```
kirillspitsyn@LAPTOP-VPGTN0GN: ~

kirillspitsyn@LAPTOP-VPGTN0GN:~$ helm repo add prometheus-community https://prometheus-community.github.io/helm-charts
"prometheus-community" has been added to your repositories
kirillspitsyn@LAPTOP-VPGTN0GN:~$ helm repo update
Hang tight while we grab the latest from your chart repositories...
...Successfully got an update from the "fission-charts" chart repository
...Successfully got an update from the "prometheus-community" chart repository
Update Complete. ⎈Happy Helming!⎈
```

```
kirillspitsyn@LAPTOP-VPGTN0GN:~$ helm install prometheus prometheus-community/prometheus
NAME: prometheus
LAST DEPLOYED: Mon Feb  5 23:04:51 2024
NAMESPACE: default
STATUS: deployed
REVISION: 1
TEST SUITE: None
NOTES:
The Prometheus server can be accessed via port 80 on the following DNS name from within your cluster:
prometheus-server.default.svc.cluster.local


Get the Prometheus server URL by running these commands in the same shell:
  export POD_NAME=$(kubectl get pods --namespace default -l "app.kubernetes.io/name=prometheus,app.kubernetes.io/instance=prometheus" -o jsonpath="{.items[0].metadata.name}")
  kubectl --namespace default port-forward $POD_NAME 9090


The Prometheus alertmanager can be accessed via port 9093 on the following DNS name from within your cluster:
prometheus-alertmanager.default.svc.cluster.local


Get the Alertmanager URL by running these commands in the same shell:
  export POD_NAME=$(kubectl get pods --namespace default -l "app.kubernetes.io/name=alertmanager,app.kubernetes.io/instance=prometheus" -o jsonpath="{.items[0].metadata.name}")
  kubectl --namespace default port-forward $POD_NAME 9093
#################################################################################
######    WARNING: Pod Security Policy has been disabled by default since    #####
######             it deprecated after k8s 1.25+. use                        #####
######             (index .Values "prometheus-node-exporter" "rbac"          #####
######  .          "pspEnabled") with (index .Values                        #####
######             "prometheus-node-exporter" "rbac" "pspAnnotations")       #####
######             in case you still need it.                                #####
#################################################################################


The Prometheus PushGateway can be accessed via port 9091 on the following DNS name from within your cluster:
prometheus-prometheus-pushgateway.default.svc.cluster.local


Get the PushGateway URL by running these commands in the same shell:
  export POD_NAME=$(kubectl get pods --namespace default -l "app=prometheus-pushgateway,component=pushgateway" -o jsonpath="{.items[0].metadata.name}")
  kubectl --namespace default port-forward $POD_NAME 9091

For more information on running Prometheus, visit:
https://prometheus.io/
```

```
kirillspitsyn@LAPTOP-VPGTN0GN:~$ kubectl get pods
NAME                                                    READY   STATUS             RESTARTS           AGE
mongo-express-deployment-b88f6d45f-8cgjx                1/1     Running            5 (3m50s ago)      15d
mongodb-stateful-set-0                                  1/1     Running            6 (3m50s ago)      15d
mongodb-stateful-set-1                                  1/1     Running            6 (3m50s ago)      15d
nginx-6jk59                                             1/1     Running            10 (3m50s ago)     15d
nginx-deployment-596b5b4d66-4zj7d                       1/1     Running            9 (3m50s ago)      15d
nginx-deployment-596b5b4d66-drp6r                       1/1     Running            10 (3m50s ago)     15d
nginx-deployment-596b5b4d66-tb27w                       1/1     Running            10 (3m50s ago)     15d
nginx-deployment-replica-5479df7db-6gxlk                1/1     Running            10 (3m50s ago)     15d
nginx-deployment-replica-5479df7db-9zv59                1/1     Running            10 (3m50s ago)     15d
nginx-deployment-replica-5479df7db-m29vz                1/1     Running            10 (3m50s ago)     15d
nginx-replica-6pbdw                                     1/1     Running            10 (3m50s ago)     15d
nginx-replica-m8pxr                                     1/1     Running            10 (3m50s ago)     15d
