

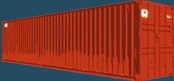
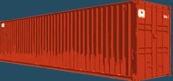
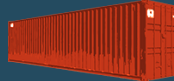
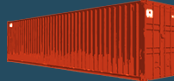
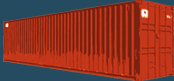
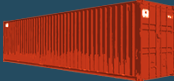
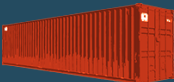
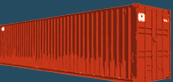
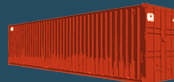
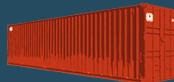
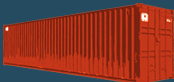
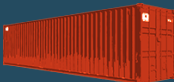


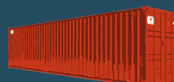
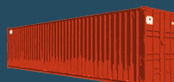


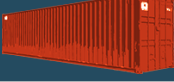
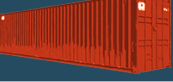
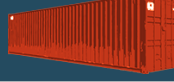
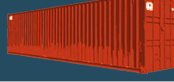
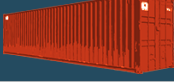
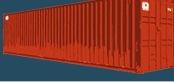
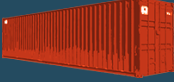
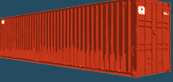
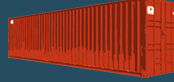
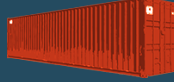
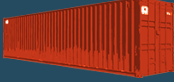
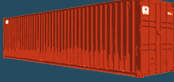
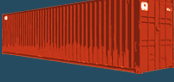
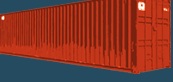
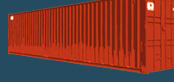
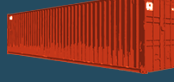
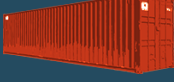
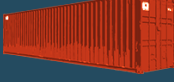
Docker Introduction

Why are we so excited?

“

Docker is an open-source project to easily create lightweight, Linux portable, self-sufficient containers from any application.”

	My Mac	Timo's Linux	Test	Staging	Cloud VM	Bare Metal
Rails Web Frontend	?	?	?	?	?	?
Node.js API	?	?	?	?	?	?
Background jobs	?	?	?	?	?	?
MySQL	?	?	?	?	?	?
Distributed DB	?	?	?	?	?	?
Message Queue	?	?	?	?	?	?

	My Mac	Timo's Linux	Test	Staging	Cloud VM	Bare Metal
Rails Web Frontend						
Node.js API						
Background jobs						
MySQL						
Distributed DB						
Message Queue						

Speed

	Ships within ...	Manual deployment takes ...	Automated deployment takes ...	Boots in ...
Bare metal	Days	Hours	Minutes	Minutes
Virtual machine	Minutes	Minutes	Seconds	< Minute
Container	Seconds	Minutes	Seconds	Seconds

Dev ⇔ DevOps

Dev: Inside the container

- my code
- my libraries
- my package manager
- my app
- my data

Ops: Outside the container

- Logging
- Remote Access
- Network Configuration
- Monitoring

“Just enough
virtualization

What is Docker?

Based on existing technologies

- Namespaces
 - > like pid, net, ipc, mount
- CGroups
 - > control resources for a group of processes
 - > like memory, cpu
- Layered FS

Layered FS

Writable Container

Image

NodeJS

Image

Nginx

Base Image

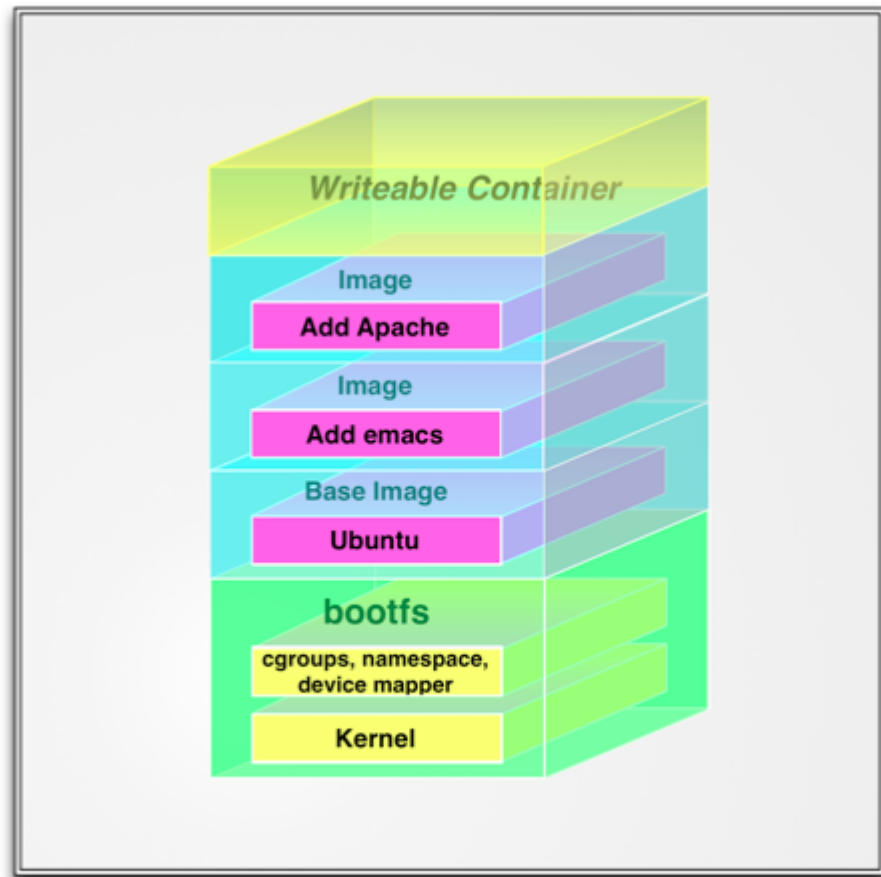
Ubuntu

bootfs

Cgroups,
Namespaces, Device
Mapper, Kernel

Layers

Chapter 11: Working with Docker images and repositories



Docker History

- Jan 2013: Initial commit
- March 2013: Docker 0.1.0
- September 2013: **Redhat** announces collaboration
- April 2014: Docker announces Docker Governance Advisory Board
- June 2014: **Google** announces engagement
- August 2014: **VMWare** announces Docker support
- September 2014: **\$40 Million** investment round
- October 2014: **Microsoft** announces Docker support



Service Providers



Dev Tools



Official Repositories



Operating Systems



Configuration Management



Big Data



Service Discovery



Orchestration



System Integrators



**Docker rocks.
And is here to stay.**