The Docker Development Template for PHP

RogueWave SOFTWARE

Innovate with Confidence

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Developer's Dream

https://www.justwatch.com/de/Film/Der-Flug-des-Navigators

1. Get Code
2. Get Dependencies
3. Start the Engines

Fast Forward

Zend Expressive

(+ a little JS)

What has happened?

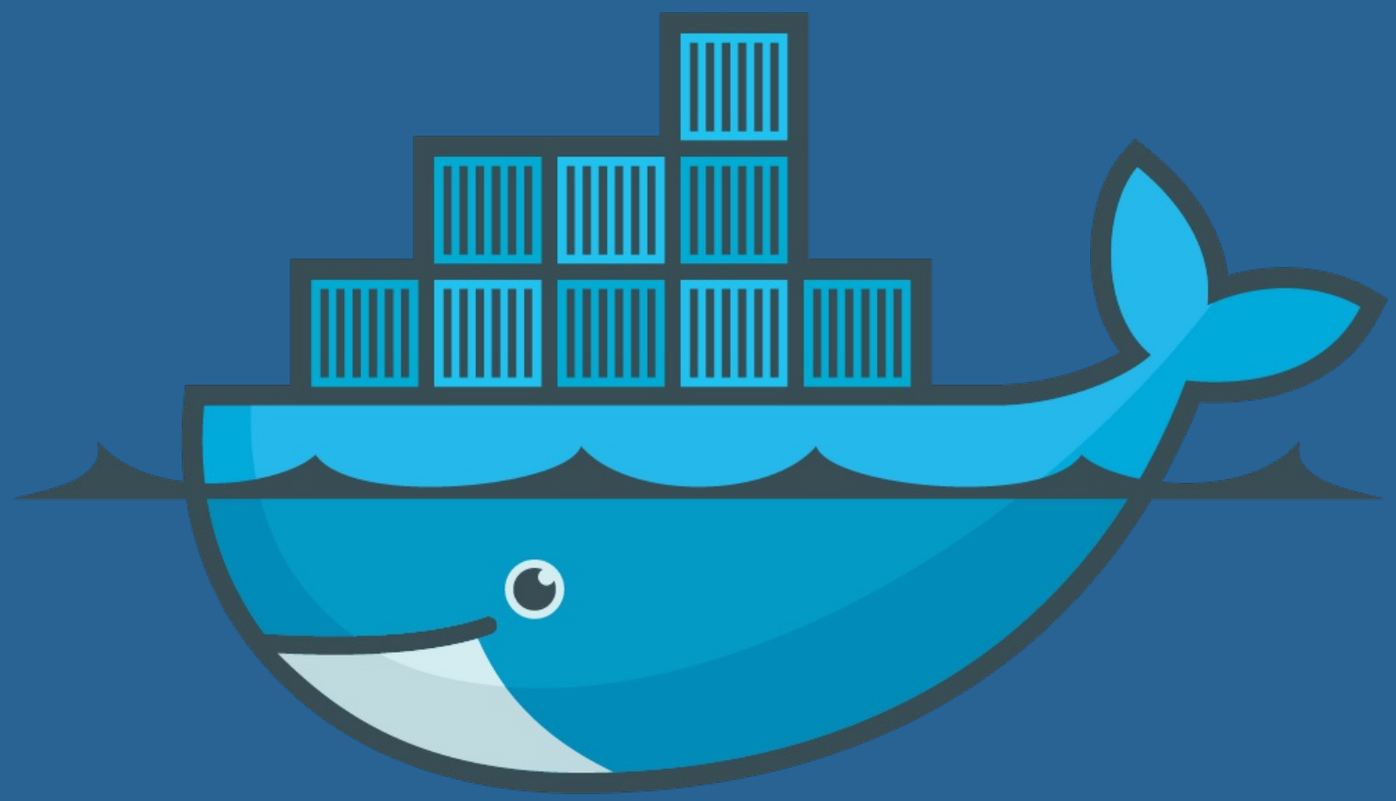
http://www.gamona.de/kino-dvd/deadpool-2,autoren-auch-das-sequel-benoetigt-kein-hohes-budget:news.html

My example project

particulum-mobile

https://bitbucket.org/account/user/janatzendteam/projects/PAR

What do I need?



docker

Docker ≠ VirtualBox

redis

One Daemon

—

One Container

"In almost all cases, you should only run a single process in a single container. Decoupling applications into multiple containers makes it much easier to scale horizontally and reuse containers."

https://docs.docker.com/engine/userguide/eng-image/dockerfile_best-practices/

Docker Compose

"Compose is a tool for defining and running multi-container Docker applications."

