

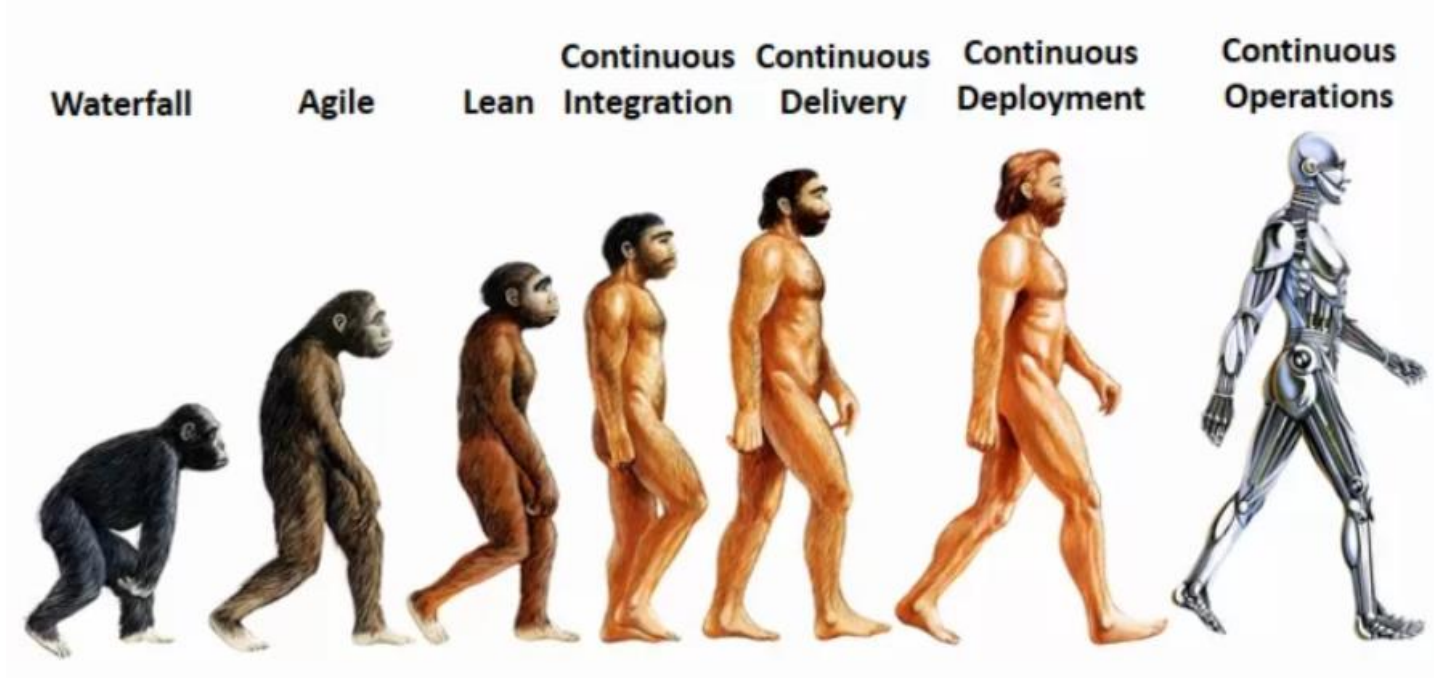
docker

Docker Compose

The open platform to build, ship and run any application anywhere

About me

- 14+ Engineering experience (Cisco Systems, VMware)
- Continuous Operations freak and AWS enthusiast



Session Logistics

- 3 hours (exercising time included)
- “Introduction to Docker” and Docker Fundamentals courses required
- You will need:
 - Linux machine
 - Dedicated
 - VM
 - Cloud provided
 - Enthusiasm

Recap from “Docker Fundamentals”

- Docker Layers
- Docker Commit
- Dockerfile syntax
- CMD vs ENTRYPOINT
- Docker TAG and PUSH
- Volumes
- Networking
- Linking containers

Agenda

- Docker-compose
- Syntax
- Docker compose commands
- Exercise

Multi-container apps are a hassle.

