Ethical Hacking: Cloud Computing

Identify Cloud Computing Concepts

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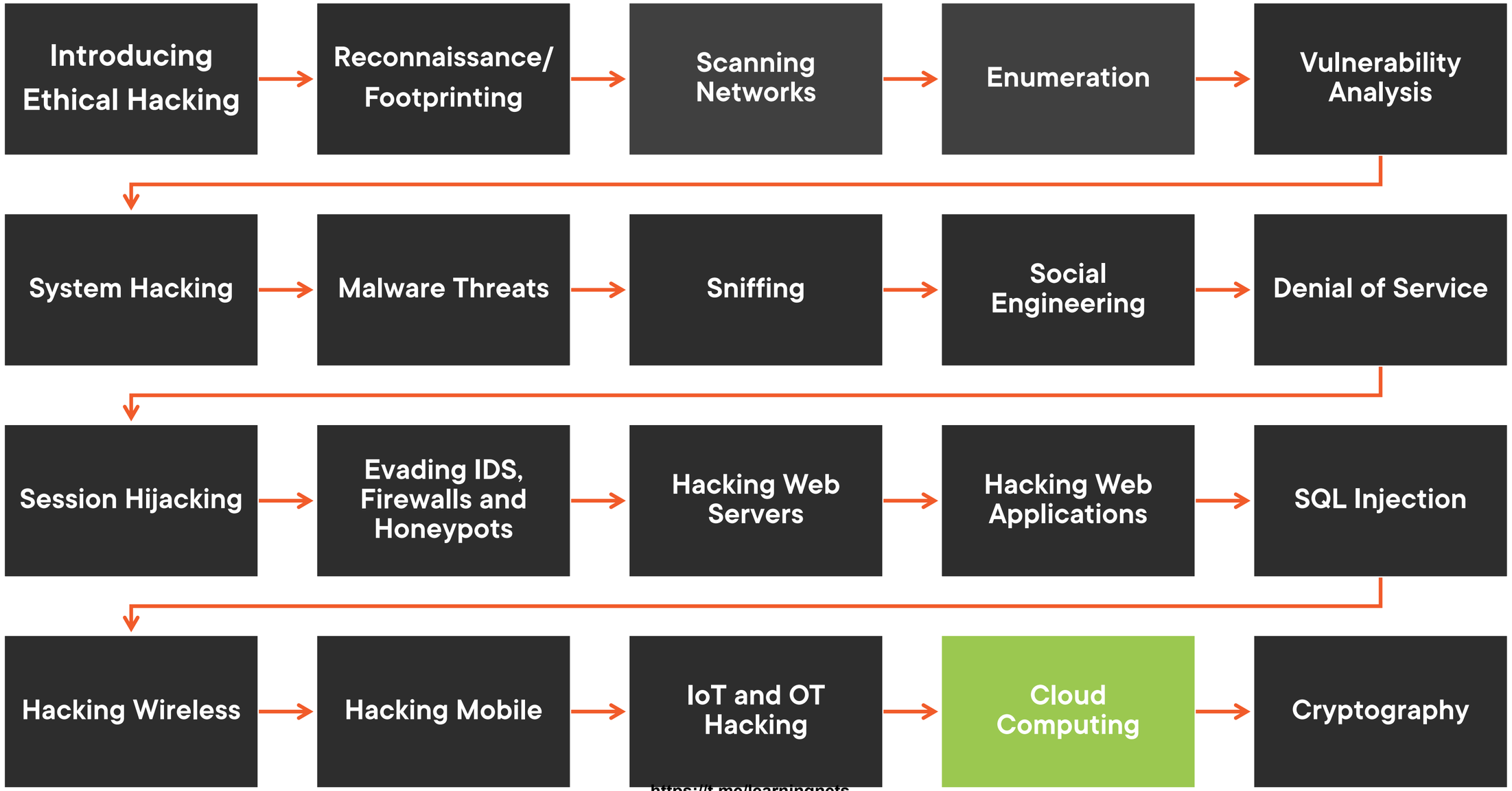
Ethical Hacking Series



Identify Cloud Computing Concepts

Cloud service types

- IaaS
- SaaS
- PaaS

Cloud deployment models

- Public
- Private
- Community
- Hybrid

Container technology

- Serverless computing

Cloud Service Types

What Is Cloud Computing?

