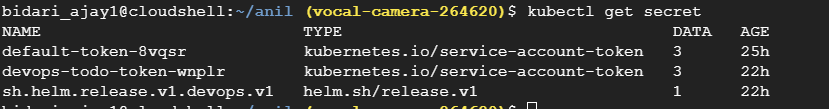
Kubernetes Secret

A Secret is an object that contains a small amount of sensitive data such as a password, a token, or a key. Such information might otherwise be put in a [Pod](https://kubernetes.io/docs/concepts/workloads/pods/) specification or in a [container image](https://kubernetes.io/docs/reference/glossary/?all=true#term-image). Using a Secret means that you don't need to include confidential data in your application code.

kubectl get secret



vim secret.yaml

apiVersion: v1

kind: Secret

metadata:

name: ajaysecret

type: Opaque

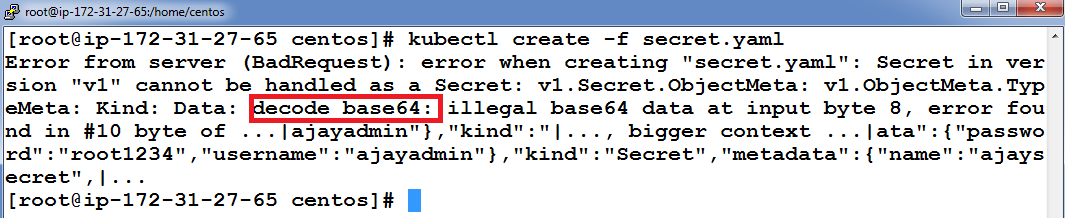
data:

username: ajayadmin

password: root1234

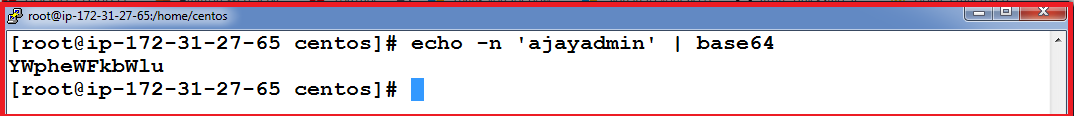
kubectl create -f secret.yaml

You should receive error that data needs to be base64 decoded



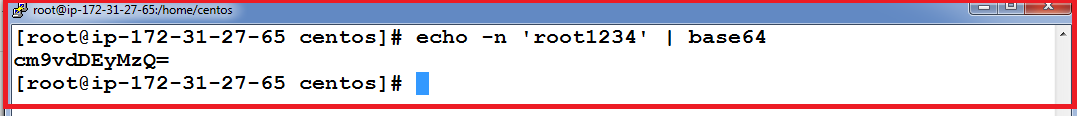
echo –n ‘ajayadmin’ | base64

this should give you a base64 coded format for your username



echo -n ‘root1234’ | base64

this should give you a base64 coded format for your password



vim secret.yaml

Replace your plain text username and password to base64 format you created

apiVersion: v1

kind: Secret

metadata:

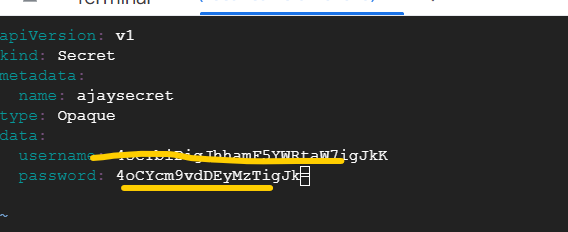
name: ajaysecret

type: Opaque

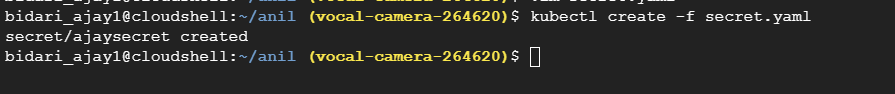
data:

username: YWpheWFkbWlu

password: cm9vdDEyMzQ=

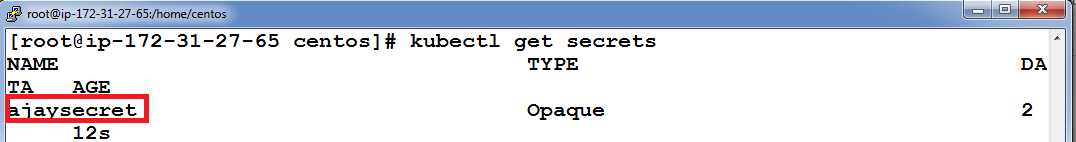


kubectl create -f secret.yaml



kubectl get secrets

This command should list the secret that you created



Let us create a POD and use secret created

vim secretpod.yaml

apiVersion: v1

kind: Pod

metadata:

name: secretmount

spec:

containers:

- name: secretmount

image: nginx

volumeMounts:

- name: ajay

mountPath: "/etc/ajay"

volumes:

- name: ajay

secret:

secretName: ajaysecret

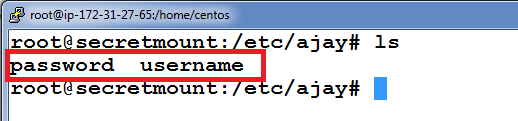
kubectl create -f secretpod.yaml

kubectl exec -it secretmount -- /bin/bash

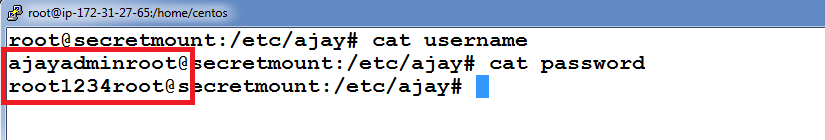
cd /etc/ajay

ls

you should see two file password and username



cat username and as well as password you should see your decoded username and password



Exit the pod

Using environment variables

vim env-secret-pod.yaml

apiVersion: v1

kind: Pod

metadata:

name: ajay-secret-pod

spec:

containers:

- name: ajaycontainer

image: redis

env:

- name: SECRET\_USERNAME

valueFrom:

secretKeyRef:

name: ajaysecret

key: username

- name: SECRET\_PASSWORD

valueFrom:

secretKeyRef:

name: ajaysecret

key: password

kubectl create -f env-secret-pod.yaml

kubectl exec -it ajay-secret-pod /bin/bash