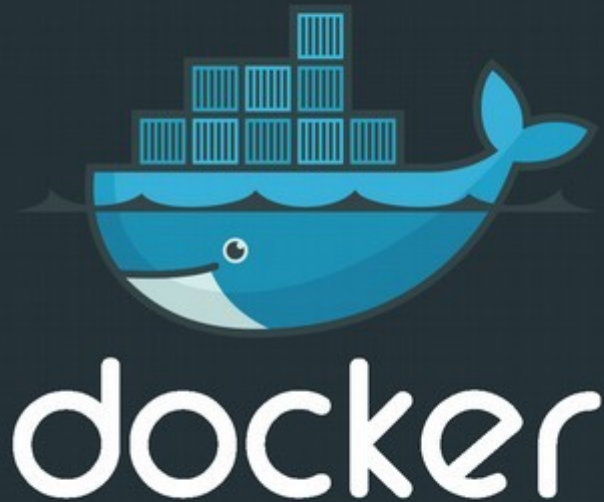
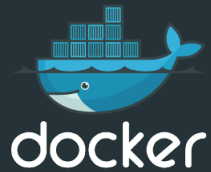


# Deploy Rails With Docker



**Dwi Fahni Denni (dfdenni)**

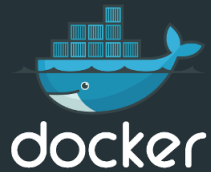
<https://github.com/zeroc0d3>



# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

- What's Docker
- Why Docker
- Container v.s Virtualization
- Docker Setup & Installation
- Docker Tools
- Build Simple Dockerfile
- Create New Simple Rails Application
- Deploy Rails Application
- Test Driven Development (TDD) Dockerfile



# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

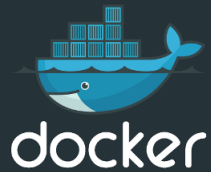
**daily #{activity}**

**Full Stack Engineer @ domikado.com**

(Web App, Mobile App & SEO Marketing Consultant)

**System Analyst @ nfndp.com**

(Architecture, Master Plan, Urban, Interior Design Consultant)



# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

**daily #{community}**

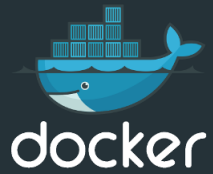
**Founder ZeroC0D3 Team**

(Independent Security Researcher)

**Contributor & Maintainer Laradock**

(A Docker PHP Development Environment)