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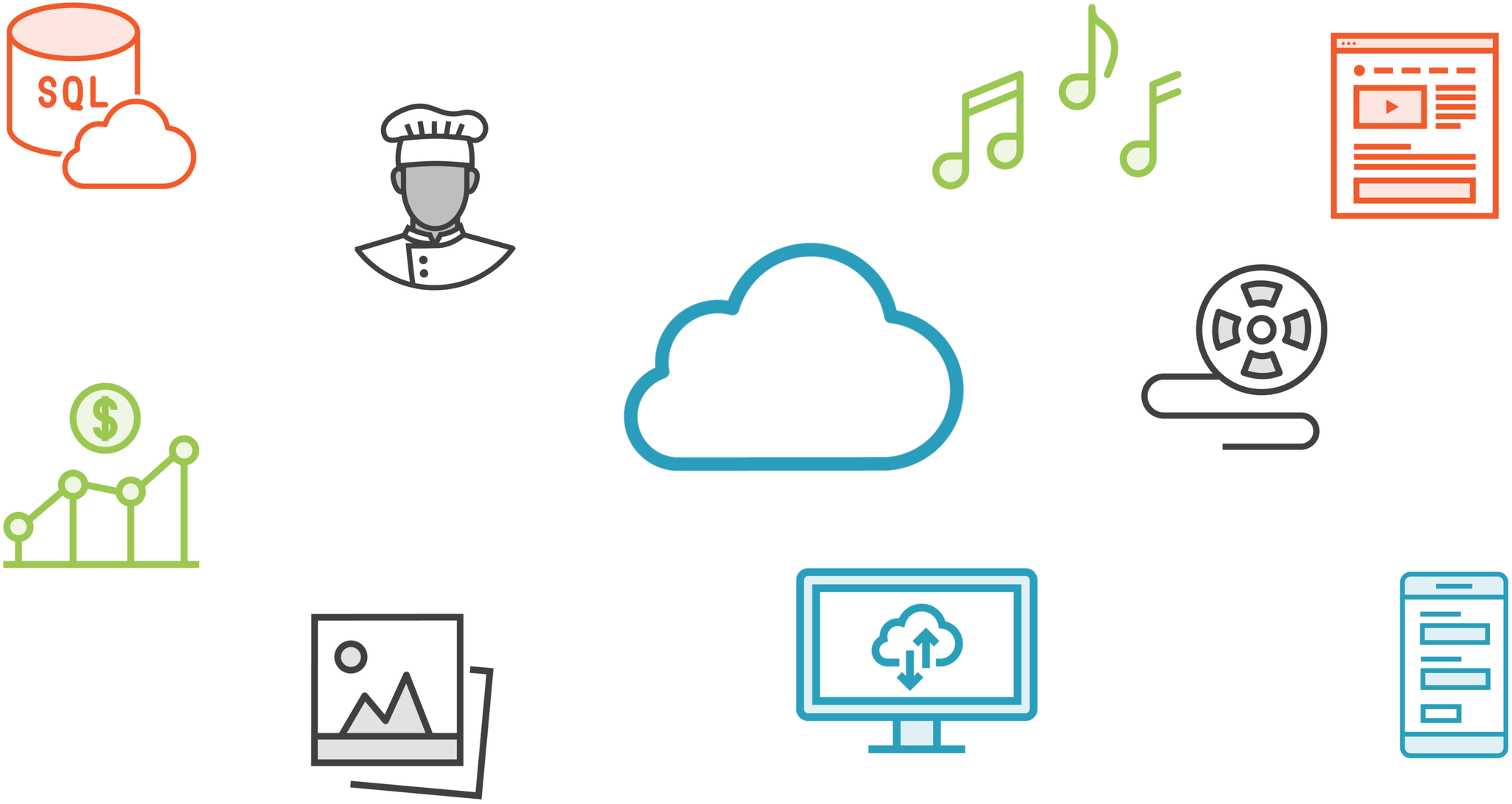
