Containers vs. Virtual Machines



Virtual Machines



Virtual Machines

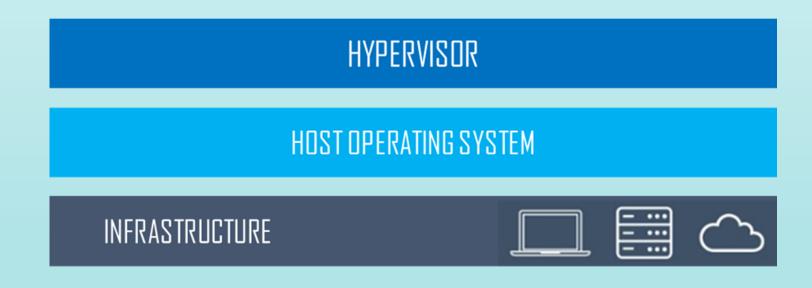


Virtual Machines

2 Types of Hypervisors

Type 1: Direct link to Infrastructure

Type 2: Runs as an app on the Host OS



Virtual Machines

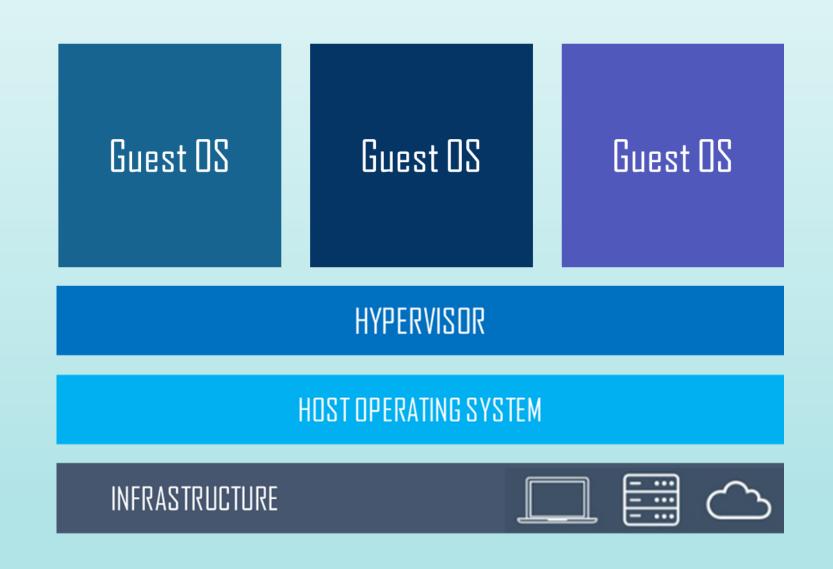
2 Types of Hypervisors examples

Type 1: VMware ESXi, Microsoft Hyper-

V server and open source KVM.

