Talk as a Service

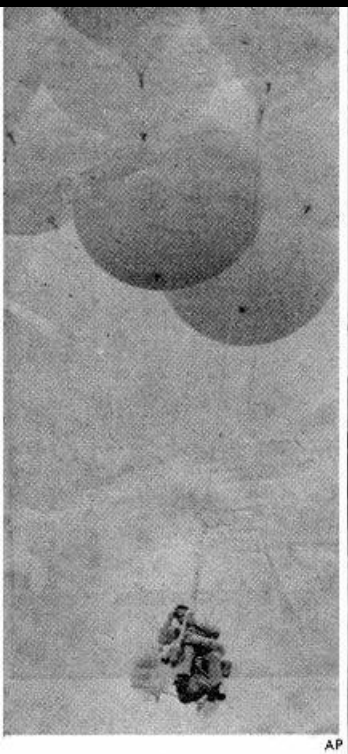
@m_e_i_s

#MadPerl2017

So the people have chosen

Docker (&-compose) for (perl) **developers**

Larry Walters
1982



AP

Up And Away

Larry Walters, sitting in his lawn chair, appears a bit concerned as he watches his last tether line break, shooting him skyward over California. Walters and his 45 weather balloons soared 16,000 feet high, exciting two jetliner pilots.

Associated Press

Larry Walters lugs craft past police car after landing in Long Beach.

PILOT: Aloft in a Lawn Chair

Walters was able to drop to the ground a few feet below his lawn chair.

As he was coming down over the roofs of Long Beach, he said, "I was saying prayers to God to please let me down in one piece."

He was jettisoning equipment as he came down—including his pellet gun, life jacket and radio.

When he came back to earth about 11:45 a.m., his face was sunburned a bright red and Walters was tired but exhilarated. "I have fulfilled my 20-year dream," he announced.

Did he plan to go up again?

"I'm staying right on the ground, yes ma'am. I proved to myself that the thing does work."

The Federal Aviation Administration took a less happy view. "We know he broke some part of the Federal Aviation Act," regional safety inspector Neal Savoy told the Associated Press, "and as soon as we decide which part it is, some type of charge will be filed."

But Lt. Reed of the Long Beach police shrugged. "There probably won't be any action taken," he said, "basically because there is nothing that covers something so unorthodox."