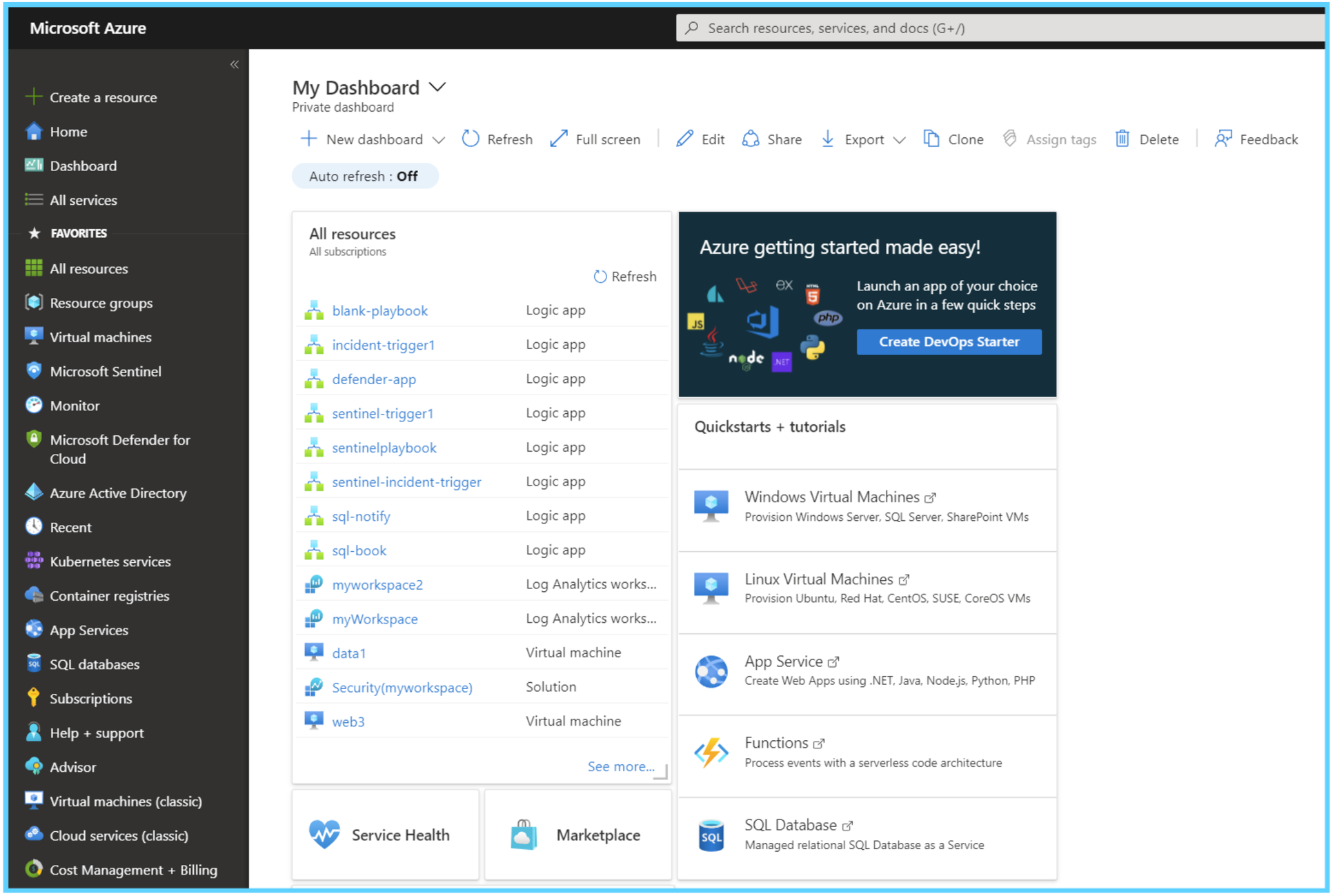
