"Kubernetes is an open-source system for automating deployment, scaling, and management of containerized applications."
Quick Kubernetes Refresh
Kubernetes Node

Machine
Kubernetes Pod

Co-located Containers

Pod

httpd

cache

Pod

DB
Kubernetes Deployment

Scales / Manages Pods

Deployment

replicas: 2

Pod

httpd

cache

Pod

httpd

cache
Kubernetes Service
Network Presence for Pods

Pod
httpd

Service

Pod
httpd

Pod
httpd

Pod
cache

Pod
cache
Kubernetes Secret

Small Blobs of Sensitive Data
Node
Pod
Deployment
Service
Secret
What is Kubernetes?

An open source orchestration system for running containerized workloads across a cluster of nodes.
Node

Host
Pod

Running Container
Deployment

Scales and manages Pods based on a template
Service

Network presence for Pods
ConfigMap and Secret

Storage for configuration
Kubernetes Resource Reference

**Node**: Virtual or bare metal host running kubelet

**Pod**: One or more containers acting as a single unit of compute (smallest unit in Kubernetes object model)

**Deployment**: Manages a collection of Pods based on a template

**Service**: Exposes a set of Pods as a network service

**ConfigMap**: Stores configuration data

**Secret**: Stores sensitive configuration data

**Namespace**: Divides cluster resources between multiple users or projects