- Build images from Dockerfiles
- Pull images from the Hub or a private registry
- Configure and create containers
- Start and stop containers
- Stream their logs

Multi-container apps are a hassle



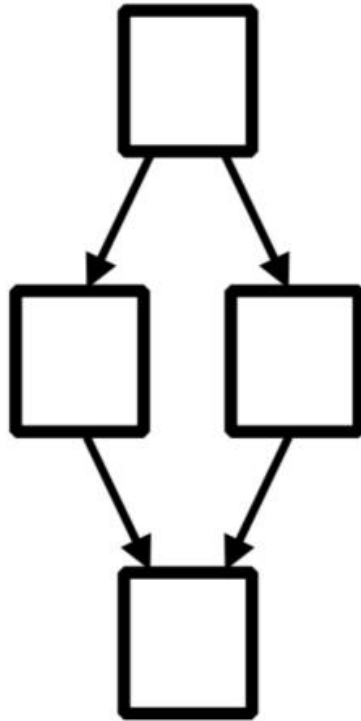
```
$ docker pull redis:latest
```

```
$ docker build -t web .
```

```
$ docker run -d --name=db redis:latest redis-server  
--appendonly yes
```

```
$ docker run -d --name=web --link db:db -p  
5000:5000 -v `pwd`:./code web python app.py
```

Multi-container apps are a hassle.

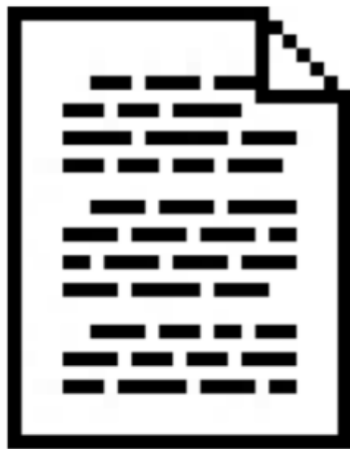


```
$ docker pull ...  
$ docker pull ...  
$ docker build ...  
$ docker build ...
```

```
$ docker run ...  
$ docker run ...  
$ docker run ...  
$ docker run ...
```


Docker Compose

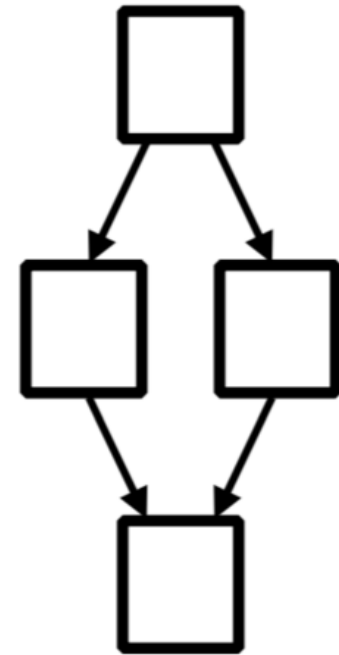
- Get an app running in one command



Text file



`$ docker up`



Native Docker API

- The same API used by other Docker commands.
- The same API used by other Docker tools.
- The same API exposed by Docker Swarm.
- Multi-container apps on multi-host clusters.

Built into the Docker client

- New command: `docker up`
- Enhanced commands: `docker build`, `pull`, `run`, `start`, `stop`, `kill`, `rm`...

Basic commands

- Docker-compose

- Up

- Down

- Scale

- Build

Demo

EXERCISE

Questions

References

- <https://github.com/docker/compose>
- Docker-compose reference guide
<https://docs.docker.com/compose/compose-file/>
- Local Development with docker-compose by Heroku
<https://devcenter.heroku.com/articles/local-development-with-docker-compose>
- Google 😊