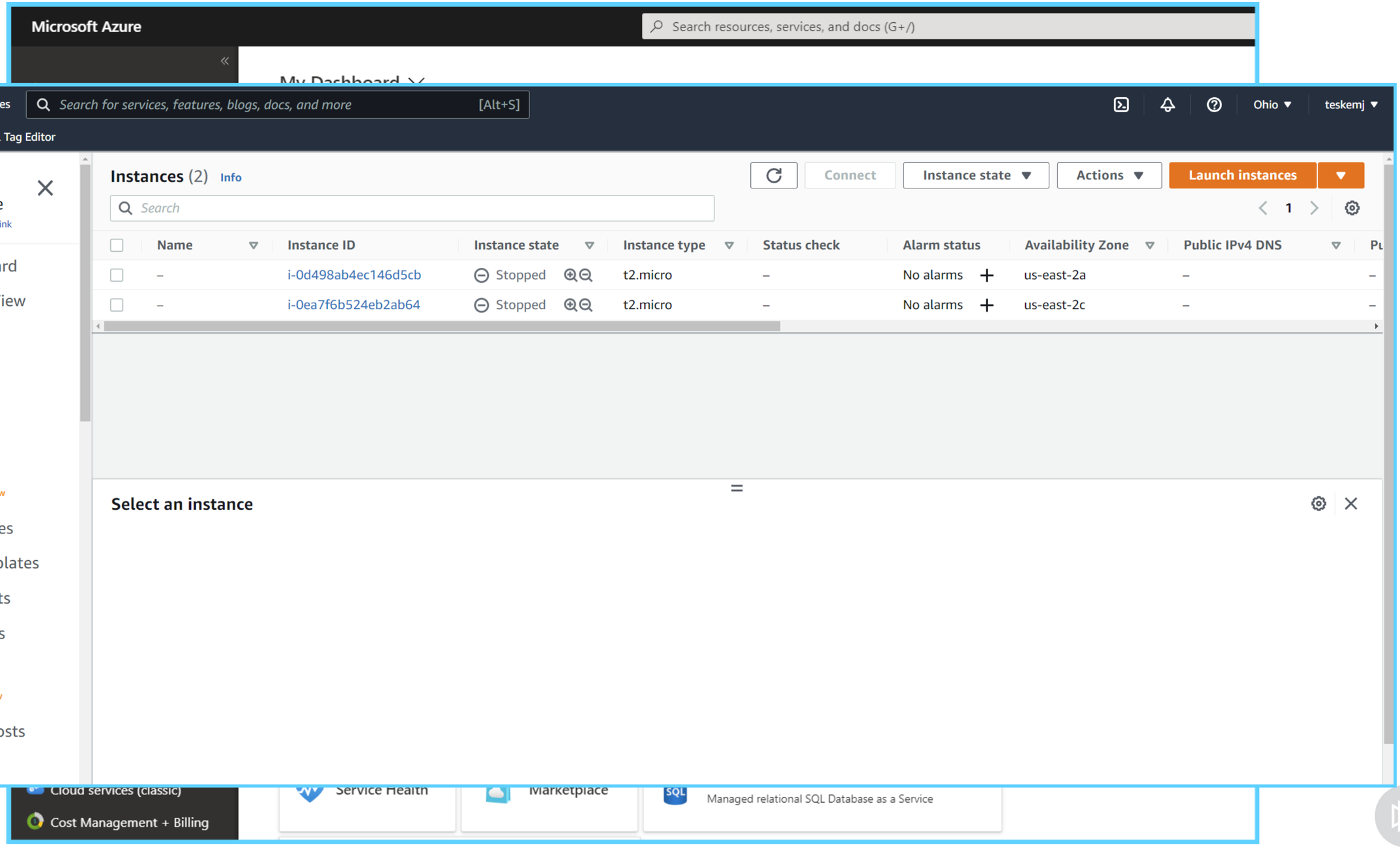
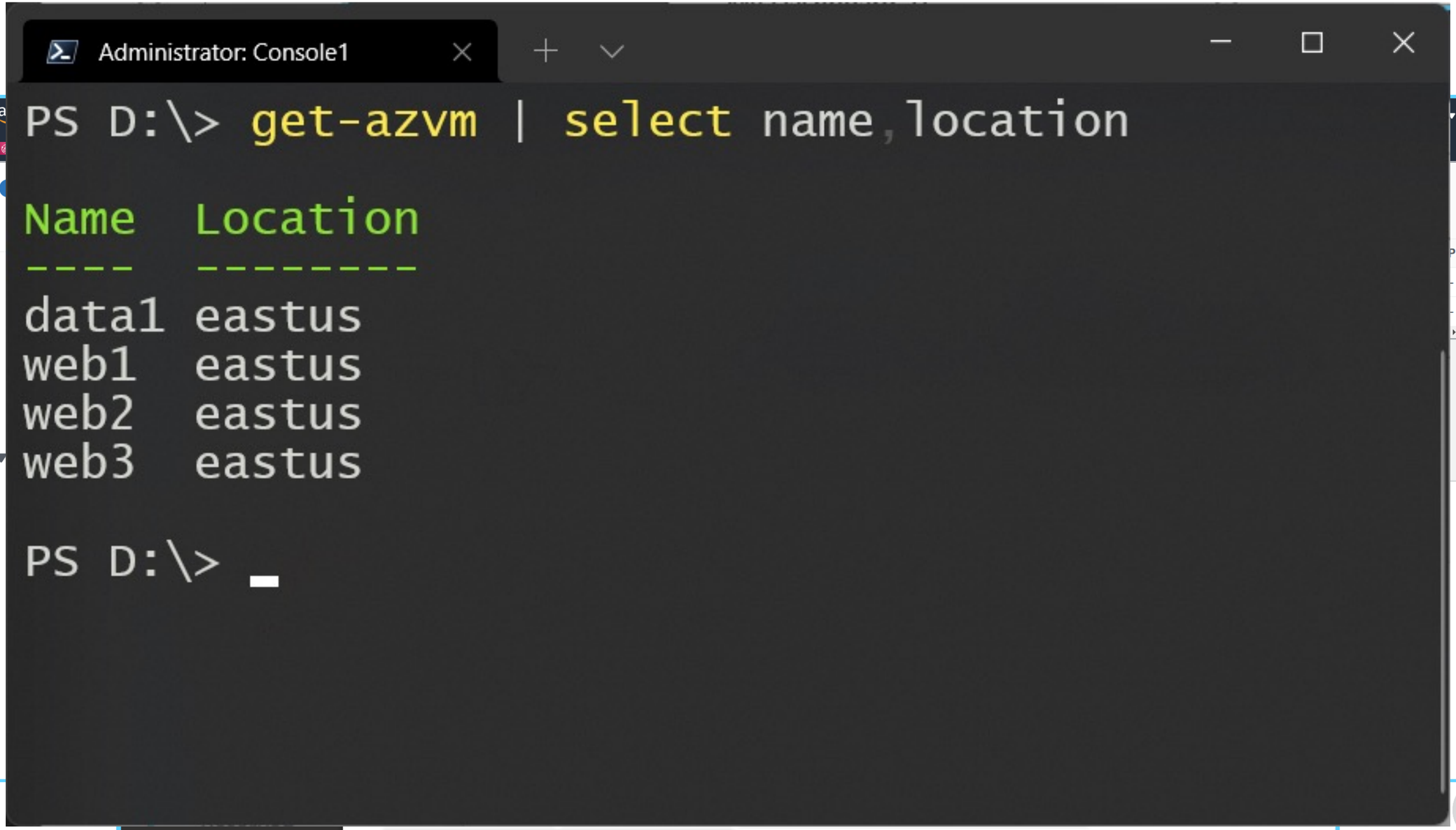








