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# MySQL for Visual Studio Release Notes

## Abstract

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

For additional MySQL for Visual Studio documentation, see [MySQL for Visual Studio](#).

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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## Preface and Legal Notices

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

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## Changes in MySQL for Visual Studio 2.0

### Changes in MySQL for Visual Studio 2.0.5 (2017-04-25, Development Milestone)

*Known limitation of this release:* MySQL Connections Manager does not save the changes made to the default schema when editing a connection. Use one of the following workarounds to resolve this limitation:

- For new connections created with MySQL Connections Manager in which a default schema is specified, close MySQL Connections Manager and then reopen it. After performing this action, you can add the connection to the Microsoft Visual Studio Server Explorer.
- For existing connections, set the default schema with MySQL Workbench.

This release includes the following new functionality and bug fixes:

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

#### Functionality Added or Changed

- Removed Support for Microsoft Visual Studio 2010.
- Added support for Microsoft Visual Studio 2017.
- Added an output pane to the MySQL SQL Editor window. The new MySQL Output pane includes the information that previously appeared in the **Messages** tab.

#### Bugs Fixed

- The MySQL Data Export Tool exported data from the wrong schema when a second schema was selected and then deselected. In addition, all selected schemas were deselected when a single schema was deselected. (Bug #25713981, Bug #23666666)
- Script files did not accept most keyboard input after the file was saved for the first time. (Bug #25713638, Bug #24751945)

- The Field Type view in the result tab of an executed SQL query did not display field information correctly when the query included a schema name explicitly. (Bug #24601948, Bug #82882)
- The `bit()` data type was incorrectly implemented as `bit(10)` for MySQL tables in the Table Designer window. (Bug #13477821)

## Changes in MySQL for Visual Studio 2.0.4 (2016-10-06, Development Milestone)

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

### Functionality Added or Changed

- Enhanced the logic that migrates stored MySQL connections to the MySQL Workbench `connections.xml` file. In previous versions, the migration was offered and if not done at that moment, the dialog to migrate was shown every time the **MySQL Connections Manager** dialog was shown, but there was no way to choose to remain storing MySQL connections in the MySQL for Visual Studio configuration folder instead of merging them with MySQL Workbench.

Now, the connection migration dialog offers a way to postpone the migration by either 1 hour, 1 day, 1 week, 1 month or indefinitely. If the migration is postponed, the dialog is shown again after that time elapses. If it is postponed indefinitely, then an option is added to the **MySQL Connections Manager** dialog that permits the connection migration to be done manually, as long as MySQL Workbench is installed.

- When the MySQL Script Editor window is opened (either by selecting **SQL**, **JavaScript**, or **Python** from the **New MySQL Script** menu), the Results area was visible showing a big gray area in the editor, despite having nothing to display. Now, this area is hidden until results are ready to display, which happens after clicking **Run**.
- The SQL syntax parser was updated to handle the optimizer hints that were introduced in MySQL 5.7.7.
- The SQL editor was updated to check the syntax of a script before sending the statements to the server. If syntax errors are present, the Visual Studio **Output** pane displays the errors and the script is not executed.
- A drop-down list of connections was added in the MySQL editor toolbar to enable fast switching among connections while editing SQL, JavaScript, and Python scripts. The list, located next to the **Connect to MySQL** button, shows all **Server Explorer** connections for the MySQL data provider with compatible protocol support.



#### Note

JavaScript and Python editors show only the connections that support the X Protocol.

### Bugs Fixed

- MySQL Workbench was unable to open connections added from the **MySQL Connection Manager**, as executing them would emit the following error: "Cannot connect to Database Server". This is because an invalid "socket=." value was added to the connection definition. To solve this, MySQL for Visual Studio was updated to use the latest `MySQL.Utility` version, which fixes code in the MySQL Workbench class to only write the socket value into the XML nodes if the connection is of type Sockets or Pipe. (Bug #24666952)