<https://github.com/laradock/laradock>

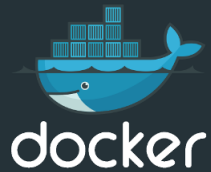


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def #{logs}
```

## Real World Changes

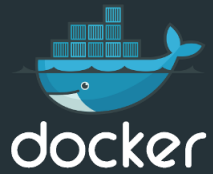


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

## def #{logs} :: Real World Changes







COMPARE	BEFORE	NOW
Application	Monolithic	Decouple Services (microservices)
Development Cycle	Long Cycle	Fast, Iterative improvements
Environment	Single	Multiple
Scaling Up	Slow	Fast



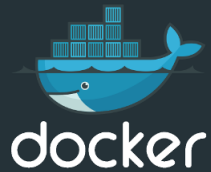
# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{logs} :: The Matrix from “Hell”

	Static website	?	?	?	?	?	?	?
	Web frontend	?	?	?	?	?	?	?
	Background workers	?	?	?	?	?	?	?
	User DB	?	?	?	?	?	?	?
	Analytics DB	?	?	?	?	?	?	?
	Queue	?	?	?	?	?	?	?
		Development VM	QA Server	Single Prod Server	Onsite Cluster	Public Cloud	Contributor's laptop	Customer Servers





# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

`def #{problem}`

## Deployment Problems



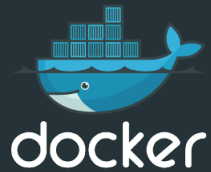


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

## def #{problem} :: Stacks & Targets

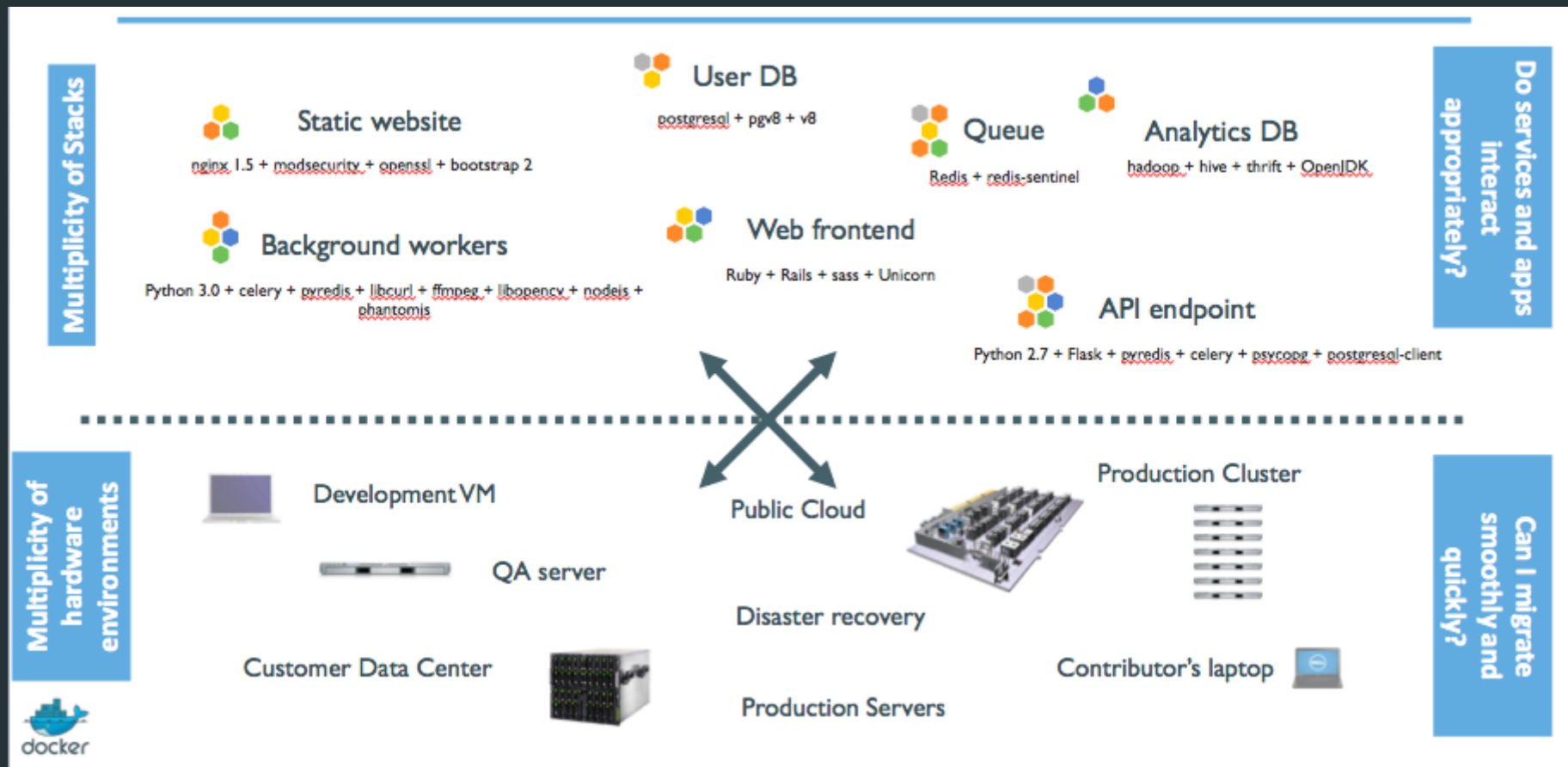
STACKS	TARGETS
Languages	Individual development environments
