

# Database

## MariaDB with PHPmyAdmin

- code snipped for mariadb with phpmyadmin (use only for development)

```
mariadb:
  image: mariadb:10.6
  restart: always
  environment:
    MYSQL_ROOT_PASSWORD: YOUR_ROOT_PASSWORD_HERE
    MYSQL_USER: YOUR_MYSQL_USER_HERE
    MYSQL_PASSWORD: YOUR_USER_PW_HERE
  ports:
    - "3306:3306"
  volumes:
    - mariadb:/var/lib/mysql
  networks:
    db:

phpmyadmin:
  image: phpmyadmin
  restart: always
  ports:
    - "8080:80"
  environment:
    - PMA_HOST=mariadb
    - PMA_PORT=3306
  networks:
    db:
```

## Mongo db

# docker web client

[github](#)

```
docker run -d --name mongoku -p 3100:3100 --env MONGOKU_DEFAULT_HOST="mongodb://mongo"
huggingface/mongoku
```

# opensearch

## one liner

```
docker run -d -p 9200:9200 -p 9600:9600 --name=opensearch --restart=unless-stopped -e
"discovery.type=single-node" -e "OPENSEARCH_INITIAL_ADMIN_PASSWORD=Fronius123" -e
"DISABLE_SECURITY_PLUGIN=true" opensearchproject/opensearch:latest
```

## single node with dashboard

```
services:
  opensearch-node1:
    image: opensearchproject/opensearch:latest
    container_name: opensearch-node1
    environment:
      - cluster.name=opensearch-cluster # Name the cluster
      - node.name=opensearch-node1 # Name the node that will run in this container
    - discovery.type=single-node
    # - discovery.seed_hosts=opensearch-node1,opensearch-node2 # Nodes to look for when
    discovering the cluster
    # - cluster.initial_cluster_manager_nodes=opensearch-node1,opensearch-node2 # Nodes
    eligible to serve as cluster manager
      - bootstrap.memory_lock=true # Disable JVM heap memory swapping
      - "OPENSEARCH_JAVA_OPTS=-Xms512m -Xmx512m" # Set min and max JVM heap sizes to at least
    50% of system RAM
      - "DISABLE_INSTALL_DEMO_CONFIG=true" # Prevents execution of bundled demo script which
    installs demo certificates and security configurations to OpenSearch
      - "DISABLE_SECURITY_PLUGIN=true" # Disables Security plugin
```

```

ulimits:
  memlock:
    soft: -1 # Set memlock to unlimited (no soft or hard limit)
    hard: -1
  nofile:
    soft: 65536 # Maximum number of open files for the opensearch user - set to at least
65536
    hard: 65536
  volumes:
    - opensearch-data1:/usr/share/opensearch/data # Creates volume called opensearch-data1
and mounts it to the container
  ports:
    - 9200:9200 # REST API
    - 9600:9600 # Performance Analyzer
  networks:
    - opensearch-net # All of the containers will join the same Docker bridge network
[]
opensearch-dashboards:
  image: opensearchproject/opensearch-dashboards:latest
  container_name: opensearch-dashboards
  ports:
    - 5601:5601 # Map host port 5601 to container port 5601
  expose:
    - "5601" # Expose port 5601 for web access to OpenSearch Dashboards
  environment:
    - 'OPENSEARCH_HOSTS=["http://opensearch-node1:9200"]'
    - "DISABLE_SECURITY_DASHBOARDS_PLUGIN=true" # disables security dashboards plugin in
OpenSearch Dashboards
  networks:
    - opensearch-net

volumes:
  opensearch-data1:

networks:
  opensearch-net:

```

## multi node

<https://docs.opensearch.org/latest/install-and-configure/install-opensearch/docker/#sample-docker-compose-file-for-development>

```
services:
  opensearch-node1:
    image: opensearchproject/opensearch:latest
    container_name: opensearch-node1
    environment:
      - cluster.name=opensearch-cluster # Name the cluster
      - node.name=opensearch-node1 # Name the node that will run in this container
      - discovery.seed_hosts=opensearch-node1,opensearch-node2 # Nodes to look for when
discovering the cluster
      - cluster.initial_cluster_manager_nodes=opensearch-node1,opensearch-node2 # Nodes
eligible to serve as cluster manager
      - bootstrap.memory_lock=true # Disable JVM heap memory swapping
      - "OPENSEARCH_JAVA_OPTS=-Xms512m -Xmx512m" # Set min and max JVM heap sizes to at least
50% of system RAM
      - "DISABLE_INSTALL_DEMO_CONFIG=true" # Prevents execution of bundled demo script which
installs demo certificates and security configurations to OpenSearch
      - "DISABLE_SECURITY_PLUGIN=true" # Disables Security plugin
    ulimits:
      memlock:
        soft: -1 # Set memlock to unlimited (no soft or hard limit)
        hard: -1
      nofile:
        soft: 65536 # Maximum number of open files for the opensearch user - set to at least
65536
        hard: 65536
    volumes:
      - opensearch-data1:/usr/share/opensearch/data # Creates volume called opensearch-data1
and mounts it to the container
    ports:
      - 9200:9200 # REST API
      - 9600:9600 # Performance Analyzer
    networks:
      - opensearch-net # All of the containers will join the same Docker bridge network
  opensearch-node2:
    image: opensearchproject/opensearch:latest
    container_name: opensearch-node2
    environment:
```

```
- cluster.name=opensearch-cluster # Name the cluster
- node.name=opensearch-node2 # Name the node that will run in this container
- discovery.seed_hosts=opensearch-node1,opensearch-node2 # Nodes to look for when
discovering the cluster
- cluster.initial_cluster_manager_nodes=opensearch-node1,opensearch-node2 # Nodes
eligible to serve as cluster manager
- bootstrap.memory_lock=true # Disable JVM heap memory swapping
- "OPENSEARCH_JAVA_OPTS=-Xms512m -Xmx512m" # Set min and max JVM heap sizes to at least
50% of system RAM
- "DISABLE_INSTALL_DEMO_CONFIG=true" # Prevents execution of bundled demo script which
installs demo certificates and security configurations to OpenSearch
- "DISABLE_SECURITY_PLUGIN=true" # Disables Security plugin
ulimits:
  memlock:
    soft: -1 # Set memlock to unlimited (no soft or hard limit)
    hard: -1
  nofile:
    soft: 65536 # Maximum number of open files for the opensearch user - set to at least
65536
    hard: 65536
volumes:
- opensearch-data2:/usr/share/opensearch/data # Creates volume called opensearch-data2
and mounts it to the container
networks:
- opensearch-net # All of the containers will join the same Docker bridge network
opensearch-dashboards:
  image: opensearchproject/opensearch-dashboards:latest
  container_name: opensearch-dashboards
  ports:
    - 5601:5601 # Map host port 5601 to container port 5601
  expose:
    - "5601" # Expose port 5601 for web access to OpenSearch Dashboards
  environment:
    - 'OPENSEARCH_HOSTS=["http://opensearch-node1:9200","http://opensearch-node2:9200"]'
    - "DISABLE_SECURITY_DASHBOARDS_PLUGIN=true" # disables security dashboards plugin in
OpenSearch Dashboards
  networks:
    - opensearch-net
volumes:
  opensearch-data1:
```

opensearch-data2:

networks:

opensearch-net:

---

Created 2023-01-02 13:13:32 UTC by Daniel Raab

Updated 2025-10-22 10:46:54 UTC by Daniel Raab