MySQL Workbench

Ultra-short Introduction

for DTU courses 02170 and 02327

Anne Haxthausen, 16 January 2024

This guide assumes that you have successfully installed MySQL Workbench and MariaDB. It explains how to try out your MySQL Workbench installation using an example file you can download from the course Filesharing on DTU Learn. Please note, that there might be small variations in the tool and its appearance, depending on the environment and the version of the tool.

If you need more info, look in the MySQL Reference Manual (https://dev.mysql.com/doc/workbench/en/), and especially in section 8.1 (https://dev.mysql.com/doc/workbench/en/wb-sql-editor.html) about the visual editor.

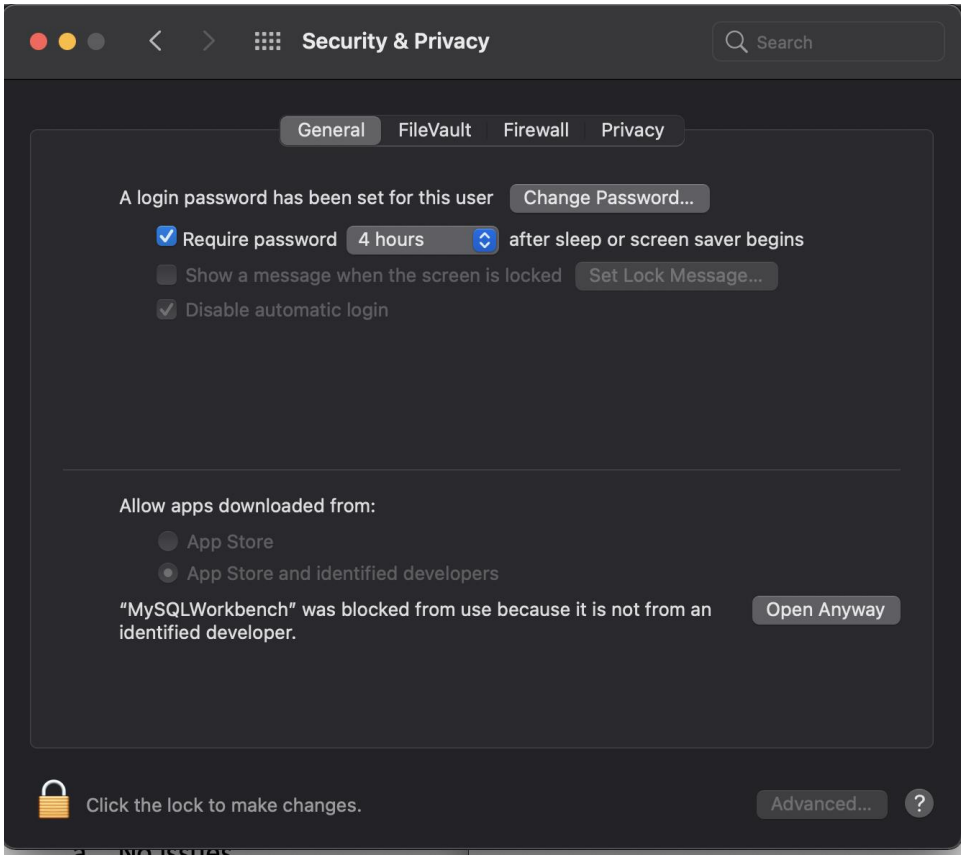
1. Start MySQL workbench.

This is done as follows:

