Bug #27297634, Bug #88985)

- The `tls_version` option was not listed as expected within the **Administration – Options File** tab. (Bug #27272808, Bug #87964)

- Syntax errors typed into the SQL editor are highlighted and each one can provide usage information within a tooltip while the pointer device hovers over the error. On hosts running macOS, the tooltip remained visible when the pointer device was moved off the highlighted error. (Bug #27255488)

- When only one role in a model was assigned to a user account, the role could not be removed. (Bug #27054771)

- Right-clicking within a new or existing script file that was opened with the Workbench Scripting Shell did not display the context menu as expected. (Bug #27037750)

- The edit dialog box did not open when an existing snippet from **SQL Additions** was double-clicked. (Bug #27036975)

- The on-screen progress of a full backup operation never changed from *Starting*. The correct progress was indicated in the log. (Bug #27011013)

- Creating an MySQL model from a script, with the imported objects added to a diagram, caused MySQL Workbench to exit. (Bug #27010684)

- The version of `gtkmm30` that shipped with Red Hat Enterprise Linux 7.4 was incompatible with the version that MySQL Workbench compiled against. The version mismatch caused MySQL Workbench to close unexpectedly. (Bug #26797891, Bug #26705113, Bug #87380)

- Catalog objects for an EER diagram were not listed, although the tables were visible in the diagram. (Bug #26747931, Bug #87662)

- The **JSON** tab of the Edit Data for Value dialog box displayed large column values as negative numbers when the numbers were positive. (Bug #26741970, Bug #87646)

- Some on-screen text within Workbench Preferences (**Fonts & Colors**) wrapped around to new lines rather than filling the open space on the same line. (Bug #26448300, Bug #85961)

- The filter arrows that select objects for forward or reverse engineering within wizards generated an error instead of moving the objects as expected. (Bug #26435349, Bug #26922638, Bug #87980, Bug #25921645, Bug #86013, Bug #25852505, Bug #85837, Bug #25741519, Bug #85522)

- The SQL editor returned an error when valid characters were used with the `utf8mb4` character set. (Bug #26142347, Bug #86454)

- An error was reported during an attempt to back up encrypted tables using MySQL Enterprise Backup. This fix introduces the **Encrypt Password** option in the **Options** subtab for a new job within the **Administration – Online Backup** tab. Setting an encryption password is required to perform backup and restore operations on encrypted tables. (Bug #26135245)

- With multiple connection tabs opened, selecting **Close All But This** from the context menu (right-click a connection tab) closed tabs at random. (Bug #25983146, Bug #86144)

- Attempting to alter a table in MySQL Workbench produced an error message when the table was previously altered using a command-line client with the `ENCRYPTION` option set to `Y` or `N`. (Bug #25929075, Bug #86021)

- When synchronizing a model with a database, none of the buttons for the **Select Changes to Apply** step were visible. In addition, some frames and options were hidden. (Bug #25906359, Bug #85963, Bug #25527078, Bug #84924, Bug #25747524, Bug #85500, Bug #26128307, Bug #86426)

- Time stamps representing the elapsed time of backup operations were miscalculated. (Bug #25820146, Bug #85764)

- Long comments in tables were truncated with too few characters when pasted into the SQL editor after using **Copy SQL to Clipboard** from the context menu within an EER diagram or the MySQL Model tab. This fix extends the threshold. (Bug #25760721, Bug #85568)

- The attribute in source code that set the program name (`'MySQLWorkbench'`) was omitted from Unix and Linux distributions. Thanks to Daniël van Eeden for contributing to the fix. (Bug #25725077, Bug #85460)

- Double-clicking areas within the spatial view caused MySQL Workbench to become unresponsive. (Bug #25723306, Bug #85443)

- The height and width of object-selection lists within the **Administration - Data Export** tab were improperly proportioned for the content of the lists and could not be resized. A scroll bar now enables access to all listed objects. (Bug #25716077, Bug #85308)

- A message displayed during the startup sequence indicated that some valid operating systems were unsupported. For current platform information, see https://www.mysql.com/support/supportedplatforms/workbench.html. (Bug #25602334, Bug #85087)

- A model exported as an SQL script could not be saved to disk when using either the Forward Engineer to Database or the Synchronize With Any Source wizard. (Bug #25569529, Bug #85030)

- The buttons associated with renaming a diagram (**OK** and **Cancel**) were partially concealed. (Bug #25557678, Bug #85011)

- The progress bar and Abort button were partially concealed on the screen when changes were being applied to stored procedures. (Bug #25532963, Bug #84927)

- Each connection to an incompatible or nonstandard server opened a dialog box with a valid warning, but without an option to suppress the warning for subsequent connections. Thanks to Christian Hesse for the patch. (Bug #25519446, Bug #84885)

- A connection made with an improper file did not return an SSL error as expected when the connection was tested. (Bug #25517237)

- An explicit collation set on a column was reverted to the default collation each time the column specification was modified with the table editor. (Bug #25504264, Bug #84815)

- The process running MySQL Workbench did not end on exit. (Bug #25496663)

- MySQL Workbench Migration Wizard returned an error message after failing to get a row count from source tables, which caused the `wbcopytables` utility to exit. (Bug #25496622)

- Starting MySQL Workbench from the command line was unsuccessful on hosts running the Fedora 25 operating system. (Bug #25495120)

- Custom settings made before executing the data export operation were not persisted if the operation was executed again (by clicking **Start Export** a second time). Instead, the custom settings were discarded and replaced by the default settings. (Bug #25488234)

- Overlapping text boxes covered the full name entered for the **Create a New Table** option within the Select Destination step of the Table Data Import Wizard. (Bug #25476103)

- The **Copy** and **Copy Details** operations from the Server Logs context menu (right-click a row in the log) were swapped. The **Copy** operation copied the details and the **Copy Details** operation performed a simple copy. (Bug #25469694)

- The **Copy as PHP Code (Iterate SELECT Results)** command (select **Tools** and then **Utilities** from the menu) was unexpectedly disabled for valid query results. (Bug #25466399)

- On Linux platforms, right-clicking **Tables** within the Catalog Tree for a valid EER diagram displayed an empty context menu. This fix minimizes the size of the empty menu. (Bug #25463963)

- Exporting a schema from the **Administration – Data Export** tab returned an error when the server was configured for use within an InnoDB Cluster. (Bug #25444837)

- After maximizing and then reducing MySQL Workbench, some screen options were improperly sized or no longer visible on Linux platforms. (Bug #25415064)

- The set of default target schemas available to choose from within the **Administration – Data Import/ Restore** tab showed each schema listed twice on Windows platforms. (Bug #25239261, Bug #84161)

- The table editor did not display generated columns within a user-defined table and the **Alter Table** operation returned an error message when an attempt was made to modify any of the nonvisible columns. (Bug #25209591, Bug #84078)

- An error message was returned when an attempt was made to inspect a partitioned table using either the information icon or the context menu. (Bug #24973171, Bug #83605)

- A single MySQL connection tab could not be closed unless a second connection tab was opened first. (Bug #24751859, Bug #83194)

- With a connection made to a remote MySQL server, some context-menu functionality stopped working. For example, right-clicking a valid stored procedure from the Schemas list and selecting **Alter Stored Procedure** or **Create Stored Procedure** did not open a tab in the editor as expected. (Bug #24506578, Bug #82659)

- On occasion, using `sudo` with a valid password to open a log file produced an exception. (Bug #24297921)

- A variety of error messages were returned when attempts were made to open the Output panel (or when using **Help**, **System Info** from the menu) with older versions of MySQL Workbench. **System Info** was removed from the menu. (Bug #23584746)

- The print-preview operation (**File**, **Print Preview** from the menu) did not work, or return an error message, on some Linux platforms. (Bug #23467065)

- Executing separate queries (each in its own connection tab) caused MySQL Workbench to exit. (Bug #23305283, Bug #81480)

- The PROJ.4 library (`libproj`) was not found, which prevented the initialization of Spatial Viewer. (Bug #22931452, Bug #80710)

- A model diagram could not be reduced in size by clicking to the grid or by adjusting its value with the input controls. Attempts to reduce the size made the diagram larger. (Bug #22929861, Bug #80730)

- Read-only tables, such as those having an index but no primary key, could be selected for update. However, the invalid update operation caused MySQL Workbench to become unresponsive before the operation finished. (Bug #22735577, Bug #80378)

- An active connection to MySQL server was closed unexpectedly with the **DBMS connection read time out (in seconds)** preference option set to zero, which should keep the connection open. (Bug #22618750, Bug #80188)

- Performance Schema instrumentation was not reset from the dashboard on Windows, even though confirmation of the change was provided. (Bug #22557320, Bug #80021)

- When using the keyboard shortcut to comment selected lines within the SQL editor and with the cursor wrapped around to the beginning of the next line, the entire unselected next line was also commented. (Bug #22282406, Bug #77143)

- A second view was created unexpectedly when an existing view was renamed using `ALTER VIEW` syntax. (Bug #22170451, Bug #79176)

- An error message (`Operation failed with exitcode 7`) was generated during the dump operation when an attempt was made to export data running on a remote server. (Bug #22093554, Bug #78937)

- The MySQL Server start and stop management operations generated unhandled exceptions. (Bug #21861171)

- Stored procedures, when added to a model and synchronized with a database, were not listed in the Navigator area of the sidebar panel. New functions were not represented in the Catalog Tree after synchronization, although each function did appear in the Navigator area and in source. (Bug #21443566, Bug #76368)

- Tabs separating multiple schemas within the **Physical Schemas** area of the **MySQL Model** tab were not visible. (Bug #21356922, Bug #77451)

- The on-screen description of the `myisam-repair-threads` system variable was incomplete. It now indicates that the (default) value of `1` disables parallel repair (see the **MyISAM** tab in **Administration - Option File**). (Bug #20667496, Bug #76200)

- Unexpected differences were displayed after using the Forward Engineer to Database wizard and then synchronizing the model and database. (Bug #20631631)

- The keyboard shortcut to open the Find and Replace dialog box (or **Edit**, **Replace** from the menu) did not work from within the Workbench Scripting Shell. (Bug #20630325)

- When importing data from a CSV file, some rows of data were not shown until **Apply** was clicked. This fix replaces the import functionality with a wizard. All rows now display correctly in the **Configure Import Settings** step of the Table Data Import wizard. Note that when no column header is provided, the first row of data is used as the header. (Bug #20630193)

- The template supplied for the **Create a Table Like** operation (right-click **Tables** within the schema tree) was not complete enough to use without custom modifications. (Bug #20578595)

- The `wb.log` file did not rotate to a new file (for example, `wb.log` to `wb.1.log`) as expected on startup. In addition, all queries were written to the `sql_actions_unconnected.log` file, instead of to an individual log file for each connection. (Bug #20356293, Bug #75496)

- The **Zoom +** icon in the spatial view toolbar produced deteriorating resolution as an image was enlarged. For better results, use the **Zoom to area** icon to recompute a portion of the whole shape, instead of simply magnifying the visible area with the **Zoom +** tool. (Bug #20279644, Bug #75318)

- A newly created SSH connection could not be used to synchronize a model with a MySQL database. (Bug #20144296, Bug #75102)

- Expired `root` passwords were not supported by MySQL Workbench and could not be changed during the first attempt to make a connection to the server where the password was expired. (Bug #19654005)

- Keywords in stored procedures and triggers were not highlighted consistently within the SQL editor and code blocks with keywords did not expand or collapse as expected. (Bug #19000092, Bug #72677)

- Selecting **Server** and then **Backup Recovery** from the menu generated an unhandled exception when the server was stopped. (Bug #18492268)

- Returned rows of a column in the result grid did not reliably sort by ascending and descending order when the column label was clicked. (Bug #18454325)

- The **Delete** key did not function within EER diagrams. (Bug #18445600)

- With both a MySQL model and EER diagram open, pressing the **Ctrl+W** keyboard shortcut twice closed the diagram, but not the model file. (Bug #18445598)

- On Linux platforms before the home screen was redesigned, attempting to drag and drop a connection from within a group caused the group to move instead of the connection. (Bug #18445563)

- When editing an EER diagram, the icons within the editor overlapped on Linux platforms. (Bug #18426867)

- Schema transfer and migration operations did not support SSH connections and produced error messages when the operations were attempted. (Bug #18138798, Bug #71295)

- The **Use defaults from global settings** model option (**Model**, **Model Options** from the menu in the **MySQL Model** tab) when selected did not override the target MySQL version (set in **Model Options**) with the default target version (set in **Workbench Preferences**). (Bug #18130160, Bug #71429)

- Attempting to edit a corrupted MySQL model (`.mwb`) file resulted in an unpredicted shutdown. (Bug #17456147, Bug #70334)

- The Save and Save As dialog boxes did not show the file type of a model or SQL script. (Bug #17300401)

- On macOS platforms, the database-migration operation returned various error messages when an attempt was made to migrate valid data into MySQL. (Bug #17299915, Bug #17299925, Bug #17408230)

- Selecting multiple objects (tables, views, and so on) in a model, and then deleting all of them at once, removed only the first object from the model. (Bug #14821928, Bug #67214)

- When an output message in the Action Area panel consisted of multiple lines, only the first line was visible. This fix provides an information box that appears briefly when a pointer device hovers over the truncated message. (Bug #14802567, Bug #66988)

- The Workbench Scripting Shell window on hosts running the GNOME Shell lacked the controls to resize or close the window. (Bug #14768677, Bug #66810)

- The context menus associated with tables in the schema tree did not function when the schema list was filtered. (Bug #14690217, Bug #67001)

- The combination of Ubuntu with `language-pack-tr` and `LANG=tr_TR.UTF-8` produced an error message when columns of type `INT` were parsed during operations that altered existing tables. (Bug #13971992, Bug #63872)

- Chinese characters in the file path of an existing MySQL model were misrepresented and rendered the file inaccessible. (Bug #11757843, Bug #49950)

- EER diagrams with long names wrapped around to a second line in the Model Overview area and were not fully visible when the host was Microsoft Windows. This fix inserts a vertical scroll bar into the Model Overview to accommodate long names. (Bug #11749931, Bug #40103)

Changes in MySQL Workbench 8.0.11 (2018-04-19, Release Candidate)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- Visual SQL editor: The context help has been enhanced to eliminate the requirement of having a valid MySQL connection to view the help topics. In addition, the help content now can be updated with each release of MySQL Workbench and the formatting of help topics has been improved. (Bug #25918509, WL #10482)

- Microsoft .NET Framework version 4.5 replaced version 4.5.2 as the minimum requirement for installing MySQL Workbench with MySQL Installer. (Bug #25837944)

- All links to MySQL and Oracle web pages from within MySQL Workbench now use the HTTPS protocol. (Bug #25531365)

- Geometry fields displayed in the result grid now include a context-menu item that opens the geometry point in a browser. The selected point opens in `openstreetmap.org` by default, but the URL is configurable. (Bug #25517676)

- The MySQL Workbench prerequisites web page was updated to include links to the latest Microsoft downloads. (Bug #25408896, Bug #25840902, Bug #85820)

- Character sets and collations are now rendered consistently across connections, models, and all editors (schema, table, and column). (Bug #18665011, Bug #72460, WL #11500)

- The **SSH Connect Timeout** preference now can be configured, whereas in previous versions, this preference was set statically to 10 seconds. (Bug #18663250)

- The following infrastructure changes were made:

  - ANTLR4 as the backend parser.

- A new auto-completion engine that works with object editors (triggers, views, stored procedures, and functions) in the visual SQL editor and in models.

- Support for new language features in MySQL 8.0, such as common-table expressions and roles.

- Grammar updates that synchronize with the latest MySQL servers.

  (WL #10496)

- Platform support for Microsoft Windows Server 2016 was added. (WL #11511)

- Administration tabs were modified to include the latest configuration options available from servers up to and including the MySQL 8.0 release series. (WL #10634)

- MySQL Workbench now supports the `caching_sha2_password` authentication plugin introduced in MySQL 8.0 (see Caching SHA-2 Pluggable Authentication). A user account can be reset to use the other available authentication types for making a connection. (WL #11552)

- MySQL Workbench source code has been reformatted according to Google style.

- MySQL Workbench now uses C++14 (replaces C++11 in 6.3.10).

- Support for invisible indexes was added for use when the active server supports the feature and the index is neither a primary key index nor a unique column (see Invisible Indexes). A new option in the **Indexes** subtab of the table editor (for both the SQL and modeling editors) provides index visibility when it is selected. (WL #11496)

- MySQL Workbench now provides a simple way to enable or disable the persisted global system variable settings introduced in MySQL 8.0 (see SET Syntax for Variable Assignment). For variables that can be persisted, a new check box enables configuration changes at runtime that also persist across server restarts, and applies the persisted value if one exists. Persistent system variables can be reset (to not persist) individually or collectively. (WL #11504)

- The layout and behavior of the graphical elements within all administration tabs now are consistent across the tabs. In addition, the sidebar **Management** secondary tab was renamed to **Administration** to match the title of the workspace tabs that open when accessing the operations listed in the **Management**, **Instance**, **Performance**, and **MySQL Enterprise** sections. (WL #10634)

- The SSH implementation based on Paramiko was replaced with the one based on libssh. (WL #10635)

Bugs Fixed

- Several tooltips within the **Administration - Users and Privileges** tab had inaccurate text that was corrected by this fix. (Bug #27392119, Bug #89256)

- Columns of a table that followed a column containing a fractional seconds part did not appear within the tab opened by using **Alter Table**. (Bug #27314770, Bug #89053)

- MySQL Workbench generated an error when the valid encryption instruction was improperly identified, but the query executed as expected. (Bug #27239353, WL #10496)

- A differences report generated during the compare schemas operation for models could not be saved to a file. (Bug #27187659)

- The on-screen buttons that enable saving a script to a file or copying it to the clipboard were missing from the review step of the forward-engineering operation on macOS hosts. (Bug #27162920, Bug #88612)

- A `UNION` query with valid syntax produced an error message. (Bug #27113889, Bug #88456)

- Some MySQL 8.0 keywords within a query were improperly identified as syntax errors. (Bug #27036620)

- Importing a JSON document with the Table Data Import Wizard was unsuccessful. (Bug #27036381, Bug #25983728, Bug #86148)

- Recorded rules were not found after the **Mode** option in the **Firewall** tab was properly configured for a valid user account. (Bug #27003240)

- The manual editing step of the MySQL Migration wizard generated an exception when an object was selected for editing. (Bug #26986326)

- The version of `gtkmm30` that shipped with Red Hat Enterprise Linux 7.4 was incompatible with the version that MySQL Workbench compiled against. The version mismatch caused MySQL Workbench to close unexpectedly. (Bug #26797891, Bug #26705113, Bug #87380)

- The DBDoc Model Reporting feature omitted comments from the detailed HTML report using frames when processing a model based on a database with valid table comments and the **Include DDL code for Objects** option selected. Generating the report also caused MySQL Workbench to exit unexpectedly. (Bug #26436291)

- The Table Data Import wizard ignored the user's column selection and always generated tables containing the full set of columns. Deselected columns were populated with `NULL` values after the import operation. (Bug #26194914, Bug #86577)

- When typing text in the search box related to an EER diagram, MySQL Workbench became unresponsive or exited unexpectedly. (Bug #26025177, Bug #86225, Bug #26678740, Bug #87522)

- A table or stored procedure with the `ENCRYPTION` table-level option in the definition prevented Workbench from parsing the definition, regardless of whether or not encryption was actually enabled. (Bug #25961450, Bug #25447637)

- The SQL editor did not highlight syntax errors in statements as expected. (Bug #25861352)

- Workbench closed unexpectedly when the Compare and Report Differences in Catalogs wizard attempted to save the differences report to a file. (Bug #25860643)

- With a default schema properly selected and with the **Create View** icon (from the menu bar in an active connection tab) selected to open a **new_view – View** tab, a valid statement returned errors and then dynamically appended `_SYNTAX_ERROR` to the view name. For example, `new_view` was changed to `new_view_SYNTAX_ERROR`. (Bug #25860621)

- When a new procedure on a MySQL model was created, the parser incorrectly generated a syntax error. (Bug #25851441)

- After restarting the server from MySQL Workbench and then attempting to refresh the server log from the **Administration - Server Logs** tab, an error message appeared indicating that a garbage packet was received. (Bug #25760560)

- An error message appeared when MySQL Workbench was started that improperly identified the operating system as unsupported. (Bug #25736096)

- The forward engineering wizard did not launch when the operation was selected from the MySQL Workbench menu on hosts running macOS. (Bug #25701117, Bug #85398)

- Changes made to a view or stored procedure associated with a model were not detected after the model was synchronized without first closing or deselecting the editor. (Bug #25671681, Bug #85246)

- Using **Alter Stored Procedure** from the context menu to rename a stored procedure did not remove the original stored procedure after renaming it. (Bug #25645222, Bug #85229)

- Two program entries were created for MySQL Workbench 6.3.9 on Windows when installed or upgraded with MySQL Installer. Only one of the programs listed in the **Start**, **All Programs** menu was a valid executable file. (Bug #25584877, Bug #85083)

- All SQL options were missing during the SQL Export Options step of the Forward Engineering SQL Script wizard when a valid model was exported. (Bug #25559175, Bug #85012, Bug #25833972, Bug #84965)

- Object rights, DDL rights, and other rights related to schema privileges set for a user account were not visible from the **Administration – Users and Privileges** tab on the Windows platform. (Bug #25527029, Bug #84923)

- Labels and icons associated with the tables, views, and routines of an EER diagram were missing from within the `Catalog` tab. (Bug #25519411, Bug #84892)

- The generated `UPDATE` statement was incorrect when the query included a row with a unique index, had multiple columns, and one column had the `NULL` value. (Bug #25510537, Bug #84856)

- Browsing for files on a remote server using a valid SSH connection returned an error and did not display the remote files. (Bug #25495895)

- After backing up server connections to a file on a Linux host, attempting to restore those connections from the backup file generated errors and was unsuccessful. (Bug #25492082)

- Clicking **Start Server** within the **Administration – Startup / Shutdown** tab did not start the server on macOS hosts. (Bug #25489098)

- The layout of **Firewall Rules** within the **Administration – Users and Privileges** tab obscured some graphical elements. This fix improves the usability. (Bug #25487997)

- Source objects could not be viewed within the setup step when using MySQL Workbench Migration Wizard to prepare for a database migration. (Bug #25487312)

- The spinning circular icon on the query tab that appears when a query executes and replaces the `X` on the tab was absent on hosts running Linux. (Bug #25482378)

- The restore operation (MySQL Enterprise Backup) produced an exception when a backup file (.mbi) was selected while the MySQL server was running. This fix provides a message indicating that the server must be stopped first. (Bug #25476406)

- An exception was returned when the **Continue execution until next break point** button was used on a script executing within the Scripting Shell. (Bug #25476250)

- When a new snippet was saved within the Scripting Shell, the save operation did not save the snippet properly and the snippet could not be reused after MySQL Workbench was restarted. (Bug #25471491)

- The **Run Script File** action could be selected from the **Scripting** menu without an available script to execute. This fix disables the submenu item unless there is a script to run. (Bug #25462195)

- Migrating a table to a database generated an incomplete definition for a binary field that was `NOT NULL`. (Bug #25404308, Bug #84519)

- Altering a stored procedure that contained double dollar-sign characters (`$$`) as part of a variable name produced an error parsing DDL message. (Bug #25377145, Bug #84466)

- Single quotes in string columns were not escaped properly during the database migration operation. (Bug #24939843)

- When multiple queries were executed, only the first query was displayed in the history output area or written to the `sql_history` log file. (Bug #24622889, Bug #82929)

- The invalid syntax indicator that appears on each line of the SQL editor did not change after the syntax was corrected or completed. This fix ensures that the editor re-evaluates each change. (Bug #24528088, Bug #82741, Bug #24901911, Bug #83395, Bug #24901911, Bug #83395)

- With large text enabled on the host, some option groups were not visible to select within the forward-engineering wizard. (Bug #24486726, Bug #82633)

- For a table with existing indexes (and `SQL_MODE=ANSI_QUOTES`), the **Indexes** tab within the table editor (opened with the wrench button in the `Schemas` tab of the sidebar) did not show the indexes as expected. **Columns**, **Foreign Keys**, **Triggers**, and **Partitioning** tabs were also missing objects defined in the table. (Bug #24349382, Bug #80483)

- Unless the default syntax checker was set to `SQL_MODE=ANSI_QUOTES`, all double-quoted string literals were highlighted as syntax errors by the SQL editor. (Bug #24329515, Bug #82293)

- After executing a query, MySQL Workbench often quit working or exited unexpectedly without writing to the log file. This fix improves the overall stability of the SQL editor. (Bug #24291775, Bug #82187)

- The SQL editor underlined some keywords and reserved words in statements, indicating a syntax error, but executed the statements successfully. (Bug #23346980, Bug #24345217, Bug #82331)

- Attempting to store a password in the vault from the Manage Server Connections window on a Windows host caused MySQL Workbench to become unresponsive. (Bug #23308198, Bug #81470)

- When executing **Explain Current Statement** (**Ctrl+Alt+X**) from the menu on an `UPDATE` statement, a query plan generation error was displayed and the operation failed. (Bug #23098982, Bug #81068)

- The Reverse Engineer Database wizard excluded tables in which the `WITH PARSER` clause was present. (Bug #22940775, Bug #80760)

- A column with the `STORED` keyword could not be generated by using the **EER Diagram** or **MySQL Model** tabs on macOS hosts. This fix updates all of the relevant tabs to include the missing **STORED** option for generating a column or for editing generated columns. (Bug #22645321, Bug #80211)

- Table rows were not generated properly when a valid Microsoft SQL Server table was migrated using the MySQL Migration wizard. (Bug #22200194, Bug #77933)

- The forward engineering operation passed the default collation when a custom collation was defined for a schema. (Bug #22148986, Bug #79115)

- When synchronizing a MySQL model that contained a table with JSON columns, the operation attempted to create a new table instead of fetching the table from the database. (Bug #22060787)

- Columns with custom collation were reset to the default collation when the model containing the table was exported. (Bug #22006966, Bug #78817)

- Models synchronized with existing databases produced an error message if any of the tables within a model had comments enclosed between `/*` and `*/` characters in triggers. (Bug #21551643, Bug #76176)

- Generated queries were incomplete for models that included table columns of type `VARCHAR` with partitioning enabled. (Bug #21104120, Bug #76489)

- Some fields within the Table Data Import wizard were misaligned and difficult to use. (Bug #20956767)

- If the **SCHEMAS** tree was refreshed during a long query, MySQL Workbench became unresponsive until the query finished. (Bug #20896682, Bug #76594)

- An error message was displayed when the delete operation was performed on an existing connection in the Manage Server Connections window. (Bug #20652117, Bug #76153)

- The mouse pointer did not always change shape to match the area it was moved to within the visual SQL editor. (Bug #20588048, Bug #75993)

- A complex `IF`, `ELSEIF`, `ELSE` structure when used to create a stored procedure within the **new procedure – Routine** tab produced a syntax error message as clause 45 was added and for each clause that followed. (Bug #18972055, Bug #72991)

- Auto-completion did not provide a suggestion reliably for instructions included in the server dictionary, such as statements or system variables. In addition, types like `TIMESTAMP` were completed with the wrong type values. (Bug #18445589, Bug #27386829, Bug #89222, Bug #26897612, Bug #87907, Bug #18871688, Bug #72812)

- Attempting to access the MySQL Enterprise Backup interface caused MySQL Workbench to stop working. (Bug #18019469)

- An exception was generated when attempting to view MySQL server logs remotely using a connection made with TCP/IP over SSH from a Windows host. (Bug #17505130, Bug #70379)

- An on-screen label with inaccurate text was corrected. (Bug #16808557)

- Erroneous input at the beginning of the line in the SQL editor generated an error marker that continued to display after the wrong input was corrected or removed. (Bug #13820997, Bug #64481)

- Popular Windows themes did not always render as expected, especially when color themes were selected on Windows hosts. In particular, some areas persisted a white background regardless of the setting. (Bug #11760110, Bug #52485)

- When out-of-range index, unique index, or primary key values were define in the source, no warning was provided to indicate that the code produced could not be executed by the MySQL server. (Bug #11745588, Bug #17509)

Changes in MySQL Workbench 8.0.0 - 8.0.10 (Skipped version numbers)

There are no release notes for these skipped version numbers.

Changes in MySQL Workbench 6.3

Changes in MySQL Workbench 6.3.10 (2017-11-15, General Availability)

- Installation Notes
- Bugs Fixed

Installation Notes

- Because the Microsoft Visual C++ 2017 Redistributable installer deletes the Microsoft Visual C++ 2015 Redistributable registry keys that identify its installation, standalone MySQL MSIs may fail to detect the Microsoft Visual C++ 2015 Redistributable if both it and the Microsoft Visual C++ 2017 Redistributable are installed. The solution is to repair the Microsoft Visual C++ 2017 Redistributable via the Windows Control Panel to recreate the registry keys needed for the runtime detection. Unlike the standalone MSIs,

MySQL Installer for Windows contains a workaround for the detection problem. (Bug #28345281, Bug #91542)

Bugs Fixed

- Performance information within the Administration – Dashboard tab demonstrated a slow rate of refresh on hosts running macOS High Sierra. (Bug #26921498)

- Tooltips within the Administration – Dashboard tab did not display when the mouse pointer was paused over each performance graph and the host was running macOS High Sierra. (Bug #26921467)

- Table objects did not display with the **Show Selection** button during the migration process on hosts running macOS High Sierra. As a result, source objects could not be selected for inclusion or exclusion. (Bug #26921431)

- Queries executed with the **Limit Rows** value set to "Don't Limit" did not display rows in the result grid on hosts running macOS High Sierra. (Bug #26921372)

- Executing a query in MySQL Workbench on a host running macOS High Sierra failed to load the result grid completely, which prevented result data from appearing within the Result Grid tab. (Bug #26826418, Bug #87714)

- Performing a keyword search in the EER Diagram Editor on hosts running macOS High Sierra caused MySQL Workbench to exit unexpectedly. (Bug #26428849, Bug #87020)

- Forward engineering a physical database design did not operate as expected on hosts running macOS High Sierra. (Bug #25979928, Bug #86146)

Changes in MySQL Workbench 6.3.9 (2017-02-07, General Availability)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- Support was added for many MySQL 8.0 features. Note that configuration-file support for MySQL 8.0 is not available and a warning banner is displayed during attempted use. (Bug #24908593, Bug #83422)

- With MySQL 5.7, several new instruments were added to the performance section including the following for **Memory Usage**: *Total Memory*, *Top Memory by Event*, *Top Memory by User*, *Top Memory by Host*, *Top Memory by Thread*, *User Resource Usage*, and the following for **User Resource Usage**: *Overview*, *I/O Statistics*, and *Statement Statistics*. (Bug #21491775)

- With MySQL 5.7, GTID_MODE can now be set online. (Bug #20712931)

- Workbench is now aware of the `innodb_optimize_point_storage` option that was added in MySQL Server 5.7.5, and later removed in MySQL Server 5.7.6. Note that MySQL Server 5.7.9 was the first 5.7 GA release. (Bug #20661496)

- Mroonga storage engine support is now available for tables. (Bug #20058280, Bug #74367)

- A new **DDL** tab was added to show the complete create statement of a table or view. Click the table inspector (info) button next to the table or view in the Schemas Navigator to display the new information. (Bug #19889537, Bug #74554)

- Dropped support for DBDesigner 4.

- Dropped Fabric support.

- Dropped support for MySQL 5.1. Minimum version is now MySQL 5.5.

- Changed to C++11.

- Changed to GTK 3 on Linux.

- OS X: Version 10.7 (Lion) and 10.8 (Mountain Lion) support was dropped. Now supporting 10.9 (Mavericks), 10.10 (Yosemite), 10.11 (El Capitan), and 10.12 (Sierra).

- Windows: Zip packages and 32-bit binaries are no longer published. The .NET Framework version 4.5 is now required.

- Linux: Fedora 23 support dropped and Fedora 25 support added. Oracle Linux 6 support was dropped.

- The option to specify an alternative application data directory, instead of the default location, was added.

- The JSON editor was improved with better parsing and error checking.

- A new **Log Level** preference (under **Others**) was added to alter the log verbosity level.

  As before, this can still be set by passing in the log-level command-line argument into Workbench at runtime, and doing so overrides the **Log Level** setting.

- The bundled `sakila_full.mwb` model now uses a dedicated 5.7 version to allow for 5.7 specific features, regardless of the version setting in the preferences.

- Full MySQL 5.7 language support was added, which affects grammar, syntax highlighting, preferences, behavior, and more.

- The **Home** screen was modified: the connections, models, and starters were split into individual pages.

Bugs Fixed

- With multiple tabs open in the SQL editor, using the context-sensitive menu to close all other tabs caused MySQL Workbench to exit unexpectedly. (Bug #25466086, Bug #84643)

- Objects sorted in the schema inspector and then selected for an operation, such as **Drop Table**, generated a statement for the wrong object. (Bug #25464011, Bug #84697)

- MySQL Workbench supports the option to require a CA certificate or identity validation. (Bug #25408639)

- If a full backup added warning messages to the backup log file, then running an incremental backup later failed. (Bug #25315796)

- No JSON tab appeared for the `Open Value in Editor` command if the field contained an empty array. (Bug #25222455, Bug #84106)

- Schema names were not escaped properly in resulting `DROP TRIGGER` statements when a trigger was created or edited. (Bug #25036458, Bug #83655)

- In some cases, executing a query caused MySQL Workbench to become unresponsive when the host was macOS Sierra. (Bug #25036263, Bug #83658)

- Having a single quotation mark (') in the text field of a table caused the MySQL Schema Transfer wizard to fail. (Bug #24978403, Bug #83616)

- Simple and complex queries executed from SQL Editor failed to complete and return control to MySQL Workbench. This behavior was observed for both local and remote queries and was often intermittent. (Bug #24977018, Bug #82951)

- Deleting rows while connected to a remote server caused the connection to fail and for MySQL Workbench to exit unexpectedly. (Bug #24947899, Bug #81019)

- The **Selected schema** drop-down list in the New Schema Privilege Definition dialog failed to display newly added schema names unless MySQL Workbench was restarted. (Bug #24798254, Bug #83111)

- The bundled OpenSSL library was upgraded to version 1.0.2J. (Bug #24753390)

- Tooltips failed to operate properly in the Visual Explain panel. (Bug #24577687, Bug #82816)

- Deleting selected rows from the Result Grid caused MySQL Workbench to become unresponsive. (Bug #24411733, Bug #82466)

- Connecting to the server resulted in the following exception: Parameter is not valid. (Bug #24394987)

- Queries returning more than 1000 rows on an SSH connection to AWS failed and caused MySQL Workbench to become unresponsive. (Bug #24330588, Bug #82291)

- Adding a password with the `Store in Vault` option caused Workbench to fail and exit. (Bug #23987798, Bug #82190)

- Opening a saved .mwb model file with MySQL Workbench generated the following error intermittently: Error unserializing GRT data string too long. The same file, when opened directly from the file system, started MySQL Workbench and displayed the model correctly. (Bug #23857478, Bug #80017)

- Query statements executed from the SQL Editor did not remain selected when the focus returned to the query area. (Bug #23760790, Bug #79580)

- The schema navigator incorrectly opened a previously viewed database, instead of the one selected, after the schema filter in the Navigator panel was used to find and list multiple databases. (Bug #23760745, Bug #71699)

- Selecting TCP/IP over SSH for existing or new connections caused MySQL Workbench to fail and exit. (Bug #23743373, Bug #82113)

- Changes made with the **Options File** editor were committed to `my.cnf` correctly, but also generated an error. (Bug #23741731, Bug #82102)

- Stored procedures containing valid `CASE` statements reported syntax errors when created or edited. (Bug #23617646, Bug #81932)

- Graphs in the performance dashboard reported negative values when the server instance was stopped and restarted during the analysis. (Bug #23103677, Bug #81067)

- The Migration Wizard successfully migrated the schema, but failed to migrate the data, when the data source was SQL Anywhere 16 using ODBC. (Bug #22987681, Bug #79140)

- Selecting too many tables when attempting to reverse engineer an EER diagram caused MySQL Workbench to fail and exit. This fix sets the permitted threshold to 1000 objects and displays a warning message when the number of objects exceeds the threshold. (Bug #22828056, Bug #80516)

- The import operation failed to import valid CSV files. (Bug #22817059, Bug #80472)

- New connections configured with the `Standard TCP/IP over SSH` connection method failed and caused MySQL Workbench to become unresponsive or to exit. (Bug #22728573, Bug #80359)

- EER diagram tables were locked to a fixed location in the window for some .mwb files. This fix enables users to unlock the tables within the diagram and to persist those changes by first changing the size of

the diagram (click **Model**, **Diagram Properties and Size**) and then saving the file. (Bug #22722596, Bug #71533)

- Performance reports generated by the Export button did not enclose in quotes and escape any string values in the CSV file, making it difficult to read the output when the strings contained commas. (Bug #22700858)

- **Check for Updates** from the **Help** menu failed to detect new releases. (Bug #22578656, Bug #80074)

- The **Filter Rows** value set in the Result Grid of a query was not reapplied when the query was changed or refreshed. (Bug #22566018, Bug #80050)

- When running large queries over an SSH tunnel, MySQL Workbench became unresponsive. (Bug #22494755, Bug #79840)

- The Export Data operation emitted an unhandled exception when the user connecting to the server lacked privileges on the mysql schema, but had full privileges on the database identified by the operation. (Bug #22478388, Bug #79807)

- Adding or editing fields in the Table Templates window for a user-defined template caused MySQL Workbench to fail and exit. (Bug #22449752, Bug #79721)

- Data exported from the **Inserts** tab of a table in an EER diagram generated invalid JSON syntax. (Bug #22381735, Bug #79673)

- Some `GRANT` statements were parsed incorrectly. (Bug #22370783)

- The Audit Inspector failed to initialize in MySQL Workbench when the locations of the audit log file and data directory were different. (Bug #22277384)

- GEOMETRY table data failed to export properly into CSV file format and failed to export at all into JSON file format (with an error). (Bug #22269646)

- Stopping a query before it finished executing often caused MySQL Workbench to stop working. (Bug #22071120, Bug #78881)

- The placeholder row (last row of the Result Grid with `NULL` values) was hidden when new rows were inserted and applied. (Bug #22065173, Bug #78294)

- Saving a reverse-engineered model caused MySQL Workbench to fail and exit. (Bug #21980722, Bug #78357)

- The cost and data process information added to "EXPLAIN JSON" in MySQL Server 5.7.2 can now be viewed in Workbench. (Bug #21848024)

- The autocomplete feature did not offer suggestions as expected. The **CTRL+SPACEBAR** keyboard shortcut can be used to activate this feature. (Bug #21685267, Bug #78185)

- Some help text was hidden from the **Schema Editor** in the **EER Diagram**. (Bug #21630661, Bug #78021)

- When MySQL Workbench performed a `copy-back` restore operation, it reported incorrectly to the mysqlbackup log that a `copy-back-and-apply-log` operation was performed. (Bug #21496475)

- The `require_secure_transport` system variable that was added in MySQL Server 5.7.8 is now supported and can be modified using MySQL Workbench. This variable enables administrators to require all client connections to the server to be made using some form of secure transport. (Bug #21484632)

- A dialog showing the wait time of an attempted connection now displays earlier for improved visibility. (Bug #21264710)

- Some routine database operations caused MySQL Workbench to fail and exit intermittently. (Bug #21231450, Bug #77286)

- The slash character (/) when used in the name of a new connection separated a group from the real connection name by default without first notifying the user. This fix gives the user an option to keep the slash character and create a connection group or to replace all slash characters in the connection name with underscore characters. (Bug #21158191, Bug #77175)

- In a query, `UNION` and `UNION ALL` statements that contained data from different tables or different databases returned data in the Result Grid that could be edited and applied to the wrong table. This fix returns read-only data that cannot be edited directly for such queries. (Bug #21046384, Bug #76964)

- The identifier quote character (`) was missing from the `DROP` statement when an attempt was made to drop the existing trigger on a database with an illegal character in the name. A syntax error resulted. (Bug #20978108, Bug #76869)

- The property values of a table in an EER diagram could not be edited from the Properties Editor. (Bug #20930134)

- Stored procedures containing valid query syntax produced syntax errors. (Bug #20929172, Bug #76761)

- Some characters could not be inserted into cells of the result grid and displayed the following text-truncation error message: Inserted data has been truncated as the control's limit was reached. Please use the value editor instead for editing such large text data. (Bug #20927915, Bug #76760)

- SQL Editor did not permit the use of `DUAL` in a derived-table subquery. (Bug #20800341)

- When the resultset grid in SQL Editor was set to a font type and size that exceeded the default row height, the output from a query hid a portion the row content instead of increasing the row height to accommodate the font value. (Bug #20794106, Bug #76520)

- The `binlog_group_commit_sync_delay` and `binlog_group_commit_sync_no_delay_count` options that were added in MySQL Server 5.7.5 are now supported, and can be modified using Workbench. (Bug #20712947)

- Russian language connection names failed to load and display properly in the home screen. (Bug #20697403, Bug #76015)

- The `innodb_page_size` MySQL Server system variable can now be changed to either 32k or 64k in Workbench, in addition to the current options. Support for these larger `innodb_page_size` values was added in MySQL Server 5.7.6. The default value in MySQL 5.7 is 16k. (Bug #20661249)

- Executing the current statement of a query by using the **CTRL+ALT+ENTER** keyboard shortcut (Vertical Text Output) partially or fully hid the output. (Bug #20573658, Bug #75959)

- When closing a tab in the SQL Editor, the focus always returned to the first tab regardless of the number of tabs open. This fix returns focus to the preceding tab (to the left) of the closed tab. (Bug #20351753, Bug #75490)

- A valid server connection was required before a script or model file could be viewed or edited. (Bug #20326028, Bug #75452)

- Starting MySQL Workbench from the command line with an optional argument of a script or model file required the absolute (or fully qualified) path name of the file. (Bug #20268606, Bug #75305)

- SQL Editor identified syntax errors in valid statements that executed properly. (Bug #20116982, Bug #74183)

- Font sizes were increased in the Home screen for improved readability. (Bug #19982157, Bug #74721)

- The MySQL Table Editor did not display the name of a selected table within an EER diagram when the editor was first opened. (Bug #19693466, Bug #74102)

- Because the `sys` schema is installed by default as of MySQL server 5.7.7, MySQL Workbench now checks for and uses it. Otherwise, MySQL Workbench (as it has since 6.1) provides the option to install it.

  References: See also: Bug #71207.

Changes in MySQL Workbench 6.3.8 (2016-10-21, General Availability)

Bugs Fixed

- **Important Note:** During normal operations, MySQL Workbench frequently and unexpectedly closed or became unresponsive. (Bug #24571739, Bug #82778)

- Compiler errors were resolved with GCC 6.2.1. Thanks to Christian Hesse for the patch. (Bug #24842267, Bug #83372)

- Using the `->>` operator in a valid SQL statement within a stored procedure returned the following error: The object's DDL statement contains syntax errors. (Bug #24693021, Bug #83043)

- The **Columns** tab of the table editor displayed an incorrect tooltip description for the `G` flag. (Bug #24558804, Bug #82790)

- For macOS, the table-partition model transposed column values leading to an incorrect `CREATE TABLE` statement. Thanks to Kit Yam Tse for the patch. (Bug #24517322, Bug #82716)

- The migration script could not successfully convert UCS-2 strings to UTF-8 in a table when migrating the table from Microsoft SQL Server to MySQL Workbench. (Bug #23751080, Bug #82134)

- Database migration from Microsoft SQL Server 2000 emitted errors and stopped when the operation failed to locate the required schema list associated with the database version. (Bug #23747299, Bug #82069)

- A `CASE` statement with `WHEN` clauses in a stored procedure emitted syntax errors. (Bug #23746795, Bug #82114)

- Selecting TCP/IP over SSH for existing or new connections caused MySQL Workbench to fail and exit. (Bug #23743373, Bug #82113)

- On Windows, migrating a table with an empty string in a column of type `ntext` failed and displayed the "Could not successfully convert UCS-2 string to UTF-8 ..." error message. (Bug #23630604, Bug #81967)

- When migrating a table with a column of type `nvarchar(max)` from Microsoft SQL Server, MySQL Workbench found the record to be bigger than the server `max_allowed_packet` value and failed to copy the record to the server. (Bug #23623191, Bug #81944)

- The usage graph under **InnoDB Status** in the Performance Dashboard consistently underreported the actual usage of the `InnoDB` buffer pool as reported on the server. This fix implements a new formula to represent the `InnoDB` buffer pool. (Bug #23584042, Bug #81837)

- The Migration Wizard successfully migrated the schema, but failed to migrate the data, when the data source was SQL Anywhere 16 using ODBC. (Bug #22987681, Bug #79140)

- Selecting too many tables when attempting to reverse engineer an EER diagram caused MySQL Workbench to fail and exit. This fix sets the permitted threshold to 1000 objects and displays a warning message when the number of objects exceeds the threshold. (Bug #22828056, Bug #80516)

- **Check for Updates** from the **Help** menu failed to detect new releases. (Bug #22578656, Bug #80074)

- The Export Data operation emitted an unhandled exception when the user connecting to the server lacked privileges on the mysql schema, but had full privileges on the database identified by the operation. (Bug #22478388, Bug #79807)

- Adding or editing fields in the Table Templates window for a user-defined template caused MySQL Workbench to fail and exit. (Bug #22449752, Bug #79721)

- Data exported from the **Inserts** tab of a table in an EER diagram generated invalid JSON syntax. (Bug #22381735, Bug #79673)

- The autocomplete feature did not offer suggestions as expected. The **CTRL+SPACEBAR** keyboard shortcut can be used to activate this feature. (Bug #21685267, Bug #78185)

- When closing a tab in the SQL Editor, the focus always returned to the first tab regardless of the number of tabs open. This fix returns focus to the preceding tab (to the left) of the closed tab. (Bug #20351753, Bug #75490)

- Index comments were improperly generated within the index section of an SQL script when using the Forward Engineer SQL Script wizard to create and export the script. (Bug #19896276, Bug #74530)

Changes in MySQL Workbench 6.3.7 (2016-06-13, General Availability)

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- The **Default target MySQL version** model preference is now an open text field instead of a dropdown select box. For example, rather than choosing a version such as "5.7", you can now enter a specific version such as 5.7.12. (Bug #23080421, Bug #81023)

Bugs Fixed

- A typo was fixed on the **Configure Server Management** page. (Bug #23534786, Bug #81738)

- On OS X, after creating a new model, and new diagram, right-clicking on the empty diagram background would freeze Workbench. (Bug #23512126)

- Executing **Data Import/Restore** would emit an unhandled exception with **Import from Self-Contained File** enabled. (Bug #23505226)

- On Linux, the **Table Data Export** wizard failed to complete the export process. (Bug #23477814)

- The MySQL Enterprise Backup **Restore** functionality could emit an unhandled exception under some circumstances. (Bug #23472573)

- Editing a remote MySQL options file via the **Options File** management tool would emit an unhandled exception after clicking **Apply**. (Bug #23307191)

- Exporting data to JSON was exporting NULL values as NULL instead of null, thus breaking the JSON output. (Bug #23241155, Bug #81331)

- Under **Users and Privileges**, Workbench did not allow hyphens for host names in the "limit to hosts matching" field. (Bug #23224606, Bug #81301)

- When viewing the code for an existing view (SQL to create the view), hexadecimal values were truncated. (Bug #23187761, Bug #81208)

- Migrating a MySQL source to a MySQL target database would fail for tables that had generated columns, as the target server rejected attempts to insert data into generated columns. (Bug #23128380, Bug #81100)

- Selecting "5.7" from **Default target MySQL version** did not take into account changes to newer versions, as 5.7 behaved like 5.7.0 instead of a newer version. For example, it was not possible to use the JSON data type for variables inside the stored procedure editor as JSON was added in MySQL 5.7.7. (Bug #23080421, Bug #81023)

- The Schema filter was slow (poor performance) when a lot (1000+) of schemas were present. (Bug #23047787, Bug #80946)

- Under **Reverse Engineering**, the information provided in the wild card description to select objects contained a typo. (Bug #23022342, Bug #80902)

- The Migration Wizard successfully migrated the schema, but failed to migrate the data, when the data source was SQL Anywhere 16 using ODBC. (Bug #22987681, Bug #79140)

- The database migration wizard database field was described as "Leave blank to select it later" but this text was updated to read as "Cannot be blank" because it is a required field. (Bug #22896342)

- The generated SQL generated by the forward engineering wizard would incorrectly output "VIRTUALCOMMENT" instead of "VIRTUAL COMMENT". (Bug #22880159, Bug #80618)

- An new option is available to specify a path to the SSH configuration and/or known hosts file. This option overwrites the defaults. (Bug #22866791, Bug #80605)

- Workbench's **Alter Table** functionality did not behave correctly when a column was defined using a TIMESTAMP with fractional seconds, such as TIMESTAMP(1). In this case, some columns would be hidden from the editor. (Bug #22839982, Bug #80547)

- Selecting too many tables when attempting to reverse engineer an EER diagram caused MySQL Workbench to fail and exit. This fix sets the permitted threshold to 1000 objects and displays a warning message when the number of objects exceeds the threshold. (Bug #22828056, Bug #80516)

- After successfully executing the database migration wizard, executing it a second time required Workbench to be restarted. (Bug #22811588, Bug #80479)

- When executing **Data Export** using a remote MySQL connection, the error resulting from a missing `mysqldump` binary was unclear. (Bug #22753693, Bug #80240)

- The PostgreSQL migration wizard could fail to migrate PostgreSQL databases that were generated with tryton. (Bug #22747525, Bug #79217)

- The **Dashboard** and **Server Status** reported different **Select per second** values. The **Server Status** page reported incorrect (inflated by about 3x) values. (Bug #22739583, Bug #74822)

- The PostgreSQL migration wizard could fail with an "pg_catalog.pg_enum does not exist" error. (Bug #22738451, Bug #71121)

- The Workbench interface would incorrectly orient itself to display as Right-To-Left (RTL) when a system's language is set to a RTL language, despite Workbench not being translated to that language. (Bug #22722701, Bug #72126)

- Attempting to test custom connection details (a connection not yet created by Workbench) caused Workbench to fail and exit. The **Test Connection** functionality only functioned for existing or new connections. (Bug #22698924, Bug #80325)

- The "Limit to Hosts Matching" field in the user manager would incorrectly report a "Host name contains incorrect characters" error if the host named contained numeric characters. (Bug #22670269)

- Import and export to JSON format failed if the table had column names that were keywords such as key or value. (Bug #22668918, Bug #80272)

- The **Alter Table** functionality did not detect a default value change from no default value to an empty string. In other words, adding a default value of "" resulted in Workbench reporting "No changes detected". (Bug #22664805, Bug #80267)

- The **DBMS connection keep-alive interval** option did not function properly. As a result, Workbench could lose the connection and result in errors similar to "Error Code: 2013. Lost connection to MySQL server during query". (Bug #22642241, Bug #80225)

- All generated paths now will use "/" as the directory separator in order to avoid the "\s" being interpreted as a space, such as "C:\path\to\certs\server-cert.pem" for generated SSL certificates. (Bug #22636645, Bug #80087)

- Importing CSV data with from a properly UTF-8 encoded source would sometimes fail, and instead could result with errors such as "*'ascii' codec can't encode character u'\xcf' at position 29: ordinal not in range(128)*". (Bug #22635390, Bug #80205)

- With Fabric, Workbench cached the topology information and did not update it when the topology changed, like when switching to a new master. (Bug #22601466)

- Code completion has been further improved to only show relevant details, such as if a table is referenced in the FROM clause then only show columns from that table and not all from the default schema, and entries have been reordered to show columns first (only preceded by keywords). (Bug #22579426, Bug #80092)

- Some stored procedure definitions were incorrectly reported as having invalid syntax. (Bug #22552958, Bug #80007)

- Executing **Alter Stored Procedure** with a user lacking SELECT privileges would crash MySQL Workbench. (Bug #22509047, Bug #79871)

- With the MySQL Firewall plugin enabled, having a user name containing a single quote character (rare, but not illegal) the queries would fail and produce an error in the **Users and Privileges** area of Workbench. These checks are now properly escaped. (Bug #22468850)

- With the `validate_password` plugin enabled, when Workbench attempted to check the strength of a new password by sending a query to the server, the password was not properly escaped in this query. In such cases, the password was incorrectly reported as a strong or weak password. The associated `SELECT VALIDATE_PASSWORD_STRENGTH()` query is now properly escaped. (Bug #22468332)

- Some internal Workbench queries failed to execute with sql_mode set to ANSI_QUOTES. (Bug #22464406)

- The **Total Time** field within the **Recent Activity** grid of the Online Backup / MySQL Enterprise Backup section of Workbench showed an incorrect duration value. (Bug #22462974, Bug #73499)

- With MySQL Server 5.5 and lower, executing **Alter Table** on tables with partitions would fail with an error similar to "Syntax error: 'PARTITION' (identifier) is not valid input at this position". (Bug #22453898, Bug #79734)

- MySQL Workbench lacked a CentOS profile, so could fail to make remote connections to a CentOS machine. (Bug #22453095, Bug #72205)

- Adding or editing fields in the Table Templates window for a user-defined template caused MySQL Workbench to fail and exit. (Bug #22449752, Bug #79721)

- Data exported from the **Inserts** tab of a table in an EER diagram generated invalid JSON syntax. (Bug #22381735, Bug #79673)

- After opening the stored procedure editor from the object browser, clicking **Execute** would execute a query that did not take into account the IN parameters. (Bug #22378620)

- On Windows, the "DEFAULT NULL" value could unintentionally be removed from the "Alter Table" window when clicking on it. (Bug #22375946, Bug #79661)

- The **Database Migration** migration link on the home page was not functioning immediately after a successful migration. (Bug #22271448)

- Several grammar and spelling corrections were implemented into the GUI. (Bug #22251496, Bug #79373)

- Under certain circumstances, sub-queries were reported as syntax errors. (Bug #22251347, Bug #79371)

- Several SQL Server 2014 database migration improvements. (Bug #22243141, Bug #79299)

- While modeling, pressing the **Enter** key while editing a document's properties would close the document properties window instead of adding a new line. (Bug #22204168)

- When copying tables, Workbench makes one connection at the start to disable triggers, makes a separate connection to do the data copy, then returns to the first connection to re-enable triggers. If the copy takes longer than the server's wait_timeout, the first connection timed out. (Bug #22190703, Bug #79242)

- The **Driver sends Unicode data as UTF-8** advanced database migration option that is available when using an ODBC driver is now disabled by default. Also, connections could hang when this option was enabled. (Bug #22149342, Bug #76382)

- Executing **Delete Row(s)** after selecting more than six rows from the results grid would not delete all of the selected rows. (Bug #21909625, Bug #78560)

- The autocomplete feature did not offer suggestions as expected. The **CTRL+SPACEBAR** keyboard shortcut can be used to activate this feature. (Bug #21685267, Bug #78185)

- Adding a DATETIME with precision (such as DATETIME(3)) from the **Table Editor** would eventually get reverted to DATETIME (without precision). (Bug #21666012, Bug #78153)

- The search (magnifying glass) icon in the schema search field was misplaced after the left sidebar was resized. (Bug #21329109, Bug #77507)

- Workbench will now prompt to continue the execution of operations containing loops in stored procedures, instead of just canceling it after ~200 executions. (Bug #21310357, Bug #77470)

- The Performance Schema installation procedure in Workbench failed to check user privileges before attempting the installation. For example, if the user had all privileges except "ALTER ROUTINE", it would

update sys.version but fail to complete the installation, and also fail to back out thereby leaving the sys.version as current but none of the functions were updated. (Bug #21261239, Bug #77360)

- On Linux and OS X, the Options File viewer shortened (cut) long option names in the GUI, although editing their values changed the correct options. (Bug #21167521, Bug #77179)

- MySQL connections were leaked when connecting and disconnecting to MySQL databases. It leaked one connection per re-connect to a database. (Bug #20996606)

- A large database caused the size reported under the **Schema Inspector** to wrap around and display a negative number. (Bug #20990435)

- From the **Options File** management feature, clicking **Discard** with the **Advanced** tab open would always revert the **thread_handling** option value to "one-thread-per-connection" even if it was set to "no threads". (Bug #20956570)

- When closing a tab in the SQL Editor, the focus always returned to the first tab regardless of the number of tabs open. This fix returns focus to the preceding tab (to the left) of the closed tab. (Bug #20351753, Bug #75490)

- The print preview icon dialog was missing the Workbench icon. (Bug #20309812, Bug #75422)

- Changes to the modeling **Appearance** font preference did not save properly, or have an effect. (Bug #20196073, Bug #75173)

- On Windows, the **Query Stats** graph would not render with MySQL Server 5.7. (Bug #20141414, Bug #75100)

- The **Query Stats** information tab was populated even when the Performance Schema was disabled. (Bug #20141262, Bug #75101)

- The *Toggle whether execution of SQL script should continue after failed statements* button was updated to better indicate when the option is enabled or disabled. (Bug #20093801, Bug #74982)

- On Windows, after closing and reopening Workbench with several SQL Editor tabs open, the tabs names were hash values (instead of MySQL connection names) if the connection names contained non-standard text. (Bug #20086117, Bug #74966)

- In the **Table Editor**, if a column has NN checked, and NN is then unchecked, then a default NULL value is automatically added to the CREATE TABLE statement when **Apply** is clicked. The column then shows a default value of NULL in the Table Editor. (Bug #19890571, Bug #74558)

- If a setting is (incorrectly) defined twice in `my.ini`, Workbench separates its values with a newline ("\n"). For example, if sort_buffer_size is defined twice, Workbench displays it as "sort_buffer_size=256K \n256K". Workbench now follows MySQL Server behavior, and uses the last defined option. (Bug #19769849)

- The cursor could seemingly disappear after executing a query, as it could remain at its last position when the query started to execute. (Bug #19703074, Bug #74128)

- The model **Page setup...** functionality was not always preserved when choosing a size for printing. (Bug #11766583, Bug #59724)

Changes in MySQL Workbench 6.3.6 (2015-12-15, General Availability)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- On OS X, the multiple object selector was disabled in the model overview. (Bug #22265928)

- On Linux, Fedora 23 is now supported. (Bug #22146526, Bug #79101)

- The "mysql_old_password" protocol is no longer supported by Workbench, as its support was removed in MySQL Server 5.7. For this reason, the **Use the old authentication protocol** option was removed. That option did not function in Workbench 6.3.5.

  For information about updating a user's password from the old to new format, see Updating Old Authentication Protocol Passwords. (Bug #22093548, Bug #78947)

- Management operations when using an SSH MySQL Server connection that authenticated using a password (and not SSH keys) would not function. (Bug #22047602)

- The **File**, **New Query** option no longer requires an open MySQL connection. (Bug #21879064)

- The MySQL Firewall tab is now disabled when the Firewall user is being created. (Bug #21150265)

Bugs Fixed

- The results grid remained empty after executing SELECT queries. A new GTK2 prerequisite was added, which is checked by the Yum repository. This affected Enterprise Linux variants, such as the Oracle Linux and CentOS distributions.

  This fix was released (pushed) after version 6.3.6 was initially released. Current users of 6.3.6 must reinstall Workbench. (Bug #22376818, Bug #79495)

- Setting the MySQL Firewall mode to "PROTECTING" for a user without defined rules would emit an unhandled exception. (Bug #22294174)

- Improvements were made to the Microsoft SQL Server 2008 migration wizard. (Bug #22271597)

- On OS X, the MySQL Firewall management option was missing from the commercial edition builds. (Bug #22270244)

- After editing the code of a routine and closing the routine editor, the changed routine was duplicated instead of applying the changes to the original routine object. (Bug #22269199)

- The JSON Data Field Value Editor functionality was improved, and bugs were fixed. Workbench 6.3.5 had known limitations. (Bug #22265214, Bug #22337871)

- On Linux, the MySQL Firewall installation checked the path `/usr/share/` instead of `/usr/share/mysql/`. (Bug #22263249)

- For **Online Backup**, the **Fix Grants for MEB** function would not create the MySQL Enterprise Backup user account. (Bug #22258080)

- The SSL results page listed the "-" character as "_" for the SSL certificate file names. (Bug #22243210)

- Exporting a database from the **Data Export** wizard did not function with remote connections. (Bug #22233795)

- The libzip library was updated; Workbench can now be installed on Ubuntu 15.10. (Bug #22230416, Bug #79320)

- After initially altering a table using the **Alter Table**, subsequent alterations to the same table in the same screen, without having closed the screen, would not always complete, as the previous alterations were

applied again. For example, it might attempt to add a column that was already added, or remove a column that was already deleted. (Bug #22202325, Bug #79265)

- Workbench did not recognize identifiers with a leading digit if it was preceded by a dot. (Bug #22193758, Bug #79247)

- After creating a table, editing the table in the same tab would yield an error after clicking **Apply**. (Bug #22178996, Bug #79199)

- Clicking **Apply** a second time while performing an **Alter Table** operation would emit a "No Changes Detected" message, despite changes being present. (Bug #22169405, Bug #79164)

- The MySQL connection search field's background and text were both white, making it difficult to decipher. (Bug #22168697, Bug #79159)

- On Windows 10, and with resolutions of 1366x768 and below, the default table editor window did not show the table columns.

  As a workaround, the output pane could be resized or hidden. (Bug #22168049, Bug #79160)

- The "BY" keyword is now supported. (Bug #22151204, Bug #79121)

- The MySQL Enterprise Backup binary can now be configured per MySQL connection, to match the correct version needed by the connected MySQL server. Before, only one MySQL Enterprise Backup binary could be used for all connections. (Bug #22143844, Bug #79108)

- Compiling Workbench now requires Connector/C++ 1.1.7 or higher, as this is the first Connector/C++ release that supports JSON. (Bug #22141269, Bug #79054)

- The **Error Logs** management tab showed a MySQL Firewall button within the community edition. (Bug #22139172, Bug #79082)

- On the **Server Logs** management tab, the **Copy** and **Copy Details** options were switched. (Bug #22139172, Bug #79082)

- Attempting to install MySQL Enterprise Firewall would fail with the following error: "Unhandled exception: type object 'FileUtils' has no attribute 'check_file_readable'".

  As a workaround, execute a `xyz_install_firewall.sql` script that is bundled with MySQL Server. (Bug #22138989, Bug #79083)

- The **Alter Table** tool did not function with partitioned tables. (Bug #22135172, Bug #79070)

- The preference windows could not be resized. (Bug #22121297, Bug #79022)

- The USE statement result was not preserved in the SQL editor, which sometimes led to unknown errors when executing multiple statements. (Bug #22106190, Bug #78985)

- After placing a new table on an EER diagram, and double-clicking on the new table, the column fields were hidden. (Bug #22090203, Bug #78931)

- "ALTER PROCEDURE" changes were not detected by Workbench 6.3.5.

  As a workaround, the SQL Editor could be used to decorate the "CREATE PROCEDURE" code with delimiters. (Bug #22084956, Bug #78924)

- Workbench 6.3.5 would fail to export MySQL Server 5.6 and below, due to changes present in MySQL Server 5.7.

  As a workaround, a MySQL 5.6 version of `mysqldump` could be used. (Bug #22060729)

- The modeling table editor did not list the JSON data type in the dropdown select list, nor did it accept it manually. Importing a JSON column from a live database worked, but creating/assigning the JSON type in the editor was not possible. (Bug #22060699, Bug #22116098, Bug #79012)

- Reverse Engineering a database that contained JSON data (columns) failed, and crashed Workbench. (Bug #22053512)

- The **Validate** option was missing from the JSON field value's editor. (Bug #22052957)

- The Grid and Tree tabs would interfere with each other in the JSON Data Field Value Editor. (Bug #22052934)

- When using a remote connection, clicking the wrench icon next to a table name in the object browser would cause a crash. (Bug #22052557)

- From **Models**, **Create EER Model From Script**, importing a script would close the diagram instead of creating the model. (Bug #22048218)

- The MySQL Firewall installation wizard did not function. (Bug #22047561)

- The data migration wizard did not always function with BLOB data. (Bug #22046141)

- On Linux, with the commercial edition, the **Online Backup** log window's status log would not always update. (Bug #22027353)

- Attempting to add comments to stored procedures would fail with invalid syntax errors. (Bug #21941439, Bug #78683)

- The **Action Output** auto-scrolling failed to function after clicking inside the action log. (Bug #21930774, Bug #78648)

- The **Table Data Import** wizard failed to import large integers. They are now properly detected and assigned as `BIGINT`. (Bug #21896324)

- Whitespace is now trimmed from the MySQL Connection fields. (Bug #21865018, Bug #78471)

- With MySQL Server 5.7.8+ connections, the login name (username) can now be 32 characters in length. (Bug #21848065)

- The **Copy All Field Names** action would insert extra (repeated) column names. (Bug #21760124, Bug #78280)

- The SYS Schema could not be installed using a remote MySQL Server connection. (Bug #21661235)

- The `SHOW GRANTS` statement would be seen as invalid syntax. (Bug #21520434, Bug #77868)

- Generated columns(a feature added in MySQL 5.7) were not fully supported in the SQL editor, Table Editor, nor Modeling interface. (Bug #21505058, Bug #77837)

- The bundled OpenSSL library was upgraded to version 1.0.1p. (Bug #21438134)

- When adding stored procedures to a Routine Group, Workbench would sometimes append "_SYNTAX_ERROR" to the procedures. (Bug #21174637, Bug #77197)

- Several behavioral improvements were made to Workbench for when the MySQL Server connection is down. (Bug #21131790)

- SQL auto-completion would sometimes show unavailable columns. (Bug #21046868, Bug #76954)

- MySQL Workbench sometimes wrongly detected a syntax error when creating stored procedures in the SQL editor. (Bug #21031036, Bug #76934)

- Including a model (via **File**, **Include Model**) generated a window that was too small. (Bug #20956593)

- When editing a MySQL Server connection, pressing **Enter** under **Server Connection**, **Advanced**, **Others**, could shutdown Workbench. (Bug #20930014)

- On Windows, the **Vertical Output** tab failed to close. (Bug #20834266, Bug #76590)

- The `performance_schema_max_sql_text_length` and `max_digest_length` options were not displayed under the **Options File** tab. These variables dictate how queries under **Statement Analysis** are truncated. (Bug #20671061, Bug #76223)

- Resizing the **New Job** window in the **Online Backup** management tool would show a floating text box. (Bug #20631601, Bug #76110)

- On Fedora 21, **Locate Log Files** and **Show Log File** did not function due to an underlining Fedora 21 glib issue. (Bug #20609499, Bug #76066)

- On OS X with multiple displays present, the SQL auto-complete box would always show on the main display, even if Workbench was on the secondary display. The underlining Scintilla library was updated to solve this problem. (Bug #20341650, Bug #75460)

- Workbench would report SQL syntax errors for subqueries using multiple parentheses. (Bug #20330840, Bug #75462)

- Saving a model file with non-ASCII characters in the name would crash Workbench, and renaming a file using non-ASCII characters would rename the file using the .bak file extension. (Bug #20328493, Bug #75455)

- On Windows, the MySQL Workbench application is now associated to files with the `.sql` extension. (Bug #20326058, Bug #75453)

- Scheduled incremental backups would not function if the file path contained spaces. (Bug #20254772, Bug #75092)

- The **Check for Update** functionality did not detect newer Workbench versions for the commercial edition. (Bug #20167571, Bug #75132)

- With incremental backups, TTS usage was attempted with the **Use Transportable Tablespaces** option disabled. This resulted in an error. (Bug #20098272)

- Workbench's **Alter Table** functionality did not detect changes to fractional seconds. (Bug #19774377, Bug #74254)

- The **Forward Engineering** SQL output sometimes contained a BOM character. (Bug #19495516, Bug #73693)

Changes in MySQL Workbench 6.3.5 (2015-10-21, General Availability)

Known limitations:

- The new JSON editor is in an early state, and has a number of usability issues

- The table editor in a MySQL Workbench model does not allow the JSON data type. The table editor in the SQL Editor is not affected

- Model synchronization fails to function for tables with JSON columns

- The MySQL migration wizard cannot function with MySQL Server 5.7 for the source database, although MySQL Server 5.7 can be used for the target database.

- The bundled `mysqldump` tool fails to create dumps for MySQL Server 5.6 and earlier. To work around this limitation, set an explicit MySQL Server 5.6 `mysqldump` binary in the Workbench preferences under **Administration -> Data Export and Import -> Path to mysqldump tool**.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- A JSON viewer/editor was added in the field editor for result sets.

Bugs Fixed

- Executing **Create EER Model from Database** with **Place imported objects on a diagram** enabled would not always create the diagram. (Bug #22046248)

- On OS X 10.11, a newly opened EER diagram was not always viewable. A workaround was to either scroll or resize the EER diagram window. (Bug #22016760, Bug #78829)

- MySQL Workbench commercial edition now checks MySQL Enterprise Backup compatibility with MySQL 5.7 when using the **Online Backup** and **Restore** features. MySQL Enterprise Backup 4.0 and above is required with MySQL 5.7 and above. (Bug #21972677)

- On Windows, connecting via RDP to Workbench with a model would cause MySQL Workbench to crash. (Bug #21951171)

- On Windows with the firewall enabled, either editing a current user or creating a new user from the **Users and Privileges** tab would crash after clicking **Apply**. (Bug #21866290)

- Under **Server Status**, the reported **Disk Space in Data Dir** was limited to "1.00 TB", even if more space was available. (Bug #21833382)

- The SQL parser and grammar was updated; some queries would emit bogus errors, although they would execute with success. For example, queries with syntax such as "ALTER TABLE foo MODIFY COLUMN bar VARCHAR(10)" and "ALTER TABLE foo MODIFY bar INT NOT NULL". (Bug #21776051, Bug #20116935, Bug #77549, Bug #75048)

- On Windows, creating blocked statements (such as BEGIN...END) with auto-complete activated would cause MySQL Workbench to emit an unhandled exception (Bug #21774642, Bug #77488)

- On Linux, dragging a routine to a **Routine Group** did not function. (Bug #21770594, Bug #21889801, Bug #78299)

- Opening **Open Value in Viewer** to view the contents of BLOB and string types would sometimes crash MySQL Workbench. (Bug #21746985, Bug #75516)

- An **SSH timeout** option was added, under the **Others** preferences panel. (Bug #21690190)

- After opening a model file, after choosing **Preferences**, **Others**, checking (enabling) **Allow more than one instance of MySQL Workbench to run**, clicking **OK** would crash MySQL Workbench. (Bug #21666322)

- On Windows 10, MySQL Workbench failed with an error similar to "The type initializer for 'HtmlRenderer.Utils.FontsUtils' threw an exception". The `HtmlRenderer.dll` DLL was updated with a fix. (Bug #21642135, Bug #75344)

- Clicking **Cancel** when using the **Table Import** wizard would emit an error, although the import process continued. (Bug #21610117, Bug #78013)

- On OS X, the **Rescan for local MySQL instances** operation was not discovering local MySQL server connections. (Bug #21605220, Bug #77989)

- On Windows, and when connecting to MySQL Server 5.7.8 or higher, the **Server Logs** did not properly display the MySQL error logs, and it instead referred to a file named "stderr" that could not be found. This is because the error log is now written to the Windows Event Log. (Bug #21566823, Bug #77958)

- Executing **Control + W** to close all tabs, and then executing it again (with all tabs already closed), would emit a Null Pointer Exception. (Bug #21543454, Bug #77906)

- When creating new user privileges with access to **All Schemas** (via the *%* wildcard), the resulting user record in *mysql.db* was created with an asterisk (***) in *mysql.db.Host* and *mysql.db.Db* instead of using *%*, resulting in inability to connect to the database.

  As a workaround, you could have executed queries such as "UPDATE mysql.db SET Host='%', Db='%' WHERE User = 'MyNewUserName'; FLUSH PRIVILEGES;". (Bug #21529564, Bug #77865)

- Several grammar and spelling fixes were made in the GUI. (Bug #21526053)

- On OS X, integrated browser tabs would open but not close. (Bug #21497509)

- With MySQL not running, the MySQL Enterprise Backup **Restore** option would emit an unhandled exception, and it was unable to execute restore operations. (Bug #21496671, Bug #21619525)

- Expanding the schema tree for a database that contained a large number of tables, such as 20,000 tables, would cause a crash. (Bug #21490728, Bug #77801)

- The **Table Data Import** wizard failed to import data into an existing table when a DECIMAL column was used. (Bug #21461807, Bug #77739)

- Importing a DBDesigner4 schema would sometimes fail, and cause a crash. (Bug #21429693, Bug #77688)

- After opening a model's EER diagram for the first time, opening the **Preferences** menu would immediately cause MySQL Workbench to crash, due to some parts being uninitialized. (Bug #21395988, Bug #77662)

- When copying elements from one diagram to another, the style attributes were not copied, although the position of the elements were retained. (Bug #21384159, Bug #77640)

- The **Performance** and **Firewall** options were missing from the **Server** menu in the commercial edition. (Bug #21379250)

- The *Unlock the Audit log* procedure in the **Audit Inspector** would sometimes fail due to malformed XML. (Bug #21379224)

- Sometimes **Startup / Shutdown** management would ignore the system's profile and use default commands to start and stop the MySQL server. (Bug #21357438)

- On Linux, with the commercial edition, MySQL Workbench did not delete the cron job after the scheduled online backup was deleted. (Bug #21312652)

- On Ubuntu 15.04, MySQL Workbench threw a lot of *GLib-GObject* warnings. (Bug #21292286, Bug #77420)

- Forward Engineering would sometimes append "COMMENT ''" to field and index definitions. (Bug #21278452, Bug #21429688, Bug #21390162, Bug #77400, Bug #77685, Bug #77644)

- Making an SSH connection to a server where the fingerprint was not in the `known_hosts` file, clicking **Test Connection** under **Remote Management** would freeze MySQL Workbench. (Bug #21264620)

References: This issue is a regression of: Bug #21122128.