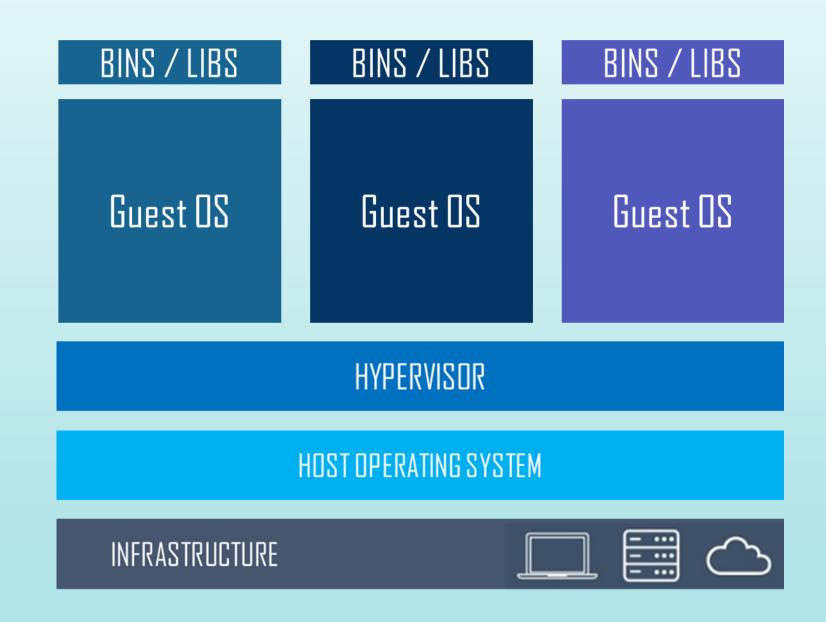
Type 2: Oracle VM VirtualBox, VMWare

Workstation



Virtual Machines

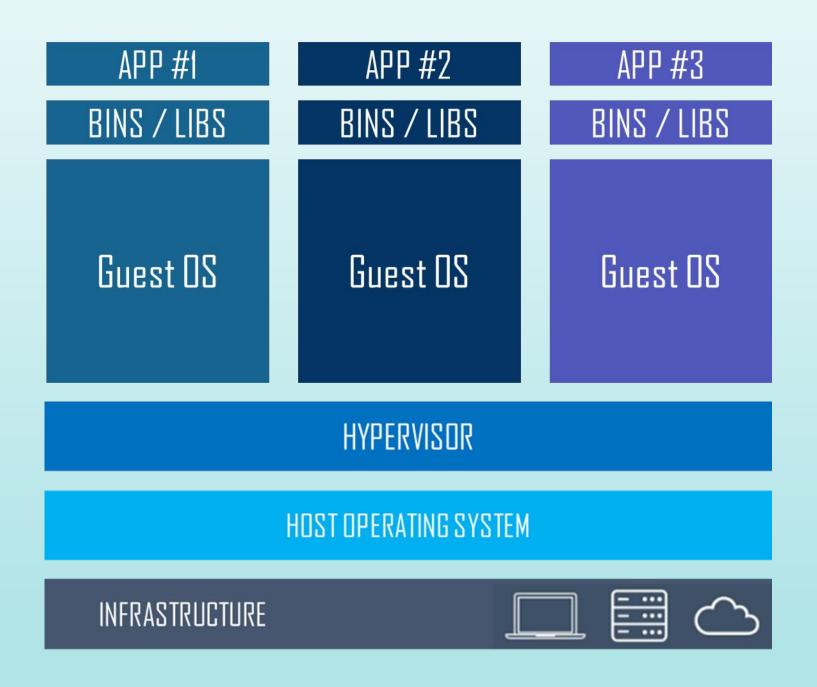
700MB * 3 = 2.1GB + CPU and Memory resources



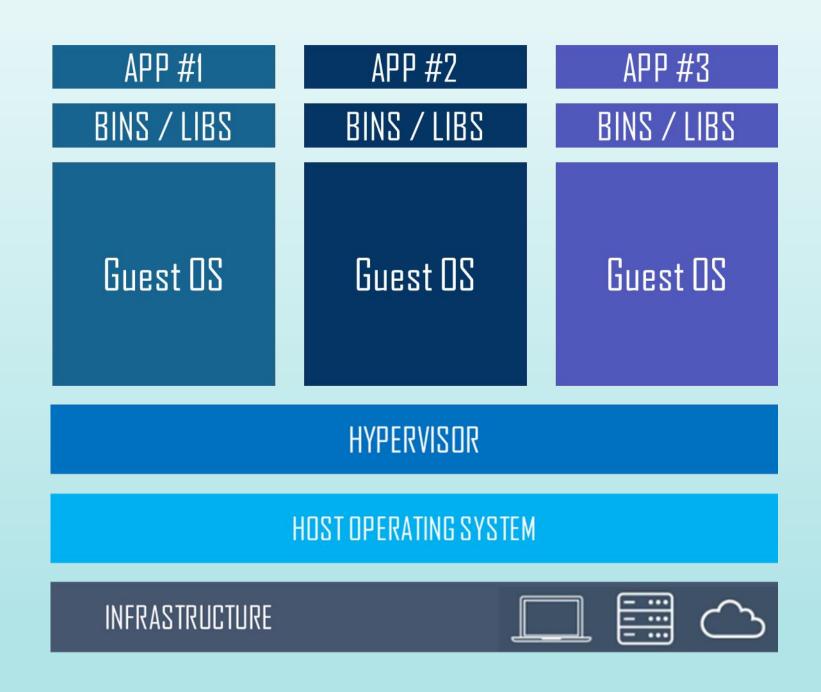
Virtual Machines

Examples:

- DB connection library
- Ruby, Python and NodeJS packages



Virtual Machines

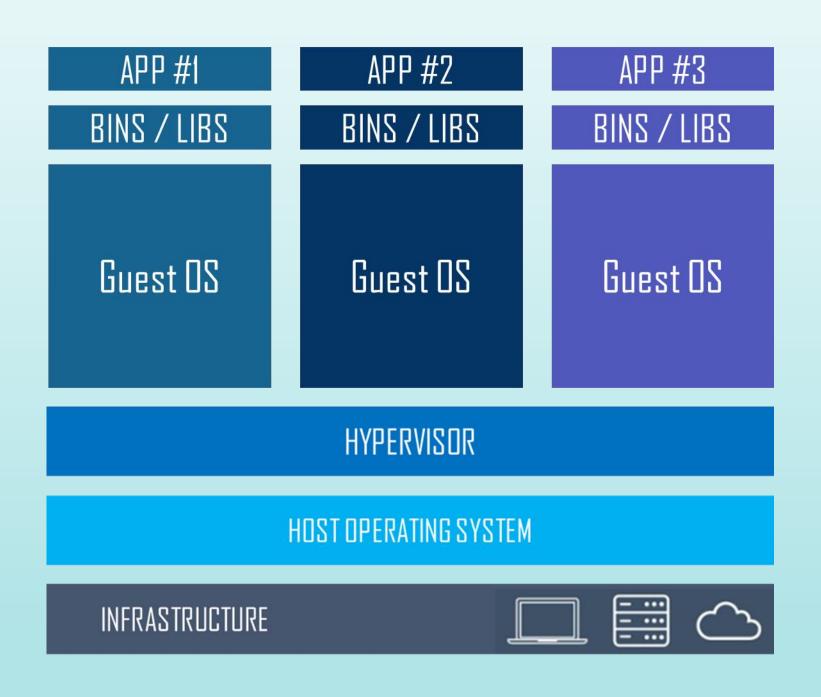


INFRASTRUCTURE





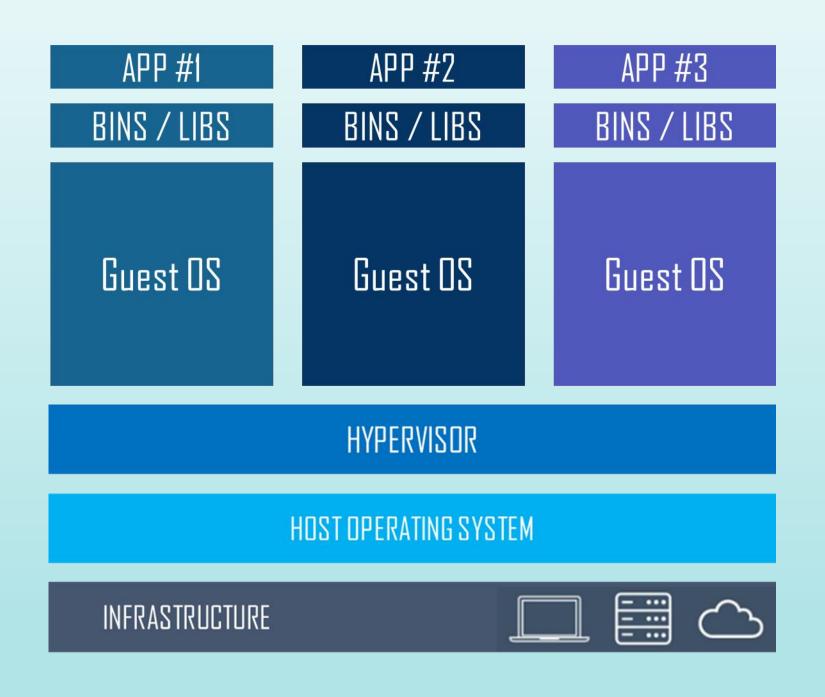
Virtual Machines



