

Reporte Clase Docker

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Docker desktop instalado y en ejecución en mi computadora (Macbook pro)



```
esaban@MacBook-Pro-de-Edgar:~$ docker --version
Docker version 20.10.8, build 3967b7d
```

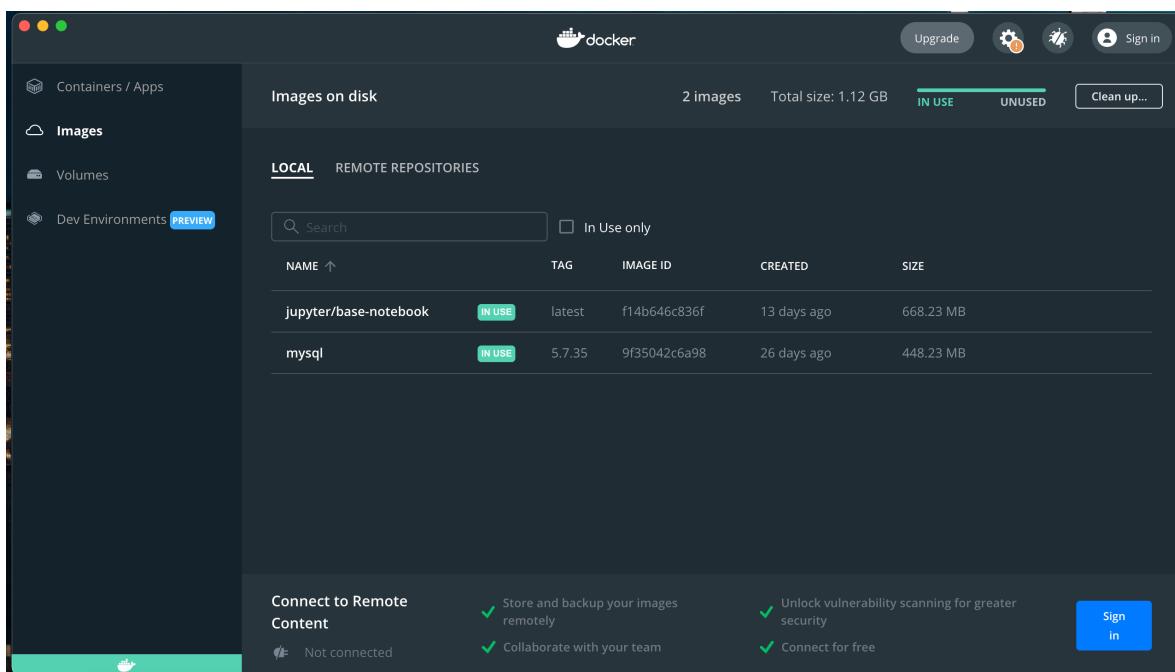


Imágenes almacenadas en Docker



```
esaban@MacBook-Pro-de-Edgar:~
```

```
docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED        SIZE
jupyter/base-notebook  latest   f14b646c836f  12 days ago   668MB
mysql               5.7.35  9f35042c6a98  3 weeks ago   448MB
```