- After connections were added to the **Server Explorer** through the **MySQL Connections Manager**, clicking **Refresh** on the **Server Explorer** toolbar caused the refresh operation to hang, and nothing else could be done within the **Server Explorer** pane. Clicking **Cancel Refresh** was required to fix this. (Bug #24666931)
- **SHOW** statements executed from the SQL editor failed to display the expected output. (Bug #24622881)
- Queries executed from the SQL editor against nonunique data in NoSQL tables emitted error messages and failed to return result sets. (Bug #24462707, Bug #82589)
- The main XML element in `%APPDATA%\Oracle\MySQL For Visual Studio\settings.config` was renamed to `MySQLforVisualStudio` from `MySQLForExcel`. Indentations were added to improve the overall readability of configuration settings. (Bug #24291264, Bug #82221)
- JavaScript and Python editors permitted connections to versions of MySQL that did not support the X Protocol if those connections were unnamed or temporary, but the scripts did not work properly. This fix adds validation to ensure that all connections related to JavaScript and Python scripts are to servers with the X Plugin enabled. (Bug #24290570, Bug #82219)
- Selecting the **New MySQL Script** context-menu option by right-clicking a **Server Explorer** connection in Visual Studio emitted an error if the connection was first closed and then opened. (Bug #24064816, Bug #82205)
- Visual Studio was unable to open a design window for any selected table in a MySQL database. (Bug #23642010)
- Opening a new MySQL script file from the Visual Studio **File > New** menu displayed the following error: "Object reference not set to an instance of an object". (Bug #23619311)
- Processing a `Result` object from the X Protocol substituted an error or information message in place of some collection output. (Bug #22983803)
- **Advanced**, **Connect**, and **Cancel** buttons were missing from the **Connect to MySQL** dialog for connections made from the script editor window. (Bug #22114315)
- Dragging and dropping a table from the **Server Explorer** in Visual Studio to a project would fail with the following error: "Some updating commands could not be generated automatically. The database returned the following error: You have a usable connection already". After clicking **OK**, Visual Studio would emit the following error "Mouse drag operation failed. Could not retrieve schema information from table or view". To solve this issue, `MySql.Data` was updated to version 6.9.9.
- From the **Query Designer**, selecting **Verify SQL Syntax** would always display "Not supported by the provider" instead of verifying the SQL syntax.
- The Python code editor displayed session options for JavaScript instead of options for the Python language.
- In some cases, selecting **Retrieve Data** for a table with a valid connection failed to populate the table with data.

## Changes in MySQL for Visual Studio 2.0.3 (2016-07-01, Development Milestone)

*Known limitation of this release:* Some features such as the Entity Framework, and some Server Explorer functionality like drag and drop elements into a Dataset Designer, or Design Tables, do not function in this version.

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

## Functionality Added or Changed

- Added an error handler to manage exceptions from MySQL Shell, and to display relevant information about the exceptions in the selected output. This includes the full error message from MySQL Shell, and extra validation in case it contains terms such as "undefined" or "null".
- Added SSL support for MySQL connections that use the X Protocol. SSL support works with PEM files, so SSL connections need to be created through the "MySQL Connections Manager" in MySQL for Visual Studio, or from MySQL Workbench.
- Added support for the following X DevAPI functions: `parseUri()` and `isOpen()`.
- A new **MySQL Output** pane was added that contains a results grid view similar to the view found in MySQL Workbench. It contains the following data for executed statements: *Success (with an icon if possible)*, *Execution index (sequential)*, *Execution Time*, *Query Text*, *Message (output from the server)*, and *Duration / Fetch*. This functionality is available for JavaScript and Python queries.
- Added a console mode editor, where pressing **Enter** executes the code.
- Added the ability to switch between "Batch" (execute multiple statements) and "Console" (execute each statement after pressing **Enter**) modes, from the Query Editor toolbar as a dropdown list.
- A MySQL connection manager dialog was added to help fully manage MySQL connections. It supports connection sharing with MySQL Workbench, and supports create, edit, configure, and delete actions.

MySQL connections created with the connection manager where the password is securely stored in the system's password vault functions with the Server Explorer in Visual Studio. The password is extracted from the password vault, and persists in the Server Explorer connections.

## Bugs Fixed

- The "mysqlx" module was not imported properly to execute JavaScript queries. (Bug #23091964, Bug #81052)
- After opening a valid MySQL connection and creating a new JavaScript MySQL script, disconnecting then reconnecting to the MySQL Server while changing the port to 33060 would fail.
- MySQL for Visual Studio now shows a message stating that a SSL connection is required by the MySQL server if the `require_secure_transport` variable is set.
- All script editors now display detailed information about the connection used. Before, the information was displayed in the toolbar as labels, but now all information is consolidated in a menu opened where the connection name is displayed. Additional information includes the connection method, host identifier, server version, user, and schema.
- Output from executing JavaScript and Python commands were not visible unless the Output window was already opened. The Output window now automatically opens when executing commands.

