

# Step 4 - Install MySQL

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It is recommended that your version of MySQL is compatible with the version of the OpenMRS Platform you are installing.

- MySQL 5.6 supports OpenMRS Platform version 2.2 and below
- MySQL 5.7 supports OpenMRS Platform version 2.3 and above

This requires installing an older version than the latest MySQL release.

## Windows

- The MySQL installer for Windows is found [here](#)
  - Click "*Looking for previous GA versions?*" to install version 5.6 or 5.7
  - For other versions, click "*Archives*"
- Run the installer program (.msi)
- Accept the license agreement
- When given the option to update installer please do so
- Under Feature Selection select Full Installation Setup and select the right Architecture for your computer (32-bit / 64-bit)
- Click next and you will be shown a list of applications that you need in order to meet the requirements for installing all services. Make sure you satisfy all the requirements, if not, please install the missing applications on your machine.
- On the next configuration options select "Developer Machine"
- Leave all other settings to default
- Enter a username and password. Note: These are the credentials for the user with root privileges. **Do not forget this password.**
- Click next and finish the installation.

*Note: MySQL might fail to run as a service, for this you can manually start it by navigating to Start > Settings > Control Panel > Administrative Tools > Services*

*Then find the service called "MySQL", right click > Properties then you can either click the "start" button or set "Startup Type" to automatic.*

## Debian/Debian derived distributions

To install an older version such as MySQL 5.6 or 5.7 (recommended), follow the instructions laid out [here](#).

To install the latest package, perform the following.

1. Install the MySQL server package as root:

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

2. Enter a root password

## Docker

Docker allows easy installation of MySQL in a self-contained container on linux but is a bit more complicated option on Windows or OSX. See <https://docs.docker.com/engine/installation/> on how to start using Docker.

After you have installed Docker, it's easy to launch a MySQL container. This will download a MySQL 5.7 Docker image and run it:

```
$ sudo docker run --name openmrs-mysql157 -p 3306:3306 -e MYSQL_ROOT_PASSWORD=openmrs -d mysql:5.7
```

Now you can connect to the database on port 3306 with username "root" and password "openmrs". Note that the port mapping argument `-p 3306:3306` is needed to expose MySQL service's port inside the container to the host.

You may also ask Docker to list all Docker containers:

```
$ sudo docker ps --all
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS
PORTS              NAMES
233f1d85e7c9       mysql:5.7          "/entrypoint.sh mysql"  20 seconds ago    Up 19 seconds
0.0.0.0:3306->3306/tcp  openmrs-mysql157
```

Need to test on another MySQL version? You may run multiple MySQL container's simultaneously just as long as you give them unique names and port mappings. For example to run a MySQL 5.7 container, you might say:

```
$ sudo docker run --name openmrs-mysql57 -p 3316:3306 -e MYSQL_ROOT_PASSWORD=openmrs -d mysql:5.7
```

Stopping and starting your database container is easy:

```
# stopping...
$ sudo docker stop openmrs-mysql57

# ...and starting again
$ sudo docker start openmrs-mysql57
```

If you decide you don't need the database any more you can remove it:

```
$ sudo docker rm openmrs-mysql57
```

Note: Some people may have trouble with different MySQL versions. Although higher versions of MySQL should work fine with OpenMRS, if you encounter problems with later versions of MySQL, try downgrading to version 5.6 as that is the recommended version.