Oracle database 18c Express edition and SQL Developer installation tutorial (Ubuntu 18.04)

This guide describes how to install Oracle DBMS, where are stored databases that we want to query, and Oracle SQL Developer, a free integrated development environment to execute SQL queries and scripts into a database stored on DBMS.

ORACLE DATABASE 18c EXPRESS EDITION

Install Docker.
(complete guide: https://docs.docker.com/install/linux/docker-ce/ubuntu/#set-up-the-repository)

From a bash shell (terminal), execute the following commands.

Add GPG key for Official Docker repository:
```
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo
apt-key add -
```

Add Docker repository at ATP resources:
```
sudo add-apt-repository "deb [arch=amd64]
https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable"
```
Update the package database with those of the previously added repository:
```
sudo apt-get update
```

Install Docker:

```
sudo apt-get install docker-ce
```

Verify the `docker correct installation and the command availability`, by lauching:
```
docker --version
```

```
Output: Docker version 19.03.8, build afacb8b
```
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 of the official Oracle Github repository:

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

It will create the folder `docker-images`. Move to the directory `docker-images/OracleDatabase/SingleInstance/dockerfiles` with the following command:

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

Then execute the following command:

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

It may take several minutes for the command to run. 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
```

You can find the oracle image (repository `oracle/database`, con tag `18.4.0-xe`).

To run your Oracle Database Express Edition Docker image use the docker run command as follows:

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

Use the password you prefer instead of "mysecurepassword" (the password you specify will be used, with the username "system", to access with SQL Developer).

For a complete guide, go to:

https://github.com/oracle/docker-images/tree/master/OracleDatabase/SingleInstance

You can check the status of the container:

```
docker container ls

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

When the status is "**Up**", you can connect with SQL Developer. It may take several minutes.

ORACLE SQL DEVELOPER INSTALLATION

prerequisites: Java 1.8.0

To download the software, connect at link :

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

Download Other Platforms Version without JDK.

SQL Developer 19.2.1 Downloads

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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)	• MD5: 8ddbc6663eb774e179b33f702ecff101 • SHA1: b1b08c57eb0ba95713a0e42f9ab58d9a6446442f • Installation Notes
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Oracle ask you to log in. If you don't have an Oracle account, create it.

From the terminal, execute followed commands:

```
sudo apt-get update
```

```
cd Downloads (or wherever you decided to download the zip file)
```

```
sudo mv sqldeveloper*.zip /usr/local/bin
```

```
cd /usr/local/bin
```

```
sudo unzip sqldeveloper-*-no-jre.zip
```

```
sudo ln -s /usr/local/bin/sqldeveloper/sqldeveloper.sh /bin/sqldeveloper
```

```
sudo rm /usr/local/bin/sqldeveloper*.zip
```

Edit the following script sqldeveloper.sh. Execute the command:

```
sudo vi /usr/local/bin/sqldeveloper/sqldeveloper.sh
```

```
#!/bin/bash
cd "dirname $0"/sqldeveloper/bin && bash sqldeveloper $*
```

Change this text with :

```
#!/bin/bash
cd /usr/local/bin/sqldeveloper/sqldeveloper/bin && bash sqldeveloper $*
```

Launch SQL Developer with command:
```
sqldeveloper
```

If sqldeveloper command was not found, you can instead execute:
```
/bin/sqldeveloper.sh
```