- The **Data Export** wizard failed to include date information when the JSON export type was used instead of CSV. (Bug #21259942, Bug #77364)

- With the commercial edition, setting up a new **Online Backup** profile would display an "Error Configuring Backup" error after entering in details, such as the MySQL Enterprise Backup executable path and backup home directory, and then clicking **Ok**. The settings would not save due to UTF-8 conversion failures in the `mysqlwbmeb.py` helper file. (Bug #21255978)

- When importing JSON, the **Table Data Import** wizard would fail at the **Configure Import Settings** step, and emit "Can't analyze file, please try to change encoding type...". (Bug #21252834, Bug #77335)

- After exporting a database with `no-create-info` checked, the import operation would fail to import it. (Bug #21250323, Bug #71393)

- In the **Table Data Import** wizard, the **Field Separator** dropdown in the **Configure Import Settings** operation did not list the "," (comma) character. (Bug #21240249)

- From the **Table Data Import** wizard, switching the line endings from the **Configure Import Settings** screen, and then switching it back, would cause the table columns to be displayed on a single line. (Bug #21240215)

- Improved integer and number recognition for data import/export with CSV files. (Bug #21240092)

- In the commercial edition, the **Audit Log Inspector** logo was broken. (Bug #21236152, Bug #77302)

- With the commercial edition, clicking **Firewall** after stopping the MySQL Server would emit the following unhandled exception: "'NoneType' object has no attribute 'find'". (Bug #21236051, Bug #77304)

- The **validate_password** plugin options are no longer visible in the **Options File** editor when the plugin is not enabled. (Bug #21187942)

- With MySQL server not running, and with a MySQL Enterprise Backup configuration file missing, attempting to open either the **Online Backup** or **Restore** tabs would throw an unhandled exception. (Bug #21161660)

- On Fedora, executing **Help**, **Locate Log File / Show Log File** would fail to function, due to an underlining problem with glib 2.44. For additional information, see Fedora bug #1175719. (Bug #21113811)

- In the Audit Inspector, executing **Select** or **Deselect** from the **Show Columns** context-menu would fail to function. (Bug #20956668)

- Several buttons and text boxes were not always located in the correct location. (Bug #20929972)

- On OS X, the **Shift + Alt + Arrow** combination would select individual characters instead of whole words. (Bug #20797766, Bug #76526)

  References: This issue is a regression of: Bug #50085.

- When executing **Start Command Line Client**, entering the incorrect MySQL password would immediately close the Window. Now, an error is displayed before the window is closed. (Bug #20737515)

- The `VARBINARY` type could not be edited in the results view grid. Clicking **Apply** to execute the change would emit an error. (Bug #20735501, Bug #76386)

- On Windows, SSH connections would fail when connecting to a server with pageant running. (Bug #20652700, Bug #76168)

- The MySQL server connection would sometimes timeout (error 10060) while processing the result set when combined with a large number or rows (e.g., 10,000) and an SSH tunneled MySQL connection. (Bug #20639995, Bug #74557)

- The **Action Output** query tooltip would sometimes display information about the wrong query. (Bug #20535654, Bug #75877)

- On Windows, a scheduled incremental MySQL Enterprise Backup backup job would always choose the latest backup as the base for the backup instead of using the last successful backup. This meant that after a failed backup, future incremental backups would fail until the next successful full backup. (Bug #20533780)

- The **Catalog Tree** would truncate table names at around 20 characters. (Bug #20122059, Bug #74995)

- The **Table Inspector** could fail if the schema name contained a dash. (Bug #20007660, Bug #74788)

- The bundled SSH library (paramiko) was not capable of supporting the key exchange algorithm (ecdsa) added in OpenSSL 6.7. (Bug #20003201, Bug #74658)

- When a connection to a MySQL server instance through a SSH Tunnel, MySQL Workbench failed to recognize the server fingerprints stored in the `.ssh/known_hosts` file, and claimed that the server authenticity could not be established. Clicking **Continue** also caused the current fingerprint to be removed, after which MySQL Workbench froze.

  Also, due to a bug in the underlining paramiko library, if a server supported ECDSA and RSA, paramiko would first try to use RSA and, as such, not use ECDSA. For information about this bug, see https://github.com/paramiko/paramiko/issues/243. (Bug #19714350, Bug #74160)

- The import and export process did not always function with network folders. (Bug #19443451, Bug #73575)

Changes in MySQL Workbench 6.3.4 (2015-06-15, General Availability)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- Fabric 1.5.x support was added. (Bug #19915013)

- Added MySQL Enterprise Firewall support. For additional information, see MySQL Enterprise Firewall Interface.

- On Windows, SQL files are now automatically associated to MySQL Workbench after the installation.

Bugs Fixed

- On OS X 10.11 (El Capitan), clicking **Close** after synchronizing a model would cause a crash. (Bug #21978855, Bug #78750)

- MySQL Enterprise Firewall support now checks and requires the commercial edition of MySQL server 5.6.24 and above. (Bug #21149929)

- The cursor focus would exit from the SQL editor after executing a query with the keyboard shortcut. (Bug #21141309, Bug #75733)

- Testing an SSH connection to a host with an unknown SSH fingerprint would freeze MySQL Workbench. (Bug #21122128)

- When selecting objects in the Forward Engineering filter, the **<** and **>** buttons were not always present. (Bug #21098504)

- On Linux, the **Audit Inspector** section was missing from the Enterprise management tab. (Bug #21098445)

- Opening a MySQL connection while the **Open SQL Script** dialog was open would crash MySQL Workbench. (Bug #21085623)

- On Linux, MySQL Workbench would not connect to a MySQL server unless `gnome-keyring` was installed, even if `gnome-keyring` was not used by the user. A workaround was to set **WB_NO_GNOME_KEYRING** to true. (Bug #21065455, Bug #76981)

- Executing the **Table Data Import** wizard with CSV data would sometimes fail when using a remote MySQL connection. (Bug #21065442, Bug #76991)

- When migrating from Microsoft Access, the **Data Transfer Setup** step would fail and throw the following exception: "Error - Unhandled exception: unknown attribute 'getOS'". In other words, the tables were created but the data was not migrated to MySQL. (Bug #21025943, Bug #76926, Bug #76647)

- On OS X, the **Edit Type Mappings for Generic Migration** wizard failed to function. (Bug #20986654, Bug #76896)

- The **Table Export wizard** operation would suggest the `.csv` file extension when JSON was selected as the file type. (Bug #20956744)

- On Linux, adding a new user to a model would display the model user's password. The password is now hidden by default, and a toggle button was added to view it. (Bug #20956578)

- An object reference error was emitted when adding a second role for a new user under the **Schema Privileges** modeling tab. (Bug #20956538)

- On the Models **SQL Scripts** tab, the **Apply Changes** and **Discard Changes** remained inactive after the SQL script was edited. (Bug #20930147)

- On Windows, the object labels were overlapping on the **Physical Schemas** section of the **Model Overview** page. (Bug #20924697)

- Executing a query containing a large number of columns (70+) would freeze MySQL Workbench. (Bug #20921329, Bug #76770)

- On Windows, attempting to open a MySQL connection from the home page would sometimes hang. (Bug #20917040)

- Clicking **Cancel** after clicking **[x]** to close MySQL Workbench would cause the home page tab to disappear. (Bug #20910092, Bug #76747)

- On Windows, attempting to connect to a MySQL server that only had named pipes enabled would fail and emit the following exception: "Invalid for this platform protocol requested(MYSQL_PROTOCOL_SOCKET)". (Bug #20885645, Bug #76692)

- Executing (applying) an Alter Table operation after deleting a table comment would not execute the query, as the generated SQL contained "COMMENT =;" instead of "COMMENT = '';". (Bug #20836140, Bug #76578)

- The bundled MySQL client was upgraded to MySQL 5.6.24. (Bug #20747709)

- Clicking a MySQL connection tile on the home page would not open the MySQL connection if the tile was not on the first screen of the home page. (Bug #20742205, Bug #76391)

- In the EER diagram editor, adding non-English characters, including high Unicode characters, into table's VARCHAR field would assume the text was too large to fit. (Bug #20732306, Bug #76380)

- After adding a TCP/IP connection over SSH to an unknown host, MySQL Workbench would hang after accepting the identity as a known hosts. (Bug #20692926, Bug #76260)

- The **Retry** functionality would sometimes fail to continue a database migration after the source database server was restarted. (Bug #20577169, Bug #75985)

- On Linux, if a query returned more than 999 rows, the row number would always show as "..." instead of the row number in the results view. (Bug #20414127, Bug #75621)

- After completing a successful **Import from Dump Project Folder** operation, clicking **Import again** would fail with ERROR 1046. (Bug #20365353, Bug #75514)

- Left-clicking on the Visual Explain overview thumbnail would cause MySQL Workbench to crash. (Bug #20362922, Bug #75508)

- The **Option File** and **Status and System Variable** sections were missing information for the Audit Log plugin. (Bug #20166897, Bug #75130)

- Performance improvements were made to the results view grid. (Bug #20024729, Bug #74836)

- MySQL Workbench did not account for the variable change of *validate_password_policy_number* to *validate_password_policy* in MySQL 5.6.10. (Bug #19881314)

- Dropped Fedora 20 support, and added Fedora 22 support.

Changes in MySQL Workbench 6.3.3 (2015-04-23, General Availability)

Bugs Fixed

- On OS X, after opening the **Table Data Export** feature from schema sidebar in the SQL Editor, the wizard's window was not wide enough to display the wizard's controls. (Bug #20822603)

- Executing a partial MySQL Enterprise Backup job and then clicking **Configure Job** would emit an unhandled exception for RadioButton_set_active. (Bug #20734865)

- Copying SQL statements from the history panel would crash MySQL Workbench. (Bug #20724034, Bug #76362)

- Right-clicking on an out-of-focus empty field under the *Inserts editor* in the EER modeling table editor would crash MySQL Workbench. (Bug #20692093, Bug #76278)

- On OS X, inserting a new row of data via the results grid would either crash MySQL Workbench after clicking **Apply**, or insert the rows along with additional empty NULL filled rows. (Bug #20681539, Bug #76245)

- The **Schema Transfer Wizard** would always report a failure, even when the operation succeeded. (Bug #20680466, Bug #75125)

- Triggers could not be edited after applying changes to a different trigger. Attempting to do this multiple times could also have caused MySQL Workbench to crash. (Bug #20678160, Bug #19916370, Bug #76234, Bug #74624)

- While creating or altering a table, the ENUM type handler would remove parentheses and quotes. For example, "enum('One','Two')" would convert to "ENUMOne, Two".

  Workaround: Review and correct the SQL before submitting the CREATE TABLE or ALTER TABLE. (Bug #20667788, Bug #76214)

- Stopping a MySQL server service immediately after installing MySQL Workbench would emit an "Unhandled exception: not a string" message.

  Workaround: restart MySQL Workbench. (Bug #20662285, Bug #76194)

- The trigger editor would fail to save data for triggers including the *BEGIN ... END* construct. It would also generate a "*GLib-GObject:ERROR:gsignal.c:756:emission_pop: code should not be reached*" error. (Bug #20655462, Bug #76082)

- The **StrictHostKeyChecking** and **UserKnownHostsFile** variables are now read from the SSH configuration file when using SSH for a MySQL connection.

  MySQL Workbench will attempt to load this configuration from the following locations: For Windows, `%APPDATA%\MySQL\Workbench\ssh\ssh_config` or `%APPDATA%\MySQL\Workbench\ssh\config`. For Linux and OS X, `~/.ssh/ssh_config` or `~/.ssh/config`. (Bug #20653285, Bug #75764)

- Connections to MySQL Server 5.7 and higher now use mysql_real_escape_string_quote instead of mysql_real_escape_string. (Bug #20637587)

- On Linux, the **>Check for updates** functionality reported a "Name or service not know" error when an Internet connection was not available, and now it emits "No network connection available." (Bug #20631579, Bug #76109)

- Checking an **Advanced Options** check box under **Performance Schema Setup** would generate an error. (Bug #20630030, Bug #76101)

- Executing the **Table Maintenance** action on a table after creating an event would fail with an "invalid column Comment for resultset" error. (Bug #20259610, Bug #75291)

- Data could not be imported into a result set when the results did not contain a Primary Key. The new import wizard does not have this limitation. (Bug #19881191, Bug #74514)

- On OS X, SSH tunneling would sometimes fail start. (Bug #11764879, Bug #57758)

Changes in MySQL Workbench 6.3.2 (2015-03-13, Release Candidate)

Bugs Fixed

- The icons for the data import and export features were reversed. (Bug #20645134, Bug #76143)

- Deleting a MySQL Enterprise Backup partial backup job would generate an unhandled exception. (Bug #20637715, Bug #76129)

- On Windows, table comments did not appear in the **Table Inspector**. (Bug #20330742, Bug #75459)

- While modeling, the tables were no longer being listed in alphabetical order. (Bug #20299714, Bug #75401)

- The Audit Log inspector no longer requires sudo access to read audit log files, and will only prompt for sudo rights if the audit log is not readable by the MySQL Workbench user. (Bug #20255637, Bug #75288)

- The MySQL configuration file editor was missing the `innodb_buffer_pool_size` option. (Bug #20168131, Bug #75131)

- While modeling, the link between two tables could not be deleted. (Bug #20123214, Bug #75064)

- The `FROM` keyword was not listed in the code completion popup. (Bug #18899887, Bug #72862)

Changes in MySQL Workbench 6.3.1 (2015-03-05, Beta)

This is the first public release of the 6.3.x branch. It includes fixes from the 6.2.x branch up to 6.2.5. See the MySQL Workbench 6.3.0 release notes for a list of new 6.3.x features.

Functionality Added or Changed

- This is the first public release of the 6.3.x branch. For additional details about MySQL Workbench 6.3, see the 6.3.0 changelog and the What's New in 6.3 guide.

Changes in MySQL Workbench 6.3.0 (Not released, Internal)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- Platforms support changes: Fedora 21 and Ubuntu 14.10 support was added, while Ubuntu 12.10 support was dropped.

- 64-bit architecture support:

  For OS X, the build architecture changed from 32-bit to 64-bit, meaning 32-bit binaries are no longer built.

  For Windows, both 32-bit and 64-bit binaries are built, but users are encouraged to use the 64-bit builds. 32-bit support is deprecated.

- Fabric 1.5 is now supported. Older versions of Fabric are no longer supported due to incompatible protocol changes.

- A new "fast migration" option was added to the migration wizard. This is another way to transfer data from one MySQL server to another while performing a migration, and it complements the existing solutions. The premise is to use a generated script on the source server to create a dump that you move to the target machine to perform the import there. This avoids the need to traffic all data through MySQL Workbench, or to have a permanent network connection between the servers. Instead, the dump and restore is performed at maximum speed by using the LOAD DATA call for the MySQL import. The migration wizard automatically creates all necessary scripts for all supported platforms and servers. It creates a self-contained Zip file that must be copied to the target server. You unzip it and execute the provided script to perform the data import.

- A new SSL certificate generation wizard was added. This new wizard helps create proper SSL certificates for both MySQL clients and MySQL servers. Connections in MySQL Workbench are updated with the certificates by the wizard. This wizard requires OpenSSL to create the certificates.

- A new table data import/export wizard was added. This feature enhances the current CSV import and export feature found in the SQL editor's result set viewer. It supports import and export of CSV and JSON files, and allows a more flexible configuration (separators, column selection, encoding selection,

and more). This new wizard does not require an executed statement on a table for a result set to be operated on, as it can now work directly on tables.

- Code completion support was improved. Code suggestions are more precise and work with additional statement types, when before only SELECT statements were fully supported. Additional database features are also supported including table engines, log file groups, table spaces, character sets, and more.

- The **Test Connection** panel was restructured. The Host, Port, User, and SSL entries are now listed separately on their own lines. Before, the text "SSL not enabled" confused some users as being a possible error.

Bugs Fixed

- On Linux, the **Saved password in keychain** functionality for a MySQL connection would not always save correctly. A possible workaround was to execute "export GNOME_KEYRING_CONTROL=1" before starting MySQL Workbench. (Bug #20074563, Bug #74771)

- When clicking the **Replace and Find** button in the SQL editor without selected text, a replace-string was inserted at the current cursor position before the editor highlighted the next match. If instead text was selected, the selected text was also replaced with the replace-string even if it did not match the found-string.

  Now, selected text does not affect the "Replace and Find" functionality. (Bug #19957424, Bug #76499)

- On Linux, the query result view did not populate with libglib version 2.42 and above. This affected Linux distributions that recently upgraded libglib, such as Ubuntu 14.10 and OpenSUSE 13.2.

  To solve this, additional builds were added. For example, Ubuntu 14.10 builds are now available as Ubuntu 14.04 builds fail on Ubuntu 14.10. (Bug #19831054, Bug #74147)

Changes in MySQL Workbench 6.2

For detailed information about the new features, see What's New in MySQL Workbench 6.2.

Prerequisite change: On Windows, MySQL Workbench now requires the Microsoft Visual C++ 2013 Redistributable Package, as previous MySQL Workbench versions used the Microsoft Visual C++ 2010 Redistributable Package.

Changes in MySQL Workbench 6.2.5 (2015-03-03, General Availability)

Bugs Fixed

- The **Options File** editor would display the equals sign character ("=") as a space (" ") when the equals sign was used in an option's value. (Bug #20404658)

- The bundled MySQL client was upgraded to MySQL 5.6.23. (Bug #20375565)

- The Fedora RPM would not install on Fedora 21 due to missing ctemplate dependencies. This is due to changes introduced in ctemplate version 0.97, where the "ReloadIfChanged" function was replaced with "ReloadAllIfChanged". (Bug #20323716, Bug #75421)

- On Linux with FIPS (Federal Information Processing Standard) enabled, MySQL Workbench would fail to connect and emit a "Cannot start SSH tunnel manager" error. Creating local connections on FIPS enabled systems is now functional, although SSH tunneling (for remote connections) remains unavailable due to limitations with the underlining paramiko library. (Bug #20236376, Bug #75262)

- On Windows, MySQL Workbench failed to schedule weekly or monthly MySQL Enterprise Backup backups.

  As a workaround, change "/ST " to " /ST " on lines 754 and 757 of `mysqlwbmeb.vbs`. (Bug #20174892)

- Executing **Data Export** with **Export to Dump Project Folder** enabled would fail and emit *unhandled exception: 'builtin_function_or_method' object has no attribute '__getitem__';*. (Bug #20168180, Bug #20542086, Bug #75136, Bug #75845)

- The Linux RPM builds failed to check for the *libzip* and *libtinyxml* dependencies, and the installation process would continue when the system did not have either of them installed. (Bug #20128947, Bug #75012)

- The model synchronization wizard would produce an incorrect synchronization SQL script if table or column mappings were modified. The generated script did not contain all of these modifications. (Bug #20128561, Bug #74878)

- The **Connection Group** folders would not properly display all connections when 40+ connections were stored in a single folder. (Bug #20119383, Bug #74763)

- On Linux, the action buttons were hidden after clicking **Next** from the initial **Forward Engineer** wizard menu.

  As a workaround, the window could be resized by dragging the bottom right corner, or by double clicking the top of the window to resize the window. (Bug #20091734, Bug #74983)

- Executing **Data Export** against multiple databases with the **Export to Dump Project Folder** option enabled would fail and generate an unhandled exception; "Error Unhandled exception: 'builtin_function_or_method' object has no attribute '__getitem__'".

  As a workaround, an export with the **Export to self-contained file** option functioned properly. (Bug #20085036, Bug #74967)

- On Linux, the **Saved password in keychain** functionality for a MySQL connection would not always save correctly. A possible workaround was to execute "export GNOME_KEYRING_CONTROL=1" before starting MySQL Workbench. (Bug #20074563, Bug #74771)

- After editing a trigger once, future changes were not seen. Other triggers were no longer visible until the table was closed and reopened.

  As a workaround; after editing a trigger, click **Apply** from the "Select an existing trigger" screen, click **Apply** again, then click on the trigger name for expected behavior. (Bug #20061687)

- Stability improvements were made to the modeling file saving and loading mechanisms. (Bug #20041632, Bug #74884)

- On Linux and OS X, creating a MySQL Enterprise Backup backup job with scheduling enabled would fail to function. (Bug #20034934, Bug #74872)

- A typo was fixed in the generated MySQL Workbench log file, the word "where" was changed to "were". (Bug #20016911, Bug #74784)

- When clicking the **Replace and Find** button in the SQL editor without selected text, a replace-string was inserted at the current cursor position before the editor highlighted the next match. If instead text was selected, the selected text was also replaced with the replace-string even if it did not match the found-string.

  Now, selected text does not affect the "Replace and Find" functionality. (Bug #19957424, Bug #76499)

- On Linux, the query result view did not populate with libglib version 2.42 and above. This affected Linux distributions that recently upgraded libglib, such as Ubuntu 14.10 and OpenSUSE 13.2.

  To solve this, additional builds were added. For example, Ubuntu 14.10 builds are now available as Ubuntu 14.04 builds fail on Ubuntu 14.10. (Bug #19831054, Bug #74147)

- MySQL Workbench did not show the index type for spatial indexes. (Bug #19802579, Bug #74332)

- The **Synchronize Model** wizard would fail on forward engineered tables that had hash partitioning enabled and then disabled. It assumed that partitioning was still enabled. (Bug #19515501, Bug #72909)

- Opening a model from the operating system's file explorer (and not from within MySQL Workbench itself) would add duplicate entries to each table's context menu in the schema explorer. (Bug #19313268, Bug #73363)

- Attempts to install the **SYS** performance helper schema with a "Local Socket/Pipe" enabled MySQL connection would fail, and do so without reporting an error. (Bug #19313081, Bug #73421)

- Under **User Accounts**, attempting to change the password for the default 'root'@'::1' user would fail and with *"Invalid host specification: The host specification "::1" is not valid. Please correct it and try again."*. (Bug #19313045, Bug #73420)

- The measurement units used by the performance reports were sometimes incorrect. (Bug #19273555, Bug #73344)

- The results grid rendering functionality was improved. Before, some queries took an unreasonable amount of time to display the results. (Bug #18952956, Bug #72946)

- Clicking **Revert** after adding a trigger under the **Alter Table**'s **Triggers** tab would fail to remove the trigger name from the trigger list, although it did delete the trigger. (Bug #18492291)

- The **Reset saved passwords** functionality did not always reset (delete) saved passwords in the vault. (Bug #18492237)

- Migrating from SQL Server 2005 to MySQL would emit "copytable: Invalid timestamp literal detected" errors if the source database contained a DATETIME column with one or more NULL values. (Bug #18117211, Bug #71350)

- The buttons after executing "Data Export" or "Data Import/Restore" operations was changed from **Start Import** / **Start Export** to **Import Again** / **Export Again**. (Bug #17665484)

- Due to "result grid" size limitations (e.g., 64k with GTK on Linux), the text there is truncated at some point. Now, an error is generated if the entered text will be truncated.

  To enter long text using the GUI, click **Open Value in Editor** from a fields context menu to open an editor window. (Bug #14383416, Bug #66031)

- Importing a DBDesigner 4 model containing INSERT statements could crash MySQL Workbench. (Bug #12949941, Bug #62317)

- The DBDoc **Model Reporting** window was undersized. (Bug #12937567)

- Pasting a "Start of Heading" (SOH) control character into the SQL editor could cause MySQL Workbench, and potentially the system, to crash. (Bug #74593, Bug #19899245)

- On Windows, closing MySQL Workbench after opening the SQL editor would cause a MySQL Workbench process to hang (remain active).

  On Linux and OS X, this instead delayed the MySQL Workbench shutdown for several extra seconds.

Changes in MySQL Workbench 6.2.4 (2014-11-20, General Availability)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- A new advanced tab was added to the MySQL Enterprise Backup profile editor. These options are stored in the [mysqlbackup] section of the backup profile, which is used by the MySQL Enterprise Backup executable through the `--defaults-file` parameter. (Bug #19643172)

- A new preference was added that defines whether pressing **Tab** inserts tab characters or spaces. (Bug #19598375, Bug #73189)

- The EER diagram catalog browser now remembers view states on a per diagram basis. (Bug #19508483, Bug #72255)

- A new **Indentation** section was added to the "General Editors" preferences. Included are options to set the indentation width and tab width. (Bug #17455648, Bug #70148)

- Adding an SQL snippet now opens the snippet editor, when before it immediately added the snippet without a title or code review. (Bug #14724622, Bug #67085)

- A new preference was added that limits the number of automatically opened SQL result sets for SELECT queries, which defaults to 50. Reaching this limit emits a warning.

  Before, executing a large number of SELECT queries (about 800) at once would cause a fatal error after exceeding system CPU and memory limits. (Bug #12949811, Bug #62259)

- A new **Skip checking of Routine Definer** option was added to the **Catalog Diff Report** wizard. This improves functionality for stored procedures and functions. (Bug #11764775, Bug #13418623, Bug #57645, Bug #63175)

- Opening an SQL script no longer requires a MySQL connection. To do this, select **Open SQL Script** from the **File** navigation menu on the home page. (Bug #11757343, Bug #49377)

Bugs Fixed

- Inserting the locate() function inside another function would incorrectly report an SQL syntax error. (Bug #19856523, Bug #74439)

- Compiling MySQL Workbench would fail on Hurd, kFreeBSD, s390x, and ppc64el systems. (Bug #19806379, Bug #74241)

- Double-clicking on an object in the schema navigator (except for the schema name) now populates the SQL editor area with the object name. This restores previous behavior. (Bug #19788017, Bug #74299)

- Connections to remote hosts using the connection method "Standard TCP/IP over SSH" would fail with new versions (1.15+) of the paramiko library.

  A workaround was to downgrade the system's paramiko library. (Bug #19768621, Bug #74223)

- Stored procedures that were identified as having syntax errors could not be saved. (Bug #19767233, Bug #74237)

- MySQL Workbench generated incorrect UPDATE queries for tables without a Primary Key even where unique keys were present. (Bug #19711078, Bug #74140)

- After typing **Control + F** and clicking **Replace**, the entered text of the replace string was not fully visible. (Bug #19690226, Bug #74088)

- On Windows, "Beautify/reformat the SQL script" could cause MySQL Workbench to freeze. (Bug #19667130, Bug #74020)

- The **Find**'s **Previous** button would sometimes behave like the **Next** button. (Bug #19647189, Bug #73971)

- Under **Data Import/Restore**, the "Enable Cleartext Authentication Plugin" option did not always function. (Bug #19598678, Bug #72433)

- Under **Users and Privileges**, the text "Click the **Drop** button to completely remove the account" was changed to "Click the **Delete** button to completely remove the account". (Bug #19598511, Bug #73857)

- A new **Data Export** preference was added that makes the `CREATE DATABASE` and `USE` statements optional in the generated output. (Bug #19598433, Bug #72599)

- A new preference (check box) was added to optionally export triggers. (Bug #19598408, Bug #73718)

- On Linux, the [x] button to close an SQL editor tab was missing if the required font package was not present on the system. Now, an image is used instead. (Bug #19598393, Bug #70993)

- The SQL syntax checker would show errors for EXECUTE statements without the "using" keyword. (Bug #19560590, Bug #73804)

- A new `GTID_PURGED` option was added under "Advanced options" to the **Data Export** wizard. (Bug #19528673)

- There was a performance regression between 6.0 and 6.1/6.2 when switching diagram tabs, loading the model, and also adding new tables. The Catalog Tree was refactored for increased performance. (Bug #19524441, Bug #69184)

- Exporting an ALTER script using the **Synchronize with Any Source** wizard after making "Column Mapping" (table name) changes would incorrectly generate CHANGE COLUMN queries as "CHANGE COLUMN `newcolumnname` `newcolumnname`" instead of "CHANGE COLUMN `oldcolumnname` `newcolumnname`". (Bug #19500938, Bug #73644)

- Attempting to execute a query with one SQL editor tab while another SQL editor tab was causing a metadata lock would freeze MySQL Workbench. (Bug #19444247, Bug #73574)

- The **Auto-save scripts interval** preference did not function, as auto-save saved all connection and query tabs every 10 seconds regardless of this setting. (Bug #19201716, Bug #73178)

- Attempting to add multiple entries using the results view "Form Editor" would fail and generate an exception unless **Apply** was clicked after each individual entry. (Bug #19185746, Bug #73253)

- The **Dashboard** charts for **Client Connections** latest current value was always null, and the current, max, and limit values were overlapped. (Bug #18965879, Bug #72984)

- The **Server Status** page did not recognize the enabled Memcached and Semi-Sync replication features. The status light for these features did not change from red to green. The **System and Status Variables** page reported the correct values for these features. (Bug #18703315, Bug #72531)

- Custom user creation and MySQL Enterprise Backup was fixed to always function with a MySQL server started with the `skip_name_resolve` system variable enabled. (Bug #17924757)

- Clicking **Cancel** at the password prompt for a Navigator option, such as **System Status**, would emit an unhandled exception. (Bug #17651774)

- The **SQL CREATE Script for Selected Object** window under **Object Migration** in the migration wizard was narrow, and was missing a slider. (Bug #14823142, Bug #67189)

- Font selection and support was improved. Some fonts, such as Cyrillic fonts, were not displayed properly. (Bug #12951450, Bug #62328)

- When generating default INSERTs code for tables in modeling, columns that are specified NOT NULL will now replace NULL column values with the DEFAULT keyword. (Bug #11762839, Bug #55483)

Changes in MySQL Workbench 6.2.3 (2014-09-23, General Availability)

Bugs Fixed

- On Linux (64-bit only), clicking **Delete Row** on a result grid would cause a crash. (Bug #19598295, Bug #73879)

- Several issues were identified and fixed in the GRANT parsing logic for MySQL Enterprise Backup. Related unhandled exceptions are no longer generated. (Bug #19589202, Bug #72390)

- On Windows, the **Data Export** functionality was escaping the *$* symbol in table names, which resulted in `mysqldump` failing to find the table. (Bug #19553584)

- On Windows, using the key combination **Control + Shift + Z** after altering a view could cause a crash. (Bug #19543544, Bug #73496)

- The **Set field(s) to NULL** result field context-menu option did not function. (Bug #19499823, Bug #73079)

- The `SHOW SLAVE STATUS NONBLOCKING` syntax introduced in MySQL 5.7 is now supported. (Bug #18383851)

- In the SQL editor, code completion would freeze MySQL Workbench when used with a large (1000+ tables) database. (Bug #17457790, Bug #70338)

Changes in MySQL Workbench 6.2.2 (2014-09-05, Release Candidate)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The following SSL related changes were introduced:

  - The **Use SSL** option for SSL connection options was changed to a dropdown, where you can select one of: *No*, *If Available*, or *Required*.

  - If *Required* is selected, the connection will fail if a SSL connection cannot be enabled.

  - New MySQL connections default to *If available*.

  - The **Test Connection** button now shows whether SSL was enabled when the connection was opened.

  - The **Session Information** panel in the SQL Editor sidebar shows is SSL is enabled, and also the Cipher in use.

  (Bug #18547269)

- Indentation is now respected in the SQL and code editors, when before the current indention level would be forgotten. New lines now start at the previous indention level. (Bug #17354356, Bug #14666286, Bug #70138, Bug #66941)

- The tab key now inserts a tab character into the query editor, when before it inserted three spaces. (Bug #14499535, Bug #66382)

Bugs Fixed

- On OS X, the SQL auto-completion feature did not function for table or field names. (Bug #19563290, Bug #73805)

- Refreshing the query results grid after an external source modified a table would sometimes fail to yield the expected results, such as showing a bogus row containing NULL values. (Bug #19527620, Bug #73762)

- Executing **Execute (All or selection) to Text** on queries that SELECT from empty tables failed and generate an error similar to "Error during "Execute Query Into Text Output" error calling Python module function SQLIDEUtils.executeQueryAsText". (Bug #19490650, Bug #72611)

- Selecting a color from color picker on a table would generate an invalid color value. (Bug #19487822, Bug #73682)

- On Windows, the catalog treeview now has tooltips to show object names of any length. On Linux, this information is available from a new column. (Bug #19487798, Bug #73681)

- The **Commit results edits** and **Discard results Edits** options would sometimes be hidden from view. (Bug #19484760, Bug #71539)

- The document tab controls now block mouse movements when the button is down, as to prevent accidental window dragging. (Bug #19484086, Bug #72256)

- If a transaction was already open with auto-commit disabled, there was a dialog that prompted to commit the open transaction before applying the changes. That dialog was simplified to only offer **Apply** and **Cancel** options. This dialog still has no effect on the transaction for applying the result set itself.

  Also, the result set changes will no longer be committed if a transaction was already open when **Apply** is clicked. With auto-commit enabled, the old behavior of applying the change inside a new transaction is maintained. (Bug #19482785, Bug #73076)

- The SQL beautification feature would change "NOW()" to "NOW ()" (note the inserted space), which created an SQL syntax error. (Bug #19477485, Bug #73661)

- The server management functionality would sometimes fail with connections using SSH tunneling. (Bug #19447288, Bug #73580)

- Clicking the spatial view in the results tab could cause a crash. (Bug #19429414, Bug #19574103, Bug #73824)

- With the presence of char(0) (0x00) in data fields, exporting result sets to CSV would sometimes generate corrupt data. (Bug #19412388, Bug #73524)

- Several typos were fixed in the GUI descriptions, such as "Program Fiels" to "Program Files". (Bug #19397736, Bug #73510)

- When there were multiple result sets, then only one was shown in the output pane when using "Vertical Output" output type. (Bug #19344302, Bug #73452)

- The **Queries per Second** metric was renamed to **Selects per Second**, to avoid confusion. (Bug #19314885, Bug #70132)

- On OS X, changing database settings would cause a crash. (Bug #19313190, Bug #73416)

- On Linux, clicking the "Zoom out the diagram" icon in the Visual Explain interface would cause a crash. (Bug #19279674)

- Quickly clicking **Apply** twice after editing a result set entry would cause a crash. (Bug #19264864, Bug #73348)

- The `--script` parameter, which is meant to load an SQL script into a query editor, will now explicitly emit a warning when it is mistakenly used with a Python script. (Bug #19255337, Bug #73334)

- The `CHAR()` data type was added to the SQL and Model editors. (Bug #19206172, Bug #73282)

- After adding enough SQL statements in the SQL editor to require scrolling, and scrolling to the bottom statement and executing it, the SQL window would automatically scroll to the top statement. Now, the cursor position is preserved. (Bug #19194043, Bug #73262)

- The three columns widths under **Status and system variables** can now be resized. (Bug #19186598, Bug #73245)

- Under certain conditions, Visual Explain would only display the raw explain data. (Bug #19186177, Bug #73256)

- The form editor would only display up to 250 characters. (Bug #19176830, Bug #73234)

- The "column privileges" section in the Table Inspector contained an extra third column. (Bug #19166119, Bug #73221)

- Saving a query in the SQL editor would clear the undo history. (Bug #19153350, Bug #73188)

- When exporting a database, MySQL Workbench now checks and notifies the user when the bundled or configured `mysqldump` is older than the target MySQL version, and prompts the user to set **Path to mysqldump Tool** in MySQL Workbench to the appropriate version. (Bug #19127351, Bug #72312)

- Clicking **Help**, **Report a Bug** did not function. (Bug #19063645, Bug #73104)

- Clicking **Import** or **Export** from a Model's table properties **Inserts** tab did not function. (Bug #18974785, Bug #72733)

- The results grid columns only showed a small number of characters. (Bug #18966800, Bug #72967)

- The generated code from an EER diagram would sometimes add the Primary Key in the wrong order. (Bug #18945899, Bug #72920)

- On Linux, assigning a referenced foreign key could cause a crash. (Bug #18936194, Bug #72916)

- MySQL Workbench incorrectly reported that the current user did not have permission to execute a SELECT query that requested values from columns that the user was explicitly granted SELECT permission. (Bug #18932984, Bug #72905)

- New lines inside an SQL statement comment would truncate the comment at the new line. (Bug #18925569, Bug #72904)

- On OS X, executing a query would sometimes hide the results grid. (Bug #18922858, Bug #72897)

- Expanding the schema list in the object browser could take a long time to execute, depending on the number of procedures present. Now, mysql.proc is used to get procedure and function information,

with the previously used (and less efficient) `SHOW PROCEDURE STATUS` as a fallback option. (Bug #18906030)

- On Linux, the BLOB columns were not viewable in the query results editor. (Bug #18788268, Bug #72676)

- Migrating SQL Server 2005 tables with timestamps would not import the timestamp column data. (Bug #18764121, Bug #72650)

- Importing or exporting data records to/from a table to/from an external file would cause a crash. (Bug #18762702, Bug #72648)

- The bundled MySQL Workbench documentation was removed, and it was replaced with a link to the official online manual. (Bug #18734566)

- While executing the **Forward Engineering** wizard after renaming a schema, the routines and views were not exported when the **Omit Schema Qualifier** option was selected. (Bug #18719282)

- The object dialog tooltip remained viewable when an object was dragged. (Bug #18718988, Bug #72549)

- Corrupted tables were listed under the **Views** tab, instead of being listed under the **Tables** tab. (Bug #18621591, Bug #72380)

- The **Notifications** tab in the Scripting Shell was missing its panel title. (Bug #18548008, Bug #72299)

- The MySQL 5.7+ implementation of the server-side statement timeout syntax is now supported in the syntax checker, configuration editor, and error handler. Example syntax includes "SELECT `MAX_STATEMENT_TIME` = 1 * FROM SAKILA.actor". (Bug #18545802, WL #6936)

- In the schema inspector, the **Copy to Clipboard** and **Send to SQL Editor** context menu options did not function. (Bug #18540059, Bug #72282)

- Executing a model to database synchronization immediately after the model was forward engineered would show too many differences. (Bug #18492219)

- Migrating from Sybase ASE could generate an incorrect connection string. (Bug #18490804)

- Connections using SSH tunneling would sometimes die after a short idle period. (Bug #18454694, Bug #72105)

- The comment input box for a model view was too short. (Bug #18454388)

- The **Export Recordset** dialog was too wide. (Bug #18454356)

- The **DBdoc Model reporting** feature did not function. (Bug #18453959)

- On Linux, the left and right arrow keys now expand and collapse nodes in the schema (object) navigator tab. (Bug #18451434, Bug #72103)

- The performance dashboard tooltips would remain open and cover other GUI elements. (Bug #18445789)

- The **Previous** and **Next** buttons did not function after loading a large audit file in the **Audit Inspector**. (Bug #18427194)

- In the table inspector, the **Drop Index** button would be pushed off the screen (hidden) when the index name was too long. (Bug #18426804)

- When migrating from Microsoft SQL Server 2008 to MySQL 5.6+, copying a table with the column type DATETIME using milliseconds precision would only fill the target entry milliseconds as .000. (Bug #18412667, Bug #72060)

- Some options were listed twice in the **Relay Log** box in the **Replication** tab of the **Options File** window, options such as relay-log-index, relay-log-recovery, and relay-log-info-file. (Bug #18373619, Bug #71976)

- SSH authentication would sometimes fail when the password was not saved to the vault. (Bug #18149737, Bug #71504)

- The query tab names would be forgotten after closing MySQL Workbench, and these tab names are now preserved across sessions. (Bug #18131999, Bug #19492952, Bug #69234, Bug #71471)

- Workbench did not recognize ALTER ONLINE|OFFLINE TABLE syntax, a syntax removed in MySQL server 5.6. (Bug #18067770)

- On 64-bit operating systems, MySQL Workbench would display the incorrect default value for the "thread_stack" system variable. (Bug #17879238, Bug #71045)

- The "expanded" property in the **Property Editor** was ignored when opening an EER Diagram. All routine groups were expanded, regardless of the "expanded" setting. Expanded, manual sizing, and any other properties are now persistent. (Bug #17554059, Bug #70506)

- The `innodb_buffer_pool_size` option was listed twice under option file management. (Bug #17339642, Bug #70003)

- On Windows, the **Schema transfer wizard** background image was cropped. This background image was removed. (Bug #17300415)

- During a partial backup operation, under certain circumstances the desired schema would not be visible in the UI. (Bug #17300033)

- The migration wizard would not migrate PostgreSQL to MySQL server 5.7. (Bug #17075011)

- The "word wrap" state is now preserved across SQL tabs and MySQL Workbench sessions. (Bug #16505796, Bug #68693)

- Empty user names are no longer allowed. (Bug #16298174, Bug #68305)

- Closing an ERR Model would not release an appropriate amount of RAM. (Bug #14768662, Bug #67264)

- When the ALTER Table editor had changes committed and an error occurred, it would attempt to re-create the original object. However, that was not functioning correctly most of the time, so this feature was completely removed to avoid confusing error messages. (Bug #13640795)

- The syntax checker and parser now handles SQL_NO_CACHE and SQL_CACHE in subqueries. This is accepted as valid syntax for MySQL server versions less than or equal to 5.1. For higher versions, a syntax error is generated. (Bug #12711154, Bug #61668)

- On Windows, the dialog windows would appear under the Windows task bar. (Bug #12622572, Bug #61125)

- Draggable boxes were difficult to locate when the model view zoom was lowered. (Bug #11749682, Bug #39608)

- The migration wizard now sets "SQL_MODE=NO_AUTO_VALUE_ON_ZERO" before copying data, which causes auto_increment field values of 0 to be copied as 0. (Bug #11747050, Bug #30486)

Changes in MySQL Workbench 6.2.1 (2014-08-19, Beta)

See the MySQL Workbench 6.2.0 release notes for a list of new 6.2.x features.

Bugs Fixed

- Adding comments for a column in a model would sometimes generate special characters. (Bug #19351764, Bug #73462)

- The word "International" was written as "Iternational" in the **Administration** panel. (Bug #19240901, Bug #73315)

- Tables could not be clicked-and-dragged after closing any other EER diagram tab. (Bug #19058582, Bug #73090)

- After editing a table column and then returning focus to the diagram view, the table name field would incorrectly take the focus. (Bug #18688201, Bug #72496)

- The "show captions next to relationships" option would cause the captions to overlap. (Bug #18633273, Bug #72307)

- The automatic context help did not always function in the SQL editor. (Bug #18592483, Bug #72324)

- On Windows, the command line character limit affected the data export function for self-contained files, as a full list of tables was passed to the `mysqldump` utility but the character limit meant some tables were not exported. (Bug #18296838, Bug #71799)

- Sometimes a new MySQL Enterprise Backup 3.9.x partial backup failed. (Bug #17354393)

Changes in MySQL Workbench 6.2.0 (Not released, Internal)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The schema navigator now includes new overlay icons for common operations such as table data view, table edit, and table/schema inspector. (Bug #18621683, Bug #13813178, Bug #72384, Bug #64493)

- The `NONBLOCKING` modifier (`SHOW SLAVE STATUS NONBLOCKING`) in MySQL 5.7+ is now supported. (Bug #18383812, WL #6402)

- An option was added that converts SQL keywords to uppercase when using the SQL beautification tool. (Bug #18124415, Bug #71459)

- A new "Pin Tab" feature was added that saves (pins) result set tabs to the SQL Editor. To use, right-click on a result set menu and select **Pin Tab** from the context menu. (Bug #16171532, Bug #67364)

- Shared SQL snippets were added. They allow multiple users to share SQL code by storing the snippets in a shared MySQL instance. (Bug #13596578, Bug #64007)

- For Microsoft Windows, 64-bit binaries are now built to go along with the 32-bit versions. (Bug #12589701, Bug #61263)

- An option to include (attach) SQL scripts was added in the forward engineer and synchronization wizards. (Bug #11748756, Bug #37299)

- Visual Explain now allows you to "drill down" into large to very large explain plans.

- The result set panel now integrates Visual Explain, and offers an execution plan for all executed queries.

- Database modeling was updated to allow changes to the formatting of note objects, and attached SQL scripts can now be included in the forward engineering and synchronization scripts.

- The **Run SQL Script** command can now be executed on SQL scripts, without first loading the scripts.

- The result tabs can now be "pinned" for persistent data views.

- The improved results handling include better column auto-sizing and saved width preferences. The fonts can also be customized.

- The migration wizard now supports migration from Microsoft Access.

- MySQL Fabric cluster connectivity: Browse, view status, and connect to any MySQL instance in a Fabric Cluster.

- The **Metadata Locks** view shows the locked connections that are blocked or being waiting on.

- The MySQL 5.7 SQL syntax and configuration options are now supported.

- A new spatial data viewer that offers graphical views of result sets containing GEOMETRY data. This utilizes the GIS capabilities in MySQL 5.7+.

Bugs Fixed

- On OS X, closed query tabs could reopen after restarting MySQL Workbench. (Bug #19376105, Bug #73487)

- A clear warning was added that fully enabling all "Performance Schema" instrumentation options causes performance degradation. (Bug #18984148)

- The results grid **Filter Rows** box failed to filter out partial matches. (Bug #18974865, Bug #72214)

- When importing a CSV file, only the first line was displayed. (Bug #18849285, Bug #72768)

- A newly created SSH / TCP connection required MySQL Workbench to be restarted before it could be used with Enterprise features. (Bug #18673220)

- The refresh button on the results grid did not function. (Bug #18670542, Bug #72471)

- The log viewer did not take into account the log file changes in MySQL server 5.7.2+. (Bug #18632608)

- Column widths in the results view window would sometimes not fit, thus requiring the columns to be resized manually.

  In addition to the autofit function being fixed, adjusted column widths are now preserved. (Bug #18589588, Bug #14079636, Bug #72332, Bug #65223)

- Multiple trigger support in MySQL server 5.7+ was added. (Bug #18547239, WL #3253)

- The SQL parser was updated to reflect the SQL grammar changes in MySQL 5.7. (Bug #18545678, Bug #18545802)

- A failed WMI managed connection would not emit an error, and would instead report the connection as being valid. (Bug #18492248)

- Sort on numeric columns did not function properly. (Bug #18447936, Bug #72104)

- The text boxes in the "Object" and "Session" windows could be edited. (Bug #18445344)

- A specific error message was added for failed MySQL connections when the `max_user_connections` limit was reached. (Bug #18431229, Bug #72026)

- The mouseover tooltips in the Visual Explain window would sometimes hide unrelated content. (Bug #18251611, Bug #71711)

- A new configuration option was added to configure the font in the results view window. (Bug #17490024, Bug #70388)

- Models that were auto-saved could not be recovered. (Bug #17299758)

- The "precision" keyword was not considered valid in MySQL Workbench. The SQL editor, reverse engineering wizard, and table editor were updated to accept the "precision" keyword. (Bug #17169591, Bug #69754)

- Opening BLOB field data (such as an average sized image) in the Value Editor could take 10-40 seconds to load. (Bug #16715370, Bug #69049)

- In the scripting editor, the **Control + F** keyboard shortcut inserted an ACK character instead of loading the "Find and Replace" dialog. (Bug #14495634, Bug #66302)

- Reordering tabs could cause query execution in an unexpected tab. (Bug #14221754, Bug #65557)

- The **Control + S** keyboard shortcut would not save the Python file in the scripting shell. (Bug #14172988)

- Textual content would not wrap the text when resizing a text object. (Bug #12546783, Bug #61092)

- A new context menu item was added that adds all tables in the privileges role editor. (Bug #11763614, Bug #56346)

- A new button was added to select all privileges when assigning privileges to a role. (Bug #11763614, Bug #56346)

- On Microsoft Windows, the Microsoft visual C++ 2013 redistributable package is now used instead of the 2010 version.

- The Lua scripting language is no longer supported in the Scripting Shell. For additional information about Python support, see Extending Workbench.

Changes in MySQL Workbench 6.1

For detailed information about the new features, see What's New in MySQL Workbench 6.1.

Changes in MySQL Workbench 6.1.7 (2014-06-27, General Availability)

Bugs Fixed

- **Security Fix:** The linked OpenSSL library for MySQL Workbench Commercial 6.1.7 has been updated from version 1.0.1g to version 1.0.1h. Versions of OpenSSL prior to and including 1.0.1g are reported to be vulnerable to CVE-2014-0224.

  This change does not affect the Oracle-produced MySQL Community build of MySQL Workbench 6.1.7, which uses the yaSSL library instead.

- On Ubuntu Linux, the 32-bit build was discontinued. Ubuntu 32-bit users must now build from the source. (Bug #19124922, Bug #73140)

- Under certain conditions (with a subquery), Visual Explain would fail with the error "error calling Python module function SQLIDEQueryAnalysis.visualExplain", even when the tabular EXPLAIN was properly generated. (Bug #18997475, Bug #72725)

- The **Backup Recovery** process could fail and generate an unhandled exception titled "list indices must be integers, not NoneType" after clicking **Cancel**. General improvements were made to this functionality. (Bug #18925451)

- The Form Editor could generate an "Index was out of range" error after adding a new record and then clicking **Add Record**. (Bug #18891983, Bug #72844)

- The schema selection step of the migration wizard would not display the complete names of the schemas nor complete the migration process if the schema name contained a dot. (Bug #18844624, Bug #72757)

- On Ubuntu 14, the dependency check was updated to allow any of mysql-client, mysql-client-5.6 or mysql-community-client client libraries. Previously, the dependency check could fail. (Bug #18841046, Bug #72729)

- Sometimes MySQL Workbench would crash when connecting to a remote Linux host using SSH. (Bug #18817608, Bug #72486)

- The **Backup Restore** action would hang with a MySQL server running in a MySQL Sandbox environment that used MySQL Sandbox to start/stop the MySQL server. (Bug #18814560)

- Executing the following steps (in order) would generate an error: change layer name, change layer color, and then resize layer. (Bug #18760955, Bug #72647)

- With the **Move Model** tool enabled, dragging a model while hovering (and pausing) over a table would generate a tooltip that would not go away. (Bug #18718801, Bug #72555)

- For a new EER diagram, editing a text object after adding a different text object could cause MySQL Workbench to crash.

  A workaround was to close the new diagram and model, and then reopen the model and diagram. (Bug #18718784, Bug #72559)

- MySQL error code 1698 (ER_ACCESS_DENIED_NO_PASSWORD_ERROR) is now handled as an authentication error. (Bug #18711142, Bug #72536)

- After enabling **Import from Folder** in the **Data Import / Restore** wizard for a connection, doing the same for a second connection would reset (deselect) this option in the first connection. (Bug #18685308, Bug #72492)

- A new "Override sudo command line" option was added to the connection manager under the **System Profile** in the connection editor for systems other than Windows. It can (optionally) configure the sudo command line to use on any operation requiring root access for administration tasks.

  If left blank (the default), MySQL Workbench continue to pass in -S and -p. Otherwise, you can replace the default sudo command. This should only be defined if the server configuration requires it. (Bug #18679748)

- For Linux, Ubuntu 14.04 builds now exist. (Bug #18622692, Bug #72388)

- **Preferences**, **SQL Queries**, **Confirm Data Changes** did not generate the **Apply Data** option. (Bug #18492280)

- On OS X, the "Oracle Linux 6" entry was missing from the MySQL connections installation type listing. (Bug #18445795)

- Column sorting did not function properly for the **Performance Reports**. (Bug #18427135)

- On OS X, pressing **Option + Shift** with the **Arrow** buttons did not function as expected in the SQL editor. This key combination selects adds a word (string) to the current selection. (Bug #18385643, Bug #72014)

- When creating a table, the `FULLTEXT` and `SPATIAL` index types were not present in the index type drop-down list when non-MyISAM tables were selected. (Bug #18376840, Bug #71998)

Changes in MySQL Workbench 6.1.6 (2014-05-16, General Availability)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- MySQL Workbench now shows a SSH fingerprint dialog box when connecting to an SSH server, to notify you when the fingerprint does not correspond to the fingerprint stored (in `known_hosts`) for that particular server. (Bug #11765158, Bug #58091)

Bugs Fixed

- MySQL Workbench could crash with a MySQL connection that was defined with an unprivileged MySQL user. (Bug #18704357, Bug #72350)

- Configuring MySQL Enterprise Backup using SSH would cause an online backup operation to fail, and it also generated an unhandled exception. (Bug #18676962)

- The following scenario generated a segmentation fault in the EER diagram editor: Double-click a table with a FK, double-click a table with a FK, select the **Foreign Keys** tab, and to generate the "Index out of range" error and segfault, either double-click an existing table or create a new table. (Bug #18632808, Bug #72329)

- The **Don't create table placeholder for views** option of the **Forward Engineer SQL Create Script** wizard did not function. (Bug #18614177, Bug #72366)

- The **Show in Editor** functionality from the **Client Connections** context-menu would not function (the option was grayed out). (Bug #18598559, Bug #72349)

- On OS X, the code completion tooltip could be displayed on top of a non-Workbench application. (Bug #18593798, Bug #72344)

- Closing the **Stored Procedure Editor** after changing a stored procedure (and clicking **Apply**) would emit an "Object reference not set to an instance of an object." error. (Bug #18591542, Bug #72328)

- In the EER diagram editor, tooltips are now hidden when mouse movements or clicks are registered, and they are also hidden when switching applications. (Bug #18536932, Bug #72257)

- When generating a Visual Explain report, a group operation would cause the generated JSON output to contain a node error. (Bug #18534644, Bug #72180)

- Altering (adding values to) an `ENUM` column potentially caused MySQL Workbench to crash. (Bug #18530674, Bug #72267)

- Executing the **Select Objects to Forward Engineer** step in the Forward Engineering wizard would crash MySQL Workbench each time the wizard is executed after the first time. In other words, the wizard

would only execute every step with success during its initial (first) execution. (Bug #18526002, Bug #72251)

- Clicking a column header in an SQL result view sorts rows in ascending order, but clicking the column header a second time would not sort the rows in descending order. (Bug #18517317, Bug #72226)

- The **Query Stats** panel contained the string "sigle" instead of the word "single." (Bug #18516611, Bug #72228)

- Subsequent executions of **Query**, **Execute (All or Selection) to Text** would cause the result's tab title from the previous execution to turn blank. (Bug #18516486, Bug #72232)

- With the **Collect Resultset Field Metadata** disabled, the **Form Editor** results view was blank. It now displays a message asking the user to enable the required **Query**, **Collect Resultset Field Metadata** preference. (Bug #18516369, Bug #72233)

- Executing a Visual Explain would sometimes generate an error with the text "Error calling Python module function SQLIDEQueryAnalysis.visualExplain". (Bug #18509791, Bug #72216)

- Changes made to a Trigger were not always recognized by the **Apply** action.

  A workaround was to edit the Trigger, close and reopen the table, and then continue to make changes before saving. (Bug #18502294, Bug #72198)

- The **PERFORMANCE** schema navigator tab was disabled for MySQL server 5.5 (and below) MySQL connections, as the system requires a MySQL server 5.6 (and above) connection. Attempting a MySQL server 5.5 would report an error about a missing `sys_55.sql` configuration file. (Bug #18502244, Bug #72201)

- The **Beautify/Reformat** feature would add whitespace to variable names, so that "@*foo*" would become "@ *foo*". (Bug #18502104, Bug #72193)

- Rapidly clicking **Execute** in an SQL session too frequently sometimes caused MySQL Workbench to crash. (Bug #18491041)

- On OS X, the background banner for the 6.1 installer (DMG file) incorrectly displayed 6.0. (Bug #18491018)

- Executing **Backup Restore** with a MySQL user lacking the proper permissions would generate an unhandled exception. (Bug #18490779)

- On Microsoft Windows, the **Management**, **Client Connections**, **View Thread Stack** feature failed to function. (Bug #18490766)

- After clicking **Apply** to save changes to a result set in the SQL editor, the executed SQL statement was no longer being displayed. (Bug #18490695, Bug #72155)

- On OS X, and after adding a backtick character on a German keyboard in the SQL editor, MySQL Workbench would crash after advancing from the backtick using **Space** while the code-completion drop-down was visible. (Bug #18445851)

- Mixed case and lower cased triggers were not properly displayed in the **Alter Table** tab, causing them to not be visible or editable. (Bug #18436881, Bug #71868)

- A MySQL connection that was created without a defined username and password failed to open, despite prompting for the username and password. (Bug #18436002)

- Labels could be cut off from the exported image when exporting a `Visual Explain`, if there were "many" objects. (Bug #18374308, Bug #71980)

- Visual Explain could fail to function for large `EXPLAIN` plans. (Bug #18373387, Bug #71973)

- MySQL Workbench will now use the default schema when set, or use the last active schema even if after closing MySQL Workbench. Before, the last active schema was not preserved after a restart. (Bug #18352922, Bug #71900)

- On OS X, when a Model Validation Plugin was executed on a nonempty document, only the first of the calls succeeded. All subsequent calls to these plugins showed an "Cannot execute db.plugin.wb.validate. Plugin requires unavailable argument value" error. (Bug #18338544, Bug #71917)

- The bundled MySQL client library was upgraded to version 5.6.17, to solve the following MySQL client issue:

  MySQL client programs from a Community Edition distribution could not connect using SSL to a MySQL server from an Enterprise Edition. This was due to a difference in certificate handling by yaSSL and OpenSSL (used for Community and Enterprise, respectively). OpenSSL expected a blank certificate to be sent when not all of the --ssl-ca, --ssl-cert, and --ssl-key options were specified, and yaSSL did not do so. To resolve this, yaSSL has been modified to send a blank certificate when an option is missing. (Bug #18070573)

- On Linux, starting/stopping the MySQL server from MySQL Workbench failed if "Default requiretty" was enabled in the system's `/etc/sudoers` file. (Bug #17438804, Bug #70289)

- The **File**, **Import**, **Import DBDesigner4 model** operation failed and generate an error. (Bug #11766079, Bug #59115)

Changes in MySQL Workbench 6.1.5 (2014-04-15, General Availability)

Bugs Fixed

- **Security Fix:** MySQL Workbench Commercial has updated the bundled MySQL client library and command-line clients (`mysql` and `mysqldump`) to MySQL 5.6.18, to use OpenSSL version 1.0.1g, which has been publicly reported as not vulnerable to CVE-2014-0160. Please see Oracle Note #1645479.1 for further details.

  Since the only change in MySQL 5.6.18 is the inclusion of OpenSSL libraries publicly reported as unaffected by CVE-2014-0160, and since Oracle-produced MySQL Community builds use `YaSSL` libraries which have been reported as not affected by CVE-2014-0160, Oracle will not produce builds for MySQL Workbench Community for version 6.1.5. This means the Community edition of MySQL Workbench will skip version 6.1.5. (Bug #18533200)

Changes in MySQL Workbench 6.1.4 (2014-03-31, General Availability)

Bugs Fixed

- Clicking **>** on a selected object during the **Select Objects** step of the Forward Engineering wizard did not move the objects. (Bug #18454428)

- Executing **Backup recovery** after a full **Online backup** could cause a crash.

- With MySQL Enterprise Backup, validation was added when backing up schemas without tables.

- On Microsoft Windows, several ".pyc" files remained after uninstalling MySQL Workbench.

Changes in MySQL Workbench 6.1.3 (2014-03-24, Release Candidate)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The default schema is now expanded automatically when a connection is opened, or when the default schema changes. (Bug #18237247, Bug #70522)

- The **Beautify query** feature was changed. It now only affects the current statement, unless there is an explicit selection. Before, it would reformat all statements in the window by default. (Bug #18237189, Bug #71544)

- A new **Create Missing Local Connections** option was added to the right-click context menu on the Home screen. It attempts to identify and create connections to locally installed MySQL servers. (Bug #17454766, Bug #70150)

- A specific connection string can now be passed to the `--query` command-line option at startup, in the form of "--query user@host:port". If this connection string does not already exist, then it will be created. (Bug #17353691, Bug #70134)

- MySQL Workbench now checks if the `lower_case_table_name` variable is correctly set on Microsoft Windows and OS X systems. If not, then MySQL Workbench will display a dialog after connect, and emit a warning message when performing synchronization or reverse engineering actions. (Bug #14802853)

- New **Report a Bug** functionality now opens a browser with the MySQL bug page pre-populated with MySQL Workbench data. This also allows MySQL Workbench to be fully manipulated while submitting the bug report. (Bug #14079590, Bug #65258)

Bugs Fixed

- Adding and then immediately deleting the same MySQL connection from within the **Synchronize With Any Source** wizard would emit an error such as "Unable to cast object of the type mysql.forms.seperationitem to type system string." (Bug #18449191, Bug #71501)

- `FOUND_ROWS()` (after a `SQL_CALC_FOUND_ROWS` statement) returned **1** (true) instead of the number of found rows. (Bug #18342953, Bug #71920)

- The local private key file for an SSH connection when executing **Remote Connection in MySQL Workbench through SSH** could not be saved to a folder with accented characters. (Bug #18328846, Bug #71800)

- Exported JSON string delimiters used double quotes instead of single quotes, and the exported JSON file extension changed from `.js` to `.json`. (Bug #18314718, Bug #71846)

- Some user interface (UI) elements explicitly set a background color but not a font color, and vice-versa. (Bug #18305958, Bug #71828)

- On OS X, the **Find** button was grayed out (disabled). (Bug #18290813, Bug #68949)

- On OS X, using key shortcuts to record marker positions #3 and #4 on the modeling canvas did not function, as these shortcuts (**Command + Shift + 3** and **Command + Shift + 4**) are predefined to execute screenshot features. (Bug #18268043)

- A **Show schema name** diagram preference was added. If enabled, it shows the schema name in the table heading of an EER Diagram. (Bug #18268014, Bug #71592)

- The **Shift + Control + Arrow Key** (left or right) now moves the cursor word-by-word in the SQL code editor, to go along with the character-by-character **Shift + Arrow Key** functionality. (Bug #18267537)

- On Linux, the audit log inspector did not function when there were not spaces in the "ls" date column. On some Linux variants, such as SLES 11, "ls -l" outputs a date format like "2014-02-14" instead of "Feb 14". (Bug #18257020)

- On Linux, a scheduled and executed MEB **Online Backup** would not output the error log to `stderr`. Also, the saved log file was always named `$BACKUP_NAME.log`, by using the literal '$BACKUP_NAME' instead of parsing it as a variable. (Bug #18243667, Bug #71674)

- MySQL Workbench will now see the `NO ACTION` and `RESTRICT` referential action options as two different options. (Bug #18237503, Bug #71499)

- On OS X, pressing **Shift** would interfere with the **Option + Arrow** word-by-word selector operation, and would instead change it to a character-by-character operation. (Bug #18237104, Bug #64358)

- On Linux, the **Help**, **View Reported bugs** link (to view current MySQL Workbench bugs) was broken. Its path included "WB%2520bugs" instead of "WB%20bugs". (Bug #18231109, Bug #71668)

- The **Check for updates** operation failed to function for the commercial edition. (Bug #18225980, Bug #16879533, Bug #69346)

- After copying and pasting tables within the **Alter Table** panel, clicking **Apply** would return "No changes detected" instead of detecting the changes. Copied and pasted entries (from the clipboard) are now detected and saved. (Bug #18205924, Bug #71632)

- When migrating from Microsoft SQL Server, `nVarchar(n)` columns would always migrate to a MySQL `VARCHAR(n)` column that was twice the size. (Bug #18195599, Bug #71608)

- While executing the Migration Wizard, successfully entered credentials during a **Test Connection** remained in cache until the migration tab was closed, despite the **Save password in keychain** option not being enabled. The connection is now closed after executing **Test Connection**. (Bug #18195389)

- When migrating from Microsoft SQL Server, column names greater than 64 characters were automatically renamed with the object migration component. The schema creation created the new table structure as expected, but later the bulk migration bulk data transfer attempted to import data to the original column names. (Bug #18168027, Bug #71532)

- When migrating from Microsoft SQL Server, mapping a `VARCHAR` column to `TEXT` would still attempt to migrate it to `VARCHAR`, which could yield an error if the `VARCHAR` exceeded the maximum size. It now properly maps to `TEXT`. (Bug #18167872, Bug #71036)

- Saved connections would sometimes not function (connect) properly unless the password was saved to the local vault. (Bug #18154787)

- The values "true" and "false" are now converted to "1" and "0" if the column is a BOOLEAN or TINYINT. Also, synchronizing a BOOLEAN against a TINYINT no longer generates any differences, when before it might generate SQL that "changed" TINYINT columns to TINYINT. (Bug #18124474, Bug #71458)

- The **Store connection for future usage** option in the **Database Migration** wizard did not store the defined MySQL connections. (Bug #18124149)

- When migrating from Microsoft SQL Server, `DECIMAL(n, n)` columns did not properly migrate to `BIGINT(n)`. (Bug #18105487, Bug #71379)

- When migrating from Microsoft SQL Server, `Varchar(MAX)` is now imported as `LONGTEXT`, instead of the erroneous `VARCHAR(-1)`. (Bug #18105486, Bug #71253)

- On Linux, using a GTK theme with light font colors would cause the schema listing to be difficult to read. (Bug #17958777, Bug #71141)

- Altering a table's comment would immediately move the cursor position to the end of the comment. A workaround was to copy-n-paste a comment into this window. (Bug #17945616, Bug #70970)

- After creating an InnoDB table with a primary key, dropping it and then creating the same table with MyISAM but without a primary key would fail with a "missing primary key" error. (Bug #17843045, Bug #70982)

- MySQL Workbench failed to reverse engineer tables containing `TIME(n)` and `DATETIME(n)` (fractional timestamp) columns. (Bug #17559837, Bug #70515)

- Executing **Execute Now** for a defined backup job would finish successfully, but would also report an error. (Bug #17408250)

- When multiple versions of MySQL Enterprise Backup were installed, the **MySQL Backup Command Path** would include both paths. Now, the first discovered path is used, and a warning about having multiple MySQL Enterprise Backup installations is logged. (Bug #17367584)

- The MySQL keywords were sometimes blank (missing) in the **SQL Additions** panel. (Bug #17346343, Bug #70116)

- The **Migration Wizard Overview** text was updated to reflect better grammar. (Bug #17283213)

- When too many tabs are present in MySQL Workbench, a double arrow now appears in the right top corner. When clicked, a list of the hidden tabs will appear. (Bug #16757127, Bug #69091)

- The **MySQL Workbench Scripting Shell** did not allow tabs or spaces for indentation in interactive Python scripts. A workaround was to instead create and execute script files. (Bug #14520728, Bug #66451)

- Sometimes the **Report Bug** window would remain open, even after pressing **Cancel**. (Bug #14495624, Bug #66084)

- The panel dimensions for an EER diagram are now preserved. This left panel stores the descriptions, properties, and history tabs. (Bug #13972049, Bug #64661)

- The **Synchronize Model** routine would only notice changes to some triggers, while ignoring changes to others. It would not update these triggers even if forced by using the **Update Source** button. (Bug #11766750, Bug #59934)

- MySQL Workbench would allow a table group to be renamed using a reserved MySQL keyword. (Bug #11763690, Bug #56431)

Changes in MySQL Workbench 6.1.2 (2014-03-04, Beta)

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The ability to select multiple processes in the **Client Connections** table was added. (Bug #18043979)

- When an error is generated while synchronizing a model to a database, the statement causing the error is now displayed alongside the generated error. (Bug #13702410, Bug #64208)

- **Create Model from SQL Script** with **Place imported objects on a diagram** checked now prompts to configure the diagram dimensions, which is especially useful when a lot of objects are imported. (Bug #11764060, Bug #56848)

- The validation routine now checks whether a column referred to by an FK has the same character set as the source column. (Bug #11749091, Bug #38136)

Bugs Fixed

- The following sequence would crash MySQL Workbench: Execute a standard SELECT statement in the SQL editor, right-click on a row from the results, click on another row when the context-menu appears (to close it), and then right-click on another row from the results. (Bug #18237466, Bug #71238)

- Data Export could only be opened once per session. If the connection was closed and reconnected, then it would work again (but only once). (Bug #18149809, Bug #71506)

- The **Visual Explain** feature did not function with MySQL Server 5.7. (Bug #18141803, Bug #71464)

- On OS X, general stability improvements were made to the codebase. (Bug #18132375, Bug #71473)

- Executing a `DROP` from within the UI (via right-click on a database in the schema navigator) would cause the UI to freeze while the `DROP` operation was executed. (Bug #18123337, Bug #71457)

- On OS X, **Command + F** did not open a search box in the SQL editor. (Bug #18055066, Bug #71326)

- Having `SQL_MODE` set to "MYSQL40" would not allow the `ALTER TABLE` action to create new columns in MySQL Workbench. (Bug #18055044, Bug #64741)

- Dropping a schema that had non-committed or reverted transactions could crash MySQL Workbench, but now the drop statement is executed as a user command so it can be aborted. (Bug #18054944, Bug #71327)

- After editing an SQL file from outside of MySQL Workbench that was also open inside MySQL Workbench, a refresh would update a different (wrong) SQL editor tab in MySQL Workbench. (Bug #18051499, Bug #71321)

- A MEB backup could not be scheduled for December 31. (Bug #18019619)

- On OS X, executing **Synchronize Database** could crash MySQL Workbench. (Bug #18000412, Bug #71203)

- Sorting by a column would sort the data starting with uppercase characters first, before sorting the lower case strings. The sorting algorithm now behaves like a typical `ORDER BY` clause, which does not prioritize uppercase characters. (Bug #17993866, Bug #71195)

- On OS X, the auto-completion popup window remained until reopening MySQL Workbench. (Bug #17799326, Bug #18281362, Bug #70912, Bug #71771)

- On Microsoft Windows, increased support for "High Contrast" modes was added. (Bug #17694247, Bug #70750)

- MySQL Workbench would freeze when the connected MySQL server stopped responding, when the context help was running. (Bug #17667094)

- The SQL editor could lose newline characters. The new forms editor is useful for this type of input, as the newlines are preserved. (Bug #17559560, Bug #70519)

- While executing **Database**, **Synchronize Model...**, adding a ROW_FORMAT definition (such as "ROW_FORMAT = COMPACT;") would not add a valid ROW_FORMAT definition on the next execution of **Synchronize Model...**, and instead an invalid (empty) "ROW_FORMAT =" was added. (Bug #17454626, Bug #70129)

- After creating two tables with an n:m relationship, attempting to create an n:m identifying relationship between the two tables would yield a misleading prompt that read "Select the Table to receive the Foreign Key." (Bug #17449878, Bug #67864)

- When configuring an SSH connection, MySQL Workbench initially shows the `$HOME` directory, and hides all directories configured to be hidden, which often includes files and directories that begin with a dot. This means that the commonly used `~/.ssh/` directory is hidden by default. You can now right-click over the "Open File..." window and view a menu with the **Show hidden files** option.

  A workaround was to type in the full path to the `.ssh` directory. (Bug #17439032, Bug #70291)

- The **Search Table Data** tool failed to function when used to search multiple schemas. (Bug #17404072, Bug #70232)

- The diagram page size is now properly passed on to printer driver. For example, defining a diagram with an A3 page size now sends A3 to the printer driver, when before it reverted to A4. (Bug #17389155, Bug #70191)

- When executing **Database**, **Synchronize with any source** on a model, the model schema was unintentionally renamed when enabling the **Override Target** option. (Bug #17299799)

- On Microsoft Windows, **Control + V** would not paste a copied diagram. (Bug #17299778)

- Using **Create EER Model from Script** would sometimes close the model without defining a schema. (Bug #17299745)

- On Microsoft Windows, the **Indexes** section would disappear after restoring (after an undo) a table change from the history tab. (Bug #17299519)

- Tables created with the **n:m identifying relationship tool** were missing the created timestamp. (Bug #17050577, Bug #69656)

- On Linux, when closing a script tab that carried unsaved changes in the SQL editor, the model dialog that prompted to "save the script first" could become hidden behind the main MySQL Workbench window. (Bug #16672658, Bug #68802)

- Selecting an element in a section (when the section was longer than the visible part of the overview panel) would scroll the view back up to the top of the panel, instead of preserving the current cursor focus. (Bug #14520978, Bug #66420)

- The `Scripting` file chooser would generate an exception (without an option to cancel) when an unsupported file type was selected. A new **Cancel** button was added to this dialog. (Bug #14520515, Bug #66453)

- The birds-eye image of the object canvas in the navigator view of the model sidebar did not always show the correct z-order, when objects overlapped on the canvas. (Bug #14456188)

- Using a MySQL script that started with an empty line to create an EER diagram would generate an empty EER diagram. (Bug #14278179, Bug #65749)

- When setting "On Delete" and "On Update" to "SET NULL" on Foreign Key fields that were marked as "NOT NULL", a generic "ERROR: Error 1005: Can't create table" error was emitted. The generated error is now more specific. (Bug #13029457, Bug #62464)

- While creating a column with the `serial` data type generates a NOT NULL constraint with a UNIQUE INDEX for the column, MySQL Workbench would complain about a missing Primary Key. (Bug #11762455, Bug #55051)

- When executing **Database**, **Synchronize Model**, the **Model and Database Differences** step now expands the folder of each database that contains differences. (Bug #11758101, Bug #50251)

- Relationship lines now snap to the closest snap point, rather than the most recently passed-over snap point. (Bug #11755408, Bug #47178)

Changes in MySQL Workbench 6.1.1 (2014-01-23, Beta)

This is the first public release of the 6.1.x branch. It includes fixes from the 6.0.x branch up to 6.0.9.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- A MEB interface now allows MEB users to be added, configured and validated inside MySQL Workbench so that a user has the correct privileges to operate MEB. (Bug #17314254)

- Dragging objects from the schema tree to the code editor now inserts the object name at the drop position. For example, dragging a table object will insert the table name. (Bug #11766411, Bug #59514)

- Files can now be dragged and dropped into MySQL Workbench, which opens the file in a new SQL editor tab. (Bug #11760313, Bug #52710)

- The restore operation can restore to a different schema. (Bug #11759068, Bug #51351)

- A caption can now have a solid background in classic relationships and/or tables. (Bug #11753926, Bug #45452)

- Comments added with the **File**, **Export**, **Forward Engineer SQL CREATE Script...** action would not be transferred to the generated SQL file. (Bug #11748708, Bug #37174)

Bugs Fixed

- Sometimes, when exporting an EER diagram to SQL, the generated SQL code did not include "DROP SCHEMA" statements even with the **Generate DROP SCHEMA** option checked. (Bug #18054932, Bug #71243)

- On Linux, the **Cancel** button was written as "Cance" on some systems, depending on the GTK theme used on the system. (Bug #18042862, Bug #71106)

- Ubuntu 13.10 is now supported. (Bug #18042416, Bug #71281)

- MySQL Workbench now builds on Debian 7.0-unstable. (Bug #18041235, Bug #71156)

- One tab could execute the query from a different tab, after swapping tabs. (Bug #17903147, Bug #71029)

- From MySQL Notifier, and with multiple MySQL instances installed, clicking **Configure Instance...** from MySQL Notifier, and then choosing the instance to configure in MySQL Workbench, could crash MySQL Workbench. (Bug #17853197)

- On Linux, renaming foreign keys and indexes would crash MySQL Workbench. (Bug #17841664, Bug #70977)

- Executing a DROP failed when multiple views were selected in the schema navigator panel. For example, selecting two views would generate an error such as "join() takes exactly one argument (2 given)". (Bug #17840809, Bug #70978)

- Toggling the **Additions and Output** panel as hidden is now preserved across MySQL Workbench sessions. (Bug #17833296, Bug #70965)

- On Linux, building MySQL Workbench from source would generate many glib related warnings with newer versions of glib. (Bug #17813170, Bug #70932)

- After creating a new view inside a model, clicking **Add View** would display a new view in the editor this new could not be saved. (Bug #17796027, Bug #70904)

- The `--routines` command line option was missing from the generated mysqldump command when multiple schemas were selected for a dump into a single file backup when the routines option was enabled. This could happen after executing the dump multiple times. (Bug #17795551, Bug #70896)

- Executing **Model**, **Forward Engineering** with the **Do not create users, only export privileges** option enabled would recreate the user instead of simply changing privileges for the existing user. (Bug #17794653, Bug #70903)

- When building from source and without building the documentation, the documentation link will open the online MySQL Workbench manual. (Bug #17788936, Bug #70873)

- Adding a new table to an empty EER diagram would crash MySQL Workbench. (Bug #17775383, Bug #70872)

- On OS X, switching colors with layers and tables several times could eventually cause a crash. (Bug #17758312, Bug #70841)

- Opening MySQL Workbench from the MySQL Notifier by choosing **SQL Editor** on a remote MySQL connection could crash MySQL Workbench. (Bug #17751731)

- MySQL Workbench displayed an empty binary string as NULL. (Bug #17741282, Bug #70817)

- The **Inserts** tab under `Forward Engineering` would sometimes unexpectedly fail. (Bug #17698069, Bug #70747)

- The `ENUM` type now corresponds better to its definition better under **Model**, **User Defined Types**, to allow arguments. (Bug #17633506, Bug #70671)

- On Microsoft Windows and OS X, the bundled PyCrypto library was upgraded to version 2.6.1. (Bug #17615430)

- If a Linux box had multiple MySQL instances running, the status would be reported as "running" for all instances even if only one or more of them were running. (Bug #17516593)

- MySQL Workbench could crash when using a MySQL connection that connects via an SSH tunnel with success, but is defined using incorrect MySQL server credentials. A dialog now requests the correct information. (Bug #17456433, Bug #70332)

- Having a long comment (more than 60 characters for table, or more than 255 characters for a column) in the model, single quotes or newlines after this length would result cause **Forward engineer SQL Alter Script...** to not include objects after the offending comments in the exported file. (Bug #17455899, Bug #69776)

- Attempting to change a trigger name in an EER Diagram would crash MySQL Workbench. (Bug #17425655, Bug #70257)

- The catalog treeview for an EER diagram was replaced by a central control with improved handling, which allows MySQL Workbench to worth more smoothly with a large number of tables. (Bug #17370413, Bug #69692)

- Opening a valid MySQL connection would sometimes yield a window with a wide SQL editor panel. (Bug #17300438)

- Under certain scenarios, the **File**, **Print to File...** action would not allow models to be unchecked. (Bug #17300434)

- On OS X, opening a local MySQL connection to a MySQL server that was unavailable would generate an unhandled exception. (Bug #17300002)

- Indexes that were auto-created for a Foreign Key can now be deleted in case another suitable index was available. (Bug #17275827, Bug #69937)

- On OS X, an option to **Disable column Resizing** or continue is now displayed when a query is determined to display too many columns. This works around a Cocoa issue that could potentially freeze MySQL Workbench. (Bug #17085770, Bug #69613)

- Model synchronization would complete, but if repeated then MySQL Workbench would ask to update the database again. (Bug #17033354, Bug #69591)

- Changing the collation type would not always be detected, as "No changes detected" would be reported after attempting to apply the change. (Bug #16492371, Bug #68672)

- On OS X, right-clicking inside the code area of the Script editor did not provide the copy and paste commands. (Bug #16276986)

- The **MySQL Forums** link on the MySQL Workbench home page was updated, and it now links to a MySQL Workbench page that also links to the **MySQL Workbench - Database Migration** forum, when before it was difficult to find. (Bug #14773380, Bug #67272)

- From **Database**, **Reverse Engineer**, and after selecting a schema with multiple tables, clicking the left or right arrow buttons with the **Show Filter** feature to include/exclude tables would lose the cursor position, and always move the cursor to the top of the list. (Bug #14017237, Bug #65018)

- For models, tables can now be renamed by double-clicking the name column, and the columns edited. (Bug #13702831, Bug #64134)

- MySQL Workbench could crash after choosing **Recover** when prompted to recover a model file from a previous session after MySQL Workbench was not closed properly. (Bug #13051204, Bug #62589)

- A large SQL script file could not be saved for a model, although a limit of around 200MB limit still exists. (Bug #13025333)

- Applying an large `SQL Script object` to a model could crash MySQL Workbench. (Bug #13025299)

- The full path to the model file is now displayed in the **Models** section in the home page. (Bug #12616312, Bug #61349)

- On Linux, executing **Export to Disk** with a custom `~/my.cnf` present would cause the export to fail. (Bug #12613307, Bug #58526)

- The temporary table created would only include one column ID rather than the full table when a view statement contained a subquery. This caused processing problems when attempting to use the exported scripts.