HOST OPERATING SYSTEM

INFRASTRUCTURE

Virtual Machines

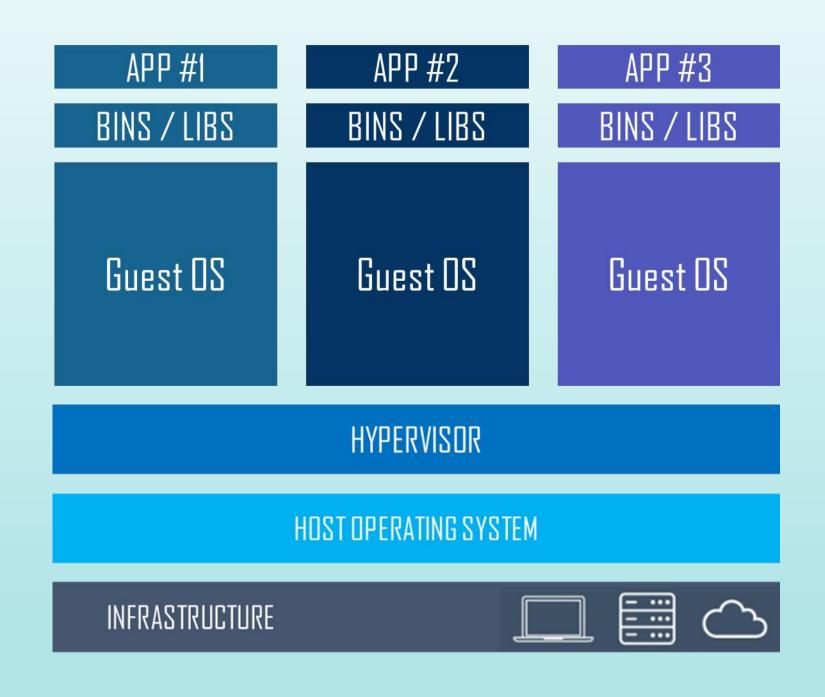


Docker Container Engine

HOST OPERATING SYSTEM

INFRASTRUCTURE

Virtual Machines



