Docker for Web Developers

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Placeholder

Promo Video Demo
of Parts of Course Goes Here

I'll talk over the video
Created after the course is done

Course Agenda

Why Use Docker as a Developer?

Setting Up Your Dev Environment with Docker Toolbox

Using Docker Client in Your Dev Environment

Hooking Your Source Code Into a Container

Linking Docker Containers

Managing Multiple Containers with Docker Compose

Deploying Your Containers to Azure

Reviewing the Case for Docker

Why Use Docker as a Developer?

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Module Agenda

What is Docker?

**Docker Benefits
(for Web Developers)**

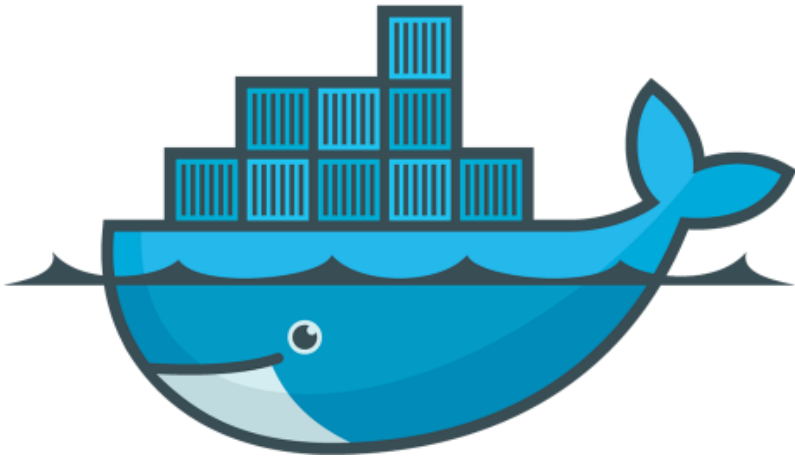**Docker Tools**

Docker in Action

What is Docker?

What is Docker?

Lightweight, open, secure platform

Simplify building, shipping, running apps

Shipping container system for code

Runs natively on Linux or Windows Server

Runs on Windows or Mac Development machines (with a virtual machine)

Relies on "images" and "containers"

