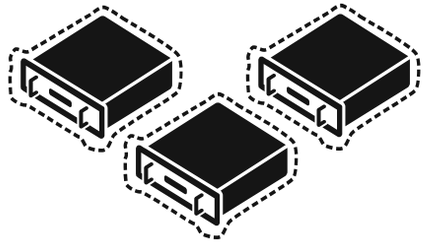

Go from VMs → Containers → Kubernetes

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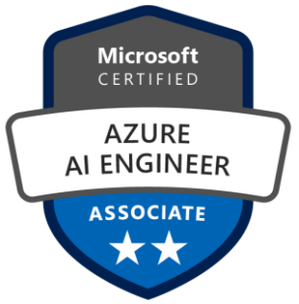
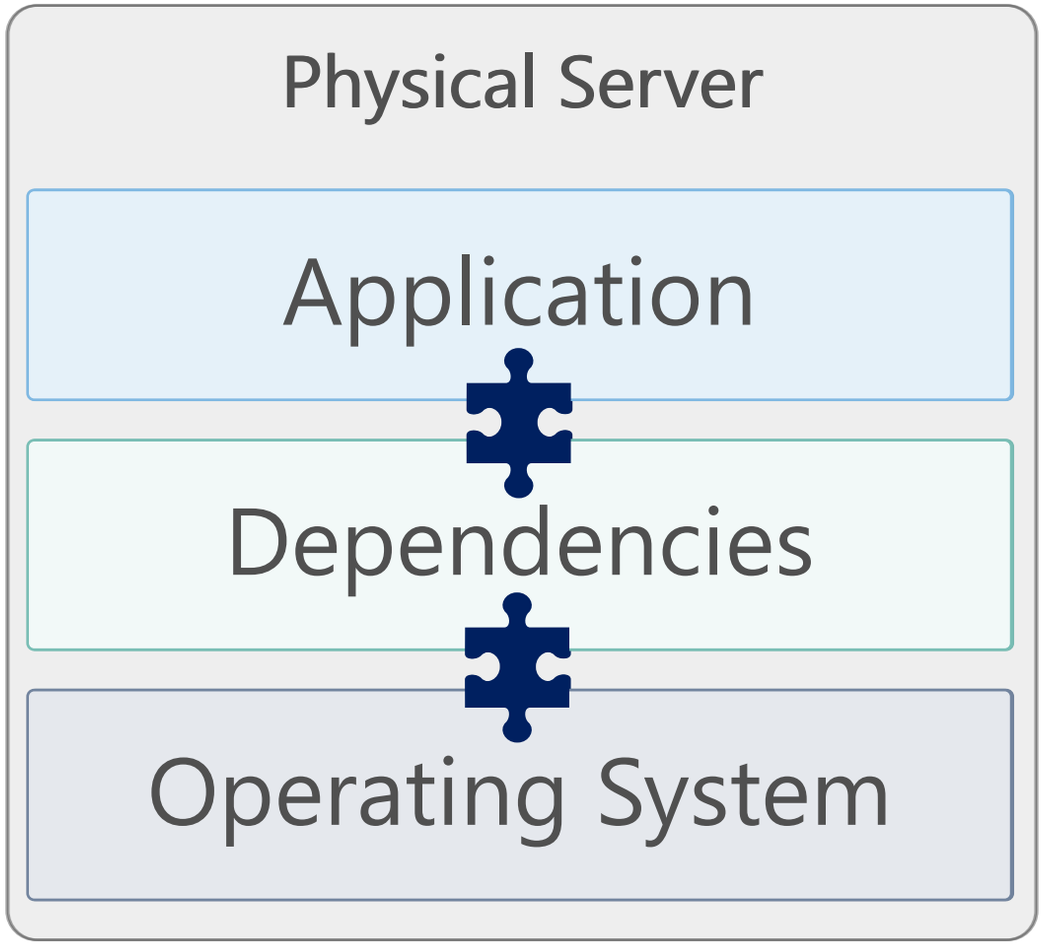