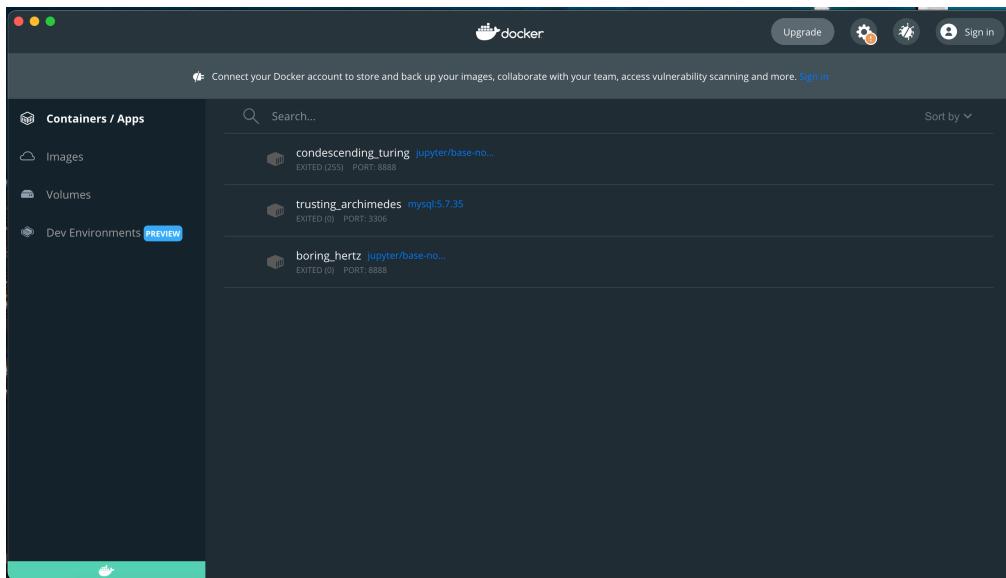


The screenshot shows the Docker desktop application running on a Mac. The sidebar on the left has tabs for 'Containers / Apps', 'Images' (which is selected), 'Volumes', and 'Dev Environments'. The main area is titled 'Images on disk' and shows two images: 'jupyter/base-notebook' (latest tag, 668.23 MB) and 'mysql' (5.7.35 tag, 448.23 MB). Both images are marked as 'IN USE'. A search bar and a 'In Use only' checkbox are at the top of the list. Below the table, there's a section for 'Connect to Remote Content' with options like 'Not connected', 'Store and backup your images remotely', 'Collaborate with your team', 'Unlock vulnerability scanning for greater security', and 'Connect for free'. A 'Sign in' button is also present.

Contenedores creados en Docker

```
ls docker ps -a
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS
ed0e32f429c0        jupyter/base-notebook   "tini -g -- start-no..."   11 days ago       Exited (255) 9 minutes ago   0.0.0.0:8
888-3888/tcp
b42776d64d74        condescending_turing    "docker-entrypoint.s..."   11 days ago       Exited (0) 11 days ago
mysql:5.7.35
be761c444b2c        trusting_archimedes   "tini -g -- start-no..."   11 days ago       Exited (0) 11 days ago
jupyter/base-notebook
boring_hertz

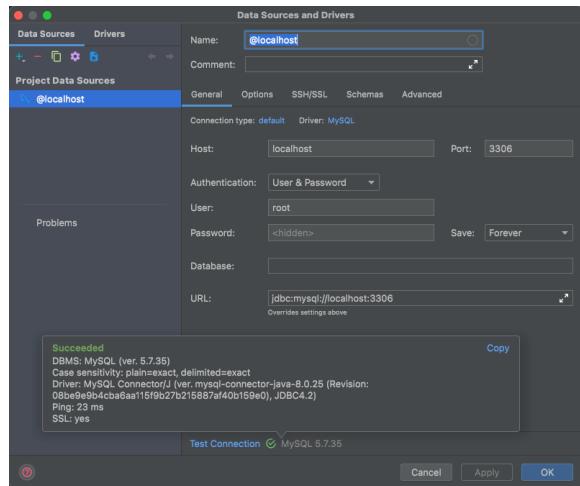
```



MYSQL en Docker

```
docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
ed0e32f429c0 jupyter/base-notebook "tini -g -- start-no..." 11 days ago Up 12 minutes 0.0.0.0:8888->8888/tcp condescending_turing
bd2727da4d74 mysql:5.7.35 "docker-entrypoint.s..." 11 days ago Up 12 minutes 0.0.0.0:3306->3306/tcp, 33060/tcp trusting_archimedes
```

Usando MYSQL desde DataGrip



sgp – test.person [@localhost]

