Kubernet Secret

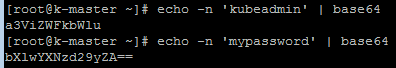
**To get encoding key**

[root@k-master ~]# echo -n 'kubeadmin' | base64

a3ViZWFkbWlu

[root@k-master ~]# echo -n 'mypassword' | base64

bXlwYXNzd29yZA==



**To create yaml file to create secret**

[root@k-master yamls]# vim 5-secrets.yaml

apiVersion: v1

kind: Secret

metadata:

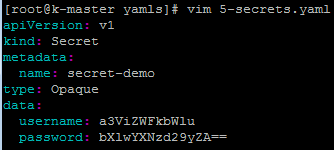
name: secret-demo

type: Opaque

data:

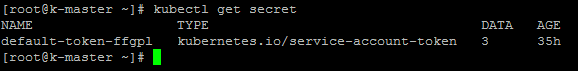
username: a3ViZWFkbWlu

password: bXlwYXNzd29yZA==



**Before creating secret, we can see, we have default secret**

kubectl get secret



[root@k-master yamls]# kubectl create -f 5-secrets.yaml

secret/secret-demo created

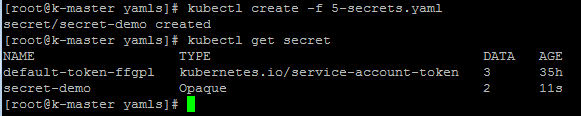
[root@k-master yamls]# kubectl get secret

NAME TYPE DATA AGE

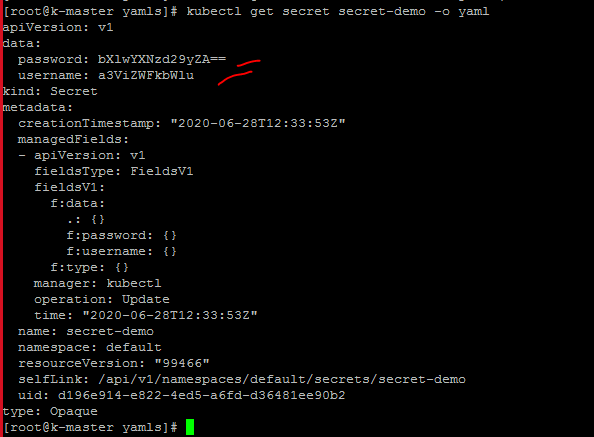
default-token-ffgpl kubernetes.io/service-account-token 3 35h

secret-demo Opaque 2 11s

[root@k-master yamls]#

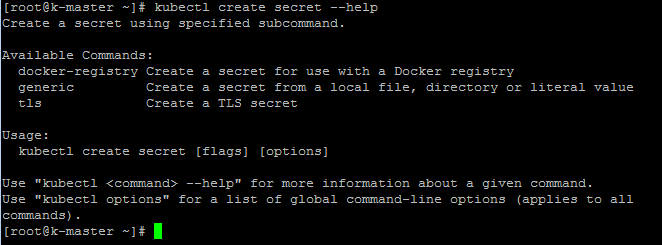


kubectl get secret secret-demo -o yaml



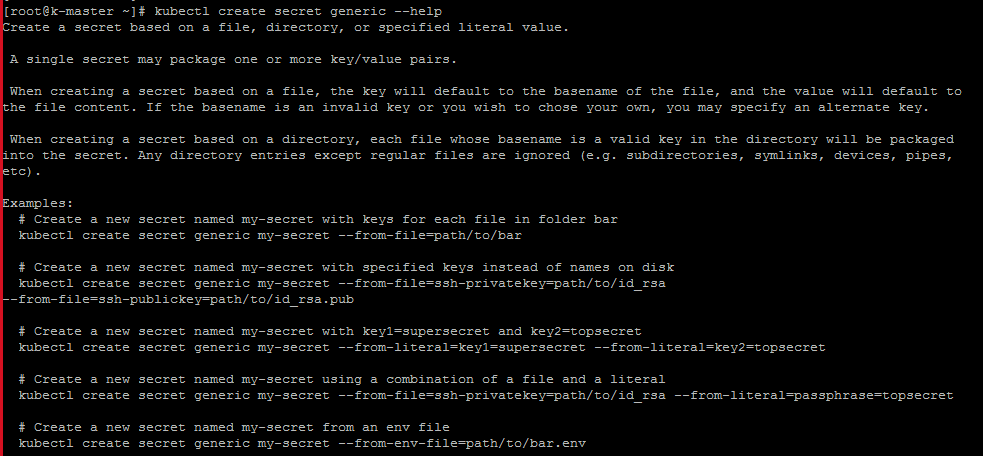
To get secret details

kubectl create secret –help



Here, we can create secret for generic, if we need help for generic, we can run below