## Changes in MySQL for Visual Studio 2.0.2 (2016-04-11, Development Milestone)

MySQL for Visual Studio 2.0.2 M1 is the first development release of MySQL for Visual Studio to add support for the new X DevAPI. The X DevAPI enables application developers to write code that combines

the strengths of the relational and document models using a modern, NoSQL-like syntax that does not assume previous experience writing traditional SQL.

To learn more about how to write applications using the X DevAPI, see [X DevAPI User Guide](#). For more information about how the X DevAPI is implemented in MySQL for Visual Studio, and its usage, see [Code Editors](#).

Known limitation of this release: SSL connections are not yet supported.

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

## Functionality Added or Changed

- Updated the MySQL parser's grammar to include keywords introduced in MySQL 5.7.
- Because the deprecated "File", "New", "Project", "Create a New Project", "Templates", "MySQL Files" option no longer exists, the resulting error is no longer present. In other words, the deprecated "MySQL Project Templates" were removed, in favor of "MySQL Item Templates".
- Support for the "IF [NOT] EXISTS" clause for CREATE, DROP, and ALTER USER statements was added.
- The JavaScript and Python editors now auto-detect the port for the X Protocol, and uses it to execute JavaScript and Python scripts. Before, it was hardcoded to 33060.

## Bugs Fixed

- The **New MySQL Script - Python** option would not function with MySQL Server 5.7.9 and higher. The error was similar to "An error occurred when trying to launch a MySql Script window".
- Minor optimizations to the script editor window.
- Added support for Visual Studio 2015 with .NET Framework 4.6.
- The "New MySql Script" command bar button did not function. The error was similar to "An error occurred when trying to launch a MySql Script window".
- The triple double quote """" used for multiline comments did not function correctly in the Python editor.
- The JavaScript editor now only shows when working with connections using MySQL 5.7 and higher.
- Opening an editor window for .mysql files that connected to MySQL Server versions lower than 5.6.6 would not function.
- The **Tree View** in the **Results** tab did not display data headers.

## Changes in MySQL for Visual Studio 2.0.1 (Not released, Internal)

Version 2.0.1 has no release notes, or they have not been published because the product version has not been released.

## Changes in MySQL for Visual Studio 2.0.0 (Not released, Internal)

Version 2.0.0 has no release notes, or they have not been published because the product version has not been released.

## Changes in MySQL for Visual Studio 1.2

### Changes in MySQL for Visual Studio 1.2.10 (2021-08-02, General Availability)

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

#### Functionality Added or Changed

- Parser and debugger revisions now make use of the parser classes generated by ANTLRCS 3.5.2 (the C# port of ANTLR 3). In addition, some syntax was updated to coordinate with MySQL Server 8.0 changes. (Bug #32398998)
- The performance associated with showing tooltips now is enhanced by switching to (async) Quick Info for UI thread affinity. (Bug #30674699, Bug #97934)
- Support for Visual Studio 2015 is removed with this release.

#### Bugs Fixed

- After an active connection exceeded its timeout setting, it could not be used again without restarting Visual Studio. (Bug #33033241)
- Visual Studio quit unexpectedly after a MySQL script was executed using a timed-out connection. Improved error messaging now identifies that a connection may no longer be active when it is selected for use. (Bug #33033225)
- An incorrect path to the deployed template files prevented the creation of MySQL MVC item templates if they were selected from a Visual Basic project. (Bug #33026170)
- Some properties and buttons were hidden within the **Advanced** area of the Connect to MySQL dialog when the DPI setting value was greater than 100. (Bug #33025993)
- The Configuration Update Tool reapplied the Connector/NET configuration changes to previously updated versions of Visual Studio when it was activated to update a new version. (Bug #33020888)
- User credentials were not copied fully to Server Explorer if a new connection was created by selecting the "**MySQL script with new connection**" option from the MySQL toolbar. The resulting connection was insufficient for use with MySQL scripts or when attempting to open the Data Export tool. (Bug #33016238)
- An error was emitted if an object was not fully initialized before the operation creating it in the MVC Item Template dialog was canceled. (Bug #33005844)
- Dialog boxes containing text messages did not resize to show the entire message if the DPI setting value was greater than 100. (Bug #33000651)
- Without Connector/NET, attempting to edit (design) MySQL tables or views returned an error. All error messages of this type now state that Connector/NET must be installed. (Bug #33000642)
- In Visual Studio 2019, the MySQL Data Export tool did not display properly within the tab. (Bug #32978902)
- An initial attempt to make a connection using the MySQL connection dialog could cause Visual Studio to stop responding. (Bug #32977888)