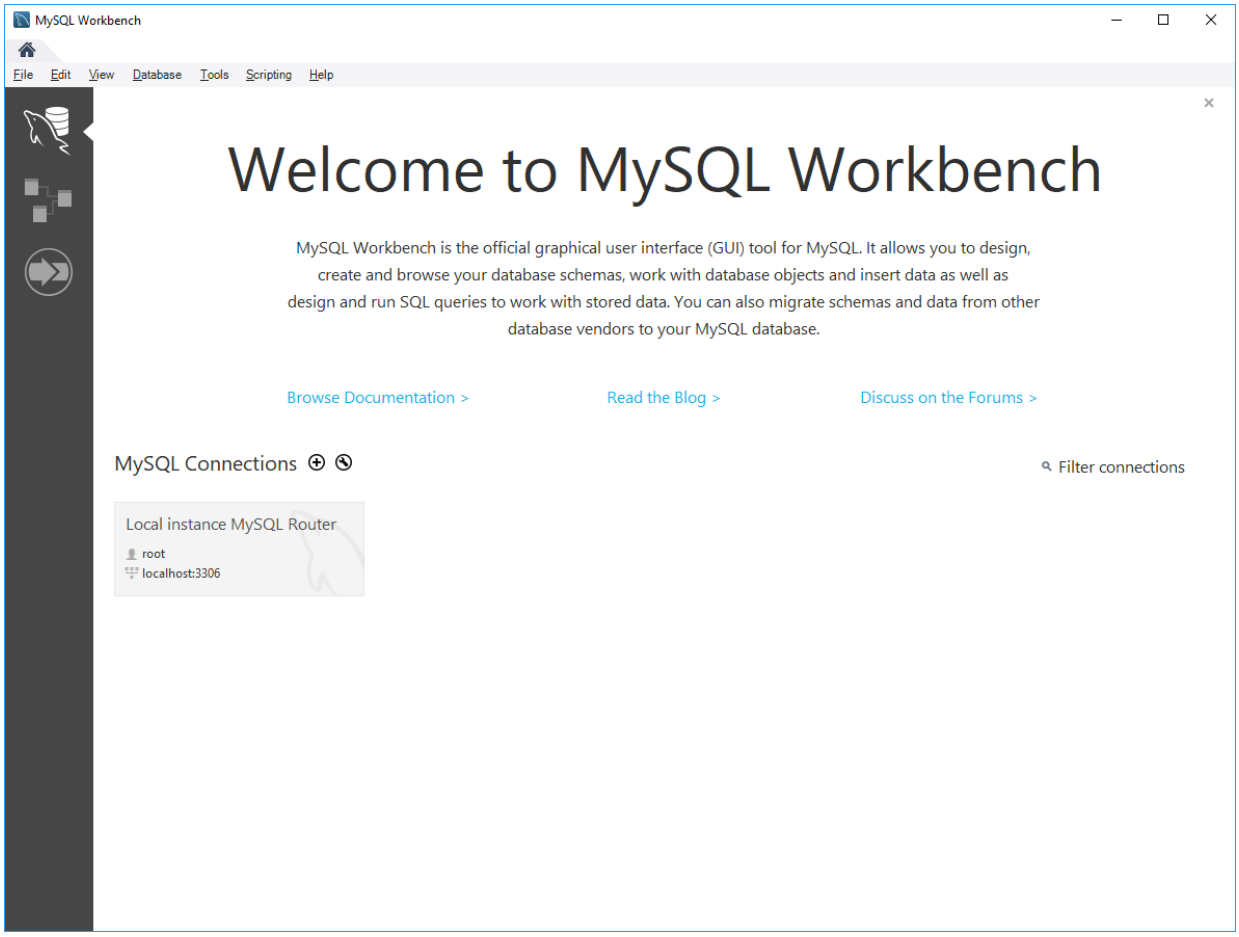
On Windows: choose from your installed programs, MySQL ->MySQL Workbench.

On Linux: type one of the commands: *mysql-workbench&* and *mysql-workbench-community&* (the latter should be used for Ubuntu 20.04 or higher).

On Mac: if you have followed the guide on installing MariaDB as a docker container, you must start the container instance as described in that guide before you can start the Workbench. You can then start the workbench by Double-clicking the MySQL Workbench application in the Applications folder. If you get a security warning that Workbench can't be opened, you can solve that by going to System Preferences -> Security & Privacy. At the bottom of the General tab, click "Open Anyway":



The opening of the workbench should result in a welcome page similar to this:



2. Create a new connection to the server (if not already done):

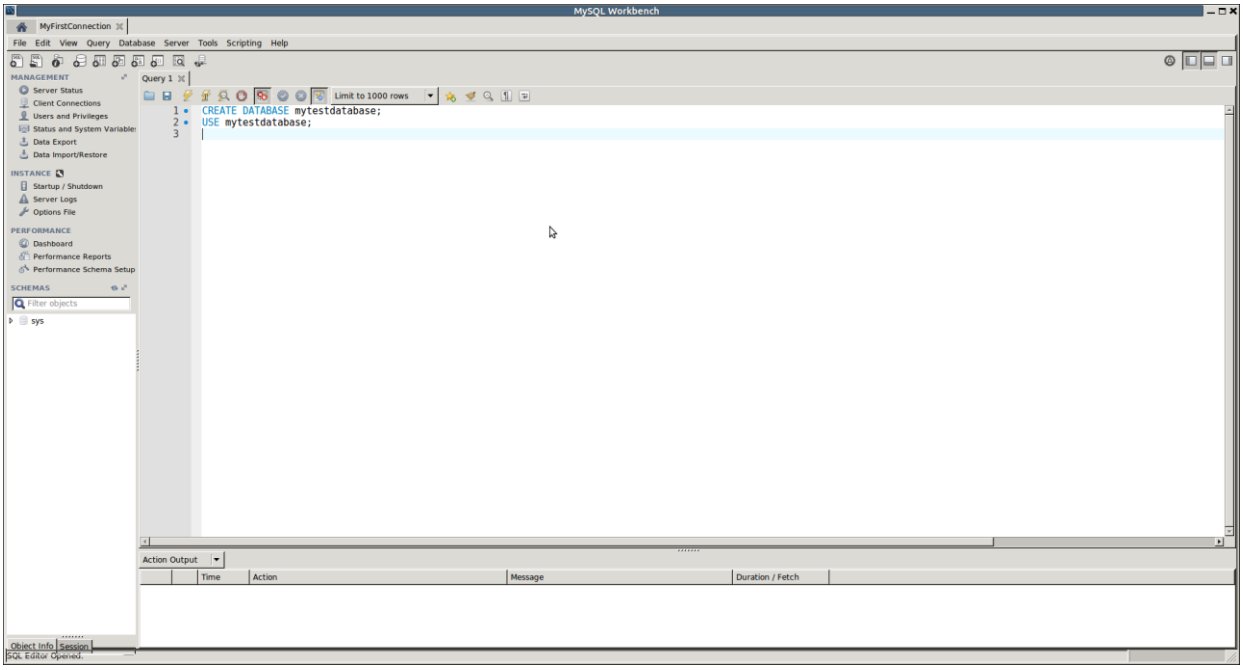
First time, you use the workbench, create a new connection (which you can use later on, whenever you want to use the workbench). If you have followed the installation guide for Mac, this step has already been done.

A new connection is created as follows:

1. Click on the + icon on the welcome page and a window will pop up.
2. Choose a name for the connection, check port is 3306 and click on **Test Connection**.
    - A window will pop up.
    - Fill out your chosen MariaDB/MySQL password and click **Ok**.
    - It will then probably give a connection warning. Click on **Continue Anyway.**
    - It will then hopefully answer: **Successfully made the MySQL connection.** Click **Ok.**
3. Now you are back to the previous window, from where you selected **Test Connection**. This time click **Ok.**
4. Now you should be back on the welcome page.

3. Open the workbench editor for your connection:

1. Click on the icon with your new connection name.
2. In case you are prompted for a password, fill out your MariaDB/MySQL password and click **ok**.
3. Click on **Continue Anyway**. The result will be a page similar to the one below.