  A workaround was to recreate the view object by deleting the dependent view definitions and replacing them with new view definitions. (Bug #11765994, Bug #59018)

- The "Scratch" SQL editor tabs were removed, and instead standard SQL editor tabs are always opened. (Bug #11765876, Bug #58882)

- Importing an invalid model could crash MySQL Workbench, but now an error is generated. (Bug #11765756, Bug #58752)

- On Microsoft Windows, opening and closing models/diagrams would increase the number of open GDI (Graphics Device Interface) objects as they were kept in memory for the undo queue. The required memory for this task was decreased. (Bug #11765437, Bug #15998212, Bug #58405, Bug #67870)

- Editing a `mandatory` relationship now updates the referenced column. (Bug #11764011, Bug #56792)

- On the index tab in the table editor, the option to change the "PRIMARY" text had no effect. (Bug #11761805, Bug #54331)

- General sorting improvements were made to the SQL statement results matrix, including changes to remove variances with different platforms. A selected column stays set after a sort, and selecting a column while holding **Shift** adds the column to the sort criteria, thus sorting by multiple columns. (Bug #11760178, Bug #52561)

- The **Schema Privileges** tab was hidden in the Schema editor, and is now more viewable. (Bug #11758814, Bug #51066)

- The Copy and Paste keyboard shortcut did not always function from within table cells in all environments. (Bug #11755245, Bug #46994)

- Zooming out from an EER diagram would also reduce the size of the associated tooltips, which rendered the tooltips unreadable. (Bug #11749683, Bug #39609)

Changes in MySQL Workbench 6.1.0 (Not released, Internal)

This is the first private alpha release of the 6.1.x branch.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- A global **Arrange**, **Align to Grid** preference was added, which affects the **Snap To Grid** option in the EER Diagram editor. (Bug #11754669, Bug #46306)

- The 'Visual Explain' feature was rewritten with a new layout. The raw EXPLAIN output and JSON output are also displayed.

- A new **Performance Dashboard** was added to the Navigator. It is a graphical representation of the data/ query flow of the connected MySQL server that shows status info from SHOW STATUS, P_S and other places.

- A new **Performance Reports** page was added to the Navigator. It provides a list of Performance Schema based server-wide performance reports.

- A **Thread Stack** view was added, and can be accessed by right-clicking a connection entry in the **Client Connections** tab and choosing **View Thread Stack**.

Bugs Fixed

- On the home screen, the model tile layout is wider, and tooltips were added in case the title does not fit. (Bug #17959942, Bug #71154)

- When using the main menu to load the administration pages, the tabs only appear or switch if the administration tab was open, and not yet closed. (Bug #17753473)

- `Event` privileges manipulation was added to **Server**, **Users and Privileges** under the **Schema Privileges** tab. (Bug #17733771, Bug #70810)

- MySQL Workbench now checks and validates MEB related variables before use, when before it assumed they were always defined. (Bug #17509559)

- Browsing the "Backup Storage directory" would generate an unhandled exception. The sequence for this browsing is **Online Backup**, **New Job**, **Options**, **Browse**. (Bug #17307519)

- A new MySQL Utilities installation was not detected when installed while MySQL Workbench was open. (Bug #17307175)

- Checking the **Server Status** of a remotely managed MySQL connection would throw an unhandled exception when pressing **OK** at the password prompt, after not entering a password. (Bug #17300394)

- On Microsoft Windows, the plugin icon was cropped if a plugin was installed. (Bug #17300272)

- Information in the **Object Info** panel could not be copied to the clipboard. (Bug #15884708, Bug #67587)

- With modeling, a red key now indicates that a key is both a PK and FK. This coincides with a red diamond representing FKs, and a yellow key for PKs. (Bug #11761658, Bug #54172)

Changes in MySQL Workbench 6.0

For detailed information about the new features, see What's New in MySQL Workbench 6.0.

Changes in MySQL Workbench 6.0.9 (2014-02-05, General Availability)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 6.0.8.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The restore operation can restore to a different schema. (Bug #11759068, Bug #51351)

Bugs Fixed

- Sometimes, when exporting an EER diagram to SQL, the generated SQL code did not include "DROP SCHEMA" statements even with the **Generate DROP SCHEMA** option checked. (Bug #18054932, Bug #71243)

- On Linux, the **Cancel** button was written as "Cance" on some systems, depending on the GTK theme used on the system. (Bug #18042862, Bug #71106)

- Ubuntu 13.10 is now supported. (Bug #18042416, Bug #71281)

- MySQL Workbench now builds on Debian 7.0-unstable. (Bug #18041235, Bug #71156)

- One tab could execute the query from a different tab, after swapping tabs. (Bug #17903147, Bug #71029)

- On Linux, renaming foreign keys and indexes would crash MySQL Workbench. (Bug #17841664, Bug #70977)

- On Linux, building MySQL Workbench from source would generate many glib related warnings with newer versions of glib. (Bug #17813170, Bug #70932)

- After creating a new view inside a model, clicking **Add View** would display a new view in the editor this new could not be saved. (Bug #17796027, Bug #70904)

- The `--routines` command line option was missing from the generated mysqldump command when multiple schemas were selected for a dump into a single file backup when the routines option was enabled. This could happen after executing the dump multiple times. (Bug #17795551, Bug #70896)

- Executing **Model**, **Forward Engineering** with the **Do not create users, only export privileges** option enabled would recreate the user instead of simply changing privileges for the existing user. (Bug #17794653, Bug #70903)

- When building from source and without building the documentation, the documentation link will open the online MySQL Workbench manual. (Bug #17788936, Bug #70873)

- Adding a new table to an empty EER diagram would crash MySQL Workbench. (Bug #17775383, Bug #70872)

- On OS X, switching colors with layers and tables several times could eventually cause a crash. (Bug #17758312, Bug #70841)

- The **Inserts** tab under `Forward Engineering` would sometimes unexpectedly fail. (Bug #17698069, Bug #70747)

- The `ENUM` type now corresponds better to its definition better under **Model**, **User Defined Types**, to allow arguments. (Bug #17633506, Bug #70671)

- On Microsoft Windows and OS X, the bundled PyCrypto library was upgraded to version 2.6.1. (Bug #17615430)

- MySQL Workbench could crash when using a MySQL connection that connects via an SSH tunnel with success, but is defined using incorrect MySQL server credentials. A dialog now requests the correct information. (Bug #17456433, Bug #70332)

- The catalog treeview for an EER diagram was replaced by a central control with improved handling, which allows MySQL Workbench to worth more smoothly with a large number of tables. (Bug #17370413, Bug #69692)

- Under certain scenarios, the **File**, **Print to File...** action would not allow models to be unchecked. (Bug #17300434)

- Indexes that were auto-created for a Foreign Key can now be deleted in case another suitable index was available. (Bug #17275827, Bug #69937)

- Model synchronization would complete, but if repeated then MySQL Workbench would ask to update the database again. (Bug #17033354, Bug #69591)

- Changing the collation type would not always be detected, as "No changes detected" would be reported after attempting to apply the change. (Bug #16492371, Bug #68672)

- The **MySQL Forums** link on the MySQL Workbench home page was updated, and it now links to a MySQL Workbench page that also links to the **MySQL Workbench - Database Migration** forum, when before it was difficult to find. (Bug #14773380, Bug #67272)

- From **Database**, **Reverse Engineer**, and after selecting a schema with multiple tables, clicking the left or right arrow buttons with the **Show Filter** feature to include/exclude tables would lose the cursor position, and always move the cursor to the top of the list. (Bug #14017237, Bug #65018)

- For models, tables can now be renamed by double-clicking the name column, and the columns edited. (Bug #13702831, Bug #64134)

- MySQL Workbench could crash after choosing **Recover** when prompted to recover a model file from a previous session after MySQL Workbench was not closed properly. (Bug #13051204, Bug #62589)

- A large SQL script file could not be saved for a model, although a limit of around 200MB limit still exists. (Bug #13025333)

- Applying an large `SQL Script object` to a model could crash MySQL Workbench. (Bug #13025299)

- The "Scratch" SQL editor tabs were removed, and instead standard SQL editor tabs are always opened. (Bug #11765876, Bug #58882)

- Editing a `mandatory` relationship now updates the referenced column. (Bug #11764011, Bug #56792)

- The **Schema Privileges** tab was hidden in the Schema editor, and is now more viewable. (Bug #11758814, Bug #51066)

- The Copy and Paste keyboard shortcut did not always function from within table cells in all environments. (Bug #11755245, Bug #46994)

Changes in MySQL Workbench 6.0.8 (2013-11-07, General Availability)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 6.0.7.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- A new MySQL Workbench preference (**Preferences**, **SQL Editor**) was added that sets the default comment type that is generated in the SQL Editor when clicking the "add comment" key combination. It can be either "--" (default) or "#". (Bug #16679373, Bug #68708)

Bugs Fixed

- When creating a table on a model diagram, an unhandled NULL reference exception was thrown when a second layer was drawn under some tables. (Bug #17561185, Bug #70518)

- When forward engineering an `SQL CREATE` script, checking the **Omit Schema Qualifier** preference would correctly remove the schema name from the CREATE statements, but it incorrectly left the schema name on the GRANT statements.

  Command sequence: **File**, **Export**, **Forward engineer SQL CREATE script**. (Bug #17516695, Bug #70438)

- On Microsoft Windows 7, under some circumstances MySQL Workbench would not connect to a MySQL server on a RHEL 5 host. (Bug #17516617)

- Restoring an incremental backup from a remote MySQL server would emit an unexpected error that referred to the `WbAdminControl` object. (Bug #17516320)

- On Microsoft Windows, having an empty SQL file saved in the AppData path would cause MySQL Workbench to not start.

  A workaround was to delete the empty SQL file before starting MySQL Workbench. (Bug #17512088, Bug #70262)

- On Linux, the **Action Output** would not auto scroll to place the latest action (executed SQL statement) in view. (Bug #17512005, Bug #70421)

- With **Use most recent backup** checked, an incremental backup made after another incremental backup would not be restored if the previous incremental backup failed. (Bug #17509626)

- On Microsoft Windows, after executing **Search Table Data** and viewing the results, right-clicking on a row and choosing **Copy Query for Matches** from the context menu would crash MySQL Workbench. (Bug #17506404, Bug #70411)

- Executing **Forward Engineer the Model to the local DB** would generate an unexpected error. (Bug #17496362)

- In the data result grid, selecting multiple fields and choosing **Set Field(s) not Null** from the context-menu would not alter the data. (Bug #17495179, Bug #70381)

- An empty SQL script file could not be saved from within MySQL Workbench, and attempting this action would generate an unexpected error. (Bug #17468833, Bug #70365)

- The **Forward Engineer - SQL Create Script** wizard would generate the `LOCK TABLES` privilege at the table level, instead of the database level. (Bug #17468314, Bug #70310)

- An unhandled exception would be thrown if the `audit.log` file was missing. (Bug #17452099, Bug #70323)

- Data Import/Export for self-contained data will now only select `*.sql` files by default, and if an extension is not defined during an export, the extension will be set to `.sql`. (Bug #17449969, Bug #69069)

- When exporting a model with multiple routines as an SQL Script, under some circumstances a deliminator was missing after a routine in the generated SQL. (Bug #17448702, Bug #70313)

- Backup operations now use the SOCKET protocol on Linux to make connections, and on Windows it uses TCP (if networking is enabled), as otherwise PIPE is used. (Bug #17440001, Bug #70295)

- MySQL Workbench now uses the `--defaults-file` option when executing `mysqlbackup`. (Bug #17439084, Bug #70293)

- On Linux, improvements were made to the check that tested if the backup directory was writable. This check now uses the Linux `test` command, instead of a temporary file creation/deletion. (Bug #17439061, Bug #70292)

- On OS X, opening a new model and pressing the "Add EER Diagram" button from the toolbar would crash MySQL Workbench.

  A workaround was to click "Add EER Diagram" from the navigation or context menus. (Bug #17437387, Bug #70284)

- The `fetch_documentation.sh` script was removed from the MySQL Workbench source download, as it referred to (and required) fetching documentation from internal URLs. (Bug #17435353, Bug #70279)

- Clicking **Alter Table** on a table with multiple triggers would sometimes generate an error. Trigger handling was improved to avoid such errors. (Bug #17432083, Bug #70244)

- Scrolling down an SQL file and executing a statement (**Control** + **Enter**) would scroll the window back to the top. The cursor now remains, even when the window is resized. (Bug #17399972, Bug #15837541, Bug #70221, Bug #67465)

- Double-clicking on an Audit Log File row would generate an unexpected error. (Bug #17376494)

- Viewing the **Client Connection** could generate an unhandled exception if a connection had a very large connection time. (Bug #17375435, Bug #70174)

- Clicking **Online Backup** after deleting the configured MySQL Enterprise Backup directory (such as `C:\MySQLBackupHome`) would throw an unhandled exception.

  Validation was added, a profile status icon was added to the backup screen, and MySQL Workbench now redirects to the **Settings** page instead of emitting an error. (Bug #17375285)

- While migrating a Microsoft SQL Server database to MySQL, database names with periods failed, and now the periods are replaced with underscores. For example, "foo.bar" will become "foo_bar". (Bug #17370098, Bug #70170)

- After selecting a table in the **Catalog** tab of the **Catalog Tree** pane, choosing **Insert new row** from the **Edit Table...** context menu would emit an unexpected error. (Bug #17357020, Bug #70140)

- After editing a trigger in the model tab, switching tabs (such as loading a connection or SQL editor tab) would cause the new trigger edits to disappear. (Bug #17348212, Bug #70122)

- On Microsoft Windows, the mouse pointer inside an SQL Editor tab would rapidly change from pointer to cursor when the mouse was moved, thus creating a repeatedly flashing event. (Bug #17347406, Bug #70119)

- Open query tabs were not persistent (reopened) after reopening MySQL Workbench. (Bug #17341182, Bug #17456474, Bug #17314977, Bug #70107, Bug #70325, Bug #70035)

- On OS X, the full field names in the **Performance** tab of the **Option Files** navigator page would not be fully visible. (Bug #17323870, Bug #70057)

- Stored routine groups could not be updated via the group editor in the EER diagram.

  A workaround is to use individual routine group editors for each routine, by dragging the routine objects into the members list of the routine group editor to group them. (Bug #17323855, Bug #70059)

- In the commercial edition of MySQL Workbench, the "MySQL Utilities" download button linked to the community version of MySQL utilities. It now links to the appropriate edition. (Bug #17316512, Bug #70049)

- On OS X, clicking **Get Timestamp Ranges** after selecting the available current filename from the Audit Plugin would throw an unhandled exception. (Bug #17300059)

- The **Run**, **Script File** sequence did not function. (Bug #17299680)

- I/O writes were reduced, which was especially a problem visible when closing MySQL Workbench with tables that had over 500 columns. (Bug #17283888, Bug #68276)

- The EER Diagram did not support some Chinese characters. (Bug #17275879, Bug #69933)

- Having a `!include` in the MySQL configuration file would cause MySQL Workbench to crash at startup. (Bug #17271775)

- The **Close Other Tabs** context-menu option did not close Table Editor tabs. (Bug #17235359, Bug #69850)

- The `innodb_buffer_pool_size` and `innodb_buffer_pool_instances` configuration parameters were duplicated in the **Options File** (formerly the **Server Administration**) tab. They were listed in both the **Buffer Pool** and **Memory" groups**.

Also, using MySQL Workbench to change these settings would generate a change that also altered whitespace in the MySQL configuration file. (Bug #16915510, Bug #69406)

- Migrating a Microsoft Access database would crash at the **Reverse Engineer Selected Schemata** step. MySQL Workbench does not support the migration of Microsoft Access, so the migration wizard will now display an error (and halt operation) when attempting to migrate an unsupported database. (Bug #16529142, Bug #67584)

- After adjusting the width of the **Id** or **Time** columns in the connection listing, the integer value was cut off without indication. The value is now shown, or an ellipses (...) is appended. (Bug #16464457, Bug #68593)

- The **Workbench Bug Reporter** failed to log in to report a bug, even when using valid credentials. This bug reporting functionality was removed from MySQL Workbench. (Bug #16056820, Bug #14520752, Bug #67990, Bug #66343)

- On Linux, `WM_WINDOW_ROLE` property is now properly set for all MySQL Workbench windows. (Bug #14171771, Bug #65537)

- The **Check for Updates**, **Submit a Bug Report**, and **Discuss a Topic** MySQL Workbench buttons are now underlined when the mouse cursor hovers over them. (Bug #11758492, Bug #50704)

Changes in MySQL Workbench 6.0.7 (2013-09-03, General Availability)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 6.0.6.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- A new option was added in the connection settings "Advanced" tab for toggling the secure_auth (useLegacyAuth) option, to optionally connect to legacy systems. (Bug #17313129, Bug #70023)

Bugs Fixed

- On OS X, MySQL Workbench would not start due to a missing `libmysqlclient.18.dylib` dependency. (Bug #17402670, Bug #70229)

- On Linux, font type and font size preference changes were not always preserved. (Bug #17382557, Bug #69691)

- Attempts to copy fields between two diagrams in the Diagram Editor failed. (Bug #17381018, Bug #70072)

- Entering a wrong password while attempting to unlock the Audit Log would generate an unhandled exception. (Bug #17376518)

- When right-clicking on a database's function via a server connection through a SSH tunnel, MySQL Workbench would crash if the function definition lacked a comment. (Bug #17353664, Bug #70016)

- Changing **Target MySQL Version** to 5.6 on an older Model will now allow configurable date related values, such as DATETIME(6), TIMESTAMP(6), and CURRENT_TIMESTAMP(6). (Bug #17350288, Bug #70125)

- On Linux, the list of local IPs is no longer retrieved with the deprecated `ifconfig` command. A list of standard localhost IPs is used instead. (Bug #17348054, Bug #70118)

- Under certain conditions, the **Database**, **Manage Connections**, **Duplicate** action failed to function. Such as, if a connection with **No Remote Admin** was enabled. (Bug #17345754, Bug #70097)

- Toggling the **Selection Database Objects to Import** option for the **Data Import/Restore** options would throw an unhandled exception. (Bug #17338687, Bug #70089)

- Under certain circumstances, the **Stored Connections** listing was empty. (Bug #17324160, Bug #70022)

- With Enterprise Audit, it would report that auditing was enabled when pressing **Enable Audit** for a MySQL Server that was not running. (Bug #17317526)

- On Microsoft Windows and with lower_case_table_names set to "1", attempting to create a schema name with only question marks ("???") using the **Create New Schema** action item would emit an error. (Bug #17314386, Bug #70040)

- On Microsoft Windows, a MySQL Enterprise Backup job with a space in the profile name was not scheduled in the Windows Task Scheduler. Also, validation was added for invalid characters. (Bug #17314101)

- On OS X, the SQL File tabs would not display the file names, and would instead display generic names like "SQL File 1". (Bug #17313835, Bug #70031)

- The full and partial backup labels were updated, to be less confusing. (Bug #17313567)

- With Enterprise Audit, the **Delete Cache** would sometimes fail and generate an error. (Bug #17300071)

- The MySQL Enterprise Backup UI was updated to clarify when a backup is full or partial, and when a partial backup is full or incremental. (Bug #17299838)

- The **Browse Audit Log File** feature would not always locate the Audit Log File. (Bug #17299818)

- On Linux, MySQL Workbench 5.2 packages would not upgrade to MySQL Workbench 6.0. It was required to manually uninstall MySQL Workbench 5.2 first. (Bug #17291904)

- On Oracle Linux, the built packages were missing a `libtinyxml.so` dependency. (Bug #17291888)

- Privileges that do not have a corresponding user entry will now be displayed in MySQL Workbench, so that they can be properly deleted by the user. This includes the "test" database. (Bug #17278181, Bug #69934)

Changes in MySQL Workbench 6.0.6 (2013-08-12, General Availability)

This is the first General Availability release of Workbench 6.0.

Bugs Fixed

- The description of the OEL packages was changed in My Oracle Support (MOS) from "Oracle Linux 6" to "Oracle Linux / RHEL 6". (Bug #16897390)

- On Microsoft Windows, the `C:\Program Files (x86)\MySQL\MySQL Workbench 6.0\` directory would remain (with some files) after uninstalling MySQL Workbench. (Bug #16657516)

- On OS X, an empty the Model Overview tab was empty. (Bug #16464436, Bug #68596)

- Reading a `my.ini` file that contained a non-commented line before the first [section] would cause a crash.

- On Microsoft Windows, the **Print to File** feature could generate a corrupted PDF file.

- On Microsoft Windows, MySQL Workbench would only detect the connection settings when the list of locally installed instances was detected. It now also detects the instance settings, such as the service name and configuration file location.

Changes in MySQL Workbench 6.0.5 (2013-08-01, Release Candidate)

This is the first RC release of 6.0. It is meant for testing purposes, and should not be used in a production environment.

Bugs Fixed

- The "Query duration / Fetch time" report failed to function properly. (Bug #17229322, Bug #69840)

- On Microsoft Windows 8, MySQL Workbench would freeze due to font related issues.

  A workaround was to change the font using **Edit**, **Preferences**, **Appearance** to a font other than "Bitstream Vera Sans Mono 12." (Bug #17183318, Bug #69480)

- The **Rename** functionality, from within the **Fix Index Names** dialog, did not report that the rename operation was successful. (Bug #14508931, Bug #66340)

- MySQL Workbench would crash after excessive **Control** + **C** and **Control** + **V** operations on modeling objects.

- On Microsoft Windows, code signing was enabled on the Windows executables.

- When performing a Sybase ASE migration, the custom length for `TEXT`, `UNITEXT`, and `IMAGE` columns was fixed as they do not allow a custom length.

- On Microsoft Windows, `Consolas` is now the default font, except in XP. This solves a potential freeze when opening the SQL editor in Microsoft Windows 8.

- On Microsoft Windows, the log file viewer would emit an exception when very long log entries were present.

- The mysql-workbench-gpl packages were renamed to mysql-workbench-community, and various RPM packaging fixes were made.

Changes in MySQL Workbench 6.0.4 (2013-07-24)

This is the third public beta release of 6.0. It is meant for testing purposes, and should not be used in a production environment.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The **Print to PDF...** and **Print to PS...** menu items were merged into a single **Print to File...** menu item. This new menu item also now allows diagrams to be selected (or deselected). (Bug #17069956, Bug #69176)

- MySQL Workbench will now detect file edit changes in the SQL editor. For example, you may now open an SQL file in MySQL Workbench, edit the same file in another text editor, and MySQL Workbench will detect the changes and update accordingly. (Bug #16744919, Bug #68950)

- It is now possible to manually specify referenced tables and columns to alter forward engineering behavior. A stub table is created for this, which is not forward engineered. (Bug #14134769, Bug #61440)

- The tab navigation feature now includes wrapping. Pressing **Control + Tab** (forward) with the last tab active will move to the first tab, and pressing **Control + Shift + Tab** (backward) with the first tab active will move to the last tab. (Bug #14096668, Bug #65354)

- As requested, MySQL Workbench can be opened from Visual Studio (or most any application) as an external tool. The `--query` command line option accepts connection information, see `--help` for additional options. (Bug #14079584, Bug #65261)

- Columns for the Foreign Key definition are now reordered to match that of the index they are associated with. (Bug #13344743, Bug #62930)

- A sub-menu in the **Query** menu was added to change the row count limit.

  A workaround was to click the toolbar button "Toggle limitation of records number" in the results grid pane to set or unset the limit for a specific result set. (Bug #11763098, Bug #55765)

- A page header and footer was added to the **Print to File...** output.

  A workaround option was to add a text field to the document and add your information there. (Bug #11762619, Bug #55233)

- Support for opening SQL (`*.sql` and `*.dbquery`) files from the command line option was added.

  If only a `.sql` file is passed in, then a connection dialog will be opened so that a MySQL connection can be chosen. If the `-query $connection` option is also passed in, then the file will be opened using that MySQL connection. (Bug #11752504, Bug #43721)

Bugs Fixed

- The **Schema Transfer** wizard text was difficult to read. (Bug #17163820, Bug #69747)

- In the Model view, the "Accordion" style tabs would disallow scrolling when multiple tabs were open. For example, **Physical Schemas** would not scroll down to other options like **Model Notes**. (Bug #17154650, Bug #69635)

- The **Schema Privileges** page was updated. Schema privileges can now only be added to the previously selected user/host pair. (Bug #17088972, Bug #68059)

- **Forward Engineer SQL Script** would not create View definitions in the generated SQL script when **Omit Schema Qualifier in Object Names** was set, the resulting SQL script only contained definitions for the table. (Bug #17066617, Bug #69686)

- It was not possible to execute statements with the `PROCEDURE ANALYSE` statement.

  A workaround was to remove the generated `LIMIT` clause. (Bug #17066330, Bug #69687)

- The `innodb_file_format_check` option was set as a String in the MySQL Workbench GUI, but it is now set with a (Boolean) check box. (Bug #17057975, Bug #69672)

- **Reverse Engineer Selected Schemata** could fail while migrating PostgreSQL 9.0.x, because MySQL Workbench assumed the `pg_catalog.pg_enum` table had the `enumsortorder` column in version 9.0.x, when it was added in 9.1.

  A workaround is to edit `db_postgresql_re_grt.py`, as suggested in the bug report. (Bug #17056367, Bug #68997)

- The **Schema Privileges** tab would not remove a user's schema privileges after pressing **Delete**. Only the **Add** and **Modify** operations functioned. (Bug #17050803, Bug #69660)

- Horizontal scroll bars are now present on all text boxes. Sometimes the horizontal scrollbar would not be displayed until the cursor was moved past the edge of the text box using the keyboard. (Bug #17050483, Bug #66747)

- Detection of compatible indexes was updated to accept any index with the correct columns at the right position. The ordering of the FK columns is automatically updated to match the index columns. (Bug #17043125)

- Executing **Synchronize Model** on databases with foreign keys could generate "Error 1822" failures. Foreign key index dependencies are now respected, in addition to any other ordering that is being done. (Bug #17037751, Bug #69508)

- A new preference was added to toggle casing for the generated keywords in the auto completion list. **Edit**, **Preferences**, **SQL Editor TAB**, **Use uppercase keyboards on completion**. (Bug #17033597, Bug #69621)

- On Microsoft Windows, executing a query using the **Control + Enter** shortcut would cause the cursor focus to be lost. (Bug #16983168, Bug #69505)

- The height of the SQL editor text pane would revert to the default height after executing a query. The customized height is now preserved. (Bug #16979473, Bug #69504)

- On OS X, executing **Apply SQL Script to Database** could overflow the window if too many errors were generated. These errors are now logged in the **Action Log** pane. (Bug #16970560, Bug #69483)

- Clicking "Alter Table" from the schema tables list and changing the engine from the engine drop down would not alter the database after pressing **Apply**. (Bug #16933119, Bug #69433)

- Connection handling was refactored. All defined connections are now listed, when before only "stored" connections were shown. Additionally, the last used connection is now highlighted by default.

  This also solves a problem where the connection manager window could crash when it was closed. (Bug #16869457, Bug #69329)

- Under **Server Administration**, **Users and Privileges**, clicking **Add Account** after sorting the list by **User** would load the details of an existing user. (Bug #16828217, Bug #69267)

- On Microsoft Windows, only the size would be saved when attempting to save a size and name for a new diagram. (Bug #16793626, Bug #69182)

- On OS X, opening the context menu for a table in the expanded tables list in the schemata explorer after running a query against the schema (before it was expanded in the schemata explorer) would cause MySQL Workbench to freeze. (Bug #16788873, Bug #69188)

- The tables drop down was not sorted alphabetically in the schema explorer if a `SELECT` query was executed on a schema before viewing the tables. (Bug #16784484, Bug #69178)

- A table's current information was not always reflected in the **Information** panel for the SQL editors, even after clicking **Refresh All**. (Bug #16708902, Bug #68988)

- **Control + PageDown** and **Control + PageUp** now switch between open SQL Editor connections. (Bug #16687676, Bug #68968)

- An option to edit a table's `KEY_BLOCK_SIZE` information was added to the **Options** tab, to go along with the current **Row Format** option. (Bug #16588233, Bug #68422)

- The **File/Open SQL Script** dialog now defaults to the last used folder during the session. (Bug #16581302, Bug #68822)

- Colons are now enclosed with brackets and recognized as a valid IPV6 hostname when using the **Setup New Connection** dialog. (Bug #16422401, Bug #68536)

- Executing a **Reverse engineer** did not refresh the **MySQL Model** tab. It is now updated automatically. (Bug #16285313)

- The **Revert** option not working for views/routines. (Bug #16284542)

- A new option to reset all connection passwords was added. It is under **Open Connection**, **Server**, **Reset saved passwords for connection**. (Bug #16284321)

- The **Refresh data from data source** option failed to function with local changes present. A dialog was added to either apply or cancel the local changes before performing the refresh. (Bug #16104127, Bug #68030)

- An option to **Select All** schemata was added to the migration wizard. An option to **Unselect All** already existed. (Bug #16065000, Bug #68017)

- With zoom at 100%, the letter "d" looked like a "c" in a table relationship tooltip. (Bug #14835312, Bug #67420)

- The **Catalog Diff Report** for an **EER Diagram** could generate a list of differences, but without any actual differences. (Bug #14829528, Bug #67209)

- After synchronizing with a data source by defining the source and destination databases, the previously selected stored connections would sometimes be incorrect. (Bug #14807904, Bug #67111)

- While editing a **Model Overview**, executing undo (**Control + Z**) could undo text in the Trigger window beyond the point that another table was clicked, eventually removing all text in the trigger tab. The trigger information is now respected between tables. (Bug #14800878, Bug #66867)

- The `Filter` field in the query tab would ignore the last character. (Bug #14636440, Bug #66844)

- Refreshing filtered results could fill the table with data, without first applying the filter. (Bug #14498414, Bug #66009)

- Scrolling around an EER diagram could sometimes cause glitches, by adding misplaced pixels along the borders. (Bug #14498256, Bug #65969)

- After reading large EER model, and immediately loading another EER model, sometimes MySQL Workbench would crash. (Bug #13923093, Bug #17024905)

- When defining a user defined data type, the available options did not include the specification of a charset, especially useful for the `TEXT` data type. The inclusion of the new **Table template** functionality fixes this issue. (Bug #13500224, Bug #63728)

- Sometimes the MySQL Workbench GUI would not scale down to allow access to some of the buttons. All buttons are now displayed when using the minimal (or greater) required resolution of 1024x768. (Bug #12756582, Bug #61608)

- When moving a column in a table either up or down by means of the context menu, the focus would not remain with the column being moved. Now, when moving a selected column of a table, the focus remains with the re-positioned column. (Bug #11763633, Bug #56371)

- A **Rename Diagram...** context menu item was added for diagrams in the **Model Overview**. (Bug #11762737, Bug #55367)

- The **User Accounts** panel is now resizable so that the **user** and **from host** columns can both fit without scrolling. (Bug #11757906, Bug #50023)

- On Linux, the green lightening bolt icon in the schema editor did not function. It was replaced by a "Refactor Schema" button. (Bug #11757390, Bug #49430)

- Changing the `INTEGER` data type to `VARCHAR` would leave the "AI" (`AUTO_INCREMENT`) attribute checked. (Bug #11755581, Bug #47379)

- Textual UI inconsistencies were fixed, such as changing the name "Window" to "Tab" when referring to a new tab. (Bug #11753870, Bug #45389)

- MySQL Workbench would allow the creation of a `FULLTEXT` index on tables using an engine that did not support `FULLTEXT`. Validation now catches invalid index type/engine type combinations. (Bug #11747352, Bug #31939)

- Validation and forward engineering did not check engine dependencies when the index type was changed. (Bug #11747351, Bug #31938)

Changes in MySQL Workbench 6.0.3 (2013-07-09)

This is the second public beta release of 6.0. It is meant for testing purposes, and should not be used in a production environment.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- On OS X 10.7 and above, full screen support was added. (Bug #16962994, Bug #69473)

- Database models can now be synchronized with any schema overriding the schema name. For example, it is now possible to synchronize two databases that have different names. (Bug #11757723, Bug #49817)

Bugs Fixed

- Migrating Microsoft SQL Server to MySQL could truncate `VARCHAR` data. (Bug #17025373, Bug #69596)

- The **SELECT DROP table/schema** context menu action would generate SQL in lowercase. SQL keywords are now written in uppercase. (Bug #17006621, Bug #69560)

- The check box in the bottom left corner of the **Model**, **Model Options** dialog box was not labeled. The label is now **Use defaults from global settings**. (Bug #17004380, Bug #69552)

- Executing **Synchronize Model** against two tables that were identical except for the order that the indexes were created, would cause MySQL Workbench to drop and immediately re-add the foreign keys. (Bug #16999452, Bug #69153, Bug #69181)

- Pressing **Control + F** would fail to open the **Find** dialog. (Bug #16996850, Bug #69540)

- The ";" separator for passing in multiple values to the `replicate-wild-ignore-table` option was not parsed correctly, and MySQL Workbench would throw an unhandled exception. (Bug #16996665, Bug #69520)

- The Forward Engineering **Generate INSERT statements for tables** option did not function. (Bug #16992658, Bug #69532)

- When executing an **Administration** task, such as **Manage Security**, an "Current Profile Has no WMI enabled" error would be reported for local connections.

  A workaround was to edit and save the connection, while making edits to the connection was not required. (Bug #16986040, Bug #59933)

- Under certain circumstances, entering an incorrect password would be saved and "Incorrect password" would be reported without the ability to enter a new (and valid) password. (Bug #16979861, Bug #69497)

- On OS X, the default configuration files for local server instances were not discovered properly. Attempts to edit the **Options File** would emit an error. (Bug #16977187, Bug #69475)

- The **DBMS connection read time out** user preference was limited to 5 characters in length. (Bug #16967769, Bug #69395)

- MySQL Workbench prompted for the `sudo` password when it was not needed. (Bug #16967758, Bug #69481)

- The **Export recordset to an external file** option would not check for existing files with the same name, and would overwrite a file without providing a warning. A prompt is now generated that asks if you want to overwrite the existing file. (Bug #16959225, Bug #69467)

- Attempting to change `my.cnf` via **Server Administration**, **Option File** would generate an error about an invalid `sudo` password. (Bug #16941451)

- Migrating a local MySQL server to a remote MySQL server would fail at the data copy step, when a stored connection using the default socket path was used. (Bug #16895726, Bug #69376)

- On Microsoft Windows 8, a "Handle is not Initialized" exception would be generated after performing a "Find and Replace" in the routine tab that is located in the group routines section. (Bug #16892512, Bug #69354)

- Adding a particularly long string (around 50 characters) to a table comment for a model diagram would cause MySQL Workbench to crash. (Bug #16703832, Bug #68984)

- When executing an **Import From Disk** operation with **Data Import/Restore** to a connection with an SSL CA File specified in the connection's configuration, clicking **Start Import** would generate an error and fail to function. (Bug #16601645, Bug #68428)

- Creating a stored function or procedure would generate SQL with superfluous `CREATE` and `USE` statements. (Bug #16588163, Bug #68204)

- Executing **Model**, **DBDoc**, **Model Reporting** created a memory link. Then after the report was generated, executing **File**, **Export**, **Export as PNG** failed and report that MySQL Workbench ran out of memory. (Bug #16562737, Bug #68755)

- Changing a column's default value from `CURRENT_TIMESTAMP` to `CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP` was not detected. (Bug #16546597, Bug #68341)

- Clicking **Apply** after only changing a backtick ("`") or space (" ") would not save the results, and instead MySQL Workbench would report "No changes detected." (Bug #16545503, Bug #68162)

- Moving tables around while constructing a diagram could cause the table positions to become lost, and scatter. (Bug #16521951, Bug #68727)

- When connected to a database in **SQL Development** mode after running a query (or using the **Edit table data** context menu option), left clicking the leftmost column in the result set pane did nothing. The row options are now enabled when clicking the left side column. (Bug #16469383, Bug #68633)

- Opening the **SQL editor** with a stored connection would not open the saved workspace if the stored connection was selected by default. (Bug #16433144, Bug #68499)

- After creating a table against a MySQL server with `lower_case_table_names` set to 1, the **Object Browser** would display the new table name as the user entered it, instead of displaying how it was created with lower-case. The lowercase version is now displayed, and the user is notified of the conversion. (Bug #16390426, Bug #68210)

- Importing a CSV file that defined line endings with "\r" instead of "\n" or "\r\n" would cause MySQL Workbench to crash. A warning message is now displayed that warns of the incorrect format. (Bug #16362189, Bug #68343)

- The `**.*` object under **Model**, **Schema Privileges**, **Privileges** was missing an icon. (Bug #16285241)

- The **Replace & Find** feature would insert the replacement text at the cursor location even if the matching text was not found. (Bug #16284625)

- On Microsoft Windows, an "Index was out of range" exception was thrown after loading the **Output** tab in the SQL editor. (Bug #16283047)

- The text editor in the lower bottom half of the snippets tab (inside the scripting shell) would become unavailable (hidden) after dragging the splitter bar all the way down. (Bug #16277909)

- After adding and deleting a relationship between tables, the deleted relationship was still reported in the yellow tooltip box.

  A workaround was to restart MySQL Workbench after saving the project. (Bug #14835355, Bug #67421)

- An error was emitted while generating a catalog diff report, and differences in catalogs are now successfully reported. (Bug #14692908, Bug #66986)

- The canvas height of the Model Overview container was not calculated properly. The amount of whitespace would increase as the number of objects increased. (Bug #14456267)

- Database synchronization with a View would sometimes fail, and could remove the View. (Bug #14005482, Bug #65108)

- Right-clicking on an existing diagram in the model editor would display a disabled Cut and Paste option. It was removed. (Bug #13470625)

- A column name mapping editor was added to the synchronize wizard, as sometimes manually adjusting the column mapping is required. (Bug #13463420, Bug #63486)

- An error dialog is now generated if an invalid column is chosen from the foreign key picker when creating the relationship. (Bug #11766525, Bug #59655)

- Validation now checks for the required parenthesis with the "Union Tables" argument during model synchronization, and adds them if they are missing. (Bug #11766487, Bug #59601)

- The default value for an `ENUM` was not quoted. (Bug #11761349, Bug #53835)

- MySQL Workbench could exhibit an extended timeout when suffering from incorrect permissions. This extended timeout was fixed, and MySQL Workbench will now ask for the sudo password when needed. (Bug #11761240, Bug #53711)

- When adding a table to form a N:M relationship in a large EER Diagram, the new N:M table was positioned far away from the tables. This third table is now added between the two other tables. (Bug #11754898, Bug #46582)

- The name of a `Diagram` can now be changed from the diagram tab via **Model**, **Diagram Properties and Size...**. (Bug #11753099, Bug #44472)

Changes in MySQL Workbench 6.0.2 (2013-06-13)

This is the first public beta release of 6.0. It is meant for testing purposes, and should not be used in a production environment.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- A new **Hide sleeping connections** option was added to the **Client Connections** section of the MySQL **MANAGEMENT** tab. (Bug #16675975, Bug #68978)

- The **Select All** and **Unselect All** (database) commands were added to the **Synchronize Model** context menu. (Bug #14084381)

- A **Functions** section was added to the **SCHEMAS** viewer in the Object Browser, to go along with the current **Tables**, **Views**, and **Stored Procedures** sections. (Bug #11763631, Bug #56368)

- A **Truncate Table** option was added to the right-click context menu for tables, which complements the current **Alter Table** and **Delete Table** options. (Bug #11758513, Bug #50726)

- Relationship properties can now be edited by double-clicking the relationship in an EER diagram. (Bug #11758318, Bug #50506)

- Table column and relationship defaults may now be configured to default as lowercase, uppercase, or capitalized (for camelCase). The syntax, under **Preferences**, **Model** is %table|upper%, %table|lower%, and %table|capitalize%. See the hovering help tool tips for additional information. (Bug #11753021, Bug #44382)

Bugs Fixed

- Several improvements were made to the Microsoft SQL server migration wizard, which included fixes for unsupported operand types. (Bug #17086889, Bug #69713)

- If several editor tabs were open, including one or more **Table editor** tabs (via **Create Table** or **Alter Table**), MySQL Workbench would crash when choosing **Close all** or **Close all but this**. (Bug #16959525, Bug #69466)

- Specifying an ip/subnetmask as a host specification would be rejected. For example, "10.0.1.0/255.255.254.0" failed to validate as a host. (Bug #16887657)

- Dropping a schema that was defined as the `default schema` would crash MySQL Workbench. (Bug #16876985, Bug #69337)

- Executing a query that contained a regular expression would cause MySQL Workbench to crash. (Bug #16775867, Bug #69167)

- Right clicking a field in the SQL Editor while in grid view would cause MySQL Workbench to freeze. (Bug #16762969, Bug #69139)

- **Forward Engineer** failed on the foreign key validation step for tables with cyclical foreign key relationships. An option to disable foreign key checks during `INSERT` handling was added. (Bug #16719239, Bug #69054)

- While migrating from a Microsoft SQL Server database, the `Datetype2` MSSQL type is now converted to the `DATETIME` MySQL type. (Bug #16681117, Bug #68790)

- An older version of the MySQL Client was bundled with MySQL Workbench, and it has since been updated. This caused problems while executing `mysqldump`. (Bug #16575396, Bug #16668532, Bug #16307109, Bug #68683, Bug #68779, Bug #68328)

- On Microsoft Windows, migrating an SQL Server database that contained a lot of columns (100+) would sometimes fail to migrate. The problem involved how `wbcopytables.exe` uses temporary files to store table names and column information. (Bug #16538786, Bug #68146)

- Upon synchronization between a model and a database, the database SQL code is no longer displayed when changes are applied to a model or set as ignored. (Bug #16529438, Bug #67692)

- Statements following a "--" style code comment would not be executed. These comments are now handled properly by MySQL Workbench. (Bug #16492436, Bug #16171620, Bug #15978566, Bug #68674, Bug #67711, Bug #67848)

- The **Slow query log** tab was empty when checking against MySQL Server 5.7. (Bug #16478942)

- If two triggers existed on a table, but only one was modified, the second trigger was removed from the schema after applying the changes. (Bug #16477746, Bug #68651)

- Using **Synchronize with Any source** would not display all available schemas for the source connection. (Bug #16471554, Bug #67887)

- When configured to generate a script for data copying on the **Data Transfer Setup** page in the Database Migration wizard, the **Truncate target tables...** and the **Enable debug output...** options were not generating commands for this script. (Bug #16464193)

- On Microsoft Windows, scripts generated for `wbcopytables.exe` would not escape parameter values that contained spaces or semi-colons. (Bug #16463467)

- Executing a very large statement could produce generic GDI+ errors, and replace the process list with a large red X. (Bug #16453590)

- While copying tables, the **Database Migration** wizard would create temporary files in the current directory upon execution. This would sometimes lead to permission errors, so the system's temporary folder is now used. (Bug #16447313)

- The **Manual Editing** step of a **Database Migration** would display all columns, but will now only show the columns that were selected for migration. (Bug #16446660)

- **Edit**, **Format**, **Beautify Query** would remove the `ROLLUP` keyword. (Bug #16435852)

- Changes to a trigger are lost after editing a file from an older version of MySQL Workbench that contains the trigger. (Bug #16433014, Bug #66572)

- On Linux, MySQL Workbench would crash after deleting a database schema from a model. (Bug #16353605, Bug #68402)

- The **Server Administration**, **Configuration**, **Options File** editor would sometimes fail to display the options. (Bug #16346058, Bug #68398)

- **Edit Table Data** was removed from the table context menu, and the table name was added as the title for the **Select Rows - Limit 1000** context menu option that can be used to edit table data. (Bug #16346058, Bug #68398)

- Comments added to primary keys were not saved. (Bug #16329439)

- When synchronizing a model with columns with default values of `NULL`, MySQL Workbench would always treat these columns as having changed. (Bug #16325636, Bug #68369)

- Selecting and then dropping multiple objects from the SQL editor would cause MySQL Workbench to delete the objects, and then crash. (Bug #16311466, Bug #68337)

- Adding a new connection using the **Manage Stored Connection** option in the **Synchronize Model** dialog would not save the connection after MySQL Workbench was closed. (Bug #16292166, Bug #68294)

- After dropping a database that is defined as the default schema and then clicking **Create a new table**, the **New table** tab would display the "default schema" in the "schema:" field. (Bug #16284582)

- The `-upgrade-mysql-dbs` command line option was missing from `-help`. (Bug #16278270)

- Clicking **Cancel** after loading **Plugins**, **Utilities**, **Change the Storage Engine of All Tables** would generate an error. (Bug #16248101, Bug #68232)

- Datetime with fractional seconds is now supported. Before, MySQL Workbench would convert `DATETIME(n)` (where "n" is an integer) to `DATETIME`. This fix also applies to `TIMESTAMP(n)`.

  Note that this option requires the default target MySQL Server version set to "5.6", which is set with the **Model**, **Model Options** preference. (Bug #16239203, Bug #68191)

- A database with a name that contained an underscore could not be assigned schema privileges using the provided database list in the **Server Administrator**, as the database name was not escaped properly. (Bug #16227715, Bug #68175)

- Default values for `DECIMAL` column definitions would not be preserved during synchronization. (Bug #16171808, Bug #67502)

- Running **Database**, **Reverse Engineer** on an EER Model diagram would cause the canvas to not draw properly until the diagram was dragged. (Bug #16171635, Bug #67440)

- While editing a schema comment, the cursor would jump to the end of the comment after the cursor was moved, thus making it impossible to edit previous comments. (Bug #16104719, Bug #67843)

- The **Action Output** window would not refresh when the **Text Output** window was not active. (Bug #16063275, Bug #67419)

- Opening a stored procedure or function for editing in a Model, editing it, and then closing the tab, would crash MySQL Workbench. (Bug #16058044, Bug #67995)

- Extra whitespace would sometimes be present between the **Migrate Table Objects** and **Migrate View Objects** sections of the **Source Objects** step in the migration wizard. (Bug #14808352, Bug #67188)

- A Database Migration from SQL Server to MySQL could fail if a SQL Server data type was a FLOAT(n). (Bug #14761954, Bug #67234)

- MySQL Workbench could crash after modifying a functioning SSH key-based authenticated stored connection with incorrect credentials. (Bug #14701987, Bug #65672)

- Clicking **Cancel** after loading **Alter Table**, **Partition** would duplicate the partition on the screen once for every time **Cancel** was clicked. (Bug #14571162, Bug #66615)

- The right-click context menu was not available while text was highlighted in the SQL editor. (Bug #14568049, Bug #66613)

- When migration SQL Server to MySQL, CHAR/VARCHAR/TEXT fields containing international text failed to transfer. These fields are now converted to NCHAR/NVARCHAR/NTEXT. (Bug #14534789, Bug #66516)

- MySQL Workbench will now check if collation and charset are compatible, and in the case of generated SQL, the charset will be ignored if they are incompatible. (Bug #14278043, Bug #65764)

- A connection could fail to connect prematurely and would report "Connection canceled" despite **Test Connection** reporting a valid connection. (Bug #13972036, Bug #64003)

- A trigger meant to insert connections on an n-n relationship failed on `INSERT` due to a wrong insert order produced during the Forward Engineering step.

  A workaround was to forward engineer the database with the **Skip Foreign Key creation** and **Skip FK Indexes** options enabled while executing **Synchronize Model**. (Bug #13790046, Bug #61594)

- With a Model project open, MySQL Workbench would crash after **Edit**, **Find**, **Find Advanced** was either clicked or after the associated keyboard shortcut (**Control + Alt + F**) was pressed. (Bug #12565875, Bug #61214)

- The **Alter Table...** option did not function on tables with triggers. This was resolved by correctly escaping the data returned by the MySQL Server when retrieving the triggers. (Bug #12546727, Bug #61110)

- Deselected table objects were still evaluated when executing the **EER Model From Existing Database** wizard on a database with triggers. (Bug #11765398, Bug #58362)

- Window placement improvements were made for using MySQL Workbench with lower screen resolutions than the minimum screen resolution requirement of 1024x768. (Bug #11764019, Bug #56802)

- The image data viewer tab in the `BLOB` image viewer would not have a horizontal tab when the image was larger than the image viewing area. (Bug #11764016, Bug #56797)

- The length of a primary key index could not be set when the primary key contained a text field. (Bug #11763301, Bug #55997)

- MySQL Workbench suffered from slow performance when selecting a large amount of data, such as 100,000+ rows. (Bug #11762734, Bug #16507740, Bug #55364)

- When **Synchronize Model** the feature was used to generate SQL to modify an existing database, it would lose the UNSIGNED attribute while executing the synchronization. (Bug #11760008, Bug #52373)

- Clicking on a table cell and pressing **F2** will now select (highlight) the cell contents for editing. Before, the cursor would be placed at the end of the cell. (Bug #11759671, Bug #52001)

- It was not possible to force synchronization of a schema with another schema that had a different name. The new **Override Target** option allows this, and is available during the **Select Schemata** stage of the synchronization wizard.

  Note: you must click **Override Target** to set the override before clicking **Continue**. (Bug #11754001, Bug #45533)

Changes in MySQL Workbench 6.0.1 (Not released)

This is the first private beta release of 6.0.

- Functionality Added or Changed

-

Functionality Added or Changed

- The **Home** tab was redesigned. See the "What's New" page for additional details. (Bug #16681573, Bug #68900)

- The available information in the Object Browser was expanded to include nontable nodes, which includes indexes, foreign keys, functions, stored procedures, and triggers. For example, a description for an index will show the type, uniqueness, and associated columns, and a function will show its parameters. (Bug #16202768, Bug #11765064, Bug #67114, Bug #57983)

- The splash screen, when loading MySQL Workbench, was removed. (Bug #11761020, Bug #53473)

- The **Server Administration** screen was improved to include additional information, when before it only displayed start/stop information. New details include running status, number of connections, traffic bandwidth, key efficiency, queries per second, server directories, available features/plugins, InnoDB related statistics, and more. (Bug #11757812, Bug #49913)

Bugs Fixed

- Forward Engineering would sometimes fail with triggers when the **Omit Schema Qualifier in Object Names** option was enabled. (Bug #16864493)

- The Database Migration wizard failed to reverse engineer a Microsoft SQL Server database if the database name contained a space. (Bug #16754457, Bug #69115)

- Attempting to create a user with the same name as the database, that contained a hyphen, would generate an error. The error was "SQL Error: 1064". (Bug #16691914, Bug #69007)

- Clicking **Apply** after editing a field name in the **Alter Table** window would not save the change, unless a different part of the edit window was clicked. (Bug #16681375, Bug #67802)

- The **Server Administration** panel would refresh the UI each time it was activated. So all unsaved changes were lost from the UI after switching to a different page and returning back to the **Users and Privileges** page. Now the UI for each tab in this page is refreshed only when it doesn't have unsaved changes. (Bug #16679449, Bug #68730)

- On Microsoft Windows 8, MySQL Workbench would not start when loaded from a network folder. (Bug #16660724, Bug #68862)

- On OS X, a table name could not be changed via the **Alter Table** menu. Clicking **Apply** would report "No Changes detected".

  A workaround was to rename the column by changing it in the list view instead of the text field below it. (Bug #16595066, Bug #68595)

- On Fedora Linux, the MySQL Workbench binary `PATH` was not properly set on some systems. (Bug #16594877, Bug #68479)

- MySQL Workbench failed to set up a connection with a MySQL user that authenticated using `PAM`. (Bug #16556099, Bug #68507)

- Copying and pasting multiple columns between tables in an EER Model would not maintain the order of the columns. (Bug #16554982, Bug #68433)

- `Connector/C++` is no longer bundled with MySQL Workbench. (Bug #16554694, Bug #68324)

- The **Sudo command** option was removed from the **Manage Server Connections**, **Server Profile MySQL Management** tab.

  Previously, the sudo password could be truncated. (Bug #16545276, Bug #67945)

- On Fedora Linux, the documentation is no longer bundled with MySQL Workbench, due to it not being "Free". (Bug #16539724, Bug #68325)

- `NULL` values were not being displayed in the first column of a result set, and were instead being displayed as empty cells. (Bug #16363542, Bug #68434)

- In the **Server Administration** panel, the "Remote Administration Disabled" message in the **Startup / Shutdown** tab was difficult to read. The remote management options are no longer visible unless it is configured. (Bug #16338435)

- Toggling break points in the `Scripting Shell` failed to set. (Bug #16271528)

- The Database Migration wizard would migrate unsigned tinyint Microsoft SQL Server values, but would throw an exception for values exceeding 127 (the maximum value for a signed tinyint). (Bug #16263882, Bug #68084)

- On Fedora Linux 18, MySQL Workbench would not install due to a missing PCRE dependency. (Bug #16198661, Bug #68114)

- It was not possible to edit indexes in the index tab of the **EER diagram**, **Alter Table** window. (Bug #16197830, Bug #68103)

- The **History** tab would display query history as oldest to newest, but now displays the most recent queries first. (Bug #14571056, Bug #66594)

- In the table editor, after entering a column comment for a new column, clicking on a different option (such as toggling `NOT NULL`) would erase the comment. (Bug #14548138, Bug #66554)

- Executing a complete schema import during a migration could run out of memory if the schema contained a lot of views, procedures, and function definitions. The memory handling was improved. (Bug #14483625, Bug #66225)

- Instead of freezing at "Tables fetching..." when table records could not be fetched, MySQL Workbench will now report this issue by updating the associated fetch icon and report it as "Could not be fetched". (Bug #14079460, Bug #65254)

- The `BINARY` flag used in a user defined type was dropped from the column definition during database synchronization. (Bug #13364844, Bug #62701)

- A **Copy Row (with names)** option was added to the context menu for record sets. (Bug #11765574, Bug #11764870, Bug #58557, Bug #57748)

- The list of Model diagrams did not re-wrap and determine how many columns of icons it could show when the window was narrowed, and would only re-wrap when the window was widened. (Bug #11755680, Bug #47486)

- On Linux, the cursor focus now starts on the **Name:** field after choosing **Edit Table**. (Bug #11755349, Bug #47112)

- The option to set the default data type for a PK column did not allow data type options to also be set for the column, such as AI or UNSIGNED. The new "Table Template" feature makes this possible. (Bug #11749340, Bug #38802)

Changes in MySQL Workbench 6.0.0 (Not released)

This is the first private alpha release of 6.0.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- New **Delete with References** and **Select with References** options were added. The `DELETE` version will generate a series of `DELETE` statements needed to delete a row from a table that includes rows from other tables that reference it, recursively. The `SELECT` version allows you to preview what rows would be deleted. (Bug #14158884, Bug #65525)

- Context Sensitive help was added that show specific help topics depending on the word at the caret in the SQL editor. After a delay, MySQL Workbench will show formatted help information from the MySQL Server (equivalent to using the help command from the command-line MySQL Client). (Bug #11765858, Bug #58862)

- The **Schema Inspector** and **Table Maintenance** features were added, which include the ability to analyze and repair tables, and view table metrics. (Bug #11765063, Bug #11761090, Bug #11758528, Bug #57982, Bug #53548, Bug #50741)

- A table templates feature was added where one can specify the list of columns to be created for a new table, in both the **SQL Editor** and in Modeling. (Bug #11764790, Bug #57661)

- A comment tab was added to allow specifying database independent comments for a store routines/views. (Bug #11764338, Bug #57161)

- A toolbar was added to all script editors with options that include save and load buttons. (Bug #11764091, Bug #56886)

- A new **Preferences**, **SQL Queries**, **Leave autocommit mode enabled by default** user preference was added. (Bug #11763282, Bug #55975)

- The `--query` command line option was changed, the connection dialog will be popped up directly if a value is not passed in. (Bug #11762355, Bug #54938)

- The development toolbar was added to all SQL editors, and includes the ability to search/replace within the **Alter Table** window. (Bug #11759599, Bug #51923)

- Added MySQL Enterprise Backup support. A GUI for the MySQL Enterprise Backup command-line now exists inside MySQL Workbench SE for Enterprise users.

- Added a code editing toolbar for all SQL editors in both the modeling and query editor interfaces.

- Added the ability to create tables from user templates, which includes a table template editor.

- Added plugins to build SQL queries for:

  - Cascading `DELETE` statements for selected tables.

  - Perform a `SELECT` statement for cascaded `DELETE` statements, for previewing.

  - Building a joined `SELECT` statement for selected tables that automatically determine the intermediate tables by using the shortest path.

- Added the database search feature.

- Added a new **Schema Manager** feature, which is found under **Schema**, **Schema Manager**.

- Added schemata migration support for SQL Anywhere and SQLite.

- Code completion now supports all query types, in addition to `SELECT` statements. Suggestions are now displayed for all database object types, such as triggers, event, and indexes, in addition to schemas, tables and columns.

- On Microsoft Windows version 7 and above, support for application color schemes was added, and they are dynamically switchable via the MySQL Workbench preferences.

- MySQL Workbench no longer bundles the μ, as they are installed as separate packages.

Bugs Fixed

- Under certain circumstances, cutting and pasting a large amount of data from an external application (such as Excel) could cause MySQL Workbench to throw an exception. (Bug #16545227, Bug #67936)

- After changing a column name, clicking a different location could cause the column name change to be lost. (Bug #16536486, Bug #68216)

- While copying a model column, the new column names default to [name]_copy[n] where "name" is the name of the copied column, and "n" is an incremented integer. (Bug #16072331, Bug #67822)

- The **Wrap-Lines** feature was not present in the functions/procedures editor, but was available in the standard SQL editor. It is now available to all SQL editors. (Bug #14823122, Bug #66942)

- The SQL editor did not recognize changes when only the case was changed. (Bug #14686272, Bug #66993)

- After clicking **Dismiss** when an orphaned document was loaded at start up, the same dialog was displayed after reopening MySQL Workbench. Recovered connections are now labeled with "(Recovered)" and will disappear after you reopen the connection. (Bug #14538902, Bug #66256)

- The **Object Browser** and **Foreign Key Referenced Table List** would sometimes list tables in a different order, but they now use the same sorting mechanism. (Bug #14521193, Bug #66279)

- When converting a `BOOL` to a `TINYINT(1)` when synchronizing a model with a schema, the synchronization diff would continue to claim the two were different. (Bug #14520990, Bug #66364)

- On OS X, resizing the navigator image to zero size (by dragging the catalog, layers, and user types part up) and then back down to resize, would cause the image to move to the wrong position. (Bug #13940003, Bug #64864)

- The quoting logic was updated to also consider that digit only identifiers should be quoted. (Bug #13939997, Bug #64869)

- Synchronization would sometimes fail and crash MySQL Workbench with models that included triggers. (Bug #12762352, Bug #61860)

- After executing **Forward Engineer CREATE**, all generated "CREATE SCHEMA IF NOT EXISTS" statements were placed at the beginning of the resulting DDL file, instead of just before the DDL for each schema. (Bug #11766560, Bug #59697)

- Switching to the **Columns** tab while creating a new table would cause MySQL Workbench to spike its CPU usage. (Bug #11766368, Bug #59467)

- Unsigned INT(10) columns would be converted to signed INT(10) for imported DBDesigner4 models. (Bug #11763391, Bug #56089)

- The `USE` statement is now being added prior to creating procedures, as otherwise it was possible that the procedures would be placed in the wrong schema. (Bug #11758847, Bug #51102)

- On Linux and Microsoft Windows, the empty properties tab was removed from the Model view interface. (Bug #11757396, Bug #49436)

- Executing **Forward Engineer SQL Script** would use the preset values from a previous execution of **Forward Engineer an Alter Script**. (Bug #11756316, Bug #48221)

Changes in MySQL Workbench 5.2

Changes in MySQL Workbench 5.2.47 (2013-02-15)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.46.

Bugs Fixed

- Pressing the **Delete** key with the cursor focus in a column name would remove diagram objects while editing an EER diagram. (Bug #16285264)

- Adding indexes to existing tables would sometimes freeze the cursor focus. (Bug #16209869, Bug #68149)

- Pressing **Delete** would delete an object from an EER Model diagram. The correct keyboard shortcut for this operation is **Modifier + Delete**. Simply pressing **Delete** will only delete the character to the right of the cursor. (Bug #16185212, Bug #68102)

- **Arrange**, **Autolayout** would push model items outside of the page. (Bug #14781895, Bug #67278)

- With auto-completion enabled, editing text in the SQL editor for a model could close MySQL Workbench. (Bug #14520292, Bug #66111)

- In the inputs tab of the table editor, it was not possible enter values using binary notation, such as b'1' or 0b1, for a value in a BIT field. (Bug #12917990, Bug #61966)

- Clicking an EER diagram tab would initially display the Model tab before displaying the EER diagram tab that was clicked. (Bug #12661264, Bug #61473)

- The foreign key settings for **On Update** and **On Delete** would sometimes be lost after adding a new foreign key. (Bug #11764432, Bug #57263)

- Sometimes the comment field was too wide and would flow over the right sidebar. (Bug #11756731, Bug #58684)

- The database migration wizard now disables triggers before copying data, by dropping and writing them to a temporary table and then restoring them later. This default behavior can be modified from the command-line by using the `--dont-disable-triggers-option` option, which prevents this logic from taking effect. Also, `--disable-triggers-on=`*schema* will remove the triggers for a particular schema and store them into a temporary table, and `--reenable-triggers-on=`*schema* will fetch the saved triggers from `--disable-triggers-on=`*schema* and recreate the triggers into the target schema.

- The uninstaller would leave leftover MySQL Workbench files on the host. These files are now deleted.

- The **New Server Instance** wizard, in the Server Administration section, was updated to include additional MySQL Server 5.6 specific templates.

Changes in MySQL Workbench 5.2.46 (2013-02-05)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.45.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The BLOB viewer defaults to read-write mode, but the text view will now show the text as read-only if the text contains "\0" or non-UTF-8 data. The text was being cutoff at the first "\0". (Bug #11764522, Bug #57364)

- New role functionality was added. It is now is possible to add schemas.*, tables.*, and *.*, and to assign privileges to each object. Before it was only possible to add individual tables when defining roles. (Bug #11761640, Bug #54153)

- The auto-completion feature was improved. For example, it now includes the parsing of aliases and subqueries for `SELECT` statements.

Bugs Fixed

- **Microsoft Windows:** In an EER Diagram, the circles at each end of a relationship line were rendered as different sizes. (Bug #12628088, Bug #54663)

- Refreshing data in the **Server Administration** panel would reset the sort order, and the sorting order would default back to `Connection ID`. This could also cause the sorting method to be mislabeled. (Bug #16206194)

- Closing a table's properties window from within the EER Model diagram window would crash MySQL Workbench. (Bug #16185134, Bug #68101)

- Closing the table properties window for a model caused MySQL Workbench to crash. (Bug #16072216, Bug #68027)

- Symantec falsely claimed that the bundled `wb.printing.wbp.be.dll` file contained a virus. (Bug #16055645, Bug #67986)

- An SQL syntax error would be reported when a comment was added to an `INDEX`. (Bug #15991038, Bug #67835)

- Two preference settings were added for online DDL operations. Listed under **Preferences**, **SQL Queries**, under **Online DDL**, these new settings (**Default algorithm for ALTER table** and **Default lock for ALTER table**) set the default values for the **Apply Script** wizard, or these values may be defined when **Apply Script** is executed. (Bug #15893626)

- Functionality (such as **Copy to Clipboard**) was missing from the right-click context-menu of the Schema browser when multiple columns were selected. (Bug #14834245, Bug #67417)

- The **Show Filter** table listing for **Export MySQL Table Objects** is now sorted alphabetically. (Bug #14706782, Bug #66712)

- Creating a table in a schema that had a "-" in the schema name would emit an error about an "unknown column", and fail to create the table. (Bug #14632271, Bug #66815)

- MySQL Workbench could crash (segmentation fault) at startup if a configuration file was corrupt. (Bug #14622471, Bug #66776)

- From the EER Diagram window, nearly completing the **Database**, **Synchronize with Any Source** wizard, and then pressing **Back** to the beginning, MySQL Workbench would crash after nearly completing the wizard the second time. (Bug #14611078)

- The **Bulk Data Transfer** migration step would fail if too many tables were being migrated, because too many arguments were being passed to the command-line. This table listing is now saved to a new file named `wb_tables_to_migrate.txt`, which is now read during the migration process. (Bug #14588167, Bug #66611)

- On Linux, the right-click context menu would differentiate between unselected and selected rows, when called from within the SQL editor results view panel. This menu is now consistent. (Bug #14539036, Bug #66308)

- Changes to a table that a view referenced would cause an error while attempting to edit the view. This fix allows MySQL Workbench to work around the underlying bug, which is MySQL bug #61718. (Bug #14526308, Bug #66502)

- Sometimes the **Create Table...** dialog in the Object Browser would emit an error instead of creating the table, after pressing **Apply**. (Bug #14520406, Bug #66169)

- MySQL Workbench could crash after files became corrupted, but now attempts to regenerate the corrupted files. (Bug #14520133, Bug #65630)

- The ability to select code in the SQL Editor by clicking on line numbers was restored. (Bug #14483713, Bug #66139)

- On OS X, and in the table editor, the schema name was changed from a dropdown-box to a simple label. (Bug #14456213)

- Right-clicking on a tab name did not show the **New Tab**, **Save tab**, **Close other tabs**, and **Copy path to clipboard** options. (Bug #14171956, Bug #65455)

- Selecting the server engine default within the Alter Table window would generate an error. (Bug #14076198, Bug #65101)

- On Linux, the **Edit**, **Preferences** menu did not wrap properly, and was too narrow so it would hide (cut) text. (Bug #14070969, Bug #64917)

- The **Model: MySQL**, **Default Storage Engine** preference would not take effect until after MySQL Workbench was restarted. (Bug #13970619, Bug #64928)

- On Microsoft Windows, holding down **Shift** with the **Spacebar** would not enter a space. (Bug #13919870, Bug #64820)

- Changes to **File**, **Document Properties** for a Model were not detected or saved by MySQL Workbench. A **Save** prompt is now generated. (Bug #13040173)

- On Linux, clicking **Apply Changes** when the cursor focus was in a data cell, the data content was not saved. (Bug #12922070, Bug #62232)

- The EER diagram **Arrange**, **Center Diagram Content** option would hide objects from the diagram. (Bug #12898144)

- MySQL Workbench would hang when attempting to connect with user accounts that utilized external authentication. (Bug #12896935)

- If MySQL Workbench crashed when an EER diagram was being created, after restarting MySQL Workbench the EER diagram would be listed as "unsaved" but would not open. And it could not be deleted from the diagram list. (Bug #12642422, Bug #61444)

- After selecting multiple objects and choosing **delete**, then choosing **keep** when prompted to delete or keep the selected objects, the relationship lines were still deleted. MySQL Workbench now asks if the relationship columns should be deleted or kept. (Bug #12565850, Bug #61113)

- Under certain circumstances, synchronizing a database to a model would remove the mandatory relationships. (Bug #11834230, Bug #60312)

- Changes made to a database schema while the **Database**, **Synchronize Model** wizard was active, would throw an exception. (Bug #11765036, Bug #57948)

- On Linux, the initial selection of a table within the schema viewer would not display the "+" to view the selected table's data, such as the columns and views. Reopening the schema table navigation tree would show the previously selected table's "+" but this is now the default behavior. (Bug #11762205, Bug #54773)

- On Microsoft Windows, **Control + Delete** would delete text from the left side of the cursor, instead of the right. (Bug #11761459, Bug #53957)

- On Linux, a warning will now warn you after attempting to close the SQL Editor when unsaved `INSERT` changes still exist.

  Also, all platforms (Linux, OS X, Windows) are now consistent, and will also warn you after attempting to close MySQL Workbench with any unsaved changes. (Bug #11758193, Bug #50363)

- The **Default Schema** setting was ignored by the **Reverse Engineer Database** wizard. (Bug #11757887, Bug #50002)

- The bundled MySQL Client was updated to version 5.6.10.

Changes in MySQL Workbench 5.2.45 (2012-12-27)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.44.

This version adds support for MySQL Server 5.6.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- **Models:** Copy, Cut, and Paste options were added to the context menu (right-click) of the **Columns** list in the models table editor. These options can be used between models. (Bug #13029519, Bug #62503)

- The **Control + /** keyboard shortcut was added to comment/uncomment lines while editing SQL queries. (Bug #14803414, Bug #67002)

- A **Copy Selected** button was added to the **Server Status** panel of the **Server Administration** window. It copies the query of the selected connection to the clipboard. (Bug #14799336, Bug #13571792, Bug #66728, Bug #63917)

- An **Import Recordset from CSV File** option was added to the SQL Editor and model `insert` tabs. This import functionality parses a file with comma-separated values. (Bug #14079606, Bug #65252)

- The **Visual Explain Current Statement** feature was added. It's similar to the existing **Explain Current Statement** feature, except this visual version generates a flowchart based on an `EXTENDED EXPLAIN` statement where `FORMAT = JSON`. This feature requires MySQL Server 5.6.5 or above. (Bug #11765095, Bug #58021)

Bugs Fixed

- **Linux:** Right-dragging saved connections, models, and MySQL Server instances on the home screen could crash MySQL Workbench. (Bug #14812457)

- **Linux:** Executing MySQL Workbench from the command-line would print `stdout` twice. (Bug #14565095, Bug #66590)

- **OS X:** The results window from executing an SQL query could be empty. A workaround was to resize the results window. (Bug #14520361, Bug #66446)

- **OS X:** Closing MySQL Workbench after executing and making changes with the **Alter Table** tool would not prompt the user with the **save** dialog. (Bug #14456136)

- **OS X:** On OS X, the default column name and column type model preferences did not function. Note that this feature does not function on Linux. (Bug #14399236, Bug #66090)

- **OS X:** The ability to select multiple columns in the models table editor did not function on OS X. It is now possible to use **Shift**, **Command**, and mouse dragging. (Bug #11766291, Bug #59372)

- **Microsoft Windows; Models:** After opening and then closing a model file from the file manager, attempts to open a different model file failed to load the model. (Bug #14791573, Bug #67312)

- **Microsoft Windows; Models:** Model files (*.mwb) would not load MySQL Workbench after being double-clicked in `Windows Explorer`. (Bug #14521111)

- **Microsoft Windows:** Pressing **Control + A** in the table editor on a table field would select all table entities instead of the text in the field. (Bug #15884658, Bug #67610)

- **Microsoft Windows:** Clicking on the **Schema** and **Schema Objects** column headers within **Server Administration**, **Data Export** would properly sort in `descending` order, but would not sort in `ascending` order when clicked again. (Bug #15849616, Bug #67518)

- **Microsoft Windows:** The **Enter** key would not create newlines within the table column comment dialogue. (Bug #14829617, Bug #67320)

- **Microsoft Windows:** Renaming an EER Diagram would crash MySQL Workbench. (Bug #14799722, Bug #66818)

- **Microsoft Windows:** The **Explain** button would not display the results in the `Explain` tab. (Bug #14702591, Bug #67059)

- **Microsoft Windows:** Right-clicking on a database name in the schema browser and choosing **Set as Default Schema** would add a strikethrough to the chosen database name. (Bug #14663690, Bug #66930)

- **Microsoft Windows:** Queries surrounded by parenthesis would not display results in the view tab. (Bug #14651969, Bug #66887)

- **Microsoft Windows:** A model failed to load when opened from the Microsoft Windows 7 taskbar if a different model was already open. (Bug #14621880, Bug #66799)

- **Microsoft Windows:** The **Id** and **Time** columns within the **Server Administration**, **Server Status**, **Connections** panel would not sort properly, as they were sorted as ASCII values instead of numerically.