- Server Explorer's design option in Visual Studio 2019 for a MySQL table did not open in the tab as expected. This fix restores the ability to alter a table. (Bug #32769097)
- Before creating a new connection, MySQL for Visual Studio prompted the user to update the log file's path and name. However, if selected, the update process returned an error. If the update was declined, selecting one of the databases from the list also produced an error. This fix revises the implementation to always initialize the logger first before attempting to log any messages. (Bug #32398894)
- If an installation targeted the Visual Studio 2015 environment, executing the MSI file to remove MySQL for Visual Studio returned an error and did not finish. (Bug #31966621)
- A runtime exception resulted when an ASP.NET Web Form Site project was configured to use the default custom SQL value ([Dataset](#)) as the [DataSource](#) mode. (Bug #30961816)
- The attempt to generate an entity framework model produced several errors rather than creating a data source with a valid connection to the database. (Bug #28752542, Bug #92681)

## Changes in MySQL for Visual Studio 1.2.9 (2019-10-21, General Availability)

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

### Functionality Added or Changed

- MySQL for Visual Studio now prompts for action when it detects any conflicts in its configuration files that were introduced after MySQL for Visual Studio was installed. Errors associated with this type of configuration conflict prevent the creation of data sources and table adapters.  
  
A new Configuration Update Tool can resolve the conflicts between Connector/NET and MySQL for Visual Studio libraries as they are detected (see [MySQL for Visual Studio Configuration Update Tool](#)). To complete the action, it is necessary to restart affected versions of Visual Studio manually after the tool finishes updating the files. (Bug #29884031, Bug #82617)
- MySQL for Visual Studio now supports all editions of Microsoft Visual Studio 2019. In addition, this release removes support for Visual Studio versions 2012 and 2013. (Bug #29616463, Bug #94937)
- The MySQL Website Configuration tool was renamed and extended to also automate entry updates to the [app.config](#) file (in addition to the [web.config](#) file). The newly renamed MySQL Application Configuration tool preserves the functionality used to simplify website development and now extends the configuration capabilities of the tool to manage dependencies required when running the Entity Data Model Wizard. (Bug #29490017)
- Connections to MySQL using SSL PEM encryption or standard TCP/IP over SSH now are supported by MySQL for Visual Studio (see [Making a Connection](#)).

### Bugs Fixed

- Several installation errors caused the wrong version or edition of Visual Studio to be identified, which then resulted in the deployment of MySQL for Visual Studio files to the wrong folder or to a file structure that represented multiple versions Visual Studio that were neither selected nor installed on the host computer. (Bug #30225436, Bug #96576)
- A secondary window opened unexpectedly when a user with insufficient database privileges ([GRANT SELECT](#) and [GRAN SHOW VIEW](#)) attempted to alter the definition of an existing view. This fix introduces an error message to explain the condition in detail. (Bug #30001906)

- From code, it was possible to create an instance of [SqlDataSource](#), make a connection to a MySQL server, and then populate an ASP.NET control. However, attempting the same sequence using the Visual Studio Configure Data Source designer produced an object-reference error when the data source was being configured in the designer (and MySQL Connector/NET 6.10.8 was installed) and also at runtime of the web application.

