

# Docker 101



@agonzalezro with <3 for [jobandtalent.com](https://jobandtalent.com)

# What is Docker?

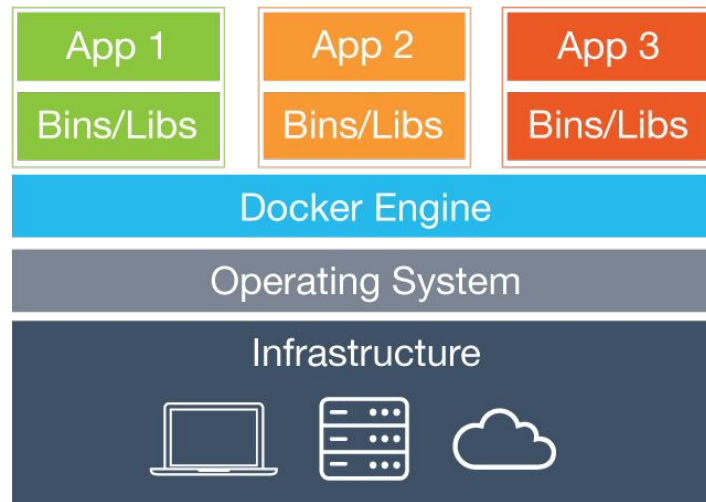
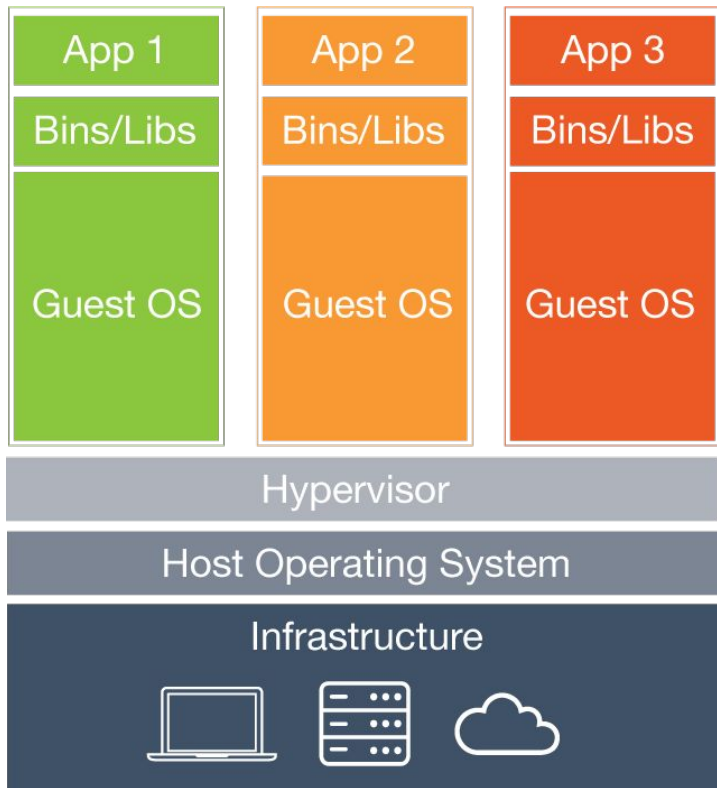
"An open platform for developers and sysadmins to build, ship, and run distributed applications."

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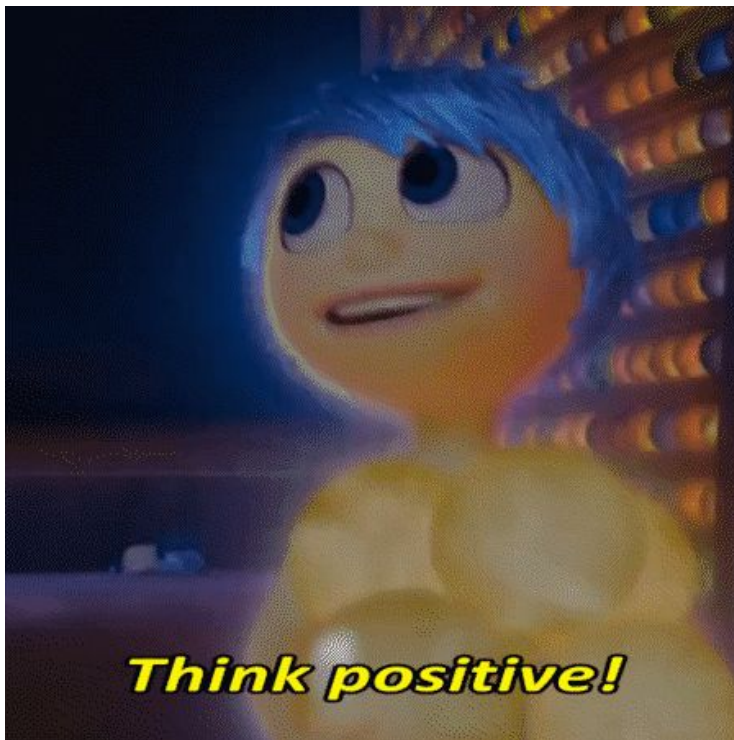


