



Introduction To Docker

Presenter Name: Kanishka Dilshan

Designation: Associate Software Architect

AGENDA

- The Challenge
- Docker Aproach
- Docker vs VMs
- Docker Architecture
- Docker Basics
- Demo
- Q&A



THE CHALLENGE

The Challenge

The Matrix From Hell

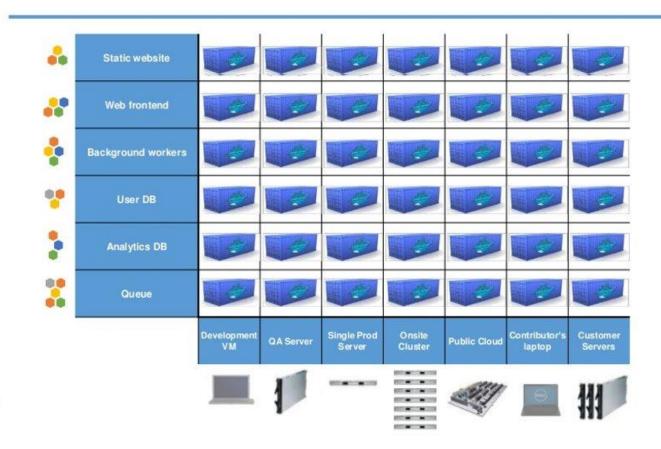
		Development VM	QA Server	Single Prod Server	Onsite Cluster	Public Cloud	Contributor's laptop	Customer Servers
00	Queue	?	?	?	?	?	?	?
•	Analytics DB	?	?	?	?	?	?	?
**	User DB	?	?	?	?	?	?	?
	Background workers	?	?	?	?	?	?	?
•••	Web frontend	?	?	?	?	?	?	?
••	Static website	?	?	?	?	?	?	?





