

Getting Started with MySQL

Installing MySQL and a Sample Database on Linux Mint



Linux Mint is a Linux distribution, based on Debian and Ubuntu, that presents a modern, easy-to-use interface. *MySQL* is a widely-used open source relational database management system. This guide shows you how to install MySQL on Linux Mint and how to set up a sample database that can be used for exploring MySQL capabilities.

Before you begin, ensure the following prerequisites are satisfied.

- Linux Mint 17.3 or later
- Linux account with administrator privileges
- A Familiarity with Bash shell commands.

Installing MySQL

MySQL requires the installation of two components: *MySQL Server* and *MySQL Client*. The server component is a platform for hosting multiple databases and provides data management services. The client component provides capabilities for accessing databases. It also has utilities for administering databases, including backup and restore operations.

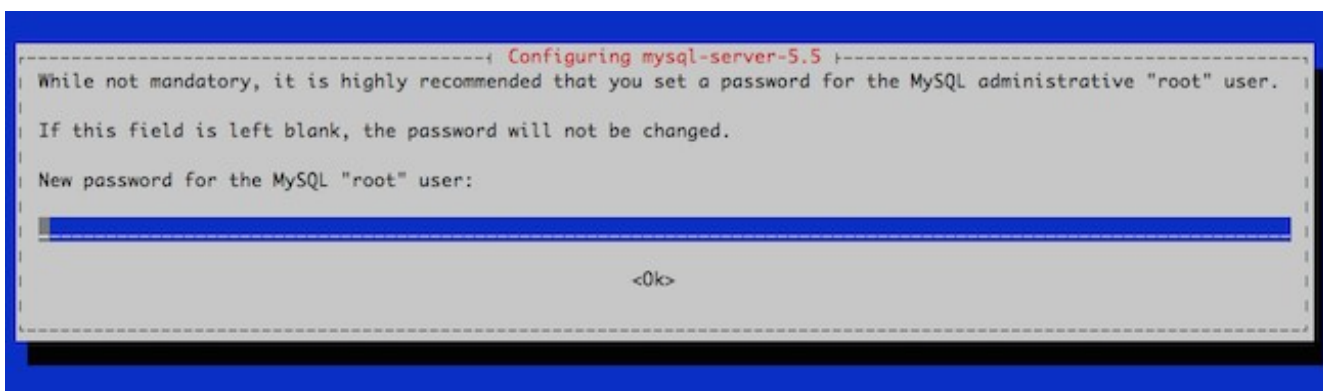
On Linux Mint, you can download and install the server and client components using `apt-get`. Be sure to use an account with administrator privileges when using the procedures below.

Download and Install MySQL Server

Use `apt-get install` to download and install the `mysql-server` package. The system may prompt for your password.

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

During installation, the system will prompt for a password for the database server *root* account (note that this is a new database account, it is not the Linux root account). Enter the password and then enter it again again to confirm. A screen shot of the password prompt window is shown below .



Download and Install MySQL Client

Use `apt-get install` to download and install the `mysql-server` package.

```
$ sudo apt-get install mysql-client
```

Verify the Installation

To ensure the installation was successful, use the `mysql` command line tool to query the database server. Start the `mysql` command line tool using the command below. At the prompt, enter the database root account password, which is the password created during the installation of MySQL Server.

```
$ mysql -u root -p
Enter password:
```

Upon successful authentication, the system will display the following information and display the `mysql` command prompt.

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 37
Server version: 5.5.49-0ubuntu0.14.04.1 (Ubuntu)

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.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

At the `mysql` prompt, execute a query to display database version information.

```
mysql> select version();
+-----+
| version() |
+-----+
| 5.5.49-0ubuntu0.14.04.1 |
+-----+
1 row in set (0.00 sec)
```

Exit the MySQL command line tool.

```
mysql> exit
```

Importing a Sample Database

Giuseppe Maxia maintains a sample “Employees” database containing records for about 300,000 individuals on GitHub that can be used for testing. Follow the procedures below to download and import the database into MySQL.

Download and Unzip the Sample Database

Download the sample database file from GitHub into the current directory using `wget`.

```
$ wget "https://github.com/datacharmer/test_db/archive/master.zip"
```

Unzip the file to the current directory using `unzip`.

```
$ unzip master.zip
```

Change the default directory to the unzipped sample database directory.

```
$ cd test_db-master
```

Import the Sample Database

Start the `mysql` command line tool. At the prompt, enter the database root account password, which is the password created during the installation of MySQL Server.

```
$ mysql -u root -p
Enter password:
```

Import the sample database by executing the SQL command in the file `employees.sql`.

```
mysql> use employees
mysql> mysql < employees.sql -u root -p
```

Executing Queries on the Sample Database

Now that MySQL is installed and the sample database has been imported, let's use the `mysql` command line tool to run a few queries and view employee information. Execute the following select statement get a list of departments.

```
mysql> select dept_name from departments;
```

```
+-----+
| dept_name |
+-----+
| Customer Service |
| Development |
| Finance |
| Human Resources |
| Marketing |
| Production |
| Quality Management |
| Research |
| Sales |
+-----+
9 rows in set (0.00 sec)
```

Execute the following select statement to get a list of all employees with a first name of “Elvis”.

```
mysql> select first_name, Last_name from employees where first_name like 'elvis';
```

```
+-----+-----+
| first_name | Last_name |
+-----+-----+
| Elvis | Demeyer |
| Elvis | Katiyar |
| Elvis | Pfau |
| Elvis | Thorelli |
| . | . |
| . | . |
| . | . |
| Elvis | Cannard |
| Elvis | Zykh |
| Elvis | Kohling |
+-----+-----+
246 rows in set (0.00 sec)
```

Next Steps

To further explore the sample database, download and install *MySQL Workbench* from the [MySQL website](#). MySQL Workbench is a graphic user interface application for database architects, developers, and administrators providing data modeling, SQL development, and administration capabilities.

* * *