**Why is it  
different?**

# VM model vs Docker model

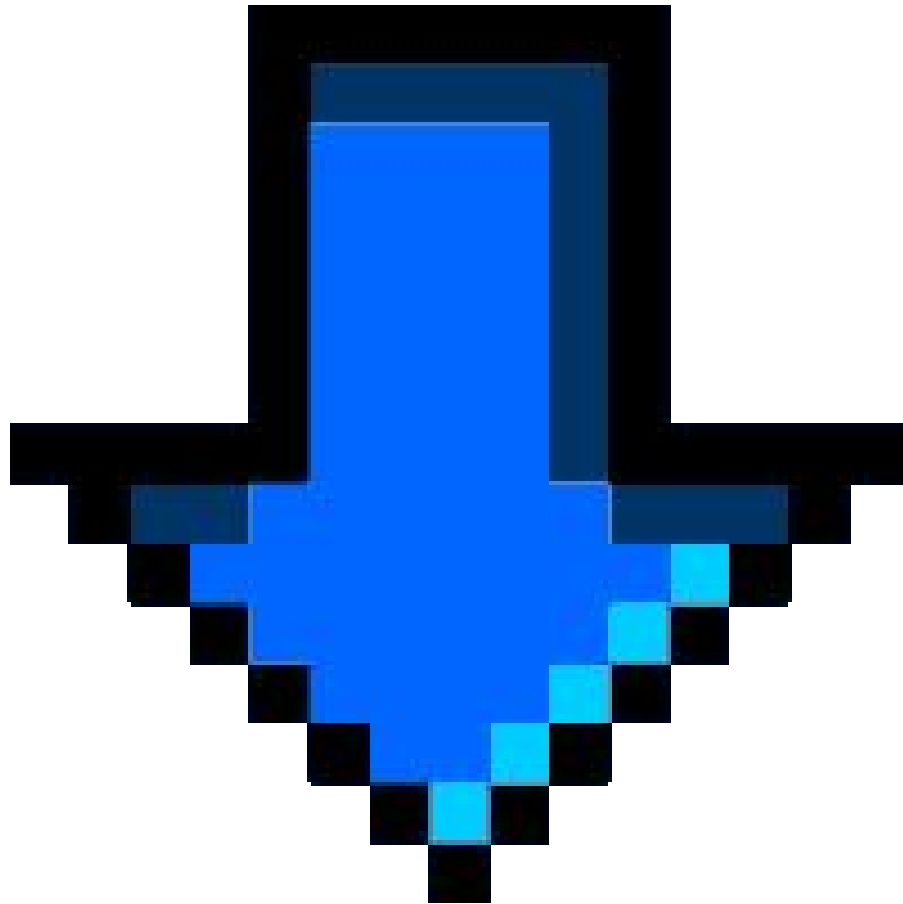


# Pros



- **Rapid app deployment**
- **Portability**
- **Version control**
- **Lightweight**
- **Immutable**
- **...**