Cloud Service Types

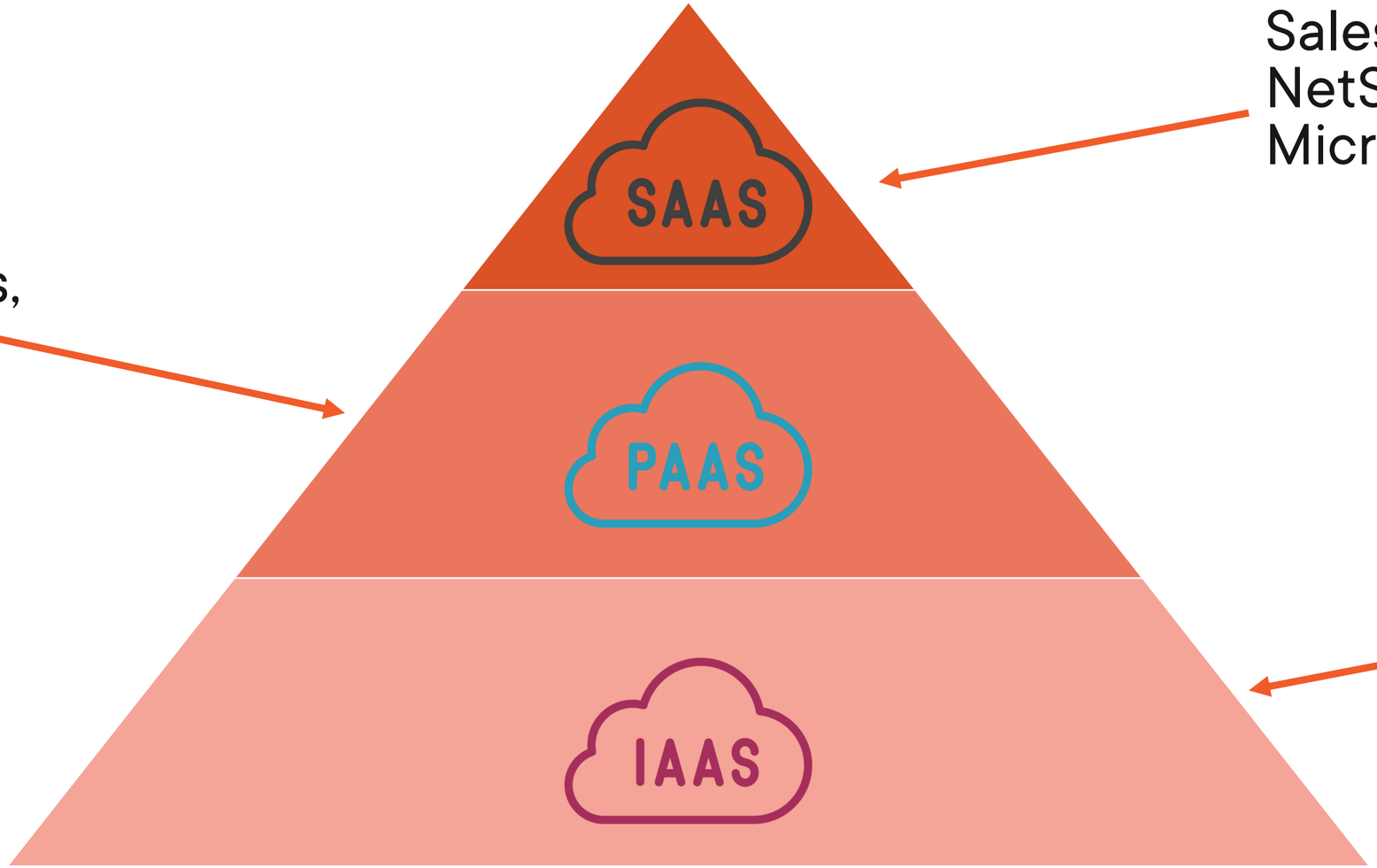
Running virtualized resources with on-demand scalability. Resources are maintained by you

A development platform. Hardware/software maintained by Cloud Service Provider (CSP)

On-demand applications. CSP manages everything

Cloud Service Types

Tabs FTW!

