

y-nana-docker-compose  
<https://youtu.be/SXwC9fSwct8>

# Table of Contents

- 1. Preconditions.....3
  - 1.1. Docker installation.....3
- 2. How to run MONGO stack using Docker only.....4
- 3. MONGO stack using docker compose.....5
  - 3.1. The Final version of docker-compose.yaml file.....6

# 1. Preconditions

## 1.1. Docker installation

```
curl -L https://get.docker.com | sh && sudo usermod -aG docker $USER && sudo reboot
```

## 2. How to run MONGO stack using Docker only

You need to perform next steps:

1. Create a new docker network

***docker network create mongo-network***

2. Run MongoDB container

***docker run \***

***-p 27017:27017 \***

***-e MONGO\_INITDB\_ROOT\_USERNAME=admin \***

***-e MONGO\_INITDB\_ROOT\_PASSWORD=superSecret \***

***--network mongo-network \***

***--name **mongodb** \***

***mongo***

3. Start Mongo-express container

***WORKS (access to WEB UI using admin:pass)***

***docker run \***

***-p 8081:8081 \***

***-e ME\_CONFIG\_MONGODB\_ADMINUSERNAME=admin \***

***-e ME\_CONFIG\_MONGODB\_ADMINPASSWORD=superSecret \***

***-e ME\_CONFIG\_MONGODB\_SERVER=**mongodb** \***

***-e ME\_CONFIG\_MONGODB\_URL=mongodb://admin:superSecret@mongodb:27017/ \***

***--network mongo-network \***

***--name mongo-express \***

***mongo-express***

***WORKS (access to WEB UI without any credentials)***

***docker run \***

***-p 8081:8081 \***

***-e ME\_CONFIG\_MONGODB\_ADMINUSERNAME=admin \***

***-e ME\_CONFIG\_MONGODB\_ADMINPASSWORD=superSecret \***

***-e ME\_CONFIG\_MONGODB\_SERVER=**mongodb** \***

***-e ME\_CONFIG\_MONGODB\_URL=mongodb://admin:superSecret@mongodb:27017/ \***

***-e ME\_CONFIG\_BASICAUTH=false \***

***--network mongo-network \***

***--name mongo-express \***

***mongo-express***

***WORKS (access to WEB UI with custom credentials – test:test for this example)***

***docker run \***

***-p 8081:8081 \***

***-e ME\_CONFIG\_MONGODB\_ADMINUSERNAME=admin \***

***-e ME\_CONFIG\_MONGODB\_ADMINPASSWORD=superSecret \***

***-e ME\_CONFIG\_MONGODB\_SERVER=mongodb \***

***-e ME\_CONFIG\_MONGODB\_URL=mongodb://admin:superSecret@mongodb:27017/ \***

***-e ME\_CONFIG\_BASICAUTH=true \***

***-e ME\_CONFIG\_BASICAUTH\_USERNAME=test \***

***-e ME\_CONFIG\_BASICAUTH\_PASSWORD=test \***

***--network mongo-network \***

***--name mongo-express \***

***mongo-express***

### 3. MONGO stack using docker compose

Create a new docker-compose.yaml file

```
version: '3.1'
services:
  mongo-db:
    image: mongo
    ports:
      - 27017:27017
    environment:
      MONGO_INITDB_ROOT_USERNAME: admin
      MONGO_INITDB_ROOT_PASSWORD: superSecret

  mongo-ui:
    image: mongo-express
    ports:
      - 8081:8081
    environment:
      ME_CONFIG_MONGODB_ADMINUSERNAME: admin
      ME_CONFIG_MONGODB_ADMINPASSWORD: superSecret
      ME_CONFIG_BASICAUTH: true
      ME_CONFIG_BASICAUTH_USERNAME: test
      ME_CONFIG_BASICAUTH_PASSWORD: test
      ME_CONFIG_MONGODB_SERVER: mongo-db
      ME_CONFIG_MONGODB_URL: mongodbs://admin:superSecret@mongo-db:27017/
    depends_on:
      - 'mongo-db'
```

**How to start the stack and delete all the containers?**

***docker compose up*** – use this command if there is only 1 docker-compose.yaml file in the folder where you are going to use this command

***docker compose -f <yaml File> up*** – use this command if you have more than 1 yaml file or it has a custom name

**How to stop the stack and delete all the containers?**

***docker compose down***

***docker compose -f <yaml File> down***

***You also can use start/stop – in this case containers will not be deleted***

***docker compose start OR docker compose stop***

***docker compose -f <yaml File> start OR docker compose -f <yaml File> stop***

### 3.1. The Final version of docker-compose.yml file

version: '3.1'

services:

  mongo-db:

    image: mongo

    ports:

      - 27017:27017

    environment:

      MONGO\_INITDB\_ROOT\_USERNAME: admin

      MONGO\_INITDB\_ROOT\_PASSWORD: superSecret

    volumes:

      - mongo-db\_data:/data/db

    networks:

      - mongo-compose-network

  mongo-ui:

    image: mongo-express

    ports:

      - 8081:8081

    environment:

      ME\_CONFIG\_MONGODB\_ADMINUSERNAME: admin

      ME\_CONFIG\_MONGODB\_ADMINPASSWORD: superSecret

      ME\_CONFIG\_BASICAUTH: true

      ME\_CONFIG\_BASICAUTH\_USERNAME: test

      ME\_CONFIG\_BASICAUTH\_PASSWORD: test

      ME\_CONFIG\_MONGODB\_SERVER: mongo-db

      ME\_CONFIG\_MONGODB\_URL: mongodb://admin:superSecret@mongo-db:27017/

    depends\_on:

      - 'mongo-db'

    networks:

      - mongo-compose-network

volumes:

  mongo-db\_data:

    driver: local

networks:

  mongo-compose-network:

    driver: bridge