Additionally, miscellaneous sorting improvements were implemented. (Bug #14612413, Bug #15953190, Bug #66768, Bug #67786)

- **Microsoft Windows:** After using the schema search filter in the object browser, right-clicking on a filtered schema would generate a context menu with invalid options. (Bug #14521006, Bug #66346)

- **Microsoft Windows: Control + H** did not invoke the replacement function. (Bug #14520920, Bug #66422)

- **Microsoft Windows:** Find and Replace would not function properly while using '_' as a replacement character. (Bug #14499088, Bug #66390)

- **Microsoft Windows:** The **Explain Current Statement** option would not function. A workaround is to manually prepend `EXPLAIN` to your query. (Bug #14483518, Bug #66157)

- **Microsoft Windows: Control + A** would not always select data from cells in the query results tab. (Bug #13891109, Bug #64723)

- **Microsoft Windows:** The default plugin directory in the configuration tab was set as a Linux style path such as `"/usr/"`, but it is now based on the OS aware `BASEDIR` value. (Bug #11764440, Bug #57271)

- **MySQL Server 5.6:** The partition count definition was limited to 1-10 as a drop-down selector in MySQL Workbench. This option is now a text field, which accommodates the 8192 partition limit in MySQL Server 5.6. (Bug #14786614, Bug #67166)

- **MySQL Server 5.6:** The SQL Editor would emit invalid syntax errors with MySQL 5.6 queries. For example, `GET DIAGNOSTICS` queries would return "syntax error, unexpected IDENT_QUOTED, expecting ':'". (Bug #14786599, Bug #14786604, Bug #14786615, Bug #67163, Bug #67164, Bug #67168)

- **MySQL Server 5.6:** MySQL Workbench would not allow passwords to be created or changed for user accounts that utilize the SHA-256 Authentication Plugin, which exists as of MySQL Server 5.6.6. (Bug #14786567, Bug #14786558, Bug #67158, Bug #67154)

- **MySQL Server 5.6:** The MySQL 5.6 `ALTER USER ... PASSWORD EXPIRE` option is now supported. An expired password indicator, and an **Expire Password** button to expire the current password, were added. (Bug #14786564, Bug #67157)

- **MySQL Server 5.6:** The SHA-256 Authentication Plugin is now supported. (Bug #14786561, Bug #67155)

- **MySQL Server 5.6:** MySQL Workbench now supports MySQL Server 5.6 configuration options. (Bug #14786556, Bug #67153)

- **MySQL Server 5.6:** MySQL Workbench would alter the `mysql.*` system tables for tasks such as account management, instead of using the corresponding account manipulation statements. This would conflict with GTID usage as of MySQL Server 5.6.

  This could have also caused a user password to be reset after modifying the user privileges. (Bug #14786531, Bug #14725272, Bug #67150, Bug #67100)

- **MySQL Server 5.6:** A `DDL` related parsing error would be generated while attempting to update an existing routine that contained a `DateTime` variable type with precision. This feature is specific to MySQL Server 5.6. (Bug #14684874, Bug #14545075)

- **MySQL Server 5.6:** Creating a standard user with MySQL Server 5.6 would sometimes fail, and emit an error that referred to an unknown `mysql_native_password` plugin. (Bug #14574998, Bug #66638)

- **MySQL Server 5.6:** All MySQL Server 5.6 system variables were listed under the **Other** tab instead of their proper location. For example, `gtid_done` is now listed under the **Replication** tab. (Bug #67170, Bug #14786569)

- **MySQL Server 5.6:** The MySQL Workbench UI now supports the extended `TIMESTAMP` and `DATETIME` features that MySQL Server 5.6 offers. Both the initial and on-update values can now be defined for these types, and the fractional-second granularity is also now supported. (Bug #67165, Bug #67169, Bug #14786605, Bug #14786616)

- **MySQL Server 5.6:** The creation of a username and password will now utilize the Password Validation Plugin in MySQL 5.6. This option is available within the Server Administration section, under the Security Options tab. (Bug #67152, Bug #67161, Bug #14786551, Bug #14786626)

- **MySQL Server 5.6:** Creating a standard MySQL Server 5.6 user account in MySQL Workbench failed, and emit an error related to the `msyql_native_auth` plugin. (Bug #67151, Bug #14786542)

- **Migration:** Migrating a Microsoft SQL Server database failed if `nvarchar(max)` was used. These are now converted to `LONGTEXT`. (Bug #14780416, Bug #67289)

- **Migration:** From within the **Manual Editing** section of the database migration procedure, viewing **Migration Problems** after **All Objects** would continue to display information from **All Objects**. (Bug #14761792, Bug #67229)

- **Migration:** Migrating from MySQL Server 5.0 to MySQL Server 5.6 could fail. The migration tool now supports MySQL Server 4.1 and above as the source database. MySQL Server 5.1 and above are supported as the target database. (Bug #14647426, Bug #66861)

- **Models:** Model notes could not be saved. The **Apply Changes** button is available again. (Bug #14813462, Bug #67211)

- **Models:** Switching from a table column tab to a different tab, and then back to the column tab, would add an empty column named "`tablename`col". This empty column would be added to the table unless **Escape** was pressed. (Bug #14768685, Bug #67235)

- **Models:** Synchronizing a model with a database could crash MySQL Workbench by causing a segmentation fault. (Bug #14588524, Bug #66707)

- **Models:** While executing the **Synchronize Model with Database** wizard, invalid trigger related errors could be emitted even though the definitions were correct. (Bug #14498358, Bug #65982)

- **Models:** Forward Engineering a model with users and roles could generate invalid SQL, because the username was not escaped within the generated `GRANT` statements. (Bug #14396930, Bug #66070)

- **Models:** The **File**, **Import**, **Import DBDesigner4 Model** feature failed to function. (Bug #13548113, Bug #63878)

- **Models:** Sometimes a modified stored procedure would not be flagged as modified while synchronizing a model. (Bug #13364922, Bug #62595)

- **Models:** The ability to open model files from older versions of MySQL Workbench has been improved. (Bug #12747012, Bug #61703)

- **Models:** When editing an EER diagram, the **Cut** context menu option follows **Delete** behavior by also deleting the schema object. It will now only remove it from the EER canvas. And a new **Remove** option was added that also only removes an object from the EER canvas. (Bug #11761492, Bug #53994)

- **Models:** Pressing **Cancel** in either the **Create EER Model from Existing Database** or **Create EER Model from SQL Script** dialogs would still open a Model tab. (Bug #11757140, Bug #49145)

- Under certain circumstances, comments could interfere with the execution of SQL statements. (Bug #15960066, Bug #67747)

- Clearing the output window while a query was running could cause MySQL Workbench to crash after the query finished. (Bug #15891884, Bug #67618)

- Saving script files did not function properly with the clipboard. Content pasted from the clipboard was not saved. (Bug #15837775, Bug #67462)

- Having `sql_mode` set to `PAD_CHAR_TO_FULL_LENGTH` causes the routine functionality to fail, as MySQL Workbench is not designed for this setting. A connection specific `sql_mode` option was added, and it can be set from the **Advanced** tab in the **Connection Editor**. It defaults to "". (Bug #14845656)

- The following scenario would crash workbench: open a table, insert a new row of data, close the table, open a different table via double-click, then press **Save Changes**. (Bug #14829570, Bug #67237)

- MySQL Workbench failed to interpret C-style comments, such as `/*! MySQL-specific code */`. For more information about comment usage in MySQL, see Comments. (Bug #14807602, Bug #67203)

- Opening a connection using **Open connection to Start Querying** from the MySQL Workbench home screen could crash MySQL Workbench. (Bug #14803527, Bug #67074)

- Added `DbMySQLQuery->affectedRows`, fixed `MySQLResult->firstRow`, and added a Splitter control to the Python binding for mforms. (Bug #14799403, Bug #66804)

- Procedures were always included in the exported SQL, even if excluded via a filter or configuration setting. (Bug #14758896, Bug #66790)

- An error tooltip would sometimes fail to be displayed while hovering the mouse pointer over an error marker in the SQL editor. (Bug #14705012, Bug #67067)

- The **Select Objects to Forward Engineer** filter was ignored while executing **Forward Engineer to Database**. All tables were exported. (Bug #14696609, Bug #67031)

- A crash could occur after switching tables in the **EER Diagram** tab while the **Privileges** was open, or while adding roles to the active table. (Bug #14645542, Bug #66869)

- A model could not be synchronized if a field contained a comment with a single quote. (Bug #14582241, Bug #66680)

- An exception would be generated when executing **Forward Engineer** without a MySQL Server connection. (Bug #14574987, Bug #66648)

- Lower level changes, such as a newly created `TRIGGER`, would not be visible after the object browser was refreshed. (Bug #14551801, Bug #66549)

- The non-functional comments box was removed from the schema editor. (Bug #14548126, Bug #66553)

- The bundled `ChangeLog` listing was outdated. (Bug #14547966, Bug #66528)

- In the MySQL Workbench Scripting Shell, an exception is now thrown while attempting to use `input()` or read from `stdin`. (Bug #14520741, Bug #66452)

- The mouse scroll would not function while viewing the **Options File** in the **Server Administration** panel. (Bug #14388344)

- Unlike the Server Administration panel (since 5.2.35), the SQL Editor did not support syntax that utilized the authentication plugins. (Bug #14356470)

- The **Server Access Management** interface would not allow a password to be set as an empty string. (Bug #14278189, Bug #65739)

- The **Limit Connectivity to Hosts Matching** option did not allow an IP with a Subnet Mask because "/" was considered an invalid character. (Bug #14207793, Bug #65583)

- Having multiple connections with TCP/IP over SSH could cause MySQL Workbench to not connect when exceeding `MaxAuthTries`. This may happen if an encryption type is unknown. The bundled `paramiko` library (on OS X, and Windows) was updated to version 1.7.7.1, which helps solve this problem, as it adds known support for OpenSSL keys. (Bug #13919914, Bug #64802)

- Multiple instances of MySQL Workbench will no longer open the same database model file. Doing so caused problems with features such as auto save and file locking. (Bug #13864687, Bug #64639)

- An SSL connection required a client certificate. (Bug #13851229, Bug #61266)

- A new **General**, **SQL Editor** option was added. Enabling **Create new tabs as Query tabs instead of File** (disabled by default) causes new SQL Editor tabs to default as Query tabs instead of SQL File tabs. File tabs include additional options, and prompt to be saved when the tab closed. (Bug #13492434, Bug #14541178, Bug #62929, Bug #66541)

- Changing a foreign key column to be nullable now deselects the mandatory check box. If all foreign key columns are set to `NOT NULL`, then the mandatory check box value will be selected. (Bug #13252655, Bug #62737)

- The `Start Command Line Client` feature would fail to connect with SSH connections. (Bug #12612343, Bug #61325)

- A **Refresh Rate** option was added to the **Server Administration**, **Server Status** window. The refresh rate defaults to "Don't Refresh" and includes options ranging from 0.5 to 30 seconds. (Bug #11926869, Bug #60546)

- It was not possible to sort schemas for exporting. (Bug #11926862, Bug #60566)

- Changes to the `DEFINER` clause were not detected by the **Alter Table** wizard when altering this clause was the only change. (Bug #11829867, Bug #60164)

- Importing a saved connection that used an SSH tunnel would throw an exception, and fail to import the connection. (Bug #11765909, Bug #58922)

- Attempting to open **MySQL Doc Library** while it was already opened would generate an error. (Bug #11763691, Bug #56432)

- When foreign keys are added, existing indexes are now used instead of always creating new indexes. (Bug #11760834, Bug #53277)

- Opening a model from a newer version of MySQL Workbench could generate an error dialog that was hidden behind the splash screen. This made it difficult to close the splash screen, which meant MySQL Workbench could not be used. A workaround was to pass in the `-nologo` option at startup. (Bug #11754043, Bug #45582)

- The `ALTER ROUTINE` functionality would not detect stored procedure changes when only the case changed. This check was case-insensitive. (Bug #65277, Bug #14136994)

Changes in MySQL Workbench 5.2.44 (2012-09-27)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.43.

This version adds native PostgreSQL and Sybase ASE support to the Database Migration Wizard.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- Added native migration support for PostgreSQL and Sybase ASE.

- Updated the bundled MySQL Utilities to version 1.1.0, which includes the new `mysqluc` console.

Bugs Fixed

- After right-clicking on a nonempty field in the SQL editor, and choosing **Copy Row Content**, pasting the row into an empty row (by right-clicking and choosing **Paste Row**) would not increment the row id when it was appropriate to do so. (Bug #14587186, Bug #66668)

- When a table from Microsoft SQL Server was migrated to MySQL, `TEXT` columns were mapped to `VARCHAR(16)`. They are now mapped to `LONGTEXT` because Microsoft SQL Server `TEXT` columns have a maximum length of `2^31 - 1`. (Bug #14556732, Bug #66584)

- The MySQL Workbench **Data Export** feature would fail to recognize tables that contained accented characters in the table's name. (Bug #14504342, Bug #66421)

- The object browser would not update the column order after a table was altered. (Bug #14495629, Bug #66232)

- On OS X systems with the Retina display, the mouse cursor would register incorrect mouse coordinates. (Bug #14396939, Bug #65607)

- Entering the caret ("`^`") character inside the SQL editor, followed by any other character, could cause MySQL Workbench to hang. This was a Scintilla bug that is now fixed. (Bug #13930994, Bug #64848)

- After choosing **Alter Table**, pressing **Apply** would cause MySQL Workbench to display "Preparing..." in the output panel, but it now displays "No changes detected." (Bug #13497239, Bug #63604)

- When synchronizing a model to a database after changing a field definition from `NOT NULL DEFAULT x` to `NULL DEFAULT NULL`, the model synchronization would correctly generate the SQL. But after executing this SQL and resynchronizing, MySQL Workbench would report that the table needed to be updated. (Bug #12756728, Bug #61720)

Changes in MySQL Workbench 5.2.43 (2012-09-12)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.42.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The default object/relationship notation for new models will now be taken from the last notation selected by the user. This is chosen via **Model**, **Relationship Notation**. (Bug #49997, Bug #11757883)

Bugs Fixed

- It was possible for a custom plugin to cause MySQL Workbench to crash. (Bug #14595613, Bug #65817)

- After editing and closing an EER diagram, double-clicking on one of the diagram tables could generate an exception. (Bug #14587490, Bug #66699)

- Dropping multiple objects at the same time was not possible. Selecting multiple objects, right-clicking on one of the selected objects, and then choosing the **Drop n Object** option would generate SQL that deleted only one of the selected objects. (Bug #14538863)

- A semicolon at the end of a single lined SQL comment would be treated as a delimiter, and cause the SQL query to not execute. (Bug #14529811, Bug #66505)

- Passing in the `-nologo` argument while starting MySQL Workbench would cause a crash. (Bug #14527014)

- MySQL Workbench would sometimes crash at startup due to a race condition. The logged error included "Invoke or BeginInvoke cannot be called on a control until the window handle has been created." (Bug #14526134, Bug #66130)

- Right-clicking and choosing **Edit Table Data** while multiple schemas are selected could cause the activity animation icon to remain active and/or crash MySQL Workbench. (Bug #14524139, Bug #66022)

- Clicking **Browse** after the **Target Creation Options** stage of the database migration wizard would generate an error. (Bug #14520838, Bug #66271)

- Synchronizing a restored EER model with the **Model and Database Differences**, **Update Model Only** configuration option enabled for all tables would cause MySQL Workbench to crash. (Bug #14510962, Bug #66436)

- Migrating a Microsoft SQL Server table that contained both `NULL` and non-null values in a `DATETIME` column failed to import properly. (Bug #14509484, Bug #66359)

- Right-clicking on a table and selecting **Copy Insert Statement** would generate SQL with the columns sorted in alphabetical order. The SQL is now generated in the order listed in the database. (Bug #14508845, Bug #66419)

- With the Slovenian keyboard layout chosen, pressing **Control + /** would not toggle commenting. (Bug #14504877, Bug #66131)

- Migrating from a remote SQL Server 2008 database to a local MySQL database failed at the **Fetch Schemata List** stage of the database migration wizard, as it was unable to connect to the source database. (Bug #14498549, Bug #66030)

- Synchronizing a model could crash if the model had an invalid foreign key. (Bug #14498436, Bug #66020)

- On Fedora 17, `autoconf` would not detect the `altlr` which is `antlr3-C version 3.4`. (Bug #14495924, Bug #66325)

- The database export feature would not always export the correct databases if some database names were clicked while others checked the selection check box. This feature now only takes into account the check boxes. (Bug #14495660, Bug #66376)

- Under certain conditions, synchronizing a model would generate SQL statements that dropped a schema before altering it. (Bug #14495165, Bug #66083)

- On Linux, the `mysql-workbench-bin` executable is no longer installed under `/usr/bin/` because it cannot be executed directly. It was moved to `/usr/lib*/mysql-workbench/`. (Bug #14485725, Bug #66322)

- On Microsoft Windows, MySQL Workbench would crash after attempting to export a model as a PNG, SVN, or PDF. (Bug #14483735, Bug #66298)

- The object browser did not display foreign keys. A workaround was to view them via the **Alter Table** interface. (Bug #14483668, Bug #66226)

- Objects in the schema tree, such as tables, were not listed alphabetically after edits were made. (Bug #14483610, Bug #66209)

- Selecting a `view` in the object browser would sometimes insert the view into the table listing. (Bug #14483526, Bug #66158)

- The **Select Schemata** step of the **Reverse Engineer Database** wizard would not display the underscore character correctly. Instead it would appear as an underline to the next character. (Bug #14467930, Bug #66248)

- On OS X, code signing was added to MySQL Workbench so it will now load when this condition is required. (Bug #14457847, Bug #66052)

- On a table with a multiple field foreign key, attempts to remove one of these fields failed. The associated check boxes can now be used with success. (Bug #14415483, Bug #66171)

- Expanding a `view` object from within the schema viewer would immediately collapse, and it would only expand with subsequent attempts. (Bug #14404189)

- On Microsoft Windows, the behavior of **Control + Enter** was changed back to the previous behavior, which is to execute the statement that contains the cursor, instead of the last statement in the SQL editor, or the current statement if the cursor is at the beginning. (Bug #14396992, Bug #66025)

- After exporting a schema, and unselecting the schema, exporting a new schema would export both the current and previously exported schema. (Bug #14388355)

- Exporting a table that contained views could fail to export. (Bug #14359349, Bug #65780)

- A warning message was added when a user attempts to delete an index that belongs to a foreign key. (Bug #14359329, Bug #65972)

- The default database while applying changes to users and privileges is now set to `mysql`. (Bug #14359266, Bug #65959)

- The `--enable-maintainer-mode` autoconf option was not available. (Bug #14329365, Bug #65900)

- MySQL Workbench could execute queries from the wrong tab after tabs were moved (reordered). (Bug #14221754, Bug #65557)

- The vertical scrollbar in the table definition window would appear incorrect after clicking a NN (Not Null) check box on one of the column definitions. (Bug #14221022, Bug #65500)

- Choosing the **Edit in New Window** context menu on a routine would not open a new window. (Bug #14171776, Bug #65520)

- Executing `from mysql.utilities.parser import GeneralQueryLog` from within the MySQL Workbench scripting shell would result in an error. (Bug #14128312)

- On OS X, new tabs could not be closed (via the [x]) if ten or more tabs were already open, and if the total MySQL Workbench window width exceeded around 1200px. (Bug #14127281, Bug #65186)

- The MySQL Export wizard would not escape hardcoded newlines in the generated SQL, but they are now escaped. For example, a `\n` now remains as `\n` in the exported query, when before it was expanded. (Bug #14124914, Bug #65222)

- On Linux, pressing the **Enter** key after typing a file name would not save the file while doing so in the SQL editor file save dialogue. (Bug #14124900, Bug #64945)

- On Linux, tables that are present are now marked with a black point in the diagram editor. (Bug #14107656, Bug #65210)

- The **Plugins**, **Objects**, **Create Multiple Tables** feature did not function on Microsoft Windows, and only created one table on Linux. (Bug #14026694, Bug #14026709)

- On OS X, hiding a window pane (such as the snippets) would cause the window pane to remain hidden, even after restarting MySQL Workbench. (Bug #14017268, Bug #65138)

- Exported "Excel Spreadsheet" files were exported with the ".xls" extension, instead of the ".xml" extension. (Bug #13970552, Bug #64955)

- MySQL Workbench was unable to edit the `lc_time_names` variable. (Bug #13939985, Bug #64880)

- Under certain conditions, MySQL Workbench would generate invalid SQL when dealing with foreign keys. (Bug #13865784, Bug #14486006, Bug #64601, Bug #66285)

- After setting an EER diagram marker, modifying the zoom, and then setting a marker, the markers would not be created. (Bug #13742896)

- While editing a model, right-clicking on a user and choosing **Copy SQL to Clipboard** would not function. (Bug #13742855)

- On Linux, the `WB_FORCE_SYSTEM_COLORS` environment variable was added. Enabling this variable (with a value of 1) will disable MySQL Workbench from using its own color scheme. Example usage: `export WB_FORCE_SYSTEM_COLORS=1`. This is useful for certain conditions, like when using the HighContrastInverse or GnomishDark system themes. (Bug #13608244, Bug #64013)

- MySQL Workbench would yield incorrect results while displaying results from the `MAX` function on a bit field. (Bug #13496747, Bug #63457)

- Table data could not be edited if the primary key was a binary field. (Bug #13418610, Bug #63198)

- Multiple objects would remain selected after adding a new table within the **Create new EER Model** wizard. (Bug #12933282)

- The **Forward Engineering** wizard did not utilize the **Use Default Schema** setting that is set in the **Manage Connections** configuration table. (Bug #12757331, Bug #61786)

- Deleting a connection would not immediately delete the connection from MySQL Workbench. (Bug #12642474, Bug #61445)

- Passwords are now removed if they are no longer used by other connections when a particular connection is deleted. (Bug #12627613, Bug #61322)

- The **Treat BINARY/VARBINARY as nonbinary character string** preference for **SQL Queries** did not function. (Bug #12612409)

- On OS X, the **Server Status** tool would fail to find the server. (Bug #11766286, Bug #59365)

- MySQL Workbench would not export data when using a remote server connection through SSL with certificates. (Bug #11766196, Bug #59249)

- When a routine contained `CONCAT` with a number as an argument, MySQL Workbench would return it as a `BLOB`. (Bug #11763872, Bug #11766226, Bug #56642, Bug #59290)

- The error icon would continue to be displayed in the SQL editor after deleting a character to create the error, and then adding it back. This only affected multiline SQL statements. (Bug #11763319, Bug #56015)

- On OS X, the window to set up a **Standard TCP/IP over SSH** connection contained incorrect descriptions. And the dialogue now behaves more intelligently. (Bug #11761555, Bug #54061)

- The **Tab** key would not navigate field values in the **Set remote configuration parameters** dialogue of the **Server Administration** panel. (Bug #11757375, Bug #49413)

- Closing MySQL Workbench while an unsaved model was open would prompt the user with a "MySQL Workbench has stopped working" error, with a **Close** button. MySQL Workbench now prompts to either save or close. (Bug #61802, Bug #12912241)

- While using the **Forward Engineer** wizard, any change detected in a connection option now clears the "Stored connection" field. (Bug #49921, Bug #11757818)

Changes in MySQL Workbench 5.2.42 (2012-08-13)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.41.

Bugs Fixed

- There was a typographical error in the "Rename" dialogue that prompts a user to rename unsupported foreign key names that originate from old model files. (Bug #14399185, Bug #66113)

- The **Reformat DDL for Views** configuration option would generate invalid SQL syntax if the expression contained an even number of parts that were very long. (Bug #14396953, Bug #66068)

- The **Search on server** button would create an additional **Search on server** button each time it was pressed. (Bug #14395153)

- After upgrading to MySQL Workbench 5.2.41, MySQL Workbench would freeze if the initial load involved a connection without a saved password. (Bug #14383570, Bug #66016)

- Data modeling would not allow table edits, and repeated attempts to do so would crash MySQL Workbench. (Bug #14374169, Bug #66013)

- MySQL Workbench would sometimes crash after populating a model. (Bug #14211444, Bug #65423)

- On Microsoft Windows XP, the width of the line number column would display a maximum of four characters. It now displays additional characters, such as the number "10000". (Bug #14079497, Bug #65259)

- Undoing the last four changes via the history tab would only undo the last three changes. (Bug #14026666)

- Entering the caret ("^") character inside the SQL editor, followed by any other character, could cause MySQL Workbench to hang. This was a Scintilla bug that is now fixed. (Bug #13930994, Bug #64848)

- On Microsoft Windows, the **Enter** key would not create newlines within the table column comment dialogue. This was a Scintilla bug that is now fixed. (Bug #13891121, Bug #64714)

- Synchronizing a model after adding a column to the model would not add the new column to the syncronized database. (Bug #13891063, Bug #63938)

- On Microsoft Windows, certain conditions would allow the model overview pane to shrink, and only display a small portion of the diagram information. (Bug #13877323, Bug #64640)

- Models that were temporarily saved as "Unsaved models" could not be deleted. (Bug #13742833)

- On OS X, attempts to store a password into the keychain could result in an error. (Bug #13387025, Bug #62279)

- A signal statement in a stored procedure was not supported, and would report a syntax error. (Bug #11763874, Bug #56644)

- Expanding the tree view for a database with a large number of tables (tested 30,000) would crash MySQL Workbench. (Bug #66036, Bug #14383521)

- On Ubuntu 12.04 64-bit, MySQL Workbench could freeze. (Bug #65331, Bug #14120708)

- Using `\func` would prevent the **Apply changes to data** option to function, and instead "Pending changes" error message windows would be displayed. (Bug #62061, Bug #12844298)

- In the SQL Editor, the cursor would inappropriately flash. This was fixed while moving to the native Scintilla control. (Bug #61752, Bug #12757202)

Changes in MySQL Workbench 5.2.41 (2012-07-25)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.40.

This version contains the initial release of the Database Migration Wizard.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- Added a new **Data Import/Restore** option to select the default schema to import to, and a button to create a new schema in case a dump is being imported from a single file. (Bug #13539030, Bug #63853)

- A word wrapping option was added to the SQL Editor. (Bug #11765583, Bug #58566)

- The Diagram object tooltip now displays the column comments. (Bug #11765060, Bug #57977)

- A **Global Privileges** tab was added to the **Server Administration** interface. It allows adding and editing individual global user privileges. (Bug #11761628, Bug #54141)

- Basic code completion functionality has been implemented. (Bug #11760500, Bug #13813099, Bug #52917, Bug #64525)

- The model wizards now remember the last connection that was added. (Bug #56515, Bug #11763761)

- MySQL Workbench added a migration wizard, which will migrate ODBC compliant databases to MySQL. (Bug #54731, Bug #11762168)

Bugs Fixed

- The **Search on Server** option would not function, and instead it generated errors when searching MySQL Server 5.1. This option is now only available when connecting to MySQL Server 5.5 or greater. (Bug #14404138)

- MySQL Workbench was not compatable with `alocal` versions greater than 1.11.1. Compiling would generate errors related to `AC_RUN_IFELSE` usage, as opposed to the preferred `AC_LANG_SOURCE`. (Bug #14329354, Bug #65898)

- On Microsoft Windows 64-bit, closing MySQL Workbench from within the SQL editor could cause a crash. (Bug #14307316)

- A snippets file could not be created. (Bug #14278287, Bug #65734)

- The option to control specific user privileges is now available with MySQL Workbench. Before it was only possible to edit the roles (e.g., DBManager) but now the specific privileges (e.g., RELOAD) can also be modified. (Bug #14226955, Bug #65677)

- Comments and collation controls are now disabled until a column in the column editor is selected. Before it was always available, so invalid entries would attempt to be created, which would result in an error. (Bug #14177412, Bug #65574)

- It is now possible to select a range of rows using the **shift** key. And on OS X, the **command** key will now allow the selection of individual rows (Bug #14177386, Bug #65569)

- An orphaned privileges tab would be shown in the table editor when switching tables. Now only the current privilege tab is displayed. (Bug #14102537, Bug #65182)

- The **Edit**, **Find**, **Find and Replace** operation was slow. (Bug #14079480, Bug #65262)

- MySQL Workbench would not load with Ubuntu 11.10. (Bug #14058886, Bug #63626)

- Having a schema without a name in a model would cause MySQL Workbench to crash. (Bug #14017357, Bug #65119)

- Using the '%' character within environment variables could cause MySQL Workbench to crash. (Bug #13989371, Bug #65056)

- MySQL Workbench failed to compile with automake 1.11.2 or greater, due to the `pkglib_DATA` reference. (Bug #13972001, Bug #63898)

- Several exposed `DbMySQL` methods (such as `makeSQLExportScript`) were problematic, and have been replaced by the `DbMySQLRE` and `DbMySQLFE` modules. (Bug #13971951, Bug #62596)

- The SQL Beautifier feature would remove `DISTINCT` from inner queries. (Bug #13970596, Bug #64932)

- MySQL Workbench would crash while multiple model routines were opened. (Bug #13970497)

- Creating and then synchronizing a table in a model with a `DOUBLE` typed column would generate invalid SQL, thus generating an "Invalid SQL syntax" error. (Bug #13970484, Bug #64990)

- The SQL Beautifier would delete `WITH ROLLUP` if it was contained within a subquery. (Bug #13919924, Bug #64796)

- The **Replace All** option would not function when the replacement string was empty. (Bug #13919875, Bug #64818)

- On Linux and OS X, it was not possible to select/copy multiple rows from within the result set grid. (Bug #13895191)

- Passing a `grt.classes.db_query_EditableResultset` object to `getattr()` could cause a crash. (Bug #13893388, Bug #64777)

- A new **Copy Row (tab separated)** option was added to the result set context menu within the SQL editor. A comma separated variant of this option already existed. (Bug #13884753, Bug #64724)

- Certain conditions would cause privilege related problems and emit errors such as "Incorrect Value Entered" when creating a table in one tab, altering it in another, then going back to the original tab. (Bug #13877873, Bug #64591)

- Using **Paste Row** after **Copy Row Data** within the SQL editor would insert rows with extra apostrophes. For example, `'hello'` would become `''hello''`. (Bug #13840070, Bug #64630)

- Internal log tables are now excluded while exporting a the MySQL database. The excluded tables are `mysql.schema`, `mysql.apply_status`, `mysql.general_log`, and `mysql.slow_log`. (Bug #13837725)

- Closing an SQL Editor tab that had a **Find/Replace** dialog box open, then subsequently closing the **Find/Replace** dialog box would crash MySQL Workbench. (Bug #13816167, Bug #64569)

- Input elements are now correctly disabled until an editable row in the column editor is selected. Therefore, invalid values are no longer set in the model. (Bug #13812811, Bug #64550)

- Changing the **Default Collation** of a schema after changing its name would reset the schema name to "new_schema". (Bug #13799456, Bug #64259)

- The **Edit table data** SQL editor option would not properly display or save Unicode characters. (Bug #13790645, Bug #64447)

- The `Match Case` search option did not function. (Bug #13790397)

- All editor tabs now prompt to save data when these tabs are closed. Before, only the main tabs (like the SQL Editor) would prompt for to save. (Bug #13788071, Bug #64462)

- Opening the **Scripting Shell** window, followed by selecting then closing the snippet tab, would cause MySQL Workbench to crash. (Bug #13744364)

- If **Plugins**, **Utilities**, **Indent Selected Lines** is used while a row is selected, then MySQL Workbench would delete the selected row. (Bug #13744346)

- On OS X, the color dropdown in the object tool would not display the color properly. It instead showed the color code, and would not apply the color to the object. (Bug #13742905)

- On OS X, the **Option** key did not behave like a standard Mac OX application. For example, **Option + Delete** would delete one character instead of one word. (Bug #13702376, Bug #64217)

- Added version dependent keyword list support for syntax highlighting. Supports MySQL Server 5.0, 5.1, 5.5, and 5.6 (Bug #13699804)

- Quickly executing the same query multiple times would cause MySQL Workbench to use an excessive amount of memory and CPU. (Bug #13642999, Bug #64077)

- On OS X, and while working with mixed-case table names, a foreign key could not be assigned to link two InnoDB tables together. (Bug #13639162, Bug #64109)

- The **Model**, **Model Options**, **Diagram**, **Hide Captions** option could not be altered (disabled) and would remain checked (enabled). (Bug #13571857, Bug #63937)

- MySQL Workbench would allow the creation of multiple foreign keys across multiple tables but with the same foreign key name. Synchronization would then emit a "Can't create table" error. (Bug #13548236, Bug #13500447, Bug #63642, Bug #62960)

- The **Object Browser** now manages procedures and functions separately, when before they could not co-exist with the same name. They remain under the routines group but have separate icons and menu options. (Bug #13548213, Bug #13730415, Bug #63849)

- After right-clicking on a value in the SQL editor and choosing **Open Value in Viewer**, selecting the text would insert extra new lines into the clipboard. (Bug #13538942, Bug #63753)

- The **Server Administration**, **Server logs**, **General Log Table** option would not function, and only show a **Try again** button. (Bug #13530413)

- While editing in the **Edit Table** tab, **Control + A** would also select diagram objects. (Bug #13519852, Bug #63758)

- A "Removed corrupt column definition for Foreign key" error would sometimes be emitted while editing a table with foreign keys. (Bug #13519797, Bug #63772)

- OpenGL determination at startup has been disabled, and instead this check is performed while creating diagrams. The system could fail at startup, so now MySQL Workbench avoids this startup trouble and can better fall back to software rendering if necessary.

  MySQL Workbench would also silently fail to load if "Microsoft Visual C++ 2010 Redistributable Package" was not available. This is now checked and reported to the user. (Bug #13512714, Bug #61969)

- The **Open Value in Editor** SQL editor option did not work with `INT` or `NULL` values. (Bug #13492493, Bug #62934)

- **Plugins**, **Utilities**, **Execute query** would freeze MySQL Workbench if the query resulted in 1000 or more rows. (Bug #13470781)

- The **Move to a group** context option for database connections would cause saved connections below the target connection (that is being added to a group) to disappear. (Bug #13470318)

- The **info** and **session** tabs within the **MySQL connection** interface would not display any information. (Bug #13466537)

- After making changes to a model, then closing the window, clicking **Cancel** on the unsaved changes warning/dialogue would close MySQL Workbench. Now the model window remains open. (Bug #13463465, Bug #63460)

- The **Options** tab within the SQL Editor would always display an empty `AUTO_INCREMENT` value for tables using `InnoDB`. (Bug #13463458, Bug #63464)

- On OS X, **Command + A** would not select all results from the result set. (Bug #13463374, Bug #63461)

- After synchronizing a database, refreshing a model would not refresh the stored procedure information. (Bug #13418563, Bug #62879)

- The MySQL Workbench bug reporting form (**MySQL Bugs: Report**) did not allow pasting content into the form. (Bug #13344751, Bug #62928)

- A query such as "`SELECT * FROM SomeTable PROCEDURE analyse()`" would only work if "limit rows" was disabled in the preferences. The MySQL Workbench query parsing has been extended to support this type of query. (Bug #13344686, Bug #62964)

- "MariaDB" has been change to "Aria" within MySQL Workbench. (Bug #13252479, Bug #62903)

- Routine groups on the diagram was not updated after adding new routines to the group. (Bug #13029520, Bug #62496)

- On Microsoft Windows, **Server Administration**, **Server logs**, **Slow Log File** would display an error instead of showing the slow query log. (Bug #13026572)

- The **Connection Method** option within the `Edit Table Data` window was partially hidden. (Bug #13025670)

- Right-clicking on **Catalog tree** within the **Model**, **Diagram** context would display an empty line. (Bug #13025389)

- Clicking between routines with different comments would not update the description editor with information from the selected object. (Bug #13025359)

- MySQL Workbench would crash after clicking EER links and options multiple times. (Bug #13024949)

- Detection of a connection to the local machine based on the IP address has been removed. There is now a selection between localhost, remote host, and db host on the initial **New Server Instance** page. Selecting localhost will let the wizard know that it is local, as otherwise the full path is now required, which for example allows 127.0.0.1 to be used as a remote host to support port forwarding. (Bug #12890503, Bug #62119)

- The sorting options within the `Inserts Editor` window did not function. (Bug #12884134)

- The **View**, **Home** option did not function. (Bug #12879850)

- User Defined Types (UDT) could not be deleted when they were not referenced elsewhere. (Bug #12671629, Bug #61530)

- The MySQL Workbench window can now be resized to 1024x710. (Bug #12632406, Bug #60762)

- A confirmation dialog was added that warns users about attempts to edit stub tables, and it describes why these will be ignored by both synchronization and forward engineering. The dialog includes an option to either keep editing it as stub object, or to clear the stub flag and make the table appear in generated SQL. (Bug #12616360, Bug #61309)

- The synchronization wizard now allows the possibility to force synchronization of schemas that are thought to have been renamed. Otherwise, MySQL Workbench will recreate the schema from scratch. (Bug #12565644, Bug #61211)

- The **EER Diagram** zoom feature would not function. (Bug #12346981, Bug #60807)

- The **Partitions** tab within the **Alter table** context menu would not show all of the available partitions. (Bug #11933015, Bug #60235)

- On OS X, having a large number of databases (1,000+) could cause performance issues where MySQL Workbench would load in several minutes, as opposed to a few seconds. (Bug #11869432, Bug #60420)

- MySQL Workbench would not allow a user to delete a saved server instance that contained an incorrect password. This incorrect password can now be deleted. (Bug #11765337, Bug #58295)

- MySQL Workbench would freeze while attempting to search and replace with a large number of strings, such as over 100,000. (Bug #11762890, Bug #55539)

- The **Synchronize Model** operation would use an excessive amount of memory. (Bug #11762726, Bug #55355)

- A new **Model: MySQL** preference was added for **Forward Engineering and Synchronization** to configure `SQL_MODE`. (Bug #11761659, Bug #54173)

- The Synchronization wizard has been changed to allow forcing synchronization of schemas that have the same name but an unexpected "last known name", which would cause a confusing scenario of the target database being recreated from scratch. (Bug #11756969, Bug #48962)

- New or updated trigger content would disappear from the SQL Editor GUI, as it was required to reopen the table editor to see the changes. (Bug #65411, Bug #14137775)

- On OS X, MySQL Workbench would crash when changing database engines if a database included a table with uppercase characters. (Bug #65376, Bug #14117038)

- The zoom feature (in or out) could cause a fatal error. (Bug #65247, Bug #14136870)

- Deleting an EER diagram would cause MySQL Workbench to hang. (Bug #65174, Bug #14102990)

- On Ubuntu 12.04, MySQL Workbench would not load. (Bug #64956, Bug #14180754)

- The **Copy Column Names to Clipboard** option could crash MySQL Workbench. (Bug #64881, Bug #13970600)

- Under certain conditions, adding a foreign key could generate invalid SQL code. (Bug #64539, Bug #13872284)

- While editing an EER diagram, and click-dragging the mouse cursor, the cursor now remains in the same place it was originally clicked. (Bug #64487, Bug #13813199)

- When altering a table with uppercase letters in the table name, MySQL Workbench would automatically convert the table name to lowercase. (Bug #64072, Bug #13639292)

- If a view contains a row that is too long to be represented as a table column, it will now be substituted with an alias column in a placeholder table, similar to how `mysqldump` behaves. Before it could generate invalid SQL, and fail to synchronize the model. (Bug #63807, Bug #13538955)

- Using **File**, **Export**, **Forward Engineer SQL CREATE Script** would remove delimiters statements if the **Omit Schema Qualifier in Object Names** option was selected. (Bug #63742, Bug #13520528)

- MySQL Workbench would sometimes repeat a warning during a successful action that followed the action with the warning. (Bug #62454, Bug #13014873)

- MySQL Workbench now uses the MySQL Server limit for maximum comment lengths while using the forward engineering wizard. Before it would truncate comments to 60 characters, which was a MySQL Server limit before version 5.5.3.

  From the MySQL Server 5.5.3 changelog: the maximum length of table comments was extended from 60 to 2048 characters. The maximum length of column comments was extended from 255 to 1024 characters. Index definitions now can include a comment of up to 1024 characters. (Bug #62207, Bug #12904170)

- On Microsoft Windows, MySQL Workbench would ignore the system's font setting, but now uses it when MySQL Workbench is initialized. (Bug #62105, Bug #12872840)

- Adding a trigger with the **Alter Table**, **Trigger** interface now warns the user if the inputted trigger statement was invalid. Before, MySQL Workbench would output "No changes to object were detected." if the SQL was valid, but without a `CREATE TRIGGER` statement. (Bug #61712, Bug #12908810)

- Closing MySQL Workbench while editing **SQL Scripts** will now prompt the user to save the edits. (Bug #61037, Bug #62959, Bug #12546710, Bug #13344705)

- MySQL Workbench now respects case-sensitivity when `lower_case_table_names` = 2. (Bug #60618, Bug #11926851)

- Synchronizing a model would drop, and then re-add, indexes and foreign keys if the order of these indexes and foreign keys were different. This could happen because MySQL Workbench would add

UNIQUE indexes in the order added by the user, whereas the MySQL Server puts them first. (Bug #60230, Bug #11829807)

- A crash would occur if trigger code referred to tables in a schema different from the one where it is contained. (Bug #60041, Bug #13611382)

- Loading large files (over 100MB) using **File**, **Open SQL Script...** failed to load the script, and throw an out of memory exception while halting operation.

  Now, MySQL Workbench warns users if a file exceeding 100MB is attempted to be loaded, and no longer crashes when running out of memory but instead reports that the file was unable to be loaded. (Bug #55312, Bug #60780, Bug #61363, Bug #64186, Bug #11762687, Bug #12339717, Bug #12627645, Bug #13790375)

Changes in MySQL Workbench 5.2.40 (2012-05-16)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.39.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The table inserts grid now supports Copy, Cut, and Paste, for both rows and individual cells. (Bug #11760095, Bug #52469)

- The SQL editor tab now displays the selected database in the header. (Bug #50932, Bug #11758694)

- The **File**, **Export**, **Forward Engineer SQL ...** wizards now have the option to use the same configuration settings from the last time **Forward Engineer SQL ...** was used. (Bug #34977, Bug #11748058)

Bugs Fixed

- On Microsoft Windows, the `mysqlrplshow` MySQL Utility was missing. (Bug #13773189)

- Within the SQL Editor, MySQL Workbench would freeze after choosing **Replace All** when the find field was empty. (Bug #13744385)

- On Microsoft Windows XP, performing a database export could cause MySQL Workbench to crash while using the **Export to Self-Contained File** option with a `UNC` path. (Bug #13701996, Bug #64267)

- On OS X, the schema sidebar was missing a horizontal scrollbar. (Bug #13596326, Bug #64000)

- Inserting a snippet into the SQL Editor could insert incorrect characters. (Bug #13466559)

- Copying SQL to the clipboard could cause MySQL Workbench to hang or crash if the table comments contained Unicode characters that exceeded the buffer size. (Bug #64611, Bug #13840045)

- Within the **Database**, **Synchronize With Any Source** wizard, synchronizing a model from a `Live Database Server` source to a `Model Schemata` destination would crash after the `Retrieve Object Information` step. (Bug #64553, Bug #13812932)

- After a connection has timed out, clicking **Reconnect to DBMS** would freeze MySQL Workbench. (Bug #64467, Bug #13840041)

- `SELECT` queries could crash MySQL Workbench during the validation stage of the SQL Editor. (Bug #64435, Bug #13788133)

- MySQL Workbench would generate invalid SQL while using the **Partitioning** tab when altering a table. (Bug #64396, Bug #13788180)

- On Windows XP, attempts to copy values from multiple cells would fail, and not insert values into the clipboard. (Bug #64281, Bug #13726466)

- A query like `SELECT foo+1 FROM bar` could cause a crash. (Bug #64051, Bug #13629089)

- The following sequence could crash MySQL Workbench: "Open a model", "Synchronize the model with a remote database", "Modify the model", and then "Synchronize the model" a second time. (Bug #63943, Bug #13779239)

- The **Data Export** option would not use the current date in the folder name containing the exported data. (Bug #63893, Bug #13571760)

- The **Open value in viewer** window did not open with `SELECT` queries that used the `cast` function. (Bug #63874, Bug #13548148)

- On Fedora Linux version 16 and greater, the `service` command is now used to start and stop the MySQL Server, instead of `/etc/init.d/mysqld`. (Bug #63777, Bug #13519817)

- The **Control + a** key combination would not select all of the text within a window. (Bug #63752, Bug #13511244)

- MySQL Workbench would not build with GLib 2.3x+, as only `glib.h` can be included directly. (Bug #63705, Bug #13500364)

- On OS X, expanding the schema for a remote database from within the SQL Editor tab would crash, if the SQL editor tab was closed before the tables were done being fetched. (Bug #63589, Bug #13500242)

- The minimum size of the MySQL Workbench window has been lowered to 980x600 pixels, although officially the minimum screen resolution requirement remains at 1280×1024. (Bug #63519, Bug #13463411)

- While using MySQL Workbench to adjust a **Users and Privileges** role with a MySQL Server version prior to 5.1.6, an unhandled exception would result from MySQL Workbench attempting to access the `mysql.event` table. (Bug #63149, Bug #13496657)

- On OS X, when viewing the results of a query that would normally exceed the window width, the last column would have a width of one character if the column type was numeric. (Bug #62588, Bug #13365052)

- **Database**, **Synchronize Model** would not update the view after a new field was added. (Bug #62569, Bug #13051152)

- Queries that explicitly set `RESTRICT` will now synchronize properly with those that do not, because `RESTRICT` is the default behavior in MySQL. (Bug #62432, Bug #13491535)

- On Microsoft Windows, the MySQL Workbench installer would sometimes not detect where `VISUAL C++ 2010` was installed.

  A workaround is to append `CPP_100_RUNTIMES` to the `eCustomProperties` property in the .msi file. (Bug #62141, Bug #12872805)

- MySQL Workbench would prompt a user for the password to reconnect to a MySQL server that had lost the connection, and this password dialogue would not have focus yet still showed as the top window with

a blinking cursor. To reduce confusion, this password window is no longer the top window. (Bug #62003, Bug #12918370)

- The following sequence would crash MySQL Workbench: **Database**, **Reverse Engineer** to generate an EER diagram, then **Database**, **Synchronize with Any Source**, and then a mouse-click would cause the crash. (Bug #61876, Bug #12912593)

- Scrolling the mouse wheel now only scrolls the focused window. (Bug #61480, Bug #12661387)

- The `_idx` suffix is now added to foreign keys as they are created.

  And MySQL Workbench checks for duplicate named foreign keys if a document is loaded from a previous version of MySQL Workbench. And if duplicates are found, then the user is given the choice of renaming them. (Bug #60705, Bug #58135, Bug #12621452, Bug #11765197)

- Password-based SSH authentication would still check the key-based authentication files within `.ssh/` before prompting for a password. (Bug #60024, Bug #12672238)

Changes in MySQL Workbench 5.2.39 (2012-04-10)

This release updates the bundled MySQL Utilities to version 1.0.5. It contains no other new features or bug fixes.

Functionality Added or Changed

- Updated the bundled MySQL Utilities to version 1.0.5.

Changes in MySQL Workbench 5.2.38 (2012-02-23)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.37.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The width of the "Reference column" drop-down selector is now set to the widest entry. (Bug #53278, Bug #11760835)

Bugs Fixed

- On Linux, the result set window would not display properly. (Bug #13615255)

- Comments that spanned multiple lines and included stored procedures with comments that were surrounded by conditional comments would not be handled properly, as MySQL Workbench would end the outer comment unconditionally when the first inner comment was finished. (Bug #13490118)

- Generating a DBDoc report with both **HTML Detailed Frames** and **Include DDL code for objects** enabled would cause MySQL Workbench to stall. (Bug #13471637)

- The **Plugins**, **Utilities**, **Execute Query Into Text Output** feature would duplicate the first column, and fill it with `NULL` values. (Bug #13470770)

- On Microsoft Windows with the "classic mode" theme set, MySQL Workbench buttons were difficult to read. (Bug #13470583)

- The **Scripting shell** window lost focus after opening and closing a tab. (Bug #13470451)

- While editing `Limit Connectivity to Host Matching` within the **Server Administration**, **Users and Privileges**, **Login** window, the **Apply** button would not be available until one of the other three **Users and Privileges** fields was changed. (Bug #13470424)

- **Scripting Shell** failed to continue running after a breakpoint. Clicking **Execute Script** after a breakpoint now continues execution of the script. (Bug #13470397)

- On Linux, MySQL Workbench `.mwb` files would be detected as Zip files. (Bug #13466584)

- The SQL Editor **Execute the Explain Command...** feature did not function properly, and would return zero results. (Bug #13466571)

- On Microsoft Windows, using the **Manage Server Instances** menu to delete server instances could cause MySQL Workbench to generate an internal error while closing the **Manage Server Instances** window. (Bug #13466083)

- For Microsoft Windows, the `Download Prerequisites` link within the MySQL Workbench installer now directly links to the prerequisites manual page. (Bug #13448582)

- Using the **Open Connection to Start Querying** dialog with a new (not stored) connection would cause MySQL Workbench to crash. (Bug #13028855)

- On Linux, while saving a new model with a note, the **Save to File** dialogue would not prompt to name the file. (Bug #12933345)

- It was possible for MySQL Workbench to generate a pop-up window underneath a different pop-up window, thus requiring a restart of MySQL Workbench when the bottom pop-up was required to be closed first. (Bug #12927510)

- Dumping a schema via the **Data export and restore** option now prompts for a correct password, as needed. Before it would simply fail to export. (Bug #12903967)

- Under the **File** menu, using the **Print to PDF...** and **Print to PS File...** options for a model would crash MySQL Workbench. (Bug #12884845)

- The editor tabs would not update after a user was added. (Bug #12884776)

- Closing a tab could result in an unhandled exception. (Bug #64152, Bug #13655860)

- Choosing the **Close All But This** option within the routines manager would freeze MySQL Workbench. (Bug #64133, Bug #13630602)

- Running a `SELECT` statement and attempting to alias the only column selected would result in a crash. (Bug #64123, Bug #13629962)

- Moving the placeholder row (an empty row) around within the table editor would crash MySQL Workbench. The placeholder row can no longer be moved. (Bug #64122, Bug #13629953)

- The **Beautify Query** feature incorrectly formatted statements containing the `UNION` clause, which left the query with syntax errors. (Bug #64120, Bug #13629967)

- When viewing the foreign key definition window of the **Alter Table** editor, the restrict foreign key option did not display for either the update or delete actions, and instead the value would appear empty. (Bug #63978, Bug #13596254)

- On Linux, the `Object Info` panel within the SQL editor would not show information about the object, and would instead remain empty. (Bug #63960, Bug #13608228)

- Within **Server Administration**, **Users and Privileges**, selecting **Add Account** after sorting the users would insert the new user into the list alphabetically, yet open the bottom user entry into the editor. (Bug #63951, Bug #13702340)

- A query similar to the following would crash MySQL Workbench: `select c.* from actor c where actor_id=38` (Bug #63940, Bug #13582514)

- Tables without an engine set were treated as though they were unable to support foreign keys. Therefore, the foreign key declaration would be missing after forward engineering these tables.

  A workaround is to explicitly set the table engine to `InnoDB`. (Bug #63934, Bug #13562926)

- On OS X, opening files saved from previous versions of MySQL Workbench would result in an empty window, without data being loaded. (Bug #63932, Bug #13571842)

- On Microsoft Windows, and when called from the home screen, opening and immediately closing the **Manage Server Instances** window would result in an unhandled exception. (Bug #63927, Bug #13571816)

- Exporting a model to a CSV file could crash MySQL Workbench. (Bug #63883, Bug #13685708)

- On Microsoft Windows, the **Open in viewer** menu could be blank while viewing results. (Bug #63873, Bug #13548115)

- MySQL Workbench would freeze when a `SELECT` statement was executed on a table without private keys, and that included at least one `UNIQUE NOT NULL` column. (Bug #63867, Bug #13542546)

- Executing a query after reordering multiple editor tabs would make the inactive editor tab active, and execute that query. (Bug #63866, Bug #13542154)

- The **File**, **Open SQL Script**, **Files of Type** dialogue would incorrectly give the option to open files with the `.dbquery` suffix, instead of `.qbquery`. (Bug #63861, Bug #13541769)

- Choosing the **Open value in Editor** option would scroll the result set to the top. Selecting this option no longer refreshes the results, so the selected row remains intact. (Bug #63860, Bug #13539049)

- Opening a **Server Administration** tab for a server instance that has remote management via SSH enabled would result in an error, and fail to load. (Bug #63857, Bug #13655999)

- After clicking **Apply** to alter a table where changes are not being made, the output window says "Preparing..." and does not automatically change to "No changes detected" until the window is clicked. (Bug #63842, Bug #13548232)

- MySQL Workbench would crash while opening an existing EER model, after a file failed to open. (Bug #63841, Bug #13539006)

- The main schema information found within the object browser now updates after a table is altered, and collapses the expanded details. And selecting an object now reloads the data, which means the current (altered) data is displayed. (Bug #63828, Bug #13538990)

- MySQL Workbench failed to compile under certain PCRE setups, like when `pcre.h` existed within `/usr/include/pcre/`. (Bug #63819, Bug #13538971)

- MySQL Workbench did not test for and use the gl.pc pkgconfig files if present, to determine the location of `GL/{gl,glx}.h` and `libGL.so`. (Bug #63818, Bug #13538964)

- On Linux and OS X, the **Replace All** search feature would hang, and not function properly. (Bug #63764, Bug #13520443)

- MySQL Workbench would not work with paramiko 1.7+. (Bug #63750, Bug #13519860)

- MySQL Workbench would crash after the following sequence: **Synchronize Model With Database**, **Fetch Object Info**, **Continue**. (Bug #63746, Bug #13591854)

- **Query**, **Commit Result Edits** and **Query**, **Discard Result Edits** could result in "Unrecognized command" errors, and not function properly. (Bug #63744, Bug #13511195)

- On Microsoft Windows, tab titles were difficult to read on systems with dark backgrounds. (Bug #63715, Bug #13500349)

- On OS X, exporting a database that has a stored procedure resulted in an unhandled exception. (Bug #63653, Bug #13476062)

- On Microsoft Windows, changing or deleting a row or column within a model, could cause a crash. (Bug #63056, Bug #13344572)

- Clicking the foreign keys tab within the **Alter table** context could crash MySQL Workbench. (Bug #63050, Bug #13492730)

- The object editor could leak memory and crash MySQL Workbench while handling notifications. (Bug #63025, Bug #13492608)

- MySQL Workbench would highlight the MySQL 5.6 reserved words `name`, `type`, and `types`. (Bug #62775, Bug #13252599)

- On Linux, right-clicking on a table and choosing the **Alter Table** feature would perform no function.

  A workaround was to delete all XML nodes from `/usr/share/mysql-workbench/modules/data/editor_mysql_table_live.glade` like:

  ```
  <child internal-child="selection">
    <object class="GtkTreeSelection" id="treeview-selection5"/>
  </child>
  ```

  (Bug #62686, Bug #13491865)

- Queries containing a `UNION` are now excluded from the automatic addition of the `LIMIT` clause, when the **Limit Rows** preference is enabled. (Bug #62524, Bug #13029474)

- Double-clicking on a table within the EER diagram editor would sometimes crash MySQL Workbench. (Bug #62451, Bug #13014823)

- On OS X 10.7+, the "Open File" panel would attempt to show hidden files, which failed and cause no files to be shown. MySQL Workbench no longer attempts to display hidden files on OS X. (Bug #62172, Bug #12912085)

- Pressing the **Control + Enter** key combination within the SQL editor would generate a recoverable error. (Bug #62169, Bug #12927292)

- While attempting to synchronize a database to any source, the **Execute** button to perform the synchronization was missing. Only the **Go Back** and **Close** buttons were shown. The **Execute** button is now standardized for all database synchronization options. (Bug #62130, Bug #12872823)

- Recovery of the last state using either the Auto-save feature, or the `Save snapshot of open editors on close` option, would sometimes load improperly by creating an empty schema and/or crash while closing opened SQL editor tabs. (Bug #61950, Bug #12917371)

- Selecting and editing multiple indexes or foreign keys would crash MySQL Workbench. (Bug #61863, Bug #62057, Bug #12757370, Bug #13013715)

- The search box within the MySQL Workbench toolbar did not perform searches. (Bug #61825, Bug #12757354)

- A pop-up window is no longer generated when selecting an inactive server from within the **Server Administration** panel. (Bug #61810, Bug #12757347)

- Individual model settings are now respected. Before they would be ignored in favor of the global settings. (Bug #61771, Bug #12757255)

- After a connection has timed out, clicking **Reconnect to DBMS** would freeze MySQL Workbench. (Bug #61722, Bug #12725314)

- When right-clicking on a table that has triggers, and then choosing **Create Statement** to either send the statement to the clipboard or SQL editor, the trigger creation statement is written before the table creation statement. (Bug #61698, Bug #12756722)

- The **Server Status** window would incorrectly sort options. Numeric fields are now sorted numerically (e.g., 1300 is now after 500). (Bug #61659, Bug #12698865)

- If the charset/collation is set to use the default value, then `DEFAULT` will now be inserted as the charset/collation name within generated queries. (Bug #61202, Bug #12622649)

- When a table had columns like `DOUBLE(M,D)`, the data model synchronization would discard the `(M,D)` specification, and convert the columns to `DOUBLE(11)`. (Bug #61165, Bug #12565933)

- MySQL Workbench would not behave correctly with `ON UPDATE CURRENT_TIMESTAMP` as a default value, while synchronizing models, and would update the field. (Bug #61087, Bug #12546735)

- The `Beautify Query` wizard would remove spaces from MySQL date function parameter values that contain `INTERVAL`. (Bug #61021, Bug #12546864)

- **Plugins**, **Utilities**, **Reformat SQL Query** would mangle queries by removing the first `SELECT` statement if a subquery clause was present. (Bug #60311, Bug #12613662)

- MySQL Workbench would emit an error (error code: 1064) with queries using `WITH ROLLUP`. (Bug #57178, Bug #11764355)

- On Microsoft Windows, rapidly repeating a query could emit an error. (Bug #56776, Bug #11763997)

- Pasting a query with `\r` line endings instead of `\r\n` or `\n` could cause MySQL Workbench to mangle the query. Line endings are now normalized after pasting, like they already were while loading files. (Bug #56334, Bug #11763603)

- On Microsoft Windows, the Routines editor would insert extra line endings. (Bug #55006, Bug #11762414)

- On Microsoft Windows, using **Alt** based key shortcut combinations would not always work. (Bug #54119, Bug #11761607)

- The dialog windows now remain in front, even when another part of MySQL Workbench is clicked. (Bug #48692, Bug #11756737)

- MySQL Workbench now detects duplicated trigger names while using the **Model**,**Validation**, **(MySQL)->Validate all** and **Model**, **Validation (MySQL)**, **Check integrity** sequences. (Bug #44063, Bug #11752780)

Changes in MySQL Workbench 5.2.37 (2011-12-26)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.36.

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- The SQL editor now automatically fetches table data. (Bug #63590, Bug #13500202)

Bugs Fixed

- Under **Server Administration**, the location of the configuration file was not visible. It is now shown within the configuration file label. (Bug #14017264, Bug #65033)

- The SQL editor would open a table in read-only mode when opened from either the **Edit Table Data** link via the home screen, or if the schema tree was not expanded. (Bug #13466131)

- On OS X, the **File**, **Open Recent** feature would open the incorrect script. (Bug #13028666)

- Viewing the **Server Logs** on a MySQL server after it has been stopped, resulted in an unhandled exception. (Bug #12908134)

- Options unrelated to the **SQL Editor** would be available under the **View** menu while an SQL editor window was open. (Bug #11763150, Bug #55830)

- Pasting from the clipboard would not work in the hostname and related fields. Users are now able to paste values into these fields. (Bug #11753997, Bug #45528)

- Invalid SQL was generated when a schema name contained a dot. Table names are now enclosed in quotes. (Bug #63710, Bug #13500360)

- MySQL Workbench could freeze while importing a dump. (Bug #63669, Bug #13485795)

- Exporting a database that has a stored procedure, resulted in an unhandled exception. (Bug #63653, Bug #13476062)

- Generating a list of tables and views was slow, when compared to the previous MySQL Workbench version. (Bug #63633, Bug #13485667)

- Creating a foreign key using the **Place a relationship using existing columns** EER option would crash MySQL Workbench. (Bug #63629, Bug #13480328)

- Changing a schema name with routines present would prepend and append invalid delimiters. (Bug #63624, Bug #13470435)

- The field editor would hang when large text values were shown. (Bug #63606, Bug #13485779)

- MySQL Workbench now quotes table names in generated SQL queries, when the table name contains characters that would break the SQL statement. (Bug #63600, Bug #13497088)

- MySQL Workbench would generate an exception after editing and then closing a table tab within the EER diagram window. (Bug #63591, Bug #13463991)

- The SQL editor would not load under certain circumstances. The check for restoring split positions was corrected to solve this issue. (Bug #63582, Bug #13490891)

- The **Help**, **Check for Updates** feature did not function properly. (Bug #63534, Bug #13463399)

- The password prompt dialog is no longer the topmost window over all open applications on a system, but now it's only the topmost MySQL Workbench window. (Bug #63499, Bug #13496347)

- The user administration panel did not fit on systems using a 1024x768 screen resolution. (Bug #62341, Bug #12967541)

- On OS X, clicking **Apply** within the **Alter Table** dialogue on a table with foreign constraints would crash MySQL Workbench. (Bug #62042, Bug #12844307)

- MySQL Workbench required the Andale Mono font. (Bug #61782, Bug #12757325)

- MySQL Workbench would sometimes be unable to save changes that were only to comments. It used a hard limit, but now uses the MySQL Server limit for maximum comment lengths. For example, it would compare the first 60 characters of a table comment change, and generate an error if the change did not affect the first 60 characters.

  From the MySQL Server 5.5.3 changelog: the maximum length of table comments was extended from 60 to 2048 characters. The maximum length of column comments was extended from 255 to 1024 characters. Index definitions now can include a comment of up to 1024 characters. (Bug #61626, Bug #12694146)

- Database synchronization would sometimes confuse similar table and routine names. (Bug #61028, Bug #12656879)

- Case changes to `ENUM` values were not recognized by MySQL Workbench. (Bug #60478, Bug #11889204)

- The column header information is displayed as it is received from the server. (Bug #60237, Bug #11829800)

- Within the **Database**, **Forward Engineer** dialogue for a Model, the `DROP Objects Before Each CREATE Object` option was ignored if the `Export MySQL Table Objects` option was not selected. (Bug #59200, Bug #11766157)

- Altering the case of a table name caused an error, when that was the only change and the `SQL Identifiers are Case Sensitive` option was set to true. (Bug #58808, Bug #11765806)

- The export feature would sometimes fail when exporting tables with stored procedures, and with `Dump Stored Procedures` checked. And also having `Export as Dump Project Folder` selected would result in an unhandled exception. (Bug #57500, Bug #11764642)

- The Forward engineering feature now preserves case for schema names, even on case-insensitive systems. Before it would create lowercase variants of the schema names on these systems. (Bug #56237, Bug #11763520)

- The **Forward engineer** feature would sometimes create invalid SQL syntax for old MySQL Workbench files with deleted routines and roles. (Bug #53973, Bug #11761473)

Changes in MySQL Workbench 5.2.36 (2011-12-03)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.35.

Known limitation: **Home -> Edit Table Data** loads the table in read-only mode. Instead, right-click on a table within the **Object Browser** and choose the **Edit Table Data** option from there.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The **Edit**, **Format**, **Beautify Query** feature no longer quotes column names. (Bug #13030351)

- The edit context menus, such as **Edit Table Data**, now open as new tabs. Before they reused (overwrote) the same tab. (Bug #61774, Bug #12731459)

- If only one server instance is defined, then the **Server administration**, **Manage security** option will now automatically connect to it, instead of prompting to choose a server instance. (Bug #61451, Bug #12647697)

- Indexes are now shown within the schema tree. And indexed columns are also indicated within the table information panel. (Bug #61295, Bug #12616367)

- The `auto_increment` information is now displayed within the SQL editor. (Bug #60933, Bug #12402845)

- On the SQL Editor tabs, right-clicking a tab now offers the following options: **New Tab**, **Save Tab**, **Close Tab**, **Close Other Tabs**, and **Copy Path to Clipboard**. (Bug #60883, Bug #12399369)

- The query and associated results are no longer displayed in separate tabs, but they are now viewable within a single interface. (Bug #60624, Bug #11926853)

- The SQL editor windows did not have maximize or minimize buttons, but these windows are now opened in configurable tabs. (Bug #60606, Bug #12617245)

- The export result set dialog has been redesigned, and now saves the previously used settings. (Bug #60490, Bug #11889185)

- SQL snippets can now be edited, and then saved. (Bug #58879, Bug #11765873)

- Tab spacing is now defined as `4` on the Linux and Mac platforms, to be consistent with Windows. (Bug #58867, Bug #11765862)

- A **Paste Row** context option was added to the **Edit Table Data** menu of the Object browser. (Bug #58169, Bug #11765228)

- Additional **Export** data types were added to the SQL Browser, which now includes `JSON`, Excel spreadsheet, and MySQL formatted XML. (Bug #56808, Bug #11764024)

- The Overview tab was replaced, in favor of the new schema tree view. (Bug #56795, Bug #11764014)

- Added the ability to edit data from a result set after executing a query. If MySQL Workbench determines that a returned result cannot be edited, then a read-only icon will be displayed, and hovering over the icon reveals a tooltip that explains why it cannot be edited. (Bug #56794, Bug #11764013)

- Added a input field to filter the schema list in the **Object Browser**. (Bug #55162, Bug #11762554)

- The **Alter table** option defaulted to Table view, but now uses the new table editor. (Bug #55050, Bug #11762454)

- MySQL Workbench did not support the `.dbquery` file extension. (Bug #54321, Bug #11761795)

- Added the **Copy Inserts to Clipboard** option to the **Plugins**, **Objects** menu. (Bug #54036, Bug #11761531)

- Added toolbar buttons to toggle the sidebars and bottom panel of the SQL Editor. (Bug #53714, Bug #11761243)

- The table view within the **Object Browser** has changed. The table view includes another level of grouping, which includes Columns, Indexes, Foreign Keys, and Triggers. Before, only the columns were listed. (Bug #53504, Bug #11761050)

- The table information window within the **Object Browser** has been expanded to include foreign keys, triggers, indexes, and data types. (Bug #53502, Bug #11761048)

- The Overview tab was removed, in favor of the new schema layout. (Bug #53323, Bug #11760879)

- New entries to the error log are now shown when restarting the MySQL server.

  When `log_output` is set to `FILE`, the log files are now displayed in the MySQL Workbench log page. (Bug #52445, Bug #11760073)

- The SQL snippets interface been redesigned and relocated to its own sidebar. Its display may also be toggled. (Bug #50069, Bug #11757950)

- The SQL Editor history tab now auto-scrolls to the bottom, so that the most recent entry is visible. (Bug #49317, Bug #11757294)

- Added a new format to the SQL Editor for export, which is identical to the XML generated by the `mysql --xml` command. It's titled `XML (mysql format)`. (Bug #49305, Bug #11757284)

- Added the ability to copy Status and System Variables to the clipboard. (Bug #49074, Bug #11757074)

- The **Database**, **Synchronize Model...** dialogue now creates a schema if one does not already exist. (Bug #45025, Bug #11753561)

Bugs Fixed

- While using the import/restore feature of the server instance administration area, views and routines were not imported. (Bug #13041684)

- Tables would be listed as `Fetching...` after pressing the **Reconnect DB** button. (Bug #13040104)

- After right-clicking a cell within the insert grid of the model table editor, an unhandled exception was generated on Microsoft Windows, and a fatal error on OS X. (Bug #13029647)

- The **Manage Security** window initially shows the first connection as selected, but it is not. (Bug #13026478)

- While administrating a server instance, importing a project folder will result in an "Import from Disk" error after the following sequence: **Data Export and restore**, **Export to Dump project folder**, with `Dump views and Dump stored routines...` checked, then exporting a schema with views and/or routines, opening the SQL Editor and dropping the exported schema, then clicking **Import to Disk** within the server administrator. (Bug #13025419)

- Pressing **Refresh** within the **Slow Query Log** tab resulted in an unhandled exception. (Bug #12928308)

- Within a diagram view, the **Edit**, **Find**, **Find advanced** option was unrecognized and performed no function. (Bug #12884864)

- A previously selected object could not be dragged, as it would instead enter "Edit Name" mode after the second click. (Bug #12884796)

- New server instances created by the **Manage Server Instance** wizard would send the incorrect service name to the MySQL admin. The command is now constructed at run time using the service name from the server instance profile. (Bug #12567371)

- The **Alter Table...** option did not function on tables with triggers. (Bug #12546727, Bug #61110)

- Creating a server instance using unicode characters worked, but an error would be generated while attempting to open them. (Bug #63100, Bug #13350556)

- Using **Alter routine** to make changes would sometimes crash after clicking **Apply**. (Bug #63076, Bug #13340307)

- Altering and saving a routine twice, reverting, and then clicking **Apply** would crash MySQL Workbench (Bug #62979, Bug #13492510)

- On Microsoft Windows, upgrading MySQL Workbench required MySQL Workbench to be run as a user with Administrator rights. (Bug #62709, Bug #13116366)

- Opening model files while using a MySQL Workbench version that was installed over a previous MySQL Workbench installation would sometimes cause permission issues. The workarounds included running MySQL Workbench with administrator privileges, or removing the installation folder before upgrading. (Bug #62703, Bug #13323929)

- An unhandled exception might be emitted after modifying an `EER` diagram, with a popup window reading "MySQL Workbench has encountered a problem - Queue empty." (Bug #62651, Bug #13079826)

- A query history date would incorrectly change when a history entry, other than the last one, was selected when the query was executed. (Bug #62642, Bug #13104635)

- The **Create Routine...** feature would report that it created a routine, but it did not, and the error was revealed in the output window. (Bug #62624, Bug #13362190)

- Right-clicking on a row within the Inserts tab could crash MySQL Workbench. (Bug #62583, Bug #13365077)

- The `Server Administrator` did not function with MySQL Server 5.0. And although MySQL Workbench does not officially support MySQL Server 5.0, this functionality now works. (Bug #62549, Bug #13029339)

- The **Alter Routine** wizard would report that a routine was successfully updated, although the routine would remain unchanged. (Bug #62527, Bug #13029468)

- The **Reconnect to DBMS** toolbar option would not reconnect after unchecking the `Safe Updates` preference. A workaround is to uncheck this option, then restart MySQL Workbench. (Bug #62448, Bug #13014798)

- On Microsoft Windows, and with the **Show Live Schema Overview** preference disabled, MySQL Workbench would emit an error while attempting to open a **Database Connection**. (Bug #62407, Bug #13364933)

- Expanding then collapsing the query results window within the SQL editor, yielded a different appearance. (Bug #62371, Bug #13007096)

- On Ubuntu 11.10, MySQL Workbench would freeze at the startup splash screen. (Bug #62347, Bug #13099521)

- Selecting and dragging tables to the diagram area failed. A workaround was to collapse the table list first and then drag it over, although it was only possible to drag a single table. (Bug #62267, Bug #13013851)

- The `Configuration File` path within the **Server Administration** panel is now read-only, when before it would temporarily set the path. This path should be set via the profile setting instead. (Bug #62252, Bug #12922746)

- Fixed a typo, where "database" was misspelled as "dabase" within the `DBDesigner` description. (Bug #62250, Bug #12912465)

- The `Auto-save` feature would behave with unpredictable results, by opening up an incorrect number of windows when MySQL Workbench was next loaded. (Bug #62192, Bug #12907612)

- Opening **Management**, **Server Logs** would generate an unhandled exception when using table-based logging, while the general log was empty. (Bug #62123, Bug #12872836)

- After setting a default schema, choosing **Refresh all** while the schema information is "fetching" would result in an unhandled exception. (Bug #62086, Bug #12913399)

- Switching between two logins for a single database connection required the password to be reentered with each switch. (Bug #62052, Bug #12921420)

- On Linux, the **Database**, **Generate Catalog Diff Report...** model option was disabled. (Bug #62040, Bug #12844314)

- Within the **Routine Editor**, opening multiple **Apply SQL Script to Database** dialogues and then executing one, except for the last one opened, would crash MySQL Workbench. (Bug #61988, Bug #12918227)

- On Microsoft Windows, the EER diagram search did not work across multiple pages. (Bug #61957, Bug #12818216)

- Fixed **Data export** so that routines and views are only exported when they are selected. In addition, individual views may now be selected for export. (Bug #61937, Bug #12949918)

- Importing a dump would misquote the `--defaults-extra-file` option, which would cause the import to fail. (Bug #61910, Bug #12912786)

- A `Download Prerequisites` link is now displayed when prerequisites, such as the "Visual C++ 2010 Redistributable Package" requirement, are not met. Before, the link was not visible. (Bug #61897, Bug #12769499)

- Repeatedly refreshing a schema resulted in an unhandled exception. (Bug #61892, Bug #12762893)

- The **File**, **Open Recent** feature would open the incorrect script. (Bug #61856, Bug #12912374)

- On OS X, switching from the Model tab to the EER Diagram tab caused an error sound. (Bug #61809, Bug #12757337)

- **File**, **Export**, **Forward Engineer SQL CREATE Script** would append an extra space to `TINYINT(1)` after converting it from `BOOL`. (Bug #61696, Bug #12711138)

- On Microsoft Windows 7, some MySQL Workbench buttons would be difficult to read due to incompatible background colors with the "Windows classic Style" scheme. (Bug #61685, Bug #12711145)

- MySQL Workbench would not recognize the active schema with case insensitive servers. As a result, an active schema within the Object browser would be unselected after a `USE` statement was executed. (Bug #61641, Bug #12711143)

- The **Users and Privileges** window did not scale to low screen resolutions like 1024x768. It does now, although MySQL Workbench still has an official minimum screen resolution of 1280x800. (Bug #61518, Bug #12661556)

- Tab panels within **Server Administration** would not fresh properly. (Bug #61452, Bug #12647731)

- The Object editors (such as **Alter Table**, **Alter View**, and **Alter Routine**) now open as tabs, instead of separate wizard windows. (Bug #61422, Bug #12642157)

- Exporting SQL for tables that included comments would generate invalid SQL statements. A comma was missing immediately before the `COMMENT`. (Bug #61393, Bug #12627762)

- After opening a saved model file, the **Control+T** shortcut would not work from within a query window. (Bug #61379, Bug #12627716)

- MySQL Workbench could crash while restoring large files. (Bug #61365, Bug #12627685)

- The **Clear script output** and **Close this script tab** buttons are now disabled in non-script tabs. (Bug #61318, Bug #12616331)

- On Linux, MySQL Workbench failed to open, because it could not load the MySQL Diff Reporting module. (Bug #61304, Bug #12613921)

- On Linux, code folding for stored procedures and loops did not work properly within the SQL editor. (Bug #61302, Bug #12612394)

- Pressing **Execute** after double clicking and editing a field in `select all` mode, resulted in an unhandled exception. (Bug #61279, Bug #12627523)

- On Microsoft Windows, the **Find** option (**Control+F**) for the SQL editor was not available. (Bug #61233, Bug #12622697)

- Executing a slow query would not notify the user that the query was running. The new SQL editor interface does show the progress. (Bug #61231, Bug #12589710)

- While double clicking an arrow to expand a table from within the object browser, to see its columns, the arrow disappeared and the table could not be expanded. (Bug #61124, Bug #12736804)

- When hovering the mouse pointer over a table figure on a diagram, the foreign key tooltip would hide the table column names. (Bug #61055, Bug #12546715)

- The default schema selection would be lost after synchronizing a model. (Bug #60975, Bug #12621744)

- MySQL Workbench would sometimes crash while in **Forward Engineering** mode. (Bug #60950, Bug #12572071)

- On Linux and OS X, using **Tab** and **Shift+Tab** to jump to next/previous fields has been added to the query result view. It had previously only worked on Windows. Additionally, the **Escape** key will now cancel editing of the current cell, and **PageUp**/**PageDown** scrolls one page up and down in the result set. (Bug #60865, Bug #12368205)

- Manipulating multiple SQL editor tabs would sometimes result in uncaught exceptions. (Bug #60764, Bug #12621640)

- MySQL Workbench would crash when attempting to use **Alter Table** or **Create Table** from within the context menu. (Bug #60760, Bug #12621510)

- Fixed a crash bug, which would happen on exit. (Bug #60733, Bug #12632325)

- If a schema within the schema panel was clicked, then a table was also clicked (dropped down) within the schema, then the panel containing Actions, Schemas, and details would expand to fill half of the view window, and the size could not be adjusted. (Bug #60692, Bug #12587848)

- The **Generate INSERT Statements for Tables** option would not generate `INSERT` statements for `BLOG` columns. (Bug #60657, Bug #12565791)

- Factory snippet files were fixed, to include proper line-endings for all platforms. (Bug #60643, Bug #12621434)

- Closing MySQL Workbench would not prompt to save unsaved work from modified SQL files and windows. (Bug #60557, Bug #11926868)

- The SQL editor output tab did not report the number of affected rows. (Bug #60535, Bug #12617147)

- The `Synchronize model with Database` wizard would not properly handle case-sensitive table names. (Bug #60523, Bug #12617135)

- Open diagram tabs from a saved MySQL Workbench state were not saved properly. (Bug #60515, Bug #12617096)

- The **Advanced Export Options** preferences were not saved, and would reset after restarting MySQL Workbench. (Bug #60497, Bug #11889197)

- Connection and query tabs can now be reordered, by dragging and dropping with the mouse pointer. (Bug #60409, Bug #11865602)

- On Linux, viewing the embedded documentation required the python-sqlite2 package. (Bug #60336, Bug #11874507)

- On OS X, **Command+W** will now close the active script editor tab, and **Command+Shift+W** will now close the active connection tab. This is now consistent with behavior on other operating systems. Before, the **Command+W** combination closed the active connection tab. (Bug #60253, Bug #11829750)

- Pressing **Esc** once now escapes out of edit mode within the row editor. Before, it had to be pressed twice. (Bug #60131, Bug #11829997)

- The **Copy Row Content** option would throw an unexpected exception, from within a model.

