

```

controlplane:~$ kubectl get configmaps
NAME          DATA  AGE
kube-root-ca.crt  1      33d
controlplane:~$ vi webapp-config-map.yaml
controlplane:~$ vi webapp-color.yml
controlplane:~$ kubectl apply -f webapp-config-map.yaml
configmap/webapp-config-map created
controlplane:~$ kubectl apply -f webapp-color.yml
pod/webapp-color created
controlplane:~$ kubectl get secrets
No resources found in default namespace.
controlplane:~$ kubectl run pod --image=inginx
pod/pod created
controlplane:~$ kubectl get secrets
No resources found in default namespace.
controlplane:~$ kubectl config set-context --current --namespace=default
kubectl: command not found
controlplane:~$ kubectl config set-context --current --namespace=default
Context "kubernetes-admin@kubernetes" modified.
controlplane:~$ kubectl get secrets
No resources found in default namespace.
controlplane:~$ kubectl describe secrets default-token-name

```

```

Editor  Tab 1  +
apiVersion: v1
kind: ConfigMap
metadata:
  name: webapp-config-map
data:
  APP_COLOR: darkblue
~

```

```

Editor  Tab 1  +
apiVersion: v1
kind: Pod
metadata:
  name: webapp-color
spec:
  containers:
    - name: nginx
      image: nginx
      envFrom:
        - configMapRef:
            name: webapp-config-map
~
~
~
~

```

```

Editor  Tab 1  +
apiVersion: v1
kind: Pod
metadata:
  name: db-pod
spec:
  containers:
    - name: mysql
      image: mysql:5.7
~
~

```

```

controlplane:~$ vi db-pod.yml
controlplane:~$ kubectl apply -f db-pod.yml
pod/db-pod created
controlplane:~$ kubectl get pod
poddisruptionbudgets.policy  pods                                podtemplates
controlplane:~$ kubectl get pod db-pod
NAME      READY   STATUS              RESTARTS   AGE
db-pod    0/1     CrashLoopBackOff    1 (12s ago) 30s
controlplane:~$

```

```

apiVersion: v1
kind: Secret
metadata:
  name: db-secret
type: Opaque
stringData:
  MYSQL_DATABASE: sql01
  MYSQL_USER: user1
  MYSQL_PASSWORD: password
  MYSQL_ROOT_PASSWORD: password123

```

```

controlplane:~$ vi db-pod.yml
controlplane:~$ kubectl apply -f db-pod.yml
pod/db-pod created
controlplane:~$ kubectl get pod
poddisruptionbudgets.policy  pods                                podtemplates
controlplane:~$ kubectl get pod db-pod
NAME      READY   STATUS              RESTARTS   AGE
db-pod    0/1     CrashLoopBackOff    1 (12s ago) 30s
controlplane:~$ vi db-secret.yml
controlplane:~$ kubectl apply -f db-secret.yml
secret/db-secret created
controlplane:~$ kubectl delete pod db-pod
pod "db-pod" deleted

```

```

Editor  tab 1
apiVersion: v1
kind: Pod
metadata:
  name: db-pod
spec:
  containers:
    - name: mysql
      image: mysql:5.7
      envFrom:
        - secretRef:
            name: db-secret