As part of a related fix, the data source now populates ASP.NET controls from custom queries as expected at runtime. Likewise, the designer now permits configuration when the 6.10.8 version of MySQL Connector/NET is installed with one caution. When using the **Specify columns from a table or view** option, the Configure Data Source designer generates the query using bracket characters ( [ ] ) as delimiters for identifiers, which produces an invalid MySQL statement. The brackets can be removed manually after the data source is created. Alternatively, the second option in the designer associated with generating queries from the data source, **Specify a custom SQL statement or stored procedure**, is the preferred option to use. (Bug #28148998, Bug #91136)

- The TableAdapter Configuration Wizard in Visual Studio configured with a valid MySQL connection produced an error, instead of generating the expected TableAdapter. Now, the error condition is resolved when MySQL Connector/NET 6.10.8 (or higher) or MySQL Connector/NET 8.0.14 (or higher) are available for use by MySQL for Visual Studio. (Bug #27857627, Bug #90390)

## Changes in MySQL for Visual Studio 1.2.8 (2018-04-30, General Availability)

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

### Functionality Added or Changed

- When Microsoft Visual Studio receives a request to register (or unregister) MySQL for Visual Studio within the IDE during the installation, Visual Studio might not execute the command properly if the host is running Windows 7. This fix identifies when Visual Studio does not register MySQL for Visual Studio as requested and then provides an alert to perform the registration manually from the Developer Command Prompt for Visual Studio using the following command:

```
devenv /updateconfiguration /log
```

(Bug #27365261, Bug #87902)

- MySQL for Visual Studio now supports the MySQL 8.0 release series (requires Connector/NET 6.9.12, 6.10.7, or 8.0.11) including:
  - MySQL data dictionary, which uses [INFORMATION\\_SCHEMA](#) tables rather than tables in the `mysql` database (see [MySQL Data Dictionary](#)).
  - The [caching\\_sha2\\_password](#) authentication plugin introduced in MySQL 8.0 (see [Caching SHA-2 Pluggable Authentication](#)).

In addition, MySQL for Visual Studio now requires that .NET Framework 4.5.2 (or later) be installed for use within Visual Studio 2012 and Visual Studio 2013.

### Bugs Fixed

- The Website Configuration Tool was unable to add an ADO.NET entity data model to an ADO.NET web application successfully. In addition to aligning the `web.config` file with the installed version of Connector/NET, this fix also disables the Entity Framework 5 selection when the installed connector no longer includes a provider for EF5 (Connector/NET 6.10 and higher). (Bug #27593219)

- Queries made with a valid MySQL connection received no response from the server. (Bug #27584991)
- When the MySQL for Visual Studio parser was unable to parse an SQL statement, it generated an unhandled exception that caused Visual Studio to exit unexpectedly. This fix enables the parser to handle exceptions properly and updates the parser to include support for `CREATE USER` syntax in the MySQL 8.0 release series. (Bug #27580303)
- The version for the `MySql.Web` assembly was incorrectly extracted, which prevented the assembly from loading properly and the MySQL Website Configuration Tool from launching. (Bug #27450530)
- Attempting to open the MySQL Web Configuration Tool, with MySQL Connector/NET and MySQL for Visual Studio prerequisites installed properly, displayed an error message instead of opening the tool. (Bug #27365141, Bug #88570)

## Changes in MySQL for Visual Studio 1.2.7 (2017-04-10, General Availability)

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

### Functionality Added or Changed

- Removed Support for Microsoft Visual Studio 2010.
- Added support for Microsoft Visual Studio 2017.

### Bugs Fixed

- The MySQL Data Export Tool exported data from the wrong schema when a second schema was selected and then deselected. In addition, all selected schemas were deselected when a single schema was deselected. (Bug #25713981, Bug #23666666)
- Script files did not accept most keyboard input after the file was saved for the first time. (Bug #25713638, Bug #24751945)

## Changes in MySQL for Visual Studio 1.2.6 (2016-01-07, General Availability)

### Bugs Fixed

- With MySQL for Visual Studio installed, attempting to create MSSQL connections would fail and throw an exception. (Bug #22122881, Bug #77441)
- The **Tools, Extensions and Updates, Installed, Tools** window always reported "1.0.0" as the current MySQL for Visual Studio version number. (Bug #22114385)
- Executing **Generate Database from Model** from an existing Entity Framework model would throw an exception related to an error with the T4 template file, when then aborted the creation of the database. The Connector/NET Entity Framework assembly (`MySql.Data.Entity.EF6.dll`) path was fixed in the MySQL T4 template file (`SSDLToMySQL.tt`). (Bug #20234532, Bug #74388)
- With Visual Studio 2012, generating a database from a model would fail and throw an exception. However, clicking **OK** after the error would cause the action to succeed. (Bug #18181649)

## Changes in MySQL for Visual Studio 1.2.5 (2015-10-29, General Availability)

**Known limitation:**

Item templates do not work correctly with MySQL Server 5.7.x, as it prevents the creation of an Entity Framework model.

