

(Dec 2022) DevOps – How to Reset Kubernetes Cluster

In some cases it is often easier to have a reset of the Kubernetes (K8S) cluster without having to re-do all the build from scratch. Most often ports, applying a yaml file for a change or a build, or a NodePort often create issues that a quick reset would greatly help.

In our example following is an error we ran into establishing two different clusters to be able to communicate

Error

```
error execution phase preflight: [preflight] Some fatal errors occurred:
  [ERROR Port-6443]: Port 6443 is in use
  [ERROR Port-10259]: Port 10259 is in use
  [ERROR Port-10257]: Port 10257 is in use
  [ERROR FileAvailable--etc-kubernetes-manifests-kube-apiserver.yaml]:
/etc/kubernetes/manifests/kube-apiserver.yaml already exists
  [ERROR FileAvailable--etc-kubernetes-manifests-kube-controller-
manager.yaml]: /etc/kubernetes/manifests/kube-controller-manager.yaml already
exists
  [ERROR FileAvailable--etc-kubernetes-manifests-kube-scheduler.yaml]:
/etc/kubernetes/manifests/kube-scheduler.yaml already exists
  [ERROR FileAvailable--etc-kubernetes-manifests-etcd.yaml]:
/etc/kubernetes/manifests/etcd.yaml already exists
  [ERROR Port-10250]: Port 10250 is in use
  [ERROR Port-2379]: Port 2379 is in use
  [ERROR Port-2380]: Port 2380 is in use
  [ERROR DirAvailable--var-lib-etcd]: /var/lib/etcd is not empty
```

Solution

```
#Reset kubernetes cluster using kubeadm
```

```
kubeadm reset -f
```

```
#Remove all the data from all below locations
```

```
rm -rf /etc/cni /etc/kubemetes /var/lib/docker/shim /var/lib/etcd /var/lib/kubelet /var/run/kubernetes ~/.kube/*
```

```
#Flush all the firewall (iptables) rules
```

```
iptables -F && iptables -X
iptables -t nat -F && iptables -t nat -X
iptables -t raw -F && iptables -t raw -X
iptables -t mangle -F && iptables -t mangle -X
```

```
#Restart the Docker service
```

```
systemctl restart docker
```