docker

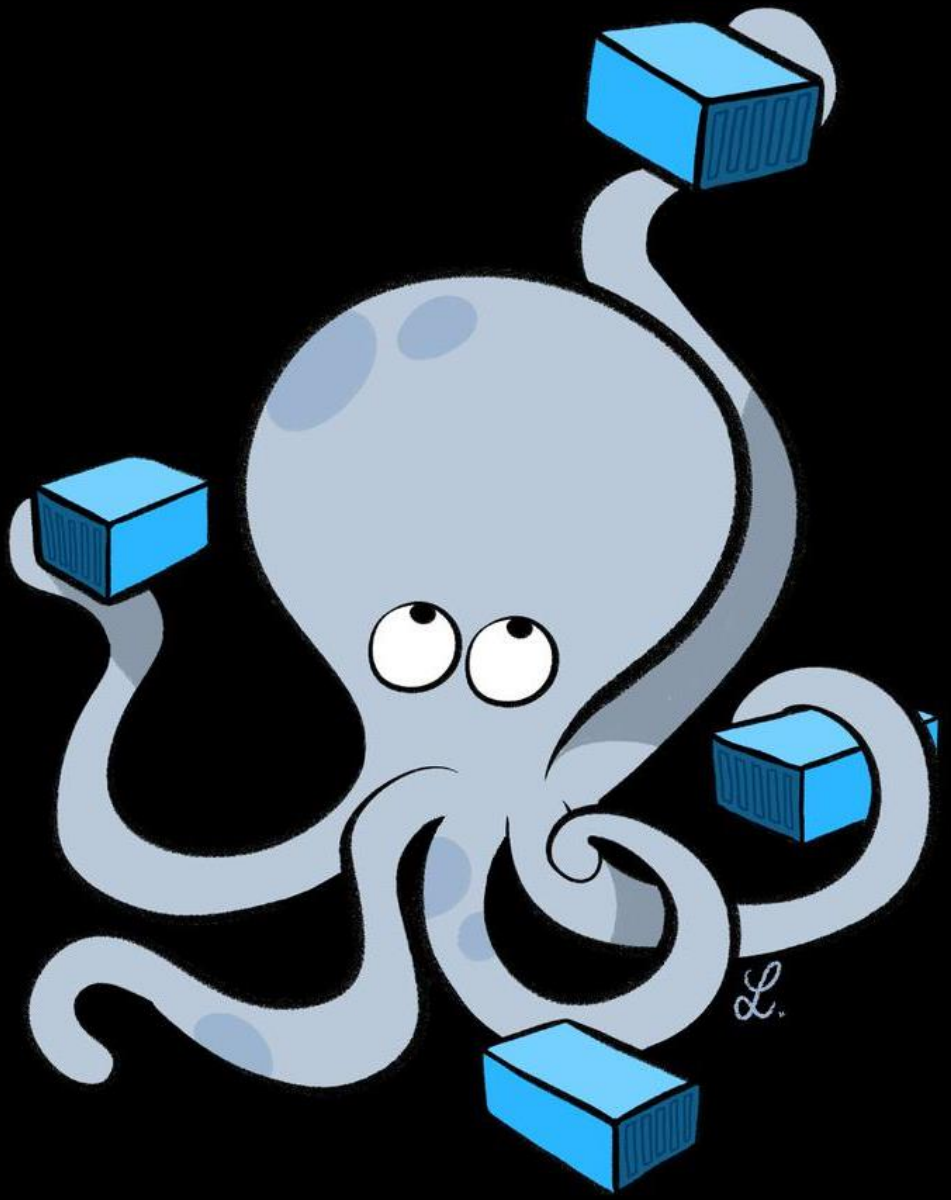
Images

Containers

Dockerfile

```
FROM perl:5.24
RUN apt-get update && apt-get install -y \
      iputils_ping

RUN useradd -ms /bin/bash code
ENV HOME=/home/code
WORKDIR /home/code
USER code

CMD echo "Madrid Perl Workshop"
```

```
# Build image
$ docker build –t my_image .


# Run container
$ docker run run –ti my_image
 Madrid Perl Workshop


$ docker run –ti my_image /bin/bash
 code@4557f41ec2fe:~$
```



Docker Compose

Services

Network

docker-compose.yml

```
version: '2'
services:
  web:
      image: my_image
      ports:
        - "5000:5000"
      volumes:
        - .:/home/code
      command: ./run_my_app.pl
      depends_on:
        -redis
  redis:
      image: "redis:alpine"
```

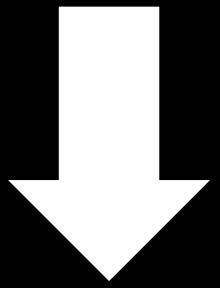
```
$ docker-compose up
 Pulling image redis...
 Pulling image my_image...
 Starting composetest_redis_1...
 Starting composetest_web_1...
 redis_1 | [8] 02 Jan 18:43:35.576
 web_1   |  * Running on http://0.0.0.0:5000/
```

Ok, so?

CONSTRAINTS

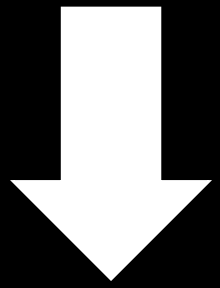
No, really, constraints.