**Cons**



- **New tooling needed**
- **Addoption**
- **Orchestration**
- **<- putYourOwn**





**Hands on!**

# **docker-machine**

```
$ docker-machine create --driver virtualbox jt
```

```
$ eval $(docker-machine env jt)
```

# **docker run**

```
$ docker run -it ubuntu  
d9f46b212a12fba0091f0f...
```

# docker images vs docker ps

```
$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	VIRTUAL SIZE
ubuntu	latest	d55e68e6cc9c	5 days ago	187.9 MB

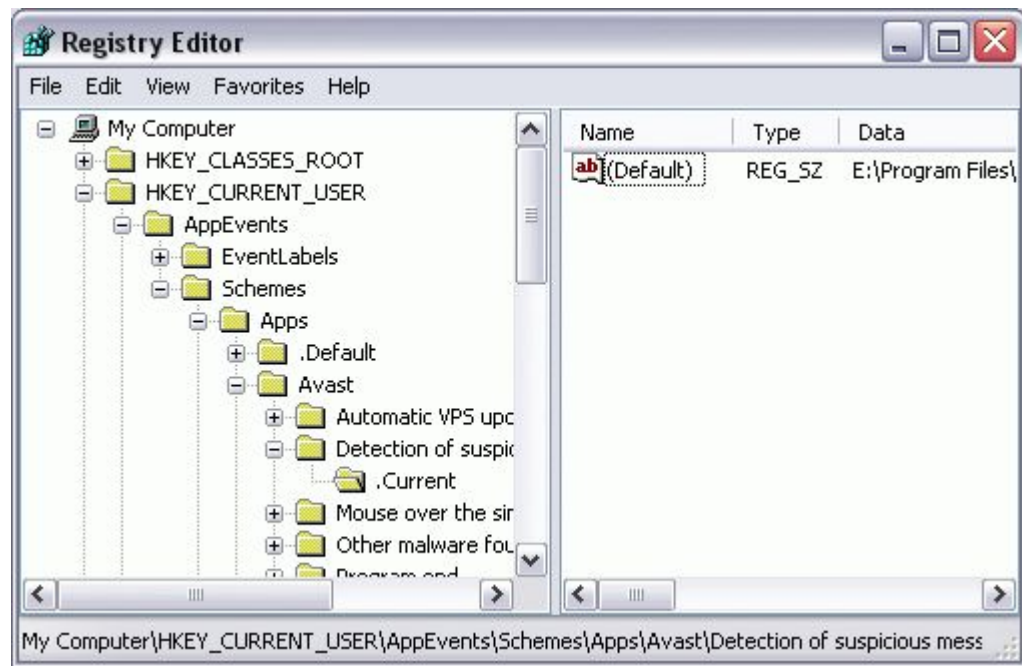
```
$ docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED...
12fba0091f0f	ubuntu	"sleep 10s"	2 seconds ago...
c8e8b387fba7	ubuntu	"yes"	2 seconds ago...

# docker logs

```
$ docker run -d ubuntu find /  
db943d94d68011757ffad50a94727ec0fda1a70245f1b6c09f46...
```

```
$ docker logs db943d94d68011757ff1b6c09f46... | head -n4  
/  
/.dockerinit  
/etc  
/etc/resolv.conf
```



# registry

# docker pull

```
$ docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
9377ad319b00: Pull complete
a82f81f25750: Pull complete
b207c06aba70: Pull complete
d55e68e6cc9c: Pull complete
library/ubuntu:latest: The image you are pulling has...
Digest: sha256:a2b67b6107aa6b1a387e75eebafd7c...
```

# docker push

```
$ docker tag d55e68e6cc9c agonzalezro/jt
```

```
$ docker push agonzalezro/jt
```

```
The push refers to a repository [docker.io/agonzalezro/jt]  
(len: 1)
```

```
d55e68e6cc9c: Image successfully pushed
```

```
b207c06aba70: Image successfully pushed
```

```
a82f81f25750: Image successfully pushed
```

```
9377ad319b00: Image successfully pushed
```

```
latest: digest: sha256:b385f1dfb6fcda517d1... size: 7739
```



**extra cmds**

# AKA RTM

\$ docker stop

\$ docker pause

\$ docker unpause

\$ docker start

\$ docker rm

\$ docker rmi

...

# Dockerfiles

# Dockerfile

```
FROM debian:stable
```

```
RUN apt-get update && apt-get install -y --force-yes apache2
```

```
EXPOSE 80 443
```

```
VOLUME ["/var/www", "/var/log/apache2", "/etc/apache2"]
```

```
ENTRYPOINT ["/usr/sbin/apache2ctl", "-D", "FOREGROUND"]
```

# What to do next?

```
$ docker build -t agonzalezro/jt .
```

```
$ docker push agonzalezro/jt
```

# Compose



# **docker-compose.yml**

```
db:
  image: postgres
  ports:
    - "5432"

companies:
  links:
    -db

web_core:
  build: ../web_core
  command: bundle exec rails s -p 3000 -b '0.0.0.0'
  ports:
    - "3000:3000"
```



**Hassle “free”**



# Thanks!

@agonzalezro

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