MAC Installation Guides

MAC Bash Installation Guidelines

Check whether bash is present on your MAC or not

`bash --version`

If the version is 3.10.x, then you need not do anything

You can either drag and drop the files, or go to that particular directory, in which the files are present and type `./filename.sh [arguments_list]`

`Drag-drop + [arguments_list]`

Note that bash 3.10 is still used in industry. So, you need not to worry.

If Bash is not present in your MAC, then perform the steps mentioned below:

Step 1: To change a user account's default shell on macOS, simply run the

`chsh -s`

Step 2: Run "`chsh -s /bin/bash`" in a Terminal Window to switch your shell from Zsh to Bash and then enter Password.

Step 3: Restart your Terminal. New terminal windows will open using Bash.

Note: You can also change the login shell to Bash in a user's advanced options page.
Zsh became the default in macOS Catalina.

Check the version of bash using the command: `bash –version`
You can see, this is Bash Version 3.2, which dates from 2007! This version of Bash is included in all versions of macOS, even the newest one. This is due to Licensing Stuff

Step 4: Upgrade Bash on MAC with Homebrew

`/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"`

Run these two commands in your terminal to add Homebrew to your PATH:

```
(echo; echo 'eval "$(/opt/homebrew/bin/brew shellenv)"') >> /Users/yyash145/.profile
eval "$(/opt/homebrew/bin/brew shellenv)"
```

```
brew upgrade
brew install bash
```

To reload the bash shell, we will use the exec command. Then, check the shell version again. `exec bash`
Check the version of Bash → `bash --version`

Step 4: Change the default Bash on MAC
First, you will need to update the list of permitted shells by adding the bash brew version into /private/etc/shells. You can do this by editing directly the file or using the tee -a command as shown below.

```
echo $(brew --prefix)/bin/bash | sudo tee -a
cat /private/etc/shells
```

Finally, you will need to update your user's shell with the chpass command line.
`sudo chpass -s /usr/local/bin/bash username`

MAC MYSQL / Workbench Installation Guidelines

Note: We are using mysql Version-8

<u>Step 1</u>: Uninstall any existing version of MySQL.

- **Open a terminal window**
- **Use mysqldump to backup your databases to text files!**
- **Stop the database server**
- `sudo rm /usr/local/mysql`
- `sudo rm -rf /usr/local/mysql*`
- `sudo rm -rf /Library/StartupItems/MySQLCOM`
- `sudo rm -rf /Library/PreferencePanes/My*`
- **edit *`/etc/hostconfig`* and remove the line *`MYSQLCOM=-YES-`***
- `rm -rf ~/Library/PreferencePanes/My*`
- `sudo rm -rf /Library/Receipts/mysql*`
- `sudo rm -rf /Library/Receipts/MySQL*`
- `sudo rm -rf /private/var/db/receipts/*mysql*`

The last three lines are particularly important as otherwise, you can't install an older version of MySQL even though you think that you've completely deleted the newer version!

```
mysqldump -u [user name] -p [password] [options] [database_name]
[tablename] > [dumpfilename.sql]
```

```
sqldump -u root -p db1 > C:\Downloads\MySQL\data.sql
```

Note that you can use “>” to generate the backup and “<” to restore the backup.
Once the backup is generated successfully, let us open the backup file to view the content of the backup file. Open the backup location and double-click on the “data.sql” file.

If you want to generate a backup of more than one database. You must add the —databases option in the mysqldump command. The following command will generate the backup of “db1” and “db2” databases with structure and data.

```
sqldump -u root -p --databases db1 db2 > C:\Downloads\MySQL\data.sql
```

Similarly, if you want to generate the backup of all the databases, you must use –all-databases option in the mysqldump command. The following command will generate the backup of all databases within the MySQL Server.

```
sqldump -u root -p --all-databases > C:\Downloads\MySQL\data.sql
```

<u>Step 2</u>: Uninstall any existing version of MySQL WorkBench.