Database › @localhost › test › tables › person

WHERE ORDER BY

	ID	NAME
1	1	Edgar
2	2	Lorena
3	3	Daniel
4	4	Kelly

Services

Connected (9 minutes ago)

```
[2021-10-23 18:37:31] Connected
test> use test
[2021-10-23 18:37:31] completed in 7 ms
test> SELECT t.*
FROM test.person t
LIMIT 501
[2021-10-23 18:37:31] 4 rows retrieved starting from 1 in 136 ms (execution:
```

Jupyter Notebook en Docker

```
docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
ed0e32f429c0 jupyter/base-notebook "tini -g -- start-no..." 11 days ago Up 12 minutes 0.0.0.0:8888->8888/tcp condescending_turing
bd2727da4d74 mysql:5.7.35 "docker-entrypoint.s..." 11 days ago Up 12 minutes 0.0.0.0:3306->3306/tcp, 33060/tcp trusting_archimedes

at 06:44:16 PM ○
I: 153 P: 32 S: 29 L: 9 E: 1 V: 1 M: 1

Tareas / Notas Docker Introduction V2 test_docker.ipynb - JupyterLab
File Edit View Run Kernel Tabs Settings Help
Launcher test_docker.ipynb Python 3 (ipykernel) ○
[1]: pip install pandas
WARNING: Retrying (Retry(total=4, connect=None, read=None, redirect=None, status=None)) after connection broken by 'NewConnectionError('<pip._vendor.urllib3.connection.HTTPSConnection object at 0x7f4d427a50>; Failed to establish a new connection: [Errno -5] No address associated with hostname'': /simple/pandas/.json: [Errno -5] No address associated with hostname) after connection broken by 'NewConnectionError('<pip._vendor.urllib3.connection.HTTPSConnection object at 0x7f4d427c370>; Failed to establish a new connection: [Errno -5] No address associated with hostname'': /simple/pandas/.json: [Errno -5] No address associated with hostname)
Collecting pandas
  Downloading pandas-1.3.3-cp39-cp39-manylinux_2_17_x86_64-manylinux2014_x86_64.whl (11.5 MB)
    11.5 MB 9.6 MB/s eta 0:00:01
Requirement already satisfied: pytz<=2017.3 in /opt/conda/lib/python3.9/site-packages (from pandas) (2021.3)
Requirement already satisfied: python-dateutil<=2.7.3 in /opt/conda/lib/python3.9/site-packages (from pandas) (2.8.2)
Collecting numpy<1.17.3
  Downloading numpy-1.21.2-cp39-cp39-manylinux_2_12_x86_64-manylinux2010_x86_64.whl (15.8 MB)
    15.8 MB 12.4 MB/s eta 0:00:01
Requirement already satisfied: six<=1.5 in /opt/conda/lib/python3.9/site-packages (from python-dateutil<=2.7.3->pandas) (1.16.0)
Installing collected packages: numpy, pandas
Successfully installed numpy-1.21.2 pandas-1.3.3

[2]: pip install mysql-connector-python
Collecting mysql-connector-python
  Downloading mysql_connector_python-8.0.26-cp39-cp39-manylinux01_x86_64.whl (30.9 MB)
    30.9 MB 10.7 MB/s eta 0:00:01
Collecting protobuf<3.0.0
  Downloading protobuf-3.18.1-cp39-cp39-manylinux_2_17_x86_64-manylinux2014_x86_64.whl (1.1 MB)
    1.1 MB 3.7 MB/s eta 0:00:01
Installing collected packages: protobuf, mysql-connector-python
Successfully installed mysql-connector-python-8.0.26 protobuf-3.18.1

[4]: from sqlalchemy import create_engine
source = create_engine('mysql+mysqldb://test:test@123@172.16.0.2/test')
[5]: import pandas as pd
[7]: pd.read_sql_query('select * from person', source)

[7]: id name
0 1 Edgar
1 2 Lorena
2 3 Daniel
3 4 Kelly
```