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How to install MySQL on macOS

Step by step instructions to install MySQL on macOS
using Homebrew

Published Jan 05 2020

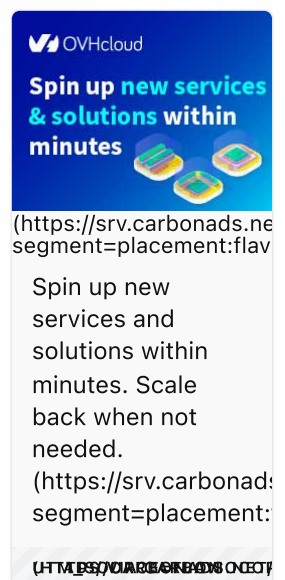
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On macOS, you can install MySQL easily using [Homebrew](https://flaviocopes.com/homebrew/)
(<https://flaviocopes.com/homebrew/>) .

Run:

```
brew install mysql
```

The above command should take a while, then print something like this:



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& solutions within
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Spin up new services and solutions within minutes. Scale back when not needed.
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(<https://srv.carbonads.net/segment=placement:flav>)

```
Cellar — fish /usr/local/Cellar — -fish — 85x51
#####
#####
#####
#####
#####
##### 100.0%
⇒ Pouring mysql-8.0.18_1.mojave.bottle.1.tar.gz
⇒ /usr/local/Cellar/mysql/8.0.18_1/bin/mysqld --initialize-i
⇒ Caveats
We've installed your MySQL database without a root password. To secure it run:
  mysql_secure_installation

MySQL is configured to only allow connections from localhost by default

To connect run:
  mysql -uroot

To have launchd start mysql now and restart at login:
  brew services start mysql
Or, if you don't want/need a background service you can just run:
  mysql.server start
⇒ Summary
📦 /usr/local/Cellar/mysql/8.0.18_1: 287 files, 278.2MB
⇒ Caveats
⇒ protobuf@3.7
protobuf@3.7 is keg-only, which means it was not symlinked into /usr/local,
because this is an alternate version of another formula.

If you need to have protobuf@3.7 first in your PATH run:
  echo 'set -gx fish_user_paths "/usr/local/opt/protobuf@3.7/bin" $fish_user_paths' >>
  ~/.config/fish/config.fish

For compilers to find protobuf@3.7 you may need to set:
  set -gx LDFLAGS "-L/usr/local/opt/protobuf@3.7/lib"
  set -gx CPPFLAGS "-I/usr/local/opt/protobuf@3.7/include"

⇒ mysql
We've installed your MySQL database without a root password. To secure it run:
  mysql_secure_installation

MySQL is configured to only allow connections from localhost by default

To connect run:
  mysql -uroot

To have launchd start mysql now and restart at login:
  brew services start mysql
Or, if you don't want/need a background service you can just run:
  mysql.server start
→ Cellar
```

You can now start the MySQL server by running:

```
brew services start mysql
```

Now we need to secure the MySQL server. By default the server comes without a root password, so we need to make sure it's protected.

Run:

mysql_secure_installation

The procedure can take a while, but it gives a lot of power to make sure you get the best defaults out of the box:

```
Cellar — fish /usr/local/Cellar — fish — 96x57

Press y|Y for Yes, any other key for No: y

There are three levels of password validation policy:

LOW      Length ≥ 8
MEDIUM  Length ≥ 8, numeric, mixed case, and special characters
STRONG Length ≥ 8, numeric, mixed case, special characters and dictionary      file

Please enter 0 = LOW, 1 = MEDIUM and 2 = STRONG: 0
Please set the password for root here.

New password:

Re-enter new password:

Estimated strength of the password: 50
Do you wish to continue with the password provided?(Press y|Y for Yes, any other key for No) : y
By default, a MySQL installation has an anonymous user,
allowing anyone to log into MySQL without having to have
a user account created for them. This is intended only for
testing, and to make the installation go a bit smoother.
You should remove them before moving into a production
environment.

Remove anonymous users? (Press y|Y for Yes, any other key for No) : y
Success.

Normally, root should only be allowed to connect from
'localhost'. This ensures that someone cannot guess at
the root password from the network.

Disallow root login remotely? (Press y|Y for Yes, any other key for No) : y
Success.

By default, MySQL comes with a database named 'test' that
anyone can access. This is also intended only for testing,
and should be removed before moving into a production
environment.

Remove test database and access to it? (Press y|Y for Yes, any other key for No) : y
- Dropping test database...
Success.

- Removing privileges on test database...
Success.

Reloading the privilege tables will ensure that all changes
made so far will take effect immediately.

Reload privilege tables now? (Press y|Y for Yes, any other key for No) : y
Success.

All done!
→ Cellar
```

Since we used `brew services start mysql` to start MySQL, your Mac will re-start it at reboot. You can run:

```
brew services stop mysql
```

to stop this from happening, and also to immediately stop MySQL.

