Step 1 - Creating a Secret Using kubectl

Store the username in a file `./username.txt` and the password in a file `./password.txt` on your local machine

echo -n 'admin' > ./username.txt
echo -n '1f2d1e2e67df' > ./password.txt

kubectl create secret generic db-user-pass --from-file=./username.txt --from-file=./password.txt

```
SJCMAC17JJHD4:Downloads lcastro$ echo -n 'admin' > ./username.txt
SJCMAC17JJHD4:Downloads lcastro$ echo -n '1f2d1e2e67df' > ./password.txt
SJCMAC17JJHD4:Downloads lcastro$ kubectl create secret generic db-user-pass --from-file=./username.txt --from-file=./password.txt
secret/db-user-pass created
```

Step 2 - Check for secrets created

kubectl get secrets

```
SJCMAC17JJHD4:Downloads lcastro$ kubectl get secrets
NAME                  TYPE                                  DATA   AGE
db-user-pass          Opaque                                2      2m15s
```

kubectl describe secrets db-user-pass

```
SJCMAC17JJHD4:Downloads lcastro$ kubectl describe secrets db-user-pass
Name:         db-user-pass
Namespace:    default
Labels:       <none>
Annotations:  <none>

Type:  Opaque

Data
====
password.txt:  12 bytes
username.txt:  5 bytes
```

Step 3 - Assign Secret to a Pod

vi pod-secret.yaml

```
apiVersion: v1
kind: Pod
metadata:
  name: mypod
spec:
  containers:
  - name: mypod
    image: redis
    volumeMounts:
    - name: foo
      mountPath: "/etc/foo"
      readOnly: true
  volumes:
  - name: foo
    secret:
      secretName: db-user-pass
```

kubectl create -f pod-secret-yaml

```
[SJCMAC17JJHD4:Downloads lcastro$ vi pod-secret.yaml
[SJCMAC17JJHD4:Downloads lcastro$ kubectl create -f pod-secret.yaml
pod/mypod created
```

Step 4 - Check the Pod created

kubectl get pods

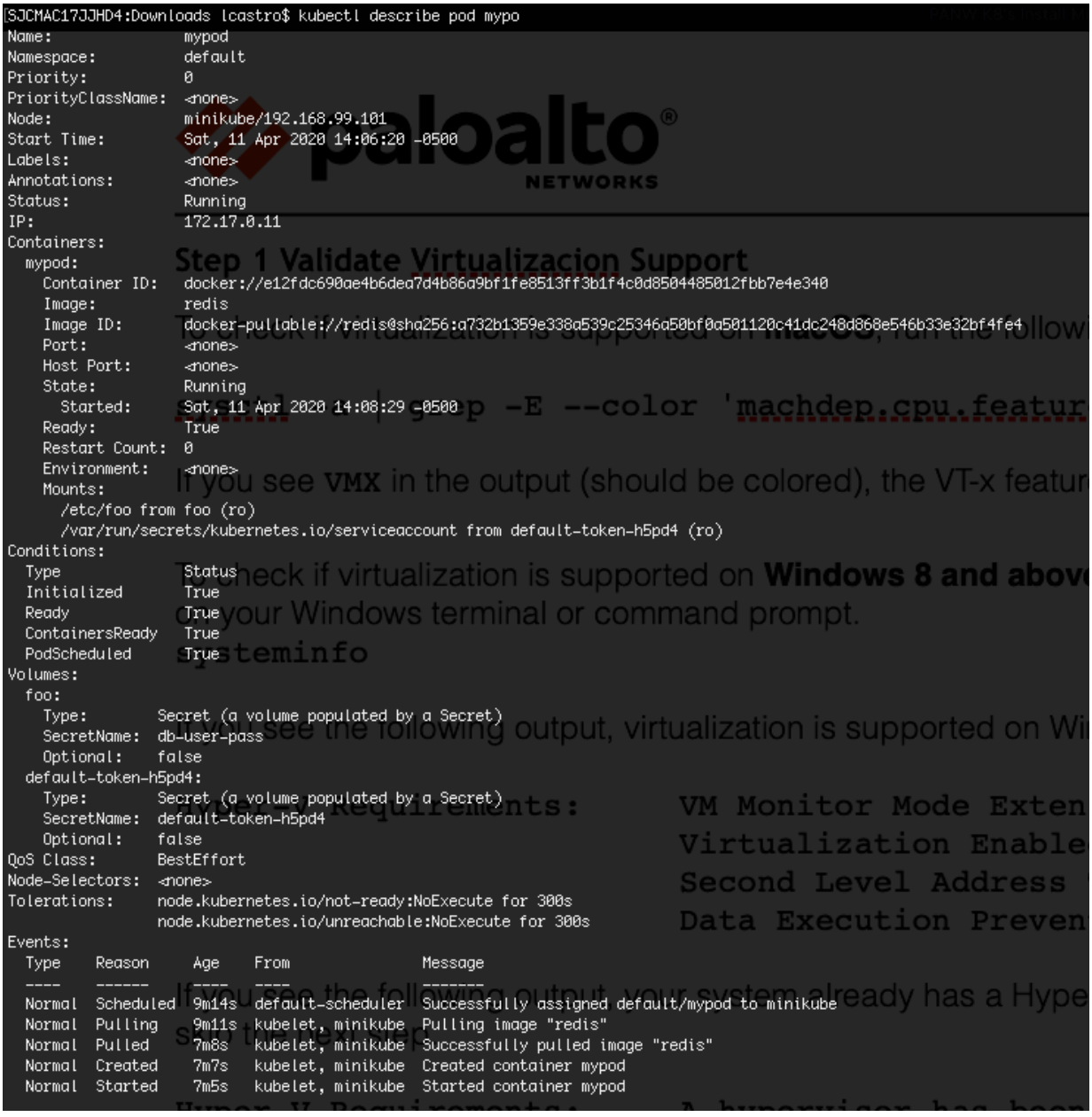
kubectl get pod -o wide

```
[SJCMAC17JJHD4:Downloads lcastro$ kubectl get pods
NAME    READY   STATUS    RESTARTS   AGE
mypod   1/1     Running   0          8m24s
[SJCMAC17JJHD4:Downloads lcastro$ kubectl get pods -o wide
NAME    READY   STATUS    RESTARTS   AGE    IP            NODE       NOMINATED NODE   READINESS GATES
mypod   1/1     Running   0          8m27s  172.17.0.11   minikube   <none>           <none>
```