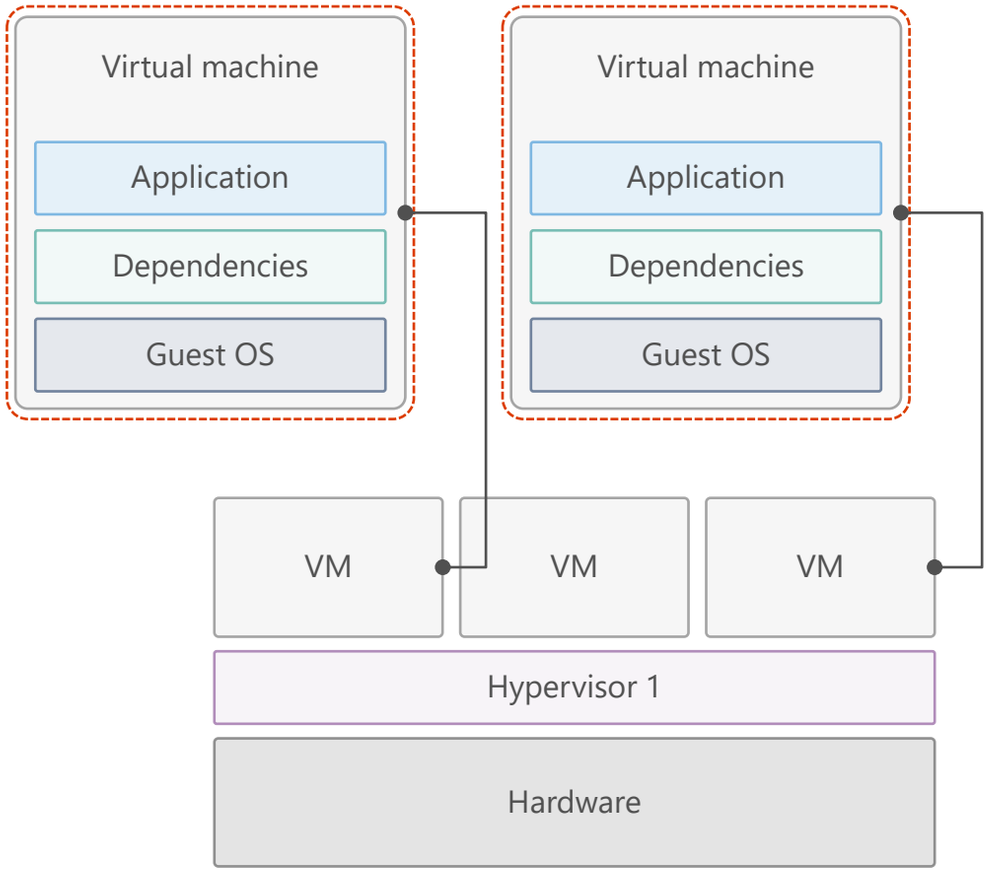
Each new
SITUATION
requires a new architecture