The Solution

Docker eliminates the matrix from Hell







DOCKER APROACH

Docker Aproach



Build



Ship

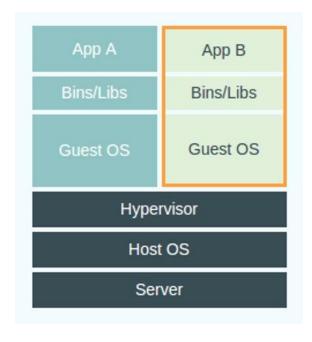


Run

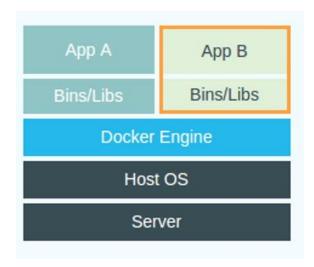


DOCKER vs VMs

Docker vs VMs



Virtual Machine

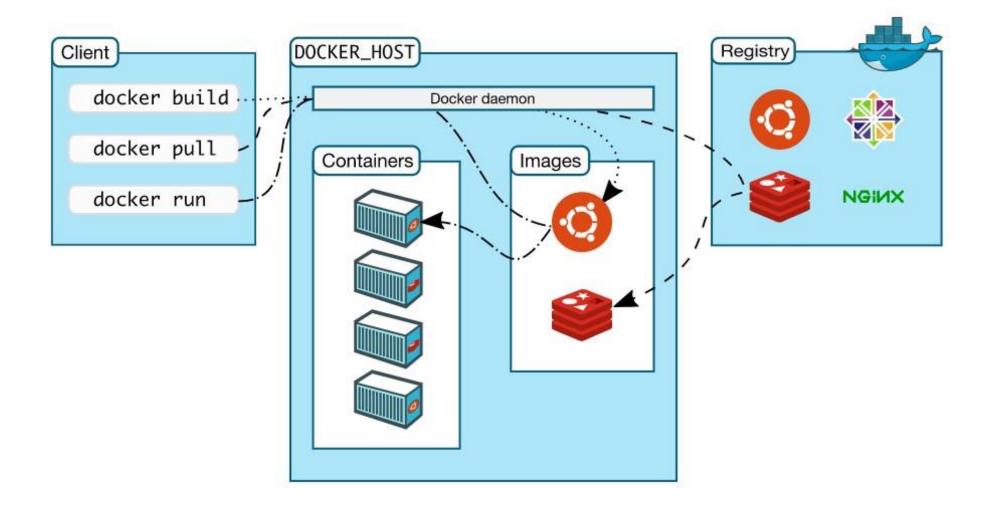


Docker



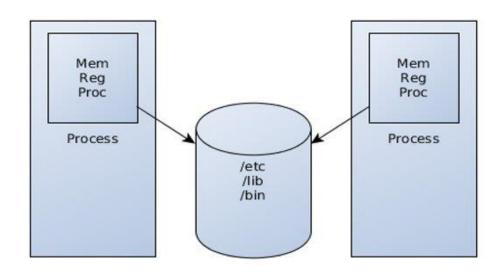
DOCKER ARCHITECTURE

Docker Architecture





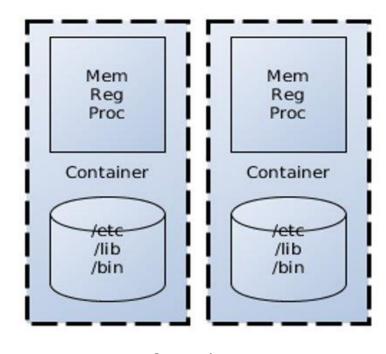
Process vs Container



Processes



- Namespaces
- Control Groups (CGroups) & chroot

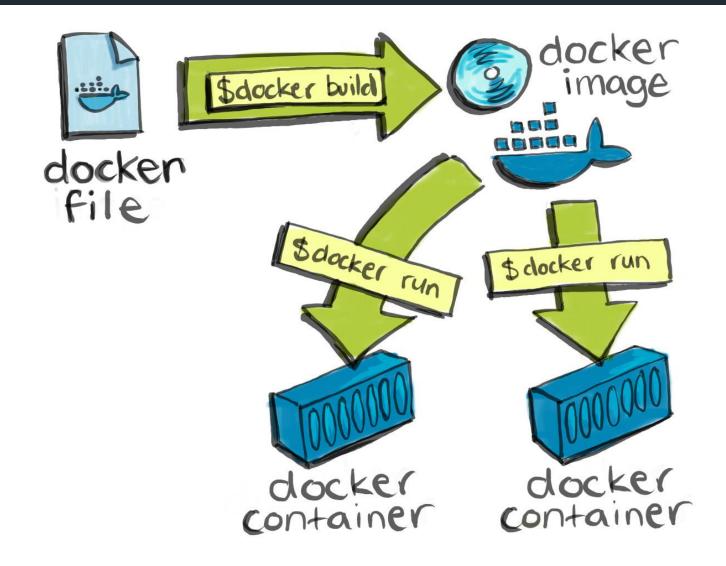


Containers



DOCKER BASICS

Docker Basics





Docker Basics Cont...

- Image
 - ▶ Blueprint of the docker container. No state.
- Container
 - Running instance based on image
- Engine
 - The process which executes/commands for containers
- Registry
 - Where docker images are stored/managed

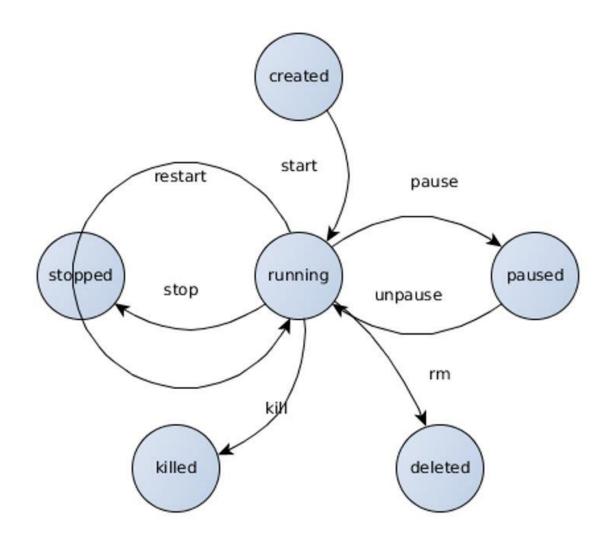


Basic Commands (Docker cli)

- build
 - Build an image from a Dockerfile
- run
 - Create a container and run a command
- ps
 - List containers
- logs
 - Fetch logs from a container
- Commit
 - Create a new image from a container's changes



Container Lifecycle

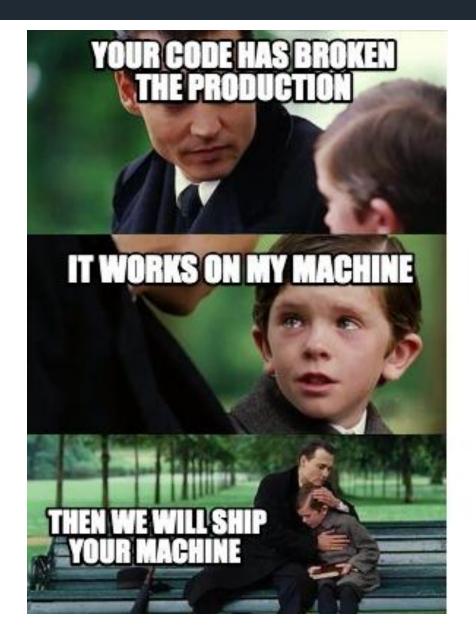




DEMO

https://github.com/kdkanishka/DockerTechTalk

Demo





Q&A

Thank you

