

Easier Development and Deployment @bhosmer - @ron\_williams

Why?

#### Benefits

- Reduce costs
- Inherent config management
- Build once, use everywhere
- Fewer broken deployments





#### What?

This technology isn't new!

#### How?

- Boot2Docker
- Kitematic
- Virtualbox/Vagrant
- Native (Linux Only)
- Shipyard / Project Atomic

# Containers are NOT Virtual Machines

#### PHP Webserver

#### LAMP Stack

Linux Apache/NGINX PHP MariaDB 2 Containers

Database

# Using Docker

- \$ docker build
- \$ docker run
- \$ docker start
- \$ docker stop
- \$ docker logs
- \$ docker inspect

### Dockerfile

ROM ubuntu:latest

MAINTAINER Ron Williams <hello@ronwilliams.io>

ENV PATH /usr/local/rvm/bin:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin

RUN apt-get update

RUN apt-get install -y wget tmux vim build-essential software-properties-common

RUN add-apt-repository -y ppa:ondrej/php5-5.6

RUN apt-get install -y apache2 php-pear php5-curl php5-mysql php5-odbc php5-imag ick php5-mcrypt php5-fpm mysql-client curl git libsasl2-modules rsyslog python-s etuptools libapache2-mod-php5 php5-imap

RUN apt-get install -y imagemagick php5-imagick php5-gd

RUN pear install Mail Mail\_Mime Net\_SMTP Net\_Socket Spreadsheet\_Excel\_Writer XML \_RPC

RUN php5enmod mcrypt

RUN apt-get install -y supervisor RUN mkdir -p /var/log/supervisor

RUN a2enmod rewrite

RUN a2enmod php5

RUN rm -f /etc/apache2/sites-available/000-default.conf

# \$ docker build

## \$ docker run

[vagrant@docker ~]\$
[vagrant@docker ~]\$

#### Persistent Data



/docroot /mysql-data



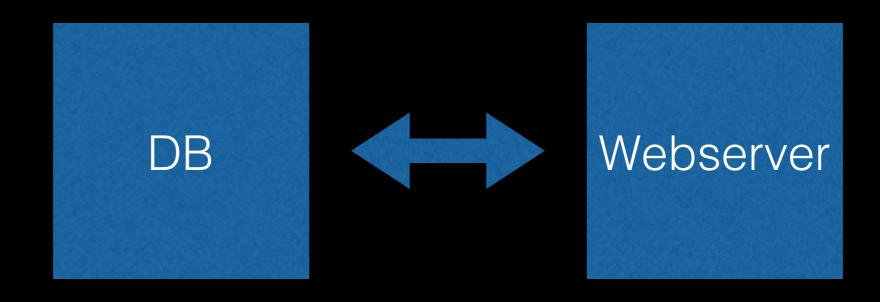
Container

/docroot

Container

/mysql-data

**Shared Volumes** 



# Linking Containers

## Using Other Containers

# \$ docker pull \$ docker push

#### Official Repositories





The Official Ubuntu base image



WordPress is a free open source bloggand a content massystem



Popular open-source relational database management system



Document-oriented NoSQL database



Official CentOS b



High performance reverse proxy server



Relational database management system



Node.js is a platform for s server-side and networkin applications

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#### Why Use Docker?

- Save on hosting & labor
- Simplify change management
- Reuse environments
- Deploy successfully