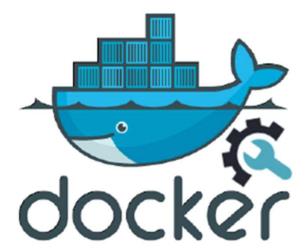
Docker









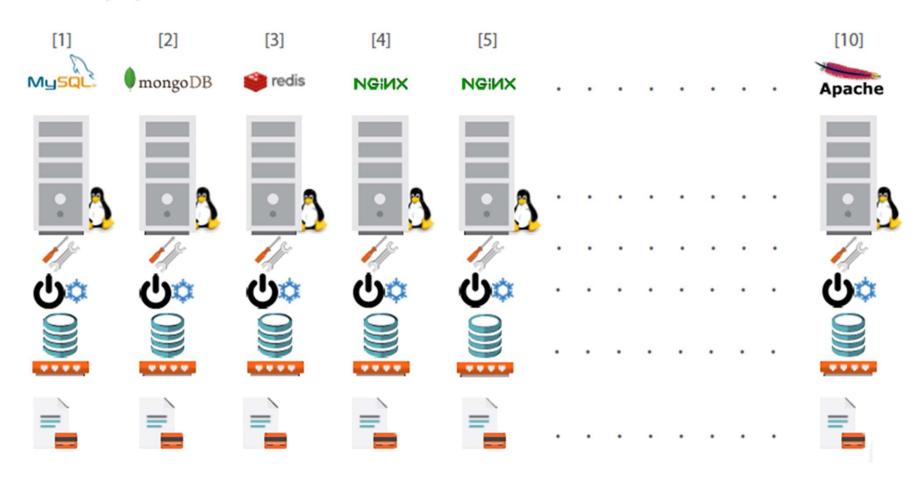






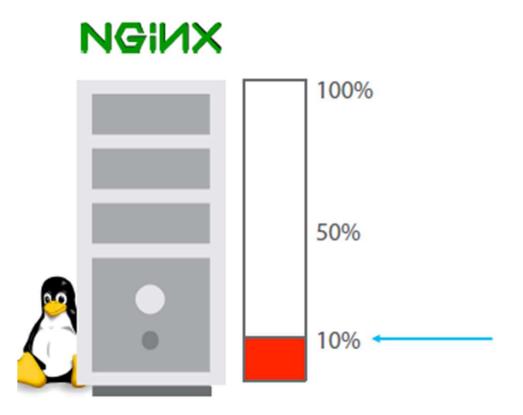
Traditional Deployment Architecture

server : application 1 : 1



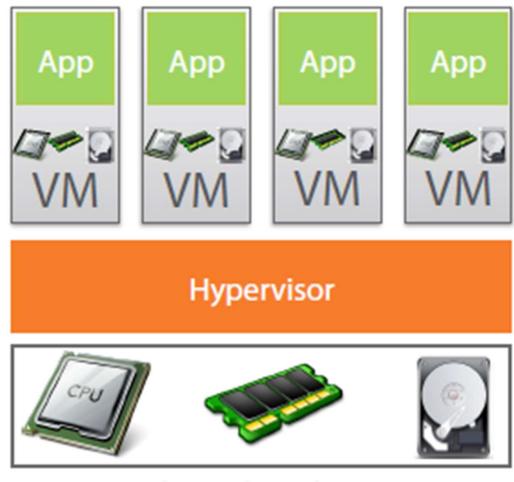
26 February 2020 Containerization with Docker