nginx-replica-zppfb                                     1/1     Running            10 (3m50s ago)     15d
note-deployment-74cc946cd8-c7t48                        1/1     Running            8 (2m10s ago)      14d
note-deployment-74cc946cd8-mskbv                        1/1     Running            12 (2m55s ago)     15d
note-server-deployment-6fb5fcb67f-dq52j                 1/1     Running            8 (119s ago)       15d
note-server-deployment-6fb5fcb67f-m7rg5                 1/1     Running            7 (119s ago)       15d
poolmgr-nodedemo-default-15241-5bb5d54f89-5x2wz         1/2     InvalidImageName   0                  2m59s
poolmgr-nodedemo-default-15241-5bb5d54f89-8pgd8         1/2     InvalidImageName   0                  2m59s
poolmgr-nodedemo-default-15241-5bb5d54f89-kl47b         1/2     InvalidImageName   0                  2m59s
poolmgr-nodeenv-default-14592-c5589c69c-68p9j           1/2     InvalidImageName   0                  2m59s
poolmgr-nodeenv-default-14592-c5589c69c-tp5zj           1/2     InvalidImageName   0                  2m54s
poolmgr-nodeenv-default-14592-c5589c69c-twslq           1/2     InvalidImageName   0                  2m54s
poolmgr-nodeenvironment-default-14844-5c9979549f-rnjtm  1/2     InvalidImageName   0                  2m53s
poolmgr-nodeenvironment-default-14844-5c9979549f-skwjr  1/2     InvalidImageName   0                  2m53s
poolmgr-nodeenvironment-default-14844-5c9979549f-trqtg  1/2     InvalidImageName   0                  2m54s
poolmgr-nodejs-default-10461-6dd8d48c64-2bvkp           2/2     Running            0                  2m59s
poolmgr-nodejs-default-10461-6dd8d48c64-jcsz6           2/2     Running            0                  2m59s
poolmgr-nodejs-default-10461-6dd8d48c64-z52g7           2/2     Running            0                  2m59s
poolmgr-nodejsdemo-default-15502-68cbc48b8d-5mnl6       1/2     InvalidImageName   0                  2m53s
poolmgr-nodejsdemo-default-15502-68cbc48b8d-ln78x       1/2     InvalidImageName   0                  2m52s
poolmgr-nodejsdemo-default-15502-68cbc48b8d-x897q       1/2     InvalidImageName   0                  2m52s
poolmgr-nodejsenv-default-13784-748bdffb49-dhcqz        1/2     InvalidImageName   0                  2m51s
poolmgr-nodejsenv-default-13784-748bdffb49-dhljw        1/2     InvalidImageName   0                  2m52s
poolmgr-nodejsenv-default-13784-748bdffb49-k569j        1/2     InvalidImageName   0                  2m51s
poolmgr-nodejsenvironment-default-14213-765b457c77-flw4x 1/2    InvalidImageName   0                  2m48s
poolmgr-nodejsenvironment-default-14213-765b457c77-sb69k 1/2    InvalidImageName   0                  2m48s
poolmgr-nodejsenvironment-default-14213-765b457c77-xfwnz 1/2    InvalidImageName   0                  2m49s
poolmgr-nodejstest-default-15707-79494cc4f-59dmh        2/2     Running            0                  2m46s
poolmgr-nodejstest-default-15707-79494cc4f-k4r5l        2/2     Running            0                  2m46s
poolmgr-nodejstest-default-15707-79494cc4f-nkrd7        2/2     Running            0                  2m47s
prometheus-alertmanager-0                               1/1     Running            0                  2m35s
prometheus-kube-state-metrics-745b475957-xhkt5          1/1     Running            0                  2m39s
prometheus-prometheus-node-exporter-fx79l               1/1     Running            0                  2m39s
prometheus-prometheus-pushgateway-6ccd698d79-svtcm      1/1     Running            0                  2m39s
prometheus-server-5c99dfc547-bn8fc                      2/2     Running            0                  2m39s
web-0                                                   1/1     Running            0                  15d
kirillspitsyn@LAPTOP-VPGTN0GN:~$ kubectl get svc
NAME                                  TYPE           CLUSTER-IP       EXTERNAL-IP    PORT(S)            AGE
kubernetes                            ClusterIP      10.96.0.1        <none>         443/TCP            15d
mongo-express-service                 LoadBalancer   10.100.41.217    <pending>      8081:32693/TCP     15d
mongodb-service                       ClusterIP      10.102.109.164   <none>         27017/TCP          15d
nginx                                 ClusterIP      None             <none>         80/TCP             15d
