

[Home](#) » [Ubuntu](#) » [How to Install SQLite 3 on Ubuntu 20.04 LTS](#)

How to Install SQLite 3 on Ubuntu 20.04 LTS

Published on: 2022-04-18 by Joshua James

SQLite is a free, lightweight relational database management system (RDBMS) in a C library. SQLite is not a client-server database engine. Instead, it is embedded into the end program. Primarily all programming languages support SQLite, which how languages embed the program is with a file with `.sqlite3/.sqlite/.DB` extension. The software is a popular choice for local/client storage such as web browsers, Android devices, etc. The list is quite extensive.

*In the following tutorial, you will learn how to install SQLite 3 and Ubuntu 20.04 LTS Focal Fossa using the command line terminal with two different *installation methods*.*

Table of Contents



1. Update Ubuntu
2. Install SQLite 3 – APT Method
3. Install SQLite 3 – Download & Compile Method
4. Comments and Conclusion

Update Ubuntu

First, update your system to ensure all existing packages are up to date to avoid any conflicts during the installation and for good system maintenance.

```
sudo apt update && sudo apt upgrade -y
```

Install SQLite 3 – APT Method

The first option and recommended to start with is to install SQLite 3 from the default APT repository. To begin the installation, use the following command in your terminal.

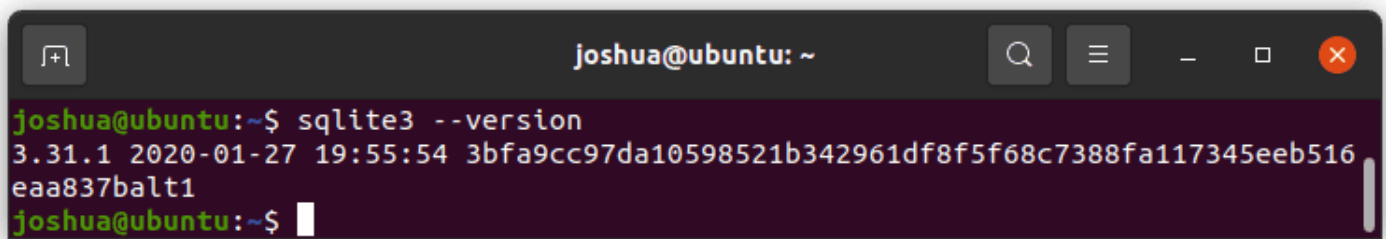
```
sudo apt install sqlite3
```

Next, verify the version installed of SQLite 3 with the `–version` command.

```
sqlite3 --version
```

Example output:

 English

A terminal window titled 'joshua@ubuntu: ~' with search, menu, and window control buttons. The command 'sqlite3 --version' has been executed, resulting in the following output: '3.31.1 2020-01-27 19:55:54 3bfa9cc97da10598521b342961df8f5f68c7388fa117345eeb516 eaa837balt1'. The prompt 'joshua@ubuntu:~\$' is visible at the bottom.

```
joshua@ubuntu:~$ sqlite3 --version
3.31.1 2020-01-27 19:55:54 3bfa9cc97da10598521b342961df8f5f68c7388fa117345eeb516
eaa837balt1
joshua@ubuntu:~$
```

Install SQLite 3 – Download & Compile Method

As many Ubuntu users would know, the version featured in Ubuntu's repository is not always the most up-to-date, and compiling can give you the latest, or for that matter, a preferred version.

First, install the build-essentials package.

```
sudo apt install build-essential -y
```

Next, visit the [SQLite Download page](#), grab the latest version link, and download it using the **wget** command.

```
wget https://www.sqlite.org/2022/sqlite-autoconf-{version}
```

Example:

```
wget https://www.sqlite.org/2022/sqlite-autoconf-3370200.tar.gz
```

Extract the files to that directory you just created.

Example:

```
tar xvfz sqlite-autoconf-3370200.tar.gz
```

Move the file to the directory created earlier.

```
sudo mv sqlite-autoconf-3370200 /opt/sqlite3
```

Now, you will navigate to the folder to begin compiling SQLite.

```
cd /opt/sqlite3
```

 English

Begin the compiling process using the following command.

```
./configure --prefix=/usr
```

The following uses the **(make)** command to start the build process. A better way to do this is to specify the number of cores you want to use in compiling to speed up the process.

```
make -j 2
```

Note the **(-j)** corresponds to the number of cores in your system to speed up the build time. If you have a powerful server, you can set this as high as possible. If you don't, it will be the default option of 1. To find out how many cores you have on your system, execute the following code:

```
nproc
```

Example output:

```
2
```

As you can see, we have two cores, so in the **(make)** command, the tutorial used **(-j 2)** to speed the process up.

Once the build process is complete, begin the installation using the following command.

```
sudo make install
```

Once installed, verify the installation and the version number.

```
sqlite3 --version
```

Example output:

```
joshua@ubuntu: /opt/sqlite3
joshua@ubuntu:/opt/sqlite3$ sqlite3 --version
3.37.2 2022-01-06 13:25:41 872ba256cbf61d9290b571c0e6d82a20c224ca3ad82971edc46b2
9818d5d17a0
joshua@ubuntu:/opt/sqlite3$
```

As above, the version is 3.37, whereas the Ubuntu repository version is at 3.31 at this tutorial.

Note that the above versions in time will change; this is just an example at the time of the tutorial of the differences.

Comments and Conclusion

The tutorial has shown how to install SQLite 3 using the APT method or compiling from source with Ubuntu 20.04 LTS. Overall, SQLite 3 is basic but powerful. However, it is acceptable for small to medium websites for large growing sites to look at MariaDB, MongoDB, and PostgreSQL, among many other options.

For more information on building applications with SQLite, visit the [official documentation page](#).

- Ubuntu
 - < [How to Upgrade to Ubuntu 22.04 LTS Jammy Jellyfish](#)
 - > [How to Install Duf Disk Usage Utility on Ubuntu 20.04](#)

Not what you were looking for? Try searching for additional tutorials.

Search

Search

[Leave a Comment](#)

Name *

Email *

☐ Save my name, email, and website in this browser for the next time I comment.

☒ Notify me via e-mail if anyone answers my comment.

☐ I consent to LinuxCapable collecting and storing the data I submit in this form. ([Privacy Policy](#)) *

 Success!



Post Comment

Search

Search

Recent Posts

How to Install VirtualBox Ubuntu Linux

How to Install Deepin (DDE) on Fedora Linux

How to Install FFmpeg on Fedora Linux

How to Install Nginx Mainline on Ubuntu Linux

How to Install Wireshark on Fedora Linux

How to Install Monit on Fedora Linux

How to Install Calibre on Fedora Linux

How to Install Kate on Fedora Linux

How to Install Geany on Fedora Linux

How to Install Foliate on Fedora Linux

How to Install Microsoft Fonts on Fedora Linux

How to Install Tor Browser on Fedora Linux

How to Increase DNF Speed on Fedora Linux

How to Install Visual Studio Code on Debian Linux

How to Install Opera Browser on Fedora Linux

How to Install Discord on Fedora Linux

How to Install Brave Browser on Fedora Linux

How to Install qBittorrent on Debian Linux

How to Install Plex Media Server on Ubuntu Linux

How to Install qBittorrent on Fedora Linux

[Contact Us](#) [Cookie Policy](#) [Disclaimer](#) [Privacy Policy](#) [Terms Of Use](#)

© 2021 - 2022 LinuxCapable all rights reserved.