  In addition, the **Paste Row** option was added. (Bug #60116, Bug #12417533)

- The `USE` statement is now properly quoted. For example, an invalid `USE` query would be generated if a schema contained a `-` character. (Bug #59882, Bug #11766711)

- Copying a table column would lose the data type, when only the column line number was selected instead of the data type or field name. (Bug #59285, Bug #11905520)

- Within a server instance administration panel, setting **Export to Self-Contained File** to an invalid path resulted in an unhandled exception. (Bug #59246, Bug #11766194)

- The Output tab of the SQL editor now adjusts whitespace characters, as to display queries on a single line. (Bug #58989, Bug #11765966)

- Enabling the `Limit Rows` SQL editor preference would cause invalid SQL syntax with `SELECT INTO` statements. (Bug #58732, Bug #11765738)

- When viewing text at a size greater than 100% (such as 125%), some text field labels would be partially hidden. (Bug #58408, Bug #12628507)

- **Server Administration**, **Manage Import/Export** would return an error about the dump module. (Bug #58098, Bug #11765164)

- MySQL Workbench would allow the creation of foreign keys on tables using engines that do not support them. A warning is now emitted if this is attempted. (Bug #57875, Bug #11764972)

- MySQL Workbench did not fully adhere to locale settings, which could result in unhandled exceptions. (Bug #56869, Bug #11764077)

- The **Foreign Keys** tab of the **Alter Table** wizard only created an index, without the foreign key. (Bug #56818, Bug #11764033)

- Broken views (e.g., a column no longer exists) are now displayed as broken within the schema tree view. (Bug #56701, Bug #11763928)

- Using MySQL Workbench could result in an unhandled exception, with the message "Attempted to read or write protected memory. This is often an indication that other memory is corrupt." (Bug #56034, Bug #11763338)

- Editor windows would sometimes lose focus, but they are now docked within the main application window, which eliminated this problem. (Bug #55923, Bug #11763235)

- Auto-scrolling for the SQL output and history windows was added. (Bug #55865, Bug #11763183)

- The **Find** feature (search) was replaced with a panel, which offers more consistent behavior across platforms. The **Find and Replace** feature is also now a panel, instead of a pop-up window. (Bug #54765, Bug #11762197)

- On Linux, the previously set window positions and sizes were not saved by MySQL Workbench. These settings are now saved upon closing, and used when MySQL Workbench is loaded. (Bug #54025, Bug #11761521)

- The **Finish** button was inactive (grayed out) for the **Edit Table Data** dialog, if the database contained exactly one table. (Bug #52833, Bug #11760422)

- If a table cannot be edited (e.g., no Primary key), then MySQL Workbench now notifies users of the reason, when before the edit option was simply not available. (Bug #51563, Bug #11759263)

- Closing and opening the SQL Editor now sets the last used schema as the default, instead of the schema specified within the connection. (Bug #51454, Bug #51026, Bug #11759165, Bug #11758776)

- A triple-click was required to change the **Referenced column** of a foreign key, while editing a table within an EER diagram. (Bug #50725, Bug #11758512)

- Selecting a schema with a large number of tables (e.g., 200+) would indicate that the schema was empty. (Bug #49291, Bug #11757270)

Changes in MySQL Workbench 5.2.35 (2011-09-23)

This section documents all changes and bug fixes applied to MySQL Workbench since the release of MySQL Workbench 5.2.34.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- On Microsoft Windows, the standard (common) keyboard and mouse shortcuts that control *zoom* were not fully implemented. Usage: **Control++** to zoom in, **Control+-** to zoom out, and **Control+/** to reset to 100%. (Bug #57463, Bug #11764608)

- Usernames and schemas can now be sorted. (Bug #55318, Bug #11762692)

- The **Copy Insert Template to Clipboard** option was added to the Model View. For more information, see A Table on an EER Diagram. (Bug #54887, Bug #11762310)

- The query history is now saved between Workbench sessions. (Bug #51388, Bug #11759102)

Bugs Fixed

- The Administrator now allows various authentication plugins (such as Windows Auth, PAM) to create user accounts.

  The dropdown for the authentication method will only be displayed if MySQL Workbench detects that additional authentication plugins are enabled by the server. (Bug #12899893)

- The unused **Start MySQL Utilities Shell for Connection** connection menu item was removed. (Bug #12898126)

- MySQL Workbench would sometimes crash after opening multiple EER diagrams. (Bug #12875254)

- The **Create EER Model from Existing Data Base** process would incorrectly report that the schema was empty. (Bug #12875126)

- The **Synchronize with Any Source** option reversed the 'destination' and 'source' database names within the generated SQL statement. (Bug #62189, Bug #12921676)

- The `is_enabled()` method was added to the mforms View class. (Bug #62140, Bug #12860149)

- MySQL Workbench crashed with a segmentation fault after the connection step of a model synchronization. (Bug #61822, Bug #12742008)

- The database connection splash screen would freeze after opening a server administration instance. It would work perfectly the second time. (Bug #61693, Bug #12756623)

- MySQL Workbench would crash when pressing **Apply** to an empty SQL field under the `Review the SQL Script to be Applied to the Database` form, the second time, after selecting **Go Back**. (Bug #61632, Bug #12694149)

- On OS X, an unchanged MWB file would prompt to save after exiting, and then crash after selecting `Yes`. (Bug #61547, Bug #12668099)

- On OS X, connecting to remote servers using SSH tunnels failed to connect. The workaround was to manually test the connection first, via the **Manage Connections** menu. (Bug #61537, Bug #12674397)

- Viewing the Admin Management option **Server Logs** with an empty `TABLE` resulted in an unhandled exception. (Bug #61523, Bug #12674989)

- On OS X, the `Operation in progress` dialogue would stall when using database connections from older versions of MySQL Workbench. The workaround was to move the mouse. (Bug #61416, Bug #12627853)

- On Microsoft Windows, a **MySQL Workbench Unexpected Error** dialogue is generated when using two SQL Editor windows each with their own database connection to the same server. (Bug #61367, Bug #12612181)

- On OS X, disabling the **Enable data changes commit wizard** preference setting would not disable the wizard. (Bug #61354, Bug #12616314)

- The SQL Editor **Output**, **History** window contained escaped characters. For example, a "`'`" was written as "`'`". (Bug #61345, Bug #12605093)

- On Linux, the **Reverse Engineer Database**, **Select Objects to Reverse Engineer** dialogue contained a menu titled `label`. (Bug #61327, Bug #12600868)

- The SQL Editor **Overview** tab did not refresh after a schema was deleted. (Bug #61314, Bug #12616355)

- **Create EER Model**, **Schema Privileges**, **Add Role**, **Privileges**, and then **Uncheck All Privileges** caused MySQL Workbench to crash. (Bug #61308, Bug #12613935)

- The **Find Plugin in Web Repository** option was removed from the `MySQL Doc Library action`. (Bug #61305, Bug #12613922)

- On Ubuntu Linux, MySQL Workbench crashed with a segmentation fault when executing the **View**, **Output** combination twice. (Bug #61303, Bug #12601189)

- On Microsoft Windows, installation of 5.2.34 over 5.2.33 would sometimes fail due to file collisions, and would then crash at startup. (Bug #61296, Bug #12600117)

- Creating, then selecting or removing user accounts with invalid hosts (such as `'%'`, including the single quotes) resulted in an unhandled exception. (Bug #61244, Bug #12580053)

- MySQL Workbench would not load the configuration options with `MariaDB` due to version number differences between `MariaDB` and `MySQL`. (Bug #61219, Bug #12605404)

- Under certain circumstances, closing a query window would not prompt to save the query. (Bug #61160, Bug #12565971)

- On Microsoft Windows, expensive queries caused MySQL Workbench to be unresponsive after other applications were made active, and the MySQL Workbench wizard was running. This meant that the main MySQL Workbench window could not be selected. (Bug #61122, Bug #12543271)

- MySQL Workbench would not compile with GNU C Compiler (GCC) version 4.6. (Bug #60603, Bug #12617226)

- The query beautifier added superfluous identifier quote characters to the end of some queries. (Bug #60576, Bug #11926859)

- On Microsoft Windows, the following scenario generated an error and a bogus SQL editor tab upon MySQL Workbench restoration: Having multiple open SQL Editor tabs, closing the first, and then closing the database connection (while the `Auto-save scripts interval` option is enabled). (Bug #60569, Bug #12617215)

- The MySQL Workbench SE `MySQL Bug Reporter` linked to bugs.mysql.com instead of support.oracle.com. (Bug #60364, Bug #11872318)

- MySQL Workbench would not connect to multiple database connections when the `sql_history` folder was too large. A workaround was to delete the `sql_history` folder. (Bug #59520, Bug #11766417)

- The SQL Editor **History** could not be saved when the username contained Unicode characters. This was due to MySQL Workbench attempting to save files using an invalid file path. (Bug #59215, Bug #12403539)

- Closing MySQL Workbench would not prompt to save SQL Editor scratch tabs. (Bug #58899, Bug #11765889)

- The **Management**, **Server Logs**, **Slow Query Log** view resulted in an unhandled exception after the initial `Newest` button usage. (Bug #58810, Bug #11765808)

- The **Object Browser** now automatically refreshes after an object is changed. (Bug #56704, Bug #11763930)

- It was not possible to drop multiple selected tables or schemas. (Bug #55688, Bug #11763027)

- **Copy Insert to Clipboard** now updates the MySQL Workbench status to say "The table `schema.table` has no records for insert statements" when no inserts are defined for the table. (Bug #54887, Bug #11762310)

Changes in MySQL Workbench 5.2.34 (2011-05-26)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.33.

This release changed the version of Python version in MySQL Workbench to 2.7. However, this produces a problem when upgrading from 5.2.33. The reason is that the installer leaves all the compiled python files (`*.pyc`) in the installation folder. The next time MySQL Workbench loads, you cannot get beyond the splash screen.

As a workaround, uninstall MySQL Workbench before you install 5.2.34. (This does not affect stored connections, starters, settings, and so forth.) Make sure that all compiled python files (`*.pyc`) have been removed from the installation folder after uninstallation is finished, before you install 5.2.34.

This problem was first encountered on Windows using the MSI package, but might also affect the Zip package or even other platforms. In any case, remove the old files before installing 5.2.34.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- Canceling a query used to work by dropping the connection. Now only the query itself is canceled. (Bug #12394153)

- MySQL Workbench now writes the `wb.log` file in the `.mysql/workbench` directory rather than in `~` (your home directory). (Bug #60930, Bug #12548457)

- The `Check for updates...` menu item that was removed several releases ago has been restored. (Bug #60488, Bug #11879029)

- The **User Accounts** panel now updates when either switching MySQL Workbench tabs or selecting the new **Refresh** button. (Bug #59605, Bug #11766489)

- On Windows, it is possible to open multiple models, but it was not clear that enabling this preference requires a MySQL Workbench restart. The check box tooltip now indicates this. (Bug #59400, Bug #11766312)

- In diagram mode, display of triggers for tables was re-enabled. (Bug #57956, Bug #11765044)

- A Check for Updates feature was added. (Bug #56612, Bug #11763846)

- If a column value is too long to display, an ellipsis (...) is displayed at the end to indicate that there is more data. (Bug #55976, Bug #11763283)

- If MySQL Workbench finds that .NET is not installed, it now provides a link for the user to get the .NET installer. (Bug #55145, Bug #11762538)

- MySQL Workbench now shows query execution time and query warnings. (Bug #51199, Bug #11758933, Bug #58333, Bug #11765373)

- The SQL Editor can now wrap long text lines. This is controllable per editor instance using its context menu. By default, line wrapping is off. (Bug #50569, Bug #11758372)

- Toggle Page Guides is no longer available. (Bug #49927, Bug #11757824)

- Added the ability to see differences of compared schema objects, when the database synchronization wizard is executed. (Bug #42844, Bug #11751838)

Bugs Fixed

- On Ubuntu Linux 11.04+, part of the main MySQL Workbench menu would be hidden when utilizing the Ubuntu Unity display handler. Therefore, the Unity style menus have been disabled. (Bug #61256, Bug #12581792)

- File import operations failed with these errors:

  ```
  Error executing task: 'module' object has no attribute
  'STARTF_USESHOWWINDOW'
  Error executing task local variable 'p1' referenced before
  assignment
  ```

  (Bug #60982, Bug #12430815)

- Executing an SQL script using the scripting shell is not supported, but attempts to do so resulted in a MySQL Workbench crash rather than an error. (Bug #60977, Bug #12402780)

- MySQL Workbench could crash while applying an SQL script to a database. (Bug #60966, Bug #12608789)

- Refreshing the Object Browser collapsed the browser tree. (Bug #60887, Bug #12366813)

- Multiple `USE` statements to change databases in the SQL Editor caused MySQL Workbench to crash. (Bug #60856, Bug #12358480)

- MySQL Workbench could not view the server logs if the server was configured with log output set to `'TABLE,FILE'`. (Bug #60853, Bug #12365454)

- Some color schemes made options difficult to read. (Bug #60826, Bug #12368221)

- In the Python workbench shell, files with a nonsupported execution generated a warning and could not be run. (Bug #60815, Bug #12561562)

- `Find` did not work in Query tabs. (Bug #60787, Bug #12347063)

- Changing connection parameters in Synchronize Model resulted in an error message. (Bug #60771, Bug #12329285)

- For import and export command operations using a Unix socket file, MySQL Workbench added an incorrect `--pipe` option to the command. (Bug #60756, Bug #12325422)

- **Forward Engineer SQL Script** wizard wrote incomplete output. (Bug #60751, Bug #12329302)

- These query beautifier problems were corrected:

  - Queries containing table aliases were mishandled.

  - Spaces between table names and table aliases were incorrectly removed.

  (Bug #60742, Bug #11883490, Bug #12327013)

- If a connection name contained a `':'` character, it did not work. (Bug #60700, Bug #12325493)

- When a schema was dropped in the Object Browser view using the context menu, the view was not refreshed properly. (Bug #60688, Bug #11933806)

- New server instances were not always displayed in the Server Administration list. (Bug #60684, Bug #11933087)

- MySQL Workbench crashed if it was unable to locate a required DLL due to security blocking. Now it displays instructions to the user how to perform unblocking. (Bug #60658, Bug #12545324)

- On Linux, MySQL Workbench was overly aggressive about reading schema information from `INFORMATION_SCHEMA`, leading to slowdowns when connecting to the MySQL server. Now information is read only for the default schema. (Bug #60644, Bug #11926793)

- Several crashes occurred under KDE with certain GTK+ themes. (Bug #60640, Bug #11926917)

- Fixed a possible crash when selecting **File**, **Export**, **Forward Engineer SQL CREATE Script**, and followed by the browse button. (Bug #60626, Bug #12617320)

- MySQL Workbench did not assign a correct tab name when opening an SQL script from the recent file list menu. (Bug #60610, Bug #11926855)

- **Control+S** did not save models or SQL Editor scripts. When opening an SQL script, it did not display the file name. (Bug #60594, Bug #12402774)

- MySQL Workbench could crash trying to display result sets that contained binary data. (Bug #60588, Bug #12385959)

- The SQL statement generated by clicking an item in the action pane failed to include the qualifying database name. (Bug #60562, Bug #11926864)

- The **Administrator** panel would not load for large process ID values of the MySQL server. (Bug #60505, Bug #12397312)

- MySQL Workbench crashed trying to execute some `CREATE TABLE` statements. (Bug #60475, Bug #12356405)

- Clicking a user name to obtain details caused MySQL Workbench to crash if the name contained an apostrope. (Bug #60473, Bug #11889207)

- Query results could not be saved to a directory for which the name contained Japanese characters. (Bug #60438)

- Exporting query results after entering a file path name did not work. (Bug #60438, Bug #11868335)

- MySQL Workbench tries to determine whether it can use Aero, but did not correctly check the platform. On Windows Server 2003, a call was made to a non-existing DLL, causing a .NET crash. (Bug #60412, Bug #11872360)

- Multiple-selection copy did not work. (Bug #60410, Bug #11865601)

- MySQL Workbench failed to compile on Gentoo Linux. (Bug #60358, Bug #12368202)

- Stored procedures could not be opened from the objects tree if the SQL Delimiter had been changed to the `';'` character. Now the label for this option in the `Preferences` dialog has been changed to `Non Standard SQL Delimiter` to better reflect its actual meaning. The tooltip has also been changed to be more descriptive. In addition, if an `Alter <object>...` operation fails due to a parse error, the retrieved DDL code is shown as is in the SQL editor. (Bug #60354, Bug #11889184)

- Attempting to connect to a nonexistent server put MySQL Workbench in a nonresponsive state. (Bug #60329, Bug #11834154)

- Record set export to a file failed unless the file name was given as an absolute path name. (Bug #60256, Bug #11874435)

- Output from the routine editor added excessive blank lines between routine definitions. (Bug #60205, Bug #11874345)

- When database connections had process IDs with large values, the connection tab displayed an error box rather than process information. (Bug #60192, Bug #12397794)

- MySQL Workbench lost the connection to the server for long-running queries (more than 600 seconds). (Bug #60103, Bug #11766876)

- MySQL Workbench sometimes looked for `my.ini` in the wrong directory. (Bug #60076, Bug #11766855)

- Some MWB files created in MySQL Workbench 5.1 could not be loaded in 5.2. (Bug #59862, Bug #11766695)

- Items from the SQL Editor history were not always available to be copied into the SQL script. (Bug #59807, Bug #11766651)

- Exporting a record set to a file resulted in invalid `INSERT` statements if the table contained a column named `key` because the column name was not quoted properly. (Bug #59787, Bug #11766638)

- It was not possible to import a dump if MySQL Workbench was installed in a directory having a name that contained spaces. (Bug #59737, Bug #11766595)

- **Control+Z** in the Model Editor did not always refresh the screen correctly. (Bug #59661, Bug #11766531)

- Selecting the Create Multiple Tables menu item resulted in an error. (Bug #59586, Bug #11766473)

- Create EER Model from SQL Script reported a syntax error when importing legal SQL scripts. (Bug #59577, Bug #11766464)

- A problem running MySQL Utilities under the KDE console was fixed. (Bug #59427, Bug #12430837)

- After using the column headers of the User Accounts list to sort the accounts by User or From Host, then selecting various accounts in turn, the selected accounts often did not match the account being displayed in the corresponding Login, Administrative Roles, or Account Limits tabs. (Bug #59391, Bug #11766304)

- Clicking the Manage Security link in the MySQL Workbench Home screen opened the Admin screen in the **Startup** tab rather than the **Accounts** tab and produced an error. (Bug #59389, Bug #11766302)

- The description given in the **Workbench Preferences** dialog for the `--safe-updates` option was incorrect. (Bug #59370, Bug #11766289)

- Connection sorting was lost after a status refresh. (Bug #59355, Bug #11766279)

- MySQL Workbench displayed superfluous error messages after the user interrupted a query. (Bug #59323, Bug #11766255)

- A `SHOW WARNINGS` query would return zero results, even when warnings existed. (Bug #59221, Bug #11766174)

- The Users column in the **Schema Privileges** tab was not sortable. (Bug #59138, Bug #11766100)

- On Windows, opening a second instance of MySQL Workbench resulted in an error. (Bug #59128, Bug #11766090)

- When the user closed the main window with a connection active, MySQL Workbench did not terminate the connection. This lead to `Aborted_clients` errors on the server side. (Bug #58944, Bug #11765929)

- Opening a connection twice resulted in unexpected errors when executing queries on the connection. (Bug #58835)

- When the SQL statement history file became large enough, MySQL Workbench encountered allocation errors attempting to add to it. (Bug #58778, Bug #12409656)

- When double-clicking tables in a model diagram, tabs were mismanaged such that the proper set of tabs did not remain available. (Bug #57349, Bug #11764509)

- On OS X, **Option+Delete** functioned as Undo rather than deleting the word to the left of the cursor. (Bug #57184, Bug #11764360)

- A memory leak occurred during diagram manipulation. (Bug #55719, Bug #11763054)

- Using the Description Editor to update a table description did not update the Comments column of the Model Overview window. (Bug #55235, Bug #11762621)

- EER Diagram Catalog Tree schema folders did not stay collapsed when moving tables from a schema to the Diagram. (Bug #55088, Bug #11762487)

- Actions that should open a web page did not work. (Bug #54827, Bug #11762254)

- With a large table displayed in the SQL Editor object browser, keyboard shortcuts for the table information display were not working, and the information was not formatted properly. (Bug #54191, Bug #11761676)

- On OS X, two-finger scrolling did not work in query windows. (Bug #53678, Bug #11761211)

- The `TRIGGER` privilege could not be assigned at the schema level. (Bug #52977, Bug #11760556)

- It was not possible to view or edit long text lines with the inline editor. (Bug #52087, Bug #11759751)

- After loading a model, zoom levels saved with bookmarks were not always used correctly. (Bug #50816, Bug #11758594)

- The live schema tree did not update properly to reflect modifications to schema objects. (Bug #50424, Bug #11758248)

- On OS X, the **Shift+Alt + Arrow** combination selected individual characters instead of words. (Bug #50085, Bug #11757963)

- On Windows, a packaging error for the Zip file distribution led to spurious GRT Shell warnings at MySQL Workbench startup. (Bug #49813, Bug #11757719)

- For data browsing, the Fetch All option sometimes disappeared. (Bug #49403, Bug #11757365)

- For SQL Editor tabs where the connection had no name, connection information was not shown. Now MySQL Workbench displays the host name (up to 21 characters). (Bug #49058, Bug #11757060)

- Opening a connection from the list of recently used connections caused the user interface to become unresponsive while wanting for the connection to open. Now a "Connecting, please wait" message

appears and there is a `Cancel` button to enable the connection request to be canceled. (Bug #48912, Bug #11756924)

- Dragging tables from the catalog to an EER diagram failed. (Bug #47028, Bug #11755277)

Changes in MySQL Workbench 5.2.33b (2011-03-21)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.33.

Bugs Fixed

- Creating a relationship broke the model file due to the index and foreign key having the same name. (Bug #60564, Bug #11926856)

- Attempting to open a saved model produced this error:

```
Error unserializing GRT Data.  Expected Type db.mysql.Column, but got
db.mysql.Table.
```

(Bug #60369, Bug #11840427)

Changes in MySQL Workbench 5.2.33 (2011-03-11)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.32.

Bugs Fixed

- It was not possible to forward engineer a model, or synchronize it with a live model. (Bug #60396, Bug #11850052)

- In the Administrator, when **Manage Security** was selected, an error message was displayed in the status bar. It was not then possible to see and therefore manage user privileges. (Bug #60370, Bug #11840439)

- The ability to synchronize non-model sources was added. (Bug #60009, Bug #11766805)

- The **Reformat SQL Query** option would sometimes fail, and emit an error. (Bug #58856, Bug #11765852)

- The query beautifier failed for queries containing subqueries. (Bug #58835, Bug #11765832)

- In the **Users and Privileges** task of the Administrator, it was not possible to sort the users alphabetically. (Bug #56456, Bug #11763710)

- MySQL Workbench would incorrectly report that the MySQL server had stopped. (Bug #51146, Bug #11758886)

Changes in MySQL Workbench 5.2.32 (2011-03-05)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.31a.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- Changing the default schema now modifies the selected schema name to be bold. (Bug #57710, Bug #11764836)

- In the SQL Editor, in the event of a crash, the content and state of script tabs was lost if not previously saved. MySQL Workbench now autosaves the content and state of the SQL Editor. (Bug #57667, Bug #11764794)

- MySQL Workbench has been improved so that an errors are more clearly identified if they occur when synchronizing with a live server, or forward engineering to a live server. (Bug #55158, Bug #11762551)

Bugs Fixed

- These query beautifier problems were corrected:

  - Aggregate function text was deleted.

  - In the SQL Editor, the beautifier did not process functions such as `COUNT()` or `NOW()` or correctly. It rendered the function with additional spaces, causing a syntax error.

  (Bug #60070, Bug #11766850, Bug #59450, Bug #11766354, Bug #58714, Bug #11765722)

- On Microsoft Windows 7, if a user profile launched MySQL Workbench, it crashed if additional user profiles attempted to launch it. The first instance needed to be closed before another user profile was able to run MySQL Workbench. (Bug #59913, Bug #11766733)

- MySQL Workbench crashed when closing the query results tab in the SQL Editor. (Bug #59774, Bug #11766626)

- When deleting a recursive foreign key constraint, the primary key was also mistakenly deleted. (Bug #59668, Bug #11766538)

- On the Home screen, right-clicking a connection and selecting **Start Command Line Client** produced this error:

```
Error calling
PyWbUtils.startCommandLineClientForConnection: see
output for details

output:
Message: Error executing plugin wb.tools.comdlineClient:
error calling wb.tools.cmdlineClient
Traceback:
File "C:\Program Files\MySQL\MySQL Workbench 5.2 CE\modules
\wb_utils_grt.py", line 96, in
startCommandLineClientForConnection

schema = conn.parameterValues["schema"].replace("\\",
  "\\\\").replace('"', '\\"')
AttributeError: 'NoneType' object has no attribute 'replace'
```

  (Bug #59638, Bug #11766510)

- Attempting to create a new server instance resulted in this error message:

```
We are sorry for the inconvenience but an unexpected exception has
been raised by one of the MySQL Workbench modules. In order to fix
this issue we would kindly ask you to file a bug report. You can
do that by pressing the [Report Bug] button below.
```

  (Bug #59578, Bug #11766465)

- In the EER Diagram view, clicking a table to edit its details sometimes resulted in this error:

```
Cannot access a disposed object.
Object name: 'DockedWindowPlugin'
```

(Bug #59559, Bug #11766448)

- In the EER Diagram view, MySQL Workbench crashed on selecting a new table. This happened if the **Privileges** tab was open for the currently selected table. (Bug #59535, Bug #11766431)

- In the SQL Editor, if a `'`' (grave accent) character was entered, any subsequently entered control keys such as the arrow keys or the backspace key failed to function correctly. (Bug #59528, Bug #11766425)

- Running the version of `mysqldump` supplied with the MySQL Server package resulted in this error:

```
Operation failed with exitcode -1073741819
```

(Bug #59411)

- The collapsed state of Workbench Central, on the Home screen, was not saved between MySQL Workbench sessions. If after collapsing Workbench Central to save vertical space, the application was exited and restarted, Workbench Central was drawn in the expanded state. (Bug #59399)

- Attempting to create a new user with MySQL Workbench failed with this error:

```
Unhandled exception: Error adding account accountName@%:
```

(Bug #59000)

- Generated scripts did not manage connection variables cleanly. For example, the `autocommit` state was not preserved by the script produced by forward engineering an SQL CREATE script. The script switched off `autocommit`, but did not then restore it correctly to its previous state. (Bug #58998, Bug #11765974)

- On Windows, the Python debugger stopped the script being executed in MySQL Workbench after about one second. It then displayed the message "abort" in the output pane. (Bug #58960, Bug #11765943)

- When a model was forward engineered, the primary keys were not created in the generated script. (Bug #58926, Bug #11765913)

- SQL Editor did not load certain text files correctly, and inserted erroneous empty lines between text. (Bug #58850)

- In the Administrator, when making a backup with the `--single-transaction` option enabled, the `--lock-tables` option was erroneously still enabled. (Bug #58562, Bug #11765579)

- Trying to create a relationship between two tables, created in a plugin, produced this error:

```
MySQL Workbench has encountered a problem
Es wurde versucht, im geschützten Speicher zu lesen oder zu schreiben. Dies ist häufig
ein Hinweis darauf, dass anderer Speicher beschädigt ist.
```

(Bug #58554, Bug #11765571)

- When synchronizing a model with a server, indexes were unnecessarily dropped and recreated. (Bug #58238, Bug #11765284)

- Forward engineering a model containing two schema resulted in a generated script that contained incorrect SQL:

```
DELIMITER ;USE `Schema2` ;
```

The `DELIMITER` and `USE` statements should not have appeared on the same line. (Bug #58117, Bug #11765180)

- When running MySQL Workbench with the arguments "-script [FILE.lua] -quit-when-done", it crashed with this message:

```
[MySQL Workbench Unexpected Error]

MySQL Workbench has encountered a problem

Cannot access released / disposed object.
Object name: "MainForm".
```

  (Bug #57570, Bug #11764708)

- In the SQL Editor, switching between query tabs did not switch the associated results panel. (Bug #57486, Bug #11764628)

- In the SQL Editor, when editing table data, this error dialog was displayed:

```
Either schema or table is not selected.
```

  Each time the dialog was acknowledged, it was subsequently redisplayed, preventing further progress. (Bug #57127, Bug #11764305)

- In the **Columns** tab of the table editor, copying and pasting the **Datatype** field using **Control+C** and **Control+V** resulted in the text "table_copy1" being pasted, rather than the copied datatype. (Bug #56501, Bug #11763749)

- When exporting a model, if the **Skip Creation of FOREIGN KEYS** option was selected, indexes were not created. (Bug #56389, Bug #11763649)

- At startup, MySQL Workbench displayed a blank screen if it had previously been closed after using the menu item **Help**, **System Info**, and then clicking the main application window close button. (Bug #55764, Bug #11763097)

- When forward engineering a model, the generated script resulted in SQL errors when executed on the server. This happened when the following options were selected:

  - DROP Objects Before Each CREATE Object

  - Omit Schema Qualifier in Object Names

  - Generate Separate CREATE INDEX Statements

  - Generate INSERT Statements for Tables

  (Bug #54836, Bug #11762262)

- The generated alter script contained erroneous statements adding and deleting indexes and foreign keys. (Bug #54180, Bug #11761666)

- The text in the SQL Editor was not anti-aliased, which hindered readability by causing the text to visually conflict with anti-aliased text elsewhere in MySQL Workbench. (Bug #54059, Bug #11761553)

- On Microsoft Windows, if the Windows Firewall application was not running, installation of MySQL Workbench would halt with an error dialog indicating that it was unable to connect to the firewall. (Bug #53603, Bug #11761143)

- Primary and foreign keys are now displayed with different icons. (Bug #53503, Bug #11761049)

- Dropping a table from the **Object Browser** did not remove the table's icon. (Bug #52878, Bug #11760462)

- There were numerous locations within MySQL Workbench where the availability of context-sensitive menus (right-clicking) was expected and useful, but not available. (Bug #49622, Bug #11757556)

- Forward engineering a table containing a multiple-line comment resulted in this error:

```
ERROR 1105 (HY000) at line 97: Too long comment for table 'motd'
```

(Bug #38597)

Changes in MySQL Workbench 5.2.31a (2010-12-13)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.31.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- It was not possible to launch the MySQL Command Line Client from the SQL Editor. MySQL Workbench has been changed so that it is now possible to launch a MySQL Command Line Client from the Home screen. This can be done through the context-sensitive menu available for items listed in the connections list on the Home screen. (Bug #56631)

Bugs Fixed

- An unexpected error was generated when attempting to modify the script created in the **Forward Engineer to Database** wizard. (Bug #58893)

- SQL Editor did not load certain text files correctly, and inserted erroneous empty lines between text. (Bug #58850)

- MySQL Workbench closed silently when the **User Defined Types Editor** dialog was closed using the close button on the window frame, or by pressing **Alt+F4**. (Bug #58846)

- Opening the **Snippets** tab in the SQL Editor caused MySQL Workbench to crash with the error:

```
** Message: query.explain built-in command is being overwritten
mysql-workbench-bin: /usr/include/boost/smart_ptr/shared_ptr.hpp:418: T*
boost::shared_ptr< <template-parameter-1-1> >::operator->() const [with T = Sql_editor]:
Assertion `px != 0' failed.
Aborted
```

(Bug #58833)

Changes in MySQL Workbench 5.2.31 (2010-12-08)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.30.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- **Edit**, **Format**, **Un/Comment Selection** was added. (Bug #55278, Bug #11762657)

- The query execution time was added to the query result status bar. (Bug #53509, Bug #11761054)

- MySQL Workbench has been changed so that holding the spacebar while in the EER Diagram view temporarily changes the cursor to the hand tool. When the spacebar is released the cursor reverts to the tool that was selected prior to the spacebar having been pressed. (Bug #52331)

Bugs Fixed

- MySQL Workbench would not detect invalid values while they were entered into the properties editor. (Bug #11749933)

- Typing into the Workbench Scripting Shell resulted in an Unexpected Error:

```
MySQL Workbench has encountered a problem.

Attempted to read or write protected memory. This is often an indication that other
memory is corrupt.
```

  (Bug #58832)

- These query beautifier problems were corrected:

  - When the beautifier was used on a query that performed a join with the `USING` keyword, the table name was concatenated with that keyword.

  - The beautifier did not recognize the optional `AS` keyword in table references. When `AS` was used with a table alias, the beautifier concatenated that keyword and the alias, which caused any references to the original alias to fail.

  - Using the beautifier on a query containing `USING` resulted in an invalid query being generated. This was due to missing spaces around `USING`.

  - Using the beautifier on a query resulted in an unhandled exception.

  - If a query was partially selected, and then the beautifier was run, the results were unpredictable. Problems included exceptions, duplicated tokens, and incorrect indentation.

  - When the beautifier was run on code containing several statements, the code was incorrectly formatted.

  - A query containing a `CASE` keyword was not handled correctly.

  - The beautifier converted certain tokens to uppercase that should not have been converted.

  - When attempting to beautify a `CREATE INDEX` query, the beautifier removed part of the query.

  - If a query was written in the **SQL Query** tab, and then highlighted using the cursor, the beautifier failed with an unhandled exception on calls to beautify, uppercase, or lowercase functions.

  - Using the beautifier on a `CREATE TABLE` statement resulted in an unhandled exception.

  (Bug #58598, Bug #58569, Bug #58347, Bug #58565, Bug #58359, Bug #58367, Bug #58361, Bug #58360, Bug #58357, Bug #58358, Bug #58356)

- In the Administrator, monitoring of a remote server did not work. (Bug #58586)

- In the Administrator, starting or stopping the monitored server produced this error message:

```
Could not stop/start server: expected a character buffer object
```

  (Bug #58400)

- When exporting a record set using the **SQL INSERT statements** file format, a number of issues were found:

  - The first line contained the executed `SELECT` statement as a comment but the `LIMIT` syntax was located in a new line. This resulted in the `LIMIT` part of the statement not being commented out.

  - Strings following the `VALUES` keyword were not quoted.

  - The `INSERT` statements contained the text "table" in place of the actual table name.

  - Existing files were overwritten without prompting the user.

  (Bug #58377, Bug #56950)

- In the SQL Editor, selecting the default database where the server contained only a single database had no effect. To avoid a "No database selected" error, the database had to be selected in a script using the `USE` statement. (Bug #58274)

- Autotools were required to be installed locally to build MySQL Workbench from source. (Bug #58263)

- The MySQL Workbench tarball contained cached Autotools information. (Bug #58261)

- In the SQL Editor, right-clicking a table name and selecting **Alter table** did not launch the **Alter table** dialog as expected. This happened if the table name utilized mixed case letters. (Bug #58223)

- Results for queries on rows that contained a null byte (\0) were truncated at the null byte character when displayed in the SQL Editor results pane. (Bug #58099)

- In the SQL Editor, when entering a hex value into an `INTEGER` column, the hex value was automatically quoted as a string, causing it to be evaluated to 0. (Bug #58045)

- In the **Server Access Management** tab of the Administrator no user accounts were displayed. Further, attempting to create a new account resulted in an exception. (Bug #57941)

- In the **Reverse Engineer SQL Script** wizard, on the **Input and Options** page, the button to select the SQL script file had the text "Brow" instead of "Browse". (Bug #57929)

- The commands to arrange objects were not enabled in the EER Diagram view. This rendered it impossible to move objects to the back or bring them to the front. (Bug #57907)

- When setting the data type of a column to `DOUBLE` with precision specified, the data type reverted to `DOUBLE` without the desired precision specifiers. This happened in both the Table Editor and the SQL Editor. (Bug #57865)

- In the **Columns** tab of the Table Editor, double-clicking to edit or add a new column caused the window to scroll to the top. (Bug #57793)

- An error message contained a spelling mistake:

```
Line 437 of .\backend\wbprivate\workbench\wb_context_ui_home.cpp:
std::string msg = strfmt("Error in sercurityManager module: %s",err.what());
```

  (Bug #57684)

- In the **SQL Editor** tab of the **Workbench Preferences** dialog, if the **OK** button was not clicked centrally, it was possible to accidentally select or deselect one of the options **Treat BINARY/VARBINARY as nonbinary character string** or **Enable Data Changes Commit Wizard**. (Bug #57669)

- For a column of type `TIMESTAMP`, the menu items **Default CURRENT_TIMESTAMP** and **Default CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP** in the context-sensitive menu of the

Columns tab of the Table Editor were grayed out. This occurred where a preceding column of type `TIMESTAMP` was allocated an explicit default value. MySQL Workbench should not have prevented setting a value using the context-sensitive menu for the second defined column in this case. (Bug #57665)

- A script file that was converted to the `cp850` character set was truncated on loading into the SQL Editor. (Bug #57636)

- The forward engineering process generated SQL code that quoted boolean values, causing incorrect cast values. When a table contained the logical `BOOLEAN` type for a field it was converted to `TINYINT(1)` as expected. However, the values that were supplied for any inserts were quoted, as in this example:

  ```
  INSERT INTO mytable (id,flag) VALUES (NULL,'TRUE');
  ```

  (Bug #57545)

- The SQL Editor generated these errors if a query ran longer than 30 seconds:

  ```
  Error Code: 2013  Lost connection to MySQL server during query
  Error Code: 2006  MySQL server has gone away
  ```

  (Bug #57449)

- Clicking the **Configuration** tab in the Administrator produced this error:

  ```
  Error Opening Configuration File
  Exception: Internal error. File data passed is not in expected format. This is a bug, we
  would appreciate if you file a bug report at http://bugs.mysql.com.
  ```

  (Bug #57418)

- `ENUM` values entered into the Inserts Editor were not automatically quoted. (Bug #57399)

- On the **Select Object** page of the **Reverse Engineer Database** dialog, the panels displayed when **Show Filter** was clicked did not resize correctly when **Hide Filter** was clicked. (Bug #57376)

- Forward engineering a model failed with a duplicate column name error when the EER diagram contained a view consisting of tables joined using the `JOIN` ... `USING` syntax. (Bug #57329)

- In the Administrator, attempting to add an account with a login name longer than 16 characters resulted in an exception. (Bug #57300)

- The MySQL configuration file could not be accessed during MySQL Workbench installation. (Bug #56987)

- When the MySQL service was set to manual in MySQL Workbench, the service was displayed as running in the server status panel, even though the service had not yet been started. (Bug #56919)

- When creating a new server instance, this error occurred when testing the settings:

  ```
  Operation failed: File  doesn't exist
  ```

  (Bug #56911)

- **Find** and **Find and replace** did not work in the **SQL Query** tab. (Bug #56898)

- Backups dumped to a project folder (file per table) were restored in no particular order. This made it difficult to resume a problematic restore at a specific point. (Bug #56897)

- Creating a many-to-many relationship between two tables resulted in only one index being generated. (Bug #56613)

- MySQL Workbench crashed when a snippet in the snippet list was right-clicked. (Bug #56588)

- When saving over a read-only file, MySQL Workbench changed the file permissions to read/write. (Bug #56403)

- In the Role Editor, the "Drag object from the catalog tree to assign privileges" text label was out of date. The label should have read "Drag objects from Physical Schemata section to assign privileges". (Bug #56321)

- If the Table Editor was resized, it returned to the default size when switching between tables to be edited. (Bug #56314)

- After the computer woke from the sleep state, MySQL Workbench attempted to reconnect to a connection that had previously been closed in the SQL Editor. (Bug #56302)

- In the **Reverse Engineer Database** wizard, the ability to select the default schema on the **Connection Options** page was superfluous. (Bug #56179)

- In the **Connections** tab of the Administrator, scrolling did not work correctly with large numbers of connections. (Bug #56144)

- When multiple tabs were open in the Administrator, with each connected to a different server, and with export of a database was set up in each, running an export operation resulted in errors. This occurred because MySQL Workbench attempted to export a database selected in a tab other than the currently selected one. (Bug #56113)

- Deleting routine groups from the EER Diagram view did not delete routines. (Bug #56084)

- If a MWB file was double-clicked to open, but MySQL Workbench was already running, a new instance of MySQL Workbench was launched, rather than opening the file in a new tab in the currently running instance. (Bug #56067)

- In the SQL Editor, in the **Foreign Key** tab of the **new-table** dialog, it was not possible to select any of the foreign key check boxes. (Bug #56024)

- When objects were double-clicked in the Diagram view, the correct tab was not always switched to in the Object Editor. The Description Editor did however switch to the correct object. (Bug #55994)

- Close tab functionality failed intermittently. This occurred for attempts to close the tab directly or when using the **File**, **Close tab** menu item. (Bug #55901)

- In the SQL Editor, an out of memory exception occurred when exporting a large record set in the CSV file format. (Bug #55889)

- In the sidebar of the SQL Editor, when a default schema was selected, other schemas listed in the sidebar were not displayed. (Bug #55864)

- In the Administrator, most columns were not sortable. For example, in the Connections tab, it was not possible to sort connections based on clicking the columns id, User, Host, DB, Command, Time, State, Info. (Bug #55813)

- When an EER diagram that was in the background was closed, it was not possible to reopen it. (Bug #55767)

- If the relationship editor was already open, it was not possible to open it for another relationship without closing it first. (Bug #55708)

- The `PYTHONPATH` environment variable from other Python installations interfered with MySQL Workbench. At startup, the error "cannot open SSH Tunnel Manager" appeared. Further, it was not possible to use the MySQL Workbench administrative functions. (Bug #55674)

- In the **Column** tab of the Table Editor, it was possible to set `NULL` as the default value for a column that had been specified as `NOT NULL`. (Bug #55456)

- In the SQL Editor, it was not possible to create a foreign key relationship between two tables. (Bug #55399)

- In the Table Editor, if a data type was selected for a column, this was immediately reflected on the EER Diagram view. However, if the selection was reverted by pressing **Control+Z**, the EER Diagram was not updated to reflect this, and continued to display the original data type. (Bug #55348)

- In the EER Diagram view, a copied object could not be pasted, if the object had previously been pasted and then edited. (Bug #55336)

- In the User Defined Data Types Editor, clicking the button to edit the argument list caused the **Argument List Editor** dialog to be drawn beneath the current dialog. As the dialog with focus could not be accessed, this meant it was not possible to proceed with editing and MySQL Workbench had to be closed. (Bug #55242)

- The **Modified** time displayed in the **Model Overview** was incorrectly set to the current time. (Bug #55237)

- Selecting a **Refresh** or **Refresh all** button or menu item caused the list of tables and views in the sidebar to become empty. (Bug #55214)

- In the **Configuration** tab of the Administrator it was not possible to enable or disable the `local_infile` (`LOAD DATA LOCAL`) option. (Bug #55031)

- It was not possible to select and copy messages in the Output window of MySQL Workbench. When messages were displayed it was no longer possible to right-click them and select either the **Copy Selected Messages to Clipboard** or the **Clear Output Windows** menu items. (Bug #54983)

- In the Model Overview, if a diagram had a title that wrapped to two lines or more, the second line was truncated due to lack of space in the panel. Now MySQL Workbench includes a scrollbar should the diagram titles not fit within the standard panel. (Bug #54952)

- Generated `INSERT` statements did not include quote characters for `TEXT` or `DATE` columns. (Bug #54910)

- In the SQL Editor, when viewing table data where the number of columns was such that some columns were offscreen, if the **End** key was pressed to go to the last column in the row, the data grid did not scroll accordingly, so the column containing the cursor was not visible without manually scrolling. (Bug #54753)

- In the Diagram view switching between tables caused erroneous carriage returns to be added to the DDL code in the Triggers tab. (Bug #54411)

- The error message displayed when the `mysqldump` version needed updating was not informative enough. (Bug #54209)

- In the Administrator, system health displayed NO DATA. (Bug #52151)

- Formatting of view code entered in the View Editor was not retained after synchronization of the model with the server. (Bug #52004)

- It was not possible to add a comment for a Layer using the Object Editor. MySQL Workbench has been updated so that it is possible to add a comment for a layer using the Object Editor. (Bug #50668)

- When using the Administrator, the CPU utilization jumped to 50%. (Bug #50578)

- After printing, the status message displayed included incorrect capitalization. "Print Diagram done" should have been displayed as "Print diagram done". (Bug #50035)

- The schema editor decreased in size by several pixels each time a new schema was edited. (Bug #49425)

- The SQL Editor did not display the execution times for queries. (Bug #49390)

- MySQL Workbench permitted an `AUTO_INCREMENT` column to be assigned a default value in the Table Editor, resulting in invalid DDL being generated. (Bug #49279)

- The menu option **View**, **Windows**, `menu item` did not appear to have any useful function. (Bug #49056)

Changes in MySQL Workbench 5.2.30 (2010-11-20)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.29.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- An advanced search and replace dialog has been added to MySQL Workbench. This can be accessed from the main menu **Edit** option, **Find and replace** or the keyboard shortcut **Control+Shift+f**. (Bug #56629)

- MySQL Workbench has been changed so that the Query Editor in the SQL editor includes an SQL formatter. Code can be highlighted and formatted using the **Edit**, **Format** menu item. (Bug #50822)

Bugs Fixed

- The default settings for the **Export Directory Path** in the **Workbench Preferences** dialog used mixed file path delimiters (both `'/'` and `'\'`). (Bug #57944)

- When importing an SQL script using the **Reverse Engineer SQL Script** wizard, copying a path from the clipboard to the **Select SQL script** file input box resulted in an "invalid path" error. (Bug #57927)

- For attempts to connect to a server using SSH, MySQL Workbench produced this error message after the user entered the password:

```
AttributeError: ServerProfile instance has no attribute 'serverInfo'
```

(Bug #57695)

- The implementation of `get_local_ip_list()` had several problems:

  - It did not have a graceful fallback state in the event of errors.

  - It failed if `ifconfig` was not on the default user path.

  - It did not handle IPv6 addresses.

(Bug #57537)

- When a foreign key was created manually, if the referenced table did not exist, MySQL Workbench crashed. (Bug #57470)

- In the EER diagram view, the table titles were the same color as the background color, making the table titles illegible. (Bug #57428)

- After a query was executed, MySQL Workbench crashed when the **Export** button was clicked to export the result set to a file. (Bug #57379)

- When a model was forward engineered with **File**, **Export**, **Forward Engineer SQL CREATE Script**, the generated script contained a statement that consisted of a single delimiter, `';'`. (Bug #57378)

- In the SQL Editor, it was not possible to close the last remaining tab. Closing the last remaining tab should result in a new blank tab being displayed. (Bug #57137)

- If the SSL option was selected for a standard TCP/IP connection, there was no facility provided to enter the SSL certificate details. (Bug #57101)

- On Linux Fedora 14, MySQL Workbench produced this error at startup:

```
/usr/bin/mysql-workbench-bin: error while loading shared libraries: libpython2.6.so.1.0:
cannot open shared object file: No such file or directory
```

(Bug #56863)

- It was not possible to change the name of an EER Diagram. The facility was missing from the **Diagram Properties and Size** dialog. (Bug #56625)

- The safe updates option on the **SQL Editor** tab of the **Preferences** dialog required a MySQL Workbench restart to take effect. (Bug #56159)

- In the Table Editor of the SQL Editor, on the **Foreign Keys** tab, selecting the **Referenced Table** dropdown for a database containing a large number of tables caused MySQL Workbench to become unresponsive while the dropdown was being populated. (Bug #56014)

- In the **Create Table** dialog of the SQL Editor, if a new column was created with a synonym data type such as `INTEGER`, the datatype would appear blank, both in the interface and in the generated SQL. This resulted in an error when clicking the **Apply SQL** button. (Bug #55620)

- Foreign keys were not updated when a referenced column was deleted. (Bug #55219)

- The output generated as a result of using the **Print** and **Print Preview** menu items was incorrect. Only the magnified top left corner of the EER diagram was displayed. (Bug #55139)

- In the **Alter Table** dialog of the SQL Editor, attempts to reorder columns failed. If a column position was changed, and then the **Apply** button was clicked, the dialog reported that no changes to the object were detected. (Bug #54923)

- When a new instance was created to connect using SSH with an SSH certificate file, the location of the certificate file was not saved. (Bug #52048)

- In SQL Editor, when using the **Alter Table** facility to set a column to Auto Increment (AI), the dialog reported that "No changes to object were detected". (Bug #50214)

Changes in MySQL Workbench 5.2.29 (2010-10-12)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.28.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- An open model that has not been saved is now automatically saved after a user-settable period. On loading a model file, MySQL Workbench will notify the user if the file was not previously saved correctly, due to a crash or power failure. MySQL Workbench can then attempt to recover the last auto-saved version. Note that for automatic recovery to be available for a new file, it will have to have been saved by the user at least once. (Bug #56718)

- The `Autosave` feature was added. (Bug #50044, Bug #11757926)

Bugs Fixed

- **Security Fix:** A security bug was fixed. (Bug #57080)

- Clicking the **Inserts** tab of the Table Editor resulted in the **MySQL Workbench Unexpected Error** dialog being displayed. (Bug #57346)

- If an EER diagram was created and then closed, attempting to reopen it caused MySQL Workbench to display an unexpected error dialog. (Bug #57259)

- In the Model View, MySQL Workbench crashed when the **Output** tab was reopened after previously being closed. (Bug #57150)

- Attempting to open the Table Editor in the SQL Editor multiple times for a table that contained no primary key caused MySQL Workbench to crash. (Bug #57139)

- Changes made to a server instance were not saved. In particular, changing installation type to "Custom" was not saved, and changes to the `sudo` command were also not saved. (Bug #57026)

- When attempting to open an EER Diagram by double-clicking it in the Model Overview, MySQL Workbench generated this unexpected error:

```
Cannot access a disposed object.
Object Name: ModelDiagramForm.
```

  (Bug #56963)

- When synchronizing a model to a live database, if a database was deselected in the wizard, a `DROP` statement for that database was generated in the SQL code to prevent it from being part of the synchronization process. This caused that database to be dropped from the live database, with corresponding loss of all data. (Bug #56938)

- In the **Alter Table** dialog of the SQL Editor, attempting to create a new index in the **Index** tab was not actioned when the **Apply** button was clicked. The dialog reported that "no changes to object were detected". (Bug #56906)

- It was only possible to connect to a MySQL server for administration using an SSH connection. (Bug #56874)

- Scripts could successfully be executed on the MySQL Server failed to execute in the MySQL Workbench SQL Editor. (Bug #56833)

- If a table containing a User Defined Type based on `VARCHAR` was forward engineered, the resulting SQL did not correctly quote the `VARCHAR` value, resulting in a server error. For example, this code was generated:

```
CREATE  TABLE IF NOT EXISTS `x`.`tabley` (`customstring` VARCHAR(10));
INSERT INTO `x`.`tabley` (`id_customstring`) VALUES (example);
```

The correct `INSERT` statement should be:

```
INSERT INTO `x`.`tabley` (`id_customstring`) VALUES ('example');
```

(Bug #56710)

- In the Administrator, clicking the **Data Dump** tab generated the error `Error updating DB: float division` and schemata were not displayed. (Bug #56658)

- In the SQL Editor, if some table data was edited, and then the connection to the server was lost, clicking the **Apply changes to data** toolbar button caused MySQL Workbench to crash.

  Now MySQL Workbench shows an error message in the **Output** tab when a connection is lost. Once the connection is back up, clicking **Apply changes to data** re-establishes the connection and sends the changes to the server. (Bug #56170)

- Screen areas in the Administrator did not redraw correctly. It was necessary to move the main window to force a redraw. (Bug #55490)

- Folding of iteration statement blocks, such as `WHILE`, `REPEAT`, and `LOOP`, did not work correctly in the SQL Editor. The loop end constructs such as `END WHILE`, `END REPEAT`, and `END LOOP` were not recognized as expected. (Bug #55358)

- If a foreign key was set to `RESTRICT` for On Delete and On Update on the **Foreign Keys** tab of the Table Editor, MySQL Workbench generated SQL code to drop and add this key on every subsequent synchronization attempt. (Bug #55155)

Changes in MySQL Workbench 5.2.28 (2010-09-19)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.27.

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- Added the ability to copy column names from result sets to the clipboard. (Bug #53000, Bug #11760578)

- The SQL Editor now displays the number of rows matched after a query. (Bug #48772)

- The following command line options have been added to MySQL Workbench:

  - `--admin instance`: Launch MySQL Workbench and load the specified server instance

  - `--query connection`: Launch MySQL Workbench and load the specified connection

  - `--model modelfile`: Launch MySQL Workbench and load the specified model

  - `--script script`: Launch MySQL Workbench and run the specified script

  - `--run code`: Launch MySQL Workbench and run the specified code snippet

  - `--quit-when-done`: Quit MySQL Workbench after `--script` or `--run` finishes

(Bug #46340)

Bugs Fixed

- Importing an exported file from a network share resulted in this error due to incorrect escaping of the path:

```
08:44:00 Restoring \\server\d$\file.sql

Running: mysql.exe --defaults-extra-file="c:\...\tmp3oc8ig"   --host=localhost
--user=root --port=3306 --default-character-set=utf8 --comments <
"\\\\server\\d\$\\file.sql"

The specified path is invalid.
```

  (Bug #56735)

- In the SQL Editor, a crash occurred if **User Snippets** was selected after another snippet collection had been selected, and then the **Replace active SQL Editor contents with selected snippet** button was clicked. (Bug #56626)

- Running a `TRUNCATE` statement in the SQL editor with safe updates enabled resulted in this error:

```
Error Code: 1175
You are using safe update mode and you tried to update a table without a WHERE that uses
a KEY column
```

  (Bug #56597)

- In the **Accounts** tab of the Administrator, an **Unexpected Error** occurred if a foreign character was used in the **Login Name** field of the **Server Access Management** tab. The same bug also affected the **Schema Privileges** tab. (Bug #56534)

- The **Table** tab of the Table Editor contained a typo in the description for the **Name** field. Replaced was spelled as "raplaced". (Bug #56518)

- Attempts to define a foreign key for a table with a composite primary key caused MySQL Workbench to crash. This happened while trying to select the fields of the composite primary key to be associated with the referenced columns. (Bug #56496)

- If a foreign key was about to be renamed, and the corresponding text field had focus, MySQL Workbench crashed if the model was then closed. (Bug #56315)

- In the SQL Editor, a statement containing `CREATE DATABASE` resulted in an unexpected error. (Bug #56295)

- The `mydb` database was created by default when reverse engineering from an existing database or script. (Bug #56183)

- If an SQL script containing international characters was saved in the SQL Editor and then restored, the last character in the restored file was missing. (Bug #56083)

- In MySQL Workbench list controls, when an item was selected and another item right-clicked, the context-sensitive menu displayed options related to the first list item selected, rather than the current list item being right-clicked, and any action selected was carried out on the first item. (Bug #56077)

- The Workbench Scripting Shell dialog could be increased in size, but not subsequently reduced in size. (Bug #56049)

- There were two problems in the **new_table** dialog of the SQL Editor:

  - When **Apply** was clicked, in the **Apply SQL Script to Database** dialog, if **Apply SQL** was clicked, the SQL would be applied without error. However, if the **Back** button was clicked and the **Apply SQL** button clicked again, an error would be generated. If this process was repeated, each time a slightly different error would be added to the list of errors displayed.

  - The **Cancel** and **Finish** buttons appeared to have the same functionality, and simply returned the user to the **new_table** dialog.

  (Bug #56000)

- If a model contained two schemata, and an attempt was made to forward engineer only one of the schemata by use of the object filters, data loss could result. This happened because a `DROP` statement was generated for both schemata in the model, rather than just the one being forward engineered. (Bug #55918)

- When OpenGL rendering was selected, the EER Diagram area was not redrawn due to faulty OpenGL drivers. The workaround was to launch MySQL Workbench using the `-swrendering` command line option. Now MySQL Workbench includes an option to select software rendering in the **Workbench Preferences** dialog. (Bug #55863)

- In the View Editor, if the name of a view was changed in the code editor to the name of a pre-existing view of that name, the contents of the pre-existing view were replaced by the contents of the new view, even though the new view was created with a different name. (Bug #55661)

- MySQL Workbench application failed to start on OS X. (Bug #55412)

- MySQL Workbench exhibited a variety of crashes if, in the Model View, EER diagrams were repeatedly created and deleted. MySQL Workbench also crashed if all objects in the diagram were copied and pasted to the same diagram several times, and then the diagram was deleted. Unexpected errors generated included:

  - Object is currently in use elsewhere

  - Index is outside the bounds of the array

  - Index must be within the bounds of the List

  (Bug #55304)

- A plugin that used Mforms generated this error at MySQL Workbench startup:

```
..... line 16, in <module>
import mforms
ImportError: No module named mforms
```

  (Bug #55243)

- If the MySQL server configuration file was modified using the Administrator to deactivate `InnoDB`, the MySQL server failed to restart, and generated this error in the log:

```
[ERROR] C:\Program Files\MySQL\MySQL Server 5.1\bin\mysqld: Error while
setting value 'FALSE' to 'innodb'
```

  (Bug #55029)

- It was no longer possible to rename a schema by double-clicking the schema tab in the Physical Schemata section of the Model View. (Bug #55010)

- If a view was created with correct syntax for an existing schema, and then **Model** menu, **Validate (SQL)** was selected, and either **Validate All** or **Check Syntax** was selected, this error message was generated in the **Output** window:

```
Syntax error in view 'view_name'. View code is 'CREATE VIEW ...'
```

  (Bug #54969)

- On Microsoft Windows, MySQL Workbench crashed if the Trebuchet MS font was missing or corrupted. Now MySQL Workbench falls back to a secondary font if the Trebuchet MS font is missing or corrupted. (Bug #54953)

- If all objects were selected in the model view, and then the **Edit Selected** menu item was selected, MySQL Workbench generated an unexpected error. (Bug #54695)

- Added MySQL Server 5.5 support. (Bug #51365, Bug #11759082)

- On Microsoft Windows, when saving a MySQL configuration file from within the Administrator, Windows displayed the UAC dialog twice. MySQL Workbench has been changed so that Windows now only displays the UAC dialog once. (Bug #49674)

Changes in MySQL Workbench 5.2.27 (2010-09-01)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.26.

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- Several changes were made to the **Synchronize Model With Database** wizard:

  - The wizard shows all schemata in a model, regardless of whether they exist in the live database.

  - The wizard shows a list of schemata that exist in the model but are missing from the live server, with a note recommending the use of the **Forward Engineering** wizard.

  - The wizard does not auto-select schemata names that are in the model but not in the live database.

  (Bug #54748)

Bugs Fixed

- Attempts to restore a backup of selected tables resulted in this error:

```
File "C:\Program Files\MySQL\MySQL Workbench 5.2 CE\modules\wb_admin_export.py", line
841, in start

    logmsg = "Restoring %s (%s)" % (schema, table)

NameError: global name 'schema' is not defined
```

  (Bug #56020)

- Forward engineering a model to a live database caused MySQL Workbench to crash. (Bug #56009)

- The **Dump** tab did not display the target folder before the dump was performed. (Bug #55945)

- MySQL Workbench crashed in the foreign key editor. The Microsoft Visual C++ Runtime Library runtime error generated prior to the crash was:

```
R6025

- pure virtual function call
```

(Bug #55910)

- If the sidebar was placed on the right hand side, using the option in Workbench Preferences, this Unexpected Error was generated when **Add Diagram** was double-clicked:

```
SplitterDistance value is invalid (-52)
```

(Bug #55902)

- In the SQL Editor, executing statements designed for MySQL Server 5.5 generated syntax or syntax highlighting errors. (Bug #55867, Bug #55891)

- After dropping a schema from the list in the Object Browser, the schema that was dropped remained, but with the name of the schema that followed it. Refreshing the list of available schemata produced an unhandled exception:

```
An unhandled exception has occurred:
Invalid node index
```

(Bug #55861)

- Selecting "Dump views" for a backup produced this error:

```
Unhandled exception: global name 'views_by_schema' is not defined
```

It was necessary to restart the Administrator to enable the dump facility again. (Bug #55833)

- In the SQL Editor, right-clicking a routine name in the Object Browser caused MySQL Workbench to exit unexpectedly. (Bug #55822)

- MySQL Workbench crashed when using the **Partitioning** tab of the Table Editor. (Bug #55761)

- If a table was copied in the EER Diagram view, and then the model was synchronized with the live database, the synchronize functionality did not recognize the copied table as a new table and overwrote the original table. (Bug #55566)

- MySQL Workbench crashed when using the **Export recordset to an external file** command button on the **result** pane of the SQL Editor. (Bug #55554)

- Renaming a column with a foreign key resulted in an invalid script being generated on forward engineering or synchronization with a live database. (Bug #55502)

- The second attempt to save a read-only model file produced this error:

```
Couldn't backup existing file name-of-the-file.mwb: No such file or directory
```

(Bug #55439)

- When a table was being edited in the Table Editor, and its name was changed, the name change was not reflected on the Table Editor's table tab. (Bug #55338)

- It was not possible to add the `LOCK TABLES` privilege when assigning a new role in the Model Overview because that privilege was missing from the available options. (Bug #55186)

- The schema collation was not saved after being changed in the Table Editor. (Bug #55152)

- When an attempt was made to synchronize a model with a live database, no schemata were listed as available in the **Synchronize Model with Database** wizard. This happened when the name of the schema in the model and the schema on the live server differed only in lettercase. (Bug #55147)

- When using MySQL Workbench to report a bug, it was not possible to attach a file using the **Choose File** button because the button had no effect. (Bug #55112)

- Dumping tables or schemata without the `LOCK TABLE` privilege produced this error:

```
mysqldump: Got error: 1044: Access denied for user 'wwroot'@'%' to database db' when
doing LOCK TABLES
```

(Bug #55019)

- Selecting **Validate (SQL)** from the Model menu and then selecting the **Validate All** option reported no errors. Selecting **Forward Engineer** from the **Database** menu and selecting **Run Validations** also reported no errors. However, executing the SQL script resulted in this error:

```
ERROR: Error 1005: Can't create table 'xxx' (errno:150)
```

(Bug #54985)

- Selecting the **Check Duplicated Identifiers (Additions)** operation from the **Validation (SQL)** submenu of the **Model** menu produced this error message:

```
Type mismatch: expected object of type db.Schema, but got workbench.physical.Model
```

(Bug #54968)

- When using the **Edit Table Data** wizard (launched from Home screen), if a database with a single table was connected to, after selecting the table, the **Finish** button remained grayed out. (Bug #54942)

- At startup, these warnings were generated in the Workbench Scripting Shell:

```
Starting Workbench...Registered 147 GRT classes.
WARNING: Could not load wb.mysql.validation.grt.dylib: Invalid module
/Applications/MySQLWorkbench.app/Contents/PlugIns/wb.mysql.validation.grt.dylib

WARNING: Could not load wb.validation.grt.dylib: Invalid module
/Applications/MySQLWorkbench.app/Contents/PlugIns/wb.validation.grt.dylib
```

(Bug #54929)

- When an attempt was made to synchronize a modified exported script with the current model, using **File**, **Export**, **Synchronize with SQL Create Script**, the model was not updated. (Bug #54501)

- When the **Alter Table** dialog for an `InnoDB` table was displayed in an SQL Editor session, the **Foreign Key Options Index** showed **INVALID** when a foreign key in the **Foreign Keys** tab was clicked. (Bug #54471)

- MySQL Workbench caused Windows XP to reboot if launched from **Start**, **Programs**, **MySQL**, **MySQL WorkBench 5.2 OSS**.

  If a MySQL Workbench model file (`.mwb`) was opened directly, an error dialog titled **Microsoft Visual C++ Runtime Library** was displayed with the message:

```
R6034
An application has made an attempt to load the C runtime library incorrectly. Please
```

```
contact the application's support team for more information.
```

The dialog's only option was **OK**. After clicking **OK**, two more instances of the same dialog were displayed. After clicking **OK** for all three, MySQL Workbench opened with the model file displayed.

On Windows 7 x64, the same runtime error (R6034) occurred. (Bug #52949)

- Opening an SQL Editor connection for a remote server produced this error:

```
OverviewBE::get_node:invalid node 0.0.0.
```

(Bug #52648)

Changes in MySQL Workbench 5.2.26 (2010-08-06)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.25.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- When using the MySQL Workbench table properties to add a foreign key, the size of a new foreign key field will now update to match the size of the corresponding primary key. (Bug #55083, Bug #11762482)

- Added the default value of `CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP` to context menu of column editor for `TIMESTAMP` columns. (Bug #54987)

- A validation module (a SE feature only) has been added. It sends an alert if foreign keys are being used in or to a partitioned table. Note: partitioned tables do not support foreign keys. (Bug #44273, Bug #11752933)

Bugs Fixed

- On the Home screen, the saved connections previously listed in the Workspace were no longer visible. (Bug #55484)

- When a model was synchronized with a live database, `CHAR(N)` columns were always synchronized as `CHAR(1)`. (Bug #55334)

- Importing a DBDesigner model caused MySQL Workbench to crash. (Bug #55300)

- In the **Synchronize Model with Database** wizard, the list of schemata was not drawn correctly on the **Select Schemata** page, if **Back** was clicked from the **Fetch Object Info** page. (Bug #55174)

- Complex queries with multiple newlines did not fit well in the **Action** column of the **Output** tab of the SQL Editor. This prevented any query error messages from being read. (Bug #55117)

- In the **Reverse Engineer Database** wizard, using a pattern mask to filter tables being imported caused a subsequent MySQL Workbench crash. (Bug #55076)

- In the Administrator, if the MySQL server configuration file was modified to enable `skip-innodb`, and the server was restarted, `InnoDB` was still active. (Bug #55030)

- On the **Snippets** tab, the tooltip for the **Insert selected snippet to cursor position in the active SQL editor** button contained the misspelling "selected". (Bug #55026)

- The **Configuration** section of the MySQL Workbench Administrator did not copy configuration variables from the `my.cnf` file that contained an underscore character. (Bug #54933)

- MySQL Workbench crashed if minimized while loading a model. (Bug #54918)

- In the **Overview** tab of the SQL Editor, if there was a large number of schemata, using the arrow buttons in the interface to scroll through them caused MySQL Workbench to crash, usually on the last schema in the list. (Bug #54891)

- When using the SQL Editor and issuing a query containing `SQL_CALC_FOUND_ROWS` and a subsequent `FOUND_ROWS()` query, `FOUND_ROWS()` returned zero instead of the number of matching rows without a `LIMIT` applied. (Bug #54868)

- MySQL Workbench would not compile on RHEL 5. This was due to the calls to the function `set_opacity` in `library/form/gtk/src/lf_utilities.cpp` (line 661) and `library/forms/gtk/src/lf_popup.cpp` (line 64). The `set_opacity` function was not available in GTK 2.10. (Bug #54844)

- Multi-statement syntax did not work in the SQL Editor. If the delimiter was set to a character other than the default semicolon, the SQL Editor should still have recognized semicolon as a valid delimiter for multi-statements, but it did not. (Bug #54831)

- In the SQL Editor, if a column's comment contained a Chinese word, then in the Object Browser, if the context-sensitive menu item **Send to SQL Editor**, **Create Statement** was selected, incomplete script code was sent to the SQL Query tab. (Bug #54822)

- When a model was forward engineered to a database, insert statements associated with binary data were not present in the generated code. As a result, binary data was not forwarded to the database. (Bug #54680)

- In an EER Diagram, the circles at each end of a relationship line were drawn in different sizes. (Bug #54663)

- When forward engineering an SQL ALTER script, the generated code attempted to recreate all foreign keys. (Bug #54363)

- In forward engineering a model to a database, the `PRIMARY` index was not reordered correctly when columns were reordered. (Bug #54176)

- When using `su -user` instead of `sudo`, rather than requesting the password of the user for invoking the `su` command, MySQL Workbench requested the `root` password and attempted to invoke the `sudo` command. (Bug #53740)

- When zooming in and out of the EER Diagram view, MySQL Workbench generated an unknown error. (Bug #52829, Bug #55390)

- When connecting to a server, MySQL Workbench prompted for a password, even if one had not been set for that account. (Bug #52826)

- After creating a server instance and double-clicking it on the Home screen, the Administrator took an excessively long time to load (over 10 minutes). (Bug #52530)

- MySQL Workbench crashed when executing `LOAD DATA LOCAL` as a query in the SQL Editor. (Bug #49694)

- If the Start Server button was clicked twice in MySQL Workbench, the server would stop. (Bug #49588)

- In the list view of the physical schemata, clicking a list column heading failed to sort the items by that column. (Bug #38863)

Changes in MySQL Workbench 5.2.25 (2010-06-30, General Availability)

First GA 5.2 release. This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.24.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- MySQL Workbench now prompts the user for a password for attempts to connect using a "TCP over SSH" connection type, if a password was not previously provided during configuration of the connection. (Bug #47892)

Bugs Fixed

- Compiling MySQL Workbench from source failed with this error while building `library/grt/src/grtpp_grt.cpp`:

```
Could not find file cairo_features.h
(included from cairo.h, which is included from
library/base/src/string_utilities.h, which is included in grtpp_grt.cpp)
```

  (Bug #54833)

- On exit, MySQL Workbench prompted the user to save changes for every query tab that had been opened in the SQL Editor, even where a table had simply been viewed, and no script code had been written by the user. (Bug #54754)

- When synchronizing a model with the live database, the generated SQL included erroneous `DROP COLUMN` and `ADD COLUMN` operations, and also erroneous `ADD INDEX` and `DROP INDEX` operations. (Bug #54740)

- Inserts data did not appear to be preserved between MySQL Workbench versions.