Go to System Settings and click MySQL. Click the Uninstall button to remove MySQL from the system.

Step 3: Upgrade Homebrew on MAC with Homebrew

```
brew upgrade
```

Step 4: Install MySQL Server

Download SQL Workbench from the official Website, you can select MAC ARM or x86 here.
https://dev.mysql.com/downloads/mysql/ - Online Shell

OR

Simply type `brew install mysql` on Terminal

After this, you should see this screen, follow the given steps

```
MySQL is configured to only allow connections from localhost by default

To connect run:
    mysql -u root

To start mysql now and restart at login:
  brew services start mysql
Or, if you don't want/need a background service you can just run:
  /opt/homebrew/opt/mysql/bin/mysqld_safe --datadir=/opt/homebrew/var/mysql
==> Summary
🍺  /opt/homebrew/Cellar/mysql/8.0.33_3: 318 files, 300.4MB
==> Running `brew cleanup mysql`...
Disable this behaviour by setting HOMEBREW_NO_INSTALL_CLEANUP.
Hide these hints with HOMEBREW_NO_ENV_HINTS (see `man brew`).
==> Caveats
==> mysql
We've installed your MySQL database without a root password. To secure it run:
    mysql_secure_installation

MySQL is configured to only allow connections from localhost by default

To connect run:
    mysql -u root

To start mysql now and restart at login:
  brew services start mysql
Or, if you don't want/need a background service you can just run:
  /opt/homebrew/opt/mysql/bin/mysqld_safe --datadir=/opt/homebrew/var/mysql
yyash145@Yashs-MacBook ~ %
```

Step 5: Check if the MySQL server is Installed on your MAC or not

Alternatively, you can open the Terminal application and type "`mysql --version`"