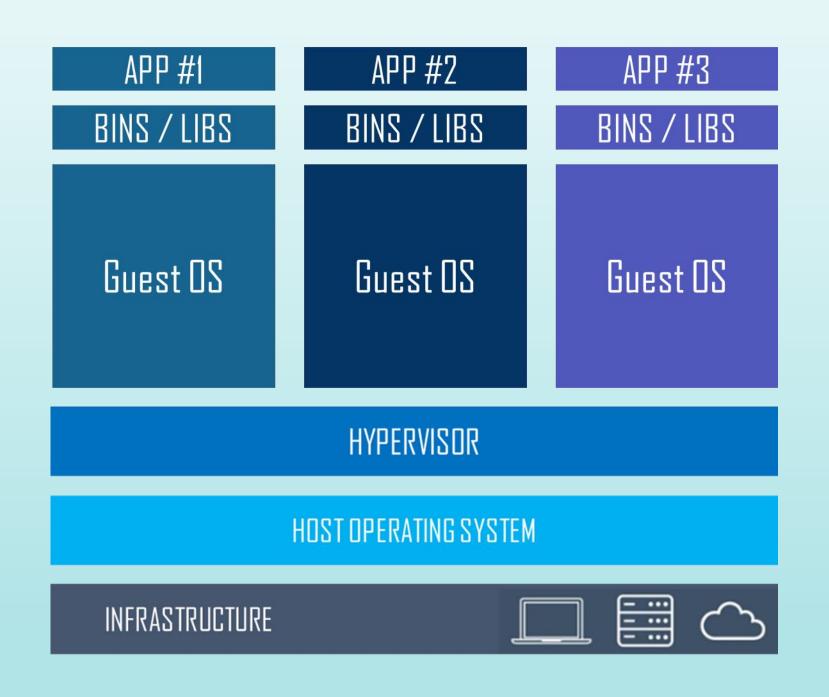
BINS / LIBS BINS / LIBS

Docker Container Engine

HOST OPERATING SYSTEM

INFRASTRUCTURE

Virtual Machines



APP #1 APP #2 APP #3

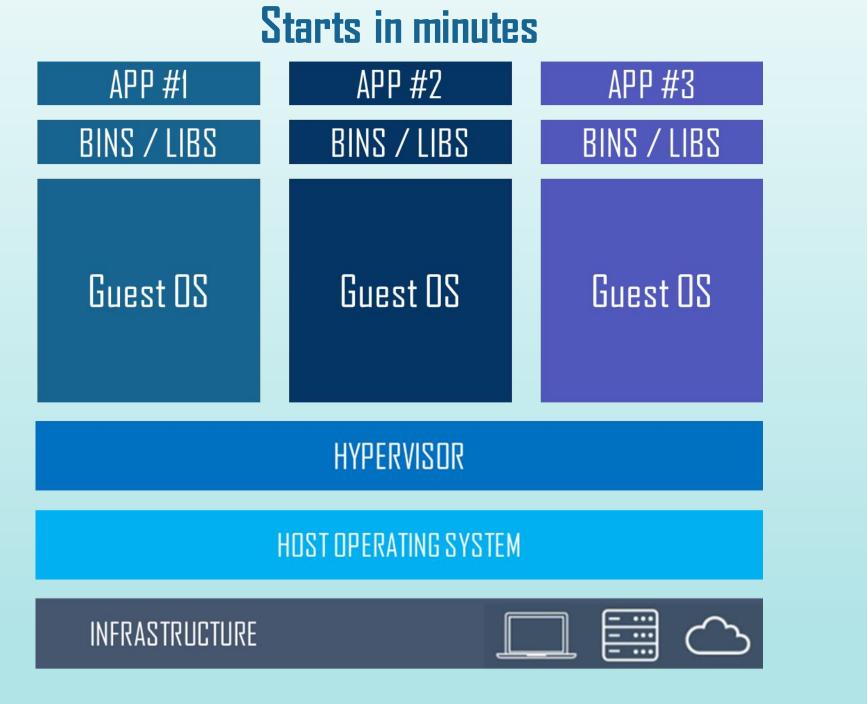