  A model was created with MySQL Workbench 5.1.18 and data inserted using the **Insert** tab. If the model was then saved and loaded into MySQL Workbench 5.2.22, and the model forward engineered to an SQL script, the generated script contained `INSERT` statements that inserted `NULL` instead of the data originally entered. (Bug #54639)

- In the **Create Routine** dialog of the SQL Editor, the text label associated with the **Name** textbox mentioned "view", rather than "routine". (Bug #54566)

- Minimizing MySQL Workbench after a connection with a server was established produced this error:

```
SplitterDistance must be between Panel1MinSize and (Width - Panel2MinSize)
```

  (Bug #54482)

- In the **Data Dump** section of the Administrator, using the **Export to Backup Project Folder** option resulted in triggers being exported to both the table files and the routines files. Attempting to import the exported files produced an error due to the duplicated triggers. (Bug #54426)

- When a `.dbquery` file created with MySQL Query Browser was opened in the SQL Editor, the Byte Order Mark (BOM) was not removed. This led to an erroneous character being prepended to the first statement, making it illegal. (Bug #54322)

- When forward engineering to a live database, the generated SQL statements contained an erroneous additional carriage return at the end of each line. This manifested in two ways. In the first case, in the **Forward Engineer to Database** wizard, if **Save to File** was selected, a carriage-return character was appended to each line. In the second case, if **Copy to Clipboard** was selected, and the content subsequently pasted from the clipboard to an editor, the extra carriage return characters was attached only to the DDL statements inside `Create View` and `Create Trigger`. (Bug #54272, Bug #54244)

- Printing or previewing an EER Diagram in Landscape/Tabloid produced blank output. (Bug #54240, Bug #54601)

- MySQL Workbench generated excessive diagnostic messages at startup. Now MySQL Workbench does not display diagnostic messages by default on Linux, unless activated by starting MySQL Workbench with the `--verbose` option. (Bug #54021)

- In the **Columns** tab of the Table Editor, column ordering handling had numerous problems. For example, dragging and dropping a column did not locate the column as expected. (Bug #53749)

- If the **Alter Routine** dialog was maximized in the SQL Editor, the dialog buttons were no longer visible. (Bug #53734)

- In the **Configuration** tab of the Administrator, the parameter **innodb_support_xa** on the **InnoDB Parameters** tab has a corresponding check box. If this was selected and changes applied, the confirmation dialog indicated these changes were made:

```
Added:  [mysqld] innodb_support_xa = True
```

  However, what was added to the `my.cnf` file was "innodb_support_xa". This meant there was no way to set this parameter (which defaults to `True`) to `False` using MySQL Workbench. (Bug #53449)

- In the SQL Editor, if a query was executed and MySQL Workbench was minimized, the **Results** tab window area was not correctly redrawn on maximizing the application. (Bug #51991)

- When synchronizing a model that contained triggers, MySQL Workbench generated erroneous `DROP TRIGGER` and `CREATE TRIGGER` statements, even when the triggers had not been changed. (Bug #51929)

- MySQL Workbench displayed instability after an SSH connection to the server was closed, resulting in hanging or crashing behavior. (Bug #50554)

- When creating a table containing columns with a `BOOLEAN` data type, the model then failed to validate, even though `BOOLEAN` is offered on the list of types available for columns. (Bug #49538)

- In the Inserts editor, the underscores in column headings were incorrectly displayed as accelerator/shortcut keys. (Bug #48831)

- For the **Manage DB Connections** dialog, labels such as user name and password were hidden when the dialog was opened at its default size. (Bug #47890)

- In the Modeler, when opening a new object such as a table, the currently open tab was reused, rather than a new tab being opened. This made it difficult to compare objects such as tables and routines. (Bug #45557)

- When a table was copied in the EER Diagram view, it was found that the paste menu option was visible but disabled when an attempt was made to paste the table into a new diagram. (Bug #38432)

Changes in MySQL Workbench 5.2.24 (2010-06-21)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.23.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- A **Kill Query** button has been added to the **Connections** tab of the Administrator. (Bug #54409)

Bugs Fixed

- In the **Configuration** tab of the Administrator, this error resulted when changes were applied:

```
Could not Save Configuration File

There was an error saving the configurationfile: exec_cmd() takes at least 3 arguments (2
given)
```

  This happened while connecting to a FreeBSD 7.1 server over an SSH connection. (Bug #54647)

- In the SQL Editor, entering a space into the **SQL Query** tab, selecting an external tab (such as the **Overview** tab or **Output** tab), and then selecting **File**, **Close Tab** caused MySQL Workbench to crash.

  Further, the **Add Table** dialog had numerous issues, including inability to select PK and other check boxes, failure to validate input, inability to apply changes, and deletion of user data in certain cases. (Bug #54124)

- The **Connections** tab in the Administrator did not feature automatic refresh. This had to be manually triggered using the **Refresh** button. Further, the **Kill Connection** button was sometimes incorrectly disabled. (Bug #53703)

- If a foreign key relationship was created, and its `modelOnly` property set, the relationship was correctly excluded when the model was synchronized with a live database. However, the DDL code for the foreign key indexes was still generated in the synchronization script. (Bug #53420)

- Synchronizing a model with a live database generated `ALTER` statements, even when there appeared to be no difference between the database and the model. (Bug #50938)

- In the SQL Editor, there was a space between the **Execute** and **Stop** toolbar buttons. Hovering the mouse cursor over this space resulted in the tooltip "Explain selected SQL" being displayed, which appeared to indicate a missing icon. (Bug #49316)

Changes in MySQL Workbench 5.2.23 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.22.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- In the SQL Editor, when more result tabs were generated than could fit into the current panel, it was not obvious how to navigate to those result sets that could not currently be displayed. This could be achieved using the left and right arrow keys, but MySQL Workbench now also includes a spin control to navigate the available tabs. (Bug #52998)

- The **Overview** tab in the SQL Editor now supports scrolling of content using the mouse wheel. (Bug #50782)

Bugs Fixed

- In the SQL Editor, attempting to execute a selection in the SQL Query tab caused all text to be executed, not just the selected text. (Bug #54536)

- Clicking a table caused MySQL Workbench to produce this error message:

```
MySQL Workbench has encountered a problem
Cannot access a disposed object
Object name: 'DockedWindowPlugin'.
```

  (Bug #54498)

- In the SQL Editor, exporting a record set failed if the target path contained an international character. (Bug #54479)

- In the **Inserts** tab of the Table Editor, adding a new row and applying changes had no effect. (Bug #54456)

- In the **General** tab of **Configuration** in the Administrator, when the **Temp directory** option was selected, and a directory was selected using the file browser, MySQL Workbench inserted backslashes rather than forward slashes. If backslashes were used in this location in the configuration file, the server crashed at startup. (Bug #54445)

- In the SQL Editor, if a table in the **Overview** tab was double-clicked, the query generated replaced code already entered into the SQL Query tab, resulting in the loss of that code. (Bug #54362)

- Synchronizing a model with a live database produced incorrect SQL code:

```
ALTER TABLE `mydb`.`table1` AUTO_INCREMENT =  ;
```

  (Bug #54319)

- In the SQL Editor, for result set exports to a tab-delimited file, MySQL Workbench added a `.CSV` file name extension. (Bug #54302)

- In the SQL Editor, selecting **Alter Table** from the context-sensitive menu had no effect. (Bug #54283)

- In the SQL Editor, editing a table with a row highlighted, right-clicking a `BLOB` column and loading a value from a file resulted in this error:

```
An external component has triggered an exception
```

  (Bug #54266)

- Changing the name of a stored procedure in the modeler and saving changes caused an erroneous `';'` character to be added to the SQL code sent to the database. That resulted in this error:

```
ERROR 1064: You have an error in your SQL syntax; check the manual that
corresponds to your MySQL server version for the right syntax to use
near ';

USE `911datashop`' at line 1
SQL Statement:
;
USE `911datashop`
```

  (Bug #54258, Bug #11761738)

- Clicking the **Edit Table Data** action item from the Home screen caused MySQL Workbench to crash. (Bug #54230)

- The forward engineering **Omit Schema Qualifier in Object Names** option was not correctly applied to some statements in Trigger code. In these cases, the schema name remained in place. (Bug #54222)

- Clicking external links in the embedded browser launched Internet Explorer rather than the default browser. (Bug #54192)

- When entering binary data into the **Inserts** tab for a table, the data was truncated at the first null byte (\0). (Bug #54156)

- Select All (**Control+A**) did not work when editing comments for a table or column. (Bug #54154)

- After a foreign key was created, and the referenced table or column was changed, the change was not reflected in the foreign key, resulting in errors. (Bug #54134)

- MySQL Workbench crashed if a pinned result tab was refreshed in the SQL Editor. (Bug #54114)

- The integrated docs web server listened on a fixed port (8811), and was not able to handle the situation where this port may be used by another service, such as another MySQL Workbench instance. (Bug #54104)

- In the SQL Editor, attempting to create a new schema using **Create Schema** with a server collation of **utf8 - default collation** produced SQL that resulted in an error when applied. (Bug #54097)

- Performing an undo operation in SQL Editor actually resulted in an undo operation in the Modeler. (Bug #54091)

- The HTTP server thread started by MySQL Workbench to provide documentation to the local web browser listened on all IP interfaces, even though it is intended only for local use. (Bug #54083)

- MySQL Workbench suffered user interface issues when used on a KDE-based system using a dark theme. (Bug #54083)

- Database export failed due to a faulty path in the command line:

```
15:42:52 Dumping rma3 (etat_produit)

Running: "mysqldump.exe" --defaults-extra-file=c:\docume~1\user\local
settings\temp\tmp9ypdhd  --no-create-info=FALSE --order-by-primary=FALSE --force=FALSE
--no-data=FALSE --tz-utc=TRUE --flush-privileges=FALSE --compress=FALSE --replace=FALSE
--host=127.0.0.1 --insert-ignore=FALSE --extended-insert=TRUE --user=root
--quote-names=TRUE --hex-blob=FALSE --complete-insert=FALSE --add-locks=TRUE --port=3306
--disable-keys=TRUE --delayed-insert=FALSE --delete-master-logs=FALSE --comments=TRUE
--default-character-set=utf8 --flush-logs=FALSE --dump-date=TRUE --allow-keywords=FALSE
--create-options=TRUE --events=FALSE "rma3" "etat_produit"

Could not open required defaults file: c:\docume~1\user\local

Fatal error in defaults handling. Program aborted

mysqldump: Got error: 1045: Access denied for user 'root'@'localhost' (using password:
NO) when trying to connect

Operation failed with exitcode 2
```

  (Bug #54067)

- In the **Alter Table** dialog of the SQL Editor, if an attempt was made to set the NN flag for a column that did not have it set, an error was generated when the changes are applied. (Bug #53918)

- When carrying out an Alter Routine operation in the SQL Editor, if a routine was modified, and a statement used that, although syntactically correct, was not permitted in a routine, all modifications were lost when changes were applied. (Bug #53887)

- An EER Diagram appeared to contain hidden tables. Although the diagram contained 12 tables, when a 'select all' was performed the user was informed that 14 tables were selected. It seemed that certain tables had been resized to be so small as to no longer be visible in the diagram. (Bug #53885)

- In the **Layer Tree** panel, if a layer was given a blank name, MySQL Workbench subsequently crashed, rather than warning about the of a blank name. (Bug #53807)

- Keyboard shortcuts such as **Command+C**, **Command+V**, and **Command+Z** were not useable consistently in all parts of MySQL Workbench. (Bug #53790)

- Columns defined as `BIT` appeared as requiring synchronization, even if no changes had been made. (Bug #53747)

- In the **Alter Routine** dialog of the SQL Editor, if the **Find and Replace** dialog was invoked with **Control +F**, and **Control+V** was used to paste in some search text, the text was actually pasted into the routine code area. (Bug #53735)

- MySQL Workbench failed to build from source on Debian Linux. This error was generated:

```
libtool: compile:  g++ -DHAVE_CONFIG_H -I. -I./src -I./src -pthread -DNDEBUG -Wall
-Wwrite-strings -Woverloaded-virtual -Wno-sign-compare -g -O2 -Wextra -Wall -Wno-unused
-Wno-deprecated -c src/template.cc  -fPIC -DPIC -o .libs/libctemplate_wb_la-template.o
In file included from ./src/ctemplate/per_expand_data.h:48,
                 from ./src/ctemplate/template_modifiers.h:69,
                 from src/template_modifiers_internal.h:53,
                 from src/template.cc:61:
./src/ctemplate/template_string.h:88: error: ISO C++ forbids declaration of 'TemplateId'
with no type
./src/ctemplate/template_string.h: In member function 'size_t
ctemplate::TemplateIdHasher::operator()(ctemplate::TemplateId) const':
./src/ctemplate/template_string.h:234: warning: right shift count >= width of type
./src/ctemplate/template_string.h: At global scope:
./src/ctemplate/template_string.h:344: warning: overflow in implicit constant conversion
src/template.cc: In static member function 'static void
ctemplate::Template::AssureGlobalsInitialized()':
src/template.cc:2365: warning: comparison between signed and unsigned integer
expressions
make[5]: *** [libctemplate_wb_la-template.lo] Error 1
```

  (Bug #53668)

- In the EER Diagram view, it was not possible to delete a relationship by right-clicking the relationship, then selecting **Delete** from the context-sensitive menu. (Bug #53659)

- In the **SQL Query** tab of SQL Editor, tooltip error messages were still displayed, even after switching to another tab. (Bug #53634)

- In the **Diagram Size** dialog, displayed using **Model**, **Diagram Properties and Size**, it was possible to set the size to 100 pages by 100 pages, but then click outside this area. This caused a MySQL Workbench Unexpected Error. (Bug #53559)

- The **Document Properties** dialog was displayed across two screens in a multiple-screen setup. (Bug #53262)

- After a default primary key name was set in the **Workbench Preferences** dialog, the PK flag was not selected as expected in the Table Editor and the column flags could not be selected. (Bug #52578)

- When synchronizing with a live database, MySQL Workbench did not interpret whitespace in `ENUM`s correctly. For example, `ENUM('image', 'video', 'swf')` was seen as different from `ENUM('image','video','swf')`, causing the live server and model to appear unsynchronized. (Bug #49182)

- When editing a column in the table editor, pressing **Control+Z** to undo the edit resulted in a previous operation being undone instead. (Bug #46286)

Changes in MySQL Workbench 5.2.22 (2010-06-02)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.21.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- On Linux, MySQL Workbench automatically added a `.sql` extension, where an extension was not specified, to any script file saved from the SQL Editor. MySQL Workbench now does not automatically add a `.sql` extension on Linux. However, on Windows, the file extension is added if one is not specified. (Bug #53731)

- MySQL Workbench now indicates that changes need to be saved using only an asterisk in the Model Overview tab, rather than this being reflected on individual EER Diagrams. (Bug #53042)

- The SQL Editor now includes a new **Set as Default Schema** context menu item. This is applicable to schema nodes in the **Object Browser** and the **Overview** panel of the Query Editor. Previously the only way to change the default schema was to select the schema from the schema selector list located at the top of the Object Browser. (Bug #51479)

- MySQL Workbench now supports creating a new tab in tabbed interfaces by using **Control+T** on Windows and **Command+T** on OS X. (Bug #48798)

- MySQL Workbench now supports entering of expressions such as `DEFAULT` or `CURRENT_TIMESTAMP` into the inserts editor. The expression needs to be preceded by `\func`. (Bug #36206)

Bugs Fixed

- If a property value was changed in the **Workbench Preferences** dialog, and **OK** was clicked, or a new tab was clicked before the cursor was moved away from the value being changed, the change was silently reverted. (Bug #54060)

- If the **Manage Server Instances** dialog was launched, and either the **New** or **Delete** button was clicked, and then the dialog was closed, MySQL Workbench crashed if the **New Server Instance** action item was then clicked on the Home screen. (Bug #54028)

- The Gnome keyring package was a dependency of MySQL Workbench. It was undesirable to require its installation on KDE-based systems. (Bug #54010)

- MySQL Workbench did not size its application window correctly on screen sizes with a 16/9 aspect ratio. (Bug #53984, Bug #11761483)

- When MySQL Workbench was launched, an overlay was displayed. In the application bar, the dialog prompting for the keyring password was waiting for input, but it was not possible to enter the password because the overlay hid the dialog. (Bug #53974)

- On the Model Overview page, when a new user object was created with Add User in the Schema privileges section, it was not possible to change any of the user object's attributes. For example, if the name of the object was changed, it would then change back to its original setting. (Bug #53946)

- In the EER Diagram view, heavy flicker resulted if the cursor was hovered over relationship lines or tables. (Bug #53941)

- When a table containing triggers was loaded into the **Alter Table** dialog of SQL Editor, clicking the **Triggers** tab showed an empty trigger, rather than the correct trigger code. (Bug #53940)

- In the SQL Editor, performing a query on a remote server returned `BLOB` values for columns that were not of type `BLOB`.

  Because binary byte strings tend to contain null bytes in their values, for safety reasons they were not displayed in the results grid. They could only be viewed or edited by means of the `BLOB` editor to avoid data truncation.

  MySQL Workbench now includes a new global option that has been added to the **SQL Editor** tab of the **Workbench Preferences** dialog. The option is **Treat BINARY/VARBINARY as non-binary character string**. By default, it is not selected. (Bug #53920)

- Attempting to copy objects from an existing diagram to a new diagram resulted in this error:

  ```
  OverviewBE::get_node: invalid node 1.0.0.22
  ```

  (Bug #53914)

- In the SQL Editor, the context-sensitive menu options **Copy to Clipboard** and **Send to SQL Editor** both failed to work. This applied to both copying in the **Object Browser** and in the **Overview** tab. (Bug #53903)

- In the SQL Editor, deleting a snippet from the snippet list using the toolbar button caused the first snippet to be deleted, regardless of which snippet was selected. (Bug #53860)

- When forward engineering a schema to a database with the **DROP Objects Before Each CREATE Object** option selected, the `DROP` statement used a delimiter before it had been declared. (Bug #53853)

- In the SQL Editor, if code was entered into the SQL Query tab, and then the application exited, MySQL Workbench did not prompt the user regarding unsaved changes, so they were lost. (Bug #53848)

- In the SQL Editor, when renaming views or routines using the live editor, the generated `ALTER` script contained only `DROP` statements and not `CREATE` statements. (Bug #53847)

- In the SQL Editor, when attempting to change an index from `INDEX` to `UNIQUE` using the **Alter Table** dialog, no changes were applied, and this error message was generated:

  ```
  No changes to object were detected
  ```

  (Bug #53787)

- In the **Create Schema** dialog of the SQL Editor, when a new schema name was entered, and changes applied, the schema name appeared to revert to the default name `new_schema`, rather than being changed to the newly specified name. This only happened on OS X. (Bug #53764)

- In the SQL Editor, if two procedures were defined in a script, each proceded with a suitable `DROP` statement, then when the script was executed and the procedures already existed, a "procedure already defined" error occurred. It appeared that the second `DROP` statement was being ignored. This problem happened if the line preceding the second `DROP` statement was terminated with a space. (Bug #53760)

- With multiple tabs open in the SQL Editor, if the script in each tab was saved to a file in turn, the script was actually saved over the previously saved script, resulting in the loss of that script. (Bug #53733)

- If multiple SQL Query tabs were opened in the SQL Editor, when a snippet was saved to the snippet list, the snippet saved would always be from the last opened **SQL Query** tab (the furthest to the right), rather than the currently selected tab. (Bug #53713)

- In the **Columns** tab of the Table Editor, automatic data type completion did not occur if the type was entered in lowercase. MySQL Workbench now completes the data type regardless of lettercase. (Bug #53710)

- Compiling MySQL Workbench from source failed with these errors:

```
...
-I../../library/dbc/src -I../../library/vsqlite++/include  -D_FORTIFY_SOURCE=2   -O2
-fno-strict-aliasing -fwrapv -march=x86-64 -gdwarf-2 -g2  -Wextra -Wall -Wno-unused
-Wno-deprecated -ggdb3 -DENABLE_DEBUG   -MT canvas_floater.o -MD -MP -MF
.deps/canvas_floater.Tpo -c -o canvas_floater.o `test -f 'model/canvas_floater.cpp' ||
echo './'`model/canvas_floater.cpp
model/canvas_floater.cpp: In constructor 'wb::Floater::Floater(mdc::Layer*, const
std::string&)':
model/canvas_floater.cpp:65:59: error: cannot call constructor 'mdc::Color::Color'
directly
model/canvas_floater.cpp:65:59: error:   for a function-style cast, remove the redundant
'::Color'
make[3]: *** [canvas_floater.o] Error 1
make[3]: Leaving directory
`/home/users/Arvenil/rpm/BUILD/mysql-workbench-oss-5.2.21/backend/wbprivate'
make[2]: *** [all-recursive] Error 1
make[2]: Leaving directory
`/home/users/Arvenil/rpm/BUILD/mysql-workbench-oss-5.2.21/backend'
make[1]: *** [all-recursive] Error 1
make[1]: Leaving directory `/home/users/Arvenil/rpm/BUILD/mysql-workbench-oss-5.2.21'
make: *** [all] Error 2
```

  (Bug #53687)

- In the **Data Dump** tab of the Administrator, the **Options** panel was not rendered correctly. (Bug #53681)

- In the SQL Editor, if a query was executed and then interrupted, MySQL Workbench hung. (Bug #53652)

- If a query was entered in the SQL Query tab, and then **Command+Enter** was immediately pressed to execute the query, the query failed. This only happened on Mac OS X. (Bug #53650)

- In the **Create New Server Instance Profile** wizard, on the **Operating System** page the **MySQL Installation Type** list was not populated correctly. Although all items were initially correctly displayed, if the **Back** button was clicked, and then **Next** clicked to return to the page, all the items in the list were duplicated. Each time this process was repeated the original list items would again be duplicated. (Bug #53649)

- On the Home screen, the MySQL Team Blog and Workbench Team Blog icons linked to the same page. Further, the MySQL News Letter icon linked to the MySQL Developer forum. (Bug #53628)

- In the **SSH Shell Connection** panel of the **Manage Server Instances** dialog, if any port other than 22 was specified, it was subsequently ignored. (Bug #53623)

- The MySQL configuration file was corrupted by the Administrator when changes were applied, if the configuration file was not terminated with a new line. (Bug #53620)

- In the SQL Editor, the toolbar items on the **Snippets** tab to replace and insert snippets had no effect when clicked. (Bug #53610)

- Specifying a new font for the SQL Editor's SQL Query tab contents had no affect on appearance. (Bug #53605)

- In the **Data Dump** section of the Administrator, this error occurred when an export was generated:

```
mysqldump: Error 2020: Got packet bigger than 'max_allowed_packet' bytes when dumping
```

```
table 'xxx' at row: 1
```

This happened only for larger tables. (Bug #53599)

- MySQL Workbench crashed when attempting to connect to a Linux server using an SSH connection. (Bug #53476)

- When a model containing a stored procedure was forward engineered to a script, the script contained invalid SQL code. This happened when the **DROP Objects Before Each CREATE Statement** and **Export MySQL Routine Objects** options were selected. Problems with the SQL code included a delimiter being used before its definition and also `DROP` statements not being terminated. (Bug #53467)

- MySQL Workbench crashed on selection of the **Model**, **Create Diagram from Catalog Objects** menu item. (Bug #53454)

- It was not possible to edit schema properties in the schema editor, such as name and default collation. (Bug #53438)

- When a model containing a table using a 1:n relationship was synchronized with a live database, the relationship then failed to render in the EER Diagram. (Bug #53252)

- Loading a large script was loaded into the SQL Editor resulted in an out of memory exception. Memory exhaustion was caused by inefficient end of line conversion. The SQL Editor now supports custom end of line formats and preserves the original line endings used in the file. End of line conversion is no longer used and large files load faster and more efficiently. (Bug #53190)

- In the **Manage DB Connections** dialog, selecting **Use ANSI quote to quote identifiers** had no effect with respect to subsequent queries using that connection. (Bug #53160)

- Delimiters were erroneously added to trigger code if the currently selected schema was changed. (Bug #53151)

- In the **Triggers** tab of the **Table Editor**, if a trigger was written that contained a `DROP TRIGGER` statement, the statement was automatically removed. (Bug #53023)

- MySQL Workbench generated an exception when an attempt was made to change the configuration file in the **System Profile** tab of the **Manage Server Instances** dialog. (Bug #52947)

- In the **Alter Table** dialog of the SQL Editor, entering a column comment in the **Comments** tab and applying the changes did not save the comment. (Bug #52893)

- Setting `WB_NO_GNOME_KEYRING=1` on Kubuntu did not appear to disable the Gnome keyring. It was therefore impossible to connect without an active keyring daemon. (Bug #52866)

- When scrolling in an EER Diagram, MySQL Workbench repeatedly displayed an error dialog containing the message "OpenGL error: invalid value". (Bug #52840)

- In the **Data Dump** section of the Administrator, when a schema was dumped to multiple files, the stored routines were not exported. (Bug #52798)

- It was not possible to set `ON UPDATE CURRENT_TIMESTAMP` as the default value for a column. (Bug #52350)

- If a table was dragged from the catalog tree on to the EER Diagram, the catalog tree collapsed. (Bug #51862)

- In the **Connections** tab of the Administrator, queries containing a comment did not always display correctly in the **Info** column. (Bug #51848)

- Output did not scale correctly for print sizes other than A4. (Bug #51515)

- When synchronizing to a live database, triggers showed as requiring updating, even when the model and live database were identical. (Bug #51409)

- If an SQL file saved in Windows file format was loaded into the SQL Editor, it was displayed with additional line breaks, and the SQL code was not interpreted correctly. Further, if code written in the SQL editor was saved to a file and then opened in an editor on Windows, it contained additional line breaks. (Bug #51308)

- In the **Connections** tab of the Administrator facility, host names that contained a `'-'` character were sometimes not displayed correctly. (Bug #51119)

- In the SQL Editor, if the **Add Table** facility was used to create a new table with the same name as an existing table, then after changes were applied, the content of both tables was the same as the existing table, and changes unique to the second table were lost. (Bug #51107)

- Attempts to forward engineer a project that contained a view failed with this error:

```
ERROR: Error 1046: No database selected
```

  (Bug #51091)

- Inserts added to a model and saved on Windows were not visible when that model was loaded on OS X. (Bug #51029)

- In the SQL Editor, carrying out a `SELECT` on a table containing more than 1000 columns resulted in the error `Too many SQL variables`. (Bug #50952)

- In the Model Overview page, when small icons view was selected, if table names were truncated, there were no tooltips to enable visibility of the full names. The tooltips, however, were present for the large icons view, and the details view. (Bug #50739)

- MySQL Workbench reported a server as not running, even if it was. The MySQL Server concerned was running on 64-bit Windows 7. (Bug #50585)

- In the EER Diagram view, it was not possible to paste a copied layer. The paste menu item was disabled in the context-sensitive menu and main menu, and pressing **Control+V** had no effect. (Bug #50253)

- In the EER Diagram view, when the diagram was displayed over multiple pages, the gray line dividing pages in the Navigator was not visible in the diagram itself. (Bug #50243)

- In the EER Diagram view, when zoomed out, a layer could be placed beyond the diagram's perimeter at the bottom right. Further, if a layer was placed beyond the perimeter at the top left, it snapped back within confines of the diagram correctly, but the navigator view was not updated accordingly. (Bug #50242)

- Zooming out from a diagram in EER Diagram view resulted in severe flicker. (Bug #50240)

- If a Workbench model file was double-clicked, MySQL Workbench crashed on launch. However, if MySQL Workbench was started using its application icon, and then the same model file was loaded from within MySQL Workbench, no problems were encountered. (Bug #49941)

- When using **Create EER Model from SQL Script** from the Home screen, the specified engine type was not present in the resulting EER model. (Bug #49568)

Changes in MySQL Workbench 5.2.21 (2010-05-12, Release Candidate)

First release candidate. This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.20.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- MySQL Workbench now features a check that compares the `mysqldump` version on the client and server machines. (Bug #52689)

- MySQL Workbench now includes the following menu items and keyboard shortcuts:

  - **Execute Current Statement**, **Control+Enter**

  - **Execute (All or Selection)**, **Control+Shift+Enter**

  - **Explain Current Statement**, **Control+Alt+Enter**

  - **Explain (All or Selection)**, **Control+Alt+Shift+Enter**

  The Stop toolbar button and menu item now are automatically enabled and disabled. (Bug #50911)

Bugs Fixed

- Proceeding through the **Edit Table Data** wizard (launched by the **Edit Table Data** action item on the Home screen) and clicking **Finish** to complete the wizard caused MySQL Workbench to crash. (Bug #53511)

- When forward engineering a model to a database, not all tables were created on the live database. (Bug #53506)

- Russian characters were not displayed correctly in the **SQL Query** tab of the SQL Editor. (Bug #53408)

- It was not possible to give the index name and foreign key name of a column different names. Now renaming an index in MySQL Workbench does not automatically rename a corresponding foreign key. Renaming a foreign key automatically renames the associated index only if the names still match at the time the foreign key is renamed. (Bug #53370)

- The **Edit SQL Script** action item on the Home screen failed to load and execute the script. (Bug #53359)

- If a socket/pipe connection method was used, and the password was stored in the keychain, MySQL Workbench could not connect to the server. (Bug #53355)

- On OS X, the overlay text for `NULL` and `BLOB` fields was missing from the results grid in the SQL editor. This meant that those fields appeared empty if a query was executed that returned a `BLOB`, such as `SELECT SHA1('hello');`. (Bug #53335)

- Changing the fonts in the **Workbench Preferences** dialog had no effect on the appearance of MySQL Workbench. (Bug #53321, Bug #49832)

- In the SQL Editor, if some script text was highlighted, when **Control+S** was pressed to save the script to a file, only the highlighted text was saved. (Bug #53275)

- An error was generated when a server was selected from the **Import/Export MySQL Data** dialog, displayed after clicking the **Manage Import/Export** action item on the Home screen. (Bug #53271)

- In the modeler, if a table was double-clicked to open it in the Table Editor, and then, without closing the Table Editor, another table was double-clicked to open it, the Table Editor was rendered as a blank panel. (Bug #53250, Bug #53347)

- MySQL Workbench crashed after using the **Edit SQL Script** action item from the Home screen. In the **Edit SQL Script** wizard, a connection was chosen that did not use a stored password, and then a script selected and the **Finish** button clicked to exit the wizard. MySQL Workbench subsequently crashed when the requested password was entered into the dialog and the **OK** clicked. (Bug #53247)

- In the SQL Editor, if a `BLOB` field containing an image was loaded into the Viewer, the image was not displayed. (Bug #53245)

- In the **Administrator** tab of the **Workbench Preferences** dialog, the description to the right of the text field **Path to mysql Tool** was incorrect. (Bug #53201)

- MySQL Workbench permitted the creation of invalid foreign keys that referenced a column that did not use a `PRIMARY KEY` or `UNIQUE` key declaration. MySQL Workbench now filters the list of columns permitted for a referenced foreign key, so that only primary key and indexed columns are listed. (Bug #53136)

- In the **Alter Table** dialog of the SQL Editor, it was not possible to create new Foreign Keys. (Bug #53134)

- If a model was saved using a file name that contained non-English characters, it could not be reopened from the list of existing models on the Home screen. (Bug #53110)

- In the SQL Editor, if multiple Query tabs were opened so that they used more than the available screen width, it was not possible to move to the tabs that were not visible. MySQL Workbench now includes scroll buttons should the number of tabs exceed the screen width. The scroll buttons make it possible to access non-visible tabs. (Bug #53070)

- If a model was forward engineered to a database, renamed, and then forward engineered again, the SQL that was generated was erroneous. (Bug #53068)

- In the **Inserts** tab of the Table Editor, if characters were entered into an integer column, MySQL Workbench crashed when a new column was selected. (Bug #53066)

- If a table was copied in the modeler, the copy of the table was renamed. However, foreign key relationships contained within the table were not renamed. (Bug #53020)

- In the **Alter Table** dialog of the SQL Editor, if two triggers were created, the second with a bad command, and the error corrected, then when changes were applied, the generated code was incorrect, dropping both triggers. (Bug #52997)

- It was not possible to increase the font size of text in the SQL Editor. MySQL Workbench has been changed so that fonts set in the **Workbench Preferences** dialog now also affect the SQL Editor. (Bug #52968)

- It was not possible to delete a trigger from the **Triggers** tab in the **Alter Table** dialog. Even though the trigger code was selected and deleted, and then **Apply** clicked, the code that was generated did not drop the deleted trigger as expected. (Bug #52955)

- Synchronize to live database failed when the model contained triggers. (Bug #52939)

- In the SQL Editor, when the **Alter Table** context-sensitive menu option was used on a table and changes were made, it was not possible to save them because the dialog reported that no changes to the object had been detected. (Bug #52786)

- In the SQL Editor, if the table data was edited, attempts to apply the changes did nothing. (Bug #52705)

- Selecting **Plugins**, **Utilities**, **Test filters** produced an unexpected error:

```
Error calling WbAdmin.openFilterDebugger
```

The Filters Debugger facility can now be accessed in the **Manage Server Instances** dialog. It is located on the Server Stats sub-tab of the Server Profile tab. (Bug #52655)

- In the SQL Editor the Find and Replace facility did not appear to function. (Bug #52251)

- Changes to EER Diagram page size using **File**, **Page Setup** were not reflected in the model navigator. (Bug #52077)

- When editing table data in the SQL Editor, the table would refresh after data was edited in the first column. This meant it was necessary to then scroll to the bottom of the table data to continue editing the record. (Bug #51965)

- Any columns that contained a comment were marked for change when synchronizing the model with the live database. (Bug #51765)

- Diagram names containing an ampersand were not displayed correctly in the Model Overview. (Bug #51617)

- The default Export Directory Path in the **Workbench Preferences** dialog was given as `DriveLetter:\MyDocumentsPath/dumps`. This mixed the `'/'` and `'\'` directory separators.

  Further, the preferred Export Directory Path set in the **Workbench Preferences** dialog was not reflected in the Export to Disk section of the **Data Dump** facility in the Administrator. (Bug #51519)

- In the **Alter Table** dialog of the SQL Editor, there was no effective way of altering a foreign key. Also, the Column and Referenced Column were not updated when a foreign key was created in the Foreign Keys tab. (Bug #51124, Bug #51262)

- In trigger code, triggers using the alias `new` were correctly colored by the syntax highlighter, but triggers using the alias `old` were not. (Bug #51061)

- When an EER Diagram layout was set to span multiple pages and then printed, the diagram was printed so small as to be illegible. (Bug #51032)

- When MySQL Workbench was maximized, it did not fit correctly onto the screen and the title bar was not displayed. (Bug #50975)

- If the name of a table was changed in the **Alter Table** dialog and **Apply** was clicked, the message "no changes to object were detected" was received, even though a change had been made. (Bug #50894)

- In the EER Diagram view, changing the page orientation to landscape using **File**, **Page Setup** caused multiple problems in MySQL Workbench. The Navigator orientation did not change, the diagram did not print at the correct size, and MySQL Workbench eventually crashed. (Bug #50861)

- When the SQL Editor was launched, MySQL Workbench became overloaded, due to a large number of tables (10,000+) in the schema. MySQL Workbench now includes two new options in the **Workbench Preferences** dialog: **Disable Live Schema Overview** and **Show Schema Names Only in Catalog List**. This enables the application to be configured to handle schemata with large numbers of tables. (Bug #50701)

- The Relationship and Layer editors did not close if the object they were editing was deleted. MySQL Workbench now supports auto-closing of all open editors, should the object being edited be deleted. (Bug #50681)

- If a PDF is generated of the EER Diagram and the resulting PDF file is viewed in Acrobat Reader, MySQL Workbench crashed if an attempt was made to reprint the diagram (overwriting the file that was currently opened in Acrobat Reader). (Bug #50408)

- In the **User Defined Types** dialog (launched using the main menu item **Model**, **User Defined Types**), selection of the `UNSIGNED` or `ZEROFILL` check boxes was not reflected in SQL code generated by the **Forward Engineer SQL Script** wizard. (Bug #50323)

- If some changes were made in the Table Editor, and the editor was still in edit mode, the active changes in the Table Editor were not saved when the model was saved. (Bug #50006)

- Using the **Compare and Report Differences in Catalogs** wizard caused MySQL Workbench to crash. (Bug #49561)

- Find was always enabled, even in contexts where it had no useful functionality. (Bug #49293)

- MySQL Workbench permitted setting the auto-increment check box for multiple columns in the Table Editor. (Bug #49278)

- In the **Select Changes to Apply** page of the **Synchronize Model with Database** wizard, if a schema was selected and then any of the **Update Model**, **Ignore**, or **Update Source** buttons was clicked, this change was not applied to child objects of the schema. (Bug #45454)

Changes in MySQL Workbench 5.2.20 (2010-04-27)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.19.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The SQL Statements tab and the record set data editor tab now indicate when they have unsaved data by displaying an asterisk character. (Bug #52799)

- If MySQL Workbench was used on an external monitor as part of an extended desktop, then when the computer was started without the external monitor, MySQL Workbench was not displayed on the primary display, and was therefore invisible. MySQL Workbench now checks for this condition and locates half of the application window on the primary desktop where it can be dragged and resized as required. (Bug #52703)

- The foreign key/index mapping implementation has been changed so that indexes created for foreign keys no longer need be marked as `FOREIGN`. They now are created with type `INDEX` and can be changed to `UNIQUE` or other types.

  Although the artificial `FOREIGN` index type has been removed, MySQL Workbench still automatically creates and maintains indexes for each foreign key by naming them after the keyname and keeping the names (FK to IDX) synchronized. (Bug #48728)

Bugs Fixed

- The MySQL Workbench `configure.in` configure script contained a construct incompatible with NetBSD. The script used `test ==` instead of `test =`. (Bug #53175)

- In the SQL Editor, when commands were entered into the SQL Statements area, and executed, they appeared on the Output tab. However, when the number of statements appearing in the **Output** tab exceeded the number that could be displayed in the default area, a vertical scrollbar did not appear. This meant any further statements that were executed were effectively hidden because it was not possible to scroll vertically to display them. (Bug #53156)

- If multiple SQL Editor tabs were opened, closing the last one caused MySQL Workbench to crash. (Bug #53061)

- If a schema was opened and an object editor, such as the Table Editor was opened, MySQL Workbench crashed if the schema was closed and immediately reopened. (Bug #53027)

- In the **Variables** tab of the Administrator, variables with long descriptions were not displayed correctly. They appeared wrapped to a new line, and clipped by the height of the **Description** row. (Bug #53025)

- On Windows, if SQL Editor was using a named pipe connection, and the **SQL Editor** tab was closed, MySQL Workbench stopped responding to user input and had to be killed using the Task Manager. (Bug #53021)

- The HUD blocked access to other applications that were running. This was particularly a problem when Administrator or SQL Editor were launched from the Home screen, and took a long time to load. (Bug #53006)

- In the **Export to Disk** tab of the Administrator's **Data Dump** facility, selecting multiple schemata for export to a self-contained file resulted in this exception:

```
unhandled exception: local variable
'tables' referenced before assignment.
```

  (Bug #52981)

- When an EER Diagram was displayed, the **Properties** tab was empty. Also, if a table in the EER Diagram was selected, the **Properties** tab remained empty. (Bug #52971)

- In the SQL Editor, field data of type `VARBINARY` viewed using the **Open Value in Viewer** context-sensitive menu item was displayed only up to the first null byte (\0). (Bug #52954)

- In the results editor of the SQL Editor, deleting more than two hundred records resulted in this error:

```
Attempting to Read or Write protected memory. This is often an indication that other
memory is corrupt
```

  This happened when using either the delete key or the **Delete Rows** context-sensitive menu option. (Bug #52951)

- When MySQL Workbench was sized to 1280 x 800, the **Start Export** button was not visible in the **Export to Disk** tab of the **Data Dump** facility. (Bug #52932)

- Selecting multiple tables at the same time in the **Overview** tab of the SQL Editor caused MySQL Workbench to crash. (Bug #52922)

- MySQL Workbench failed to compile from source due to a missing `#include <stdarg.h>` statement in the file `library/sql-parser/include/myx_sql_tree_item.h`. (Bug #52919)

- When building MySQL Workbench, the build process failed if the `--no-copy-dt-needed-entries` linker option was specified (this happens by default when building on Fedora 13). (Bug #52918)

- Print to PDF, Print to PS File, and all export functions did not work correctly. For example, if Print to PDF was selected, MySQL Workbench would attempt to open a new document, and if the user proceeded, the current document would be closed.

  Further, selecting the menu option **Save Model As** resulted in the **Open Document** dialog being displayed. If the user clicked **Yes** the application became stuck in a loop, if **No** was clicked an error dialog was displayed. (Bug #52909)

- Script editors, such as the editor in the SQL Editor, that used the Scintilla component, did not have full integration with the Edit menu. Short cuts and menu commands for operations such as copy, paste, select all, and find were not implemented. (Bug #52834, Bug #51806)

- In the EER Diagram view, layer objects did not respond to edit commands (either double-clicking or using the **Edit Layer** context-sensitive menu option). (Bug #52822, Bug #52823)

- While MySQL Workbench was starting up, if the Windows screensaver activated, this led to unpredictable behavior of MySQL Workbench. For example, the application could freeze, fail to redraw its main window, or display artifacts. On other occasions the application was not able to accept keyboard input, and had to be terminated using the Task Manager. (Bug #52780)

- When switching between Model Overview Page, and EER Diagram View, MySQL Workbench incorrectly rendered the EER Diagram View inside the **Table Editor** panel. (Bug #52778)

- The MySQL Workbench dependency on `libmysqlclient` has changed to use version 16 of the library rather than 15. (Bug #52682)

- If a table comment contained a single quote character, an error resulted when an attempt was made to synchronize this with a live server. This was because the code generated by the synchronization process did not escape single quotation marks in the table comments. (Bug #52608)

- In the **Snippets** tab of the SQL Editor, there appeared to be a third column, with no heading or data, in the snippets list. MySQL Workbench now expands the second column to fill the available space. (Bug #52559)

- The View Editor deleted text pasted into the editor by the user. This happened if, for example, a view was copied from the editor, a new view created and the copied text pasted into the new view. At this point the pasted text would be deleted by the auto-parsing facility of the View Editor. (Bug #52433)

- In the **Reverse Engineer Database** wizard, on the **Connection Options** page, if the first empty connection was selected from the **Stored Connection** list, and then the **Connection Method** changed, the fields on the **Parameters** tab did not change accordingly. (Bug #51742)

- Each time an **Admin** tab was started an instance of `cscript.exe` was executed. However, when the **Admin** tab was closed the corresponding `cscript.exe` process was not terminated. This resulted in ever increasing numbers of `cscript.exe` processes, which consumed resources unnecessarily, and constituted a resource leak. (Bug #51601)

- When selecting Print Preview for an EER Diagram, the objects in the preview appeared primarily as black filled rectangles. (Bug #51513)

- In the **Columns** tab of the Table Editor, the bottom button of the comments scrollbar was situated too low, making downward scrolling very difficult because only part of the scrollbar button was exposed. (Bug #51496)

- In the **Columns** tab of the Table Editor, if a comment was added to a column, or a column with a comment was selected, then when another table was double-clicked to load it into the Table Editor, the comment for the column previously selected was still displayed in the inactive **Comments** area. (Bug #51495)

- If an SQL statement was selected in the SQL Statements area of the SQL Editor, and copied to the snippets list using the **Save SQL to Snippets List** toolbar button, then the statement was only partially saved, the beginning of the statement being missing. This only happened for lines after the first line. Also, the further down the copied statement was located, the less text was successfully copied to the snippets list. This resulted in statements further down the code being heavily truncated, with only the latter portion of the statement being saved. (Bug #51474)

- If a snippet was deleted from the **Snippets** tab in the SQL Editor, after MySQL Workbench was restarted the deleted snippet would reappear as if it had never been deleted. (Bug #51335, Bug #52558)

- In the **Reverse Engineer Database** wizard, on the **Select Schemata** page, any schema name containing an underscore was displayed without the underscore character. Further, if the **Alt** key was pressed, the underscores appeared under the first character located after where the underscore should have been displayed, giving the character the appearance of being an accelerator key. (Bug #51141, Bug #52965)

- In the **Columns** tab of the Table Editor, if a column was right-clicked on, and then **Move Up** selected, the column ordering was not updated within the **Columns** tab, until the area was clicked again. (Bug #51139)

- The MySQL Workbench make targets, with the exception of `make all`, were broken by the file `ext/ctemplate/Makefile`. (Bug #51024)

- In the SQL Editor, when a new tab was created, the focus was on the Object Explorer, rather than in the SQL Statements area. This meant that the user had to press the **Tab** key, or click within the SQL Statements area before they could start typing SQL code. (Bug #50711)

- MySQL Workbench crashed when the `root` user, located in the **Server Access Management** tab of the Accounts facility in the Administrator, was clicked. (Bug #50703)

- SQL Editor syntax highlighting did not correctly recognize escaping of the single quote character (').
  Queries such as `SELECT '\'' FROM DUAL;` were therefore not highlighted correctly. (Bug #50324)

- When using the **Forward Engineer SQL Script** wizard, if an existing script file was selected to be overwritten, the wizard would not continue, the file had to be deleted first. (Bug #46920)

Changes in MySQL Workbench 5.2.19 (2010-04-16)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.18.

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- In the **Configuration** tab of the Administrator, the list showing the section in the configuration file has been changed to a read-only control. (Bug #52443)

Bugs Fixed

- In the SQL Editor, when altering a routine, if the Apply SQL Script button was clicked, MySQL Workbench froze. (Bug #52853)

- When trying to open a saved model file, MySQL Workbench generated this error:

```
error executing plugin wb.file.openModel: Internal error:
wait box creation must be done on the main thread
```

  (Bug #52851)

- Double-clicking a model file (`*.mwb`) to open it caused MySQL Workbench to crash. (Bug #52838)

- When opening a connection to start querying from the Home screen, the HUD displayed correctly. However, an error occurred with the connection, and the error dialog was displayed beneath the HUD.

This meant it was not possible to click the dialog, although pressing **ESC** cleared it. The error dialog should have been displayed in front of the HUD, making it clickable. (Bug #52812)

- MySQL Workbench crashed when carrying out most tasks in the SQL Editor including adding tables, adding columns, and altering tables. (Bug #52789)

- The MySQL Workbench preference to locate the sidebar on the right did not work. Further, the **Toggle Sidebar** button did not function. (Bug #52631, Bug #53072)

- Attempting to build MySQL Workbench using the `LDFLAGS="-Wl,--as-needed"` linker options failed. (Bug #52570)

- MySQL Workbench listed `gtkmm` 2.4 as a dependency in `configure.in`. However, it used features only available in later versions of this library. (Bug #52406)

- In the Object Browser of the SQL Editor, if a schema was dropped, the schema concerned was not removed from the Object Browser, but another schema was. However, if the connection was synchronized, the Object Browser displayed the correct information. (Bug #51919)

- In the **Data Dump** facility of the Administrator, if Export to Self-Contained file was selected and a destination file explicitly chosen, the selected schema was deselected on return from the file chooser. (Bug #51797)

- MySQL Workbench crashed when creating a foreign key relationship in the EER Diagram view. (Bug #51602)

- In the SQL Editor, the syntax highlighter coloured two dashes as a comment. This was incorrect because two dashes should be highlighted as a comment only when followed by a space. (Bug #51596)

- The internal script MySQL Workbench used to add a new user to MySQL Server was incorrect. After MySQL Workbench was started, it was possible to create a new user, but attempts to create additional users resulted in an unhandled exception. (Bug #50947)

- In the Table Editor of the MySQL Model page, and the **Alter Table** dialog of the SQL Editor, the text label "comments:" was truncated to "commen". (Bug #50765)

- In the EER Diagram view, using the context-sensitive menu items **Copy table**, or **Edit in New Window** resulted in this error:

```
plugin:wb.edit.editSelectedFigureInNewWindow
Cannot execute plugin
A model diagram must be selected.
```

  (Bug #50649)

- MySQL Workbench appeared to perform a Save As operation rather than a Save operation when saving a modified script file in the SQL Editor. Also, there was no indication that the file being worked on had unsaved changes (this is normally indicated by `'*'` in the title bar). Finally, the file name was not displayed on the SQL Editor tab. (Bug #50055, Bug #51373)

- The **File**, **Open Recent** menu item was not being populated with recently opened script files. (Bug #50053)

- When two routine groups were being edited, and in both cases the **Routines** tab was selected to display the SQL code, switching between the routine groups did not result in the target **Routines** tab contents being updated. For example, if `routines1` was being displayed and the `routines2` selected, the `routines1` code continued to be displayed in the **Routines** tab. (Bug #49432)

- In the SQL Editor, the **Alter Schema** dialog had a comments field. However, the comments entered were not used in the generated DDL code. The comments field no longer appears. (Bug #49280)

- In the EER Diagram view, when typing a new value into the Navigator Zoom input control, the zoom level of the diagram changed as the new value was being entered. The diagram should only have been redrawn when the new value being entered in was fully entered by pressing the **Enter** key, instead of changing dynamically as the zoom level value was being entered. (Bug #48597)

- In the EER Diagram view, if the cardinality of a relationship was changed and then an attempt made to edit a second relationship, the cardinality of the first relationship was applied to the second relationship. (Bug #46906)

- The **Assigned Privileges** list on the **Privileges** tab in the View Editor lacked default grant options such as SELECT, UPDATE, and DROP. (Bug #42157)

Changes in MySQL Workbench 5.2.18 (2010-04-13)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.17.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- MySQL Workbench now features the ability to copy field data in the SQL Editor results tab in quoted or unquoted mode. (Bug #51041)

Bugs Fixed

- When using the **Forward Engineer SQL Script** wizard, the wizard did not terminate `DROP procedure IF EXISTS` statements with a semicolon. This caused SQL syntax errors if the script was executed on a server. (Bug #52743)

- In the SQL Editor, if a routine was altered in the routine editor, it was possible to close the editor without the editor prompting you to save any changes made, and so changes were lost. (Bug #52728)

- The **Triggers** tab in the **Alter Table** dialog of the SQL Editor erased all entered code, when an attempt was made to copy and paste text within the tab. (Bug #52587)

- The **Data Dump** facility in the Administrator exported the entire schema into a single file when the **Dump Views** option was selected. Further, if tables were selected and the **Dump stored routines** option selected, the routines would be stored in their own file, but with the `DROP PROCEDURE IF EXISTS` statements missing. (Bug #52579)

- During the import procedure of the **Data Dump** facility in the Administrator, stored routines were not imported. (Bug #52577)

- The **Connection Information** panel in the SQL Editor did not display information for the User field. (Bug #52560)

- MySQL Workbench crashed when an attempt was made to create an EER Diagram from a database containing a large number of tables (1500+). (Bug #52500)

- MySQL Workbench crashed if **No** in the **Delete Object** dialog was clicked when attempting to delete a view from an EER Diagram. (Bug #52310)

- In the SQL Editor, if in the **Alter Routine** dialog, the user had a routine that contained an error, the routine would be lost if an attempt was made to close the **Alter Routine** dialog using the close button, and then click **Yes** to apply changes. (Bug #51921)

- In the **Alter Table** dialog of the SQL Editor, in the columns or indexes tab, the first right-click in the dialog central area failed to display the context-sensitive menu. However, it was displayed on subsequent clicks. (Bug #51796)

- In the SQL Editor, it was not possible to export a result set, if the result set was not the first result set. For example, if there were two result sets, it would be possible to export the first one created, but not the second result set. (Bug #51595)

- In the Object Explorer of the Sidebar, if an existing table was right-clicked, the context-sensitive menu displayed the option **Create Table...**. However, selecting this option appeared to have no effect. (Bug #51570)

- In the SQL Editor, in the results editor, it was not possible to edit or copy data containing multiple lines of text. Further, lines containing new lines were displayed as if the new lines did not exist.

  MySQL Workbench now includes a blob editor. This can be accessed by right-clicking in the field to edit and selecting **Open Value in Editor**. (Bug #51561)

- In the **Alter Routine** dialog of the SQL editor, there was inconsistency between the operation of the close dialog button ('X') on the top right of the window, and the **Close** button on the bottom right. When using the close dialog button you were prompted to save changes, regardless of whether you actually changed the routine or not. When using the **Close** button, the user was not prompted, even if the routine had changed. (Bug #51518)

- The Message Log text area in the **Forward Engineer to Database** wizard was in active, preventing scrolling of the message when an error occurred. (Bug #51417)

- In the SQL Editor, right-clicking a row in the results editor (after double-clicking a table), and selecting delete from the context-sensitive menu, did not have any effect. (Bug #51361)

- The scrollable boxes on the Home screen did not respond to mouse wheel events. (Bug #51213)

- When editing a row in the SQL Editor, if a column was NOT NULL and had a default value, and a value was not entered for it, then after changing another column if changes were applied an error would be generated. This was because the editor attempted to set the NOT NULL column to NULL, rather than to its default value. (Bug #50781)

- The Log text area in the **Reverse Engineer SQL Script** wizard was inactive, preventing the log message from being scrolled. (Bug #50758)

- The model Navigator did not redraw itself correctly. The Navigator worked correctly for the first model loaded into MySQL Workbench, but not for subsequently loaded models. (Bug #50580, Bug #50622)

- When editing a table in the SQL Editor, the context sensitive menu items did not affect the row under the cursor, but a previously selected row. This potentially led to the unintentioned deletion of a row. (Bug #50113)

- On the Linux platform, no context-sensitive menu was displayed when right-clicking a schema tab in the Physical Schemata section of the MySQL Model page. (Bug #49429)

- In the EER Diagram view, when a table with a name containing underscores was right-clicked, the context-sensitive menu displayed menu items containing the table name without the underscores. (Bug #49314)

- In the MySQL Model page it was not possible to delete a schema by using the context sensitive menu in the Physical Schemata section. (Bug #48055)

Changes in MySQL Workbench 5.2.17 (2010-04-02)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.16.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The Execute Current Statement command in the SQL Editor has been improved. The statement that contains the cursor will be executed. Further, if the cursor is outside of a statement, the last statement before the cursor is executed. (Bug #52302)

- If MySQL Workbench attempts to connect to MySQL Server version 4.x, an error message is generated to indicate this version is not supported. (Bug #51455, Bug #51844)

- MySQL Workbench has been changed so that it is possible to run the start, stop, and check status scripts executed from the Administrator, with administrator privileges. A check box has been provided to enable you the option of acquiring the administrator rights to execute the commands. This option is switched off by default for the check status command. (Bug #51276)

- A description column has been added to the snippets table. (Bug #51010)

- The WeifenLuo library was removed. This was the cause of difficult to trace application crashes. (Bug #50706)

- Various improvements to the SQL Editor user interface, including additional context-sensitive menu items in the Object Explorer, additional buttons in the **Create Table** and **Alter Table** dialogs, and more clearly displayed error messages. (Bug #50637, Bug #49918)

- The MySQL Workbench installer now includes a **Launch Now** check box. By default, this is selected, so MySQL Workbench will be launched when the installer exits. (Bug #50387)

- In the SQL Editor, the **Comments** tab in the **Create View** dialog has been removed. (Bug #49270)

- The Output window only appeared in the Model context. MySQL Workbench has been changed so that the Output window now has its own tab on the main screen. (Bug #48988)

Bugs Fixed

- In the SQL Editor, the wrong table was displayed when using `EDIT`. This happened if two schemata contained tables with the same name. For example, if two schemata, `schema1` and `schema2` both contained a table `t1`, then if the following SQL was entered and executed, `schema2.t1` would be displayed instead of `schema1.t1`:

```
use schema1;
edit t1;
```

(Bug #52401, Bug #52692)

- If, in the EER Diagram view, an attempt was made to edit two tables, MySQL Workbench crashed. (Bug #52158)

- In the EER Diagram view, when the menu item **Model**, **Diagram Properties and Size** was selected from the main menu, MySQL Workbench crashed. (Bug #52065, Bug #52375)

- The **Alter Table** dialog in the SQL Editor displayed comments with a single quote character prepending it, and with the last character of the comment truncated. (Bug #51972, Bug #52297)

- MySQL Workbench crashed when synchronizing a model to a live server. (Bug #51892)

- MySQL Workbench crashed while attempting to edit code in the SQL Editor. (Bug #51815)

- The **New Server Instance** wizard did not set the correct name for the startup script, when the installation type was set to Fedora Linux (Vendor Package). Testing the connection resulted in the error "Operation failed: /etc/init.d/mysql start is invalid". (Bug #51802)

- In the Object Explorer of the SQL Editor, right-clicking a table displayed the menu option **Send to SQL Edtor**. Editor was spelled incorrectly. (Bug #51790)

- When synchronizing a model containing a large number of Stored Routines, not all routines were synchronized with the live server. (Bug #51731)

- When synchronizing between two triggers, unexpected `USE` statements and the comment "-- Trigger DDL Statements" appeared intermittently. This caused a syntax error in the script. (Bug #51728)

- If a connection was opened for querying and then **Control+W** quickly pressed to close the connection, MySQL Workbench would crash. (Bug #51685)

- When opening the `ip2nation.sql` file MySQL Workbench crashed. (Bug #51606, Bug #51531)

- Exporting a result set to a CSV file resulted in a file with a trailing comma appended to each line including the heading. (Bug #51594)

- In the **Inserts** tab of the Table Editor, if a row was right-clicked and **Delete selected rows** selected, MySQL Workbench crashed. (Bug #51584)

- MySQL Workbench crashed if objects were sequentially selected in the EER Diagram view. (Bug #51573)

- In the SQL Editor, when an SQL query was entered that contained a large number of characters, it appeared full width in the action column of the Output tab, causing the Response column to be unacceptably narrow. (Bug #51550)

- In the **Alter Table** dialog of the SQL Editor, if a column was added to a table, and then an attempt made to alter that column's data type, the wizard generated `ADD COLUMN` code, rather than `CHANGE COLUMN`. That resulted in this error when an attempt was made to apply the changes:

```
ERROR 1060: Duplicate column name 'test_column'
```

(Bug #51516, Bug #51719)

- In the **Alter Table** dialog of the SQL Editor, when a table was edited and changes applied, if subsequent changes were made and applied an error would result, as MySQL Workbench attempted to use `ADD COLUMN` rather than `CHANGE COLUMN`. (Bug #51481)

- When **Manage Import / Export** was clicked on the Home screen, a server instance selected, and then **OK** clicked, MySQL Workbench displayed an error dialog with this message:

```
MySQL Workbench has encountered a problem, External component has thrown an
exception.
```

(Bug #51477, Bug #51665, Bug #51703, Bug #51733, Bug #51800, Bug #51870, Bug #51895, Bug #51963, Bug #51944, Bug #51999, Bug #52052, Bug #52262)

- Building MySQL Workbench from source failed if `LDFLAGS="-Wl,--as-needed"` option was specified. (Bug #51469)

- If a long running SQL query was executed in the SQL Editor, and then the **SQL Editor** tab closed, MySQL Workbench crashed if a new connection was started from the Home screen. This exception was generated:

```
Unknown Exception: caught in c:\documents and
settings\mysqldev\build\mysql-workbench-oss-5.2.16\backend\windows\wbprivate.wr\src\Wb.h
at line 1087
```

(Bug #51467)

- It was not possible to connect to the MySQL server with MySQL Workbench if using sockets. (Bug #51419, Bug #51460)

- When a model with a view was exported using **File**, **Export**, **Forward Engineer SQL CREATE Script**, a semicolon was added to the end of the `CREATE VIEW` statement, even if one was already present from the view code entered. (Bug #51416)

- On the MySQL Model tab, if a table was clicked on and edited using the context menu option **Edit Table**, MySQL Workbench crashed. (Bug #51410, Bug #50936)

- If all screens and tabs were closed in MySQL Workbench and then **Data**, **Manage Connections** selected, then when the **Manage DB Connections** dialog was closed an unknown exception occurred. (Bug #51403)

- If a server instance was created with the **New Instance** wizard with SSH disabled, this exception occurred when attempting to administer the server instance:

```
Exception = System.Runtime.InteropServices.SEHException
Message = External component has thrown an exception.
FullText = System.Runtime.InteropServices.SEHException: External component has thrown an
exception.
   at MySQL.Forms.DrawBoxImpl.drawbox_mouse_click(Object sender, MouseEventArgs e)
   at System.Windows.Forms.Control.OnMouseClick(MouseEventArgs e)
   at System.Windows.Forms.Control.WmMouseUp(Message& m, MouseButtons button, Int32
clicks)
   at System.Windows.Forms.Control.WndProc(Message& m)
   at System.Windows.Forms.Control.ControlNativeWindow.OnMessage(Message& m)
   at System.Windows.Forms.Control.ControlNativeWindow.WndProc(Message& m)
   at System.Windows.Forms.NativeWindow.Callback(IntPtr hWnd, Int32 msg, IntPtr wparam,
IntPtr lparam)
```

(Bug #51368, Bug #51476, Bug #51522, Bug #51483, Bug #51978, Bug #51810, Bug #51883, Bug #51803, Bug #52115, Bug #52163, Bug #51292, Bug #51668, Bug #51784, Bug #51789, Bug #51940, Bug #51947, Bug #52021, Bug #52028, Bug #52108, Bug #52240)

- After exporting a schema to disk, importing the schema did not restore the tables. (Bug #51261)

- In the Routine Editor, the editor added "//" as the last delimiter, even though "DELIMITER $$" was used at the beginning of the code. (Bug #51247)

- In the SQL Editor, if a foreign key name was changed using the **Foreign Key** tab or **Indexes** tab of the **Alter Table** dialog, this error was generated:

```
Type mismatch: expected type string, but got list
```

(Bug #51192)

- When the MySQL Workbench source was configured, the package `gnome-keyring-1` was not found. (Bug #51090)

- There were discrepancies between the list of pre-requisite packages given on the MySQL Workbench website and those listed in the `README` file in the MySQL Workbench distribution. (Bug #51085)

- On the **Output** tab of the SQL Editor, it was not possible to properly view the contents of the Action and Message columns, if the text exceeded the standard column width.

  MySQL Workbench has now added a detail panel, so that long messages can be easily viewed. (Bug #51040)

- In the Administrator section of MySQL Workbench, if a new user was created, the password was not correctly applied for the account, resulting in the new user being denied access when an attempt was made to connect to a server with that user account. (Bug #50983, Bug #51464)

- An Out of Range exception occurred when switching from the Table Editor to the Home screen. (Bug #50980, Bug #51030)

- In the **Output** tab of the SQL Editor, if a query produced an error response, it was difficult to read the returned error message. The message could only be read using mouse-over in the **Response** column, and the error message text could not be copied. The **Response** column is now renamed to **Message**. Further, the **Message** column has been widened, and new **Action** and **Message** detail panels have been added, making it easier to read error messages. (Bug #50629, Bug #50860)

- When using the main menu item **Scripting**, **Run Workbench Script File**, the dialog appended ".lua" to the selected file name. This resulted in a failure to load the desired file. (Bug #50501)

- In the SQL Editor, field names containing an underscore were displayed incorrectly on the Results tab. Instead of the underscore being displayed in the correct location the following character appeared underlined. (Bug #50132)

- When a schema with Foreign keys and associated automatically generated foreign indexes was exported with the **Skip Creation of FOREIGN KEYS** check box selected, the generated script still contained the indexes. (Bug #49987)

- In the SQL Editor, in a result set tab it was not possible to copy values from the result set. MySQL Workbench now includes the context sensitive menu items **Copy row values** and **Copy field content**. (Bug #49683, Bug #50170)

- The Table Editor, Routine Editor, and other object editors stayed open, even if the user switched from the MySQL Model page to the SQL Editor page, Home screen, or Administrator page, thereby causing confusion. (Bug #49367)

- In the live editing tab of the SQL Editor, if the **Alt+Tab** key combination was used, the ascending and descending sort order of the columns could no longer be changed. (Bug #49366)

- The live data editor in SQL Editor did not permit the columns to be sorted in descending order by clicking the column heading. It only permitted column sorting in ascending order through clicking the column heading. (Bug #49302)

- In the **Overview** tab of the SQL Editor there was no scrolling facility available. This meant that if the model contained a large number of schema objects the panel area was quickly filled, and it was not possible to view all of the objects without the ability to scroll. (Bug #49290, Bug #51634)

- In the **Alter Routine** dialog of the SQL Editor, when a routine was changed, and the changes successfully applied using the **Apply SQL Script to Database** dialog, the **Alter Routine** dialog still

prompted the user to apply changes, even though the changes had already been successfully applied. (Bug #49273)

- When switching from a tab such as the **SQL Editor** tab to the Home screen, the toolbar did not change accordingly. However, the buttons on the toolbar were still active, leading to the possibility of unintentional actions. (Bug #49147)

- In the SQL editor, if Alter Table was invoked for a table, and then the partitioning tab selected and partitioning enabled, it was possible to select a partition count of 0, which then generated an error if an attempt was made to apply changes. (Bug #49050)

- This bug occurred when using the MySQL Workbench Administrator with MySQL Server version 5.0. When selecting Enable General Log in the Administrator's configuration page, MySQL Workbench attempted to add the option `general-log` to the configuration file, even thought this is not supported by MySQL Server 5.0. (Bug #49011)

- In the **Overview** tab of the SQL Editor, if there were a large number of schemata, it was not possible to access certain schemata because they did not all fit on the schema tab control.

  MySQL Workbench has been changed so that there is now a small drop down control that enables you to select the required schema, even if it is not currently visible on the schema tab control. (Bug #48898, Bug #50169)

- In the EER Diagram view, when zooming in or out of the diagram the screen was not redrawn correctly. (Bug #48020, Bug #48032, Bug #34505)

- When using the option **Omit Schemata Qualifier in Object Names** in the **Forward Engineer** dialog, the schema name still appeared in `DROP`, `CREATE SCHEMA`, `INSERT` and `USE` statements. The schema name also appeared in the table comments. (Bug #46837, Bug #51411)

- In the configuration settings panel of the Administrator, the ',' character was treated as part of the database name, and so it was not possible to specify multiple databases for certain configuration options.

  MySQL Workbench has been changed as follows:

  Several configuration options permit multiple databases to be specified. For example, binlog-do-db and binlog-ignore-db. However, if a comma is used to delimit these databases, the comma is correctly treated as part of the database name. This means that to specify multiple databases you must use multiple instances of the option.

  To specify multiple instances of the option, the ";" character can be used in MySQL Workbench. When text is entered into the option entry field and the ";" symbol detected, MySQL Workbench prompts you to select multiple instances, or leave the option entry unchanged. If selected the option will be written to the configuration file as multiple instances. Further, when a multiple instance option is detected in a configuration file it is parsed into <value1> ; <value2> ; ... ; <valueN>. (Bug #15245, Bug #11745436)

Changes in MySQL Workbench 5.2.16 (2010-02-17)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.15.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- In the SQL editor, the keyboard shortcut to run a single query has been changed to **Control+Enter**. To run all queries the keyboard shortcut has been changed to **Control+Shift+Enter**. (Bug #50747)

- The key sequence **Control+Q** has been added as a shortcut for the main menu item **File**, **Exit**. (Bug #50727)

- In the SQL Editor a comment has been added to the EDIT statement to clarify its functionality. (Bug #50705)

- The **Manage DB Connections** dialog now prevents removal of a connection used by a server instance. (Bug #50547)

- In the **Logs** tab of the Administrator it was not possible to view long queries, or copy their text. MySQL Workbench has been changed so that double-clicking an entry in the **Logs** tab pops up a dialog with the complete text, and also provides a **Copy Detail** button to copy the text of the entry. (Bug #49442)

- The data dump facility, used for exporting data to disk, has been modified to enable the `--single-transaction` option to be specified.

  If `--single-transaction` is enabled, the table selection will be restricted the following ways:

  - If a single schema is selected, it is possible to select/deselect its tables as required.

  - If more than one schema is selected, all tables from these schemas must be selected because `mysqldump --databases` will be used in this case.

  (Bug #49220)

- When a model with multiple EER Diagrams was opened, all EER Diagrams would be displayed in tabs. This happened whether or not a EER Diagram had been displayed in a tab prior to saving the model.

  MySQL Workbench has been changed so that the **EER Diagram** tab state is saved, so that when a model is opened, only those EER Diagram tabs that were open on save are restored. This prevents unnecessary cluttering of the interface. (Bug #44454, Bug #50732)

Bugs Fixed

- **Security Fix:** Passwords were stored in plain text format in the file `server_instances.xml`.

  To improve security MySQL Workbench has been changed in the following ways:

  - The password is no longer stored in the connection XML file.

  - When a connection is opened, a password request dialog is displayed and the password requested. The password can optionally be stored in the system keychain/vault/keyring.

  - When editing a connection profile, you can also store the password in the system keychain.

  - For compatibility, when MySQL Workbench starts it will look for passwords stored in the XML file. If any password is found, it will be removed from the XML file and automatically stored in the keychain. When MySQL Workbench exits, the connections file will be free from passwords.

  (Bug #50194)

- When using the **Server Administration** link, or **Manage Security** link, on the **Home** screen, to log in to a remote server through an SSH connection, if the password dialog was closed, and cancellation of the SSH connection dialog acknowledged, this exception was generated:

```
Exception = System.Runtime.InteropServices.SEHException
Message = External component has thrown an exception.
FullText = System.Runtime.InteropServices.SEHException: External component has thrown an
exception.
   at MySQL.Forms.DrawBoxImpl.drawbox_mouse_click(Object sender, MouseEventArgs e)
...
```

  (Bug #51088)

- In the **Create a new server instance** wizard, on the last page of the wizard if the **Back** button was pressed and then the **Next** button pressed, an error was generated stating the server instance already existed. (Bug #51060)

- Using **File**, **Export**, **Forward Engineer ALTER Script** to export a model resulted in MySQL Workbench generating the exception `AccessViolationException`. (Bug #51053)

- In the SQL Editor, if using the **Alter Table** dialog, attempting to apply changes after renaming an index resulted in this error:

```
SQL Error 1091: Can't DROP 'username_foo'; check that column/key exists
```

  (Bug #50970)

- In the **System Profile** tab of the **Manage Server Instances** dialog, if the **Path to configuration file** textfield was set using the browse button, **...**, the value in the textfield appeared to be set correctly to the selected file. However, if the dialog was closed and reopened, the new path was not displayed in the text field. If the path was manually entered, rather than using the browse button, the textfield would display the correct path even if the dialog was closed and reopened. (Bug #50965)

- In the SQL Editor, if the **Edit Data** dialog was invoked for a table, and some data edited, MySQL Workbench crashed when the **Apply SQL** button was clicked. (Bug #50920)

- An exported script containing triggers and views resulted in the error `#1046 - No database selected` when run on the MySQL Server. This was due to a missing `USE DATABASE` statement in the generated script. (Bug #50900)

- The second invocation of **File**, **Print** caused MySQL Workbench to crash. (Bug #50885)

- The SQL code editors used in the modeling functionality within MySQL Workbench, for example in the **Triggers** tab of the Table Editor, failed to identify and highlight SQL code errors. (Bug #50835)

- In the SQL Editor the text "Parsing SQL ..." displayed in the status bar remained once the parsing was complete.

  MySQL Workbench has been changed to display "No errors found" once parsing has successfully completed. (Bug #50833)

- If a MySQL server was set to accept named pipe connections only, and then a server instance created in MySQL Workbench using a named pipe connection, it was not possible to subsequently connect to the server with MySQL Workbench. (Bug #50830)

- Expanded Schemata Palettes in the SQL Editor would collapse when switching between SQL Editor tabs. (Bug #50815)

- In the SQL Editor the toolbar button to execute SQL statements was missing.

MySQL Workbench also now includes a new toolbar button to execute a single statement. (Bug #50791)

- In the MySQL Model tab, if the Table Editor was launched and then the Home screen tab clicked, MySQL Workbench displayed the MySQL Workbench **Unexpected Error** dialog. (Bug #50768)

- On the MySQL Model page using Roles and Users to grant privileges to a schema resulted in errors when the model was forward engineered, and the resulting script applied against a MySQL server. The script failed due to invalid SQL syntax because the SQL created did not correctly apply the privileges to all schema objects. (Bug #50762)

- In the **Data Dump** facility of the Administrator, attempting to export a schema to disk failed if a table name contained a space. (Bug #50728)

- In the Workbench Scripting Shell dialog, clicking an item in the value inspector panel (lower left corner) caused an exception:

```
System.Runtime.InteropServices.SEHException: External component has thrown an
exception.
   at MySQL.Grt.TreeModel.expand_node(NodeId node)
   at MySQL.Grt.GrtTreeModel.TreeViewExpanding(Object sender, TreeViewAdvEventArgs e)
   at System.EventHandler`1.Invoke(Object sender, TEventArgs e)
   at Aga.Controls.Tree.TreeViewAdv.OnExpanding(TreeNodeAdv node)
   ...
```

(Bug #50683)

- In the **Data Dump** facility of the Administrator it was not possible to import a file where the path contained a space. (Bug #50609, Bug #50007)

- In the SQL Editor a situation occurred where all results tabs could not be closed. Further, results tabs were incorrectly created with the same label. (Bug #50334, Bug #50865)

- In the **Manage DB Connections** dialog it was not possible to select a default schema for the Socket/Pipe connection type because this facility was not provided by the dialog user interface. (Bug #50283)

- It was possible to connect to a database using a password containing a space. However, when this connection was used to attempt a backup the operation failed, due to the password not being correctly quoted. (Bug #50213)

- The messages generated by `mysqldump` when a data export operation failed were difficult to interpret, for example:

```
Operation failed with exitcode 2
```

(Bug #50137)

- In the SQL Editor, when editing table data, if an operation failed when changes were applied, the error message was not clearly visible. (Bug #50112)

- In the SQL Editor, if a `LONGTEXT` field was being edited in the table data live editor, when the changes were applied an error was generated.

  MySQL Workbench has also been changed so that large text values need to be edited in an external editor and then pasted into the grid cell. (Bug #50111, Bug #50692, Bug #50948, Bug #50814)

- When synchronizing a schema with a live server, the scale of columns with type `DECIMAL` was erroneously set to zero. For example, a `DECIMAL(17,5)` was found to be set to `DECIMAL (17,0)` in the generated script. (Bug #50110)

- When a non-SSH server instance was created, and a connection made to a remote server, only the **Data Dump** facility of the Administrator was available. The same problem occurred if SSH-based administration was deselected for the server instance. (Bug #50098)

- In the SQL Editor, if a database was selected in the **Overview** tab and then either the **Drop Schema...** context menu item was selected, or the drop schema toolbar button clicked, the DROP DATABASE dialog was displayed. However, if the dialog close button was then clicked to cancel the dialog, the database was still dropped, instead of being unaffected by the cancelling of the dialog. (Bug #50072, Bug #50960)

- In the **Create a new server instance** wizard, if an operating system of type **Windows (MySQL 5.1 Installer Package)** was selected, this error was generated on the **Test Settings** page:

```
Error: File C:\Program Files\MySQL\MySQL Server 5.1\my.ini doesn't exist
```

  This was because the file was actually stored in `C:\Programas\MySQL\MySQL Server 5.1\my.ini`.