Framework	Pre-production, QA, Staging, etc
Database	Production: on premise, cloud, hybrid

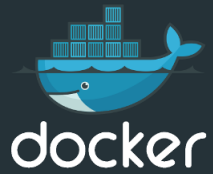


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

## def #{problem} :: Deployment Problems



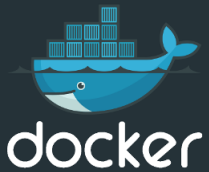


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{whats}

## What's Docker



# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

## def #{whats} :: What's Docker

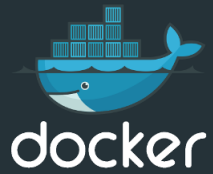
**Docker** is an open source containerization engine, which automates the packaging, shipping, and deployment of any software applications that are presented as lightweight, portable, and self-sufficient containers, that will run virtually anywhere.

A **Docker container** is a software bucket comprising everything necessary to run the software independently. There can be multiple Docker containers in a single machine and containers are completely isolated from one another as well as from the host machine.

**Docker container** includes a software component along with all of its dependencies (binaries, libraries, configuration files, scripts, jars, and so on)



**Docker** is an Open Platform to **Build**, **Ship**, and **Run** Distributed Applications

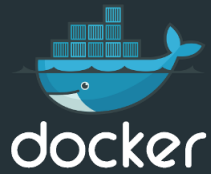