BINS / LIBS BINS / LIBS

Docker Container Engine

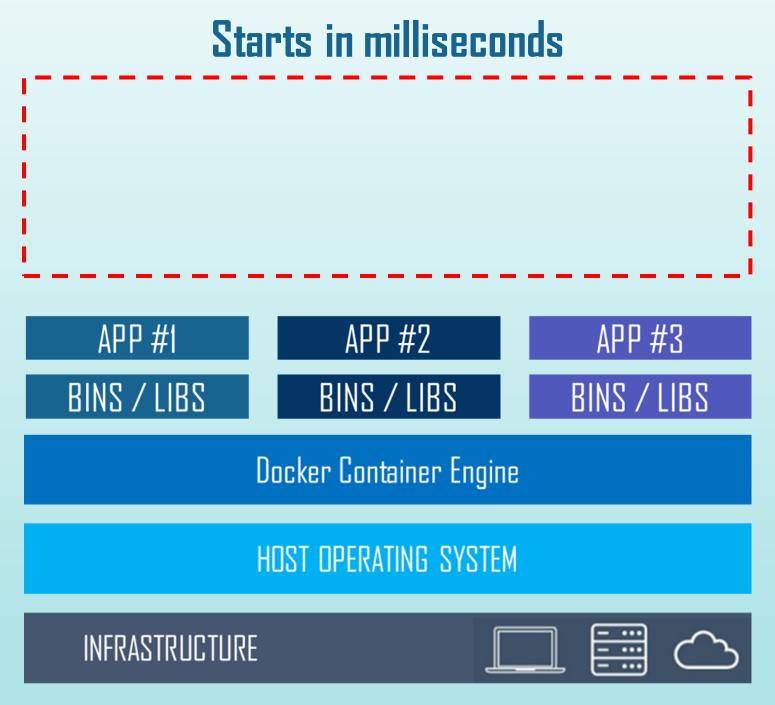
HOST OPERATING SYSTEM

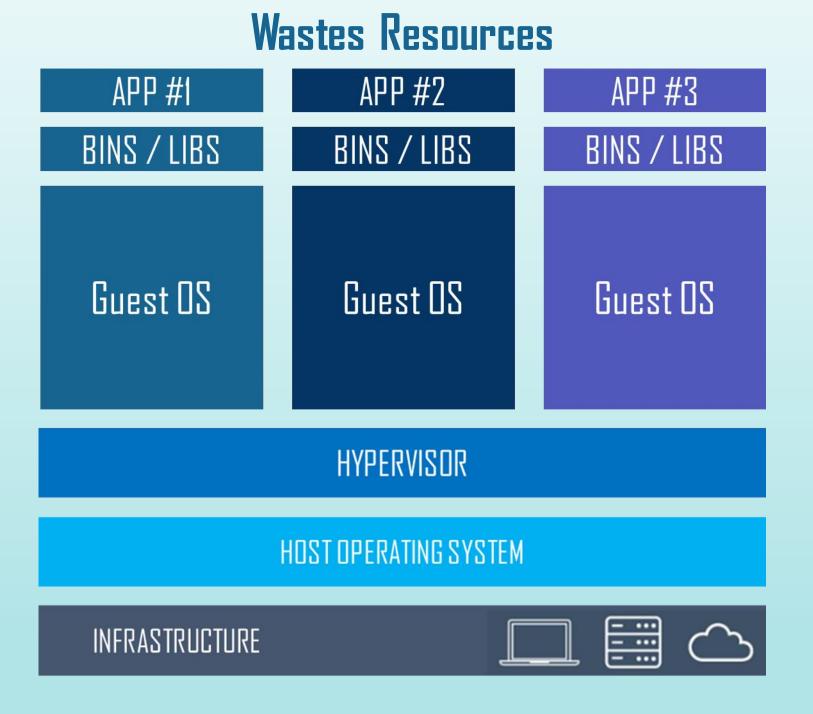
INFRASTRUCTURE

Virtual Machines

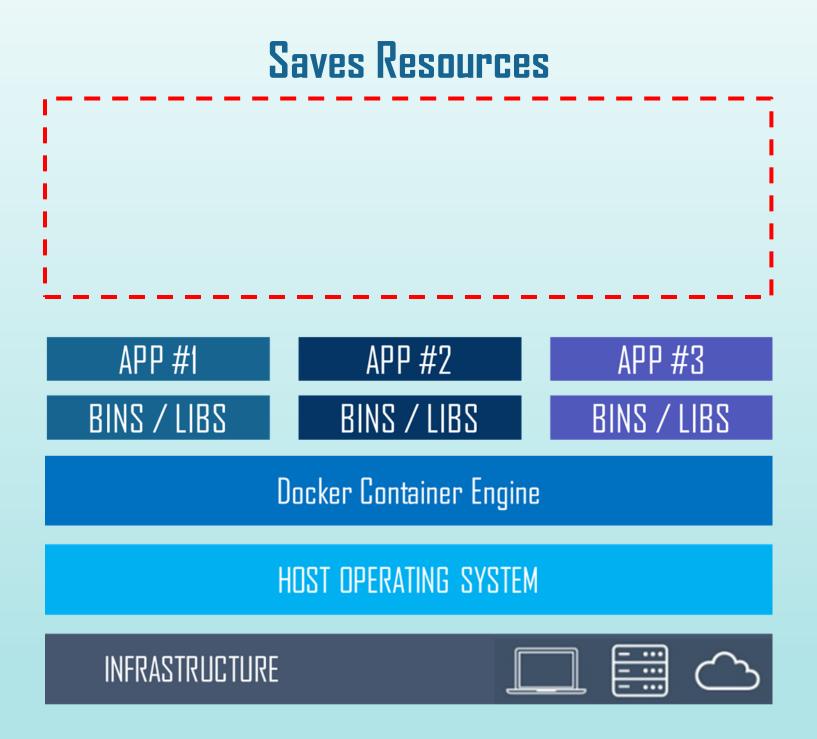


