```
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!⎈
```

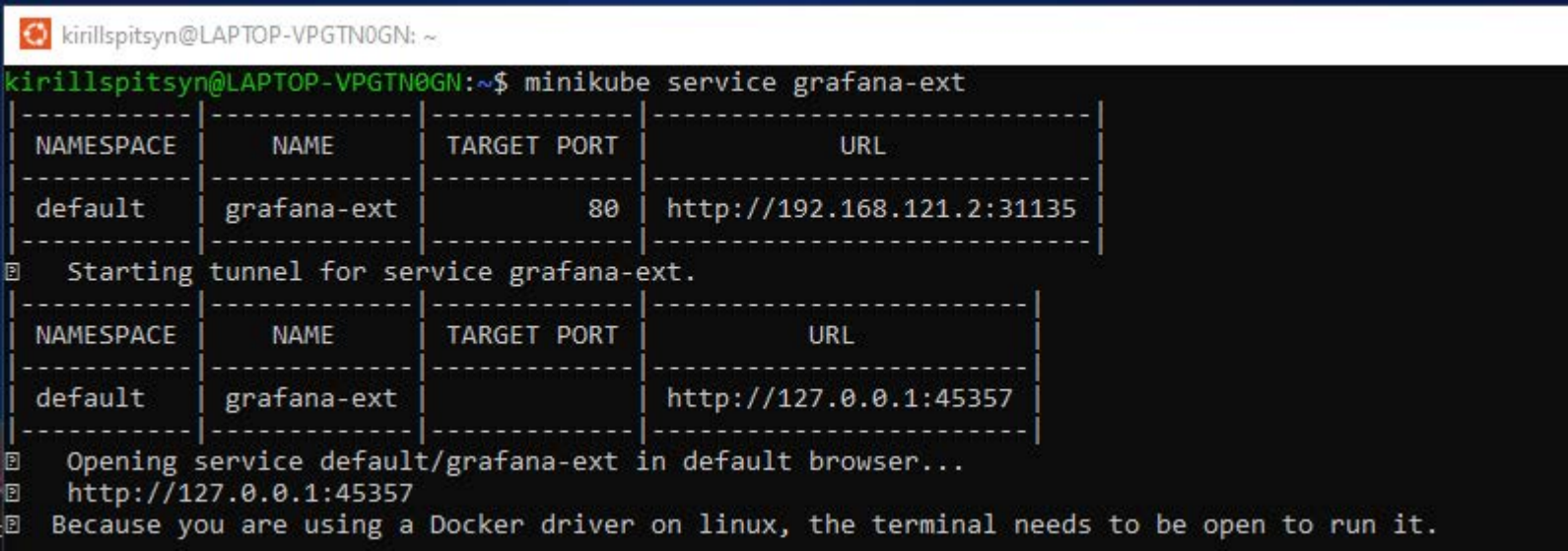
```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN0GN:~$ helm install prometheus prometheus-community/prometheus
NAME: prometheus
LAST DEPLOYED: Mon Feb  5 23:04:51 2024
NAMESPACE: default
STATUS: deployed
REVISION: 1
TEST SUITE: None
NOTES:
The Prometheus server can be accessed via port 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/
```

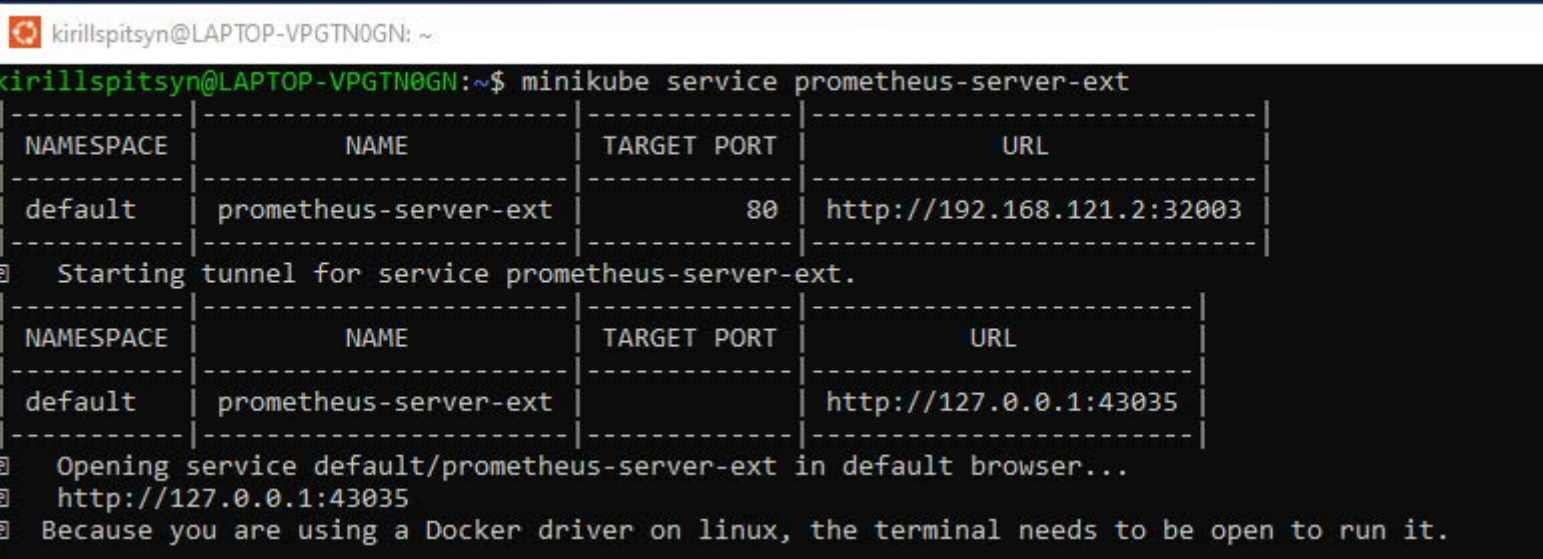
kirillspitsyn@LAPTOP-VPGTN0GN: ~

```
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: ~
kirillspitsyn@LAPTOP-VPGTN0GN:~$ kubectl expose service prometheus-server --type=NodePort --target-port=9090 --name=prometheus-server-ext
service/prometheus-server-ext exposed

```
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
```


kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN0GN:~$ minikube service grafana-ext
| NAMESPACE | NAME | TARGET PORT | URL |
| default | grafana-ext | 80 | http://192.168.121.2:31135 |
Starting tunnel for service grafana-ext.
| NAMESPACE | NAME | TARGET PORT | URL |
| default | grafana-ext | | http://127.0.0.1:45357 |
Opening service default/grafana-ext in default browser...
http://127.0.0.1:45357
Because you are using a Docker driver on linux, the terminal needs to be open to run it.


kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN0GN:~$ minikube service prometheus-server-ext
| NAMESPACE | NAME | TARGET PORT | URL |
| default | prometheus-server-ext | 80 | http://192.168.121.2:32003 |
Starting tunnel for service prometheus-server-ext.
| NAMESPACE | NAME | TARGET PORT | URL |
| default | prometheus-server-ext | | http://127.0.0.1:43035 |
Opening service default/prometheus-server-ext in default browser...
http://127.0.0.1:43035
Because you are using a Docker driver on linux, the terminal needs to be open to run it.

127.0.0.1:45357/connections/datasources/edit/e8afa7bf-951f-4115-934f-8d2bc8315a96/

Search or jump to...

Home › Connections › Data sources › prometheus

Connections

Add new connection

Data sources

Alerting

Manage alerts via Alerting UI

Interval behaviour

Scrape interval: 15s

Query timeout: 60s

Query editor

Default editor: Builder

Disable metrics lookup

Performance

Prometheus type: Choose

Cache level: Low

Incremental querying (beta)

Disable recording rules (beta)

Other

Custom query parameters: Example: max_source_resolution=5m&timeout

HTTP method: POST

Exemplars

+ Add

✓ **Successfully queried the Prometheus API.**

Next, you can start to visualize data by building a dashboard, or by querying data in the Explore view.

Delete | Save & test

127.0.0.1:45357/connections/datasources

Search or jump to...