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{why}

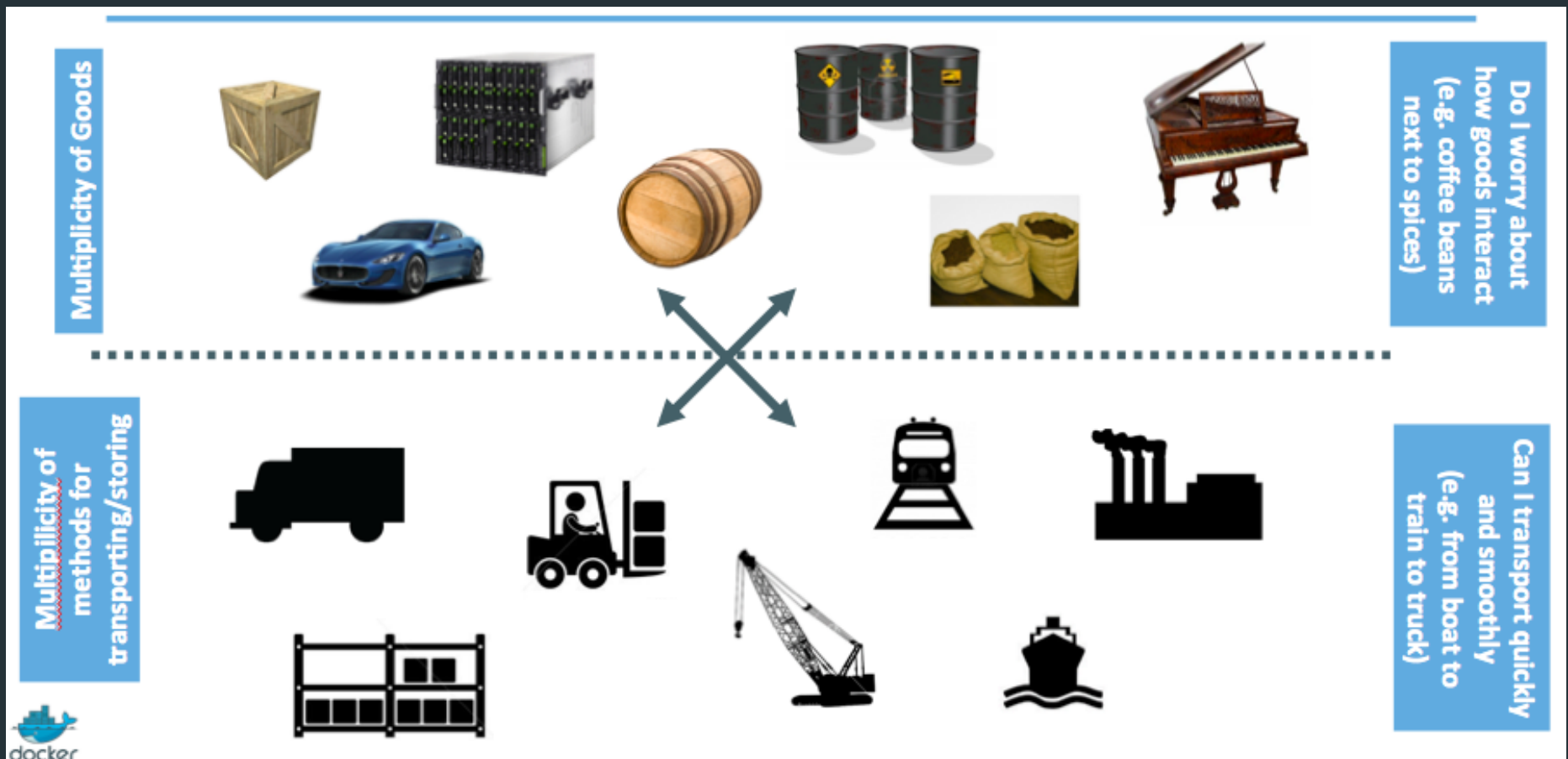
## Why Docker

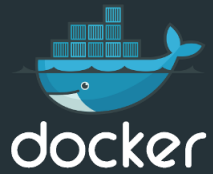


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{answer1} :: Why Docker

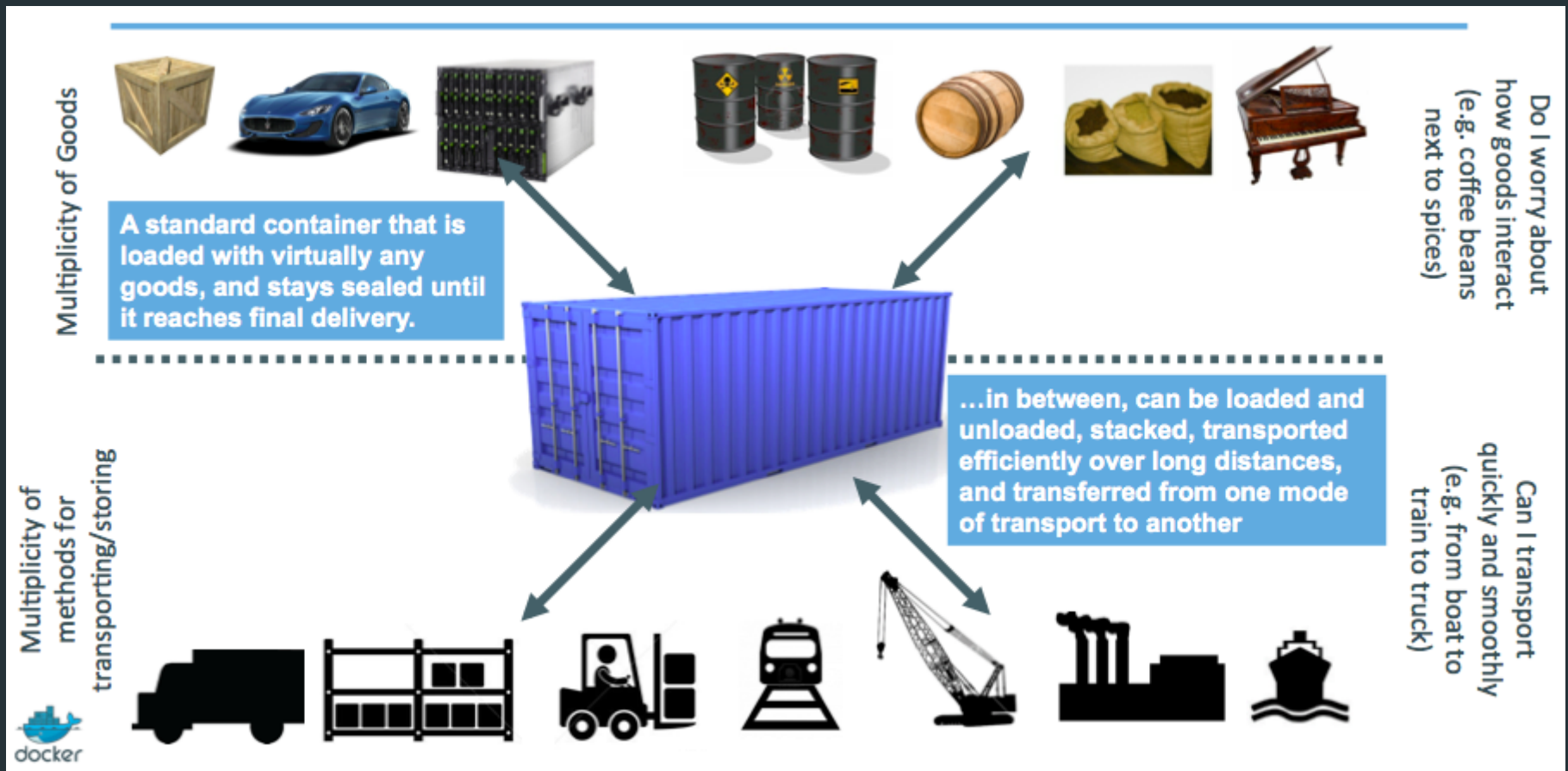


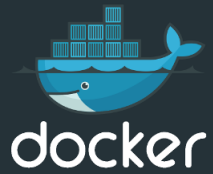


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{answer2} :: Why Docker

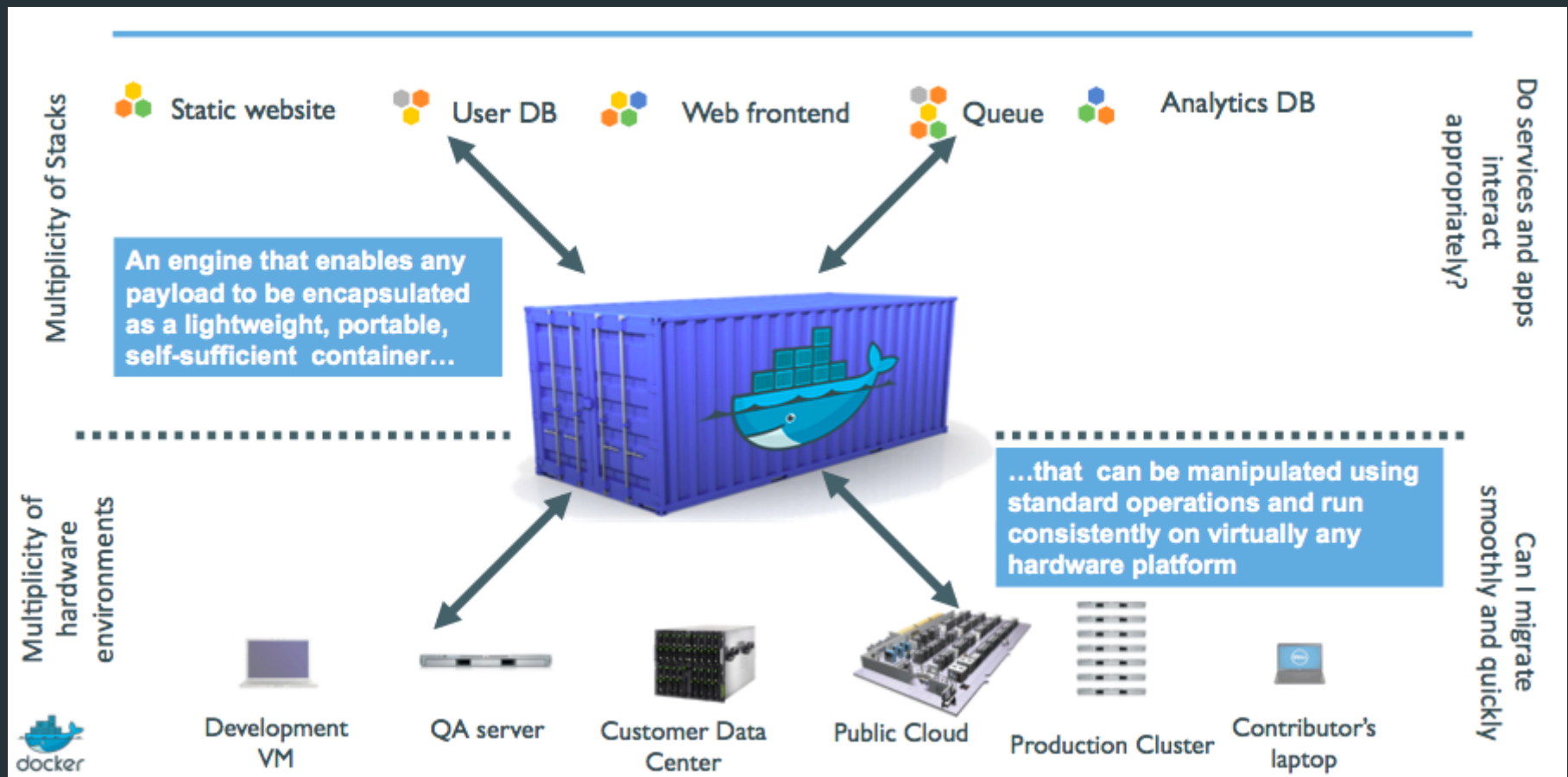




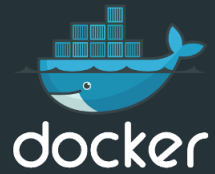
# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{answer3} :: Why Docker



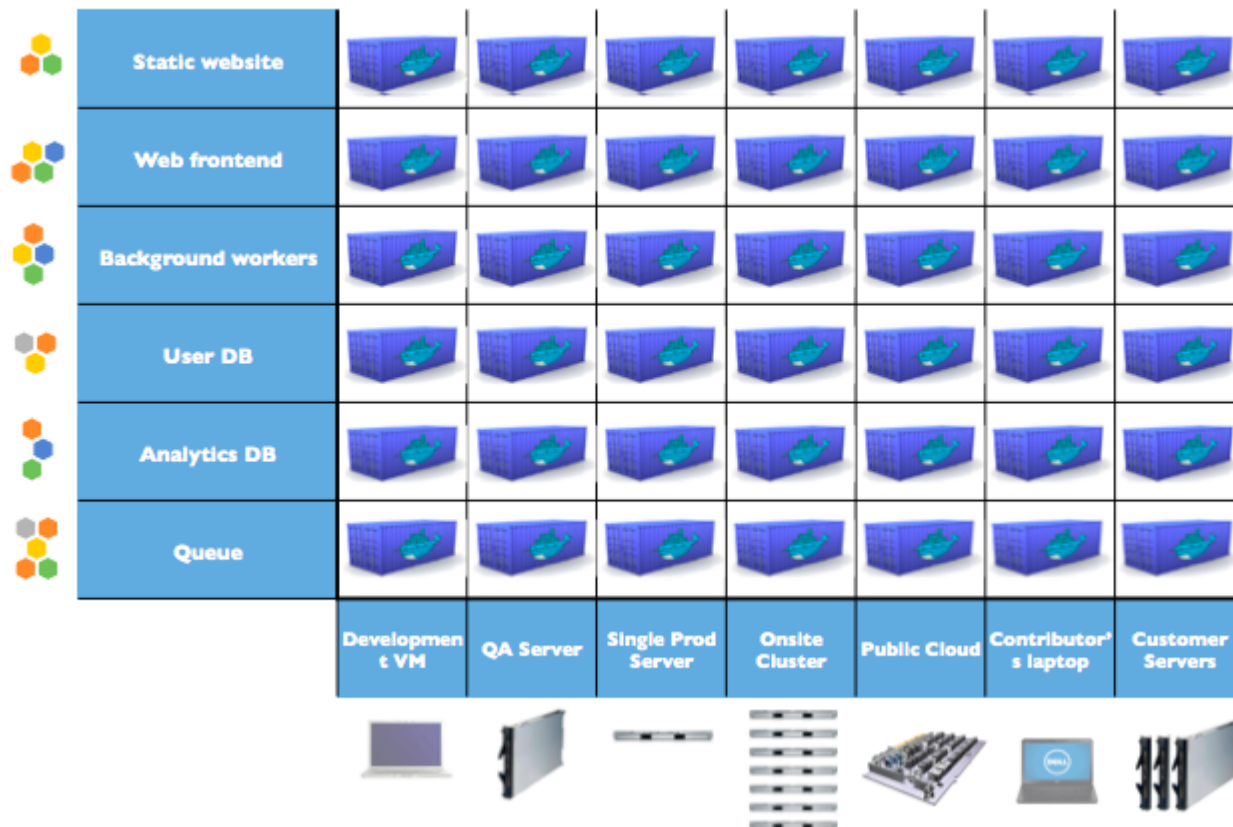