You can also avoid this **daemon mode** (that's what we call programs that always run in the background and restart when the computer is restarted) by running:

```
mysql.server start
```

This will start MySQL and will keep it running until the computer is shut down, or until you run:

```
mysql.server stop
```

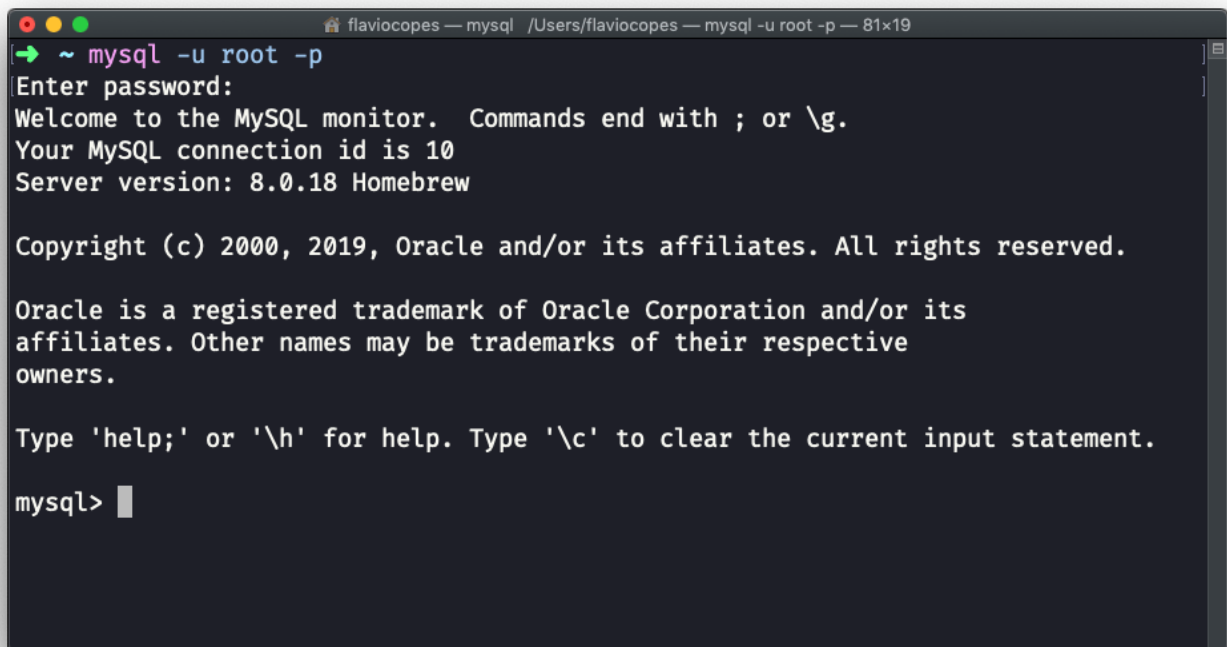
and it will not re-start it at reboot.

It's up to you to decide which one you prefer.

Now you can connect to the server using the command:

```
mysql -u root -p
```

You will need to type the `root` user password *after* you run this command, and once you are done you should see this screen:

A terminal window with a dark background and light-colored text. The window title bar shows 'flaviocopes — mysql /Users/flaviocopes — mysql -u root -p — 81x19'. The prompt is '~ mysql -u root -p'. The user has entered a password, and the MySQL monitor has started. The output shows: 'Enter password:', 'Welcome to the MySQL monitor. Commands end with ; or \g.', 'Your MySQL connection id is 10', 'Server version: 8.0.18 Homebrew', 'Copyright (c) 2000, 2019, Oracle and/or its affiliates. All rights reserved.', 'Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.', 'Type \'help;\' or \'\\h\' for help. Type \'\\c\' to clear the current input statement.', and the prompt 'mysql>' with a cursor.

```
flaviocopes — mysql /Users/flaviocopes — mysql -u root -p — 81x19
➔ ~ mysql -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.18 Homebrew

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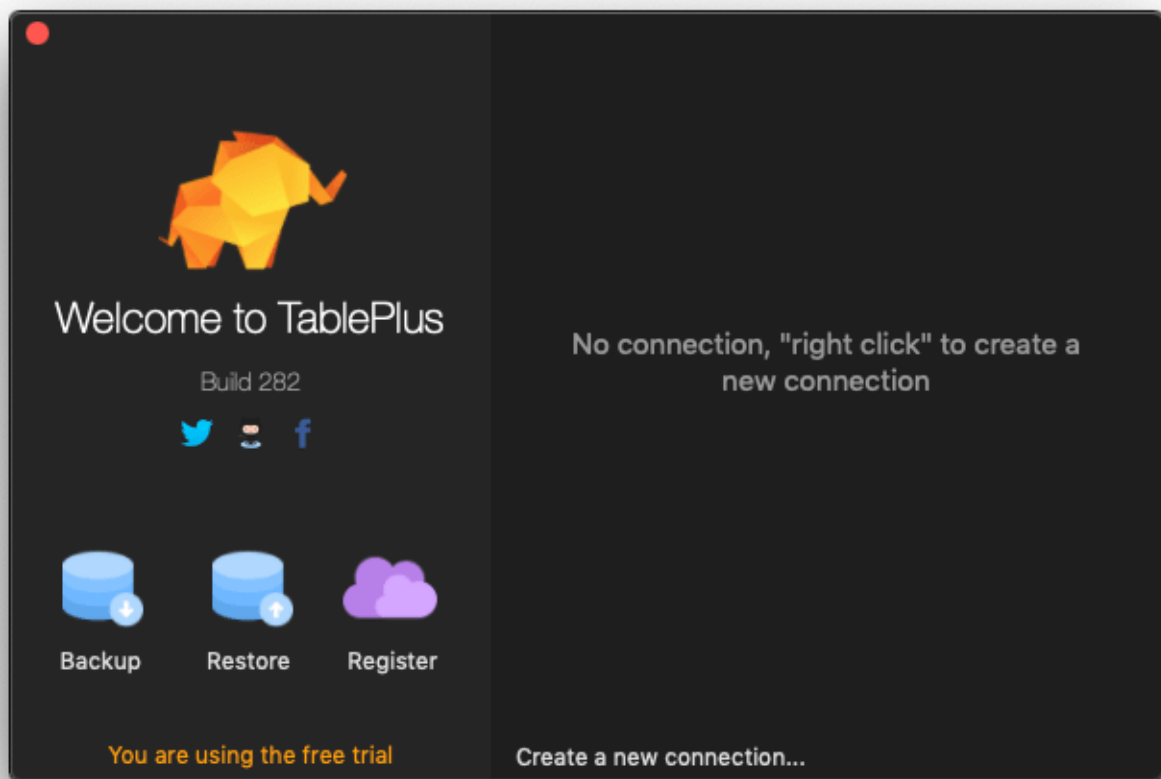
Type 'help;' or '\\h' for help. Type '\\c' to clear the current input statement.

mysql> █
```

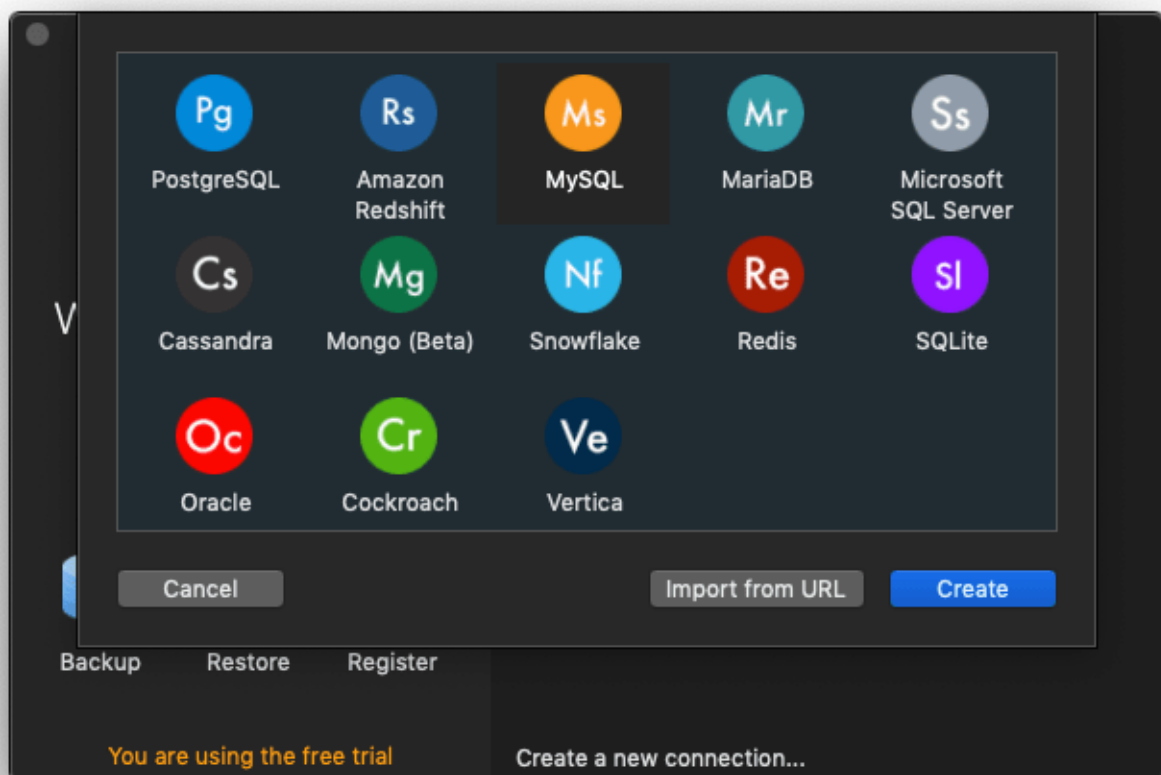
A great GUI (graphical) software we can use to interact with a SQLite database is TablePlus.