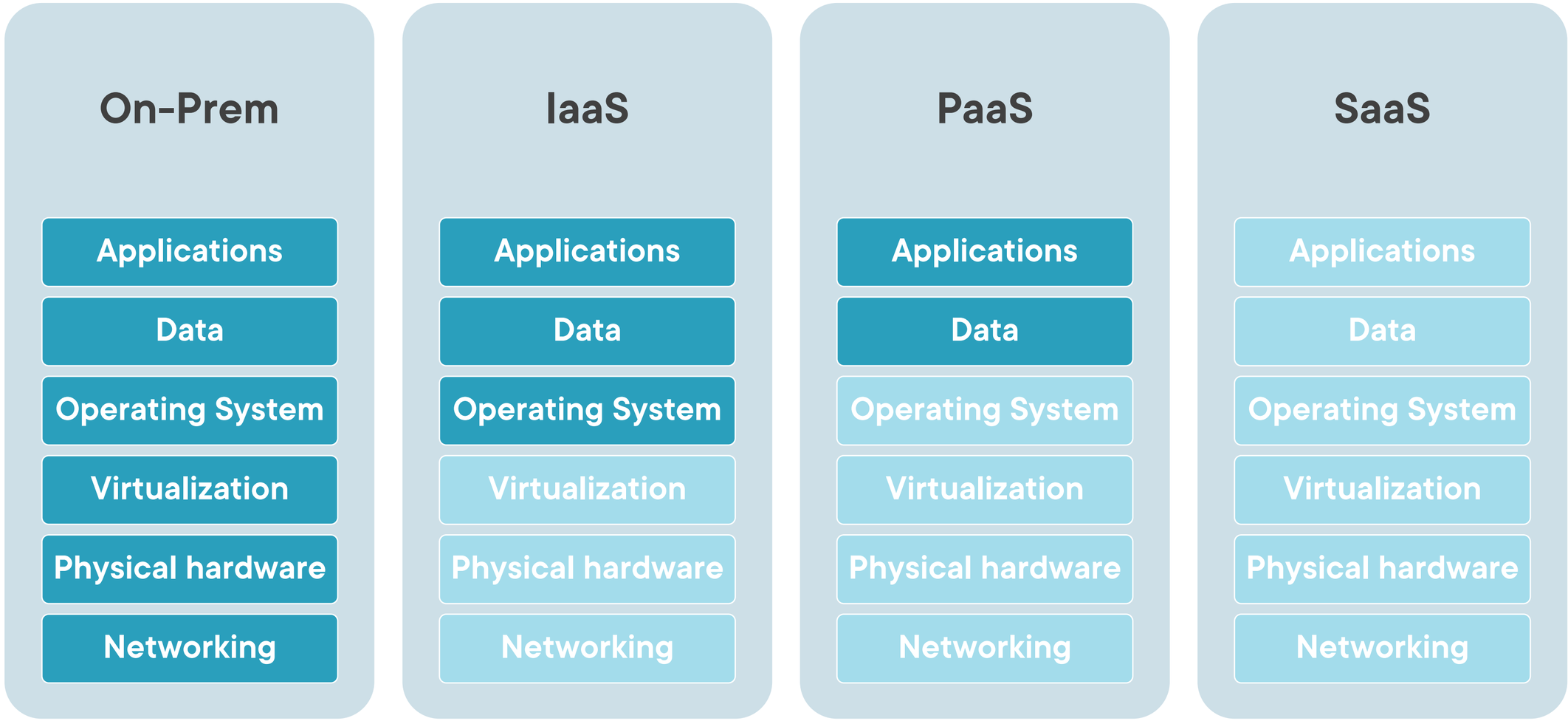


Salesforce,
NetSuite,
Microsoft 365

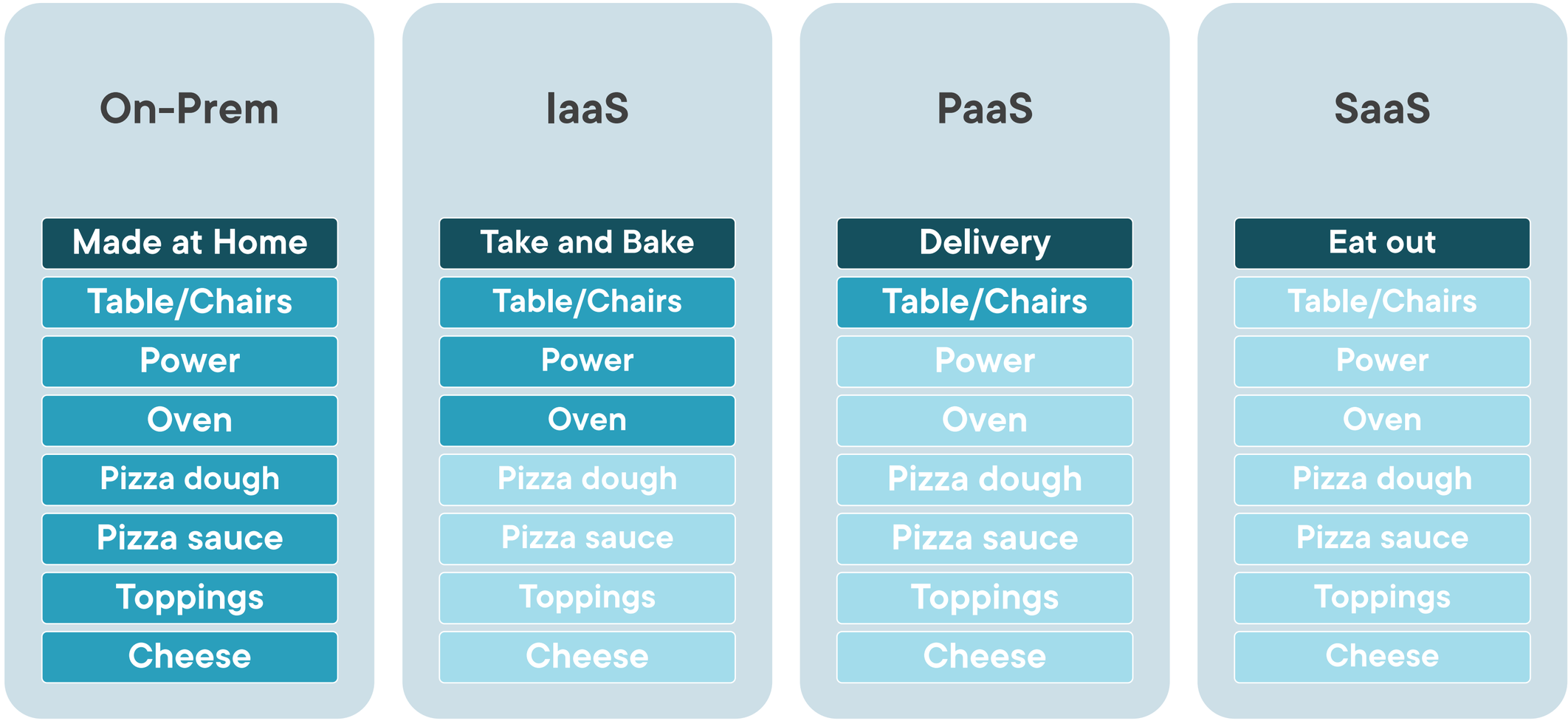
GitHub,
Kubernetes,
Docker,
GitLab

AWS EC2,
Google Cloud
Storage

Shared Responsibility Model



Pizza as a Service



Other Cloud Service Types

Identity as a Service: Identity and access management

Function as a Service: developing and running app functions

Security as a Service: suite of services like IDS, incident reporting, etc.