MAERSK LINE
MADISON MAERSK

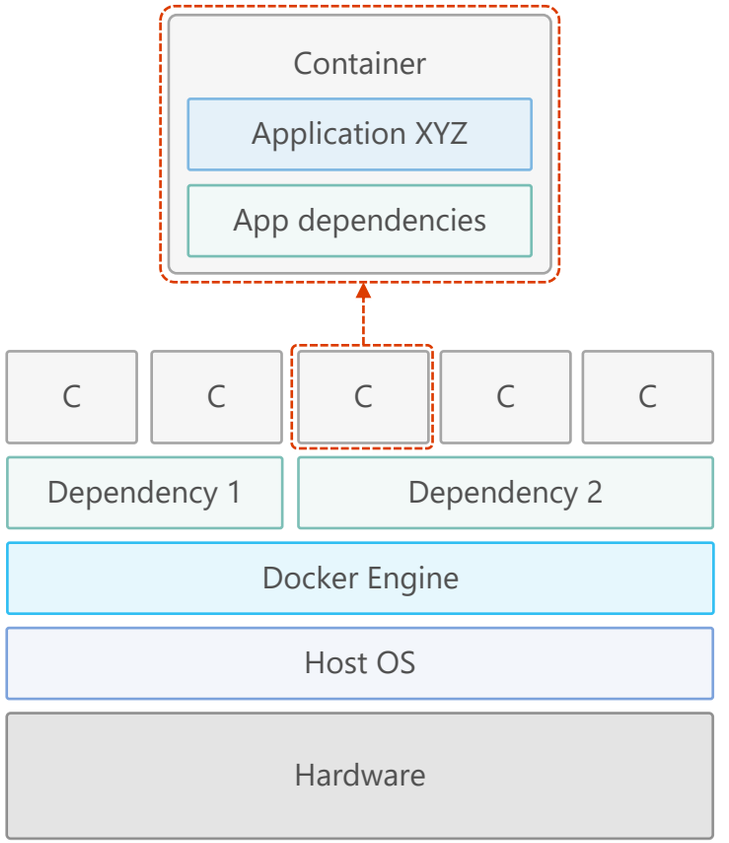
Let's get **Physical**…



Hello **Virtualization**…



Here comes **Containers**…

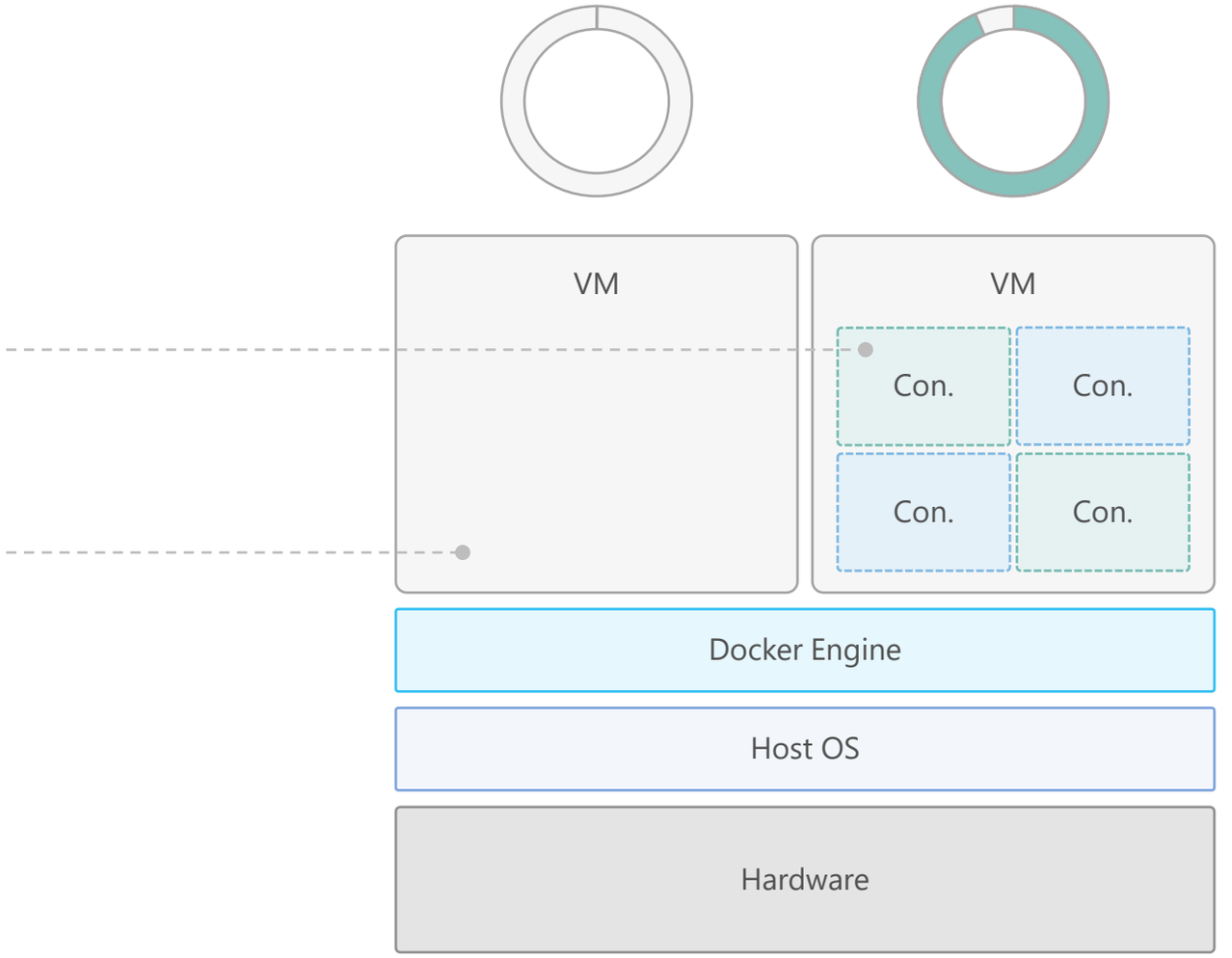


The container **advantage**

Containerized environment

Migrate containers and their dependencies to underutilized VMs for improved density and isolation

