

#### What is Docker?

"Docker is the world's leading software containerization platform"

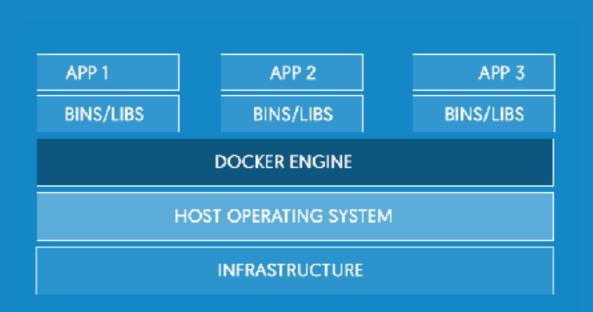
#### What does Docker allow me to do?

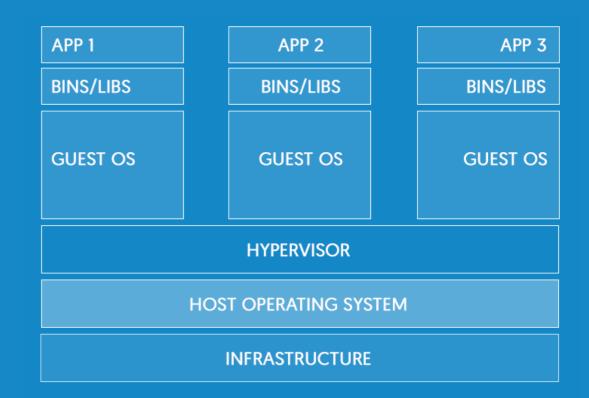
"Package your application into a standardized unit of software development"

So it's like a Virtual Machine (VM) right?

### **VM Scenario**

APP 1 APP 2 APP 3 BINS/LIBS **BINS/LIBS BINS/LIBS GUEST OS GUEST OS GUEST OS HYPERVISOR HOST OPERATING SYSTEM INFRASTRUCTURE** 

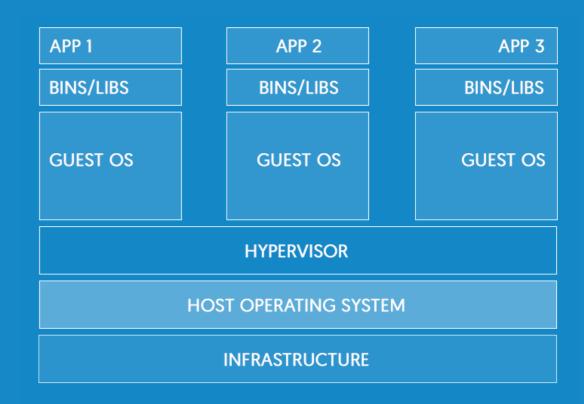




Docker

vs Virtual Machine

# APP 1 BINS/LIBS APP 2 BINS/LIBS BINS/LIBS BINS/LIBS OCKER ENGINE



Docker

HOST OPERATING SYSTEM

**INFRASTRUCTURE** 

vs Virtual Machine

## Benefits of Docker

- \* Accelerate Development
- ★ Empower Creativity
- ★ Eliminate Environment Inconsistencies
- ★ Lightweight
- ★ Open
- ★ Secure by Default

## Build, Ship, & Run Any App, Anywhere

Dev-test pipeline automation, 100,000+ free apps, public and private registries

#### New to Docker?

Create your free Docker ID to get started.

Choose a Docker Hub ID

Enter your email address

Choose a password

Sign Up

Browse Thousands of the most popular software tools in the Docker Image Library

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#### Explore Official Repositories

