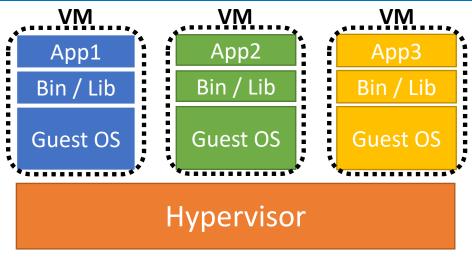
Microsoft Azure Fundamentals
Training Bootcamp

Azure Containers Fundamentals 101

Virtual Machines VS Containers



i.e. VMware Workstation, ESXi

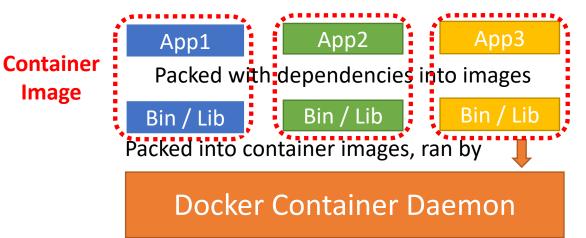
Host Operating System

i.e. Windows, Mac, Linux

Infrastructure

i.e. Laptop, server in DC

Virtual Machines



Installed in OS, manages and runs containers

Host Operating System

Any OS that can run containers; i.e. Linux

Infrastructure

Containers

Microsoft Azure Fundamentals

Virtual Machines VS Containers

| | Virtual Machines | Containers |
|------------------|-------------------------------|----------------------|
| Boot Time | minutes | ms or seconds |
| Guest OS | Yes | No |
| Resources | High (CPU,RAM,Storage) | Low |
| Use Case | Isolate systems (environment) | Isolate Applications |

Microsoft Azure Fundamentals

Virtual Machines VS Containers Analogy

VM



- Totally separate
- Own infrastructure
 - Electricity
 - Heating, etc

Container



- Shared infrastructure
 - Electricity
 - Heating, etc
- Multiple sizes available

Containers in Azure – Azure Container Instances

- You can easily run containers on Azure without managing servers -> Azure Container Instances (ACI)
- □ ACI (Azure PaaS offering) allows uploading your containers to Azure and running them immediately
- No virtual machines to manage, no additional configuration needed



Containers in Azure – Azure Kubernetes Service

- Azure Kubernetes Service (AKS) makes deploying and managing containerized applications easy
- □ Azure Kubernetes Service (AKS) is a complete orchestration service for containers with distributed architectures with multiple containers



Orchestration – use AKS in order to automate, manage and interact with a large number of containers Microsoft Azure Fundamentals Training Bootcamp

Thank you