

DOCKER

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DOCKER

- REST API (written in go) on top of LXC
- manages
 - building, packaging and life cycle of containers
 - network configuration
 - distribution of images
- AUFS: copy on write file system
- open sourced by dotcloud in March 2013

LXC

- OS level virtualization
- lightweight
- multiple network and process spaces on single host
- powers e.g. heroku dynamos
- basically "chroot on steroids"

CONTAINERS

- lightweight: NOT full OS/VM
- perfect world: one process per container
- NO sshd
- NO direct FS access
- NO cron
- NO syslog
- NO monitoring
- created to be thrown away

COMMANDS

create images	docker build
tag images	docker tag
distribute images	docker push/pull
start containers	docker run
stop containers	docker kill
remove containers	docker rm
remove images	docker rmi

DOCKERFILE

- scripting language to create images
- linear batch script
- caching

```
FROM ubuntu:precise
MAINTAINER tobias.schwab@dynport.de

RUN sed "s/main$/main universe/" -i /etc/apt/sources.list
RUN apt-get update
RUN apt-get install redis-server
RUN mkdir -p /data/redis

ADD ./redis.conf /etc/redis.conf

EXPOSE 6379
CMD redis-server /etc/redis.conf
```

DEMO

- www.docker.io
- www.dynport.de
- github.com/dynport
- [@tobstarr](#)