How To Install MySQL 8 on Amazon Linux 2

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SQL stands for “structured query language” and it makes up the name MySQL, which is the combination of My and SQL. My is the name of MySQL’s co-founder, Monty Widenius daughter. MySQL is an open source database management system created primarily for the management of relational databases. For commercial use cases you can buy a license from Oracle for premium support.

In this article I’ll walk you through the installation of MySQL 8.0 on Amazon Linux 2 Server running on AWS Cloud or as a Virtual Machine somewhere in your data center. If you need a detailed article on the new features of MySQL 8, checkout the official release notes page.

Amazon Linux is a derivative of CentOS 7 Linux server with few extra repositories and packages for improved performance and integrations with other AWS cloud services. You can check the release of your server by running the following command in the terminal.

```
$ cat /etc/os-release
NAME="Amazon Linux"
VERSION="2"
ID="amzn"
ID_LIKE="centos rhel fedora"
VERSION_ID="2"
PRETTY_NAME="Amazon Linux 2"
ANSI_COLOR="0;33"
CPE_NAME="cpe:2.3:o:amazon:amazon_linux:2"
HOME_URL="https://amazonlinux.com/"
```

Step 1: Add MySQL Yum Repository to Amazon Linux 2

First, we need to add the MySQL Yum repository to our Amazon Linux 2 server's repository list. This operation is only done once and provides all MySQL package versions repositories.

Install an RPM repository package by running the commands below:

```
sudo yum install https://dev.mysql.com/get/mysql80-community-release-el7-
3.noarch.rpm
```

Hit the y key in your keyboard when prompted to start the installation.

```
Loaded plugins: dkms-build-requires, langpacks, priorities, update-motd
mysql80-community-release-el7-3.noarch.rpm
|  25 kB  00:00:00
Examining /var/tmp/yum-root-8dO5e8/mysql80-community-release-el7-3.noarch.rpm:
mysql80-community-release-el7-3.noarch
Marking /var/tmp/yum-root-8dO5e8/mysql80-community-release-el7-3.noarch.rpm to be
installed
Resolving Dependencies
--> Running transaction check
---> Package mysql80-community-release.noarch 0:el7-3 will be installed
--> Finished Dependency Resolution
amzn2-core/2/x86_64
| 3.7 kB  00:00:00

Dependencies Resolved

================================================================================
================================================================================
 Package                                  Arch                      Version
```

```
================================================================================
Installing:
 mysql80-community-release                    noarch                    el7-3
/mysql80-community-release-el7-3.noarch                    31 k

Transaction Summary
================================================================================
================================================================================
Install  1 Package

Total size: 31 k
Installed size: 31 k
Is this ok [y/d/N]: y
```

Verify that the package was installed successfully.

```
Downloading packages:
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : mysql80-community-release-el7-3.noarch
1/1
  Verifying  : mysql80-community-release-el7-3.noarch
1/1

Installed:
  mysql80-community-release.noarch 0:el7-3

Complete!
```

```
$ ls /etc/yum.repos.d
amzn2-core.repo  amzn2-extras.repo  mysql-community.repo  mysql-community-
source.repo
```

You can also view list of configured repositories with yum command.

```
$ sudo yum repolist
Loaded plugins: dkms-build-requires, langpacks, priorities, update-motd
35 packages excluded due to repository priority protections
repo id
repo name
status
amzn2-core/2/x86_64
Amazon Linux 2 core repository
20,877
amzn2extra-docker/2/x86_64
Amazon Extras repo for docker
28
mysql-connectors-community/x86_64
MySQL Connectors Community
130+35
mysql-tools-community/x86_64
MySQL Tools Community
115
mysql80-community/x86_64
MySQL 8.0 Community Server
193
repolist: 21,343
```

```
sudo amazon-linux-extras install epel -y
sudo yum install mysql-community-server
```