kubectl create secret generic –help



<https://www.magalix.com/blog/kubernetes-secrets-101>

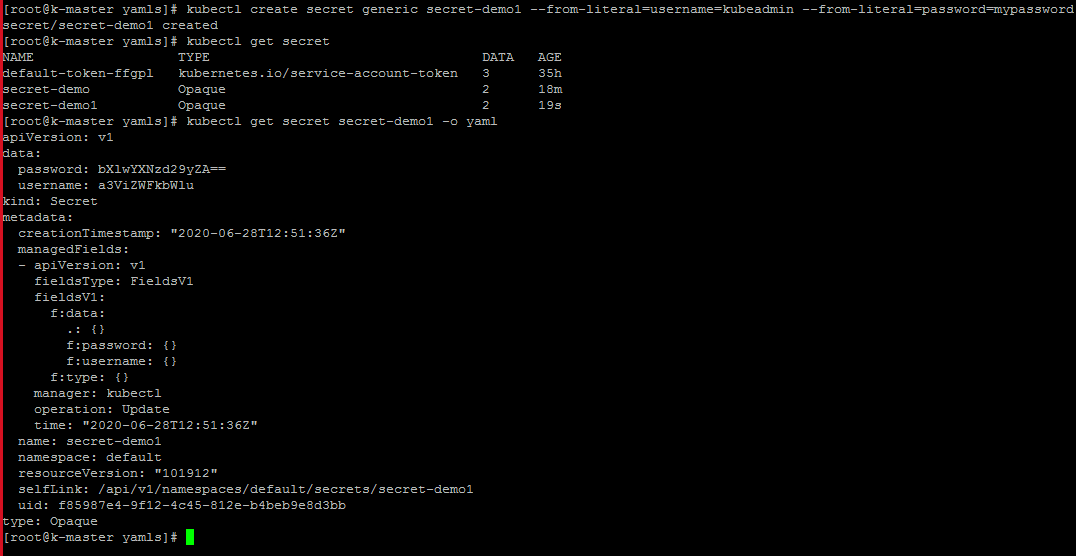
# How to create secret from command line

**Type 1:-**

kubectl create secret generic secret-demo1 --from-literal=username=kubeadmin --from-literal=password=mypassword

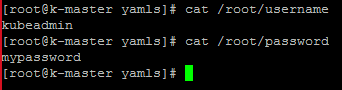
kubectl get secret

kubectl get secret secret-demo1 -o yaml



(Both are same in yaml and type 1)

Type3



kubectl create secret generic secret-demo --from-file=/root/username --from-file=/root/password

[root@k-master yamls]# kubectl get secret

NAME TYPE DATA AGE

default-token-ffgpl kubernetes.io/service-account-token 3 35h

secret-demo Opaque 2 36m

secret-demo1 Opaque 2 18m

secret-demo3 Opaque 2 18s

# To create pod with secret

[root@k-master yamls]# vim 5-pod-secret-env.yaml

apiVersion: v1

kind: Pod

metadata:

name: busybox

spec:

containers:

- image: busybox

name: busybox

command: ["/bin/sh"]

args: ["-c", "sleep 600"]

env:

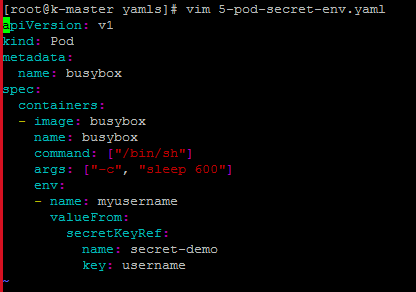
- name: myusername

valueFrom:

secretKeyRef:

name: secret-demo

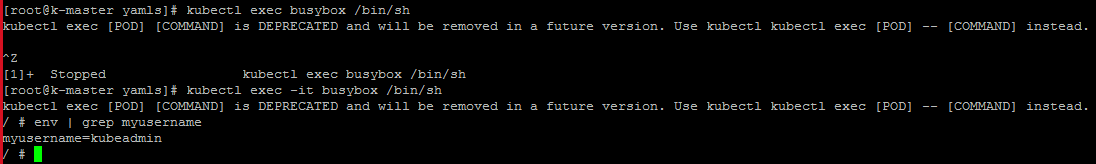
key: username



kubectl create -f 5-pod-secret-env.yaml

kubectl exec -it busybox /bin/sh

env | grep myusername



# To Create pod with secret volume

[root@k-master yamls]# vim 5-pod-secret-volume.yaml

apiVersion: v1

kind: Pod

metadata:

name: busybox2

spec:

volumes:

- name: secret-volume

secret:

secretName: secret-demo

containers:

- image: busybox

name: busybox

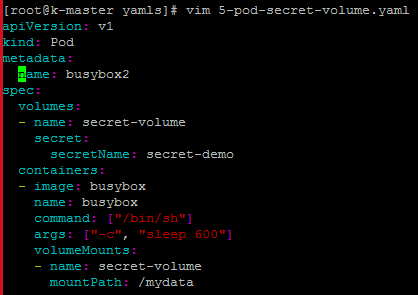
command: ["/bin/sh"]

args: ["-c", "sleep 600"]

volumeMounts:

- name: secret-volume

mountPath: /mydata



[root@k-master yamls]# kubectl create -f 5-pod-secret-volume.yaml

pod/busybox2 created

[root@k-master yamls]# kubectl get pods

NAME READY STATUS RESTARTS AGE

busbox 1/1 Running 9 90m

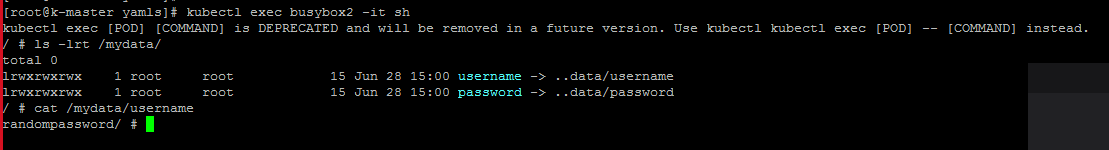
busybox 1/1 Running 9 98m

busybox1 1/1 Running 2 28m

busybox2 1/1 Running 0 4s

[root@k-master yamls]#

kubectl exec busybox2 -it sh

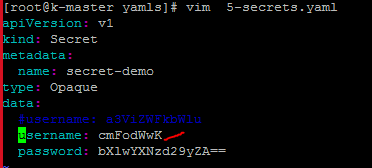


Here, we can change username to “rahul”

[root@k-master yamls]# echo 'rahul' | base64

cmFodWwK

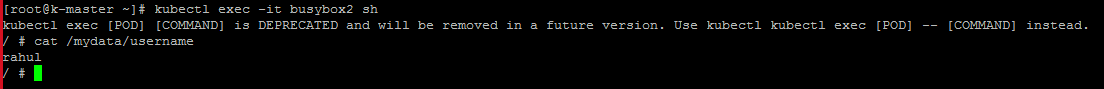
Changed value to latest one



kubectl apply -f 5-secrets.yaml

kubectl exec -it busybox2 sh

(here you can see username has been changed automatic)

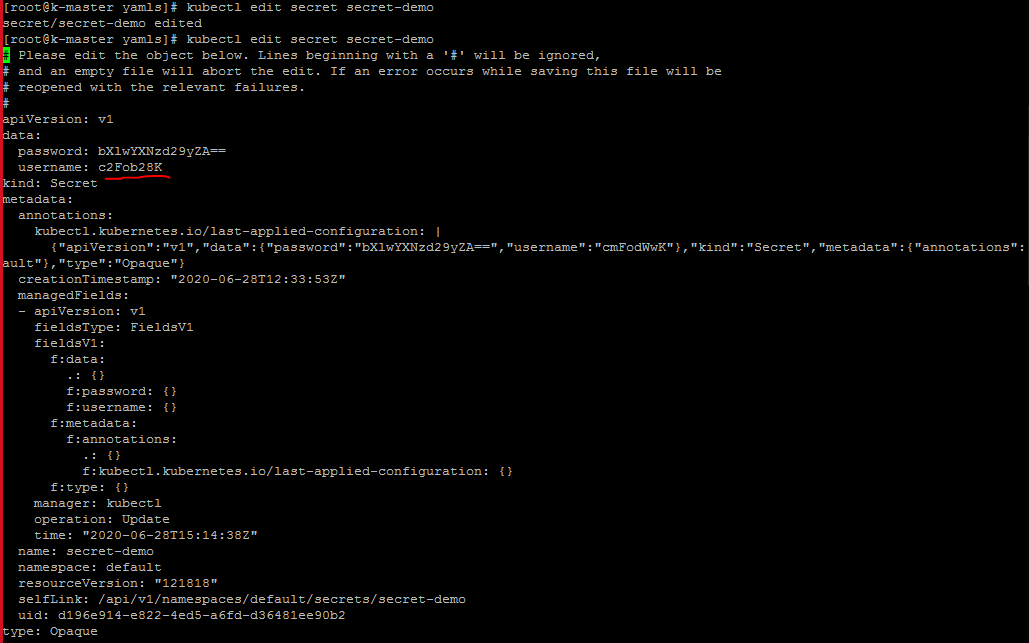


We can change the username directly from secret by edit like below

[root@k-master yamls]# echo 'sahoo' | base64

c2Fob28K

kubectl edit secret secret-demo



After saving it, you must have to exist container and login again to check changes

kubectl exec -it busybox2 sh

cat /mydata/username