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

## Functionality Added or Changed

- Project Templates were replaced with Item Templates.

The **Project Templates** option was removed from the plugin toolbar, and from the Project menu, in order to add the **Item Templates** feature with two options: **MySQL MVC Item** and **MySQL Windows Forms Item**, which are available as a context menu for existing projects. They add new windows forms or MVC controllers/views connected to MySQL.

- Added the **Entity Framework** option to the **MySQL Website Configuration** dialog for web projects, so Entity Framework version 5 or 6 can be used with a MySQL database provider. These automatically add the configuration/references needed to the `web.config` file and the project itself. Also, all available configuration options are now listed in the dialog.

## Bugs Fixed

- The Installer could not uninstall MySQL for Visual Studio if Visual Studio was uninstalled first. (Bug #21953055, Bug #71226)
- In v1.2.4, the **Launch Workbench** and **Open MySQL Utilities Console** toolbar buttons were disabled. (Bug #21495692)
- The "Templates" could not be uninstalled via **Add/Remove Programs**. Because Project Templates were replaced by Item Templates, this is no longer a concern. (Bug #21488922, Bug #77802)
- The dataset designer wizard was not showing the stored procedure parameters when creating a "TableAdapter" using existing stored procedures for the "Select" command. Also, the stored procedure command had an "error" thus causing the dataset to not be created. (Bug #20233133, Bug #74195)

## Changes in MySQL for Visual Studio 1.2.4 (2015-07-28, General Availability)

This is a maintenance release that fixes bugs and adds support for Microsoft Visual Studio 2015.

### Known limitations:

MySQL for Visual Studio project templates are designed to work with MVC 4, but Microsoft Visual Studio 2015 is the first VS version that ships with MVC 5. As a workaround for this release, you must install MVC 4 to get the project templates working with VS 2015. If MVC 4 is not installed, then the MySQL template menus and toolbars will be disabled.

If MySQL for Visual Studio 1.2.4 is installed before MVC 4, then you must uninstall and then reinstall the 1.2.4 plugin. Executing a "Change" or "Repair" will not work.

The **Launch Workbench** and **Launch MySQL Utilities** toolbar buttons are disabled in this release.

## Bugs Fixed

- Added Microsoft Visual Studio 2015 support. (Bug #21438524, Bug #77708)
- Removed Microsoft Visual Studio 2008 support.

## Changes in MySQL for Visual Studio 1.2.3 (2014-08-06, General Availability)

This is the first GA release in the MySQL for Visual Studio 1.2 series, and it is a version suitable for production environments.

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

### Functionality Added or Changed

- A MySQL Simple Membership provider option was added to the web configuration tool.

### Bugs Fixed

- Several DLL files were hardcoded with the version number "1.0.0.0" instead of using the current MySQL for Visual Studio value. (Bug #19209876)

## Changes in MySQL for Visual Studio 1.2.2 (2014-07-15, Release Candidate)

This RC release of the 1.2.x branch improves the feature set that was added in the limited 1.2.x branch. This RC release should not be used in a production environment.

### Bugs Fixed

- The MySQL **ASP.NET MVC 3 Project Wizard**, MySQL **Windows Forms Project**, and MySQL **Website Configuration** wizards were improved.
- The MySQL **Windows Forms Wizard** now generates an application with multiple forms that include different types of views based on user customization.
- Entity Framework 5 / 6 support was added when generating new MySQL projects.

## Changes in MySQL for Visual Studio 1.2.1 (2014-07-01, Beta)

This beta release of the 1.2.x branch improves the feature set that was added in the limited 1.2.0 release. This beta release should not be used in a production environment.

### Bugs Fixed

- The MySQL **ASP.NET MVC 3 Project Wizard**, MySQL **Windows Forms Project**, and MySQL **Website Configuration** wizards were improved.
- The MySQL **ASP.NET MVC 3 Project Wizard** now generates browsable pages for all tables included in the Data Entity model.
- A **Create New MySQL Project** dialog is now accessible from the MySQL Toolbar.
- The name MySQL **MVC 3 Template** was changed to MySQL **ASP.NET MVC 3 Project Wizard**.

