• title: First page of first presentation

• description : First page of first presentation

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theme : nighttransition : default

Docker

Let's begin with a story

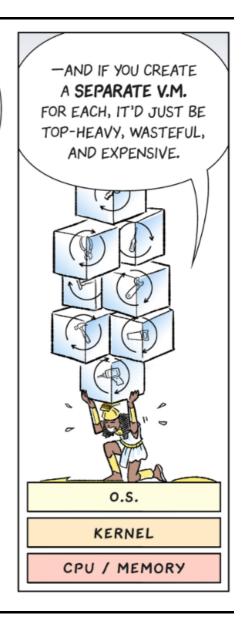


-IF YOU PUT THEM
ALL IN A VIRTUAL
MACHINE, APPS COULD
STILL CONFLICT WITH
ONE ANOTHER—

O.S.

KERNEL

CPU / MEMORY



BUT, WHAT IF EACH PROCESS COULD SOMEHOW BE BUILT TO **RUN ON ITS OWN**—



—WITH
ITS LIBRARIES
AND SETTINGS
BAKED IN?





IN SHORT, EVERYTHING EACH PROCESS NEEDS TO RUN ON ANY MACHINE, VIRTUAL OR BARE METAL.

So what are containers?

- application packed into "box"
- "box" contains everything it needs to run
- can run (almost) everywhere

What is Docker?

- create, manage containers
- easy to use
- powerfull

Docker - elements

Images

- "schema" of container
- shareable
- docker images

Containers

- running process
- docker ps
- docker run

Networks

- provides communication between containers
- docker network

Volumes

- can store data from containers
- when container dies, data in volume is preserved
- docker volume

Dockerfile

- file used to create images
- · create images based on other images

Docker-compose

- group of containers, called services here
- can also create volumes and networks
- file in yaml style

DEMO

Docker hub

• place, where you can share your images

• everyone can download public images

Orchestrators

- provides easy way of managing containers
- Kubernetes
- Docker Swarm

Links

- https://cloud.google.com/kubernetes-engine/kubernetes-comic/
- https://github.com/KrystianKolad/DockerPlayground
- https://docs.docker.com/
- https://hub.docker.com/