The Role of Images and Containers

Docker Image

Example: Ubuntu with Node.js and Application Code

Docker Container

Created by using an image. Runs your application.
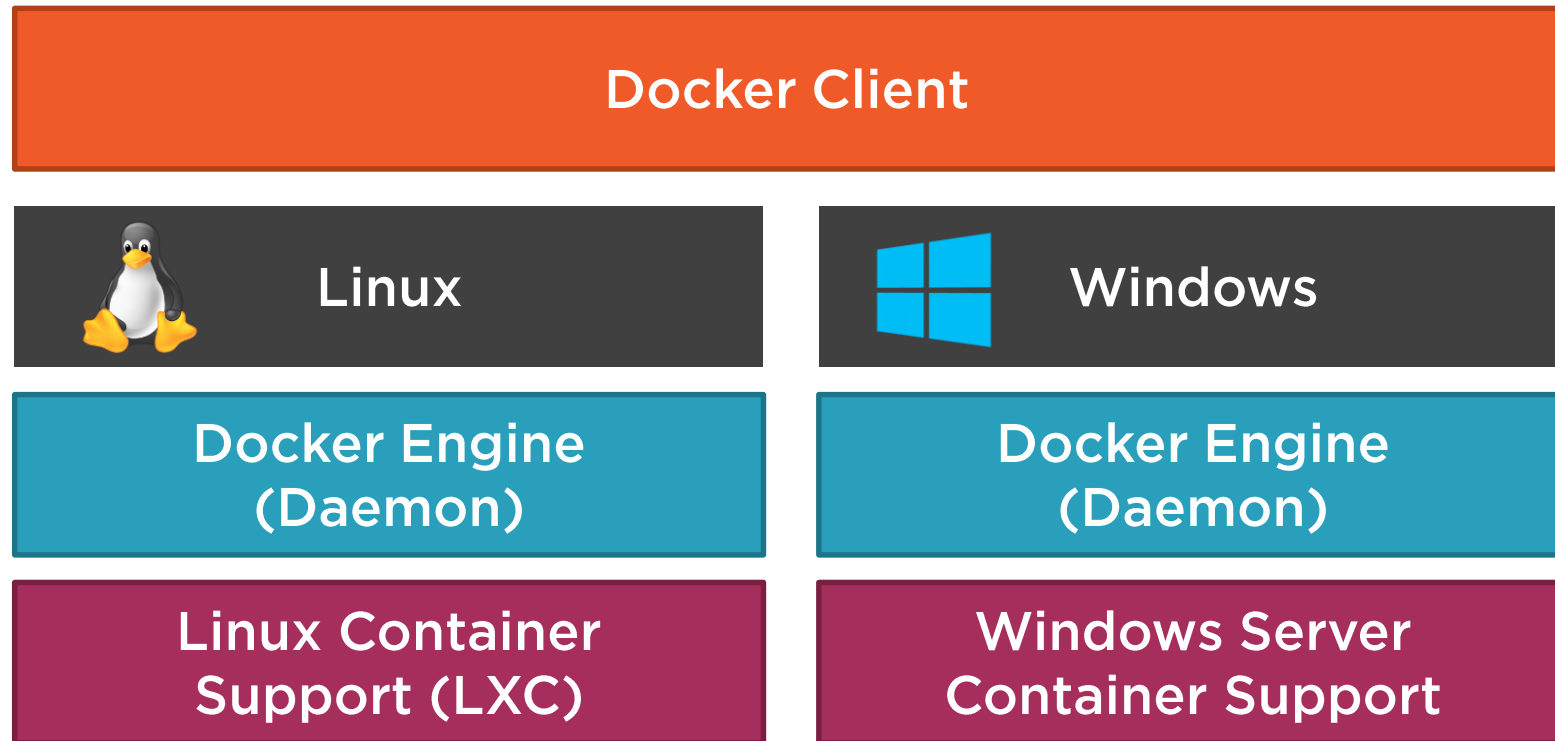
Image

A read-only template composed of layered filesystems used to share common files and create Docker container instances.
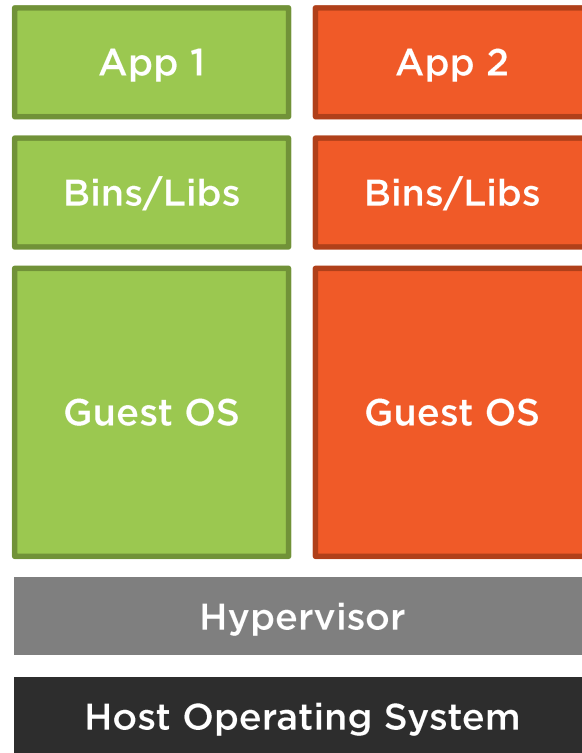
Container

An isolated and secured shipping container created from an image that can be run, started, stopped, moved and deleted.
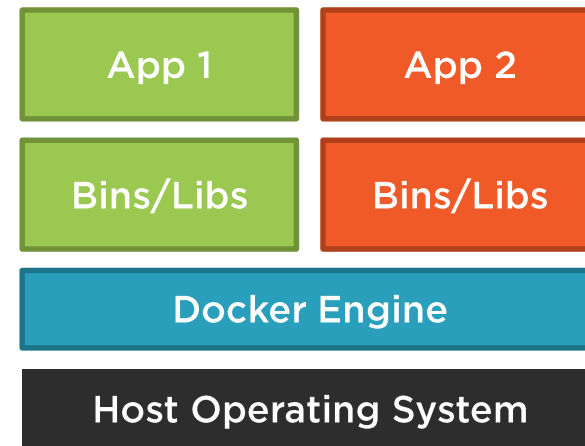
Where Does Docker Run?