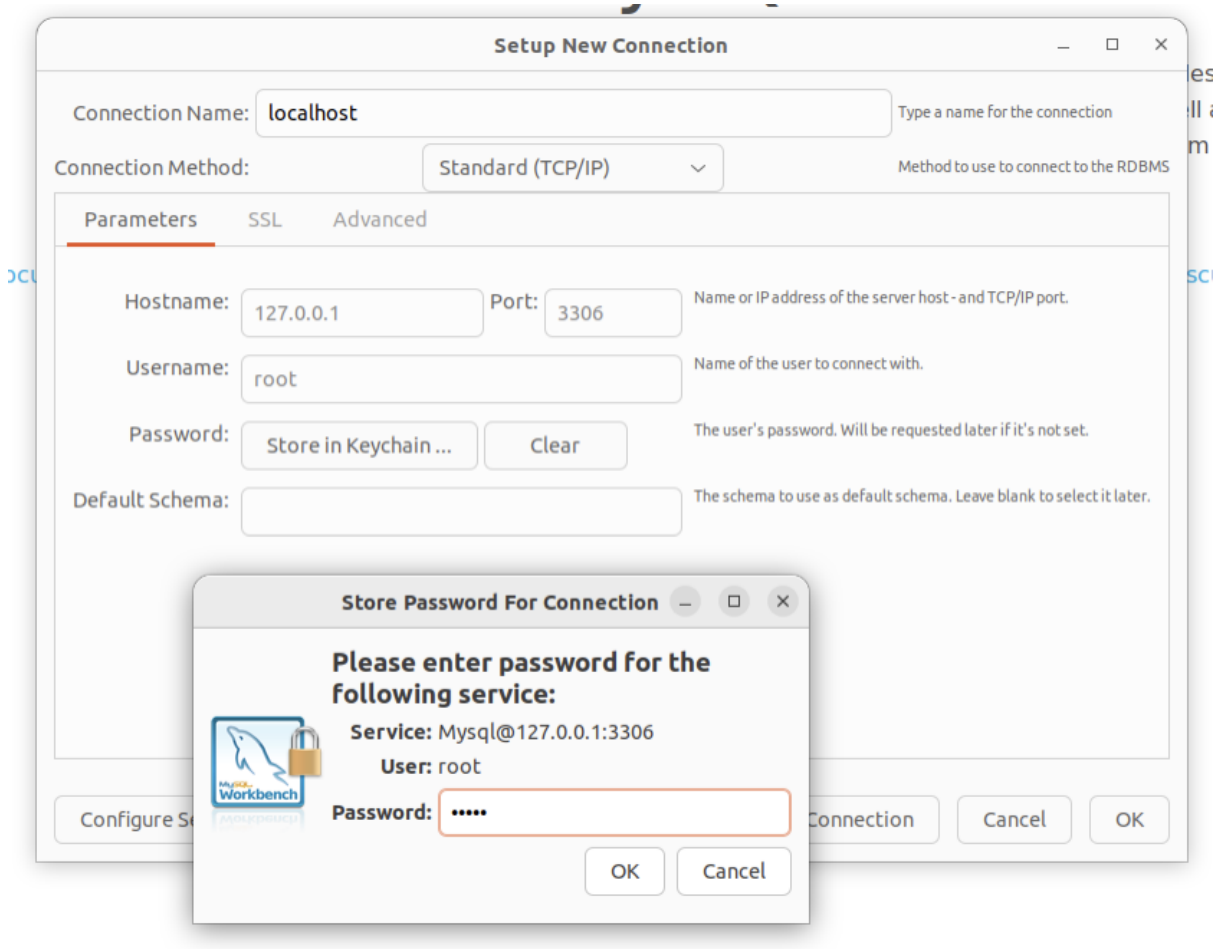
Step 6: Install MySQL Server

https://dev.mysql.com/downloads/workbench/ - SQL Workbench

I'll prefer you to use Workbench
Shift it to the Applications Folder

Step 8: Configure MySQL Workbench

Enter the details as shown below:



Click on Store in Keychain. Enter password as ‘root’.
Do test connection. Then Ok. Then finally Ok again.
Double click on the saved box to connect.

Run the following queries once connected to ‘localhost’:

```
CREATE SCHEMA `ssd_lab`;
CREATE SCHEMA `ssd_assignment`;
```

Step 7: Quit SQL Server

Type `quit;` on Terminal

MAC Python Installation Guidelines

Step 1: Check if already installed.

`python3 --version`

Step 2: If your version is below 3.10 , uninstall it

Go to Finder
Go to Applications in the menu on the left
Find the Python folder with the version number you want to uninstall, right-click it, and select “Move to Trash”.

Step 2: Download the latest version of Python, preferably 3.11 from the Official Website

https://www.python.org/downloads/
It detects your operating system automatically and shows a big button for downloading the latest version of Python installer on your Mac.
If it doesn't, click the macOS link and choose the latest Python release.

Once the download is complete, double-click the package to start installing Python. The installer will walk you through a wizard to complete the installation, and in most cases, the default settings work well, so install it like the other applications on macOS. You may also have to enter your Mac password to let it know that you agree with installing Python.

When the installation completes, it will open up the Python folder.

Step 3: Check the version of Python Again

`python3 --version`

Step 4: Check the version of pip and update it to the latest version

`pip3 –version`
`python3 -m pip install –upgrade pip`

Step 4: Install pip (if not installed)

```
curl https://bootstrap.pypa.io/get-pip.py -o get-pip.py
python3 get-pip.py
```

Step 5: Check the version of pip

`pip3 –version`

MAC MongoDB Atlas Installation Guidelines

https://www.mongodb.com/cloud/atlas/register

Register / Signin For an Atlas Account
Create and Deploy a Cluster
Add You Connection IP address to your IP access List
Create a Database User for your Cluster
Connect to your Cluster
Load Data

Alternatively, you can also use MongoDB Compass, it comes with a better GUI for interacting with the MongoDB databases, while MongoDB Atlas is a fully-managed Cloud-based service provided by MongoDB.