

The first step toward using Prometheus and Grafana to gather metrics within Kubernetes is to install them. This video walks you through the process of installing Prometheus and Grafana in your Kubernetes cluster. After completing this lesson, you will know how to quickly install Prometheus and Grafana using Helm.

Since there are quite a few commands involved in this installation, here is a reference guide for the commands used to perform the installation in this lesson:

```
curl https://raw.githubusercontent.com/kubernetes/helm/master/scripts/get > /tmp/get_helm.sh
chmod 700 /tmp/get_helm.sh
DESIRED_VERSION=v2.8.2 /tmp/get_helm.sh
kubectl --namespace=kube-system create clusterrolebinding add-on-cluster-admin --clusterrole=cluster-admin --
helm ls
cd ~/
git clone https://github.com/kubernetes/charts
cd charts
git checkout efdcffe0b697311ec6e5e83136ea74cdbc6527d
cd ../
vi prometheus-values.yml
```

prometheus-values.yml:

```
alertmanager:
  persistentVolume:
    enabled: false
server:
  persistentVolume:
    enabled: false
```

Then run:

```
helm install -f prometheus-values.yml charts/stable/prometheus --name prometheus --namespace prometheus
vi grafana-values.yml
```

grafana-values.yml:

```
adminPassword: password
```

Then run:

```
helm install -f grafana-values.yml charts/stable/grafana/ --name grafana --namespace grafana
vi grafana-ext.yml
```

grafana-ext.yml:

```
kind: Service
apiVersion: v1
metadata:
  namespace: grafana
  name: grafana-ext
spec:
  type: NodePort
  selector:
    app: grafana
  ports:
```

```
- protocol: TCP  
  port: 3000  
  nodePort: 8080
```

Then run:

```
kubectl apply -f grafana-ext.yml
```

You can check on the status of the prometheus and grafana pods with these commands:

```
kubectl get pods -n prometheus  
kubectl get pods -n grafana
```