Challenge

http://www.foxmovies.com/movies/kingsman-the-secret-service

```
docker run -d -i -t -p 80:80 -p \
3000:3000 -p 3001:3001 -p \
2222:22 --name gsd alankent/gsd
```

```
docker run -it --rm --name my-running-script
\
-v "$PWD":/usr/src/myapp \
```

3000:3000 -p 3001:3001 -p \
2222:22 --name gsd alankent/gsd

```
docker run -it --rm --name my-running-script
\
-v "$PWD":/usr/src/myapp \
-w /usr/src/myapp php:7.0-cli \
php your-script.php
```

Duct tape works anywhere.
Duct tape is magic and
should be worshipped.
Andy Weir, The Martian
http://the-martian-movie.tumblr.com/post/128648842093/duct-tape-here-duct-tape-there-engineering-on

docker-compose.yml
docker-compose-setup.yml
(.env)

https://bitbucket.org/janatzendteam/particulum-mobile-master/src/masterbitbu/docker-compose.yml

docker-compose:
helps me defining (dev) infrastructure

Makefile

https://bitbucket.org/janatzendteam/particulum-mobile-master/src/master/Makefile

http://90to5.org/5MM/2015/ferris-buellers-day-off-1986/

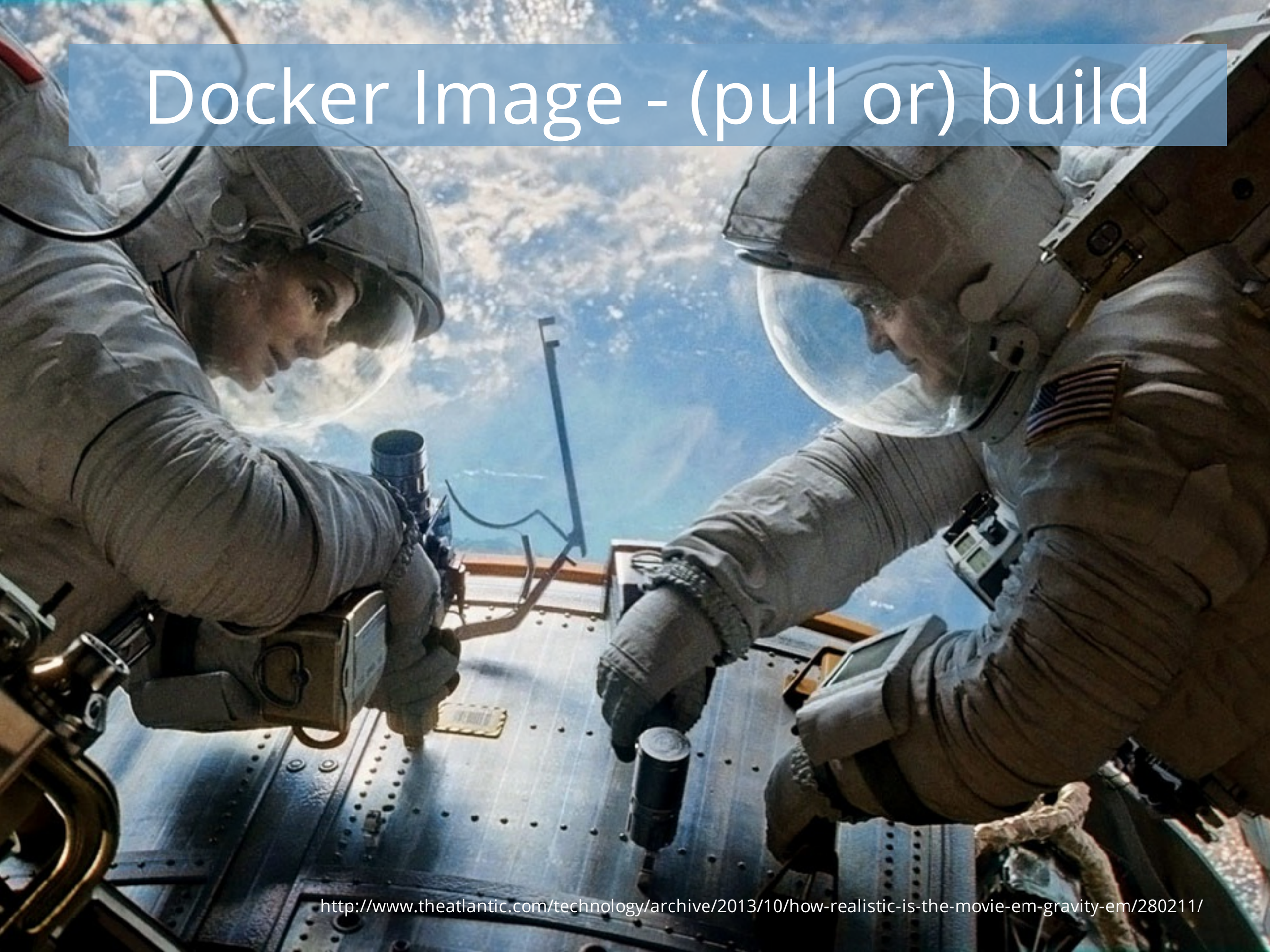
make:

helps me controlling the infrastructure

Important Commands:

- make start
- make up
- make down
- make clean
- make build-dev

Docker Image - (pull or) build



http://www.theatlantic.com/technology/archive/2013/10/how-realistic-is-the-movie-em-gravity-em/280211/

- Docker Hub
- Private Docker Repository
- Local Dockerfile
- Remote Dockerfile

FAIL

- Missing Best Practices
- Docker Updates
- Docker Compose Updates
- Permissions
- Persistent Data

Permissions?
What's the problem?

- webserver writes files
- write access for www-data
- www-data not available on host
- use uid and gid of local user (#)

Database

or

Where to store my persistent Data?

- Volumes
- map local dir to /var/lib/mysql

```
mysql:
  image: mysql:5.6
  volumes:
    # mda = mysql_data_archive
    - ./mda:/mda
  environment:
    MYSQL_PASS: admin
  command: bash -c "cd / \
    && tar xvf /mda/backup.tar \
    && /run.sh"
```

Benefits

- no huge files to handle
- exchange images
- every step is documented
- ~~no~~ less networing issues

Danke schön

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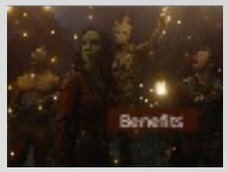
@5square_de

https://bitbucket.org/account/user/janatzendteam/projects/PAR
http://5square.de/talks/



docker run -d -i -t -p 80:80 -p 1.
3 000:3 000 -p 80 01:80 01 -p 1.
2 222:2 2 -name gui alarbeni gui

docker run -d -rm -name mp running script
1.
-v "$PWD" /usr/srcmpapp 1.
-w /usr/srcmpapp php 7.0x0 1.
php pose script.php

docker-compose.yml
docker-compose-setup.yml
(.env)

make:
helps me controlling the infrastructure

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- Docker Updates
- Docker Compose Updates
- Permissions
- Persistent Data

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docker-compose:
helps me defining (dev) infrastructure

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- make build-dev

Permissions?
What's the problem?

- web server writes files
- write access for www data
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- use sid and gids flocal user (#)

Database
=
Where to store my persistent Data?

- Volumes
- map local dir to /var/lib/mysql

mysql:
image: mysql:5.6
volumes:
- # mda = mysql_data_archive
- ./mda:/mda
environment:
MYSQL_PASS: admin
command: bash -c "cd /1
&&/var/ mda/backup.tar 1
&&/run.sh"