Can’t write to disk



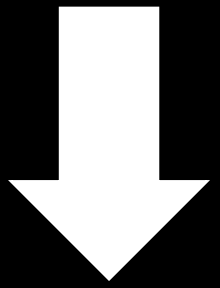
Immutability

Immutability



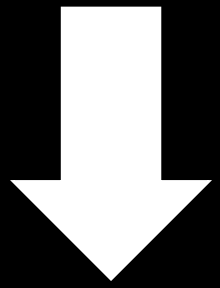
Less uncertainty

Immutability



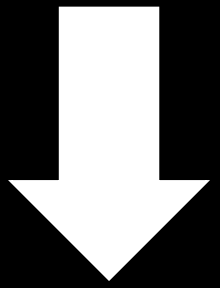
Easy(er) to reason about

Support only one OS



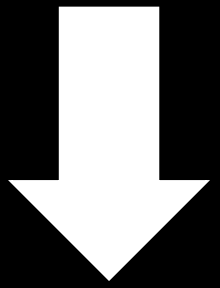
You only need one

Support only one OS



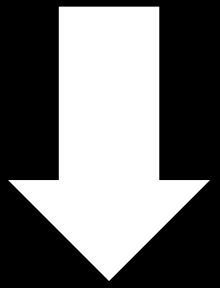
(probably) Works on prod

Support only one OS



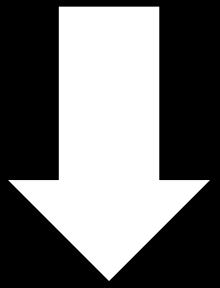
Don’t need plenv/brew

Define your entire stack



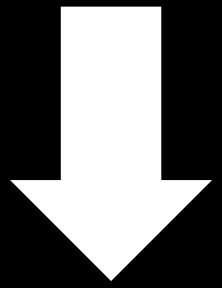
Infrastructure as code

Define your entire stack



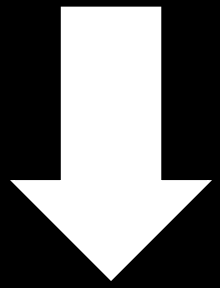
Explicit dependencies

Define your entire stack



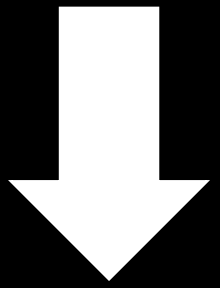
Works on ‘dev’ machine

Define your entire stack



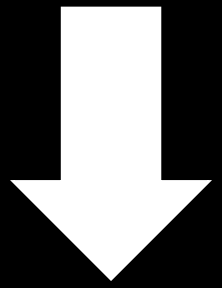
Integration first

Define your entire stack



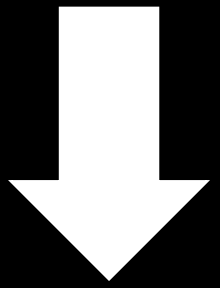
Infrastructure as code

Define your entire stack



Try Perl 5.26 today

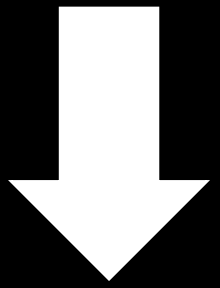
Infrastructure as code



New dev?

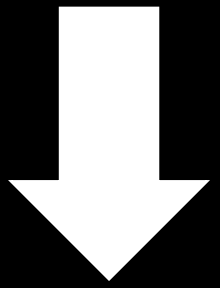
`docker-compose up`

`docker-compose up`



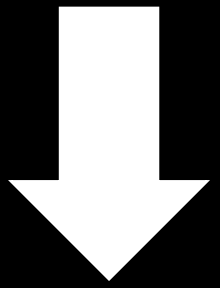
My laptop can burn

1 container, 1 process



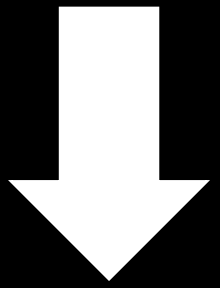
1 process, 1 service

1 process, 1 service



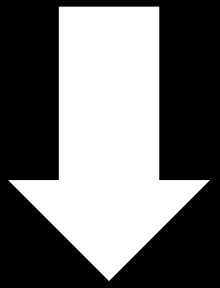
Explicit communication

1 process, 1 service



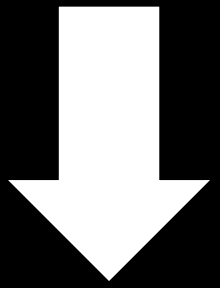
Better architecture

1 process, 1 service



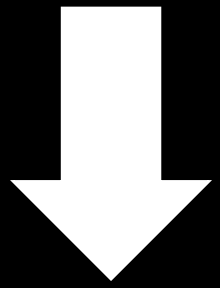
Look Ma! Microservices

1 process, 1 service



Each service it’s the king

Only Linux?



?

Remember Larry?

Why is relevant?

IT’S AWESOME

Why isn’t everyone talking about this?

Constraints are good

TIMTOWDY

Deployments are hard

Thanks

Questions?

(And apologies for the lack of kittens, you should have asked for it)