

# Crear un contenedor con MongoDB

*Implantación de aplicaciones web*

Daniel Miguela Alfonso

<b>1. Introducción</b>	<b>3</b>
<b>2. Desarrollo del ejercicio</b>	<b>3</b>

## 1. Introducción

En esta práctica vamos a ver como crear una base de datos mongodb a partir de una imagen ya creada de docker y como crear e insertar datos.

## 2. Desarrollo del ejercicio

Primero vamos a descargar la imagen con “docker pull mongo”, una vez descargada, vamos a crear un contenedor con “docker run --name mongo -d mongo:latest”.

```
Administrador: Símbolo del sistema
C:\Windows\System32>docker pull mongo
Using default tag: latest
latest: Pulling from library/mongo
29202e855b20: Pull complete
7513301b17d7: Pull complete
8584f3ef3048: Pull complete
5b7464f50635: Pull complete
c6ff633f781c: Pull complete
5644f6e5c0e6: Pull complete
d930da07d87d: Pull complete
06fc900f7e64: Pull complete
17a4f29a303b: Pull complete
Digest: sha256:192e2724093257a7db12db6cbafd92e3e5d51937f13846d49ea555cea85787ce
Status: Downloaded newer image for mongo:latest
docker.io/library/mongo:latest

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout quickview mongo

C:\Windows\System32>
```

```
Administrador: Símbolo del sistema
C:\Windows\System32>docker pull mongo
Using default tag: latest
latest: Pulling from library/mongo
29202e855b20: Pull complete
7513301b17d7: Pull complete
8584f3ef3048: Pull complete
5b7464f50635: Pull complete
c6ff633f781c: Pull complete
5644f6e5c0e6: Pull complete
d930da07d87d: Pull complete
06fc900f7e64: Pull complete
17a4f29a303b: Pull complete
Digest: sha256:192e2724093257a7db12db6cbafd92e3e5d51937f13846d49ea555cea85787ce
Status: Downloaded newer image for mongo:latest
docker.io/library/mongo:latest

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout quickview mongo

C:\Windows\System32>docker run --name mongo -d mongo:latest
99a45cf14735bf71211d99092868753b0096d6aeee80f36326f3d105aad12e2d

C:\Windows\System32>
```

Una vez creada vamos a conectarnos al contenedor con “docker exec -it mongo mongosh”.

```
mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000
C:\Windows\System32>docker exec -it mongo mongosh
Current Mongosh Log ID: 65b13fa5ce8ed3768da559c4
Connecting to:      mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.1.1
Using MongoDB:      7.0.5
Using Mongosh:      2.1.1

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.

-----
The server generated these startup warnings when booting
2024-01-24T16:42:18.496+00:00: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine. See http://dochub.mongodb.org/core/prodnotes-filesystem
2024-01-24T16:42:19.663+00:00: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
2024-01-24T16:42:19.663+00:00: /sys/kernel/mm/transparent_hugepage/enabled is 'always'. We suggest setting it to 'never'
2024-01-24T16:42:19.663+00:00: vm.max_map_count is too low
-----

test>
```

Ahora vamos a ver las bases de datos que tenemos creadas con el comando “show dbs”

```
mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000
Connecting to:      mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.1.1
Using MongoDB:      7.0.5
Using Mongosh:      2.1.1

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.

-----
The server generated these startup warnings when booting
2024-01-24T16:42:18.496+00:00: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine. See http://dochub.mongodb.org/core/prodnotes-filesystem
2024-01-24T16:42:19.663+00:00: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
2024-01-24T16:42:19.663+00:00: /sys/kernel/mm/transparent_hugepage/enabled is 'always'. We suggest setting it to 'never'
2024-01-24T16:42:19.663+00:00: vm.max_map_count is too low
-----

test> listDatabases
ReferenceError: listDatabases is not defined
test> show dbs
admin    48.00 KiB
config  60.00 KiB
local   40.00 KiB
test>
```

Estas son las bases de datos que trae por defecto, para crear una nueva base de datos vamos a usar el comando “use nombre\_bd”.

```
mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000
test> use prueba
switched to db prueba
prueba>
```

Una vez en la base de datos vamos a insertar una colección con el comando “db.nombre\_db.insertOne({campo:”valor”,campo:”valor”})”

```
mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000
m/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.

-----
The server generated these startup warnings when booting
2024-01-24T16:42:18.496+00:00: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine. See
http://dochub.mongodb.org/core/prodnotes-filesystem
2024-01-24T16:42:19.663+00:00: Access control is not enabled for the database. Read and write access to data and conf
iguration is unrestricted
2024-01-24T16:42:19.663+00:00: /sys/kernel/mm/transparent_hugepage/enabled is 'always'. We suggest setting it to 'nev
er'
2024-01-24T16:42:19.663+00:00: vm.max_map_count is too low
-----

test> listDatabases
ReferenceError: listDatabases is not defined
test> show dbs
admin    40.00 KiB
config  60.00 KiB
local   40.00 KiB
test> use prueba
switched to db prueba
prueba> show collections
prueba> db.prueba.insertOne({id:"2",nombre:"pepe"})
{
  acknowledged: true,
  insertedId: ObjectId('65b14588ce8ed3768da559c5')
}
prueba>
```

Vamos a ver la colección y su contenido con el comando “db.nombre\_db.find()”

mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000

er'

2024-01-24T16:42:19.663+00:00: vm.max\_map\_count is too low

test> listDatabases

ReferenceError: listDatabases is not defined

test> show dbs

admin 40.00 KiB

config 60.00 KiB

local 40.00 KiB

test> use prueba

switched to db prueba

prueba> show collections

prueba> db.prueba.insertOne({id:"2",nombre:"pepe"})

```
{
  acknowledged: true,
  insertedId: ObjectId('65b14588ce8ed3768da559c5')
}
```

prueba> show collections

prueba

prueba> db.prueba.find()

```
[
  {
    _id: ObjectId('65b14588ce8ed3768da559c5'),
    id: '2',
    nombre: 'pepe'
  }
]
```

prueba>