Storage with Volumes

Kubernetes offers storage management functionality similar to that of Docker, with some key differences. This lesson will explore volumes, one of the options for managing container storage in Kubernetes. This will help us understand how to provide simple external storage for our containers.

Relevant Documentation

- Volumes

Lesson Reference

Access UCP in a browser at `https://<UCP_SERVER_PUBLIC_IP>` .

We can create Kubernetes objects in UCP by navigating to **Kubernetes** > **+ Create**. Make sure to use the default namespace throughout this exercise.

Make sure to view the `default` namespace (**Kubernetes** > **Namespaces**, then click **Set Context** next to `default`).

Create a pod that uses a hostPath volume.

```
apiVersion: v1
kind: Pod
metadata:
  name: volume-pod
spec:
  restartPolicy: Never
  containers:
  - name: busybox
    image: busybox
    command: ["sh", "-c", "echo \"Successful output!\" > /output/output.txt"]
    volumeMounts:
    - name: host-vol
      mountPath: /output
  volumes:
  - name: host-vol
    hostPath:
      path: /tmp/output
```

Look at the pod list and check which node the `volume-pod` pod is running on. Log in to that node via SSH.

Check the output location on the node.

```
cat /tmp/output/output.txt
```

We should see the text `Successful output!` .