Less Utilization in Traditional Architecture



3

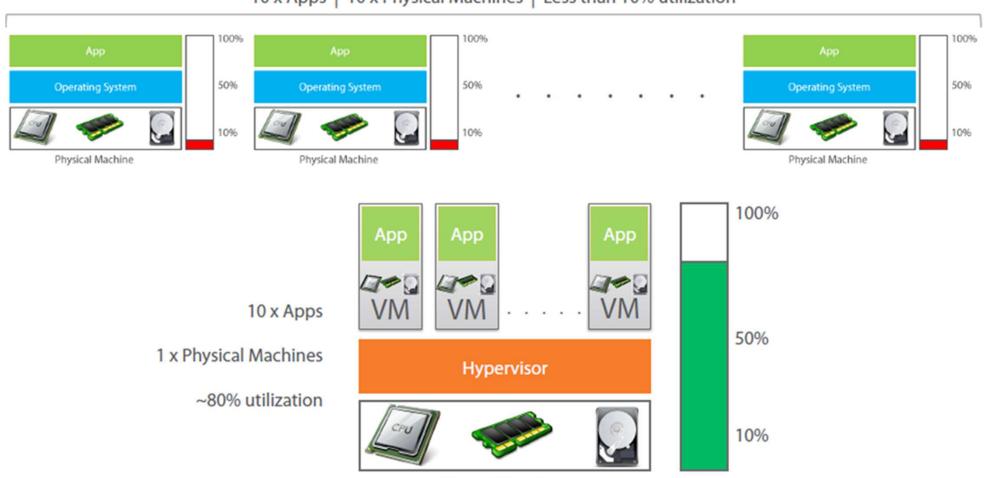
Virtual Machine to the Rescue



Physical Machine

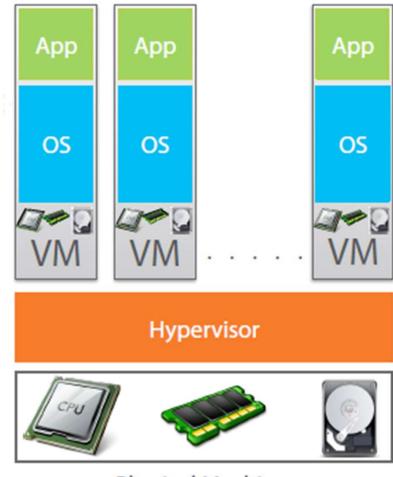
Virtual Machine provides better utilization

10 x Apps | 10 x Physical Machines | Less than 10% utilization



Physical Machine

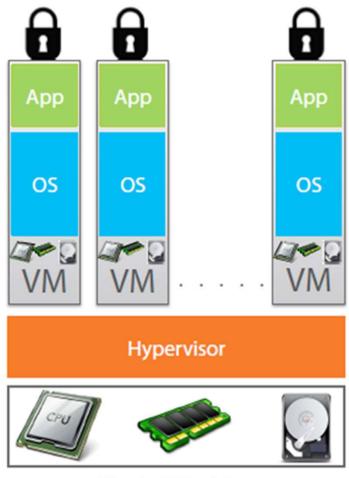
Each VM needs a separate OS



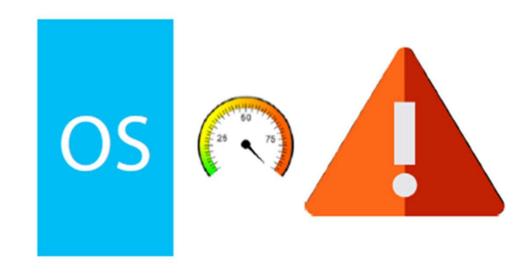
Physical Machine

6

OS takes most of the Resources



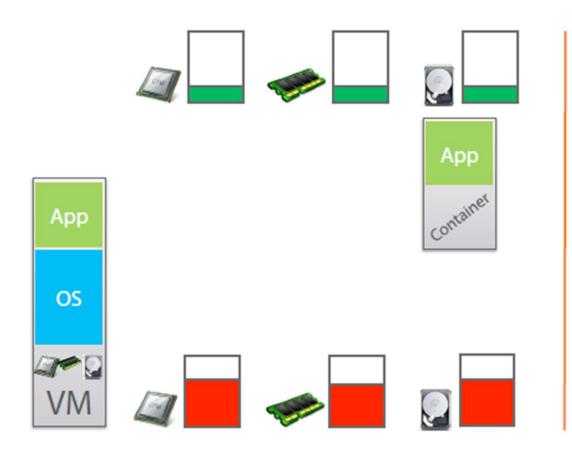




Why use separate OS for each App?

