Monitoring

Install helm3 on master node

```
curl -fsSL -o get_helm.sh https://raw.githubusercontent.com/helm/helm/main/sc
chmod 700 get_helm.sh
./get_helm.sh
```

Add the Helm Stable Charts for your local client.

`helm repo add stable https://charts.helm.sh/stable`

Add prometheus Helm repo

```
helm repo add prometheus-community https://prometheus-community.github.io/hel
helm search repo prometheus-community
```

Create Prometheus namespace

`kubectl create namespace prometheus`

Install kube-prometheus-stack

Below is the helm command to install kube-prometheus-stack. This installation formally called prometheus-operator also comes with a grafana deployment embedded.

`helm install stable prometheus-community/kube-prometheus-stack -n prometheus`

In order to make prometheus and grafana available outside the cluster, use NodePort or LoadBalancer instead of !ClusterIP.

Search `type: ClusterIP` and change it to `type: NodePort` on

`kubectl edit svc stable-kube-prometheus-sta-prometheus -n prometheus`

and `kubectl edit svc stable-grafana -n prometheus`

```
kubectl get svc -n prometheus
```

log into stable-grafana from your PC. Use node port. Username/Password: `admin` / `prom-operator`

[OPTIONAL] How to Create Kubernetes Monitoring Dashboard?

For creating a dashboard to monitor the cluster:

Click '+' button on left panel and select 'Import'.

Enter 12740 dashboard id under Grafana.com Dashboard.

Click 'Load'.

Select 'Prometheus' as the endpoint under prometheus data sources drop down. Click 'Import'.

This will show monitoring dashboard for all cluster nodes

How to Create Kubernetes Cluster Monitoring Dashboard?

For creating a dashboard to monitor the cluster:

Click '+' button on left panel and select 'Import'.

Enter 3119 dashboard id under Grafana.com Dashboard.

Click 'Load'.

Select 'Prometheus' as the endpoint under prometheus data sources drop down. Click 'Import'.

This will show monitoring dashboard for all cluster nodes

Create POD Monitoring Dashboard :-

For creating a dashboard to monitor the cluster:

Click '+' button on left panel and select 'Import'.

Enter 6417 dashboard id under Grafana.com Dashboard.

Click 'Load'.

Select 'Prometheus' as the endpoint under prometheus data sources drop down. Click 'Import'.