

Download Docker for MAC

Referred links:

<https://www.youtube.com/watch?v=ciYsDbBx80s>

<https://docs.oracle.com/database/121/COMSC/installation.htm#COMSC00004>

1. Docker Desktop Community 2.1.0.3 - Download

- <https://docs.docker.com/docker-for-mac/release-notes/#docker-desktop-community-2103>

2. Move to Applications! and login with docker hub id and pwd

3. In terminal

-> docker login

4. Browse

- https://hub.docker.com/_/oracle-database-enterprise-edition

- Proceed to checkout

- Enter first name, last name, Company:none, Title:none, phone no

- Check I agree and I acknowledge

- Get Content

- Copy command from next page similar to this one

-> docker pull store/oracle/database-enterprise:12.2.0.1

Install Oracle using Docker for MAC

5. Paste the copied command in terminal and enter. Downloading will start.

- Digest and Status will be shown

6. run command on terminal

-> docker run -d -p 1521:1521 --name oracle store/oracle/database-enterprise:12.2.0.1

(1521:1521 is container name & 12.2.0.1 is Docker image tag)

- o/p will be a long code containing alphabets and numbers

7. Check if database is running and health status, run command on terminal

-> docker ps -a

o/p similar to this one:-

CONTAINER ID	IMAGE	COMMAND	CREATED
STATUS	PORTS	NAMES	
b5fcf785d4ea	store/oracle/database-enterprise:12.2.0.1	"/bin/sh -c '/bin/ba..."	About a minute ago
Up	About a minute (health: starting)	0.0.0.0:1521->1521/tcp, 5500/tcp	oracle

8. Connecting to container, run command on terminal (change <Oracle-DB> to container name or container id)

- docker exec -it <Oracle-DB> bash -c "source /home/oracle/.bashrc; sqlplus /nolog"

(my case)

-> docker exec -it oracle bash -c "source /home/oracle/.bashrc; sqlplus /nolog"

o/p will be SQL*Plus release and production info

9. run command on terminal

SQL> connect sys as sysdba;

Enter password: Oradoc_db1
Connected.

SQL> alter session set "_ORACLE_SCRIPT"=true;
Session altered.

SQL> create user batman identified by batman;
User created.

SQL> GRANT ALL PRIVILEGES TO batman;
Grant succeeded.

SQL> commit;
Commit complete.

SQL> exit
Disconnected from Oracle Database 12c Enterprise Edition Release 12.2.0.1.0 - 64bit Production

10. Install hr schema

-> docker start oracle
oracle
-> docker exec -it oracle bash -c "source /home/oracle/.bashrc; sqlplus /nolog"

SQL*Plus: Release 12.2.0.1.0 Production on Sun Aug 9 12:00:48 2020

Copyright (c) 1982, 2016, Oracle. All rights reserved.

SQL> connect batman;
Connected.
SQL> alter session set "_ORACLE_SCRIPT"=true;

Session altered.
SQL> GRANT ALL PRIVILEGES TO batman;

Grant succeeded.

SQL> @?/demo/schema/human_resources/hr_main.sql

specify password for HR as parameter 1:
Enter value for 1: hr

specify default tablespace for HR as parameter 2:
Enter value for 2: users

specify temporary tablespace for HR as parameter 3:
Enter value for 3: temp

specify log path as parameter 4:
Enter value for 4: \$ORACLE_HOME/demo/schema/log/

***** success *****

select * from employees;

*** working ***

----- Oracle JDBC -----

1. Download ojdbc8.jar from here

<https://www.oracle.com/database/technologies/jdbc-ucp-122-downloads.html>

2. Project right click -> Build Path -> Configure Build Path -> Select derby jar and Remove -> Add external jars -> browse and select ojdbc8.jar -> Apply and Close.

3. Loading JDBC driver in java program

-> `Class.forName("oracle.jdbc.driver.OracleDriver");`

Establishing connect with the database

NOTE: know your SID before doing this

- Either look for it in listner.ora file, or
- run the below command in terminal

After connecting to database, connect with your user and execute any following SQL statement to find the ORACLE_SID

SQL> SHOW PARAMETER INSTANCE_NAME

SQL> SELECT INSTANCE FROM V\$THREAD;

SQL> SELECT SYS_CONTEXT('USERENV','INSTANCE_NAME') FROM DUAL;

SQL> SELECT INSTANCE_NAME,HOST_NAME from v\$instance;

and get the hostname and insert it in below url in place of ORCLCDB.

-> `String url = "jdbc:oracle:thin:@localhost:1521:ORCLCDB";` // ORCLDB.localdomain or OSE or //32118:ORCL

-> `String user = "batman";` //user created

-> `String pass = "batman";` //pwd for this user

***** Save the code and Run ! Voila! It should work, if doesn't then throw away the laptop for a while and relax. ****

By

Aayush Arora

Anchal Maheshwari