  Similar bugs where the configuration file could not be found were reported on both English and non-English systems. (Bug #50050, Bug #50635, Bug #50966, Bug #50873, Bug #51008)

- If a table was dropped from a live database, and then the model synchronized, the dropped table would be detected, but the table was not dropped from the model concerned. (Bug #50000)

- For a default MySQL Server installation, no `my.ini` or `my.cnf` file is created. This proved problematic when creating a server instance in MySQL Workbench because the **Create a new server instance** wizard expected a configuration file to be specified. If the path to the configuration file was left blank, a model error dialog was displayed by the wizard. If alternatively, one of the standard locations for the configuration file was entered, problems arose when an attempt was made to subsequently change configuration values in the configuration section of the Admin screen. The problems included MySQL Workbench hanging, and repetitive requests for a 'super user' password. (Bug #49766, Bug #50317)

- In the SQL Editor, in the add routine dialog, if the template was used, and a simple `SELECT 1;` statement added to the template, this error was generated when changes were applied:

```
ERROR 1064: You have an error in your SQL syntax; check the manual that
corresponds to your MySQL server version for the right syntax to use
near '' at line 3
SQL Statement:
CREATE PROCEDURE `world`.`new_routine` ()
BEGIN
SELECT 1
```

  (Bug #49710)

- In the **Forward Engineer SQL Script** wizard, selecting the check box **Omit Schema Qualifier in Object Names** caused the `CREATE SCHEMA` statement to be removed. `DROP SCHEMA` statements were also removed, even if the **Generate DROP SCHEMA** check box was selected.

  MySQL Workbench has been changed so that if the **Omit Schema Qualifier in Object Names** check box is selected, it is possible to optionally select the check box **Insert USE Statements**, to enable or disable the use of `USE` statements. (Bug #49682)

- If the **Data Dump** facility in Administrator was used to export to a self-contained file, then when that file was imported an unhandled exception was generated. (Bug #49529)

- If the MySQL Server was stopped then attempting to access the **Logs**, **Accounts**, **Connections**, **Variables** or **Data Dump** tabs in the Administrator resulted in unhandled exceptions. (Bug #49439)

- MySQL Workbench did not support SSH keys that required a passphrase to be entered. (Bug #49418)

- When using an SSH connection to manage a remote server, MySQL Workbench repeatedly prompted the user to enter a password, even though a key file had been specified. (Bug #49307)

- In the SQL Editor, when using the live editor, if **Query**, **Export Results** was selected from the main menu and a CSV output format chosen, the exported data was found to be in tab delimited format, rather than CSV format. (Bug #49303)

- When MySQL Workbench was connected to a remote server using an SSH connection, and a data export operation performed, MySQL Workbench actually attempted to perform the data export on a local server instance, rather than on the connected remote server. If the remote and local server had a common user account, a backup could be performed that appeared to complete successfully, but which contained data from the local server rather than the connected remote server. (Bug #49295)

- In the **Alter Table** dialog of the SQL Editor, support for triggers appeared to be provided, but underlying functionality was missing. (Bug #49287)

- In the SQL Editor, if Alter Table was invoked, and the collation for a column changed, no changes were detected after clicking **Apply**. (Bug #49277)

- The descriptions used for options in the **Advanced Options** tab in the **Data Dump** section of the administrator were lacking clarity and in some cases dated. (Bug #49224)

- The import log contained messages with redundant parentheses. (Bug #49218)

- There was no facility to cancel the Export to Disk process, once started, in the Administrator. Further, the **Start Export** button erroneously remained enabled during the export process, enabling the user to start new export processes, resulting in errors. (Bug #49115)

- In the **Data Dump** facility of the Administrator, if a schema was selected, but its corresponding check box not selected, and then several of its tables selected for export, this error occurred when the **Start Export** button was clicked:

```
Nothing to do, no schemas or tables selected.
```

  (Bug #49110)

- In the **Create a new server instance** wizard, using the default SSH Key Path, `~/.ssh/id_rsa`, resulted in a 'file not found' error when testing the connection. However, if the path was entered as `/home/username/.ssh/id_rsa` the connection test was successful. The same problem was also present in the **Manage DB Connections** dialog. (Bug #49090)

- The first connection created with New Connection did not appear immediately in the list of available connections. (Bug #49079, Bug #49801)

- Numerous variables were missing from the DDL section of the **Status Variables** tab in the administrator. (Bug #49073, Bug #49077)

- In the configuration file editor it was possible to select a directory, such as **Temp directory** on the General tab, without specifying a corresponding path. (Bug #49035)

- In the **General** tab of the configuration file editor, the option **Default table type** was present, even though it was deprecated in MySQL Server 5.0. Further, selecting this option and applying changes did not change the server configuration file. (Bug #49006)

- If the command for checking server status was changed in a server instance, the change did not take effect unless MySQL Workbench was restarted. (Bug #48992)

- MySQL Workbench did not correctly detect the status of MySQL Servers where multiple servers were running on the same host, and so displayed incorrect server status on the Admin screen. (Bug #48975)

- In the **Forward Engineer SQL Script** wizard, selection of the **Skip Creation of FOREIGN KEYS** check box was not reflected in the generated script. (Bug #47969)

- When using MySQL Workbench to create an `ALTER` script, the generated script did not reflect columns where only the case of the column name had changed. (Bug #45556)

- If a schema that contained tables with no engine defined was reverse engineered, and then the engine type was changed in MySQL Workbench, then when the model was exported the ALTER script did not contain code to change the engine of the table. (Bug #45110)

Changes in MySQL Workbench 5.2.15 (2010-01-28)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.14.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The GRT Shell exhibited various issues and could generate exceptions in some circumstances.

  The GRT Shell has been updated and is now implemented as a standalone dialog known as the Workbench Scripting Shell. (Bug #49298)

Bugs Fixed

- Double-clicking any main tab, just below the main menu toolbar, caused MySQL Workbench to generate an exception. (Bug #50562)

- If text was entered into the search bar in the SQL Editor, and the sidebar button clicked twice, MySQL Workbench crashed. This only happened on OS X. (Bug #50560)

- In the **Columns** tab of the Table Editor, attempting to change the column data type using the list caused MySQL Workbench to crash. (Bug #50546, Bug #50598, Bug #50527)

- The Portrait and Landscape icons were missing from the **Page Setup** dialog. (Bug #50529)

- It was not possible to print EER Diagrams or schemata. The **File**, **Print** option was grayed out, and **Control+P** did not have any effect. (Bug #50528)

- On an EER Diagram, when a relationship was placed using the toolbar button **Place a Relationship using Existing Columns**, if the relationship was subsequently checked in the **Foreign Keys** tab of the Table Editor, it was found to contain incorrect values for foreign key names, for example, fk_%dcolumn %1. It was apparent that the placeholder had not had its value correctly substituted. (Bug #50492)

- MySQL Workbench reported the remote server as being down, in the Database Server Status section of the Administrator, even though the server was in fact running, and queries could be successfully run against the database using MySQL Workbench. (Bug #50453)

- When the menu item **File**, **Page Setup** was selected from the main menu, MySQL Workbench crashed. (Bug #50315)

- When performing a data dump in the Administrator, the operation failed with an exit code 7.

MySQL Workbench has been changed so that it will generate an error if the `mysqldump` executable cannot be found. (Bug #50184)

- Client-side sorting always sorted on an alpha basis, regardless of data type. This meant numeric values were not sorted into the order expected. (Bug #50158)

- With an EER Diagram open, the **File**, **Page Setup** menu item was unavailable. (Bug #49863)

- When working through the **Manage DB Connections** wizard, the prompt to **Enter SSH password** appeared as a sheet behind the modal dialog box for the wizard. In some situations, it was not possible to see the **Enter SSH password** sheet, and it was not possible to click any buttons on, or close, the modal wizard.

  This meant the user had to move the modal dialog box to see the **Enter SSH password** sheet, but is was not obvious that this was possible because the window decorations indicated that the modal dialog could not be focused.

  MySQL Workbench now uses a dialog rather than a wizard used for Manage DB Connections when creating a new connection. (Bug #49810)

- The **Synchronize Model with Database** wizard generated a script that erroneously dropped schemata that had been selected to be ignored. (Bug #49587)

- On the **General** tab of the configuration file editor, if a value was set for **Temp directory**, and the changes applied, the value set was not displayed in the preview, implying it would not be set in the server configuration file. (Bug #49423)

- When a MySQL Workbench unhandled exception occurred and the exception dialog was displayed, if the user clicked **Quit**, and there were unsaved changes, a new dialog was displayed, warning of unsaved changes. If **Cancel** was clicked on this dialog, MySQL Workbench would exit, which was not the expected behavior because changes would then be lost. If **Yes** was clicked on this dialog, to save changes, MySQL Workbench crashed. Overall, the behavior of the dialogs was confusing.

  A new error dialog has been introduced that changes the handling. It presents the user options to go to the bug report page, copy debug information to the clipboard and to close the dialog. (Bug #49304)

- In the Administrator, when an attempt was made to import multiple tables from the same project folder, MySQL Workbench only imported the first table and then stopped, reporting the import process as finished. (Bug #49217)

- In the SQL Editor, if an attempt was made to change the number of partitions in a table, using Alter Table, the SQL code produced did not contain the necessary `ALTER TABLE` statement to effect this change. (Bug #49054)

- If the MySQL Server was stopped outside of MySQL Workbench then the server status displayed in the Administrator did not update correctly until the **Startup** tab was clicked. The log file did however correctly note the change in status. (Bug #48966)

- When exporting a model to a single file using **File**, **Export**, **Export as Single Page PDF** or **Export as Single Page Postscript File**, the table positions contained in the file were incorrect. (Bug #47384)

- If a model contained a table which used a user defined type for a column, then when the model was forward engineered an erroneous `COLUMN CHANGE` statement was generated for the column. This only happened for user defined types without additional arguments. For example, a user defined type using `INTEGER(11)` would not create a `COLUMN CHANGE` statement, but using `INTEGER` would. (Bug #45834)

Changes in MySQL Workbench 5.2.14 (2010-01-21)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.13.

Bugs Fixed

- If a multiline configuration option in the MySQL server configuration file was removed using the configuration editor of the Administrator tab, MySQL Workbench generated an error. (Bug #50470)

- In the SQL Editor, the **Alter Table** dialog created incorrect DDL for changes to the partitioning. (Bug #49055)

- In the Physical Schemata section of the MySQL Model tab, the tables were not displayed in alphabetic order. (Bug #47143)

Changes in MySQL Workbench 5.2.13 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.12.

Bugs Fixed

- Selecting the **Help**, **Check for Updates** menu item opened the web browser and displayed an error:

```
Not Found

The requested URL /version-check.php was not found on this server.
Apache Server at wb.mysql.com Port 80
```

(Bug #50415)

- When building MySQL Workbench 5.2.11 from source on CentOS 5.4, this error occurred:

```
python_context.cpp:388: error: invalid conversion from 'const char*' to 'char*'
python_context.cpp:388: error:   initializing argument 1 of 'PyObject*
PyImport_ImportModule(char*)'
make[4]: *** [python_context.lo] Error 1
make[4]: Leaving directory `/home/install/mysql-workbench-oss-5.2.11/library/grt/src'
make[3]: *** [all-recursive] Error 1
make[3]: Leaving directory `/home/install/mysql-workbench-oss-5.2.11/library/grt'
make[2]: *** [all-recursive] Error 1
make[2]: Leaving directory `/home/install/mysql-workbench-oss-5.2.11/library'
make[1]: *** [all-recursive] Error 1
make[1]: Leaving directory `/home/install/mysql-workbench-oss-5.2.11'
make: *** [all] Error 2
```

Note, from MySQL Workbench 5.2.13, binary and source packages for CentOS 5.4 will be available. Due to the dependence of MySQL Workbench on certain packages that are older in CentOS 5.4 than in other operating systems, MySQL Workbench has some minor features, such as tooltips, disabled. (Bug #50360)

- In the SQL Editor, if a routine was edited, and the changes applied, the changes were automatically reverted if the apply failed. This meant that any changes the user had made had to be entered again. (Bug #49790)

- In the SQL Editor, if an object was created or renamed, that change was not reflected in the user interface. This change fixes the problem for Linux and OS X. (Bug #49454)

  References: See also: Bug #50424.

- Invalid values were written to the MySQL server configuration file by the configuration editor. MySQL Workbench also added new entries to the configuration file, rather than update the existing entries. As a result of the this the server failed to start. (Bug #49420)

- If the server configuration file contained more than one entry for `replicate-do-db`, the configuration editor on the **Admin** tab displayed only the second entry, rather than both. (Bug #49299)

- In the configuration editor in the Admin tab, the lists for displaying units, such as for the **Sort buffer size** option, did not show 'G', which represents Gigabytes. This bug was fixed in 5.2.10.

  It was subsequently decided to standardize all units around uppercase characters. In particular the 'k' was changed to 'K'. This change was made in version 5.2.13. (Bug #49013)

Changes in MySQL Workbench 5.2.12 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.11.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- In the SQL Editor, if a table was edited with the Edit Data facility, and table values changed, no warning was given if an attempt was made to close the tab without having first applied changes using the apply button.

  MySQL Workbench has been changed so that if the user attempts to close a live editing tab, without having applied any changes made, a warning dialog is displayed. (Bug #49925)

- MySQL Workbench has been changed to permit a connection to be created where the password does not have to be stored. In this case, MySQL Workbench prompts the user to enter the correct password when the connection is established. (Bug #49409)

- Undo operations are no longer tracked in the editors that work with live databases, such as table editors within the SQL Editor. (Bug #49284)

Bugs Fixed

- **Security Fix:** The password for the connected MySQL Server was exposed by the SQL Administrator in MySQL Workbench. The password was displayed in plain text form in the Startup Message Log on the **Startup** tab of the Admin page. (Bug #43287)

- In SQL Editor, `SELECT` statements that called functions, for example `SELECT md5('abcd')`, did not give the expected result. (Bug #50248)

- In the Table Editor, the list for selecting the table engine type contained a reference to `calpont`. This should now be `infinidb`. (Bug #50159)

- In OS X, the context-sensitive menu was missing from the live editing tab of the SQL Editor. Right-clicking in the editing tab simply displayed a OS X menu, rather than the context-sensitive menu to enable actions such as copying, deletion and setting selections to `NULL`. (Bug #50114)

- On the Model page, if some text was entered into a note in Model Notes, and then the model was saved and closed, on reloading the note would be empty.

  This also happened for a script added in SQL Scripts. After the model was saved and reloaded, the script would be empty. (Bug #50108)

- Custom Python modules failed to load and were not displayed in the MySQL Workbench Plugins menu.

  In MySQL Workbench 5.2 the syntax used has changed from `@wbplugin` to `@ModuleInfo.Plugin`. (Bug #50108)

- The script code generated from a model for routines did not quote schema names in `USE` statements. (Bug #50051)

- Lower panels such as the **Table Editor** remained open, even when the user returned to the Home screen. (Bug #49926)

- In the SQL Editor, when using the **Query**, **Export Results...** menu item, the file extension was omitted when selection of an existing output file was made. (Bug #49870)

- After selecting Edit Table Data from the Home screen, and launching the **Edit Table Data** wizard, MySQL Workbench crashed if a connection was selected and then the **Next** button clicked. (Bug #49864)

- In the **Manage DB Connections** dialog, when attempting to create a Standard TCP/IP over SSH connection, errors occurred when testing the connection in the case where a key file had been specified. If the path to the key file was quoted the error was:

```
Cannot open SSH Tunnel:   ERROR Invalid request
```

  If the same path was not quoted the error generated was:

```
Could not connect SSH tunnel:   ERROR [Errno 22] invalid mode ('r') or filename:
'D:\\Documents and Settings\\tf221715\\.ssh\\id_dsa'
```

  It should be noted that currently only key files using the OpenSSH format are supported. (Bug #49812)

- In the SQL Editor, if a Stored Procedure was executed and then immediately executed again, this error was generated:

```
Error code 2014
  Commands out of sync; you can't run this command now
```

  This problem only affected MySQL Workbench running on the OS X platform. (Bug #49553)

- Right-clicking a Routine Group and then selecting **Copy SQL to Clipboard** did not work. No code was copied to the clipboard. (Bug #49440)

- Opening a model file, closing it and quickly reopening it caused MySQL Workbench to hang. (Bug #49428)

- Clicking the **Test Connection** button in the **Manage DB Connections** dialog caused MySQL Workbench to lock up. The error generated on the console was:

```
18743 INFO Connecting to SSH server at 127.0.0.1:22...
Unhandled exception in thread started by <bound method Tunnel._threadloop of
<__main__.Tunnel instance at 0x9acea8>>
```

  This happened for the connection method Standard TCP/IP over SSH. (Bug #49419)

- Two SSH tunnels were opened for a single connection to an SSH server. The user was also prompted for a password when a new connection was established, even when the existing tunnel was reused. (Bug #49412)

- SSH Tunnels opened by MySQL Workbench were never closed. SSH Tunnels created when clicking **Test Connection** in the **Manage DB Connections** dialog, were not closed. This was also the case when the SQL Editor and Server Administration tabs were closed. (Bug #49411)

- In the **Partitioning** tab of the alter table dialog it was possible to enter a number greater than 10 into the Partition Count textfield. However, when these changes were applied the DDL generated substituted any value entered that was greater than 10 with the value 2. (Bug #49380)

- MySQL Workbench generated an unhandled exception when trying to add a new column using the Alter Table facility in the SQL Editor. After the `VARCHAR(45)` column was added, without selecting any column check boxes, the exception occurred when the **Apply** button was clicked. (Bug #49364)

- If a database was reversed engineered from a source, and a table renamed, then although this change was detected by MySQL Workbench, no DDL code was generated if an attempt was then made to synchronize this change with the source. (Bug #49313)

- In the SQL Editor, when a schema was dropped, it was still displayed in the **Overview** tab and in the schemata explorer of the side panel. Further, MySQL Workbench did not provide any confirmation that the schema had been dropped successfully or otherwise. (Bug #49282)

- The **Alter Schema** dialog in the SQL Editor permitted the schema name to be changed using the **Name** textfield, even though doing this is not supported at the server level. (Bug #49281)

- In the SQL Editor, if an item in the **History** tab was right-clicked, and the menu option **Append selected items to SQL script** selected, MySQL Workbench generated an unhandled exception:

```
glibmm-ERROR **:
unhandled exception (type std::exception) in signal handler:
what: vector::_M_range_check
```

(Bug #49245)

- In the **Create a new server instance** wizard, if the check box **Enable SSH login based administration** was cleared, the wizard still prompted the user to enter an SSH password when the **Next** button was clicked. (Bug #49226)

- In the Server Status section of the Admin page, the SYSTEM graphic showed CPU usage at 50%, while the corresponding text label showed CPU usage at 0%. The graphic and label remained out of synchronization for around 15 seconds. (Bug #49212)

- In the SQL Editor if an `EDIT table` operation was being carried out, it appeared that data in the table was not updated, and also a row already inserted would be erroneously deleted when attempting to add a new row of data, when changes were applied.

  MySQL Workbench has been changed so that if an error occurs during changes being applied, an error dialog is displayed showing any errors that occurred. Also, the status text is now updated to say "Apply Failed", rather than "Changes Applied". (Bug #49179)

- The **Manage DB Connections** dialog did not prevent duplicate connection names or an empty string as a valid connection name. (Bug #49150)

- The toolbar buttons on the Home screen did not reflect the order of the action items in the Workspace. The Open Server Profile button and Open DB Connection Manager buttons needed to exchange positions. (Bug #49149)

- In the **Logs** tab of the Administrator, the Oldest and Newest buttons appeared to have reversed functionality. Oldest displayed the most recent timestamps and Newest displayed the oldest. (Bug #49065)

- In the **Manage DB Connections** dialog, many textfield labels appeared truncated. (Bug #49052, Bug #49378)

- The ID for a connection was displayed in the **Connections** tab of the Admin page, even after the corresponding administration session had been closed. (Bug #48989)

- The Connections list in the **Manage Server Instances** dialog did not display the user name for socket and pipe connections. For example it displayed `Localhost - @:0 <Local Socket/Pipe>`, rather than `Localhost - root@:0 <Local Socket/Pipe>`. (Bug #48969)

- Various errors occurred when attempting to modify the server configuration using the **Configuration** tab of the Administrator:

```
Unhandled exception: global name 'tempfile' is not defined
```

```
Unhandled exception: [Errno 22] Invalid argument:
'C:\\users\\tax\\appdata\\local\\temp\\tmpo47ttn'
```

  Also, if the **Logs** tab was selected to view the server log files, this error occurred:

```
Unhandled exception: Error executing 'Select @ @
log_output': Unknown system variable 'log_output'
```

  (Bug #48906)

- In the **Forward Engineer an ALTER Script** wizard, the textfields and associated buttons for selecting input and output files were not positioned correctly within the window, when the selected file name was long. Although the files could be selected when the wizard was first launched, if the wizard was launched subsequently, the text fields would be filled with the previously selected file names, causing the textfields and Browse buttons to be located beyond the borders of the window.

  A similar problem also affected the **Forward Engineer SQL Script** wizard. (Bug #48222)

- In the **Partitioning** tab of the **Alter Schema** dialog, it was not possible to create a single partition. If a partition count of 1 was specified this was actually set to 2 in the generated DDL. (Bug #48114)

- When performing a Synchronize Model operation, all foreign key relationships in the EER diagram that had the setting `draw split` were redrawn as `fully visible`. (Bug #47767)

- When running MySQL Workbench from the command line, it could not open model files where the path contained a space. (Bug #46297)

Changes in MySQL Workbench 5.2.11 (2009-12-18)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.10.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- MySQL Workbench had confusing and erroneous behavior when attempting to handle multiple model tabs. It has now been changed so that if a model is currently loaded, and a new model or saved model needs to be loaded, the current model will be closed first before then opening the new model. (Bug #49422)

- In the configuration editor, it was not possible to find, and therefore set, the configuration variable "old".

  This has now been added to the **General** tab in the configuration editor of the Admin tab. (Bug #49039)

- It was impossible to use a function call as a field value in an editable result set, such as for a result set in the Query Editor or in the **Inserts** tab in the Table Editor. This was because MySQL Workbench automatically escaped string parameters passed to the function call. For example, if an attempt was made to enter into a field a function such as `md5('fred')`, MySQL Workbench would generate the SQL code `md5(\'fred\')`.

  MySQL Workbench now makes it possible to enter a function, or any other expression, into a field using the `\func` prefix. For example, `\func md5('fred')` can be entered. MySQL Workbench will now ensure that the string 'fred' is not escaped. See (Bug #38600)

Bugs Fixed

- **Security Fix:** When using the **Data Dump** facility in the Admin screen, the full `mysqldump` command, including the password used, was written to the logs. (Bug #49294)

- In the SQL Editor the SQL Statements area could only display ten lines of code and was not resizeable. (Bug #49788)

- In an EER diagram, if the model was synchronized with a live database, any foreign key relationship lines that were set to hidden became visible. (Bug #49631)

- In the Home screen Workspace, in the central panels listing connections, models and server instances, the items in the panels appeared to be rendered as links. However, clicking these "links" had no effect, and the items could only be loaded by double-clicking.

  MySQL Workbench has been changed to remove the link effect, and these items can only be loaded by double-clicking. (Bug #49623)

- When MySQL Workbench silently reconnected to a server after a communication failure, it failed to reinitialize the connection correctly. As a result of this failure Autocommit was silently enabled. If a user was working with transactional tables, the commit and rollback toolbar buttons appeared to work, although they had no effect. (Bug #49462)

- If a connection failed MySQL Workbench reconnected silently. This caused problems with transactions. If changes were made to a table, before a `COMMIT`, and the connection lost, MySQL Workbench would reconnect silently and enable the user to `COMMIT`. However, it did not warn that this `COMMIT` was on a new connection, and that the `COMMIT` would have no effect. (Bug #49461)

- In the **Advanced** tab of the configuration editor, the option **Delay key write** had a file selector button associated with it. This should have been a list offering the values `ON`, `OFF`, `ALL`. (Bug #49424)

- When using the **Create a new server instance** wizard, the panel used to enter the SSH password was hidden by the wizard. (Bug #49416)

- If the Home screen was closed and then an attempt made to reopen it from the **View**, **Home** main menu option, MySQL Workbench crashed. (Bug #49388)

- MySQL Workbench did not have the ability to toggle Autocommit mode, or a facility to explicitly start a transaction, in the SQL Editor. This was in contrast to Query Browser, which did support such facilities. (Bug #49384)

- When using the Reverse Engineer SQL Script to import the Sakila script file, `sakila-data.sql`, MySQL Workbench occasionally crashed. (Bug #49381)

- In the **History** tab of the SQL Editor, it was possible to simultaneously select multiple entries in the **Time** panel. However, this did not seem to serve any useful purpose as the content of the SQL column only displayed the code for a single entry. (Bug #49375)

- In the Schemata Palette of the SQL Editor the default schema selector did not work if the schema name contained a '.' character. (Bug #49373)

- When using the SQL Snippets palette, right-clicking a snippet, and then selecting the menu item **Insert text into SQL Area**, replaced all text in the SQL Statements area. This happened after another snippet had previously been inserted because the default state was to leave all code in the SQL Statements area selected. (Bug #49370)

- The `AUTHORS` file in the MySQL Workbench distribution was empty. (Bug #49341)

- In the **Overview** tab of the SQL Editor the drop database button on the toolbar did not work correctly. If pressed the dialog presented did not contain the name of the current database in its message, and generated text such as:

```
Do you want to drop database `` from DB server ...
```

Note the empty string where the database name should have been. Further, the text on the dialog button **drop** was also missing the database name:

```
DROP ``
```

(Bug #49330)

- The path to the an external `mysqldump` tool set in the **MySQL** tab of the **Preferences** dialog was ignored by MySQL Workbench. This prevented the **Data Dump** facility in the Admin screen from working correctly because the required tool could not be found. (Bug #49319)

- The live data editor of the SQL Editor, which was launched by double-clicking a table in the Overview tab, did not behave correctly. If a column value was changed, and the cursor remained in the edited cell, then if the **Apply made changes to data source** toolbar button was clicked, the contents of the cell reverted to its value prior to editing. However, other cell values that had been edited were correctly saved. (Bug #49301)

- In the SQL Editor, when editing live table data, there was no right-click menu item to delete a row. (Bug #49300)

- When importing data using the **Data Dump** tab of the Admin screen, MySQL Workbench did not notify the user of failed imports because it could not detect failed imports. (Bug #49297)

- When a export was performed using the **Data Dump** tab of the Admin screen, and the export failed, the resulting SQL file was not deleted. (Bug #49296)

- In the SQL Editor, using the **Alter Routine** wizard to generate a script to modify an existing routine in the live database results in errors, due to incorrect script code being emitted. For example, the statement `DELIMITER $$` was missing from the start of the script. (Bug #49289)

- When an attempt was made to load the `sakila.sql` script file in the SQL Scripts section of the Model tab, MySQL Workbench crashed with this error:

```
glibmm-ERROR **:
unhandled exception (type std::exception) in signal handler:
what: File '/home/kolbe/Downloads/sakila-db/sakila-data.sql' contains invalid UTF-8
data.
```

(Bug #49242)

- In the **Overview** tab of the SQL Editor, the toolbar buttons to add and drop a schema did not function. Clicking the buttons appeared to have no effect. (Bug #49240)

- In the **Overview** tab of SQL Editor, the toolbar buttons representing large icons, small icons, list, add, and delete did not function correctly. (Bug #49239)

- The **Configuration** tab on the Admin screen had a text label "Edit my.cnf File". This text was not appropriate as on Windows the configuration file is called `my.ini`. (Bug #49237)

- In the configuration editor, on the Admin tab, the operation of the Apply and Cancel buttons did not work correctly. If an option was selected, and then Cancel selected in the view changes dialog, and then Apply clicked again, the selected option was incorrectly listed twice in the configuration file. (Bug #49236)

- In the **Create new server instance** wizard, on the MySQL Config File page, clicking the **Check path** button generated an exception. (Bug #49228)

- Even though the server had been stopped, the **Server Status** graphical panel displayed values for active connections, traffic and key efficiency, giving the impression that the server was still active. (Bug #49225)

- The server health graphs Connection Usage and Traffic, in the **Server Status** panel of Admin tab, appeared to indicate the server was operating at 100% capacity, even when this was not the case.

  MySQL Workbench has been changed to use variable scaling, rather than linear scaling, for these graphs. (Bug #49214)

- On the Admin screen the labels for the monitoring graphs were difficult to read. Further, the value for Traffic was sometimes displayed as a negative number. (Bug #49211)

- In the **Log Files** tab of the configuration editor, selected from the Admin tab, the option **Write Logs to** did not work correctly. If either the **Files** or **Tables** options were selected from the option list, the MySQL Server would not subsequently start. This was because the options should have been **File** and **Table**. (Bug #49123)

- When using the **Data Dump** facility on the Admin screen, the export process appeared to hang when exporting with the **Export to Backup Project Folder** radio button selected. (Bug #49113)

- When using the **Create Table** wizard in the SQL Editor, the resulting dialog contained certain options that could not be deselected once selected. For example, the Merge Method option featured a list with three options: Prevent Inserts, First Table, Last Table. Note that once one of these options was selected, there was no way to clear this selection, as there was no facility to select anything other than one of these three options. (Bug #49048)

- In the **General** tab of the configuration editor, changing the data directory using the file chooser control led to an invalid directory being introduced into the MySQL configuration file. This prevented the MySQL Server from starting. (Bug #49036)

- In the **General** tab of the configuration editor in the Admin screen, the option `Default table type` provided an incomplete, and incorrectly capitalized, list of storage engines/table types. (Bug #49010)

- In the **Configuration** tab of the Admin screen, any changes made and applied were not reflected in the configuration file of a local MySQL Server installation. (Bug #49008)

- In the Server Status section of the Admin screen, the values for CPU status appeared to be erroneously multiplied by 100, and the Memory status appeared to be continually 0. (Bug #48994)

- In the **Document Properties** dialog the created date and last changed date values were reversed. (Bug #48104)

- When a schema containing tables with foreign key indexes was synchronized with a live server, MySQL Workbench attempted to erroneously drop and recreate at least one of the foreign key indexes. (Bug #47766)

- After synchronizing a model with a live database, and saving the resulting modified model, MySQL Workbench crashed. On restarting and attempting to reopen the model file, MySQL Workbench generated this error:

```
Error unserializing GRT data inserting null value to not null list
```

  (Bug #47518)

- In an EER diagram, if relationship links were laid out as desired, and then a synchronization with the live server carried out, the relationship links were repositioned by MySQL Workbench. (Bug #47234)

- If a relationship link was selected in the EER Diagram view, and the menu item **Plugins**, **Objects**, **Copy SQL to Clipboard** was selected, an error was generated.

  Note that in version 5.2.11 this menu option is correctly disabled for these objects. (Bug #39556)

Changes in MySQL Workbench 5.2.10 (2009-12-01)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.9.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- MySQL Workbench now has the command line option `--version`, which is used to display the version of the application, when launching the application from the command line. (Bug #49136)

- The **Help**, **Workbench Product Page** menu item launched the default web browser, but displayed an outdated product page. This was due to a web server configuration issue. MySQL Workbench now displays the correct, up-to-date product page. (Bug #49066)

Bugs Fixed

- When using **Alter Table** in the SQL Editor, if a column name was changed, and the **Apply** button clicked, the **Apply Object Changes** wizard was launched. The **Review changes** page indicated that the script that would be applied would drop the altered column then add a new column with the new name. This led to column data being lost because the script should instead have used `CHANGE COLUMN`, to change the name of the column. (Bug #49286)

- When using **Alter Table** in the SQL Editor, if a table name was changed, and the **Apply** button clicked, the **Apply Object Changes** wizard was launched. The **Review changes** page indicated that the script that would be applied would incorrectly create a new table as a duplicate of the table being renamed, rather than use `ALTER` to rename the table. (Bug #49275)

- In the configuration editor, in the Admin tab, the **Discard** button simply unchecked all options, rather than just those that had been checked during the current editing session. This made the button appear to have a "clear all" function, rather than the expected "revert changes" function. (Bug #49234)

- When using the **Forward Engineer SQL CREATE Script** wizard, if the check box **Omit Schema Qualifier in Object Names** was selected, the script code for views was omitted. (Bug #49153)

- In the **Administrative Roles** tab of **Server Access Management**, selection of Roles did not work correctly. For example, selecting the **DBA** check box, and then deselecting it, caused all roles to be

deselected. Further, using the **Revert** button resulted in the selected user disappearing from the **User Accounts** panel. (Bug #49071)

- MySQL Workbench did not handle signed and unsigned integers correctly. For example, if performing a synchronization between a model and a live database where the only difference was a column was declared to be of type `INTEGER` in one case and `UNSIGNED INTEGER` in the other, the difference would not be detected and the ALTER script would imply the databases were the same. (Bug #49063)

- A MySQL configuration file caused MySQL Workbench to crash, when an attempt was made to view it in the configuration editor of the Admin tab. The error generated was:

```
Unhandled exception:  'bool' object has no attribute 'strip'
```

(Bug #49060, Bug #49602)

- In the SQL Editor, two buttons on the toolbar had no tooltips. These were the green check or tick mark, and the red back arrow buttons. Further, they did not seem to become enabled or disabled according to the context, making it difficult to determine their intended function. (Bug #49059)

- On the **MySQL Config File** page of the **New Server Profile** wizard, clicking **Check section** generated an exception if there were options in the MySQL configuration file that did not have values assigned:

```
Check if mysqld section exists in /tmp/my.cnf
** Message: function call error
Traceback (most recent call last):
  File "/usr/lib/mysql-workbench/modules/wb_admin_grt.py", line 292, in
testInstanceSettingByName
    parser.read([config_file])
  File "/usr/lib/python2.5/ConfigParser.py", line 267, in read
    self._read(fp, filename)
  File "/usr/lib/python2.5/ConfigParser.py", line 490, in _read
    raise e
ConfigParser.ParsingError: File contains parsing errors: /tmp/my.cnf
        [line  2]: 'log-bin\n'

glibmm-ERROR **:
unhandled exception (type std::exception) in signal handler:
what: error calling WbAdmin.testInstanceSettingByName: see output for details
```

(Bug #49057, Bug #47954)

- On the Admin screen, the server configuration option **Key buffer**, was located under the **General** tab, rather than the **MyISAM Parameters** tab, even though it was a `MyISAM`-only option. (Bug #49017)

- In the configuration editor in the Admin tab, the lists for displaying units, such as for the **Sort buffer size** option, did not show 'G', which represents Gigabytes. This bug was fixed in 5.2.10.

  It was subsequently decided to standardize all units around uppercase characters. In particular the 'k' was changed to 'K'. This change was made in version 5.2.13. (Bug #49013)

- In the SQL Editor, the database explorer of the Schemata palette in the side panel did not work correctly. Incorrect behavior included random collapsing of expanded databases and occasional crashing. (Bug #48981)

- When using the data modeler, MySQL Workbench extended vertically to the maximum size of the screen, overlapping the dock, and thereby making it impossible to use. (Bug #48976)

- In the **Manage Server Instances** dialog, if the **Server Instances** list pane was empty, then on creating a new Server Instance, it was not possible to change the instance's name. The instance had to be created, the dialog closed. On reopening the dialog, the instance could be renamed. (Bug #48967)

- The Generate Catalog Diff Report feature did not permit the comparison of imported scripts because selecting the radio button for this option had no effect. (Bug #47230)

- If a collation was changed for a table in the Table Editor, there was no facility to then set this back to the schema default.

  A new entry has been now been added to the collation selection list: **Schema Default**. (Bug #46513)

- When a model containing stored routines was forward engineered to a script, the script contained an erroneous additional delimiter after each stored routine. This resulted in a "No query specified" error when an attempt was made to run the script on a server. (Bug #39929)

Changes in MySQL Workbench 5.2.9 (Not released)

Internal release. This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.8.

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- If, while editing data in the Inserts Editor, the **ESC** key was accidentally pressed, the Inserts Editor would close without warning and all data entered to that point would be lost.

  The improved Inserts Editor does not display this characteristic. Pressing the **ESC** key will have no effect. (Bug #48452)

Bugs Fixed

- MySQL Workbench crashed when the **Import/Export Server Data** Action Item on the Home screen was clicked. (Bug #49064)

- Clicking the Action Item, **Manage Security**, on the Home screen generated this exception:

```
Traceback (most recent call last):
  File "C:\Program Files\MySQL\MySQL Workbench 5.2 OSS/modules\wb_admin_grt.py", line
199, in openSecurityManager
    tab.wait_server_check(4)
  File "C:\Program Files\MySQL\MySQL Workbench 5.2 OSS/modules\wb_admin_grt.py", line 95,
in wait_server_check
    while tab.configuration.last_is_running_check is None and time.time() - t < timeout:
NameError: global name 'tab' is not defined
```

  Further, if this Action Item was clicked again then MySQL Workbench crashed. (Bug #49061)

- The Forward Engineer SQL Script failed to generate SQL code when the check box **Generate INSERT Statements for Tables** was selected, and the tables contained rows. (Bug #49046)

- In the **Overview** tab of the SQL Editor, representing a "live" view of the database currently connected to, if an attempt was made to edit a view, the resulting script generated unnecessary, and in fact dangerous, DROP TABLE statements. This had the potential side-effect that a table that coincidentally had the same name as the view, would be dropped with ensuing data loss. (Bug #49041)

- In the **Configuration** tab of the Server Administrator screen, if log file configuration changes were applied, MySQL Workbench hung if the password request dialog was cancelled. (Bug #49037)

- The Workbench Configuration editor interface contained a backtick character rather than a single apostrophe. (Bug #49014)

- In the **Advanced** tab of the **Admin** screen, the check box **SQL Mode** had an erroneous file chooser button associated with it. The button should not have been there. (Bug #49012)

- MySQL Workbench did not parse the following entry in the `my.ini` file correctly:

```
default-storage-engine=INNODB
```

  This resulted in the default storage engine not being detected correctly by MySQL Workbench, although this entry was correctly recognized by the MySQL server. However, MySQL Workbench did parse the following entry correctly, due to the correct capitalization being used:

```
default-storage-engine=InnoDB
```

  (Bug #49007)

- After creating a new Server Instance from the **Home** screen, then clicking the **Logs** tab in the Admin screen, this exception was generated:

```
Unhandled Exception:  Error executing 'SELECT @@log_output':
Unknown system variable 'log_output';
```

  (Bug #49004)

- Clicking the Action Item **Manage Security** on the Home screen resulted in MySQL Workbench crashing. (Bug #48990)

- Any `TEXT` columns in the Table Editor, or `TEXT` columns in the SQL Editor results tabsheet, were displayed as `BOOLEAN` values, either 1 or 0. (Bug #48982)

- MySQL Workbench crashed on opening a model file. This appeared to be due to MySQL Workbench causing corruption in the model file. (Bug #48891)

- In the EER Diagram view, the **Toggle Grid** and **Align Objects to Grid** toolbar buttons were not rendered correctly when in the selected state. (Bug #48822)

- The Inserts Editor did not display columns of type `ENUM`. (Bug #48288)

- On the **Filter Objects** page of the **Forward Engineer SQL Script** wizard, clicking **Show Filter**, selecting multiple objects from the left panel, and then clicking **>**, would result in only the first of the selected objects being moved to the right hand panel. (Bug #48116)

- Working through the **Synchronize Model with Database** wizard did not result in the live database being updated. (Bug #47953)

- Using UTF-8 accented characters in the Stored Routine DDL editor caused the DDL parser to raise a syntax error and refuse to save the routine. (Bug #47730)

- The **Forward Engineer SQL Script** wizard did not generate the export script. On the **Review SQL Script** page of the wizard, the review panel was blank. Further, clicking **Copy to Clipboard** generated this exception:

```
Unknown Exception caught in c:\documents and settings\mysqldev\my documents\visual
studio 2008\projects\workbench52\backend\windows\wbprivate.wr\src\Wb.h at line 1085.
```

  (Bug #47482)

- When using the **Forward Engineer SQL Script** wizard, the script generated for a model containing multiple schemata, only included the `CREATE SCHEMA` statement for the first schema. (Bug #47202)

- Running the **Forward Engineer an ALTER Script** wizard resulted in an ALTER script that dictated changes were required to tables, even in the case where no such changes were necessary. (Bug #47063)

- Attempting to use **Database**, **Generate Catalog Diff Report** resulted in a Segmentation Fault. (Bug #46810)

- The **Forward Engineer SQL Script** wizard did not generate correct delimiter syntax for routines. For example, it generated this code:

```
DELIMITER //
//

CREATE PROCEDURE `sakila`.`film_not_in_stock`(IN p_film_id INT, IN p_store_id INT, OUT
p_film_count INT)

READS SQL DATA
BEGIN
    SELECT inventory_id
    FROM inventory
    WHERE film_id = p_film_id
    AND store_id = p_store_id
    AND NOT inventory_in_stock(inventory_id);
    SELECT FOUND_ROWS() INTO p_film_count;
END //
//
```

This resulted in errors when an attempt was made to run the generated script on MySQL Server. (Bug #46505)

Changes in MySQL Workbench 5.2.8 (2009-11-18, Beta)

First Beta release of 5.2. This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.7.

Bugs Fixed

- When a table was edited in the EER Diagram view, and **Control+S** was pressed to save the model, the model file was not saved. (Bug #48682)

- If an model object, such as a schema or table, was deleted or its creation was undone using the undo feature, while the object editor was open, a crash occurred if the editor was then subsequently closed. (Bug #48664)

- When running MySQL Workbench, this error occurred when an attempt was made to change the Windows screen resolution:

```
cairo error: out of memory
```

(Bug #48520)

- MySQL Workbench did not start correctly. At startup it generated this error:

```
Microsoft Visual C++ Runtime Library

Runtime Error!

Program C:\Pro...

This application has requested the Runtime to terminate it in an unusual way.
Please contact the application's support team for more information.
```

(Bug #48389)

- Once a default value had been set for a column in the Table Editor, it was not possible to remove it. (Bug #47085)

- The View text editor was overly aggressive in trimming excess whitespace from View definitions. If there was some hesitation after the user entered one or more spaces, the editor would trim whitespace back to the last non-space character entered. (Bug #46894)

- In the EER Diagram view, the auto-resizing of tables did not work correctly, tables were too small to permit all columns to be visible. (Bug #46806)

- When using the Fedora 10 RPM installation packages on Fedora 11, opening a database connection produced this error:

```
Cannot Connect to Database Server
Connection 'antonia' could not be established: Database driver: Failed to open library
'/usr/lib/mysql-workbench/mysqlcppconn.so'. Check settings.
```

  The MySQL Workbench libraries were installed in `/usr/lib64/`, not `/usr/lib/`. (Bug #46428)

- In the **Manage DB Connections** dialog, the text fields **Username**, **Password**, and **Default Schema** accepted text, but as the text was being entered only the top half of the characters entered displayed. However, once the text had been submitted, the characters were displayed correctly. (Bug #45106)

- Printing of an EER Diagram did not work correctly if a table vertically spanned multiple pages. In this case pages would be printed up to and including the page that contained the first part of the table that spanned multiple pages, but the pages containing the remaining parts of the table would not be printed. This problem typically occurred when a table had more fields than could comfortably fit on a single page. (Bug #33919)

Changes in MySQL Workbench 5.2.7 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.6.

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- In the **Administrator** tab of MySQL Workbench the **Data Dump** (Export/Import Data) feature now uses the `--comments` parameter when executing an import or export operation. (Bug #23002)

Bugs Fixed

- In the **Manage Server Instances** wizard, MySQL Workbench crashed if the **New** button was clicked. (Bug #48347)

- On Ubuntu Linux, MySQL Workbench did not warn if a new model was to be saved as a file that already existed on the drive. (Bug #48345)

- The `Use compression protocol` option was not working correctly when set in the **Manage DB Connections** wizard.

  When the checkbox **Use compression protocol** was selected in the **Advanced** tab of the **Manage DB Connections** wizard, this error was generated when the connection was tested:

```
No bool value passed for CLIENT_COMPRESS
```

The same error occurred even if the **Use compression protocol** check box was subsequently cleared. (Bug #48202)

- When editing a stored routine or trigger in the Table Editor, the cursor would relocate to the top of the editing window if a key was not pressed for a few seconds.

  Note

  On Windows this issue was fixed in 5.1.18. On OS X this issue was fixed in 5.2.4. On Linux this issue was fixed in 5.2.7.

  (Bug #48156)

- Attempting to export the result of an SQL query to CSV using **Query**, **Export Results...** gave the error:

  ```
  Failed to open template file: `/usr/share/mysql-workbench/modules/data/sqlide/CSV.tpl`
  ```

  This occurred on a Fedora 11 AMD64 install, from RPM. The requested file was found in a different directory, `/usr/share/mysql-workbench/sqlide/`. The error did not occur after the file was moved to the required location. (Bug #48156)

- In the **Columns** tab of the Table Editor, the tooltip for the AI column did not work. If the cursor was placed over the column no tooltip text was displayed. (Bug #48129)

- If an **EER Diagram** tab was closed, it was not possible to reopen it by clicking its icon on the model page. (Bug #47545)

- In the GRT shell the `help` command, which is equivalent to `?`, crashed when no arguments were specified. (Bug #47503)

- The script generated by **File**, **Export**, **Forward Engineer SQL CREATE Script** dropped a schema if it existed and then recreated it. This resulted in loss of existing data. (Bug #47468)

- When an attempt was made to add a database connection, this error was generated:

  ```
  Test connect failed
  Couldn't load library libmysqlclient_r.so: libmysqlclient_r.so: cannot open shared object
  file: No such file or directory
  ```

  This only happened on Linux. (Bug #47238, Bug #48507)

- In the **Inserts** tab of the Table Editor, values entered for a `BIT` column were not saved. If values were entered and then the changes applied, the values in the `BIT` column disappeared. (Bug #47100)

- When a model was loaded and an EER Diagram opened, the model navigator did not display the model correctly. (Bug #46970)

- In the Table Editor, when trying to modify a column default value, errors occurred.

  - On a `TIMESTAMP` column it was not possible to enter a valid value of the format yyyy-mm-dd hh:mm:ss. This caused an error if forward engineering was attempted.

  - A `NULL` default value for a column could not be deleted.

  (Bug #46878)

- In the **Inserts** tab of the Table Editor, if a string that contained spaces was added as an insert, the string was truncated to the text before the first space. (Bug #46624)

- In the **Reverse Engineer Database** wizard it was not possible to select only one table to reverse engineer, and then proceed to the next step. (Bug #45881)

- When running a plugin that called a function such as the following, the document's status was set to "unsaved", and an asterisk was displayed in the title bar, as soon as the file selection dialog opened. This occurred even for a new document, or an unmodified document.

```
function rfstest(obj)
  local path
  path = Workbench:requestFileSave("Caption", "SQL Files (*.sql)|*.sql")
end
```

  (Bug #44813)

- Forward Engineer SQL CREATE Script generated schema qualifiers for Stored Procedure names regardless of the setting of the **Omit schemata qualifiers from output** check box. This resulted in the generated script containing Stored Procedure names prefixed by the schema name. (Bug #43276)

- In the Table Editor, the keyboard shortcuts such as **Control+X**, **Control+V** and **Control+C**, affected the main document, rather than being confined to within the Table Editor. For example, if **Control+C** was used to copy a column, this erroneously resulted in a duplicate table being created in the main model. (Bug #42626)

- If a collation was set as the schema default, this was not correctly handled when the model was synchronized with a live database.

  If a collation was set as a schema default, and then the model forward engineered to a database, the collation was correctly set. If however, the model was then synchronized with the live database, MySQL Workbench attempted to alter the collations to `utf8_general_ci`. (Bug #38807)

Changes in MySQL Workbench 5.2.6 (2009-10-21)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.5.

Bugs Fixed

- If a foreign key relationship was altered to point to a column in a different table, the foreign key was updated correctly but the EER diagram was not redrawn to reflect the new relationship. (Bug #47807)

- After using the **Forward Engineer to Database** wizard, MySQL Workbench would crash if an attempt was subsequently made to exit the application. (Bug #47276)

- When editing a trigger, the trigger editor would automatically insert a delimiter during a pause in typing, and also relocate the cursor. (Bug #45929)

Changes in MySQL Workbench 5.2.5 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench MySQL Workbench 5.2.4.

Bugs Fixed

- The following exception was generated when closing the **Relationship** tab for an EER Diagram:

```
System.NullReferenceException: Referência de objeto não definida para uma instância de
um objeto.
   em MySQL.GUI.Workbench.MainForm.mainDockPanel_ActiveDocumentClosing(Object sender,
ActiveDocumentClosingEventArgs e)
   em
```

```
WeifenLuo.WinFormsUI.Docking.DockPanel.OnActiveDocumentClosing(ActiveDocumentClosingEventA
rgs e)
   em WeifenLuo.WinFormsUI.Docking.DockPane.CloseContent(IDockContent content)
   em WeifenLuo.WinFormsUI.Docking.DockPane.CloseActiveContent()
   em WeifenLuo.WinFormsUI.Docking.VS2005DockPaneStrip.Close_Click(Object sender,
EventArgs e)
   em System.Windows.Forms.Control.OnClick(EventArgs e)
   em System.Windows.Forms.Control.WmMouseUp(Message& m, MouseButtons button, Int32
clicks)
   em System.Windows.Forms.Control.WndProc(Message& m)
   em System.Windows.Forms.Control.ControlNativeWindow.OnMessage(Message& m)
   em System.Windows.Forms.Control.ControlNativeWindow.WndProc(Message& m)
   em System.Windows.Forms.NativeWindow.Callback(IntPtr hWnd, Int32 msg, IntPtr wparam,
IntPtr lparam)
```

(Bug #47958)

- When attempting to run MySQL Workbench, the splash screen appeared and then the application immediately crashed, generating the "Send error report to Microsoft" dialog. On debugging it was found that MySQL Workbench was throwing a `TypeLoadException`:

```
Could not load type 'WeifenLuo.WinFormsUI.Docking.ActiveDocumentClosingEventArgs' from
assembly 'WeifenLuo.WinFormsUI.Docking, Version=2.2.3428.40956, Culture=neutral,
PublicKeyToken=null'.
```

On inspection of the referenced assembly it was confirmed that there was no type `ActiveDocumentClosingEventArgs` defined. (Bug #47534, Bug #47480)

Changes in MySQL Workbench 5.2.4 (2009-10-07)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.3.

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- Some keyboard shortcuts have been changed.

On Microsoft Windows and Linux **Control+Y** is now used for Redo. OS X continues to use **Command +Shift+Z** as its default for Redo. For Synchronize Model, **Control+Alt+Y** is used on Windows and Linux, and **Command+Control+Y** is used on OS X. (Bug #46285)

Bugs Fixed

- When editing a stored routine or trigger in the Table Editor, the cursor would relocate to the top of the editing window if a key was not pressed for a few seconds.

  Note

  On Windows this issue was fixed in 5.1.18. On OS X this issue was fixed in 5.2.4. On Linux this issue was fixed in 5.2.7.

  (Bug #48156)

- If a new empty EER diagram was created, then **Model**, **Relationship Notation**, **Connect to Columns** was selected, MySQL Workbench generated these messages:

```
** Message: item_activated: 0x28d5cf0 ->
```

```
'plugin:wb.view.setRelationshipNotation:fromcolumn'
** Message: unhandled message 4: wb.view.setRelationshipNotation finished in 0.00s
```

These messages were not generated if the EER diagram contained at least one table. (Bug #47565)

- When a model was synchronized, this incorrect SQL was generated:

```
CREATE  TABLE IF NOT EXISTS `synthescom`.`adx_clienti` (

  `id` INT(11) UNSIGNED NOT NULL AUTO_INCREMENT ,

  `citta` VARCHAR(100) NULL DEFAULT NULL ,

  `provincia` VARCHAR(100) NULL DEFAULT NULL ,

  PRIMARY KEY (`id`)

ENGINE = MyISAM

DEFAULT CHARACTER SET = utf8

COLLATE = utf8_general_ci;
```

Note that the closing parenthesis, which should have been located after the PRIMARY KEY statement, is missing. Thats resulted in this error being generated:

```
ERROR: Error 1064: You have an error in your SQL syntax; check the
manual that corresponds to your MySQL server version for the right
syntax to use near 'ENGINE = MyISAM

DEFAULT CHARACTER SET = utf8

COLLATE = utf8_general_ci' at line 13
```

(Bug #47407)

- When a table was opened for editing in the Query Editor, the `DECIMAL` column values appeared in the result set as integer values, disregarding precision and scale settings. The fractional part of the number was discarded. It was also not possible to add the fractional part of the number during editing. (Bug #47405)

- In the EER Diagram, Layer names were not rendered. This only happened with OpenGL rendering (only on Microsoft Windows). (Bug #47385)

- When the **Query Database** menu option was selected, the explorer on the right-hand side displayed Tables, Views and Routines, but when the Routines folder was expanded the routines contained in the model were missing. (Bug #47088)

- Clicking the **Test Connection** button in **DB Connection Editor** wizard did not appear to have any effect. (Bug #47083)

- In the Query Editor, when an attempt was made to expand a schema and select a table, this exception was generated:

```
************** Exception Text **************
System.AccessViolationException: Attempted to read or write protected memory. This is
often an indication that other memory is corrupt.
   at MySQL.Grt.TreeModel.expand_node(NodeId node)
   at MySQL.Grt.GrtTreeModel.TreeViewExpanding(Object sender, TreeViewAdvEventArgs e)
   at System.EventHandler`1.Invoke(Object sender, TEventArgs e)
   at Aga.Controls.Tree.TreeViewAdv.OnExpanding(TreeNodeAdv node)
   at Aga.Controls.Tree.TreeViewAdv.SetIsExpanded(TreeNodeAdv node, Boolean value)
   at Aga.Controls.Tree.TreeViewAdv.SetIsExpanded(ExpandArgs eargs)
```

```
   at Aga.Controls.Tree.TreeViewAdv.SetIsExpanded(TreeNodeAdv node, Boolean value, Boolean
ignoreChildren)
...
```

(Bug #47044)

- On OS X using **cmd + backspace** to delete a column in the table editor did not work. (Bug #46613)

- In the **Synchronize Model with Database** dialog the text in the upper right area of the dialog did not wrap correctly, resulting in some text not being visible. (Bug #45455)

- MySQL Workbench EER Diagram view did not permit the creation of a foreign key constraint on a primary key. (Bug #39546)

Changes in MySQL Workbench 5.2.3 (2009-09-15)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.2.

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

- In the **Inserts** tab of the Table Editor, if a value was entered with quoting then any characters in the string requiring escaping were not escaped. However, if the same string was entered without quoting then the string would be escaped correctly by MySQL Workbench.

  For 5.0 and 5.1 this is expected behavior. If a value is entered without leading and trailing quotation marks, the Inserts Editor adds quoting and escapes characters that require it. However, if quoted text is entered, the Inserts Editor carries out no further checks because it assumes a correctly escaped and quoted sequence has been entered.

  5.2 features a new Inserts Editor. In this case the user enters the string without quoting or escaping and the Inserts Editor takes care of all quoting and escaping as required. (Bug #38906)

Bugs Fixed

- In the **Forward Engineer SQL CREATE script** wizard, in the dialog asking for confirmation to overwrite an existing file, clicking the **Cancel** button led to the wizard proceeding to the next step, while clicking the **Replace** button led to cancellation of the action. The functionality of the buttons appeared to be reversed. (Bug #47257)

- When adding inserts with a `NULL` value in a column, MySQL Workbench incorrectly added single quotation marks to the NULL value.

  > **Note**
  >
  > Note, when entering a `NULL` value right-click the button next to the value and select **Set selection to NULL**, otherwise `NULL` will be interpreted as a string literal.

  (Bug #47122)

- MySQL Workbench crashed on launch on OS X 10.6.0. (Bug #46953)

- If the Default Storage Engine was selected as `MyISAM` in the **Model Options** dialog, when a new table was created in the EER Diagram it was found to have a storage engine type of `InnoDB`. (Bug #46752)

- When a model containing invalid/broken foreign key definitions was loaded into MySQL Workbench, the errors were detected and repaired.

  However, when the model was saved and reloaded it contained changed data types. All `INTEGER` columns were changed to `INTEGER(11)`. Further, some `BOOLEAN` columns were changed to `BOOLEAN(1)`. (Bug #46467)

- If the Table Editor had been invoked then the Text Boxes in the **Tools**, **Preferences** dialog became vertically misaligned. This only happened for MySQL Workbench running on OS X. (Bug #46255)

- When a connection was selected in the DB Connection Editor it appeared to flicker a number of times before MySQL Workbench crashed. (Bug #46065)

- When a database with Stored Procedures was reverse-engineered into MySQL Workbench the Stored Procedures were not displayed in the Routine Editor, and so could not be edited. (Bug #45704)

- When running MySQL Workbench on OS X, if a table was added to the model diagram and deleted the application crashed. This happened for a new diagram from a schema imported from a live database. (Bug #45692)

- During Forward Engineering, clicking the **Copy to Clipboard** button generated code that contained an extra newline per line. (Bug #45579)

- Attempts to rebuild the MySQL Workbench source RPM failed. The RPM appeared to contain an unmodified template `mysql-workbench.spec.in` instead of the correct spec file with variable placeholders replaced by actual values.

  When using the following command to rebuild the RPM:

  ```
  shell> rpmbuild -ba --clean SPECS/mysql-workbench.spec.in
  ```

  This error was generated:

  ```
  error: File /usr/src/packages/SOURCES/mysql-workbench-oss-@VERSION@.tar.gz:
  No such file or directory
  ```

  Further, the spec file in the package had the incorrect suffix ".spec.in" instead of ".spec". (Bug #45515)

- On OS X, it was not possible to resize a Text Object on the EER Diagram canvas. (Bug #45472)

  References: See also: Bug #39887.

- It was not possible to assign columns to indexes because the **Column** check boxes did not respond to mouse events. (Bug #45260)

- MySQL Workbench generated a segmentation fault when clicking either the **NN** or **AI** check boxes on the **Columns** tab of the Table Editor. (Bug #45075)

- In the **Columns** tab of the Table Editor, if the column was of type `ENUM` and was given a default value, when an attempt was made to forward engineer the schema it would not validate. (Bug #44368)

- In the Physical Schemata pane if more schema were added than could fit within the pane, these schema could not be viewed because there was no ability to scroll the pane. Further, double-clicking the schema in the Catalog pane did not locate the schema in the Physical Schemata pane.

  MySQL Workbench was changed so that a small down arrow button was added to the right side of the Physical Schemata tab bar. This provides a list to select a specific schema tab. (Bug #39735)

- When **Help**, **About** was selected from the main menu, it was not possible to copy MySQL Workbench version information to the clipboard. (Bug #39610)

- When a diagram was exported as PNG it used the height and width of the model as displayed in the EER Diagram. This resulted in the exported picture being too small or too large, rather than being scaled to a consistent size. (Bug #36226)

Changes in MySQL Workbench 5.2.2 (2009-07-27)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.1.

Bugs Fixed

- The **Synchronize Model with Database** wizard contain a spelling mistake. The word "synchronization" was mispelled as "synchronizatiob". (Bug #45939)

- MySQL Workbench 5.1.16 failed to create INSERTs in the exported DDL for some tables. (Bug #45920)

- MySQL Workbench crashed at startup on OS X. (Bug #45869)

- If MySQL Workbench gave the message that the MySQL Server was no longer available (because of timeout due to inactivity) then MySQL Workbench crashed when the user tried to reconnect. (Bug #45123)

- The UML relationship notation was incorrect.

  When setting a Foreign Key to NULLable, the table referenced by the Foreign Key should be marked as optional. However, MySQL Workbench marked the table containing the Foreign Key itself as optional. (Bug #45069)

- If a user added a `LIMIT` clause to a query, the automatically added `LIMIT 0,1000` clause caused a syntax error. (Bug #45051)

- The new SQL IDE, introduced in 5.2, did not support returning results from procedures. When any routine was called, there were no results displayed in the query editor window. However, the log contained the message "Response: OK".

  When another query was run on the same connection, the log message was:

  ```
  Error Code: 2014 Commands out of sync; you can't run this command now
  ```

  (Bug #44910)

Changes in MySQL Workbench 5.2.1 (2009-05-22)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.2.0.

Changes in MySQL Workbench 5.2.0 (2009-04-30, Alpha)

This is the first alpha release of 5.2.0.

Changes in MySQL Workbench 5.1

Changes in MySQL Workbench 5.1.19 (2010-09-06)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.18.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- In the **Forward Engineer SQL Script** wizard the check box **Generate DROP SCHEMA** now causes every `CREATE SCHEMA` statement to be prepended with `DROP SCHEMA IF EXISTS ` `schemaname` `. (Bug #46706)

Bugs Fixed

- The **Omit Schema Qualifier in Object Names** option in the **Forward Engineer SQL Script** wizard appeared to have no effect. After selecting this option and proceeding through the wizard, the generated script still contained schema qualifiers. (Bug #46268)

- Synchronizing a model with a live database, without having made any changes to the model or the database, caused the model to appear as unsaved, indicating that unnecessary changes may have been made to the model. (Bug #40914)

- When synchronizing with a live database, if the direction of synchronization was changed to inbound, the script generated indicated that no inbound changes would be made. (Bug #40648)

- MySQL Workbench EER Diagram view did not permit the creation of a foreign key constraint on a primary key. (Bug #39546)

Changes in MySQL Workbench 5.1.18 (2009-09-03)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.17.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The Column Editor has been updated to remove the feature whereby a column could be toggled to a primary key by double-clicking it. Primary key status can now only be set by selecting the appropriate check box in the adjacent **Column Details** frame. (Bug #46579)

- It was not possible to change column order by dragging and dropping columns in the **Columns** tab of the Table Editor. MySQL Workbench has been changed to enable you to drag and drop a column to change the column order as required. (Bug #40601)

Bugs Fixed

- When editing a stored routine or trigger in the Table Editor, the cursor would relocate to the top of the editing window if a key was not pressed for a few seconds.

  Note

  On Windows this issue was fixed in 5.1.18. On OS X this issue was fixed in 5.2.4. On Linux this issue was fixed in 5.2.7.

  (Bug #48156)

- MySQL Workbench generated an unhandled exception when using **File**, **Export**, **Forward Engineer SQL CREATE Script**. The exception was generated if an attempt was made to generate a script so that it wrote over a script already created. (Bug #47115)

- Clicking the **Test Connection** button in **DB Connection Editor** wizard did not appear to have any effect. (Bug #47083)

- MySQL Workbench crashed on launch on OS X 10.6.0. (Bug #46953)

- When the data type of a table column was changed in the Table Editor, it was not reflected in the EER Diagram, although the tooltip was updated correctly. This only happened in MySQL Workbench 5.1.17. (Bug #46940)

- In the **Columns** tab of the Table Editor, when the empty row at the end of the column list was right clicked, MySQL Workbench crashed with this error:

```
** (mysql-workbench-bin:15234): WARNING **: /tmp/sakila.mwbd1/document.mwb.xml:26: link
'{591FC376-B82F-4F3D-B185-BA5C65B77080}' <object workbench.Workbench> key=owner could not
be resolved
** Message: unhandled message 4: wb.file.openRecentModel finished in 0.58s

glibmm-ERROR **:
unhandled exception (type std::exception) in signal handler:
what: Index out of range.

aborting...
Aborted
```

  (Bug #46937)

- The DDL was generated without foreign keys, regardless of whether the **Skip generation of foreign keys** option was turned on. (Bug #46875)

- In the **Column** tab of the Table Editor, if the **NN** check box was selected or deselected, the change was not immediately reflected in the EER Diagram, but was seen if some other operation caused the table object in the diagram to be refreshed. This also happened with the **AI** check box. (Bug #46869)

- The auto-completion of column names in the Table Editor completed names unnecessarily, requiring characters in the name to be manually deleted. This only happened on the Linux version of MySQL Workbench. (Bug #46847)

- The **Esc** key did not initiate the closing of an active dialog box. (Bug #46829)

- Editing of Text Objects did not work correctly. When **Enter** was hit, line feed did not move editing to the next line, and introduced a box character. (Bug #46789)

- The **Forward Engineer SQL Script** wizard generated invalid SQL code for a small model with foreign keys:

```
SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0;
SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='TRADITIONAL';

SET SQL_MODE=@OLD_SQL_MODE;
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```

  (Bug #46787)

- MySQL Workbench did not export Foreign Keys when using the **File**, **Export**, **Forward Engineer SQL CREATE Script** wizard, even though the option **Skip Creation of FOREIGN KEYS** check box was cleared. Further, MySQL Workbench crashed when a column with a Foreign Key was added to a table. (Bug #46783)

- If the Default Storage Engine was selected as `MyISAM` in the **Model Options** dialog, when a new table was created in the EER Diagram it was found to have a storage engine type of `InnoDB`. (Bug #46752)

- When synchronizing with a live database, the script generated included drop statements that were placed in the wrong order, this led to the a schema being dropped after it was created. (Bug #46740)

- When a N:M identifying relationship was created on a single table, a foreign key name collision occurred - both keys were given the same name. MySQL Workbench has been changed so that key names have a trailing number added to avoid conflicts. (Bug #46363)

- MySQL Workbench generated an exception when the mouse wheel was used to move between tabs in the Table Editor:

```
(mysql-workbench-bin:4864): Gtk-CRITICAL **: gtk_tree_view_unref_tree_helper: assertion
`node != NULL' failed

glibmm-ERROR **:
unhandled exception (type std::exception) in signal handler:
what: invalid index

aborting...
Aborted
```

  (Bug #46304)

- When an EER Diagram contained tables or views with underscores in their names, the context menu associated with them displayed their names incorrectly in the menu. The underscores where displayed as accelerator keys in the context menu. (Bug #46302)

- The **User Defined Types** dialog, launched from **Model**, **User Defined Types...** on the main menu, did not permit user-defined types to be changed. Further, it appeared to be possible to edit the new user type in the **User Types** side panel, but no changes made there were retained.

  MySQL Workbench has been changed to permit User Types to be edited only from the **User Defined Types** dialog, and correct operation of this dialog has been restored. (Bug #45936)

- When editing a trigger, the trigger editor would automatically insert a delimiter during a pause in typing, and also relocate the cursor. (Bug #45929)

- In the **Synchronize Model with Database** dialog the text in the upper right area of the dialog did not wrap correctly, resulting in some text not being visible. (Bug #45455)

- The DBDoc documentation generation system did not support facilities for Stored Routines, Views and Triggers. (Bug #41589)

- After using the **Help**, **Update...** to upgrade MySQL Workbench, the application failed to start correctly. After the splash screen was displayed MySQL Workbench displayed an error dialog - "MySQL Workbench has stopped working". (Bug #41460)

- In the Physical Schemata pane if more schema were added than could fit within the pane, these schema could not be viewed because there was no ability to scroll the pane. Further, double-clicking the schema in the Catalog pane did not locate the schema in the Physical Schemata pane.

  MySQL Workbench was changed so that a small down arrow button was added to the right side of the Physical Schemata tab bar. This provides a list to select a specific schema tab. (Bug #39735)

- When a diagram was exported as PNG it used the height and width of the model as displayed in the EER Diagram. This resulted in the exported picture being too small or too large, rather than being scaled to a consistent size. (Bug #36226)

- Printing of an EER Diagram did not work correctly if a table vertically spanned multiple pages. In this case pages would be printed up to and including the page that contained the first part of the table that spanned multiple pages, but the pages containing the remaining parts of the table would not be printed. This problem typically occurred when a table had more fields than could comfortably fit on a single page. (Bug #33919)

Changes in MySQL Workbench 5.1.17 (2009-08-14)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.16.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- Bug reported: If code with an error was entered into the **Triggers** tab of the Table Editor, the code disappeared when typing stopped.

  What actually happened was when a table name was given that was not that of the table currently being edited, the trigger code was moved to the table specified.

  MySQL Workbench has now been changed so that if a table name is specified other than other than that of the table being edited, then the table name is highlighted as a syntax error, rather than moving the trigger code to the table actually specified. (Bug #46349)

- When a model with multiple EER Diagrams was opened, all EER Diagrams would be displayed in tabs. This happened whether or not a EER Diagram had been displayed in a tab prior to saving the model.

  MySQL Workbench has been changed so that the **EER Diagram** tab state is saved, so that when a model is opened, only those EER Diagram tabs that were open on save are restored. This prevents unnecessary cluttering of the interface. (Bug #44454, Bug #50732)

- When a Text Object was placed on an EER Diagram it could not be resized and also did not appear to automatically resize correctly around any text entered.

  Text Objects on the EER Diagram canvas can now be resized by grabbing the sizing handles that appear when the object is selected. As with Table Objects, a manual modification of the object sets the `manualSizing` attribute of the Text Object to `true`. This property can also be set in the Properties pane. This means that these Text Objects automatically expand on entering more text, but the size isn't automatically reduced when text is removed or wrapped manually. By setting this property to `false`, the Text Object size is also automatically reduced to fit the containing text. (Bug #39887)

- In the **Foreign Keys** tab it was not possible to rename a foreign key by renaming the corresponding index entry.

  MySQL Workbench has been changed so that it is possible to rename a foreign key by renaming its corresponding index. The foreign key name is now automatically updated when the index is renamed. The index name is also updated when the foreign key name is changed. (Bug #39511)

- In MySQL Workbench it was not possible to generate an export script without schema information. MySQL Workbench has been changed to include the option **Omit Schema Qualifier in Object Names**. This can be found in the **Forward Engineer SQL Script** and **Forward Engineer to Database** wizards.

  Note that this does not change the script used in Procedures or Views. If you are using schema qualifiers in these locations you will have to remove them manually. (Bug #34827)

- The menu item **Help**, **View Reported Bugs** has been added to the main menu. This opens the bugs listing for MySQL Workbench in the default browser. (Bug #32813)

Bugs Fixed

- When trying to connect to a server from MySQL Workbench, this error was generated:

```
Connection 'Server' could not be established: No bool value passed for CLIENT_COMPRESS
```

  This occurred when using connections created in MySQL Workbench 5.2.1 with 5.2.2. (Bug #46635)

- On the EER Diagram, if an Undo operation was carried out after an Autosize operation, table objects were reduced to their minimum size. (Bug #46605)

- An Unknown Exception was caught after placing a relationship between two tables in the EER Diagram. The exception generated was:

```
Unknown Exception caught in: c:\documents and settings\mysqldev\my documents\visual
studio 2008\projects\workbench\backend\windows\wbprivate.wr\src\Wb.h at line 1026
```

  (Bug #46562)

- In the **Columns** tab of the Table Editor, if a default value was added for a column, it could not then be removed. (Bug #46509)

- Calling the **Plugins**, **Catalog**, **Dump All Table Columns** item from the main menu generated this error:

```
Error executing plugin wb.catalog.util.dumpColumns: error calling
PyWbUtils.printAllColumns: 'str' object is not callable
```

  (Bug #46477)

- In the EER Diagram, if a layer was double-clicked a new tab was added to the Table Editor. However, if a relationship or table was double-clicked any existing tab would be reused, rather than a new tab being created. There appeared to be no consistent policy on how double-clicks should be handled. (Bug #46466)

- The `INSERT` statements generated for columns of type `TEXT` by the Insert Editor were not correct because the values were not quoted. Also, when the Insert Editor was closed and then reopened the last column entry was lost. (Bug #46390)

- When an attempt was made to synchronize Stored Procedures from the source database to MySQL Workbench, the Stored Procedures were deleted from the source database. (Bug #46346)

- If an attempt was made to load a new model file while a model file was already loaded, this error dialog was generated:

```
OverviewBE::get_node: invalid node 1.1
```

  (Bug #46292)

- When **Plugins**, **Catalog**, **Give a Prefix to All Tables in Catalog**, was selected from the main menu, MySQL Workbench crashed with this error:

```
** (mysql-workbench-bin:5898): WARNING **:
/home/miguel/.mysql/workbench/wb_options.xml:325: link
'b7ee49b4-67f5-11de-9d1e-0800272fd858' <object GrtObject> key=owner could not be resolved
** Message: item_activated: 0xadbb608 -> 'plugin:wb.file.newDocument'
** Message: unhandled message 4: wb.file.newDocument finished in 0.34s

** Message: item_activated: 0xaacbea8 -> 'plugin:wb.util.prefixTables'
```

```
glibmm-ERROR **:
unhandled exception (type std::exception) in signal handler:
what: request_input_becb not implemented

aborting...
Aborted
```

This only happened when running on Linux. (Bug #46280)

- If the Table Editor had been invoked then the Text Boxes in the **Tools**, **Preferences** dialog became vertically misaligned. This only happened for MySQL Workbench running on OS X. (Bug #46255)

- When an SQL Script was added and then its name changed, the name would erroneously revert back to "Script". (Bug #46246)

- Reverse Engineering from a live database failed if the server had `sql_mode` set to `ANSI_QUOTES`. (Bug #46185)

- In the **Columns** tab of the Table Editor, selecting the **AI** check box before entering a name for the column caused MySQL Workbench to crash. (Bug #46150)

- The Microsoft Windows version of MySQL Workbench leaked GDI objects, resulting in a drop in performance. (Bug #46101)

- The text contained in a Text Object in an EER Diagram was syntax highlighted. This was not appropriate for a simple text note. (Bug #46092)

- When using the **Reverse Engineer Database** wizard a Segmentation Fault was generated by MySQL Workbench on Ubuntu Linux:

```
(mysql-workbench-bin:22735): Gtk-CRITICAL **: gtk_tree_selection_get_selected: assertion
`selection->type != GTK_SELECTION_MULTIPLE' failed
** Message: item_activated: 0x30d4920 -> 'plugin:db.plugin.database.rev_eng'
** Message: unhandled message 4: db.plugin.database.rev_eng finished in 0,00s
```

(Bug #46078)

- When writing code in the Routine Editor it appeared that the code was lost if the Routine Editor was closed. (Bug #46049)

- MySQL Workbench crashed if a table was selected, right-clicked, and then the menu item **Copy SQL to Clipboard** chosen.

  MySQL Workbench also crashed with the same model if an attempt was made to export the schema using the **Forward Engineer SQL CREATE Script** wizard. (Bug #46025)

- In the EER Diagram, when hovering the cursor over a column in a table, the hint box contained the text associated with the subsequent column, and the first column hint box contained the name of the table. (Bug #45997)

- The **Synchronize Model with Database** wizard contain a spelling mistake. The word "synchronization" was mispelled as "synchronizatiob". (Bug #45939)

- If an attempt was made to copy and paste a trigger, the trigger code would revert to the source trigger, when the pasted trigger was edited.

  MySQL Workbench has been changed so that triggers are associated with the table in which they are edited. If a trigger has the wrong schema or table pointed to by its `CREATE TRIGGER` statement, it will be highlighted as a syntax error. (Bug #45931)

- MySQL Workbench 5.1.16 failed to create INSERTs in the exported DDL for some tables. (Bug #45920)

- MySQL Workbench crashed at startup on OS X. (Bug #45869)

- When a model was synchronized with a live database, and only stored procedures needed to be synchronized, this error was generated:

```
ERROR: Error 1046: No database selected
```

(Bug #45867)

- In MySQL Workbench running on OS X, if any changes were made in the **Page Setup** dialog, this error was generated:

```
builtin:wb.page_setup

Type mismatch: expected object of type app.PaperType, but got app.PaperType
```

Note, the **Page Setup** dialog is accessed by selecting **File**, **Page setup...** from the main menu. (Bug #45861)

- The **Forward Engineering SQL ALTER Script** wizard generated `DROP INDEX` and `ADD UNIQUE INDEX` statements for any unique index, even for one that had not been modified. These unnecessary statements had to be manually deleted from the script. (Bug #45830)

- When compiling the MySQL Workbench source with GNU C Compiler (GCC) version 4.4.0, the compilation failed because the version of the Boost library used was not compatible with GCC 4.4.0.

  The version of the Boost library required for compatibility with GCC 4.4.0 is 1.37 or later. (Bug #45798)

- MySQL Workbench crashed and also lost procedure objects when attempting to synchronize with a live database. (Bug #45773)

- When building MySQL Workbench on PowerPC/PowerPC64 on Linux, the build failed because "bswap32" was not defined.