It comes with a free trial that's perfect for our usage, because it's not time-based but rather it limits the amount of concurrent connections you can make to the database.

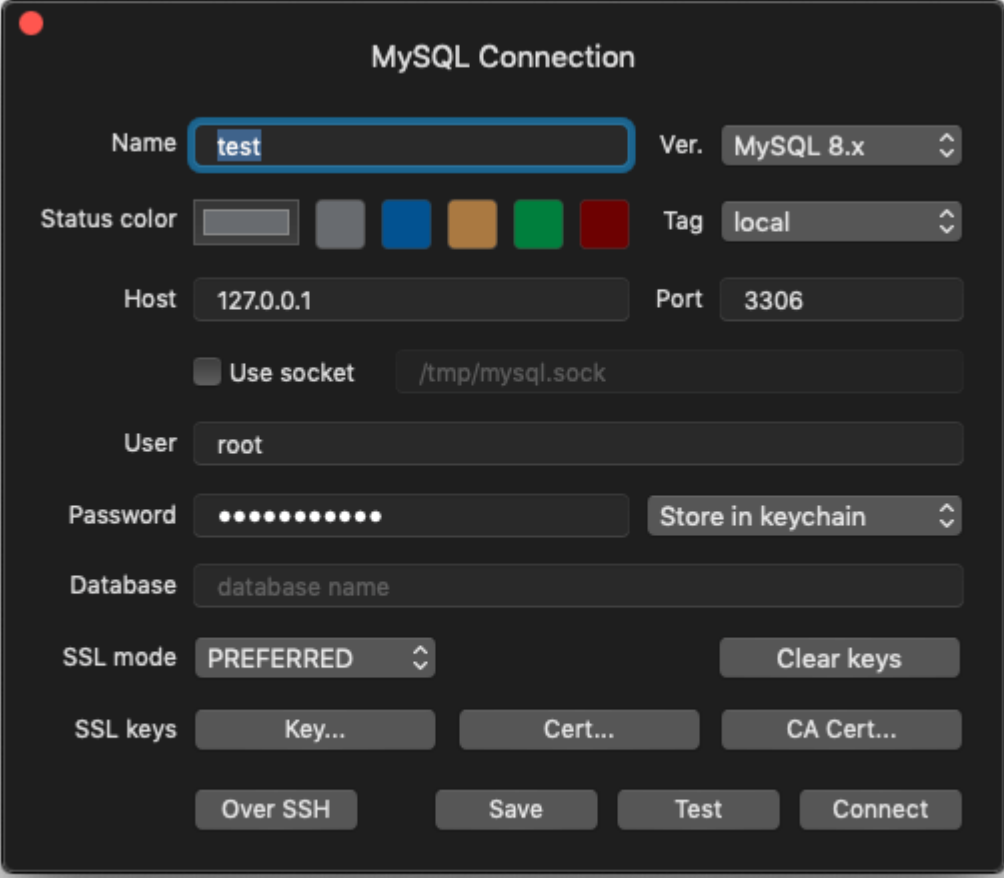
Download it from <https://tableplus.com> (<https://tableplus.com>) . I know there are macOS, Windows and Linux versions.