Decommission unused resources for efficiency gains and cost savings



Orchestrating with **Kubernetes**

Scheduling

Affinity/anti-affinity

Health monitoring

Failover

Scaling

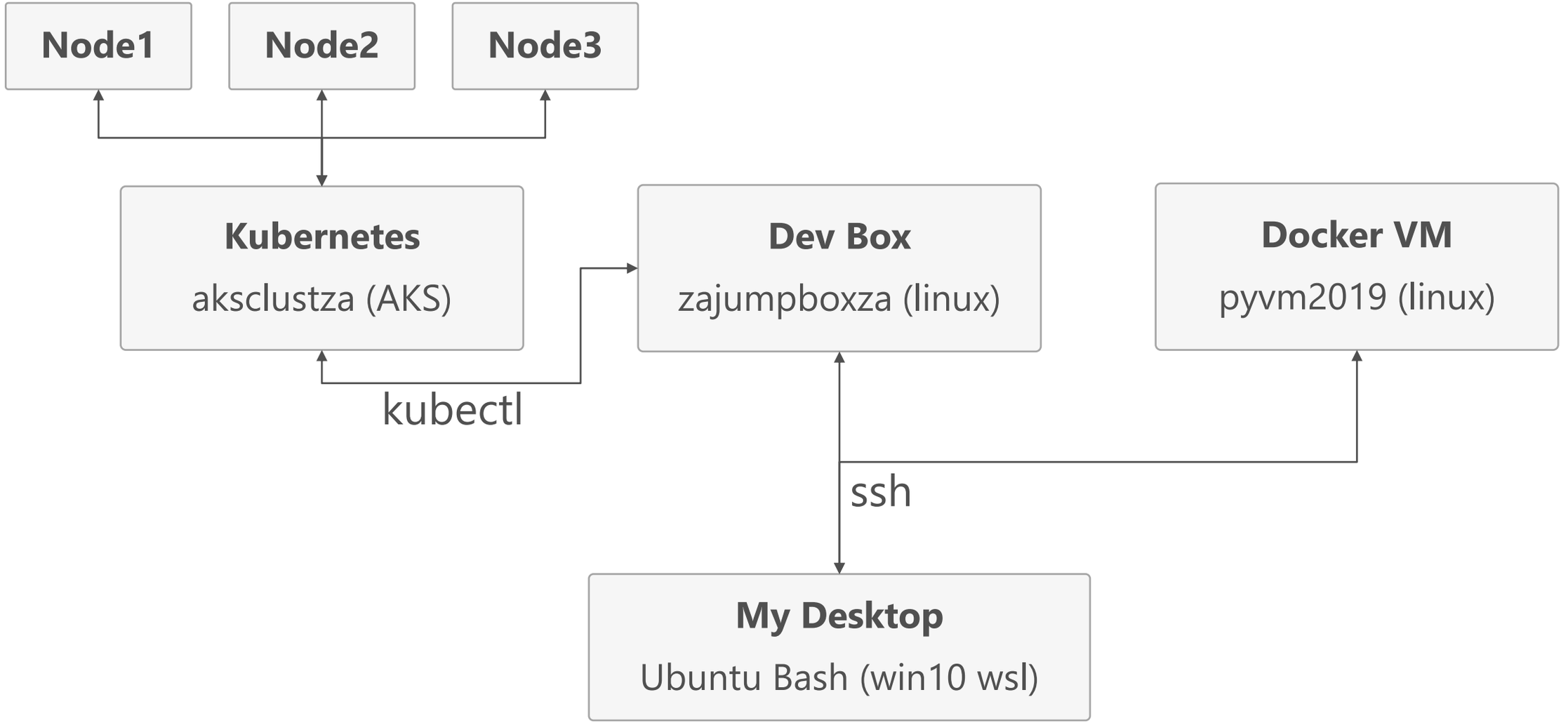
Networking

Service discovery

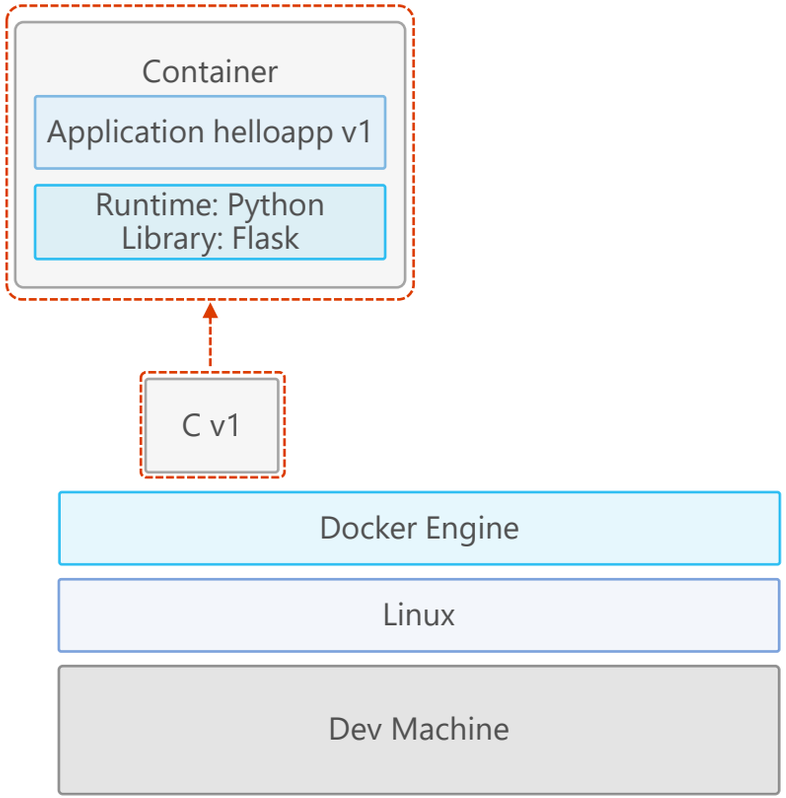
Coordinated app upgrades

Demo

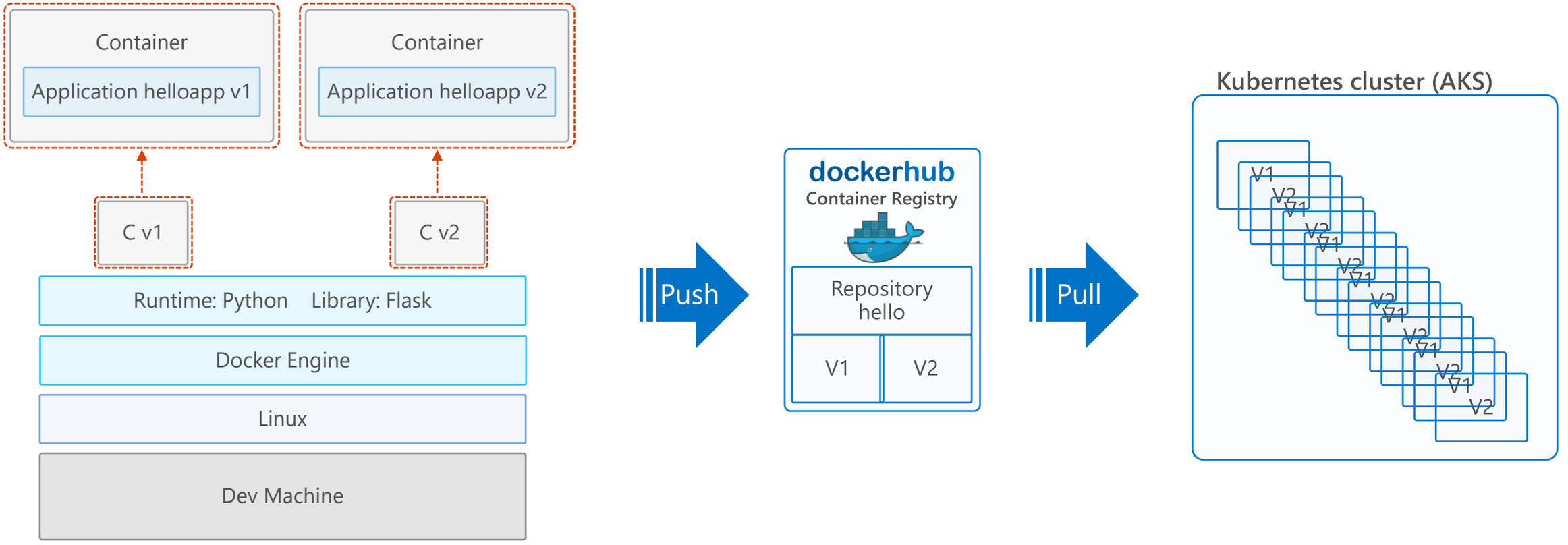
Demo Environment



Recap

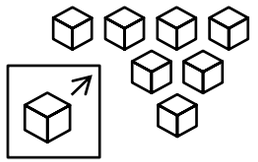

Container
Application helloapp v1
Runtime: Python
Library: Flask
C v1
Docker Engine
Linux
Dev Machine

Recap


Container
Application helloapp v1
Container
Application helloapp v2
C v1
C v2
Runtime: Python
Library: Flask
Docker Engine
Linux
Dev Machine
Push
dockerhub
Container Registry
Repository
hello
V1
V2
Pull
Kubernetes cluster (AKS)
V1
V2

Top scenarios for Kubernetes

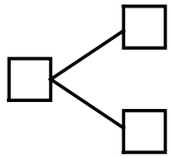
Lift and shift to containers



Cost saving

without refactoring your app

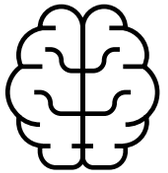
Microservices



Agility

Faster application development

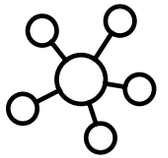
Machine learning



Performance

Low latency processing

IoT



Portability

Build once, run anywhere

Thank You!

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