```

```
controlplane:~$ kubectl apply -f db-secret.yml
secret/db-secret configured
controlplane:~$ vi db-pod.yaml
controlplane:~$ kubectl apply -f db-pod.yaml
pod/db-pod created
controlplane:~$ kubectl get pod
NAME          READY   STATUS    RESTARTS   AGE
db-pod        1/1     Running   0           8s
```

```
controlplane:~$ vi multi-container-pod.yml
controlplane:~$ kubectl apply -f multi-container-pod.yml
pod/yellow created
controlplane:~$ vi init-container-pod.yml
controlplane:~$ vi multi-container-pod.yml
controlplane:~$ kubectl apply -f init-container-pod.yml
pod/red created
controlplane:~$ vi print-env.yml
controlplane:~$ kubectl apply -f print-env.yml
pod/print-envvars-greeting created
```

```
controlplane:~$ kubectl logs -f print-env
error: error from server (NotFound): pods "print-env" not found in namespace "default"
controlplane:~$ kubectl get pod
NAME          READY   STATUS             RESTARTS   AGE
db-pod        1/1     Running            0           11m
print-envvars-greeting 0/1     CrashLoopBackOff   3 (12s ago) 4m58s
red           1/1     Running            0           6m48s
webapp-color  1/1     Running            0           38m
yellow        2/2     Running            0           8m33s
controlplane:~$ kubectl logs -f print-envvars-greeting
Welcome to DevOps Industries
controlplane:~$
```

```

apiVersion: v1
kind: Pod
metadata:
  name: yellow
spec:
  containers:
    - name: lemon
      image: busybox
      command: ['sh', '-c', 'while true; do echo lemon; sleep 10; done']
    - name: gold
      image: redis
~
~
~

```

```

apiVersion: v1
kind: Pod
metadata:
  name: red
spec:
  initContainers:
    - name: init-myservice
      image: busybox
      command: ['sh', '-c', 'sleep 20']
  containers:
    - name: redis
      image: redis
~

```

```

apiVersion: v1
kind: Pod
metadata:
  name: print-envvars-greeting
spec:
  containers:
    - name: print-env-container
      image: bash
      command: ['sh', '-c', 'echo "${GREETING} ${COMPANY} ${GROUP}"; sleep 60']
      env:
        - name: GREETING
          value: "Welcome to"
        - name: COMPANY
          value: "DevOps"
        - name: GROUP
          value: "Industries"

```

```
controlplane:~$ ~/.kube/config
bash: /root/.kube/config: Permission denied
controlplane:~$ kubectl config view
apiVersion: v1
clusters:
- cluster:
    certificate-authority-data: DATA+OMITTED
    server: https://172.30.1.2:6443
    name: kubernetes
contexts:
- context:
    cluster: kubernetes
    namespace: default
    user: kubernetes-admin
    name: kubernetes-admin@kubernetes
current-context: kubernetes-admin@kubernetes
kind: Config
preferences: {}
users:
- name: kubernetes-admin
  user:
    client-certificate-data: DATA+OMITTED
    client-key-data: DATA+OMITTED
controlplane:~$
```

```
controlplane:~$ kubectl config current-context
kubernetes-admin@kubernetes
controlplane:~$ kubectl config view --minify | grep user
  user: kubernetes-admin
users:
  user:
```

```
apiVersion: v1
kind: PersistentVolume
metadata:
  name: pv-log
spec:
  capacity:
    storage: 100Mi
  accessModes:
    - ReadWriteMany
  hostPath:
    path: /pv/log
~
~
```

```

apiVersion: v1
kind: PersistentVolumeClaim
metadata:
  name: claim-log-1
spec:
  accessModes:
    - ReadWriteMany
  resources:
    requests:
      storage: 50Mi
~
~

```

```

apiVersion: v1
kind: Pod
metadata:
  name: webapp
spec:
  containers:
    - name: nginx
      image: nginx
      volumeMounts:
        - mountPath: /var/log/nginx
          name: log-volume
  volumes:
    - name: log-volume
      persistentVolumeClaim:
        claimName: claim-log-1
~
~

```

```

controlplane:~$ vi pvc.yml
controlplane:~$ vi pv.yml
controlplane:~$ kubectl apply pv.yml
error: Unexpected args: [pv.yml]
See 'kubectl apply -h' for help and examples
controlplane:~$ kubectl apply -f pv.yml
persistentvolume/pv-log created
controlplane:~$ vi pvc.yml
controlplane:~$ vi pv.yml
controlplane:~$ vi pvc.yml
controlplane:~$ kubectl apply -f pvc.yml
persistentvolumeclaim/claim-log-1 created
controlplane:~$ vi webapp.yml
controlplane:~$ kubectl apply -f webapp
webapp-color.yml      webapp-config-map.yml  webapp.yml
controlplane:~$ kubectl apply -f webapp.yml
pod/webapp created
controlplane:~$ █

```