Click "Create a new connection..." and select MySQL in the list:



then set a name for the connection, and enter "root" and the password you set previously:

A dark-themed dialog box titled "MySQL Connection". It contains various input fields and buttons for configuring a MySQL connection. The "Name" field is highlighted with a blue border and contains the text "test". The "Ver." dropdown is set to "MySQL 8.x". The "Status color" section shows a row of color swatches: a selected grey one, followed by blue, orange, green, and red. The "Tag" dropdown is set to "local". The "Host" field contains "127.0.0.1" and the "Port" field contains "3306". There is a checkbox for "Use socket" which is unchecked, with a text field next to it containing "/tmp/mysql.sock". The "User" field contains "root". The "Password" field is masked with dots, and there is a "Store in keychain" dropdown next to it. The "Database" field contains "database name". The "SSL mode" dropdown is set to "PREFERRED", and there is a "Clear keys" button next to it. The "SSL keys" section has three buttons: "Key...", "Cert...", and "CA Cert...". At the bottom, there are four buttons: "Over SSH", "Save", "Test", and "Connect".

MySQL Connection

Name Ver.

Status color Tag

Host Port

☐ Use socket

User

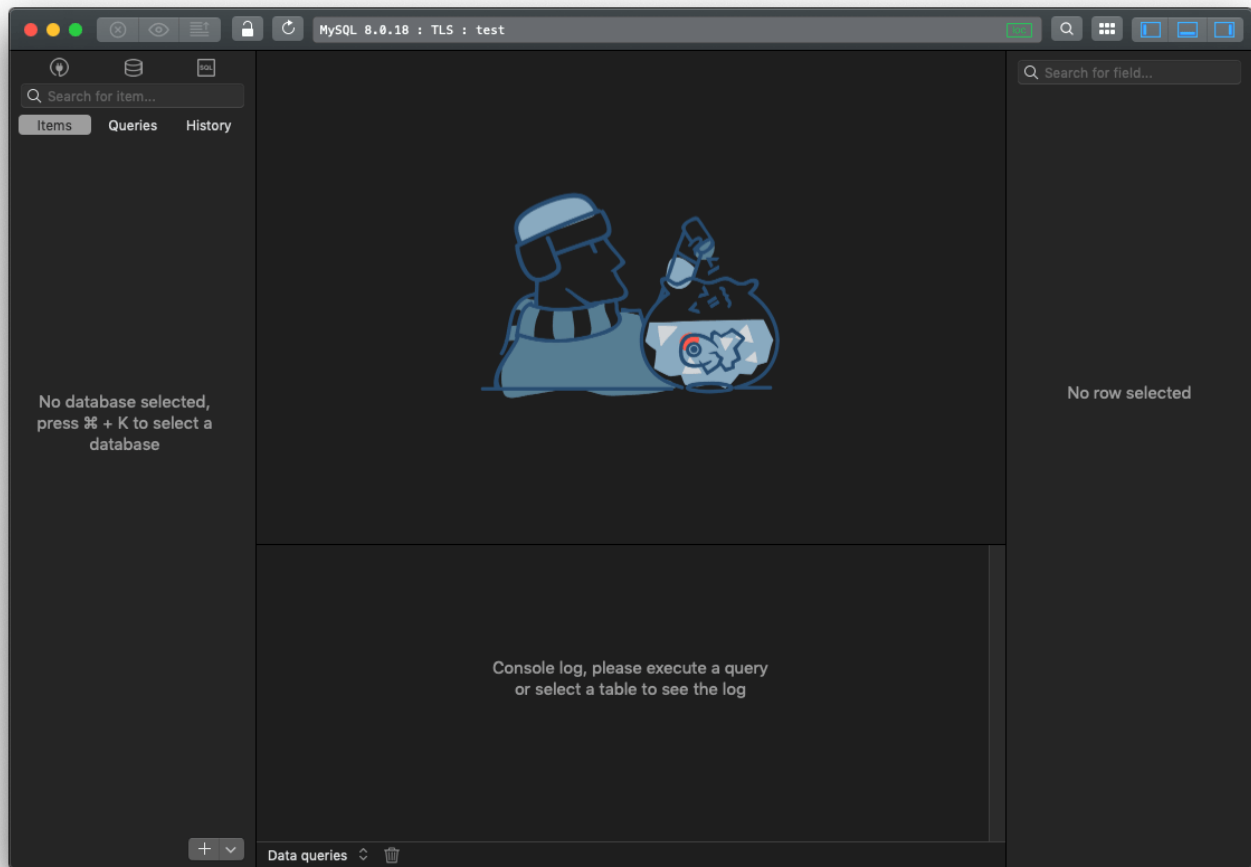
Password

Database

SSL mode

SSL keys

Click **Connect** , and you should be connected to MySQL!



Note that we are connected using the `root` user, which should only be used for administration purposes.

Day to day use of a database should be done using a normal user. We'll see it in a separate tutorial.

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(<https://flaviocopes.com/page/book-blog/>)

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