Docker Client

🐧 Linux	🪟 Windows
Docker Engine (Daemon)	Docker Engine (Daemon)
Linux Container Support (LXC)	Windows Server Container Support

Docker Containers Versus Virtual Machines

Virtual Machines

Docker Containers
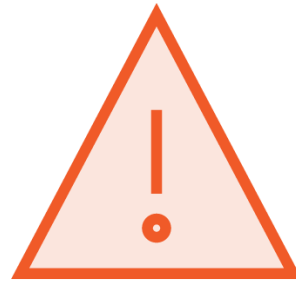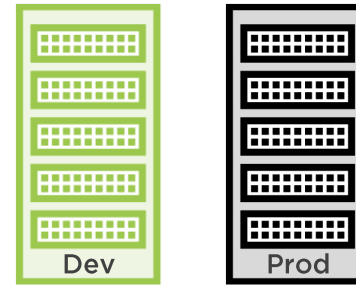
Docker Benefits
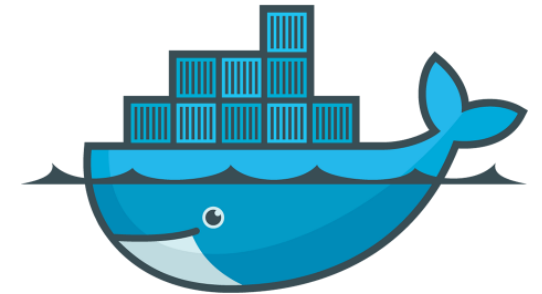# (for Web Developers)

Docker Benefits
(for Web Developers)