Container as a service: running containerized service and orchestration

All the aaS's

XaaS

FWaaS

mBaaS

DaaS

Cloud Deployment Models

Cloud Deployment Models

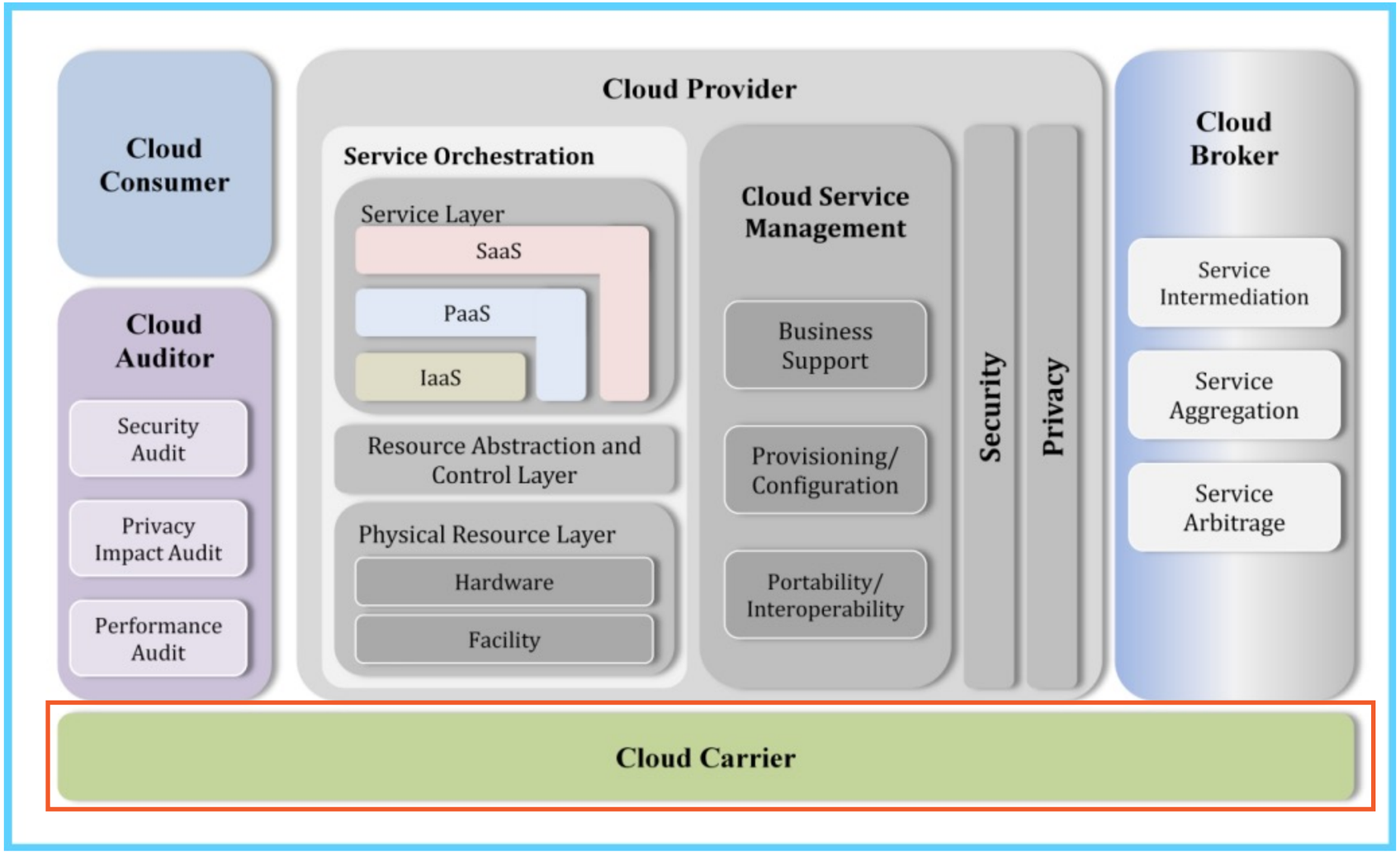
Public Cloud

Private Cloud

Community Cloud

Hybrid Cloud

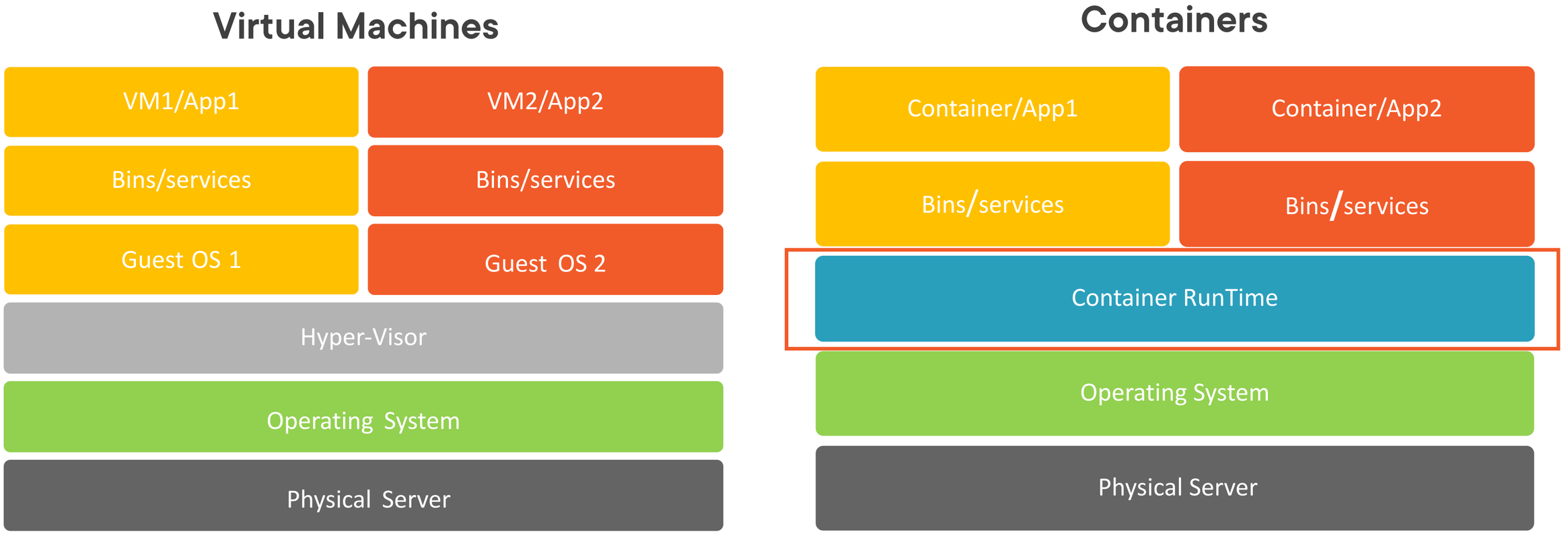
Cloud Deployment Model



NIST Cloud Reference Architecture https://bit.ly/36M6hv9

Container Technology

What Is a Container?



Benefits of Container Instances

Faster startup

Custom sizes

Per second billing

Persistent storage

Security through isolation

Linux and Windows

Container Orchestration

Kubernetes is an open-source system for automating deployment, scaling and management of containerized apps or microservices

Uses declarative configuration to orchestrate containers in different compute environments

A deployment is configured as a cluster consisting of at least one master machine and one or more worker machines

Learning Check

- **Software as as Service (SaaS)**
- **Cloud provider**
- **Root**
- **Kubernetes**

Module Review

Key Learnings

Cloud service types

Shared responsibility model

Serverless computing

Up Next:
Cloud Security