

Tutorial for setting up Oracle and SQL Developer (Mac OS)

This tutorial is aimed at explaining how to set up Oracle's DBMS. You will use it to store the databases you will need to work with. Additionally, you will need to set up Oracle SQL Developer, a tool needed for executing SQL queries and scripts. This tutorial addresses the installation of both tools on your personal computer (with Mac OS).

SETTING UP ORACLE DATABASE 18c EXPRESS EDITION

Install **Docker** following the instructions available at <https://hub.docker.com/editions/community/docker-ce-desktop-mac>. Once you download the .dmg file, run it to complete the installation.

Get Docker Desktop for Mac

Docker Desktop for Mac is available for free.

Docker Desktop - macOS must be version 10.14 or newer: i.e. Mojave (10.14) or Catalina (10.15). Mac hardware must be a 2010 or a newer model.

Download [Docker Toolbox](#) for previous OS versions.

By downloading this, you agree to the terms of the [Docker Software End User License Agreement](#) and the [Docker Data Processing Agreement \(DPA\)](#).



Next, open a terminal ($\text{⌘} + \text{Space}$ and write "terminal") and make sure that the `docker` is available, by launching it:

```
$ docker --version
Docker version 19.03.8, build afacb8b
```

(only type the command **in blue** after the \$ symbol)

If the output of the command does not show the program version (but instead you get an error message, such as `-bash: docker: command not found`), docker has not been set up correctly.

From the terminal, you should now create a clone to the official Oracle GitHub repository

```
$ git clone https://github.com/oracle/docker-images.git
```

This will create the directory `docker-images`. Now move to the directory `docker-images/OracleDatabase/SingleInstance/dockerfiles` using the following command:

```
$ cd docker-images/OracleDatabase/SingleInstance/dockerfiles
```

From here, run:

```
$ ./buildDockerImage.sh -v 18.4.0 -x
```

This command may take several minutes to complete. Once finished, check that the docker image has been created correctly:

```
$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
oracle/database	18.4.0-xe	8babb3a5ad97	23 minutes ago	5.89GB

Among the listed images, you should find one of oracle (repository `oracle/database`, with tag `18.4.0-xe`). Now, run the container with the following command:

```
$ docker run --name myxedb -d -p 1521:1521 -e  
ORACLE_PWD=mysecurepassword -e ORACLE_CHARACTERSET=AL32UTF8  
oracle/database:18.4.0-xe
```

You may change “mysecurepassword” with a password of your choice (make sure you use this password, with username “system”, when creating a connection in SQL Developer).

Once you execute the command, you can check the status of the newly created container:

```
$ docker container ls
```

```

CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS
ad318d7836a4  oracle/[...]  "/bin/[...]"           5 minutes ago Up 5 minutes (healthy) ...

```

When the status changes to “Up”, you will be able to connect through SQL Developer (though it may take some additional minutes before the login is successful).

SETTING UP ORACLE SQL DEVELOPER

Prerequisites: Java 1.8.0

You can download the software from the following website:

<https://www.oracle.com/technetwork/developer-tools/sql-developer/downloads/index.htm>

Select the **Mac OSX** version.

SQL Developer 19.2.1 Downloads

[Download the latest SQL Developer Version Here](#)

Version 19.2.1.247.2212 - September 12, 2019

- [Release Notes](#)
- [Bugs Fixed](#)
- [Documentation](#)

Platform	Download	Notes
Windows 64-bit with JDK 8 included	Download (490 MB)	<ul style="list-style-type: none"> • MD5: 8ddbc6663eb774e179b33f702ecff101 • SHA1: b1b08c57eb0ba95713a0e42f9ab58d9a6446442f • Installation Notes
Windows 32-bit/64-bit	Download (410 MB)	<ul style="list-style-type: none"> • MD5: ec986f454d747b742830284e6cd46fb0 • SHA1: f250ec93895f7b3fb4ae240ef32705cc5392e1b1 • Installation Notes • JDK 8 or 11 required
Mac OSX	Download (338 MB)	<ul style="list-style-type: none"> • MD5: 65082059e4332566ae69ba68cd27d3c8 • SHA1: 097b829a98ad70d308d46bc7f1a5e4503b978ee3 • Installation Notes • JDK 8 or 11 required
Linux RPM	Download (401 MB)	<ul style="list-style-type: none"> • MD5: ad7fc15627f151461f6a9b2affe8025c9 • SHA1: ead77e3ee035deb7116ba0916b2a18081dd403ab • Installation Notes • JDK 8 or 11 required

You will need to **create an account** on Oracle before proceeding with the download. Complete the registration and the verification of the email.

Once registered, you can download the .app.zip file (e.g. sqldeveloper-19.2.1.247.2212-macosx.app.zip).

Next, open the .app.zip file: this will extract SQLDeveloper.app. Double click this file to run SQL Developer.