Home › Connections › Data sources

Connections

Add new connection

Data sources

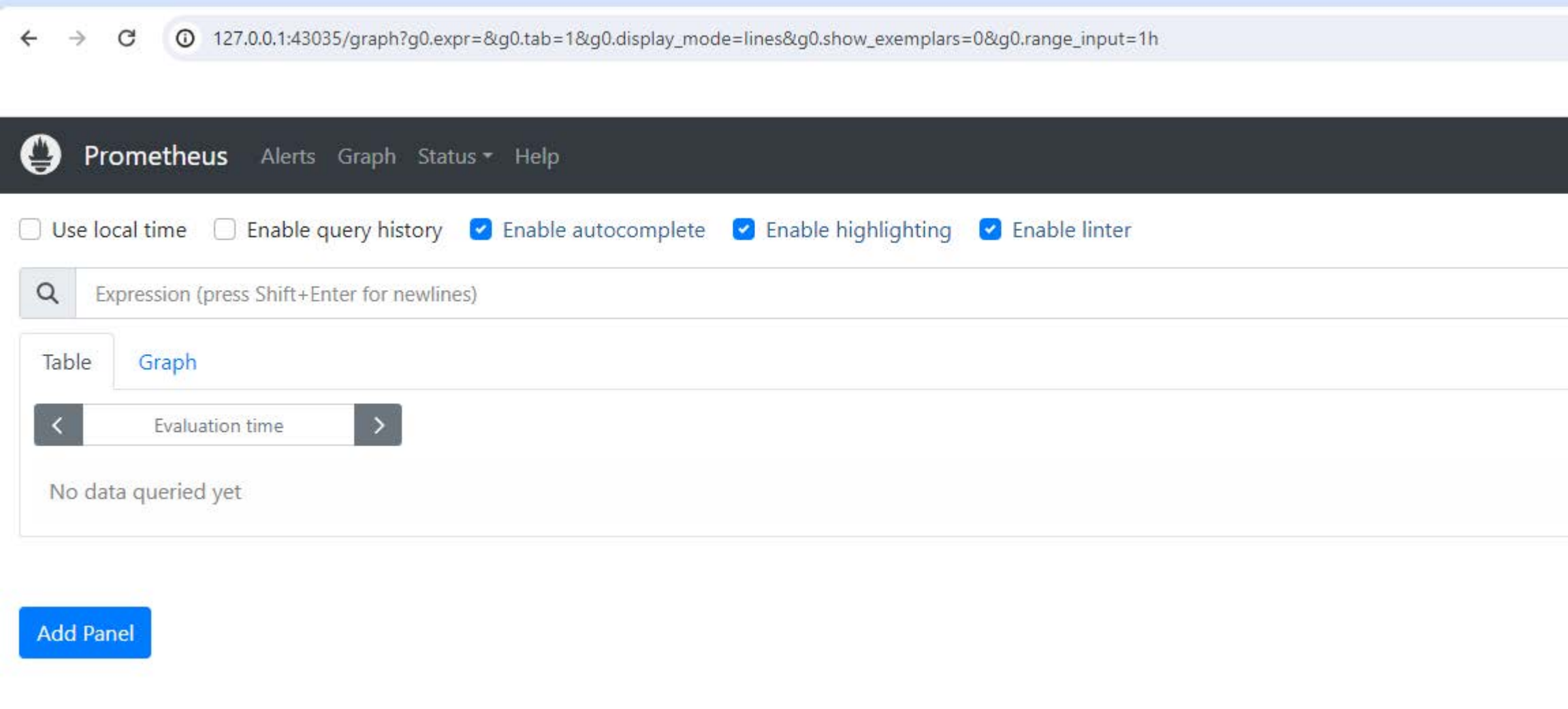
Data sources

View and manage your connected data source connections

Search by name or type

prometheus

Prometheus | http://192.168.121.2:32003 | default


127.0.0.1:43035/graph?g0.expr=&g0.tab=1&g0.display_mode=lines&g0.show_exemplars=0&g0.range_input=1h
Prometheus
Alerts
Graph
Status
Help
Use local time
Enable query history
Enable autocomplete
Enable highlighting
Enable linter
Expression (press Shift+Enter for newlines)
Table
Graph
Evaluation time
No data queried yet
Add Panel

127.0.0.1:45357/d/f1d1cf2a-9e83-4ed8-aeb5-94f15d941ebc/prometheus-2-0-overview?orgId=1&refresh=30s

Search or jump to... ctrl+k

Home › Dashboards › Prometheus 2.0 Overview

Add | Last 30 minutes | 30s

job All | instance All | interval 1h | reloads | down

at a glance

Uptime [1h]

100.000

Currently Down

No data to show

Total Series

25030

Memory Chunks

25030

quick numbers

Missed Iterations [1h]

N/A

Skipped Iterations [1h]

N/A

Tardy Scrapes [1h]

0