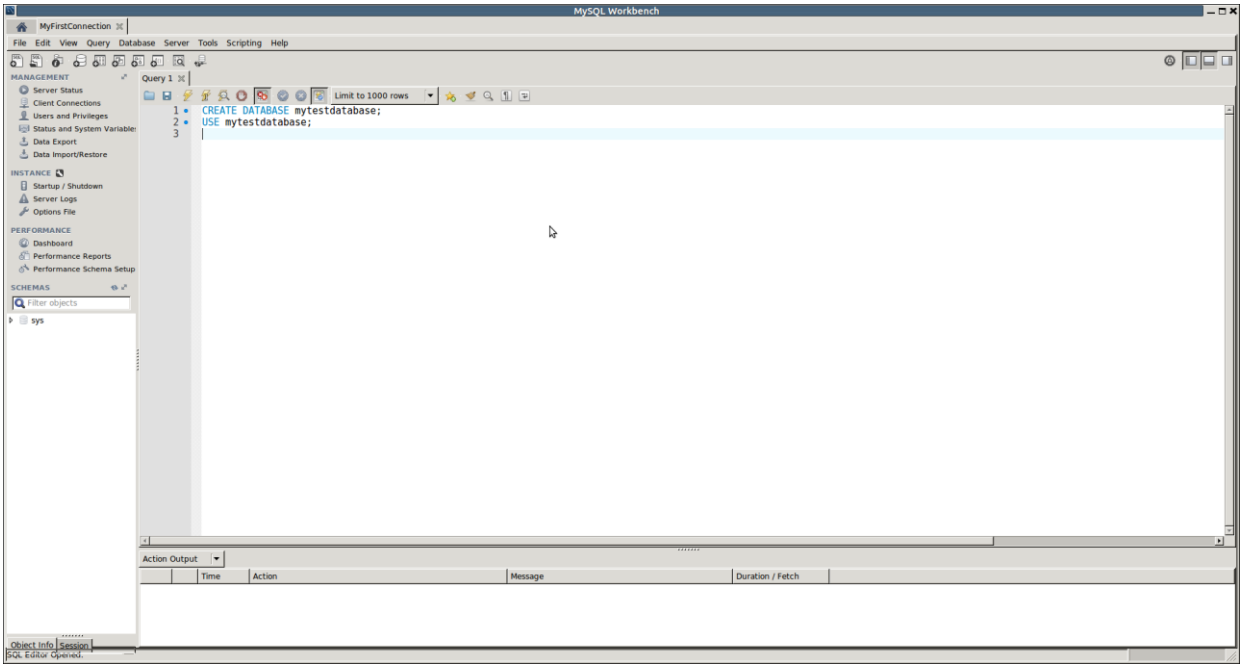


4. Writing and executing SQL commands: This is done in an *SQL query panel.*

1. As an example, type the following in the SQL query panel:

   CREATE DATABASE mytestdatabase;

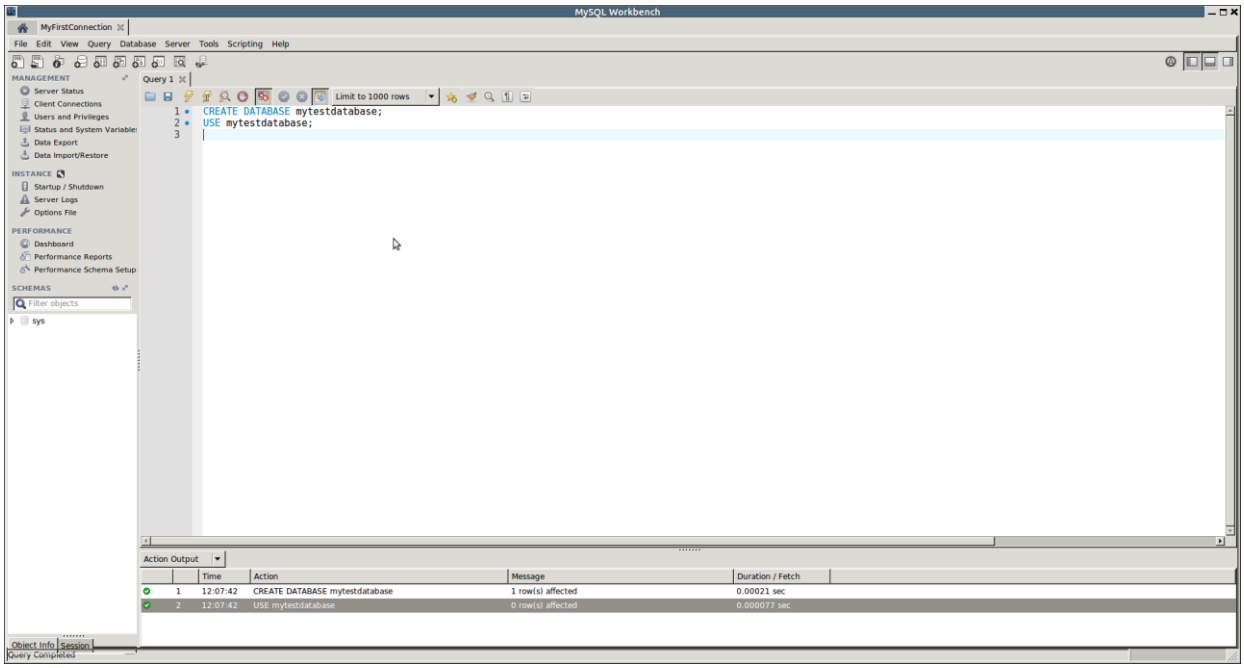
   USE mytestdatabase;



2. In the menu bar of the SQL query panel, click on the flash icon to execute all the SQL statements you have just typed. (If you do not wish to execute all statements, select those you want to use,

before clicking on the icon.) Alternatively use “Query > Execute ...”.