```
In file included from src/template_string.cc:47:
src/base/arena.h: In member function 'void google::BaseArena::ReturnMemory(void*,
size_t)':
src/base/arena.h:211: warning: comparison between signed and unsigned integer expressions
src/template_string.cc: In function 'uint32 UNALIGNED_LOAD32(const void*)':
src/template_string.cc:120: error: 'bswap32' was not declared in this scope
```

(Bug #45629)

- Relationship lines were not always drawn on the EER Diagram. (Bug #45583)

- During Forward Engineering, clicking the **Copy to Clipboard** button generated code that contained an extra newline per line. (Bug #45579)

- Attempts to rebuild the MySQL Workbench source RPM failed. The RPM appeared to contain an unmodified template `mysql-workbench.spec.in` instead of the correct spec file with variable placeholders replaced by actual values.

  When using the following command to rebuild the RPM:

```
shell> rpmbuild -ba --clean SPECS/mysql-workbench.spec.in
```

This error was generated:

```
error: File /usr/src/packages/SOURCES/mysql-workbench-oss-@VERSION@.tar.gz:
```

```
No such file or directory
```

Further, the spec file in the package had the incorrect suffix ".spec.in" instead of ".spec". (Bug #45515)

- MySQL Workbench 5.1.13 running on Ubuntu Linux crashed when it attempted to load a model file created using MySQL Workbench 5.0 on Windows XP. The same model file did load correctly using MySQL Workbench 5.1.12. (Bug #45491)

- On OS X, it was not possible to resize a Text Object on the EER Diagram canvas. (Bug #45472)

  References: See also: Bug #39887.

- When synchronizing a model with a live database, clicking the **Update Model** actually caused the server to be updated as if **Update Source** had been clicked. (Bug #45456)

- The settings for `ON UPDATE` and `ON DELETE` in Foreign Key/Relationship Defaults set in the **Model** tab of **Tools**, **Preferences**, were not taken into account when new tables and relationships were created. (Bug #45393, Bug #45239)

- The Inserts Editor did not have functionality to remove a row once added. This problem only occurred with MySQL Workbench running on Linux. (Bug #44458)

- In the **Columns** tab of the Table Editor, if the column was of type `ENUM` and was given a default value, when an attempt was made to forward engineer the schema it would not validate. (Bug #44368)

- In the **Forward Engineer SQL Script** wizard, on the **SQL Object Export Filter** page, if **Back** was clicked to go to the **SQL Export Options** page, and then **Next** was clicked to return to the **SQL Object Export Filter** page, on that page all sections were duplicated. If this was repeated the objects were triplicated and so on. (Bug #44317)

- In the **Columns** tab of the Table Editor, when setting a column data type to `ENUM` it was not possible to choose Collation for the column details. Only the Table Default collation was available. (Bug #43352)

- In the **Columns** tab of the Table Editor, a column name could be entered with leading or trailing spaces. That led to this error when exporting the schema:

```
ERROR 1166 (42000): Incorrect column name 'name  '
```

  (Bug #43345)

- The script created by Forward Engineer SQL CREATE Script failed with an error if the model contained a view that referenced a column defined in another view. (Bug #43061)

- In the **Columns** tab of the Table Editor, if a column is dragged and dropped to change its position, after the move the column highlighted is not the one moved. (Bug #42476)

- In the **Columns** tab of the Table Editor, if a column was deleted, and it had inserts in the **Inserts** tab, in the **Inserts** tab the last entry would be incorrectly deleted. (Bug #41931)

- In the **Foreign Keys** tab of the Table Editor, the values of the **On Update** and **On Delete** fields, in the **Foreign Key Options** pane, did not always refresh for each Foreign Key constraint selected in the table on the left side.

  For example, if the currently selected constraint was `SET NULL` for **On Delete**, and then a different selection was made for a constraint that has no action specified for **On Delete**, the field remained with

the value from the previous selection, which gave a false indication that such action was specified in the definition of the newly selected constraint.

Note that incorrect field values were only displayed when the last selected constraint did not have an action defined. (Bug #41887)

- When the flags of a User Defined Type were changed in the **User Types** panel, the change was not updated in the EER Diagram, the Table Editor, or the exported SQL. (Bug #41453)

- A model failed to synchronize with a live database because a column of type `DOUBLE` was exported as a type `DOUBLE(256)`. (Bug #41290)

- When a MySQL Workbench model was synchronized with a live database, a foreign key relationship, recently added to the database, was not reflected in the EER Diagram. Although the foreign key was created in the table object, the relationship connector widget was not drawn on the canvas. (Bug #41219)

- In the **Columns** tab of the Table Editor, when moving a column lower in the list of columns using drag and drop, the column was incorrectly placed one position below the point indicated by the position marker. (Bug #40641)

- When **Connect to Columns** was selected for the Relationship Notation option, the line connecting a foreign key to its referenced table was drawn to the incorrect column. (Bug #40627)

- When **Help**, **About** was selected from the main menu, it was not possible to copy MySQL Workbench version information to the clipboard. (Bug #39610)

- Foreign Key checks were not enabled before the standard inserts section of the script started. (Bug #35180)

Changes in MySQL Workbench 5.1.16 (2009-06-30, General Availability)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.15. This is the first General Availability (GA) level release of 5.1.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- The MySQL Workbench **Tools**, **Options...** menu item has been renamed to **Preferences...**, and the corresponding dialog now has the title **Workbench Preferences**. (Bug #44462)

- When a relationship was edited in the EER diagram, a new tab was created in the Table Editor, rather than using any existing relationship tab. For example, if one relationship tab existed, and then another relationship was edited, a new tab would be created, rather than using the existing tab. (Bug #39624)

- In an EER diagram, if a table contained enums with many values, the table was excessively wide, and had to be manually resized.

Version 5.1.16 now features a new preference setting which lets you specify the maximum length of a data type definition string, to be displayed in a table in an EER diagram. This is available for `ENUM` and `SET` types. Data type definitions that exceed these lengths are displayed as `SET/ENUM(...)` in the EER diagram.

The new setting can be found by selecting **Tools**, **Preferences** from the main menu, and then selecting the **Diagram** tab. The settings are then available in the **Tables** panel. (Bug #34919)

Bugs Fixed

- When an attempt was made to add a new table to a schema page other than the default **MySQL Model** page, this error was generated:

```
Unknown Exception caught in c:\documents and settings\mysqldev\my documents\visual studio
2008\projects\workbench\backend\windows\wbprivate.wr\src\Wb.h at line 1026
```

(Bug #45821)

- When a model was exported using either **File**, **Export**, **Forward Engineer SQL CREATE Script** or **Database**, **Forward Engineer...**, MySQL Workbench crashed with a segmentation fault. This occurred after the objects to export were selected, it did not matter if one or all objects were selected. This occurred using MySQL Workbench 5.1.14 RC on Ubuntu Linux and Windows. (Bug #45718)

- The data type `ENUM` did not accept parenthesis in its values. (Bug #45607)

- In the **Columns** tab of the Table Editor, when a column was right-clicked to display the context-sensitive menu, the **Move Up** and **Move Down** menu items were disabled. This meant that the order of the columns could not be changed in the normal manner. (Bug #45590)

- Right-clicking in a blank area of the **User Types** window generated an exception:

```
System.NullReferenceException: Object reference not set to an instance of an object.
   at MySQL.GUI.Workbench.UserDatatypesForm.contextMenuStrip1_Opening(Object sender,
CancelEventArgs e)
   at System.Windows.Forms.ToolStripDropDown.OnOpening(CancelEventArgs e)
...
```

(Bug #45490)

- When attempting to enter trigger code into the **Triggers** tab of the Table Editor, a timer appeared to periodically fire, which caused the delimiter to be added while typing.

  This only happened when using the OS X version of MySQL Workbench. (Bug #44264)

- In the **Forward Engineer SQL Script** wizard, the location opened by the **Browse** button defaulted to the MySQL Workbench install directory. However, after an output script file was set the location opened by the **Browse** button returned to the default, rather than remembering the last location accessed. This required navigating to the correct location each time the script was regenerated. (Bug #43837)

- MySQL Workbench displayed incorrect icons in the Table Editor. The icons for columns displayed in the table editor did not match those displayed in the EER Diagram. (Bug #42794)

- In the **Forward Engineer SQL CREATE Script** wizard, the **Generate INSERT Statements for Tables** option did not take into account which tables were excluded in the SQL Export Filters. All insert statements were generated, including those for tables that had been excluded in the export filters. (Bug #40913)

- In the EER Diagram, right-clicking to edit a table sometimes failed with the following error:

```
Cannot execute db.mysql.plugin.edit.table
Plugin requires unhandled argument type.
```

(Bug #39513)

- When a table was renamed, inserts that had been created for it disappeared. Further, when a table was updated in **Physical Schemata** or in the **Catalog** pane, inserts were not updated. (Bug #38654)

- If font size was changed in the **Appearance** tab of the **Workbench Preferences** dialog, this had no immediate effect on the visual appearance of the EER Diagram. (Bug #38198)

- In the **Indexes** tab of the Table Editor, it was not possible to change the order number of a column for an index of type `PRIMARY` in the **Index Columns** panel, using the list available in the **#** column. (Bug #37273)

- When zooming an EER Diagram, the text in a table would sometimes extend beyond the edge of the table box. (Bug #35407)

Changes in MySQL Workbench 5.1.15 (2009-06-26)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.14.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- A routine object was deleted if its code was removed from the routine group. This behavior has now been noted in the main documentation. (Bug #45738)

Bugs Fixed

- Selecting **Database**, **Generate Catalog Diff Report** from the main menu caused MySQL Workbench to crash. (Bug #45652)

- Generated INSERT statements did not have a database name.

  The generated `INSERT` statements were at the end of the SQL output. However, there was no `USE database` statement before the group of inserts. The comment before the group of `INSERTS` did refer to the database table.

  If you had multiple databases, this generated errors on import. (Bug #45642)

- In the **Forward Engineer SQL Script** wizard, when the **Show Filter** button was clicked, the left hand panel containing database and table names was too narrow, especially if a long database name or table name was used. This made it hard to determine which tables to select. (Bug #45623)

- The **File**, **Export**, **Forward Engineer SQL CREATE Script** wizard contained malfunctioning buttons. When prompted with the message "Do you want to overwrite an existing .sql file?", the **Replace** and **Cancel** buttons had the reverse effect. Clicking **Replace** cancelled the action, whereas clicking **Cancel** proceeded to the next step. (Bug #45619)

- In Ubuntu Linux, right-clicking any item in the **Catalog**, **Layers**, **User Types**, or **History** tabs, or other tabs typically docked in the right hand side of MySQL Workbench, did not display a context-sensitive menu. (Bug #44298)

- MySQL Workbench **Synchronize Model** feature had unexpected behavior. For example, synchronizing the model with the live database would cause changes to the database, even if this was not desired. Also, if tables were dropped in the live database, and the model synchronized, the changes to the live database were not reflected in the model. Further, if a model was created and synchronized to an empty schema in the live database, when synchronization took place again, MySQL Workbench would indicate many changes were required, even if no changes had been made to the model or database. (Bug #42149)

- Double-clicking a layer in the **Layers** tab did not select it in the EER Diagram canvas. However, other objects in the **Layers** tab could be selected on the EER Diagram canvas in this manner. (Bug #34938)

- Right-clicking a relationship in the **EER Diagram** canvas, and selecting **Edit in New Window...** from the context-sensitive menu, had no effect. (Bug #34069)

Changes in MySQL Workbench 5.1.14 (2009-06-19)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.13.

Bugs Fixed

- On OS X, MySQL Workbench crashed when creating a new document after another one had been worked on.

  If editing a document, and then selecting to create a new document and not saving the current document when prompted, MySQL Workbench crashed when the save dialog closed. (Bug #45519)

- Printing an EER diagram crashed MySQL Workbench. (Bug #45518)

- When right-clicking an item that was not selected, such as a table or routine, in the **MySQL Model** tab, the item was selected without the other items being deselected.

  The expected behavior for applications in both Windows and Linux is that right-clicking an item that has not been selected, should deselect all other items. Right-clicking an already selected item should not alter any of the selections. (Bug #44268)

- When synchronizing a model with a database, rather than synchronizing only the selected tables, all tables were synchronized. (Bug #43485)

Changes in MySQL Workbench 5.1.13 (2009-06-12)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.12.

Bugs Fixed

- When using the **Forward Engineer SQL Script** wizard, the **SQL Object Export Filter** step displayed duplicate items. (Bug #45241)

- When using the **Generate Catalog Diff Report** wizard, the Stored Connection information was not automatically populated when a previously defined Stored Connection was selected. (Bug #45234)

- Adding Insert records for a table worked correctly. However, there was no way to remove the records once the **Open Editor** facility has been used to add them. (Bug #45233)

- On OS X, using the **Forward Engineer to Database**, or **Forward Engineer SQL Script** wizards caused MySQL Workbench to generate this error message:

  ```
  The application MySQLWorkbench quit unexpectedly after it was relaunched.
  ```

  (Bug #45229)

- When defining a primary key with a user-defined data type, it was not possible to set the auto-increment (AI) attribute. Clicking the AI check box had no effect.

  To circumvent this problem it was possible to temporarily change the data type of the column to a built-in data type such as `INT`, set the AI attribute and then change the data type back to the desired user-defined data type. The model could then be saved. However, if this model was reopened and **File**,

Export, **Forward Engineer SQL CREATE Script** used to generate a script, MySQL Workbench would crash. (Bug #45165)

- MySQL Workbench did not limit foreign key name length. This meant that an exported SQL script was invalid and MySQL Server generated an error on attempting to import it:

```
1059 - ER_TOO_LONG_IDENT
```

(Bug #45139)

- On OS X, if the mouse pointer was used to select an entity and then **Command+Delete** was pressed before the tooltip appeared, MySQL Workbench crashed when the delete was confirmed. (Bug #45042)

- Foreign key names must be unique. However, MySQL Workbench default generated foreign key names were sometimes identical, causing Forward Engineer SQL CREATE Script to fail. (Bug #45027)

- Synchronization of the model with an external database failed to report errors. This meant there was the possibility of an incomplete synchronization, without the developer being informed. (Bug #45024)

- Changing a relationship's visibility had no effect.

  If a relationship was right-clicked in the EER diagram, **Edit Relationship** selected, and then the **Relationship** tab selected, the visibility radio buttons were displayed. However, if the visibility settings were changed there was no effect. (Bug #44988)

- On Ubuntu Linux, MySQL Workbench crashed with a segmentation fault when an attempt was made to save the model. (Bug #44974)

- On the Linux version of MySQL Workbench it was not possible to rename a layer by double-clicking it in the **Layers** window (which is typically docked to the right hand side of the screen).

  A layer editor has now been added to the Linux version of MySQL Workbench. This can be activated by double-clicking the layer's title. (Bug #44972)

- It was not possible to rename a table created using **Add Table**, by copying text into its text field. (Bug #44913)

- In the **Flags** box, which is located in the **Column Details** panel in the **Table Editor**, the same flags were not listed as available for both the `INT` and `INTEGER` data types. `INT` has both `UNSIGNED` and `ZEROFILL` listed, but these were not listed for the column if it was of type `INTEGER`. Also, the **AI** check box was not selectable for columns defined as `INTEGER`. (Bug #44872)

- Using the **Foreign Keys** tab of the **Table Editor**, it was not possible to correctly create multiple foreign key relationships. (Bug #44701)

- MySQL Workbench appeared not to display table rows in an EER diagram for tables that had more than 20 columns.

  MySQL Workbench now includes the ability to manually resize the table, besides automatically limiting the number of columns to a user selectable value, by order of appearance, regardless of being key columns or not. (Bug #44675)

- On Debian Linux (Lenny), after adding a second table and selecting AI on the first column element, MySQL Workbench generated a segmentation fault. (Bug #44612)

- In the **Workbench Preferences** dialog, on the **Diagram** tab, in the **Tables** panel, the check boxes **Show Column Types** and **Show Column Flags** did not work correctly. Selecting or deselecting **Show Column Types** only had an effect when MySQL Workbench was restarted. Selecting **Show Column Flags** had no effect at all, and the flags were never displayed. (Bug #44586)

- When in the **Columns** tab of the **Table Editor**, if an attempt was made to change a column data type to `INTEGER(n)` this would have no effect and the column data type would remain unchanged. However, if `INT(n)` was entered this was accepted and the data type changed accordingly. (Bug #44552)

- When a new index was created in the **Indexes** tab for a table that already had indexes, the previously displayed index field remained selected. This caused concern that the newly created index would be on the wrong field. (Bug #44532)

- The **Forward Engineer SQL Script** wizard did not permit the SQL script text to be copied using the keyboard shortcut. Only the mouse could be used to select and copy the text. (Bug #44531)

- On Ubuntu Linux, the following MySQL Workbench menu items did not work: **Page Setup**, **Print Preview** and **Print**.

  If those menu items were selected, these console messages were generated:

```
** Message: item_activated: 0xaa44bf0 -> 'builtin:wb.page_setup'
** Message: show_progress_becb not implemented
** Message: unhandled message 4: wb.print.setup finished in 0,00s

** Message: show_progress_becb not implemented
create font Helvetica 0 0 11,000000 (200)** Message: item_activated: 0xa4c9800 ->
'plugin:wb.print.printPreview'
** Message: show_progress_becb not implemented

** (mysql-workbench-bin:11732): WARNING **: Could not open editor shared object
'/usr/lib/mysql-workbench/plugins/'
** Message: unhandled message 4: wb.print.printPreview finished in 0,00s

** Message: show_progress_becb not implemented
** Message: item_activated: 0xa4cec08 -> 'plugin:wb.print.print'
** Message: show_progress_becb not implemented
** Message: unhandled message 4: wb.print.print finished in 0,00s

** Message: show_progress_becb not implemented
create font Helvetica 0 0 11,000000 (300)
```

  (Bug #44524)

- When a Routine Group was renamed, this was not immediately updated in the EER diagram. (Bug #44503)

- When `Workbench:copyToClipboard()` was used from within a plugin, only garbage characters were copied to the Windows clipboard. This affected the operation of plugins.

  When a plugin attempted to output the string "abcdefghijklmnopqrstuvwxyz0123456789!§$%&/()=" a runtime exception was generated. (Bug #44461)

- The **Forward Engineer SQL Script** wizard would write over an existing file without prompting the user for confirmation. (Bug #44437)

- On OS X, an application window's red close button should contain a solid circle if the current document is unsaved. However, for MySQL Workbench this did not work correctly. Although the circle was initially shown, it was not displayed after subsequent edits to the model. (Bug #44435)

- When attempting to delete an existing EER diagram, MySQL Workbench crashed.

  The origin of the diagram seemed to have no bearing on whether the crash occurred because it happened both with diagrams created from reverse engineering and those created independently. (Bug #44407)

- Deleting or cutting a Relation from an EER diagram crashed MySQL Workbench. (Bug #44340)

- When Relations were deleted using the Foreign Keys tab, MySQL Workbench intermittently generated an exception:

```
System.AccessViolationException: Attempted to read or write protected memory. This is
often an indication that other memory is corrupt.
   at System.Windows.Forms.Control.MarshaledInvoke(Control caller, Delegate method,
Object[] args, Boolean synchronous)
   at System.Windows.Forms.Control.Invoke(Delegate method, Object[] args)
   at System.Windows.Forms.Control.Invoke(Delegate method)
   at MySQL.GUI.Workbench.Plugins.ObjectEditorPlugin.RefreshFormDataInvoke()
   at MySQL.Grt.DelegateSlot0<void\,void>.cpp_callback()
   at sigc.pointer_functor0<void>.()(pointer_functor0<void>* )
   at sigc.adaptor_functor<sigc::pointer_functor0<void>
>.()(adaptor_functor<sigc::pointer_functor0<void> >* )
   at sigc.internal.slot_call0<sigc::pointer_functor0<void>,void>.call_it(slot_rep* rep)
   at MySQL.Grt.Db.TableEditorBE.remove_fk(NodeId fk)
   at
MySQL.GUI.Workbench.Plugins.DbMysqlTableEditor.deleteSelectedFKsToolStripMenuItem_Click(Ob
ject sender, EventArgs e)
   at System.Windows.Forms.ToolStripItem.RaiseEvent(Object key, EventArgs e)
   at System.Windows.Forms.ToolStripMenuItem.OnClick(EventArgs e)
   at System.Windows.Forms.ToolStripItem.HandleClick(EventArgs e)
   at System.Windows.Forms.ToolStripItem.HandleMouseUp(MouseEventArgs e)
   at System.Windows.Forms.ToolStripItem.FireEventInteractive(EventArgs e,
ToolStripItemEventType met)
   at System.Windows.Forms.ToolStripItem.FireEvent(EventArgs e, ToolStripItemEventType
met)
   at System.Windows.Forms.ToolStrip.OnMouseUp(MouseEventArgs mea)
   at System.Windows.Forms.ToolStripDropDown.OnMouseUp(MouseEventArgs mea)
   at System.Windows.Forms.Control.WmMouseUp(Message& m, MouseButtons button, Int32
clicks)
   at System.Windows.Forms.Control.WndProc(Message& m)
   at System.Windows.Forms.ScrollableControl.WndProc(Message& m)
   at System.Windows.Forms.ToolStrip.WndProc(Message& m)
   at System.Windows.Forms.ToolStripDropDown.WndProc(Message& m)
   at System.Windows.Forms.Control.ControlNativeWindow.OnMessage(Message& m)
   at System.Windows.Forms.Control.ControlNativeWindow.WndProc(Message& m)
   at System.Windows.Forms.NativeWindow.Callback(IntPtr hWnd, Int32 msg, IntPtr wparam,
IntPtr lparam)
```

  (Bug #44326)

- When exiting MySQL Workbench with unsaved changes, you are given the choices **Save**, **Don't Save** and **Cancel**. When **Cancel** was clicked, MySQL Workbench exited without saving, rather than returning to the application without making any changes.

  This only happened when clicking the main application Close button, in the upper right corner. It did not happen if the application was exited by selecting **File**, **Exit** from the main menu. (Bug #44267)

- The **Copy SQL to Clipboard** menu item, which was normally available when right-clicking a table in MySQL Workbench, was not displayed. (Bug #44254)

- If the order of columns was changed in the **Columns** tab, this was not reflected in the EER diagram. (Bug #44240)

- In the table editor the `VARBINARY` data type was not listed in the list for columns. (Bug #44023)

- In the table editor, when a column was added with a data type of `TIMESTAMP`, and the default value of 0 entered, MySQL Workbench erroneously added quotation marks around the 0. Any generated SQL script therefore contained errors, and would subsequently fail. (Bug #44006)

- The **Forward Engineer SQL Script** wizard did not emit table INSERT statements in the generated script when requested to do so. (Bug #43799, Bug #44385)

- When synchronizing a model with a database, using the **Synchronize Model with Database** wizard, the data type translation resulted in errors. (Bug #42728)

- Omit Schema Qualifiers did not omit schema for foreign keys.

  When using **File**, **Export**, **Forward Engineer SQL CREATE Script** and selecting the **Omit Schema Qualifiers** check box, the schema for foreign keys were not omitted. (Bug #42328)

- When editing a column's type in the **Columns** tab of the **Table Editor**, the list for selecting the data type displayed `BOOL`. However, once that had been selected the data type was displayed as `BOOLEAN`.

  Further, if a column data type was set by entering `INTEGER` in the **Datatype** column, it then changed to `INT` on pressing return. (Bug #41934)

- MySQL Workbench frequently crashed with an unknown exception in Wb.h at line 1010.

  This occurred while working on tables within EER diagrams on a design consisting of more than 190 tables and 20 EER diagrams. (Bug #41325)

- Invisible characters in a reverse engineered script caused errors to be generated when the same script was forward engineered.

  The problem was due to the reverse engineered script containing a mixture of \n, \r and \r\n line endings. These are now normalized to \n in the reverse engineering code. The validation process now also checks SQL code objects to ensure valid line endings. (Bug #41254)

- When working in the **Routines** tab of the **Routine Group** editor, the **Routine** tab did not appear to save changes to routine code.

  If code was copied from an external application into the **Routine** tab, then the model saved and MySQL Workbench exited, then on restarting MySQL Workbench, any changes to the routine code were lost. (Bug #40885)

- When trying to synchronize a model to a database, tables defining some columns as `FLOAT` or `DOUBLE` prevented the synchronization SQL script from working.

  The SQL generated used the syntax `FLOAT(256)` or `DOUBLE(256)` which was rejected by MySQL Server 5.0.51a.

  Editing the generated script manually to use just `FLOAT` or `DOUBLE` worked. However, MySQL Workbench then assumed the target table was not correctly synchronized, and prompted the user accordingly. (Bug #40169)

- When a relationship was fully visible in the EER diagram, if the user chose to have it drawn split, or hidden, MySQL Workbench behaved as expected. However, if the relationship was hidden, and the user chose to have it drawn split, or fully visible again, the relationship was not properly redrawn. The user had to move either of the tables involved in the relationship to have the relationship redrawn. (Bug #40015)

- When editing a foreign key in the **Foreign Keys** tab of the Table Editor, and then removing the corresponding relationship from the EER Diagram canvas, the **Foreign Keys** tab remained open and populated, instead of being cleared and closed. (Bug #39478)

- When tables with relationship connectors were dragged or copied from one EER diagram to another, the connectors were not always drawn. (Bug #38545)

Changes in MySQL Workbench 5.1.12 (2009-04-27)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.11.

Bugs Fixed

- In the **Foreign Key** tab of the Relationship Editor, the two buttons labeled **Edit Table...** were inactive. Clicking them had no effect. (Bug #45391)

- When running on Ubuntu Linux the edit window in MySQL Workbench was not expanded horizontally by default.

  When editing existing routines, the horizontal scroll-bar covered 100% of the visible area, no matter how long any of the rows are. This meant that if a row expanded outside the visible area, it was not possible to scroll sideways to see the rest of the row. All of the row was there, but the right part was not visible. (Bug #44296)

- It was not possible to change the Default Collation for any schema. (Bug #44220)

Changes in MySQL Workbench 5.1.11 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.10.

Bugs Fixed

- MySQL Workbench crashed when attempting to delete an EER diagram from the **EER Diagrams** section of the main project tab. (Bug #44245)

- When using MySQL Workbench on Linux, if a new layer was created it was not possible to then change the layer's name in the Properties tab. (Bug #44202)

Changes in MySQL Workbench 5.1.10 (2009-04-10)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.9.

Bugs Fixed

- It was not possible to edit the cardinality of existing relations using the MAC OS X version of MySQL Workbench. Attempting to change the cardinality using the radio buttons had no effect. For example, it was not possible to change a relation from one-to-many to one-to-one. (Bug #44043)

- When a nonstandard port was specified in **Database**, **Forward Engineer...**, such as 3307, MySQL Workbench still attempted to connect to port 3306. (Bug #44014)

- When a foreign key was created, a column was selected in the original table, but no column was selected in the foreign table. If the project was saved and an attempt was made to reload it, this error message was generated:

```
Unserializing GRT data - Inserting null value to not null list
```

This error prevented MySQL Workbench from opening the project file, resulting in all model data being inaccessible. (Bug #43997)

- The name of the table displayed on the tab in the Table Editor did not update when the table name was changed in the editor. (Bug #43960)

- Data entered using the **Inserts** tab in the Table Editor was not displayed in the Inserts tab, but was saved to the MWB file when the project was saved. The data could be viewed in MySQL Workbench

running on platforms other than OS X, but the OS X version of MySQL Workbench did not display the data entered using the Inserts tab. (Bug #43907)

- When a plugin was installed using the **Tools**, **Install Plugin/Module File...** menu option, MySQL Workbench copied the selected plugin and reported:

```
'Copied module /Users/tilman/Desktop/SymfonyYmlExport.grt.lua to
'/Users/tilman/Library/Application Support/MySQL/Workbench/modules/SymfonyYmlExport.grt.lua'
Please restart Workbench for the change to take effect.'
```

When restarted, MySQL Workbench crashed. MySQL Workbench could only be fully restarted by first removing the installed file from the modules directory. (Bug #43906)

- Soon after MySQL Workbench was launched, error popup dialogs were generated with this message:

```
"AXDocument" attribute unsupported by <some component>
```

This occurred on the OS X version of MySQL Workbench, when a third-party usage monitoring utility was running. This error was due to the fact that custom exception reporting was disabled by default. (Bug #43872)

- An attempt to edit a table resulted in this error:

```
The plugin db.mysql.editors.mwbplugin does not
  contain the published object DbMysqlTableEditor
```

This only happened if the project was opened immediately after MySQL Workbench was started. (Bug #43863)

- If a MySQL Workbench project file was opened, all tabs closed, and then **File**, **New** selected, MySQL Workbench crashed with this error message:

```
Unknown exception caught in c:\users\tax\documents\visual studio 2008\projects\wb
5.1\workbench\backend\windows\wbprivate.wr\src\Wb.h at line 994.
```

(Bug #43850)

- If an attempt was made to use the undo feature after having first saved a project, MySQL Workbench crashed. (Bug #43849)

- When creating a new 1:n link MySQL Workbench froze. (Bug #43812)

- Using the Navigator to zoom in and out of an EER diagram view caused MySQL Workbench to crash. (Bug #43782)

- The Many-to-Many Table generated by MySQL Workbench was of engine type Server Default. It should have been of type `InnoDB`. (Bug #43776)

- On opening a diagram the file tables layout was broken. All tables were placed in the top left corner.

  It appeared that MySQL Workbench stored the diagram layout in the MWB file correctly but it was not retrieved correctly on file load. (Bug #43455)

- In the EER Diagram view, if the Tables folder was expanded in the Catalog Palette, and then a table dragged onto the EER Diagram, the expanded Tables folder immediately collapsed. (Bug #41922)

Changes in MySQL Workbench 5.1.9 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.8.

Bugs Fixed

- In Model View after performing **Edit**, **Select**, **Select All**, it was not then possible to undo the operation. (Bug #43225)

- When a script was processed by **File**, **Import**, **Reverse Engineer MySQL CREATE Script**, columns with a boolean data type had their data type ignored. As a result, the type of the column in the Table Editor was empty. (Bug #43094)

Changes in MySQL Workbench 5.1.8 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.7.

Bugs Fixed

- In the **Reverse Engineer Database** wizard it was not possible to select only one table to reverse engineer, and then proceed to the next step. (Bug #45881)

- Using the Inserts Editor caused MySQL Workbench to crash. The error message generated when used was:

```
** Message: ==============================
** Message: refresh_gui_becb unhandled refresh: 20 RefreshTimer
```

This was due to the fact that, in the 5.1.4 Alpha version of MySQL Workbench, the Inserts Editor had not been implemented. (Bug #40671)

Changes in MySQL Workbench 5.1.7 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.6.

Bugs Fixed

- MySQL Workbench 5.1.7 for OS X crashed at startup. It was looking for `libmysqlclient.15`, which was not found in `/usr/local/mysql/lib`. The error generated was:

```
Process:          MySQLWorkbench [14915]
Path:             /Applications/MySQLWorkbench.app/Contents/MacOS/MySQLWorkbench
Identifier:       com.sun.MySQLWorkbench
Version:          ??? (???)
Code Type:        X86 (Native)
Parent Process:   launchd [95]

Date/Time:        2009-02-02 18:53:52.120 +0100
OS Version:       Mac OS X 10.5.6 (9G55)
Report Version:   6

Exception Type:   EXC_BREAKPOINT (SIGTRAP)
Exception Codes:  0x0000000000000002, 0x0000000000000000
Crashed Thread:   0

Dyld Error Message:
  Library not loaded: /usr/local/mysql/lib/libmysqlclient.15.dylib
  Referenced from: /Applications/MySQLWorkbench.app/Contents/MacOS/MySQLWorkbench
  Reason: image not found
```

Note that MySQL was installed, but the specific version of client library required was not present. (Bug #42550)

Changes in MySQL Workbench 5.1.6 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.5.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- MySQL Workbench has been changed so that layers and tables listed in the Layers palette are sorted in alphabetic order, making it easier to find the required object. (Bug #39781)

Bugs Fixed

- A dialog displayed a message with a missing file name. The message displayed was:

```
Import of SQL script file '' has finished successfully.
```

Note the file name is missing from the message.

This dialog is located in the **File**, **Import**, **Reverse Engineer SQL CREATE Script** wizard. It is displayed on the page after importing the file, clicking **Next** and then **Execute**. (Bug #39922)

- The **Advanced** button displayed the text label **&Advanced**.

This button is located in the **File**, **Import**, **Reverse Engineer SQL CREATE Script** wizard. It is displayed on the page after importing the file. (Bug #39921)

Changes in MySQL Workbench 5.1.4 (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.1.3.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- There was a problem where relationships that were hidden could then not be selected to bring up their relationship editor. Relationships can now be selected as objects in the Layer window. Once selected, the relationship's `visible` property can be set to `True` in the Properties window, thus making the relationship visible again. (Bug #40167)

Bugs Fixed

- Loading a model using the Linux version of Workbench resulted in a crash. However, the model loaded correctly with the Windows versions of Workbench. (Bug #39992)

- A model created using the Windows version of Workbench caused the Linux version of Workbench to crash on loading the model. (Bug #39983)

Changes in MySQL Workbench 5.0

Changes in MySQL Workbench 5.0.30 (2009-02-18)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.29.

Bugs Fixed

- MySQL Workbench crashed when the mouse wheel was used. If you scrolled the **Options** tab of the **Table Editor**, closed the **Table Editor** and then used the mouse wheel again on the **MySQL Model** page, MySQL Workbench crashed. (Bug #42847)

- Introducing a UserType into a model caused the **File**, **Export**, **Forward Engineer SQL CREATE Script** wizard to crash. Further, performing a **Plugins**, **Objects**, **Copy SQL to Clipboard** operation also caused MySQL Workbench to crash. (Bug #42085)

- The **Forward Engineer SQL CREATE Script** wizard failed to generate a script correctly.

  This happened when using the **File**, **Export**, **Forward Engineer SQL CREATE Script** facility. If, in the wizard, **Object of type MySQL table** was selected, and then all tables added to the **Exclusion Masks** pane, before moving back the required table to the **Objects to Process** pane, the script was generated for the entire database rather than the selected table. (Bug #41475)

- When a diagram was renamed, the history displayed:

  ```
  Rename 'new name' to 'new name
  ```

  It should have instead displayed:

  ```
  Rename 'old name' to 'new name'
  ```

  (Bug #41355)

- If a model contained a View that was using a Function, and an attempt was made to Synchronize the database, an error was generated such as:

  ```
  Error 1305: FUNCTION `bleble` does not exist
  ```

  A similar error was also generated if the **Forward Engineer SQL CREATE Script** wizard was used. (Bug #40846)

- The viewport, which is the combobox in the top right corner of Workbench, did not scale to less than 40%. However, resizes above 40% worked fine. (Bug #39607)

- The **Forward Engineer SQL ALTER Script** wizard produced an erroneous script.

  If Forward Engineer SQL CREATE Script was used to generate a script and this was then used as an input to Forward Engineer SQL ALTER Script, without having made any changes to the model, then an ALTER script with no changes should be produced. However, the ALTER script showed many changes, even though no changes had been made to the model. (Bug #37709)

Changes in MySQL Workbench 5.0.29 (2008-12-12)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.28.

Bugs Fixed

- Workbench crashed when objects other than tables were moved out of a layer. (Bug #41358)

- In the EER Diagram view an icon was not displayed for Not-NULL items. (Bug #41326)

- When a diagram was renamed, the label of the corresponding tab was not automatically updated. However, when the focus was changed, the text was correctly updated. (Bug #38867)

- The table figures in the Diagram view had insufficient information. They did not display information such as constraints or default values. (Bug #38553)

- When the grid was activated, dragged objects on layers were incorrectly placed with an offset of -1,-1. (Bug #35989)

- The last column in a table disappeared in the table editor, and it was not possible to add further columns. (Bug #35905)

Changes in MySQL Workbench 5.0.28 (2008-12-06)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.27.

Bugs Fixed

- If you attempted to select several tables in the table list of the **MySQL Model** view, and you accidentally included the **Add Table** button in your selection, a message box appeared warning of an unknown exception:

```
"Unknown Exception caught in: c:\documents and settings\mysqldev\my documents\visual
studio 2005\projects\workbench\backend\windows\wb.wr\src\Wb.h at line 1010"
```

The program did not crash. Only the messagebox appeared. (Bug #41201)

- If two foreign keys were created in a table that referenced a second table and then an attempt was made to delete the relations and the referenced table, MySQL Workbench crashed. (Bug #41025)

- When clicking the **+** and **-** buttons in the **Physical Schemata** pane of the **MySQL Model** tab, an `Unhandled Exception` was generated:

```
System.Runtime.InteropServices.SEHException: External component has thrown an exception.
```

(Bug #40971)

- The **Referenced Column** pane of the **Foreign Key** tab became cleared if the foreign key was renamed. Subsequently, attempting to choose a **Referenced Column** did not display a link in the **EER Diagram** view. To get foreign key relationships working again it was necessary to de-select the check boxes from the **Columns** pane, re-select them, and then select the **Referenced Column** pane. (Bug #40649)

- When a table was renamed the inserted data was lost. (Bug #40327)

- A complex EER diagram threw an exception whenever an action was performed on it. However, other diagrams in the same MWB file functioned correctly.

  The exception generated was:

```
System.Runtime.InteropServices.SEHException: Un composant externe a levé une exception.
   à wb.ModelViewForm.handle_mouse_button(ModelViewForm* , MouseButton , Boolean , Int32
, Int32 , EventState )
   à MySQL.Workbench.ModelViewForm.OnMouseUp(MouseEventArgs e, Int32 X, Int32 Y, Keys
keystate, MouseButtons buttons)
   à MySQL.GUI.Workbench.ModelViewForm.CanvasPanel_MouseUp(Object sender, MouseEventArgs
e)
   à System.Windows.Forms.Control.OnMouseUp(MouseEventArgs e)
   à MySQL.Utilities.WindowsCanvasViewerPanel.OnMouseUp(MouseEventArgs e)
   à System.Windows.Forms.Control.WmMouseUp(Message& m, MouseButtons button, Int32
clicks)
   à System.Windows.Forms.Control.WndProc(Message& m)
   à System.Windows.Forms.ScrollableControl.WndProc(Message& m)
   à System.Windows.Forms.Control.ControlNativeWindow.OnMessage(Message& m)
   à System.Windows.Forms.Control.ControlNativeWindow.WndProc(Message& m)
```

```
   à System.Windows.Forms.NativeWindow.Callback(IntPtr hWnd, Int32 msg, IntPtr wparam,
IntPtr lparam)
```

(Bug #39360)

Changes in MySQL Workbench 5.0.27 (2008-11-07)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.26.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- There was a problem where relationships that were hidden could then not be selected to bring up their relationship editor. Relationships can now be selected as objects in the Layer window. Once selected, the relationship's `visible` property can be set to `True` in the Properties window, thus making the relationship visible again. (Bug #40167)

Bugs Fixed

- When a stored routine was edited, the edit cursor jumped back to the start of the page unless typing was constant. (Bug #40426)

- When using the **Copy Insert to Clipboard** menu item the generated SQL code was incorrect. The "S" was missing from "VALUES" and the data was not included. This resulted in SQL code such as:

```
INSERT INTO `table1` (`table1_id`, `descr`) VALUE ();
```

(Bug #40041)

- If a trigger was renamed, and the design then synched with a database instance, the generated SQL created a trigger with the new name and then dropped the trigger with the old name. This resulted in this error:

```
Error 1235: This version of MySQL doesn't yet support
'multiple triggers with the same action time and event for one table'
```

(Bug #39989)

- The **Copy SQL to Clipboard** action (right-click menu on table) did not use Windows-compatible line endings. (Bug #39476)

- When a column had a data type `BOOLEAN` and it was exported using **Forward Engineer SQL ALTER**, the exported type was `BOOLEAN(2)` instead of `BOOLEAN`. (Bug #39257)

- Workbench application performance was poor, with slow loading times and excessive memory usage. (Bug #38439)

- When a DBDesigner model with 333 tables was imported into Workbench the RAM usage went up to approximately 1GB. Workbench then crashed with this exception:

```
Error creating cairo context: out of memory
```

(Bug #37178)

Changes in MySQL Workbench 5.0.26 (2008-10-16)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.25.

Bugs Fixed

- When attempting to export a model using the **File**, **Export**, **Forward Engineer SQL CREATE Script** menu item, Workbench crashed on clicking the wizard's **Finish** button. (Bug #39578)

- The **Copy Insert to Clipboard** action generated SQL with lowercase keywords. This was not consistent with the behavior of the **Copy SQL to Clipboard** action. (Bug #39477)

- Renaming a table and then selecting **Forward Engineer SQL ALTER Script** did not result in a `RENAME` statement. Instead, `DROP` and `CREATE` statements were generated. (Bug #39256)

- The script generated by the **Export**, **Forward Engineer SQL CREATE Script** menu item contained invalid statements when using two schemata. (Bug #39211)

- Exported SQL code containing a trigger that called a procedure failed when an `INSERT` activated the trigger. (Bug #39088)

Changes in MySQL Workbench 5.0.25 (2008-09-12)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.24.

Bugs Fixed

- If the user closed all tabs and then quit, Workbench crashed. (Bug #39346)

- Foreign keys referencing a deleted table were not removed. (Bug #39150)

- **Forward Engineer SQL CREATE Script** and **Forward Engineer SQL ALTER Script** generated scripts that did not put index names in quotation marks. (Bug #39140)

- When Workbench was started with the **GRT Shell** tab opened, the object tree in the **GRT Tree** pane was not displayed. (Bug #39122)

- When triggers were exported with the **Generate DROP TABLES statements** option checked, `DROP TRIGGER IF EXISTS` did not appear in the exported SQL. (Bug #39119)

- The **Triggers** tab would always enable Insert mode when opened. (Bug #39118)

- In the **Foreign Key** tab of the **Table Editor**, the menu that is displayed on clicking in the **Referenced Table** column, listed table names by creation date, rather than by sorted name. (Bug #38944)

- If any `DEFAULT` properties were defined for a model, they appeared to be lost after saving the model and restarting Workbench. (Bug #38825)

- When you loaded a UTF-8 encoded script file into Workbench, the embedded SQL editor replaced international characters with the `?` symbol. (Bug #38783)

- When creating Views and Routines, the entry in the **Undo History** window showed "Parse MySQL View" instead of "View Created", and "Parse MySQL Routine" instead of "Routine Created".

  When subsequently undoing this operation the correct text was displayed. Performing a redo then resulted in the incorrect text being displayed again.

  Additionally, when undoing a Routine Group, the previous undo action in the history was incorrectly renamed and the last entry in the history was deleted. (Bug #36047)

- In the **Table Editor** tab, wherever data could be entered, such as in the **Foreign Key Name** entry field, the default wrap protocol was to go to a new line. This resulted in text that was only partially visible. (Bug #34510)

- The synchronization wizard could show a diff tree for schemata different from those that had been selected. (Bug #32365)

Changes in MySQL Workbench 5.0.24 (2008-08-12)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.23.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- In the `MySQLGrtShell.exe` program the **Values** tab has been renamed to **GRT Tree**. However, the **GRT Tree** tab only shows a root node because there is no GRT Tree loaded when the `Shell` is started in standalone mode. (Bug #35052)

Bugs Fixed

- Indexes listed when the **Index** tab was selected could not be deleted if the index type was `FOREIGN`. (Bug #38639)

- When the menu item **Model**, **Validation**, **Validate all** was selected, and an error dialog subsequently displayed, the dialog error message had a missing dot separator between the database name and table name. (Bug #38632)

- When a DBDesigner 4 model that contained duplicate relationships was imported into Workbench, and then exported, the resulting script failed when executed on MySQL server. (Bug #38488)

- It was not possible to synchronize a model to an external database, if the model contained triggers. (Bug #38436)

- When resizing the comment column under **Physical Schemata** view in column format, the column resize was reverted when switching between schemas. (Bug #38431)

- An attempt to copy a table and then paste it into a new schema resulted in an `Unknown Exception` being generated. (Bug #38429)

- If you created a new view with an `OR REPLACE` clause, the **Forward Engineer SQL CREATE Script** output contained the `OR REPLACE` clause twice. (Bug #38337)

- When a DBDesigner 4 XML file was imported into Workbench the `INSERT` statements were incorrectly converted. (Bug #38196)

- Importing a script that specified an incorrect data type required Workbench to close. (Bug #38146)

- Workbench crashed when using the **Model**, **Validation(MySQL)**, **Validate All** menu item on a model that contained a dangling foreign key index. (Bug #38115)

- Foreign key options (`onDelete`, `onUpdate`) are not imported from DBDesigner schema. (Bug #37794)

- In the `mysql-workbench-oss-5.0.23-win32-noinstall` version of Workbench the menu item **Plugins**, **Objects**, **Copy SQL to Clipboard** did not work. (Bug #37736)

- When synchronizing the database, table comments were not updated. However, column comments worked as expected. (Bug #37686)

- Running **Help**, **Update...** crashes Workbench when the wizard comes to the point where it is trying to close Workbench. (Bug #37665)

- **Database**, **Synchronize** did not update the model view when the table was changed in the database, until after Workbench was restarted. (Bug #37634)

- **Forward Engineer SQL CREATE Script** did not reflect changes made to the model. (Bug #37574)

- When using the **Forward Engineer SQL CREATE Script**, columns marked as `NOT NULL` were generated as `NOT NULL DEFAULT NULL`. (Bug #37385)

- Errors were generated in SQL code during **Forward Engineer Schema** for Inserts data in `TIMESTAMP` columns. (Bug #37059)

- If a database was imported using **Reverse Engineer SQL ALTER Script** and the database name changed in Workbench, the script then generated by **Forward Engineer SQL ALTER Script** was incorrect. (Bug #36178)

- The auto-increment flag was not cleared internally for a column, when the type of that column was changed to one for which auto-increment is invalid; for example, `char`. When the model was exported using **Export**, **Forward Engineer SQL Create Script**, the resulting script incorrectly retained the auto-increment flag for the changed column. (Bug #36085)

Changes in MySQL Workbench 5.0.23 (2008-06-25)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.22.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- It was not clear how a stored connection profile could be edited and the changes saved. Tooltips have been added to the relevant buttons and the main documentation clarified. (Bug #37061)

Bugs Fixed

- The **File**, **Export**, **Forward Engineer SQL CREATE Script** menu item exports a script it is then unable to import using the **File**, **Export**, **Reverse Engineer MySQL Create Script** menu item because it incorrectly imports comments containing special characters. (Bug #37563, Bug #37562)

- Workbench was failing to correctly export Trigger DDLs. (Bug #37432)

- Using **Generate Schema Diff Report** resulted in a crash. The crash was caused by improper handling of an invalid foreign key in a table. While this issue is correctly reported by a validation module, in Standard Edition **Generate Schema Diff Report** didn't handle that correctly. (Bug #37393)

- When a new column was added to a table `Inserts` data was deleted. (Bug #37192)

- Trying to edit a table in a new window displays an error message dialog:

```
plugin:wb.edit.editSelectedInNewWindow
Invalid plugin
Invalid plugin wb.edit.editSelectedInNewWindow
```

(Bug #37180)

- If you try to place a new image into an EER Diagram and select an invalid filetype, you get a error message dialog with the following text:

  `cairo error: invalid matrix (not invertible)`

  If you then click **OK** to clear the dialog and then try to select **Place a New Table**, the error message dialog is displayed again. (Bug #37079)

- The **Forward Engineer** wizard did not report connection status correctly. If invalid database credentials were entered, the wizard reported success, even though the connection failed. (Bug #37060)

- Incorrect behavior when editing a table. When the **columns** tab is selected, if you want to delete multiple selected tables at once, Workbench removes the wrong columns. (Bug #37045)

- The script generated by the **File**, **Export**, **Forward Engineer SQL ALTER Script** menu item contains syntax errors. (Bug #36889)

- The export filter did not properly filter tables. (Bug #36739)

- Workbench generated incorrect syntax when attempting to synchronize with a live server. The resulting code was missing commas which resulted in a syntax error. (Bug #36674)

- After reverse engineering an SQL create script and drawing some EER diagrams, a subsequent import of the same script destroys the EER diagrams. All tables in the catalog are updated, but the reference of the table in the diagram to the table in the catalog is lost. The tables in the diagram are still visible, but do not correspond to the table in the catalog.

  After closing and re-opening the file, all diagrams are empty and it is impossible to delete the diagrams. However, in the overview in the upper right corner, the tables placed in the diagram are still visible. (Bug #36381)

- Mouse wheel does not work when you double-click a table and select the **Options** tab. (Bug #36374)

- When **File**, **Export**, **Forward Engineer SQL ALTER Script** menu item is selected it causes an `ALTER Script Generation (Script Synchronization)` error. (Bug #36355)

- The behavior of the **Synchronize** wizard was inconsistent when cancelled and re-run. (Bug #36177)

- Several windows and tabs have fields which are either not completely visible or are obscured by labels that overlap the field. (Bug #36115)

- When creating a `Schema Diff Report` from the local model to a live database, the wizard crashed with an unhandled exception. (Bug #35878)

- Collapsing of the EER Diagram section of the **MySQL Model** tab is not retained after program relaunch. (Bug #35717)

- In the **MySQL Model** tab, in the summary line for **Physical Schemata**, there are three icons, one for large icon view, one for small icon view, one for list view. Changing the view is not saved between application launches. (Bug #35716)

- Performing a **Database Synchronization** resulted in erroneous `ALTER` statements being generated. (Bug #34812)

- Menu item was incorrectly named **Generate Schema Diff Report**, when it should have been called **Generate Catalog Diff Report**. (Bug #34398)

- Workbench failed to restore window states, window positions and side-panel sizes from the previous execution of the application. (Bug #32442)

- The `AUTO_INCREMENT` attribute is now ignored on import for column types that do not support it. (Bug #31986)

Changes in MySQL Workbench 5.0.22 (2008-05-27)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.21.

Bugs Fixed

- Can not add values for `TIMESTAMP` columns in the **Inserts** editor. (Bug #37009)

- When columns are added to, or removed from a table, Workbench deletes all **Inserts** data. (Bug #37008)

- Trigger definition auto-formatting resulted in malformed code. (Bug #36815, Bug #37685)

- The script generated by the **File**, **Export**, **Forward Engineer SQL CREATE Script** menu item contains a spurious quotation mark. (Bug #36753)

- For `CREATE TABLE` statements, `TIME` column default values were not quoted properly. (Bug #36669)

- Print preview in landscape orientation did not work correctly. (Bug #36647)

- When opening a model created with an earlier version of Workbench, the **Indexes** tab displayed indexes of type `FOREIGN` as type `INDEX`, and it was not possible to change them back to `FOREIGN`. (Bug #36453)

- If a table column definition permits `NULL` and has been set with a default of `NULL`, integrity validation operations complained that the default value for the column is invalid. (Bug #36397)

- After use of **Control+X** to cut text from a text-edit box and **Control+Z** to undo the operation, the canvas was updated correctly but not the text box. (Bug #36358)

- Shifted content could not be scrolled or navigated. (Bug #36328)

- The mousewheel scrolled the overview pane when it was open behind the insert-editor. (Bug #36253)

- View renaming in overview did not work properly and has been disabled. (Bug #36202)

- The Copy to SQL operation caused a crash. (Bug #36184)

- Dragging objects out of a layer did not work properly. (Bug #36053)

- The enabled/disabled status of items in the **Edit** menu was not updated properly. (Bug #35962)

- Relationships were drawn over tables. (Bug #35867)

- The script generated by database synchronize contained errors. (Bug #35644)

- Setting up foreign key relationships across multiple schemas did not work. (Bug #34546)

- Scrollbars now appear correctly when editor windows are reduced in height. (Bug #32454)

- Table partitioning information was not exported properly. (Bug #32226)

Changes in MySQL Workbench 5.0.21 (2008-04-27)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.20.

Bugs Fixed

- The undo operation did not completely undo a relationship between two tables. It removed only the line drawn between two tables, but did not undo the fields and keys. (Bug #36645)

- Double-clicking a column-heading separator in Find results caused a crash. (Bug #36266)

- The scripts generated by the **File**, **Export**, **Forward Engineer SQL ALTER Script** and **File**, **Export**, **Forward Engineer SQL CREATE Script** include unnecessary SQL code. (Bug #36170)

- The **Copy Connection nn** menu item on the context menu of a connection does not have a complementary **Paste Connection** menu item. The **Edit** menu has a greyed-out **Paste Connection** menu item. (Bug #36166)

- When a schema used `InnoDB`, and then was switched to use `MyISAM`, the script generated by **Forward Engineer SQL CREATE Script** still contained `InnoDB`-only syntax. (Bug #35947)

- **Forward Engineer** wizard failed to create a table, but did not show any error messages. (Bug #35874)

- Saving a file restores the column widths of the list view to default under **Physical Schemata**. (Bug #35718)

- When making a column a primary key and this column has `NULL` as default value, this default value is not changed. When the table gets synchronized back to the database Workbench creates a statement such as:

```
ALTER TABLE `test_defhan`.`table1` CHANGE COLUMN `id_table1` `id_table1` INT(11) NOT NULL
DEFAULT NULL, ...
```

This leads to an error:

```
Error 1067: Invalid default value for 'id_table1'
```
(Bug #32972)

Changes in MySQL Workbench 5.0.20 (2008-04-26)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.19.

Bugs Fixed

- Re-creating a deleted relationship caused a crash. (Bug #36385)

- The message log on the **Forward Engineer Progress/Results Advanced** dialog had no scroll bar. (Bug #36192)

Changes in MySQL Workbench 5.0.19 (2008-04-15)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.18-rc.

Bugs Fixed

- The HTML Basic Single Page DBDoc report from the **Model** -> **DBDoc** -> **Model Reporting** menu option was missing the schema and table numbers. (Bug #36060)

- **Forward Engineer SQL CREATE Script** wizard generated no output script. Further, no error or warning messages appeared to be generated that might explain this.

The error message in this case was displayed in the Advanced Log, which was not visible to the user. MySQL Workbench was changed so that the Advanced Log appeared to the user if it received an error message. (Bug #34430)

Changes in MySQL Workbench 5.0.18-rc (Not released)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.17-rc.

* Functionality Added or Changed

* Bugs Fixed

Functionality Added or Changed

* Foreign key labels could not be hidden, and displayed labels were not centered. There are now options to hide all connection captions, and to center captions. (Bug #30902)

Bugs Fixed

* In the table editor, setting the input focus by clicking the mouse did not work. (Bug #35969)

* The Reference Column dropdown used during foreign key creation was slow to display. (Bug #35948)

* In the table editors foreign key Tab, when a column for the foreign key is checked (right pane), the Referenced Column dropdown opens. Pressing Escape at this point caused a crash. (Bug #35926)

* After changing the Row Format option, closing the table editor and opening a new document caused a crash. (Bug #35925)

* If a table in an EER Diagram was double-clicked in an attempt to open it for editing in the Table Editor, this error was generated:

```
Cannot load selected plugin(.\db.mysql.editors.wbp.fe.dll::DbMysqlTableEditor)
```

(Bug #35897)

* Synchronizing the data model with a live database from the **SQL Diff Tree** dialog resulted in a crash. (Bug #35884)

* Creating a Schema Diff Report from the local model to a live database caused a crash. (Bug #35878)

* The Pack Keys option could not be saved. (Bug #35872)

* Some menus or submenus had items enabled when the corresponding features were disabled. (Bug #35870)

* The Connection Caption option did not work properly. (Bug #35859)

* The status of a connection line in a table diagram was not updated when a foreign key relationship between tables was changed. (Bug #35800)

* The **File** -> **Export** -> **Export as PNG** menu item was enabled under some circumstances in which it should have been disabled. (Bug #35746)

* Scrolling was slow for table models with large numbers of tables. (Bug #35655)

- Pressing **Control+Z** to undo the last change in an SQL Script text box deleted the entire script. (Bug #35649)

- Workbench is unable to read files such as Workbench Model Files from a non-English directory. (Bug #35547)

- Workbench permitted table comments to be entered longer than the maximum length of 60 characters. (Bug #34507)

- A crash could occur during foreign key creation. (Bug #33545)

- Autoplacing for display of complex schemas has been improved. (Bug #32888)

- Typing `q` in the GRT Shell caused a crash. (Bug #32755)

Changes in MySQL Workbench 5.0.17-rc (2008-04-07, Release Candidate)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.16-rc.

Bugs Fixed

- Creating a new view and then deleting it caused a `System.AccessViolationException`. (Bug #35840)

- Editing a stored procedure within Workbench could cause an exception. (Bug #35828)

- The modified timestamp for an existing model was not correctly updated for all changes. (Bug #35719)

- Identifiers for field names in DML SQL statements would not be quoted correctly, permitting reserved words to be included in the SQL statements. (Bug #35710)

- Workbench would crash repeatedly when drawing the diagram for a table where the referenced column in a foreign key relationship was blank. (Bug #35677)

- Identifiers using uppercase characters for stored procedures would automatically be modified to lowercase. (Bug #35650)

- When working with the **SQL Script** editor, it was not possible to select all the text in the display when using **Control+A**. (Bug #35646)

- The **Model Navigation** window could not be collapsed like other palettes. (Bug #35642)

- Modifying the primary key index definition for within the table view would not update the entity relationship diagram. (Bug #35639)

- When validating an existing model using the Forward Engineer Wizard, MySQL-specific validation failed. (Bug #35604)

- Deleting an existing layer on a diagram and then editing other objects on the same canvas could generate a number of exceptions, and could corrupt the Workbench file. (Bug #35603)

- Switching to the Connect to Columns notation with an existing model would cause an exception. (Bug #35601)

- Data in `BLOG` and `TEXT` columns defined using the **Inserts** tab would not be quoted correctly in the resulting SQL. (Bug #35525)

- Opening an existing Workbench model with an invalid foreign key definition would cause an exception. (Bug #35501)

- Moving multiple tables on the same diagram, and then using Undo to revert the model to the original layout, only the first table selected be returned to its original position. (Bug #35465)

- When adding a foreign key relationship within a catalog with an existing entity relationship diagram, the foreign key relationship is not added to the existing diagram. (Bug #35429)

- The precise position of individual connections would not be retained when the schema was saved. (Bug #35397)

- Opening a GRT shell while the table editor is open would raise an exception. (Bug #35349)

- When modifying an existing foreign key relationship, the generated `ALTER` script did not reflect the modification. (Bug #35265, Bug #35830)

- When creating foreign key relationships that point to more than one table, the same foreign key identifier for the same table could be created. This would create invalid SQL code for creating the table. (Bug #35262)

- When importing an existing DB Designer schema, Workbench could crash. (Bug #35123)

- Setting up indexes in both the index and foreign key list views, the mouse pointer would dissappear while the entry box was in use. (Bug #35062)

- Double-clicking the Catalog title bar undocked the GRT Tree window. (Bug #34856)

- The font for views and routines was not monospace by default. (Bug #34537)

- When using the Forward Engineer Wizard, if an error occurred, the dialog showing the error detail would be incomplete, and determining the reason for the error would be masked because the end of log message would be hidden. (Bug #34509)

- When using the **Hide Menu Items Not Applicable to this Edition** option, a simplified version of the **Find** dialog box was not available. (Bug #34493)

- Editing the text of the Trigger portion of an existing schemata would introduce additional text into the Trigger definition. (Bug #34397)

- Creating more than five stored procedures or views in a model would cause the dialog box for the operation to move to a different layer, making it inaccessible when using the mouse. (Bug #34153)

- Selecting **Export**, **Forward Engineer ALTER script** from the **File** would open a **SQL Script Synchronization** dialog, rather than export dialog. (Bug #34099)

- When moving more than layer in Model Navigator, only the first layer's position would be reflected correctly in the output. (Bug #33627)

Changes in MySQL Workbench 5.0.16-rc (2008-03-26, Release Candidate)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.15-rc.

- Functionality Added or Changed

- Bugs Fixed

Functionality Added or Changed

- Options and configuration options that affect models can now be set on a model by model basis. Choose **Options** from the **Model** menu and choose the **Diagram** tab. (Bug #34610)

Bugs Fixed

- When double-clicking the row in a column as a primary key, the primary key property would be toggled. The editor will now permit you to edit the value when you click a data row on the table. (Bug #35613)

- Opening the **Indexes** portion of a table would generate a unhandled exception error. (Bug #35598)

- When disabling global options on an individual model failed to honor the model specific options would be ignored. (Bug #35516)

- When placing a 1:n relation, an `index out of range` error could be raised. This could further result in `operation on NULL object: Invalid value` errors when trying to edit the relation. (Bug #35447)

- Setting the value of a numeric column to a negative value was not supported. (Bug #35442)

- Printing an HTML version of the schema would produce a fatal error. (Bug #35400)

- The **OK** and **Cancel** buttons for the **Diagram Size** dialog would not be initialized properly. (Bug #34808)

- When using print preview on a diagram, clicking the **Print** button would send a blank page to the printer. (Bug #34630)

- When copying multiple table definitions from one schema to another, only the first table in the selection would be pasted into the new schema. (Bug #34483)

- The **Draw Line Crossing** option failed to be recognized correctly. You can also now set this on an individual model basis using the **Options** option in the **Model** menu. (Bug #34248)

- Copying an existing module to the plugins directory would trigger a double registration of the modulem, and produce an error. (Bug #34134)

- When exporting a diagram to PDF, some additional lines would be added to the generated PDF. (Bug #33586)

- Placing an image on to the canvas could crash the application. For images larger than the canvas, the image is automatically reduced so that it is properly visible on the canvas for editing. (Bug #33179)

- A 1:m relation in a diagram failed to be generated properly when exported as a PDF. (Bug #32882)

- The Undo and Redo options would not be applied properly when making modifications to partition definitions. (Bug #32279)

Changes in MySQL Workbench 5.0.15-rc (2008-03-17, Beta)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.14a-beta.

Bugs Fixed

- Using **Undo** on a relationship within a model would cause an exception. (Bug #35243)

- A foreign key relationship to the source table (a reflexive relationship) gives a bad representation in the entity model diagram. (Bug #35237, Bug #34810)

- Generating an `ALTER SCRIPT` or using the synchronize functionality on a model with entity relationships, the relationship lines within the diagram would be generated twice. (Bug #35213)

- Boolean values were unsupported when trying to insert values into a table, the `TRUE` would instead be replaced by a textual, quoted version `'TRUE'`. (Bug #35205)

- Printing a model diagram to PDF or Postscript, results in a corrupt file PDF or Postscript file that does not match the model. (Bug #35197)

- Deleting objects within the overview pane when the corresponding editor pane for those objects is open would cause a crash. (Bug #35186)

- When entering data into the **Default** column of the table editor, the use of the **Return** key for saving the information about the default value was not supported. (Bug #35127)

- There was a typographical error in the help message for the GRT command `cd`. The word `Absolute` was missing the final `e`. This has been corrected. (Bug #35119)

- When changing the name within a foreign key relationship, the modified name is not reflected in the tables to which the foreign key is related. (Bug #35093)

- Scrollbar navigation did not work after importing a DB Designer schema with a large canvas size. However, you could still navigate using the `Model Navigator` palette. (Bug #34988)

- After importing a DB Designer schema, the following error occurred: "Cairo error: input string not valid UTF-8." (Bug #34987)

- Creating a new file after changing an existing file with modifications could lead to the original being deleted without prompting to save the changes. (Bug #34976)

- When saving an existing model, the **MySQL Model** overview panel would scroll to the top of the model definition. (Bug #34975)

- Changing the `drawSplit` property of a connection from the `Properties` palette did not updated the `Visibility` section of the connection editor. (Bug #34934)

- Editing a primary key column within a model on Microsoft Vista could cause a crash. (Bug #34922)

- On the `MySQL Model` page, when the large icons view was selected, the `Add Table` icon disappeared. (Bug #34904)

- Incorrect `ALTER` statements are created during the synchronization process if you add foreign keys to an existing or imported model. (Bug #34897)

- A new **GRT Inspector** tab would be created every time the **GRT Shell** was opened. In addition, manually closing the **GRT Inspector** and **GRT Shell** components would cause an exception. (Bug #34857)

- Opening an existing MySQL Workbench file after associating the `.mwb` extension with the application leads to a crash when you open a MySQL Workbench file. (Bug #34849)

- When editing a model, the windows and toolbars would realign themselves during selection. This was related to the configured font sizer the DPI setting of the monitor, causing the application to redraw the windows to account for the configuration combination. (Bug #34822)

- Attempting to move a table on an EER diagram after deleting a relationship, caused the application to crash. (Bug #34816)

- The **New File** dialog is nonmodal, and could be hidden by other windows. The dialog is now always drawn on top of other windows. (Bug #34784)

- Changing the column name of a table when you have pending inserts to the table did not change the column name in the corresponding `INSERT` statements. (Bug #34500)

- The `Properties` palette was not cleared when a new project was started. It retained the properties of the last selected object. (Bug #34433)

- Deleting an existing schema with an open table editor would not close the table editor window. The window is now closed when the schema is deleted. (Bug #34345)

- Searching a project specifying `Entire Model` in the `In Location:` list did not return any results. This applied to the Standard Edition only. (Bug #34170)

- When the page size was changed from A4 to B4 it was not possible to move objects on an EER diagram beyond the old page boundaries. (Bug #34148)

- When editing comments, the **Return** key would move to the next column, which prevented the use of newlines within the comment information. Workbench now permits use of the **Return** key within the comment field. (Bug #33980)

- Where relationship lines crossed, and one of the connectors was changed to `Hidden` or `Draw Split`, the semi circle that indicated the previous intersection was still shown on the remaining connector. (Bug #33818)

- Editing an existing diagram could cause an unhandled exception on Windows Vista. (Bug #33477)

- Identifiers (tables, column, index, triggers and other data types) could be created with names longer than the maximum support by MySQL Server. (Bug #33265)

- The application crashed when attempting to export an SQL CREATE script. (Bug #33263)

- Placing an object on the canvas of an EER diagram where you have reverse engineered an existing database, would lead to multiple copies of the object appearing on the diagram. (Bug #32891)

- When scrolling through a schema, the tables in the schema were not redrawn correctly. (Bug #32835)

- On an EER diagram you could not select a relationship if the connection line wasn't stepped. You can now select a connector even if it is not stepped. (Bug #32734)

- Printing a model when there is no printer connected could result in an application exception. (Bug #32320)

Changes in MySQL Workbench 5.0.14a-beta (2008-02-28, Beta)

This unscheduled beta release fixes Bug #34847. Other bug fixes applied since the release of MySQL Workbench 5.0.14-beta are also documented.

Bugs Fixed

- MWB files were not saved properly if Workbench crashed. Reopening such files caused Workbench to crash. (Bug #34848)

  References: See also: Bug #34847.

- Workbench models created in version 5.0.13 crashed when used with version 5.0.14. The unscheduled Beta release, 5.0.14a fixes this bug. (Bug #34847)

- When clicking the **Browse** button in the image editor, the default file name was `openFileDialog1`. This now defaults to an empty string. (Bug #34622)

- Repeatedly changing the object notation crashed Workbench. This is no longer repeatable. (Bug #34499)

- Importing a DBDesigner file immediately threw an exception. This happened even when software rendering was used. DBDesigner files can now be imported without incident. (Bug #33588)

Changes in MySQL Workbench 5.0.14-beta (2008-02-25, Beta)

This section documents all changes and bug fixes applied since the release of MySQL Workbench 5.0.13-beta.

- Workbench Improvements in this Version

- Bugs Fixed

Workbench Improvements in this Version

- **Expand All** and **Collapse All** menu options have been added under the **Arrange** menu. The **Expand All** option expands all objects on an EER. This option will display a table's columns if the object notation supports expansion. Indexes will not automatically be expanded unless they were previously expanded and have been collapsed using the **Collapse All** menu option. Some object notations, such as `Classic`, do not permit expansion or contraction. **Collapse All** undoes the operation performed by **Expand All**.

- A **Fit Objects to Contents** option has been added under the **Arrange** menu option. This option expands an object on an EER diagram. For example, if a table has a long column name that is not fully displayed, using this menu option will expand the table making the column name visible.

- A **System Information** menu option has been added to the **Help** menu. This option displays information about your system that is useful when reporting a big.

- An **Export as SVG** menu option has been added under the **File**, **Export** menu option.

- Because of serious performance and display issues Workbench no longer uses Mesa. For those users who don't have native OpenGL support, Workbench now uses the Windows GDI API. The command line switch for using this mode is `-swrendering`. For more information about running Workbench from the command line see Launching.

- The GRT inspector has been improved to support new types. Namely:

  - text

  - longtext

  - bool

  - color

  - file

  This makes it much easier to change object properties manually. Multiple selection support has also been improved—you can easily change a value for several selected objects at once.

Bugs Fixed

- When exporting an SQL CREATE script it was possible to create two tables in the same schema with the same name. (Bug #34668)

- After placing related tables on an EER diagram and then removing them using the **Undo** menu option, the connection lines between related tables no longer showed up. (Bug #34601)

- When choosing the **Export as PNG** menu option the file dialogue box file type was `All Files` instead of `PNG`. The same was true for **Export as singlePage PDF** and **Export as singlePage PS**. The default is now the appropriate file type. (Bug #34548)

- If there was a relationship between table `A` and table `B` and also one between table `B` and table `A`, the connection lines appeared on top of each other. Connection lines now appear attached at the related columns. (Bug #34543)

- When there were multiple tables with long identifiers the `Physical Schemata` section of the `MySQL Model` page was messy. Table names were obscured and sometimes overlapped. Also, the position of the `Add Table` icon was not optimal. Now the space between table names is adjusted to the largest entry and the `Add Table` icon is fixed in the upper left corner. (Bug #34536)

- When returning to the `SQL Export Filter` page after using the **Back** button, filters were no longer selected. Selections now persist. (Bug #34503)

- The export filters were applied more than once when forward engineering an SQL `CREATE` script. This happened if you exported the script after using the **Back** button on the `SQL Export Filter` page. (Bug #34501)

- When the object notation was Workbench Classic the width of a table on an EER diagram could not be less than the widest column. If there was an enum column with many options, this made for a disproportionately wide table. Table width can now be less than the widest column. (Bug #34496)

- When multiple objects on an EER diagram were selected and deleted, Workbench crashed. This happened when both connections and tables were selected. (Bug #34434)

- Setting a column to `AUTO_INCREMENT` caused the application to crash. (Bug #34418)

- It was reported that you could not add a primary key to a table imported from a MySQL `CREATE` script. This was not true but did highlight the fact that the method for adding a primary key was not obvious. Now, in addition to adding a primary key by double-clicking the icon to the left of a column in the table editor view, you can also add a primary key by checking the `PRIMARY KEY` check box in the `Column Details` section of the table editor. (Bug #34408)

- When using the menu option **Generate Schema Diff Report** an exception was thrown. A new tree-less version of the Diff report plugin resolves this problem. (Bug #34396)

- Users failed to be created when exporting an SQL `CREATE` script. (Bug #34342)

- When a table's `expanded` property was set to `0`, the connection line between related tables, appeared at a diagonal orientation. A connection line is now docked on the sides of a table even when the `expanded` property is set to `0`. (Bug #34249)

- Copying a table from the `MySQL Model` page to an EER diagram canvas created a duplicate table with the same name as the original. This table did not show up in the `Catalog` palette or in the appropriate schema in the `Physical Schemata` section of the `MySQL Model` page. (Bug #34230)

- Creating a new foreign key did not update an EER diagram. An EER diagram is now updated immediately. (Bug #34206)

- When there were many tables on an EER diagram, constant screen refreshing made the application unusable. The performance of the software rendering mode has been improved. (Bug #33646)

- A table with many columns did not display properly. When the table was expanded on an EER diagram it was impossible to scroll down and view all the columns. Improved rendering has helped solve this problem. However, for very large tables you may have to increase the size of an EER. To do this use the **Model**, **Diagram Size ...** menu option. (Bug #33367)

- When changing the foreign key column of a table on an EER diagram, the foreign key did not change color and Workbench crashed when attempting to save the MWB file. The application no longer crashes and the foreign key is updated. (Bug #33139)

- It was not possible to resize a table that used the `Workbench (Default)` object notation. This was problematic for a number of reasons:

  - Long table names make the table very wide.

  - Column definitions that are long relative to the table name, are truncated.

  - Even if you trimmed column names using the **Diagram** tab of the `Workbench Options` the names were sometimes truncated bled over the table border.

  This has been corrected. (Bug #32981)

- When there were two schemata and two EER diagrams tables did not show up on the EER diagram if tables from different schemata were added to different EER diagrams. This was caused by defective software rendering. (Bug #32588)

- When forward engineering to a live database, objects not selected on the `Select Objects` page were still created. This applied to tables, routines, and users. (Bug #32578)

- It was not possible to drag or resize tables on an EER diagram. Tables can now be manually resized. To revert a table to automatic sizing use the `Property` palette and set `manualSizing`to True. (Bug #32549)

- In the Image tool, canceling the open file dialog caused a crash. (Bug #32453)

- The display turned black when the application was resized. This happened when viewing the `MySQL Model` page or when viewing an EER diagram. (Bug #23959)