* + 1. Kubernetes Pods can have more than one container. In this lesson, we will discuss multi-container Pods. We will talk about how and why they are used, and we will demonstrate how to create multi-container Pods and how to use sidecar containers.

#### Relevant Documentation

* [Using Pods](https://kubernetes.io/docs/concepts/workloads/pods/" \l "using-pods)
* [Shared Volumes](https://kubernetes.io/docs/tasks/access-application-cluster/communicate-containers-same-pod-shared-volume/)
* [Patterns for Composite Containers](https://kubernetes.io/blog/2015/06/the-distributed-system-toolkit-patterns/)

#### Lesson Reference

Create a simple multi-container Pod.

vi multi-container-pod.yml

apiVersion: v1

kind: Pod

metadata:

name: multi-container-pod

spec:

containers:

- name: nginx

image: nginx

- name: redis

image: redis

- name: couchbase

image: couchbase

kubectl create -f multi-container-pod.yml

View your pod's status.

kubectl get pod multi-container-pod

Create a multi-container Pod that uses shared storage.

vi sidecar-pod.yml

apiVersion: v1

kind: Pod

metadata:

name: sidecar-pod

spec:

containers:

- name: busybox1

image: busybox

command: ['sh', '-c', 'while true; do echo logs data > /output/output.log; sleep 5; done']

volumeMounts:

- name: sharedvol

mountPath: /output

- name: sidecar

image: busybox

command: ['sh', '-c', 'tail -f /input/output.log']

volumeMounts:

- name: sharedvol

mountPath: /input

volumes:

- name: sharedvol

emptyDir: {}

kubectl create -f sidecar-pod.yml

View the logs for the sidecar container.

kubectl logs sidecar-pod -c sidecar