NG:NX	nginx official	4.4K STARS	10M+ PULLS	DETAILS
Butter	busybox official	832 STARS	10M+ PULLS	DETAILS
	redis official	2.8K STARS	10M+ PULLS	DETAILS
<b>②</b>	ubuntu official	4.9K STARS	10M+ PULLS	DETAILS
docker	registry official	1.1K STARS	10M+ PULLS	DETAILS
•	mongo official	2.5K STARS	10M+ PULLS	DETAILS
	swarm official	512 STARS	10M+ PULLS	DETAILS
My <mark>SQL</mark> .	mysql official	3.2K STARS	10M+ PULLS	<b>&gt;</b>

ccb5b24

dcb5b24

fcf43f5c

**ADD PYTHON** 

ADD CURL

**DEBIAN IMAGE** 

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**ADD PYTHON** 

**ADD CURL** 

**DEBIAN IMAGE** 

**ADD MARIADB** 

**DEBIAN IMAGE** 

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**ADD PYTHON** 

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**ADD CURL** 

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**DEBIAN IMAGE** 

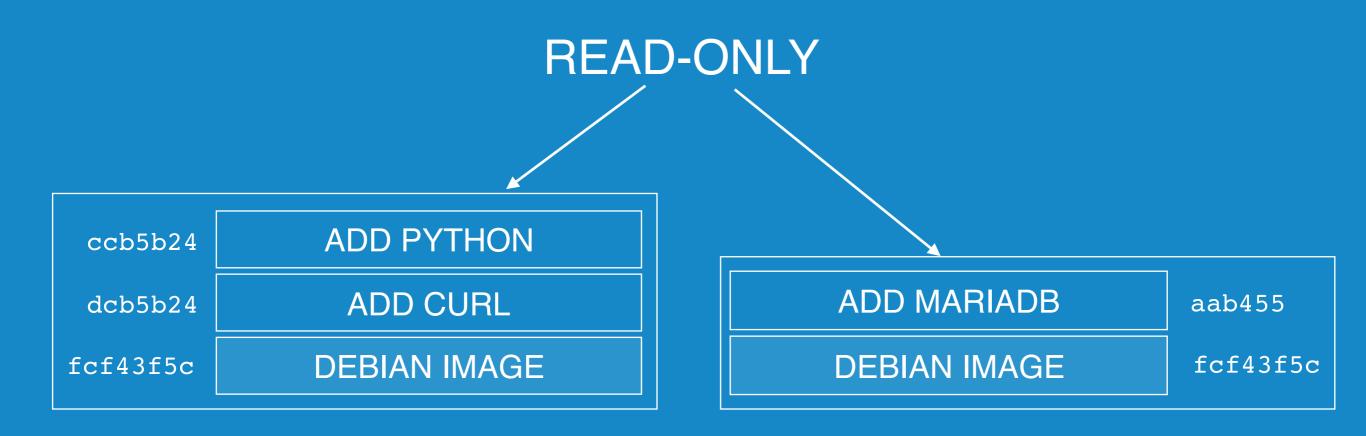
**ADD MARIADB** 

**DEBIAN IMAGE** 

aab455

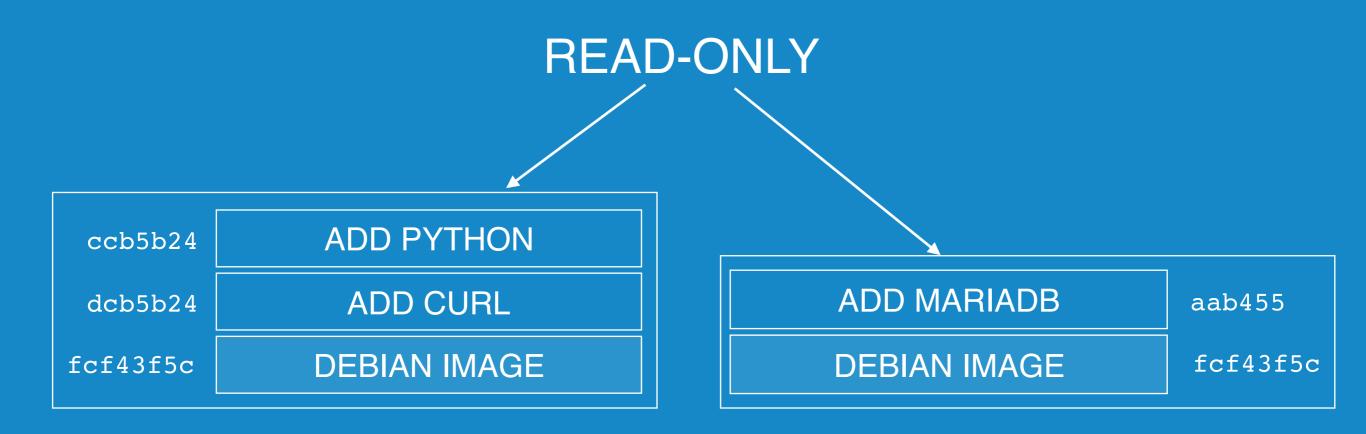
fcf43f5c



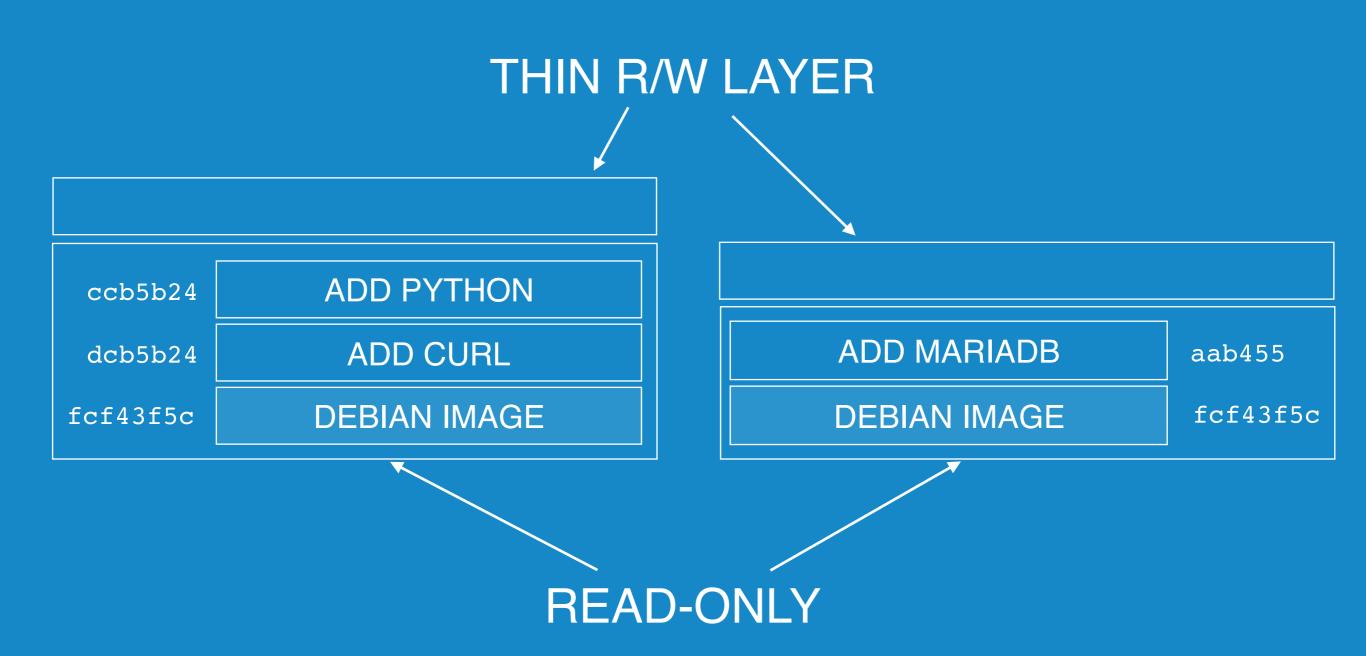


# **CONTAINERS?**

## Containers



## Containers



AuFS - Advanced multi layered unification Filesystem

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Container = READ-ONLY + THIN R/W LAYER IMAGE

#### AuFS - Advanced multi layered unification Filesystem

```
READ-ONLY = commit( Container )
IMAGE
```

READ-ONLY = commit( Container )

READ-ONLY = READ-ONLY + DOCKERFILE IMAGE

#### **DOCKERFILE**

```
FROM debian: latest
RUN apt-get update && \
    apt-get install -y python && \
    rm -rf /var/lib/apt/lists/*
EXPOSE 8000
RUN mkdir /code
COPY ./index.html /code
WORKDIR /code
ENTRYPOINT ["python -m SimpleHTTPServer"]
```

## **Enough chitchat!**

# DEMO