Accelerate Developer Onboarding
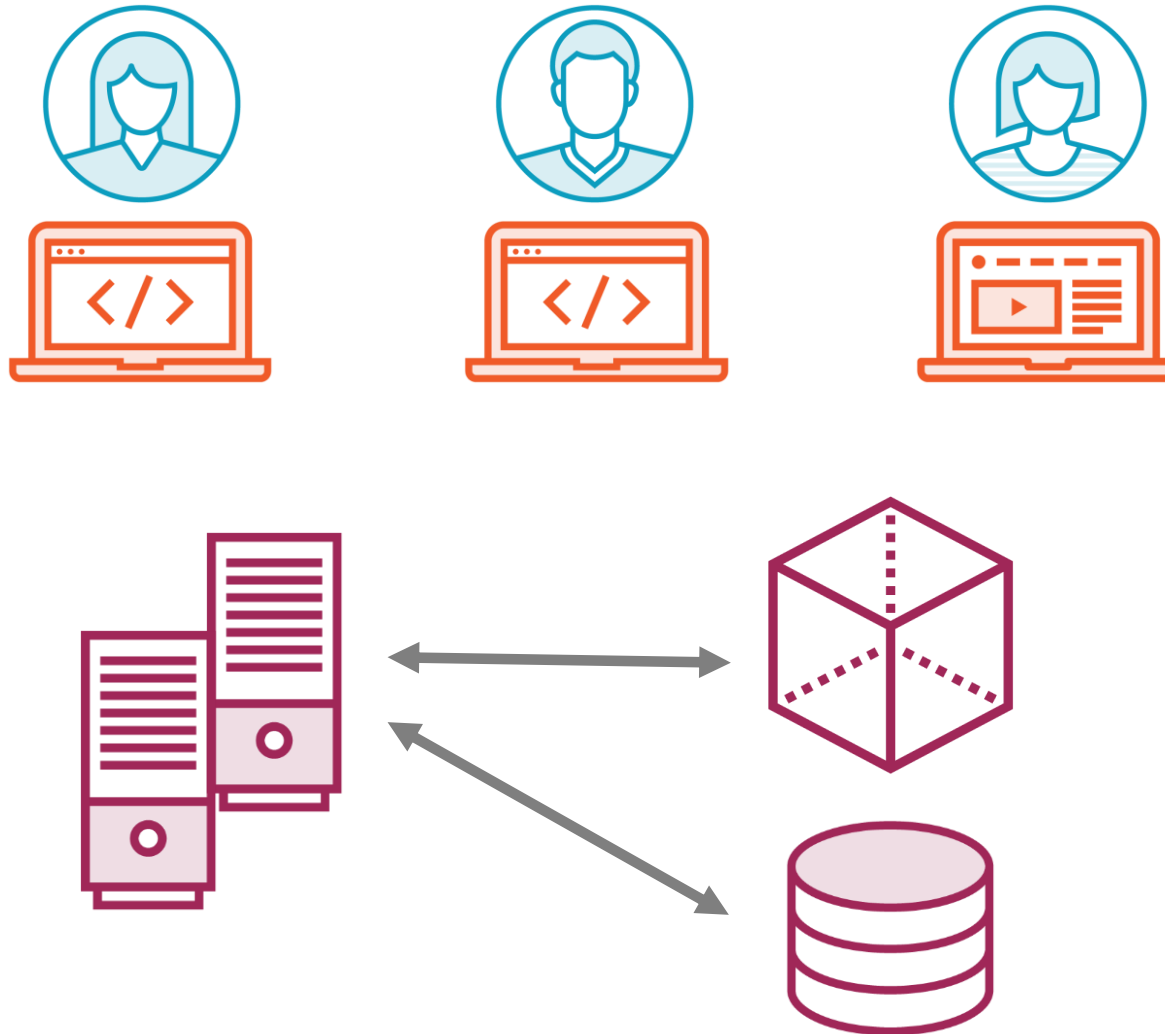
Eliminate App Conflicts

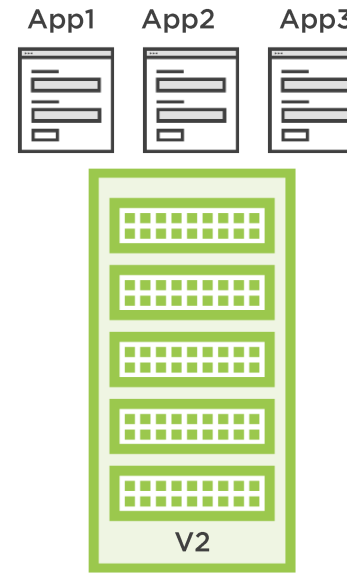**Environment Consistency**

Ship Software Faster

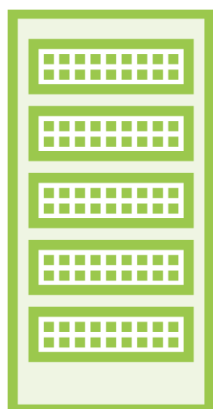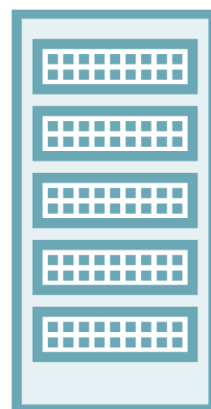# Accelerate Developer Onboarding

