

DOCKER VOCABULARY

DOCKER

PaaS environment to build, deliver and run software as isolated and independent containers.

- By default containers are sand-boxed / isolated.
- You can make container services available to others by **exposing ports**, e.g. for your browser to use
- You can make containers to see others by connecting them by virtual **networks** between containers
- You can make containers to share data also by shared **volumes** (basically a shared folder that two or more containers can access)

DOCKER ENGINE

The engine (*dockerd* daemon/process and Docker Engine API) to manage and run the containers.

DOCKER CLIENT

The *docker* command line command. Client for giving commands about starting or stopping containers, or building, publishing images.

DOCKERFILE

Your 'script' for making your own Docker images. Image could be built based on source code and other assets on your disk and, if needed, ready-made images from *Docker Hub* or other docker image registry.

DOCKERIGNORE

Says which files will not be packed into the Docker image.

DOCKER IMAGE

Ready-made from Docker Hub, or one you have created. Template that can be used to create container.

E.g. some MariaDB image you want to take into use. It's a snapshot of a running/runnable MariaDB or other DB server that starts from a certain documented state. Typically there is a root user with known password (public information, everyone knows the password!), a certain database/schema created, like 'test'. When taking that image into use, you must then immediately:

- secure the root user by changing the password
- create a user with less privileges with safe password or other safe access.
- give that user access to wanted schema etc.
- continue possibly with table creation, etc...

DOCKER IMAGE REGISTRY – e.g. Docker Hub

We can push/publish our images for other to use. Or pull/download images to use ourselves.

DOCKER COMPOSE

Tool for creating and starting multiple containers that talk to each other. Thus you have to make some ports exposed, or define (virtual) networks shared by multiple containers, or share volumes. You can define those in a docker-compose.yml file

DOCKER VOLUME

Persisted folder and files on disk. Allows sharing between containers, but also keeping data between container deletion and re-creation.