Reload Failures [1h]

0

Skipped Scrapes [1h]

0

errors

Failures and Errors

up

Upness (stacked)

Storage Memory Chunks

series

Series Count

Series Created / Removed

127.0.0.1:45357/d/f1d1cf2a-9e83-4ed8-aeb5-94f15d941ebc/prometheus-2-0-overview?orgId=1&refresh=30s

Search or jump to... ctrl+k

Home › Dashboards › Prometheus 2.0 Overview

Add · Last 30 minutes · 30s

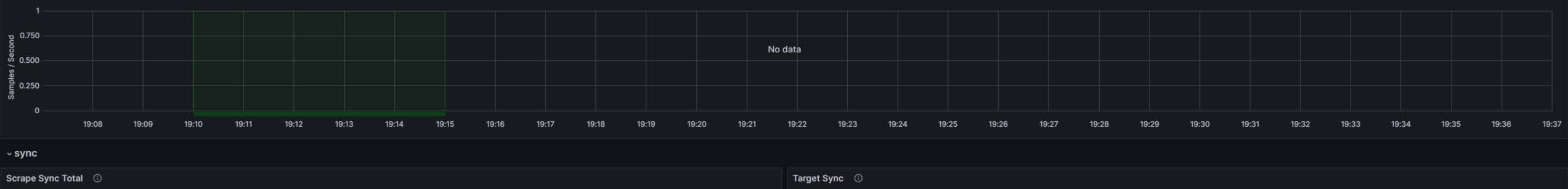
series

Series Count

Series Created / Removed

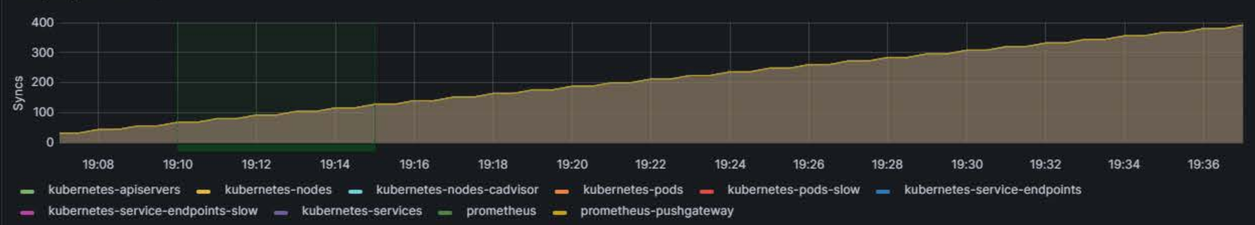
appended samples

Appended Samples per Second

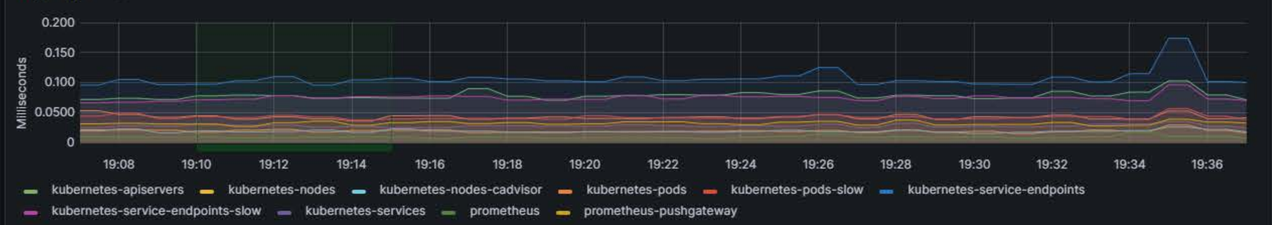


sync

Scrape Sync Total



Target Sync



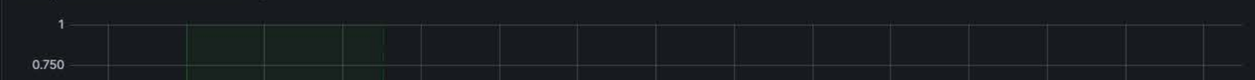
scrapes

Scrape Duration

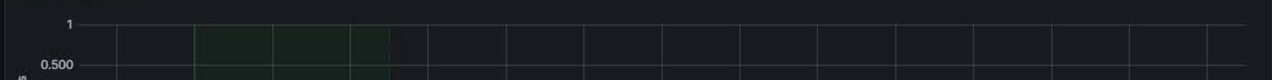
Rejected Scrapes

durations

Average Rule Evaluation Duration



HTTP Request Duration



notifications

Notifications Sent

config

Minutes Since Successful Config Reload

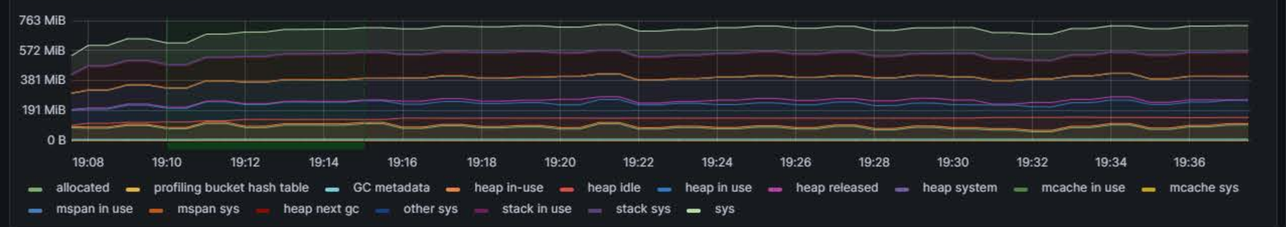
Successful Config Reload

garbage collection

GC Rate / 2m

Broken, ignore

Go Memory Usage (FIXME)



Scrape Duration

Target Scrapes / 5m