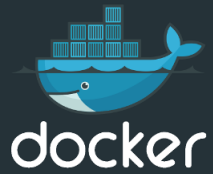


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{solved} :: Eliminate The Matrix of "Hell"



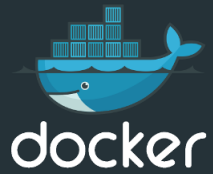


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

`def #{compare}`

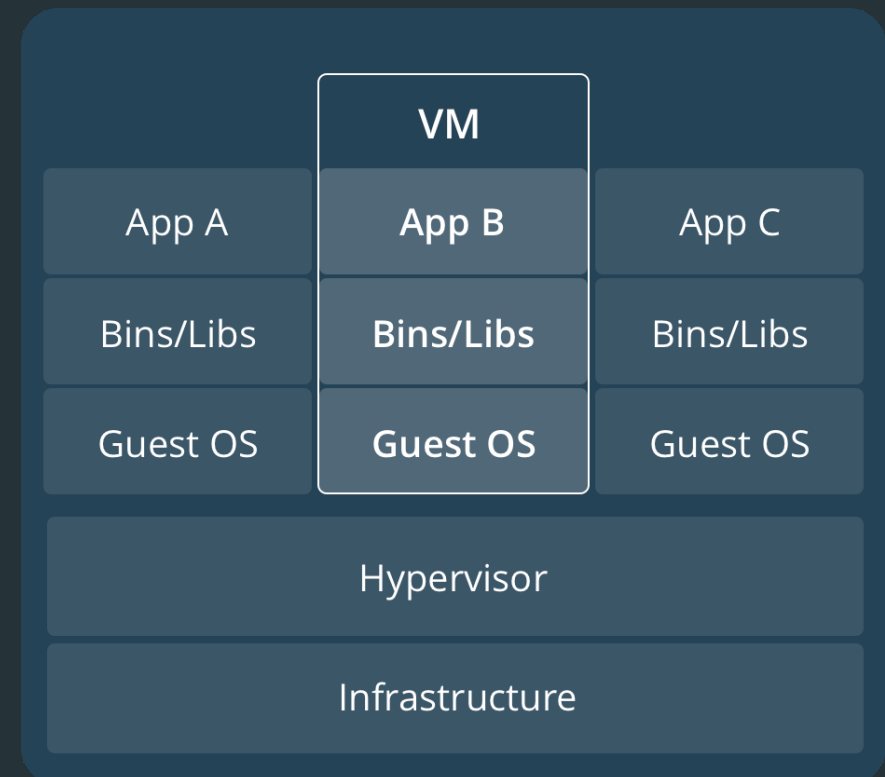
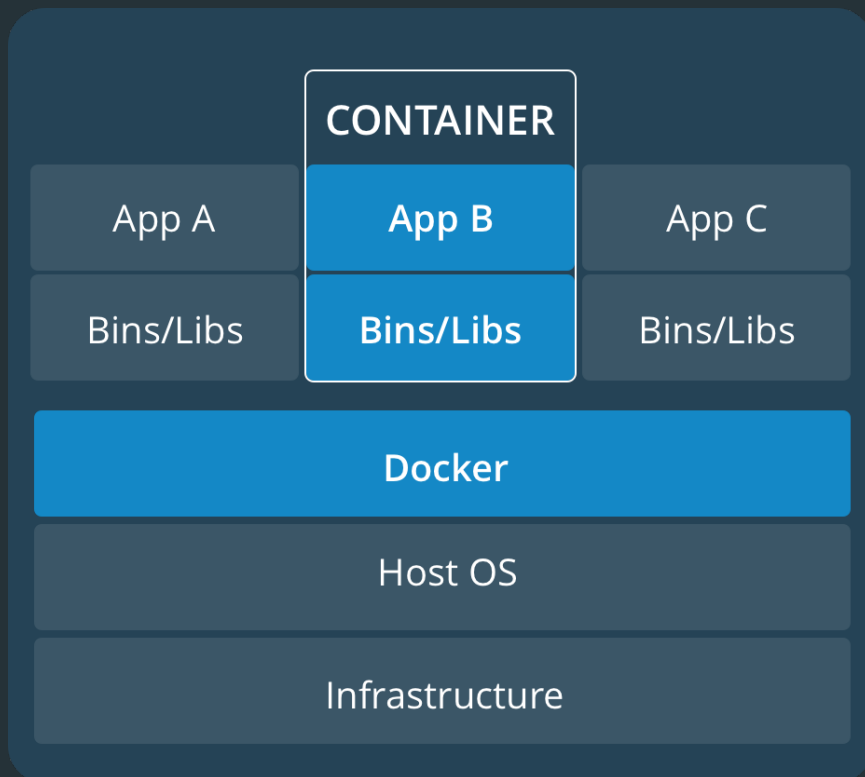
## Container v.s Virtualization

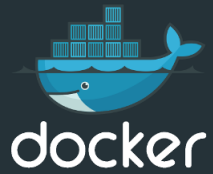


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

## def #{compare} :: Container v.s Virtualization



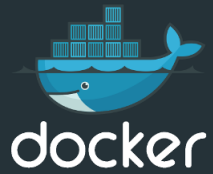


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def #{req}
```