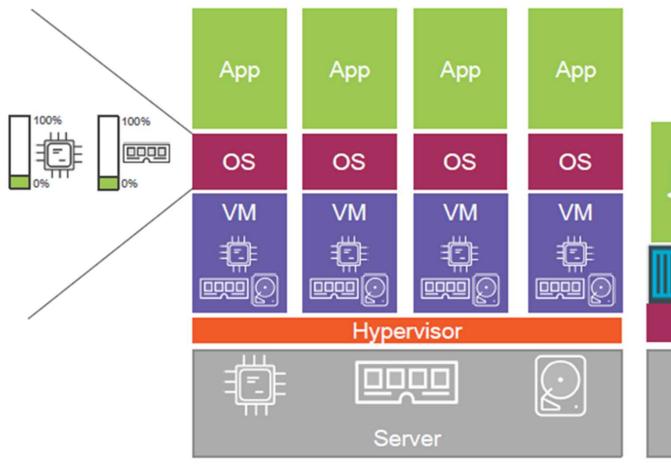
26 February 2020 Containerization with Docker

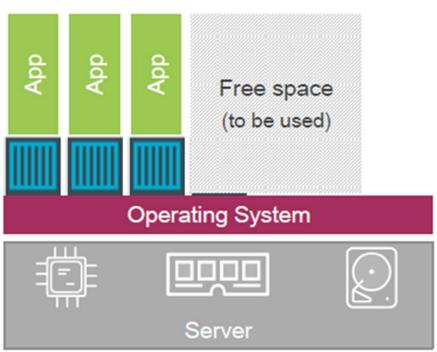
Containers to the Rescue



Containers are more lightweight than Virtual Machines

Containers vs VM





Hypervisor Architecture Container Architecture

What is Docker?

Docker is an open-source project

Makes it easy to create containers

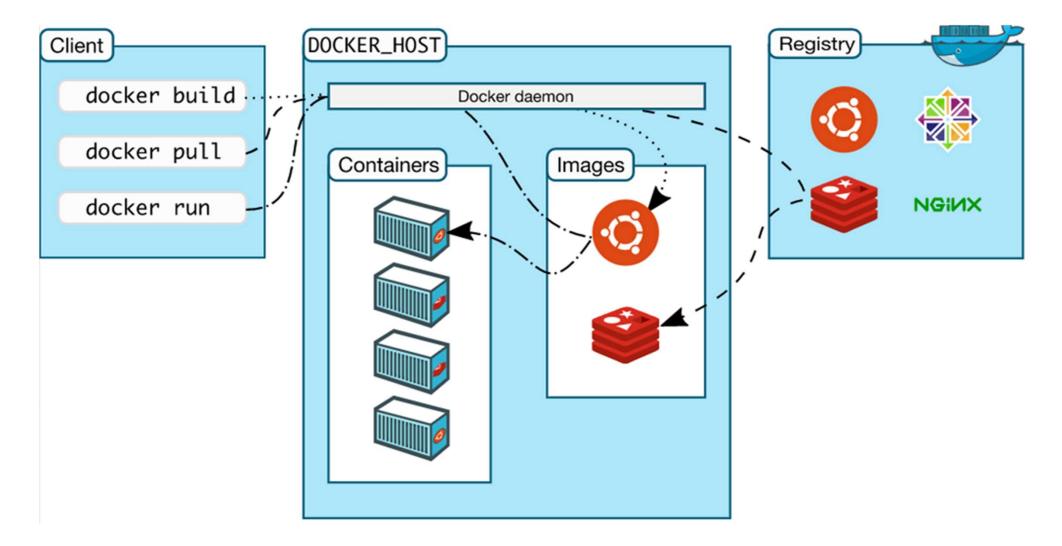
Automates the deployment of applications inside software containers

Quickly deploy and scale applications

Docker alternatives

- LXD Linux daemon by Ubuntu
- Containerd A simple yet robust container runtime
- Podman Open-source container engine for Linux
- Rkt Pod-native, app container engine

Docker Architecture





Practical