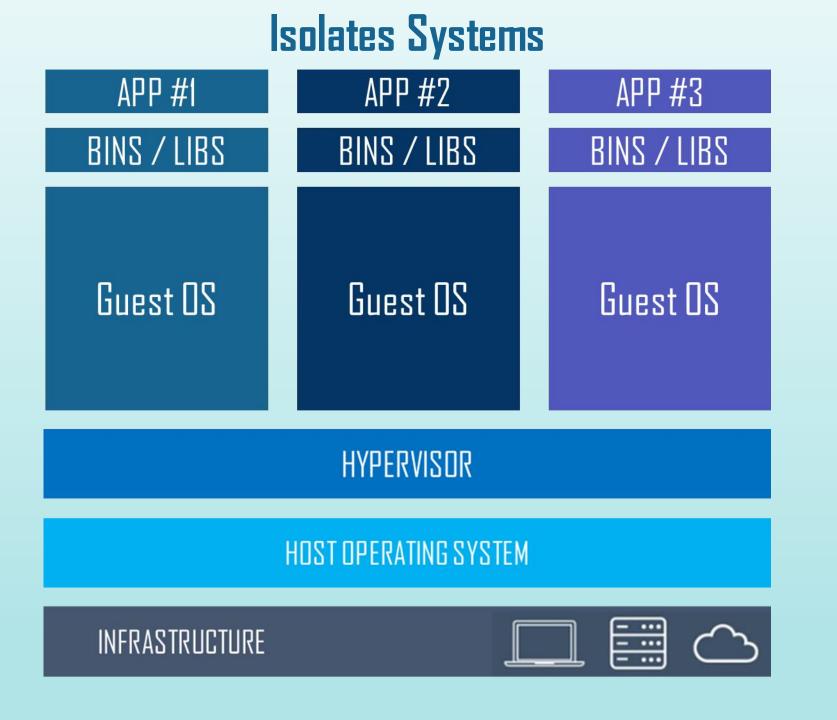
Virtual Machines



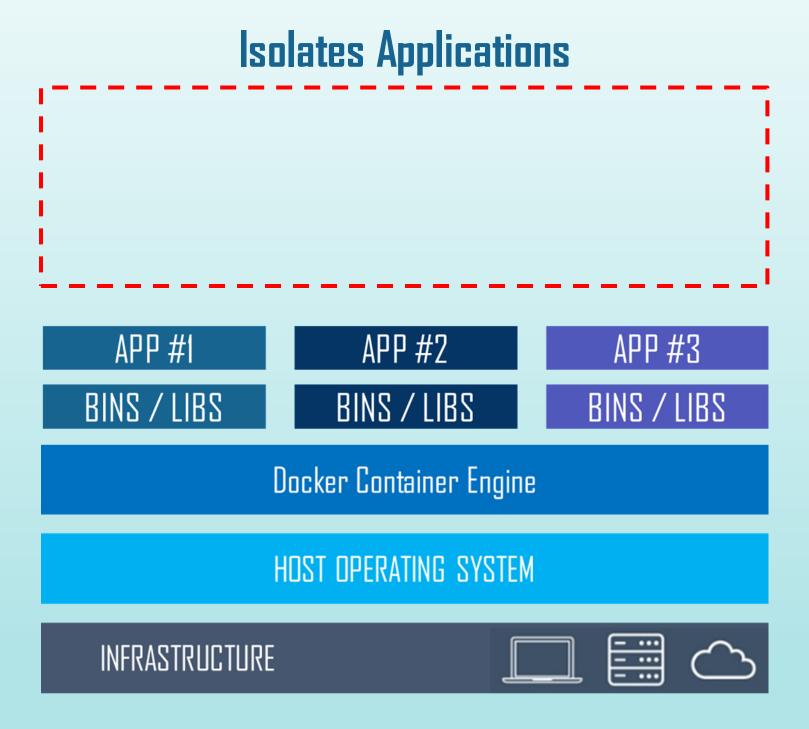


Virtual Machines

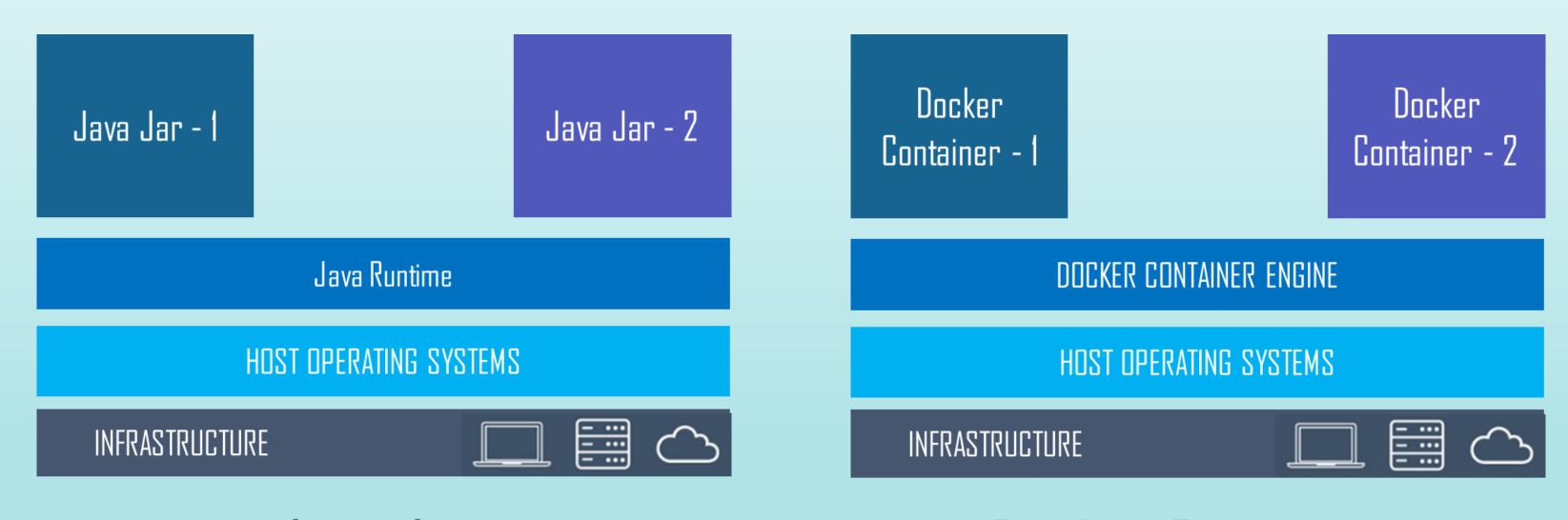




Virtual Machines

