

Installing MySQL for LAMS

LAMS 3.1

Using LAMS 3.1

You must use MySQL 8

[Download MySQL 8](#)

Important mysql settings in my.cfg/my.ini:

```
[mysqld]

## LAMS additions

explicit_defaults_for_timestamp
character-set-server = utf8mb4
collation-server = utf8mb4_unicode_ci
transaction-isolation=READ-COMMITTED
sql-mode="ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_D
ATE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION"
interactive_timeout = 300
wait_timeout = 300
innodb_file_per_table = 1
max_allowed_packet=32M

[mysqldump]
default-character-set=utf8mb4
hex-blob=1
single-transaction=1
quick=1
```

Create DB and db user

(default settings, please change)

```
mysql> CREATE DATABASE lams DEFAULT CHARACTER SET utf8mb4 COLLATE
utf8mb4_unicode_ci;
mysql> CREATE USER 'lams'@'localhost' IDENTIFIED BY 'lamsdemo';
mysql> GRANT SELECT,INSERT,UPDATE,DELETE,CREATE,CREATE TEMPORARY
TABLES,DROP,INDEX,ALTER ON lams_nus3.* TO 'lams'@'localhost';
mysql> FLUSH PRIVILEGES;
```

LAMS 2.5 and 3.0

Using LAMS 2.5+ on WildFly?

You must use MySQL 5.7.10+

LAMS requires MySQL 5+. Note that **it will not work with MySQL 4 or below**.

You can download MySQL 5+ for Windows from the [MySQL downloads website](#).

Installing and Configuring MySQL

This tutorial shows how to install MySQL server and prepare a user and database for LAMS:

Creating a the LAMS database

Login into MySQL as root and run the following two commands to create a database for LAMS and its user to access it:

```
mysql> DROP DATABASE IF EXISTS lams;  
mysql> CREATE DATABASE lams DEFAULT CHARACTER SET utf8 COLLATE utf8_unicode_ci;  
mysql> GRANT SELECT,INSERT,UPDATE,DELETE,CREATE,CREATE TEMPORARY  
TABLES,DROP,INDEX,ALTER ON lams.* TO lams@localhost IDENTIFIED BY 'lamsdemo';
```

We use lams as database name and db user and lamsdemo as password. These are the default settings, but you can set your own. Just make sure you change these settings when you **build LAMS** (see `common.properties` file).

Advanced stuff

Only required if you know what you are doing.

For those interested, you can find out more about installing and configuring MySQL from the [MySQL chapter](#) on Windows installation. For LAMS usage, the defaults in the installer should be fine.

LAMS expected the following two entries to exist in the `my.ini` file in the `[mysqld]` section

```
[mysqld]  
transaction-isolation=READ-COMMITTED  
sql-mode="STRICT_TRANS_TABLES,NO_AUTO_CREATE_USER,NO_ENGINE_SUBSTITUTION"
```

For those **installing on Windows *without* the installer**, please ensure you have these lines in your `my.ini`, or `my.cnf`. This file can usually be found in either your MySQL Server directory (e.g. `C:\Program Files\MySQL Server 5.0`) or in your Windows directory (`C:\Windows`). If you are using Linux/Ubuntu/Debian, you can probably find the file in `/etc/mysql/my.cnf`.

If **installing MySQL using the MySQL Windows installer** the `sql-mode` will already be set for you. In this case the `transaction-isolation` setting will be configured by the LAMS Windows installer, so you don't have to worry about editing the `my.ini` file.