

Containers

CONTAINERS AND KUBERNETES



This Module



Containers

Kubernetes

The Bad Old Days

Application run Business



Application run on Servers

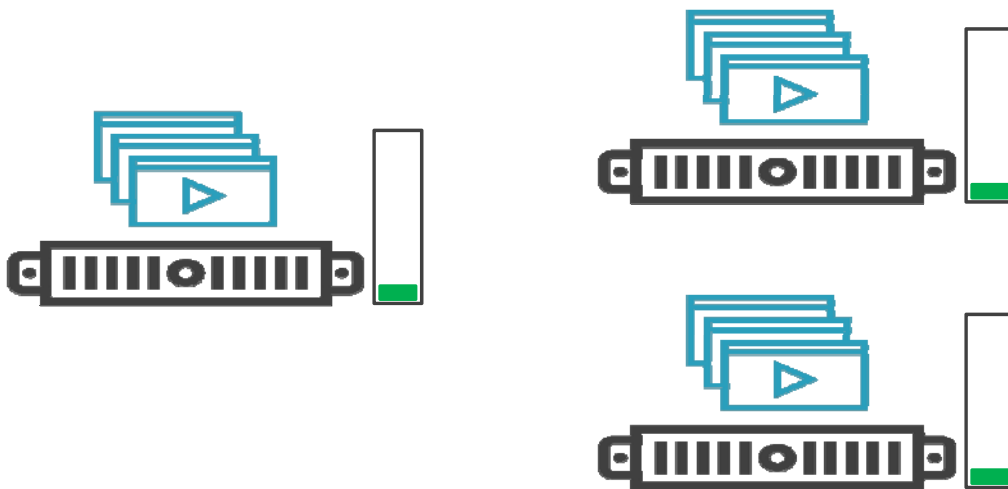


New Application need New Servers

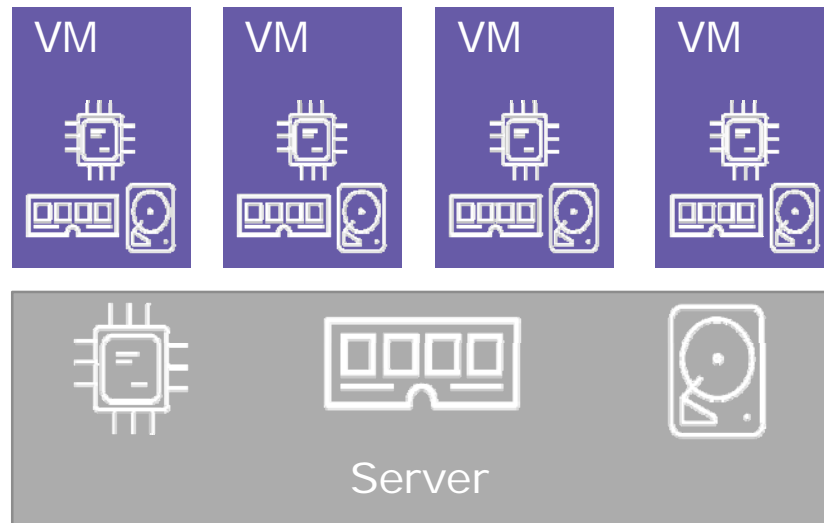


Hello Virtual Machine!