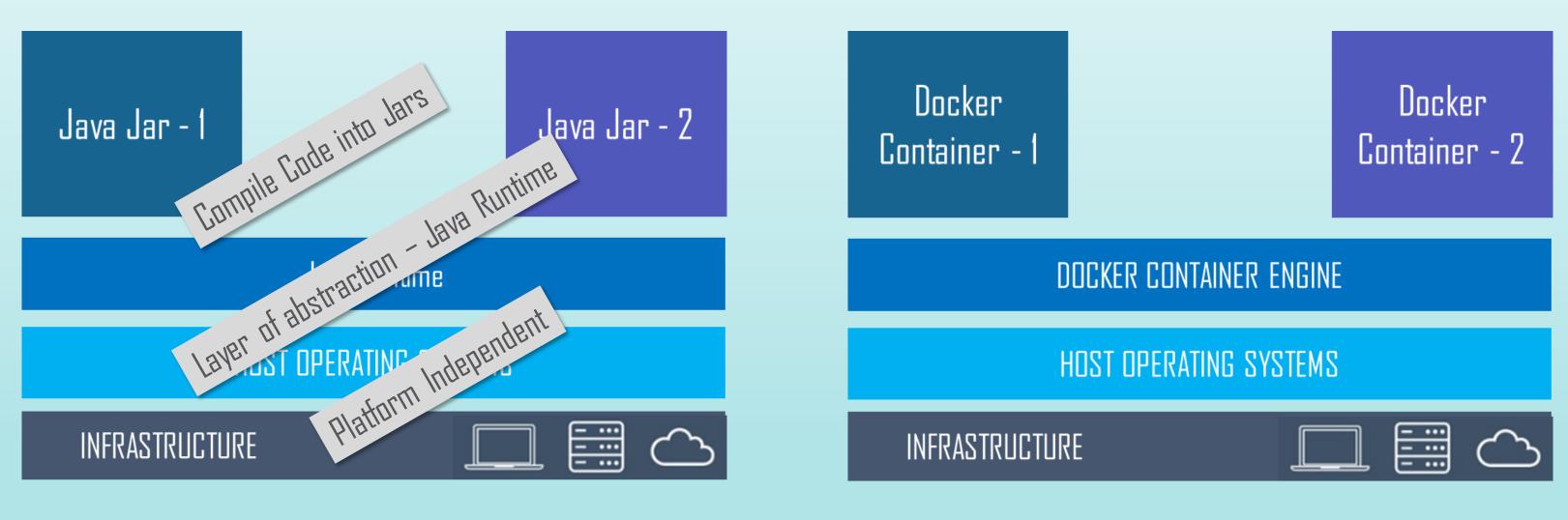


Containers are 'Like' Jars



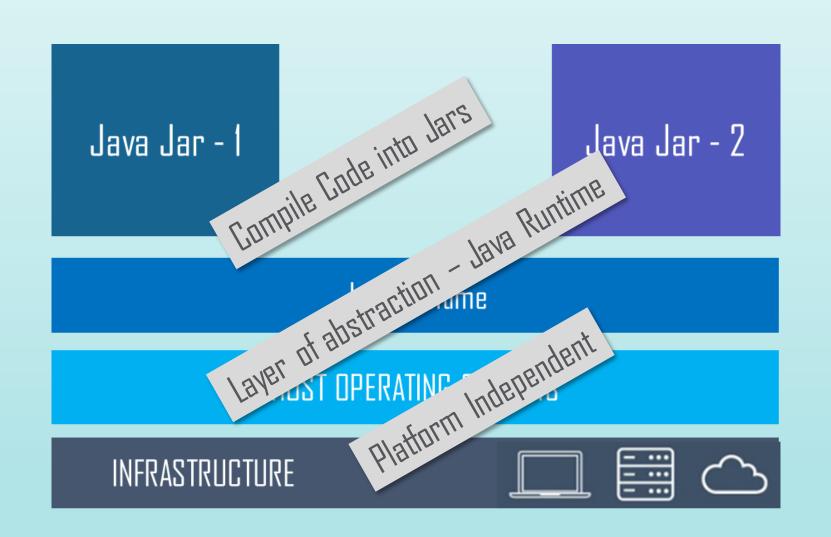
Java Jars

Containers are 'Like' Jars



Java Jars

Containers are 'Like' Jars



Java Jars