## Requirements

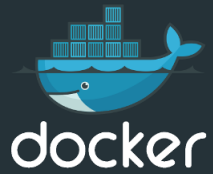


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{begin}

## Installation & Setup

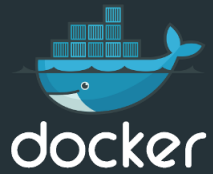


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{tools}

## Docker Tools

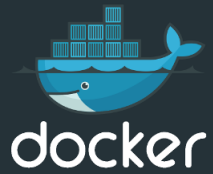


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def #{demo1}
```

## Create Simple Dockerfile



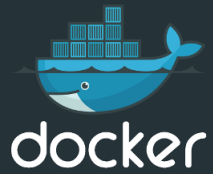
# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def #{demo2}
```

## Build & Run Docker Container



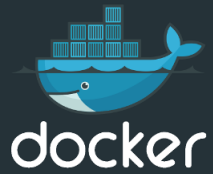


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def #{demo3}
```

## Create New Rails Application

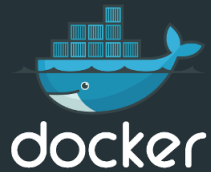


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{demo4}

## Setup Configuration Rails

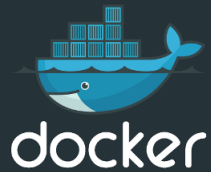


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def #{deploy}
```

## Deploy Rails In Different Environments

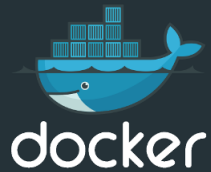


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{demo5}

**Running Capistrano For  
Deploying Environment Docker Container  
(Development & Production)**

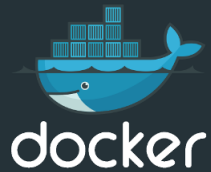


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def #{run}
```

## Running Rails From Docker Container



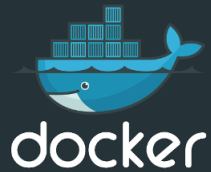
# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def #{demo6}
```

## Restart Unicorn - Optional (Development & Production\*)

\*) NO NEED to run if causing downtime

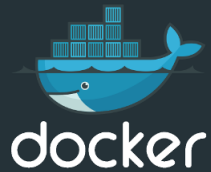


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def #{evaluate}
```

## Test Driven Development (TDD) Dockerfile



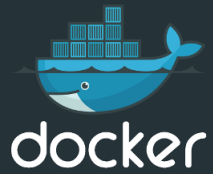
# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def #{demo7}
```

## Running TDD Dockerfile From RSpec



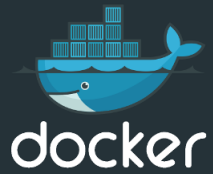


# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

def #{qa}

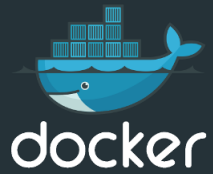
## Questions ?



# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

```
def Presentation  
  puts #{Thanks}  
end
```



# Deploy Rails With Docker

Dwi Fahni Denni (dfdenni) :: <https://github.com/zeroc0d3>

`def #{email}`

`denni@domikado.com`

`dfdenni@nfndp.com`