## Changes in MySQL for Visual Studio 1.2.0 (2014-04-21, Alpha)

The first public release of the 1.2.x branch. This alpha release is not feature complete, has limitations, and should not be used in a production environment.

## Functionality Added or Changed

- The MySQL **Website Configuration** wizard was updated to include an ASP.NET **Web Personalization** provider. This allows you to store personalization state data for the content and layout of Web Parts pages that are generated by the Web Parts personalization service using MySQL as a data source.

This feature requires Connector/NET 6.9.

- The MySQL **Website Configuration** wizard was updated to include an ASP.NET **Site Map** provider. This allows you to show a hierarchical list of links that describe the structure of a site.

This feature requires Connector/NET 6.9.

- A MySQL **Windows Forms Project** wizard was added, and is available from the Visual Studio **New Project** dialog. This wizard automates the generation of a simple .NET Windows Forms Application with a form that is connected to a MySQL data source.
- A MySQL **MVC 3 Template** wizard was added, and is available from the Visual Studio **New Project** dialog. This wizard automates the generation of an ASP.NET application that includes a MySQL **Membership configuration** section, and can be set up to use a new or existing MySQL database. Optionally, the application can also use the **MySQL Role** and **MySQL Profile** providers.

## Changes in MySQL for Visual Studio 1.1

### Changes in MySQL for Visual Studio 1.1.4 (2014-03-10, General Availability)

This is a maintenance release for the MySQL for Visual Studio 1.1 series, and it is suitable for production environments. It is compatible with Connector/Net 6.8.3 and later, and it supports MySQL Server versions 5.0 to 5.6.

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

### Functionality Added or Changed

- Introduced a new MySQL toolbar, which provides shortcuts to some of the main functionalities of MySQL for Visual Studio. See [Enabling the MySQL Toolbar](#) for details.

### Bugs Fixed

- The MySQL parser did not recognize the full string literal syntax of `[_charset_name]'string' [COLLATE collation_name]` as supported by the MySQL Server. This fix makes Connector/NET and MySQL for Visual Studio recognize the string literal syntax as specified in [Character String Literal Character Set and Collation](#), in the MySQL Server manual. (Bug #18169145)
- In Visual Studio, the stored procedure debugger did not evaluate the `last_insert_id()` function in a watch expression correctly. This fix also corrects similar issues for two other information functions that query the debug data table: `row_count()` and `found_row()`. (Bug #18111085)
- A new model could not be created with Entity Framework 6 in Visual Studio 2013 when using MySQL for Visual Studio 1.1.3 and Connector/NET 6.8.3. (Bug #18105394, Bug #71427)
- The MySQL parser could not parse an `if` statement when there were any spaces before the parenthesis for the arguments (for example, "if (1,1, 1)"). Besides `if`, the same issue occurred for a number of other

functions like `row_count`, `ifnull`, `mod`, `repeat`, and so on, and this fix corrects the problem for all of them. (Bug #17981407)

- When debugging a stored routine in Visual Studio with the debugger, long identifiers caused the error "data too long for column 'pvarname'" to be thrown. That was because the SQL script of the debugger did not support the same lengths for identifier names as the MySQL server does. This fix matches the debugger with the MySQL server on the maximum lengths supported for identifier names. (Bug #17568158, Bug #70159)

## Changes in MySQL for Visual Studio 1.1.3 (2014-01-14, General Availability)

This is the first GA release in the MySQL for Visual Studio 1.1 series, and it is a version suitable for production environments. It is compatible with Connector/Net 6.8.3, and it supports MySQL Server versions 5.0 to 5.6. It includes the following features:

- Integration with Visual Studio 2013 (requires Professional Edition or higher)
- Integration with Connector/Net 6.8.3
- Support for Entity Framework 6 new designers in Visual Studio 2013 (requires Connector/Net 6.8.3)
- A new data export tool

### Bugs Fixed

- Intellisense did not treat the keywords "describe" and "desc" as synonyms of "explain". (Bug #17956087)
- Intellisense showed views from all databases, instead of just the current one. (Bug #17954412)
- The debugger failed with parser errors when debugging stored procedures with a `Leave` statement. (Bug #17616344)