note-server-service                   ClusterIP      10.98.43.56      <none>         5000/TCP           15d
note-service                          LoadBalancer   10.96.39.94      <pending>      3000:30211/TCP     15d
prometheus-alertmanager               ClusterIP      10.106.234.224   <none>         9093/TCP           3m6s
prometheus-alertmanager-headless      ClusterIP      None             <none>         9093/TCP           3m6s
prometheus-kube-state-metrics         ClusterIP      10.108.74.194    <none>         8080/TCP           3m6s
prometheus-prometheus-node-exporter   ClusterIP      10.96.86.134     <none>         9100/TCP           3m6s
prometheus-prometheus-pushgateway     ClusterIP      10.102.192.231   <none>         9091/TCP           3m6s
prometheus-server                     ClusterIP      10.101.206.118   <none>         80/TCP             3m6s
kirillspitsyn@LAPTOP-VPGTN0GN:~$
```

```
kirillspitsyn@LAPTOP-VPGTN0GN:~$ helm repo add grafana https://grafana.github.io/helm-charts
"grafana" has been added to your repositories
kirillspitsyn@LAPTOP-VPGTN0GN:~$ helm repo update
Hang tight while we grab the latest from your chart repositories...
...Successfully got an update from the "fission-charts" chart repository
...Successfully got an update from the "grafana" chart repository
...Successfully got an update from the "prometheus-community" chart repository
Update Complete. ⎈Happy Helming!⎈
kirillspitsyn@LAPTOP-VPGTN0GN:~$ helm install grafana grafana/grafana
NAME: grafana
LAST DEPLOYED: Mon Feb  5 23:20:49 2024
NAMESPACE: default
STATUS: deployed
REVISION: 1
NOTES:
1. Get your 'admin' user password by running:

   kubectl get secret --namespace default grafana -o jsonpath="{.data.admin-password}" | base64 --decode ; echo


2. The Grafana server can be accessed via port 80 on the following DNS name from within your cluster:

   grafana.default.svc.cluster.local

   Get the Grafana URL to visit by running these commands in the same shell:
     export POD_NAME=$(kubectl get pods --namespace default -l "app.kubernetes.io/name=grafana,app.kubernetes.io/instance=grafana" -o jsonpath="{.items[0].metadata.name}")
     kubectl --namespace default port-forward $POD_NAME 3000

3. Login with the password from step 1 and the username: admin
##################################################################
######   WARNING: Persistence is disabled!!! You will lose your data when   #####
######            the Grafana pod is terminated.                            #####
##################################################################
kirillspitsyn@LAPTOP-VPGTN0GN:~$ kubectl get svc
NAME                                      TYPE           CLUSTER-IP       EXTERNAL-IP    PORT(S)          AGE
grafana                                   ClusterIP      10.103.212.44    <none>         80/TCP           48s
kubernetes                                ClusterIP      10.96.0.1        <none>         443/TCP          15d
mongo-express-service                     LoadBalancer   10.100.41.217    <pending>      8081:32693/TCP   15d
mongodb-service                           ClusterIP      10.102.109.164   <none>         27017/TCP        15d
nginx                                     ClusterIP      None             <none>         80/TCP           15d
note-server-service                       ClusterIP      10.98.43.56      <none>         5000/TCP         15d
note-service                              LoadBalancer   10.96.39.94      <pending>      3000:30211/TCP   15d
prometheus-alertmanager                   ClusterIP      10.106.234.224   <none>         9093/TCP         16m
prometheus-alertmanager-headless          ClusterIP      None             <none>         9093/TCP         16m
prometheus-kube-state-metrics             ClusterIP      10.108.74.194    <none>         8080/TCP         16m
prometheus-prometheus-node-exporter       ClusterIP      10.96.86.134     <none>         9100/TCP         16m
prometheus-prometheus-pushgateway         ClusterIP      10.102.192.231   <none>         9091/TCP         16m
prometheus-server                         ClusterIP      10.101.206.118   <none>         80/TCP           16m
kirillspitsyn@LAPTOP-VPGTN0GN:~$ kubectl expose service grafana --type=NodePort --target-port=3000  --name=grafana-ext
service/grafana-ext exposed
```