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By: Hazel Virdó

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How To Install MySQL on Ubuntu 16.04

39

Posted November 23, 2016 © 495.7k

MYSQL

UBUNTU

UBUNTU 16.04

Introduction

MySQL is an open-source database management system, commonly installed as part of the popular LAMP (Linux, Apache, MySQL, PHP/Python/Perl) stack. It uses a relational database and SQL (Structured Query Language) to manage its data.

The short version of the installation is simple: update your package index, install the `mysql-server` package, and then run the included security script.

```
$ sudo apt-get update
$ sudo apt-get install mysql-server
$ mysql_secure_installation
```

This tutorial will explain how to install MySQL version 5.7 on a Ubuntu 16.04 server. However, if you're looking to update an existing MySQL installation to version 5.7, you can read [this MySQL 5.7 update guide](#) instead.

Prerequisites

To follow this tutorial, you will need:

- One Ubuntu 16.04 server set up by following [this initial server setup guide](#), including a sudo non-root user and a firewall.

Step 1 — Installing MySQL

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itory by default. At

To install it, simply update the package index on your server and install the default package with `apt-get`.

```
$ sudo apt-get update
$ sudo apt-get install mysql-server
```

You'll be prompted to create a root password during the installation. Choose a secure one and make sure you remember it, because you'll need it later. Next, we'll finish configuring MySQL.

Step 2 — Configuring MySQL

For fresh installations, you'll want to run the included security script. This changes some of the less secure default options for things like remote root logins and sample users. On older versions of MySQL, you needed to initialize the data directory manually as well, but this is done automatically now.

Run the security script.

```
$ mysql_secure_installation
```

This will prompt you for the root password you created in Step 1. You can press `Y` and then `ENTER` to accept the defaults for all the subsequent questions, with the exception of the one that asks if you'd like to change the root password. You just set it in Step 1, so you don't have to change it now. For a more detailed walkthrough of these options, you can see [this step of the LAMP installation tutorial](#).

To initialize the MySQL data directory, you would use `mysql_install_db` for versions before 5.7.6, and `mysqld --initialize` for 5.7.6 and later. However, if you installed MySQL from the Debian distribution, like in Step 1, the data directory was initialized automatically; you don't have to do anything. If you try running the command anyway, you'll see the following error:

Output

```
2016-03-07T20:11:15.998193Z 0 [ERROR] --initialize specified but the data directory
```

Finally, let's test the MySQL installation.

Step 3 — Testing MySQL

Regardless of how you installed it, MySQL should have started running automatically. To test this, check its

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```
$ systemctl status mysql.service
```

You'll see output similar to the following:

Output

```
● mysql.service - MySQL Community Server
   Loaded: loaded (/lib/systemd/system/mysql.service; enabled; vendor preset: en
   Active: active (running) since Wed 2016-11-23 21:21:25 UTC; 30min ago
   Main PID: 3754 (mysqld)
     Tasks: 28
    Memory: 142.3M
       CPU: 1.994s
    CGroup: /system.slice/mysql.service
            └─3754 /usr/sbin/mysqld
```

If MySQL isn't running, you can start it with `sudo systemctl start mysql`.

For an additional check, you can try connecting to the database using the `mysqladmin` tool, which is a client that lets you run administrative commands. For example, this command says to connect to MySQL as `root` (`-u root`), prompt for a password (`-p`), and return the version.

```
$ mysqladmin -p -u root version
```

You should see output similar to this:

Output

```
mysqladmin Ver 8.42 Distrib 5.7.16, for Linux on x86_64
Copyright (c) 2000, 2016, 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.
```

```
Server version      5.7.16-0ubuntu0.16.04.1
Protocol version    10
Connection          Localhost via UNIX socket
UNIX socket         /var/run/mysqld/mysqld.sock
```

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Threads: 1 Questions: 12 Slow queries: 0 Opens: 115 Flush tables: 1 Open table

This means MySQL is up and running.


Conclusion

You now have a basic MySQL setup installed on your server. Here are a few examples of next steps you can take:

- [Implement some additional security measures](#)
- [Relocate the data directory](#)
- [Manage your MySQL servers with SaltStack](#)
- [Learn more about MySQL commands](#)

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SQL

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How To Improve Database Searches with Full-Text Search in MySQL 5.6 on Ubuntu 16.04

10 Comments

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[khanhicetea](#) November 27, 2016

3 If it occurs error because of broken MySQL package on Ubuntu 16.04. Just do this trick

```
# Purge all MySQL packages
sudo apt purge mysql*
sudo rm -rf /var/lib/mysql
sudo rm -rf /etc/mysql

# Reinstall MySQL
sudo apt install mysql-server mysql-client
```

[butNowg](#) January 26, 2017

0 Hey,

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RKVieira February 2, 2017

- o Same here. Can't go beyond this step.

RKVieira February 3, 2017

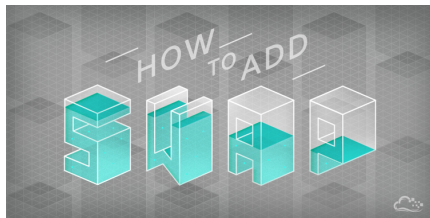
- o The "welcome" message when you log in on the console ("message of the day") tells you where the password is stored.

jasperbarzilaj February 4, 2017

- 1 This worked for me.

<https://www.digitalocean.com/community/tutorials/how-to-add-swap-on-ubuntu-14-04>

(use `dd if=/dev/zero of=/swapfile bs=1M count=1024` if you have cheap plan, and don't forget to purge and remove certain files as mentioned)



How To Add Swap on Ubuntu 14.04

by Justin Ellingwood

Swap space can be used as an "overflow" area for your system when you run out of RAM. The operating system can store data that would normally be kept in RAM on the hard drive in a

funky24426 June 3, 2017

- o WOW. I cannot install mysql because of errors like for 6-7 hours. Then finally, your solution worked for me. I made the swappines = 100 temporarily to install mysql at swapfile and it downloaded it to the swap space without error. Thank you so much man. Really thank you. I cannot explain how i am thankful to you.

sujith3g June 17, 2017

- o change `mysqladmin -p -u root version` to `sudo mysqladmin -p -u root version` to test the installation

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the proper

command is `sudo systemctl start mysql`

[uzeirdalip](#) September 1, 2017

0 Thank You, worked for me :)

[cloudnine](#) October 12, 2017

1 I haven't had to mess with the swap file to get mysql to install, as a couple of others have commented. Must thank my lucky stars. :-)

Thanks for taking the time to explain the differences in initializing `mysqlinstalldb` between the 5.6 and 5.7 versions of mysql. I find this level of attention of detail in most D.O tutorials and is the reason why I respect them so much.



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