

To deploy Prometheus on Kubernetes using Helm, you can follow these steps:

1. Install Helm:

If you haven't already, install Helm on your Kubernetes cluster. You can use the following commands:

```
curl -fsSL -o get_helm.sh
https://raw.githubusercontent.com/helm/helm/main/scripts/get-helm-3
chmod 700 get_helm.sh
./get_helm.sh
```

2. Add the Prometheus Helm Repository:

Create namespace Prometheus

```
kubectl create namespace prometheus
```

Add the Prometheus community Helm repository:

```
helm repo add prometheus-community https://prometheus-
community.github.io/helm-charts
helm repo update
```

3. Install Prometheus:

Deploy Prometheus using the Helm chart:

```
helm install prometheus-operator prometheus-community/kube-prometheus-stack
--namespace Prometheus
```

```
sparrx@DESKTOP-0N62A4P:~$ helm install prometheus-operator prometheus-community/kube-prometheus-stack --namespace prometheus
W0613 20:21:24.220013 10114 warnings.go:70] unknown field "spec.attachMetadata"
W0613 20:21:24.326670 10114 warnings.go:70] unknown field "spec.endpoints[0].enableHttp2"
W0613 20:21:24.650770 10114 warnings.go:70] unknown field "spec.attachMetadata"
NAME: prometheus-operator
LAST DEPLOYED: Thu Jun 13 20:20:57 2024
NAMESPACE: prometheus
STATUS: deployed
REVISION: 1
NOTES:
kube-prometheus-stack has been installed. Check its status by running:
  kubectl --namespace prometheus get pods -l "release=prometheus-operator"

Visit https://github.com/prometheus-operator/kube-prometheus for instructions on how to create & configure Alertmanager and Prometheus instances using the Operator.
sparrx@DESKTOP-0N62A4P:~$ |
```

4. Verify Deployment:

Check the status of Prometheus components:

```
kubectl get pods -n Prometheus
```

```
sparx@DESKTOP-0N62A4P:~$ kubectl get pods -n prometheus
```

NAME	READY	STATUS	RESTARTS	AGE
alertmanager-prometheus-operator-kube-p-alertmanager-0	2/2	Running	0	78s
prometheus-operator-grafana-867c546b64-9zrhs	3/3	Running	0	85s
prometheus-operator-kube-p-operator-579f5cb6fc-lq2lw	1/1	Running	0	84s
prometheus-operator-kube-state-metrics-788b85f94-wsjvd	1/1	Running	0	84s
prometheus-operator-prometheus-node-exporter-g97br	0/1	ContainerCreating	0	85s
prometheus-prometheus-operator-kube-p-prometheus-0	2/2	Running	0	65s

```
sparx@DESKTOP-0N62A4P:~$
```