A number of dependencies are installed in the process.

```
Dependencies Resolved

================================================================================
================================================================================
 Package                                    Arch                    Version
Repository                          Size
================================================================================
================================================================================
Installing:
 mysql-community-libs                       x86_64                  8.0.21-
1.el7                               mysql80-community                4.5 M
     replacing  mariadb-libs.x86_64 1:5.5.64-1.amzn2
 mysql-community-libs-compat                x86_64                  8.0.21-
1.el7                               mysql80-community                1.2 M
     replacing  mariadb-libs.x86_64 1:5.5.64-1.amzn2
 mysql-community-server                     x86_64                  8.0.21-
1.el7                               mysql80-community                499 M
Installing for dependencies:
 mysql-community-client                     x86_64                  8.0.21-
1.el7                               mysql80-community                 48 M
 mysql-community-common                     x86_64                  8.0.21-
1.el7                               mysql80-community                617 k
 ncurses-compat-libs                        x86_64                  6.0-
8.20170212.amzn2.1.3                   amzn2-core                    308
```

```
================================================================================
================================================================================
Install  3 Packages (+3 Dependent packages)

Total download size: 553 M
Is this ok [y/d/N]: y
.....
Total
2.3 MB/s | 553 MB  00:03:59
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-mysql
Importing GPG key 0x5072E1F5:
 Userid     : "MySQL Release Engineering <mysql-build@oss.oracle.com>"
 Fingerprint: a4a9 4068 76fc bd3c 4567 70c8 8c71 8d3b 5072 e1f5
 Package    : mysql80-community-release-el7-3.noarch (installed)
 From       : /etc/pki/rpm-gpg/RPM-GPG-KEY-mysql
Is this ok [y/N]: y
```

Core packages installed are:

- MySQL server: mysql-community-server
- MySQL client: mysql-community-client
- Common error messages and character sets for client and server: mysql-community-common

Step 3: Start and Configure MySQL 8 on Amazon Linux 2

The next step is to start MySQL server services.

```
sudo systemctl enable --now mysqld
```

Confirm if MySQL server service is started and running.

```
$ systemctl status mysqld
● mysqld.service - MySQL Server
   Loaded: loaded (/usr/lib/systemd/system/mysqld.service; enabled; vendor preset:
disabled)
   Active: active (running) since Wed 2020-08-12 17:25:38 UTC; 7s ago
     Docs: man:mysqld(8)
           http://dev.mysql.com/doc/refman/en/using-systemd.html
  Process: 4807 ExecStartPre=/usr/bin/mysqld_pre_systemd (code=exited,
status=0/SUCCESS)
 Main PID: 4880 (mysqld)
   Status: "Server is operational"
   CGroup: /system.slice/mysqld.service
           └─4880 /usr/sbin/mysqld
```

A superuser account *'root'@'localhost* is created with initial password set and stored in the error log file. To reveal it, use the following command:

```
$ sudo grep 'temporary password' /var/log/mysqld.log
2020-08-12T17:25:34.992227Z 6 [Note] [MY-010454] [Server] A temporary password is
generated for root@localhost: BEw-U?DV,7eO
```

Use this initial password to harden the server.

```
$ sudo mysql_secure_installation -p'BEw-U?DV,7eO'
```

Set new password and set other settings to better secure access to MySQL server.

```
Securing the MySQL server deployment.


The existing password for the user account root has expired. Please set a new
password.

New password:

Re-enter new password:
The 'validate_password' component is installed on the server.
The subsequent steps will run with the existing configuration
of the component.
Using existing password for root.

Estimated strength of the password: 100
Change the password for root ? ((Press y|Y for Yes, any other key for No) :
```

```
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.
```

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

All done!
```

You can update root password anytime from MySQL shell.

```
$ mysql -uroot -p
mysql> ALTER USER 'root'@'localhost' IDENTIFIED BY 'MyNewStrongP@ssw0d!';
```

The Password Policy is requires:

- At least one uppercase letter
- At least one lowercase letter
- At least one digit
- At least one special character
- Total password length is at least 8 characters.

You have installed MySQL 8 server successfully on Amazon Linux 2 and ready to roll..

Below are other guides on Amazon Linux available in our website.

How To Install Docker CE on Amazon Linux 2

How To Install MariaDB 10.5 on Amazon Linux 2

Install Podman in Amazon Linux 2