## Changes in MySQL for Visual Studio 1.1.2 (Not released, Internal, Release Candidate)

### Bugs Fixed

- Could not open the ASP.NET Web Configuration tool in the Solution Explorer when using MySQL for Visual Studio 1.0.2 and Connector/NET 6.7.5. (Bug #17898244, Bug #69808)
- When opening or creating a `.mysql` file, trying to invoke Intellisense caused an error in some cases. (Bug #17890216)
- Debugger failed to debug a routine correctly when it had two functions in a single expression. That was due to an error in handling the scope of the second function, which has been fixed. (Bug #17865915)
- Installation on Windows Server 2008 failed. (Bug #17698406, Bug #70590)

## Changes in MySQL for Visual Studio 1.1.1 (Not released, Internal, Beta)

- [Functionality Added or Changed](#)
- [Bugs Fixed](#)

### Functionality Added or Changed

- With MySQL for Visual Studio 1.0.2, the registration of the Data provider in the `machine.config` file was done by the installation of MySQL for Visual Studio. From MySQL for Visual Studio 1.1.1

onwards, the registration is no longer performed by MySQL for Visual Studio, but is performed during the installation of Connector/NET (from 6.8.1 and on). Also, the registration is no longer needed when using MySQL for Visual Studio only.

- Added support for Entity Framework 6 for creating a model using Database First and Model First. This feature requires Connector/NET 6.8.1.

## Bugs Fixed

- When trying to edit or alter a stored procedure or trigger that included references to session variables, an error occurred and the changes were not saved, unless `Allow User Variables=true` was in the connection settings. Besides stopping the error, this fix also stops similar issues with renaming stored procedure or trigger using **Alter Routine**. (Bug #17830161)
- Generation of database from a simple model failed in Visual Studio 2012.



### Important

For this fix to work, you have to select the correct **DDL Generation Template** as an entity property. Also, there is a known issue found with Visual Studio 2010, which forces the user to go back and forth between steps in order to create the SQL script.

(Bug #17800707, Bug #67964)

## Changes in MySQL for Visual Studio 1.1.0 (Not released, Internal, Alpha)

### Functionality Added or Changed

- Added the MySQL Data Export tool.
- Added support for Visual Studio 2013.

## MySQL Visual Studio Plugin Release Notes



### Note

This section contains separate Visual Studio Plugin release notes for versions of Connector/Net older than 5.1.2. From Connector/Net 5.1.2 to 6.6.x, the Visual Studio Plugin is part of the main Connector/Net package, and changes to the Visual Studio Plugin are described in the Connector/Net release notes.



### Note

Since Connector/Net 6.7.x., the Visual Studio Plugin has been replaced by the product MySQL for Visual Studio, and these two products have conflicting version numbers.

## Changes in MySQL Visual Studio Plugin 1.0.1 (2006-10-04)

This is a bug fix release to resolve an incompatibility issue with Connector/Net 5.0.1.

It is critical that this release only be used with Connector/Net 5.0.1. After installing Connector/Net 5.0.1, you will need to make a small change in your machine.config file. This file should be located at `%windir%\Microsoft.Net\Framework\v2.0.50727\CONFIG\machine.config` (`%windir%` should be the location of your Windows folder). Near the bottom of the file you will see a line like this:



```
<add name="MySQL Data Provider" invariant="MySql.Data.MySqlClient"
description=".Net Framework Data Provider for MySQL"
type="MySql.Data.MySqlClient.MySqlClientFactory, MySql.Data"/>
```

It needs to be changed to be like this:

```
<add name="MySQL Data Provider" invariant="MySql.Data.MySqlClient"
description=".Net Framework Data Provider for MySQL"
type="MySql.Data.MySqlClient.MySqlClientFactory, MySql.Data,
Version=5.0.1.0, Culture=neutral, PublicKeyToken=c5687fc88969c44d"/>
```

## Changes in MySQL Visual Studio Plugin 1.0.0 (2006-10-04)

### Bugs Fixed

- Ability to work with MySQL objects (tables, views, stored procedures, etc) from within Server Explorer.
- DDEX (Data Designer Extensibility) compatibility.

