Docker for web mapping



Examples
Carto (db) stack
MapServer + Mapbender + PostGIS





operating system virtualization software that bundles programs in packages / containers

containers are isolated from each other

can communicate via defined channels

run on the same kernel of the host machine





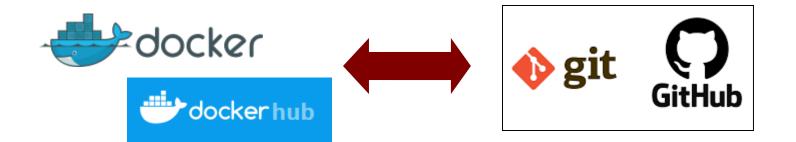
Docker engine

Background (daemon) process dockerd
Command line client docker

Docker compose

tool for defining and running multi-container Docker applications
Command line utility docker-compose





git code

GitHub

docker images

dockerhub



How to use it

- Choose Server machine
- Install Docker engine
- Install docker-compose
- Start (download) existing docker image
- Comfigure and use web mapping software stack

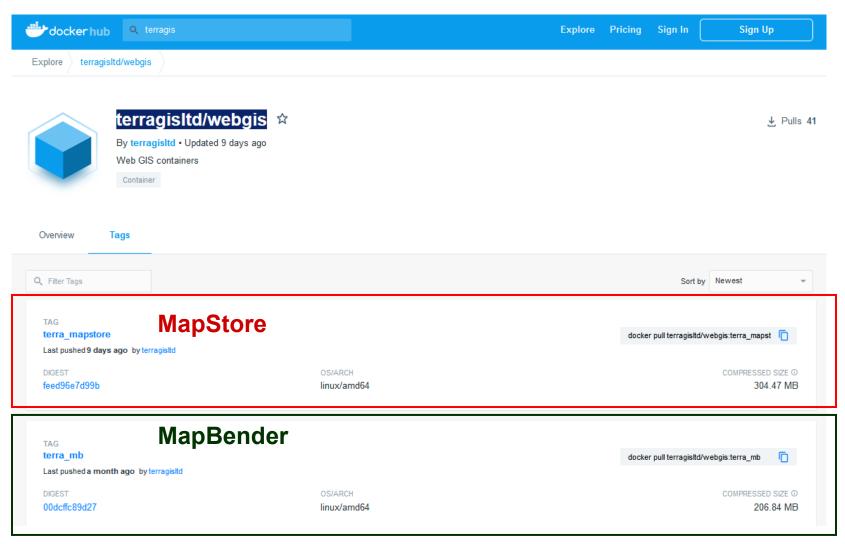


Further Steps

- Build your own custom Docker image
- Push to Dockerhub
- Orchestrate multiple docker containers for an entire web mappping software stack with docker-compose
- Deploy with ease



Examples terragis/webgis





Carto (db) stack



: sverhoeven/cartodb

https:/hub.docker.com/r/sverhoeven/cartodb/

docker run -d -p 80:80 -h 111.222.11.222 sverhoeven/cartodb

http:// 111.222.11.222 /login

dev

pass1234



Custom web mapping stack

docker-compose.yml

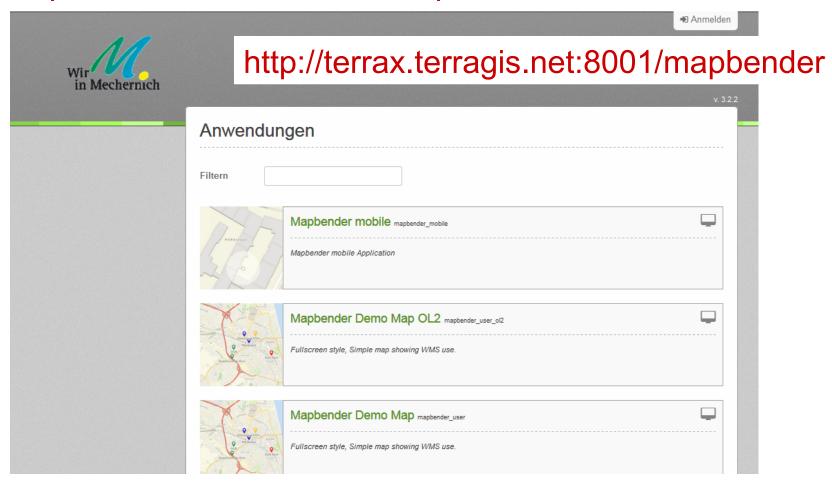
```
version: "3"
services:
 db:
                                                to start:
   image: postgis/postgis
   environment:
                                                docker-compose up -d
     - POSTGRES USER=postgres
     - POSTGRES PASSWORD=
     - POSTGRES DB=postgres
   ports:
     - "5435:5432"
   container name: terra postgis
   volumes:
     - /var/mapdata/mechernich/data:/var/lib/postgresql/data
 mapbender:
   image: terragisltd/webgis:terra mb
   depends on:

    db

   ports:
     - "8001:80"
   container name: mapbender
 mapserver:
   image: terragisltd/webgis:mapserv cache
   ports:
     - "81:80"
   container name: mapserver
   volumes:
     - /var/mapdata/mechernich:/map
```

Custom web mapping stack

Mapbender - PostGIS - MapServer





Custom web mapping stack

Mapbender - PostGIS - MapServer