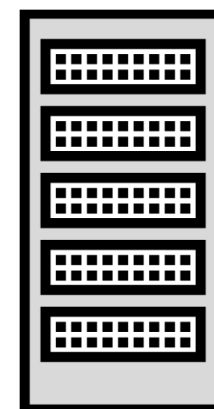# Eliminate App Conflicts
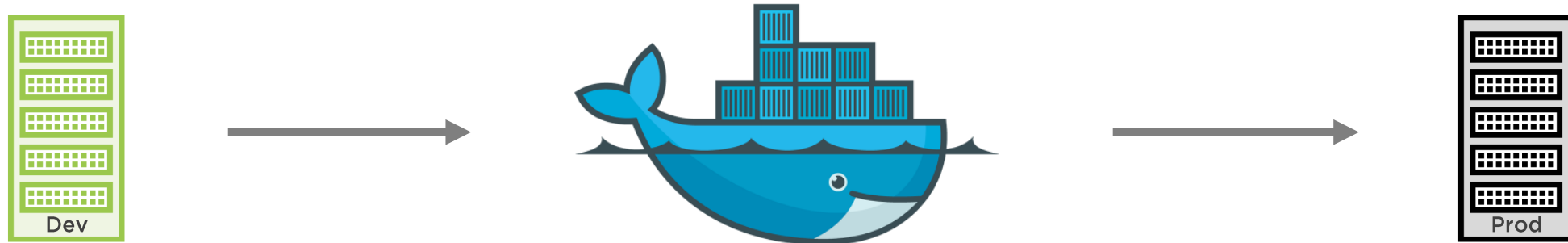
Environment Consistency

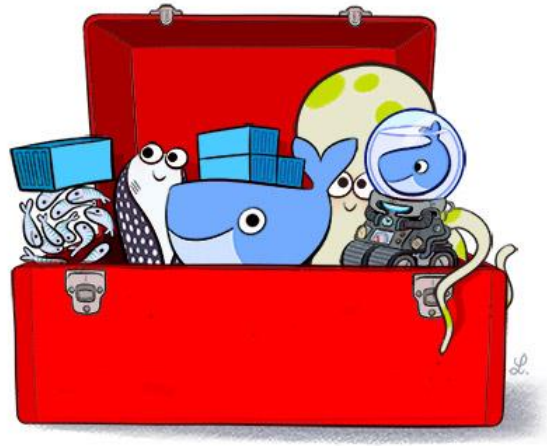Development   Staging   Production

Ship Software Faster

Docker Tools

Docker Toolbox

Docker Toolbox (Windows 7/8 or Mac)

Provides image and container tools

Virtual Machine (for Windows/Mac)

Works on Windows, Mac, Linux

https://www.docker.com/docker-toolbox
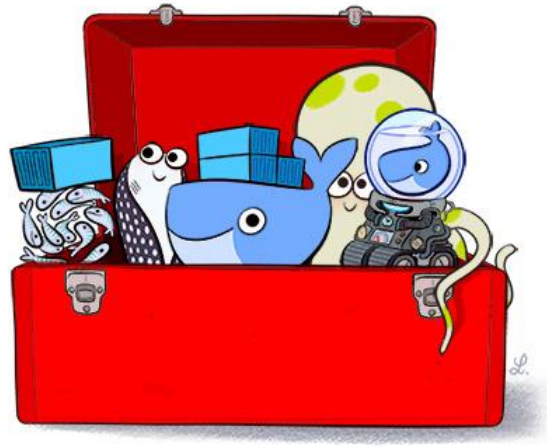
Docker CE

Docker Community Edition (Windows 10 Pro+ or Mac)

Provides image and container tools

Using Hyper-V/Hyperkit to run VMs

Works on Windows, Mac, Linux

https://www.docker.com/community-edition

Docker Toolbox vs. Docker CE

Docker Toolbox	Docker Community Edition
Windows 7 or 8	Windows 10+ Pro or Mac
Uses Virtual Box	Hyper-V/Hyperkit
Will use Docker Machine	Don't normally need to use Docker Machine

Docker Toolbox Tools

Docker Client

Docker Machine

Docker Compose

Docker Kitematic

VirtualBox

Docker Toolbox

Docker in Action

Summary

Docker simplifies building, shipping and running apps

Runs natively on Linux and Windows Server

Docker is NOT the same as using Virtual Machines

Key benefits to Web Developers:

- Accelerate developer onboarding
- Simplify working with multiple apps
- Consistency between environments
- Ship faster!