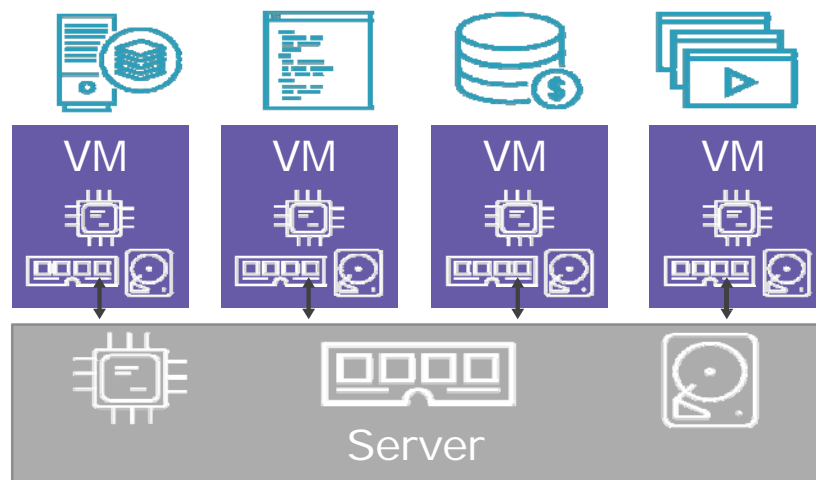
Old Days: One Server for One App



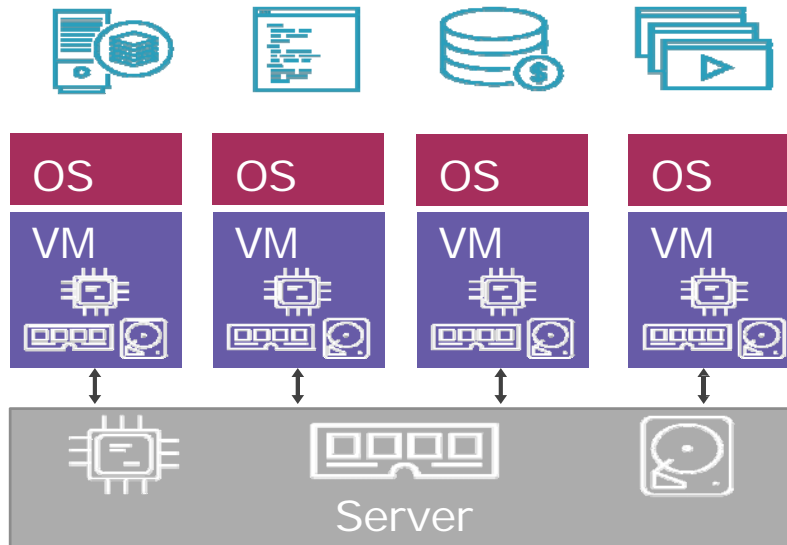
Virtual Machine on Physical Server



Application run on VM



Application run on VM



Potential OS overheads

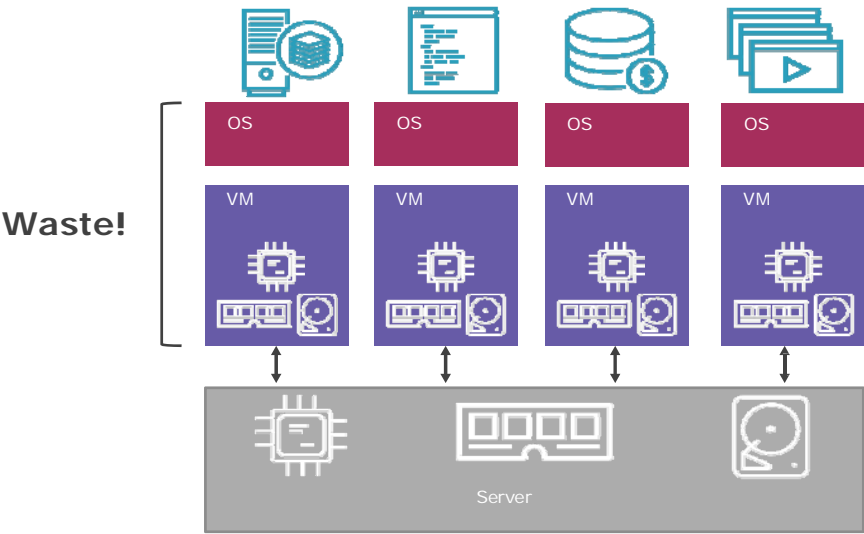


License costs

Admin costs

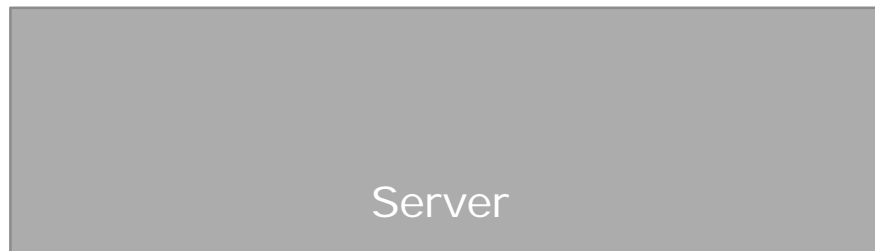
- Patching
- Updates
- AV
- More

Potential OS Overheads



Containers

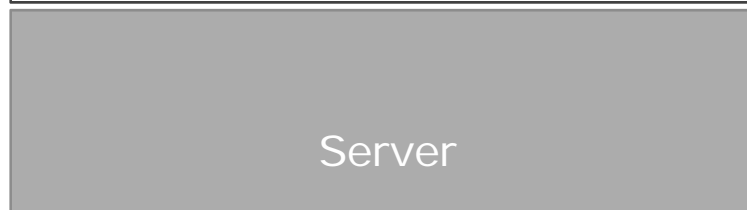
4 Apps with 1 Physical Server



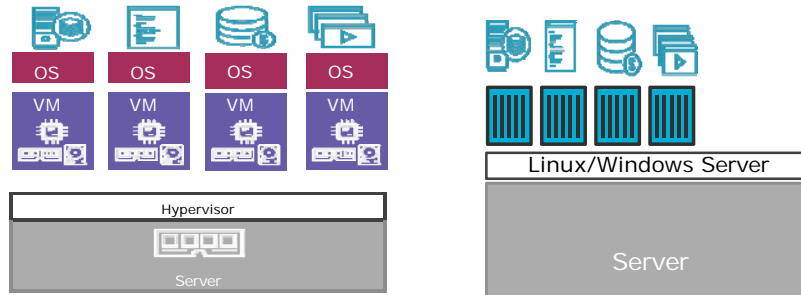
One OS and 4 Containers



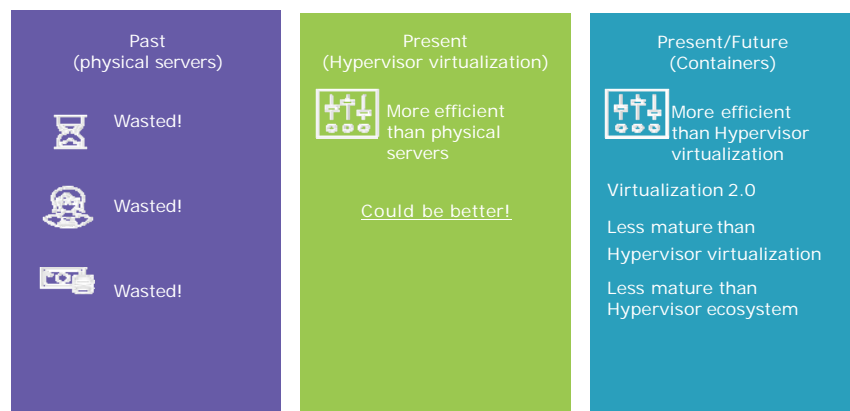
Linux/Windows Server



Virtual Machine vs Container



Past – Present – Future



Kubernetes

CONTAINERS AND KUBERNETES



Kubernetes History

Google!

Search the web using Google!

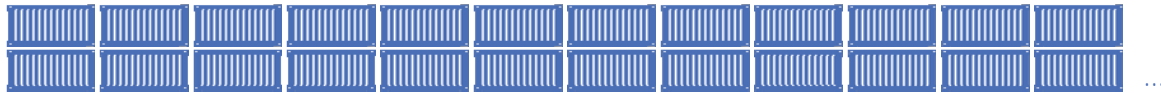
What is Google?

10 results

Google Search

I'm feeling lucky

Index contains ~25 million pages (soon to be much bigger)



Google!

Search the web using Google!

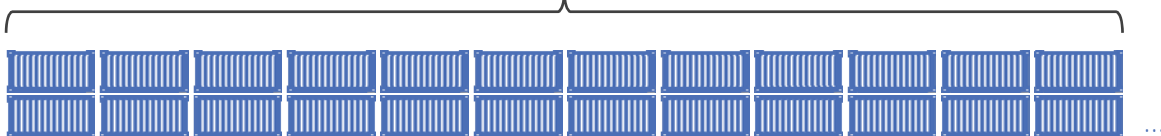
What is Google?

10 results

Google Search

I'm feeling lucky

Index contains ~25 million pages (soon to be much bigger)



kubernetes.io

 **kubernetes**

DocumentationKubernetes BlogTrainingPartnersCommunityCase StudiesVersionsEnglish

[KubeCon + CloudNativeCon NA 2022 Detroit, Michigan + Virtual.](#)
5 days of incredible opportunities to collaborate, learn + share with the entire community!
October 24 - 28, 2022.

 
KubeCon CloudNativeCon
North America 2022

Kubernetes, also known as K8s, is an open-source system for automating deployment, scaling, and management of containerized applications.

It groups containers that make up an application into logical units for easy management and discovery. Kubernetes builds upon 15 years of experience of running production workloads at Google, combined with best-of-breed ideas and practices from the community.



Planet Scale

Designed on the same principles that allow Google to run billions of containers a week, Kubernetes can scale without increasing your operations team.

Summary



Containers

Kubernetes