3. As a result, in the (action) output panel, you will see the status of the executed statements as shown on the picture below. (If the query had resulted in a table, this would have been shown in a *result panel* as will be shown in next section.)



5. Loading a script from a .sql file into a new SQL query panel and execute it:

1. Download the “FamilyDB.sql” file from the Databases folder under DTU Learn > Course Content > Content. This file contains SQL commands to create and populate a table with data.

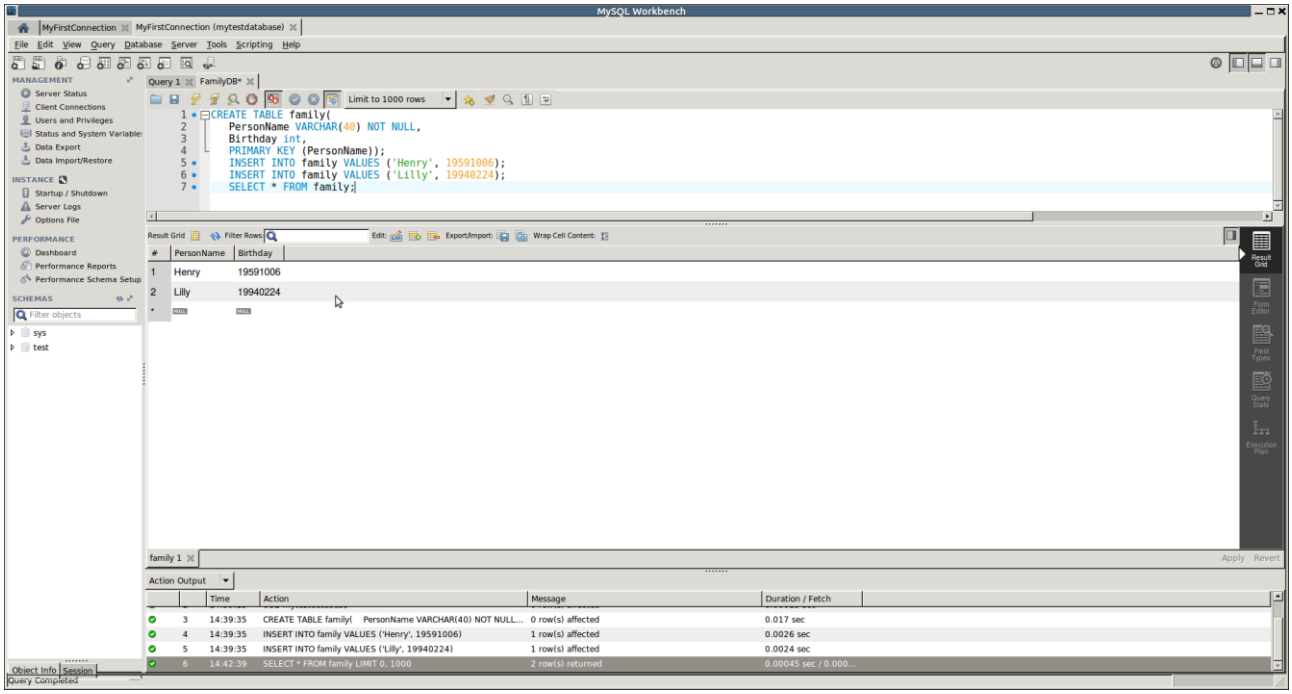
2. Select “File > Open SQL Script” (or click on the left-most icon in the SQL query panel), select the downloaded file, and click “Open”.

3. You can now execute the script as follows: In the menu bar of the SQL query panel, click on the flash icon to execute the SQL script. 

4. To check the result, execute the SQL command

   SELECT * FROM family;

   The result (a table with two rows) is shown in the result panel: as can be seen below.



6. Creating a script with SQL queries in a .sql file:

If you wish to save the commands from the active query panel into an SQL script file (with extension .sql) do as follows:

1. Select “File > Save Script As” (or click on the second icon in the SQL query panel), select the file to which the commands should be written, and click “Save”.

7. Ending the session:

On Windows, select “File > Exit”.

On Mac, select “MySQLWorkbench > Quit MySQL Workbench”

Note that the database and tables you have created will, as default, be kept for next time you connect to the system.
(However, if you make models in the Workbench, these must be saved.)