



- 1. Workshop Introduction
- ▼ 2. Introduction to Kubernetes
  - ▼ Kubernetes (k8s) Basics
    - What is Kubernetes
    - Kubernetes Nodes
    - K8s Objects Overview**
    - K8s Objects Detail (1/2)
    - K8s Objects Detail (2/2)
  - ▼ Kubernetes Architecture
    - Architectural Overview
    - Control Plane
    - Data Plane
    - Kubernetes Cluster Setup
  - ▼ Amazon EKS
    - EKS Cluster Creation Workflow
    - What happens when you create your EKS cluster
    - EKS Architecture for Control plane and Worker node communication
    - High Level
    - Amazon EKS!
- 3. Start the Workshop
- 4. Terraform Primer (Optional)
- 5. Creating a private EKS Cluster with Terraform
- 6. Extra Activities (Optional)
- 7. Using Fargate (Optional)
- Conclusion
- Cleanup

# K8s Objects Overview

Kubernetes objects are entities that are used to represent the state of the cluster.

An object is a “record of intent” – once created, the cluster does its best to ensure it exists as defined. This is known as the cluster’s “desired state.”

Kubernetes is always working to make an object’s “current state” equal to the object’s “desired state.” A desired state can describe:

- What pods (containers) are running, and on which nodes
- IP endpoints that map to a logical group of containers
- How many replicas of a container are running
- And much more...

Let’s explain these k8s objects in a bit more detail...

Previous

Next