kubectl get pod mypod -o yaml

```
SJCMAC17JJHD4:Downloads lcastro$ kubectl get pod mypod -o yaml
apiVersion: v1
kind: Pod
metadata:
  creationTimestamp: "2020-04-11T19:06:20Z"
  name: mypod
  namespace: default
  resourceVersion: "635060"
  selfLink: /api/v1/namespaces/default/pods/mypod
  uid: 871c416b-7c27-11ea-b4de-08002716856b
spec:
  containers:
  - image: redis
    imagePullPolicy: Always
    name: mypod
    resources: {}
    terminationMessagePath: /dev/termination-log
    terminationMessagePolicy: File
    volumeMounts:
    - mountPath: /etc/foo
      name: foo
      readOnly: true
    - mountPath: /var/run/secrets/kubernetes.io/serviceaccount
      name: default-token-h5pd4
      readOnly: true
  dnsPolicy: ClusterFirst
  enableServiceLinks: true
  nodeName: minikube
  priority: 0
  restartPolicy: Always
  schedulerName: default-scheduler
  securityContext: {}
  serviceAccount: default
  serviceAccountName: default
  terminationGracePeriodSeconds: 30
  tolerations:
  - effect: NoExecute
    key: node.kubernetes.io/not-ready
    operator: Exists
    tolerationSeconds: 300
  - effect: NoExecute
    key: node.kubernetes.io/unreachable
    operator: Exists
    tolerationSeconds: 300
  volumes:
  - name: foo
    secret:
      defaultMode: 420
      secretName: db-user-pass
  - name: default-token-h5pd4
    secret:
      defaultMode: 420
      secretName: default-token-h5pd4
status:
  conditions:
  - lastProbeTime: null
    lastTransitionTime: "2020-04-11T19:06:20Z"
    status: "True"
    type: Initialized
  - lastProbeTime: null
    lastTransitionTime: "2020-04-11T19:08:32Z"
    status: "True"
```

kubectl describe pod mypod



```
SJCMAC17JJHD4:Downloads lcastro$ kubectl describe pod mypo
Name:               mypod
Namespace:          default
Priority:           0
PriorityClassName:  <none>
Node:               minikube/192.168.99.101
Start Time:         Sat, 11 Apr 2020 14:06:20 -0500
Labels:             <none>
Annotations:        <none>
Status:             Running
IP:                 172.17.0.11
Containers:
  mypod:
    Container ID:   docker://e12fdc690ae4b6dea7d4b86a9bf1fe8513ff3b1f4c0d8504485012fbb7e4e340
    Image:          redis
    Image ID:       docker-pullable://redis@sha256:a732b1359e338a539c25346a50bf0a501120c41dc248d868e546b33e32bf4fe4
    Port:           <none>
    Host Port:      <none>
    State:          Running
      Started:      Sat, 11 Apr 2020 14:08:29 -0500
    Ready:          True
    Restart Count:  0
    Environment:    <none>
    Mounts:
      /etc/foo from foo (ro)
      /var/run/secrets/kubernetes.io/serviceaccount from default-token-h5pd4 (ro)
Conditions:
  Type              Status
  Initialized       True
  Ready             True
  ContainersReady   True
  PodScheduled      True
Volumes:
  foo:
    Type:        Secret (a volume populated by a Secret)
    SecretName:  db-user-pass
    Optional:    false
  default-token-h5pd4:
    Type:        Secret (a volume populated by a Secret)
    SecretName:  default-token-h5pd4
    Optional:    false
QoS Class:       BestEffort
Node-Selectors:  <none>
Tolerations:     node.kubernetes.io/not-ready:NoExecute for 300s
                 node.kubernetes.io/unreachable:NoExecute for 300s
Events:
  Type    Reason     Age    From               Message
  ----    ------     ----   ----               -------
  Normal  Scheduled  9m14s  default-scheduler  Successfully assigned default/mypod to minikube
  Normal  Pulling    9m11s  kubelet, minikube  Pulling image "redis"
  Normal  Pulled     7m8s   kubelet, minikube  Successfully pulled image "redis"
  Normal  Created    7m7s   kubelet, minikube  Created container mypod
  Normal  Started    7m5s   kubelet, minikube  Started container mypod
```

Step 5 - Check the Pod created

kubectl delete secret db-user-pass

kubectl delete pod my pod

```
SJCMAC17JJHD4:Downloads lcastro$ kubectl delete secret db-user-pass
secret "db-user-pass" deleted
SJCMAC17JJHD4:Downloads lcastro$ kubectl delete pod mypod
pod "mypod" deleted
```