

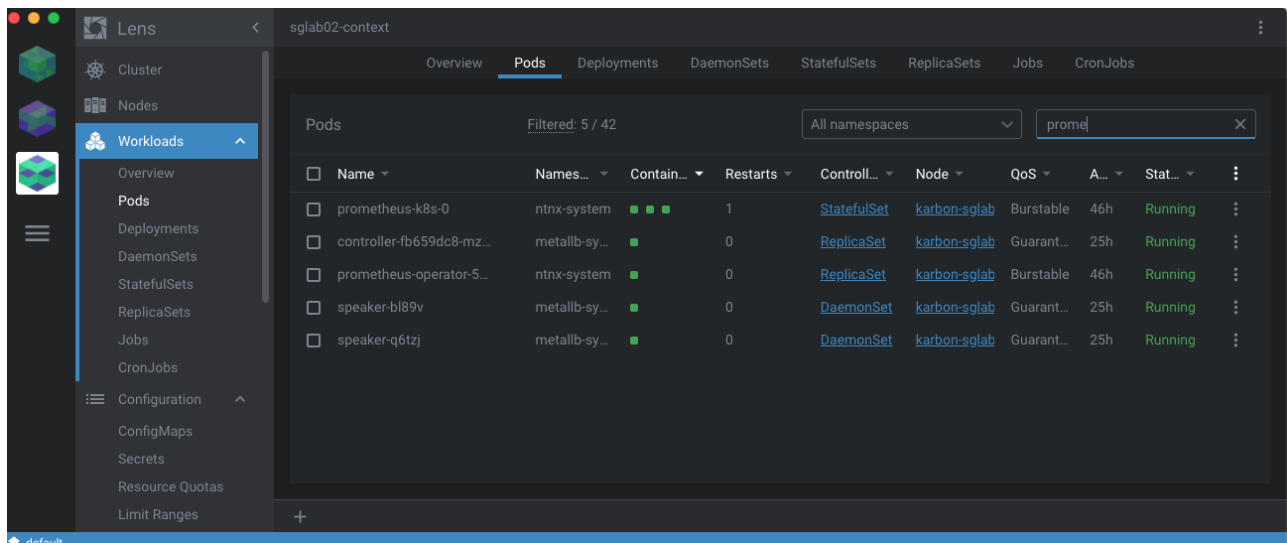
Prometheus & Grafanaによる監視ダッシュボードの作成

1. Prometheus

Karbonクラスタ作成時に自動的にPrometheusをインストールしました。PersistentVolumeはNutanix Volumeを利用しています。

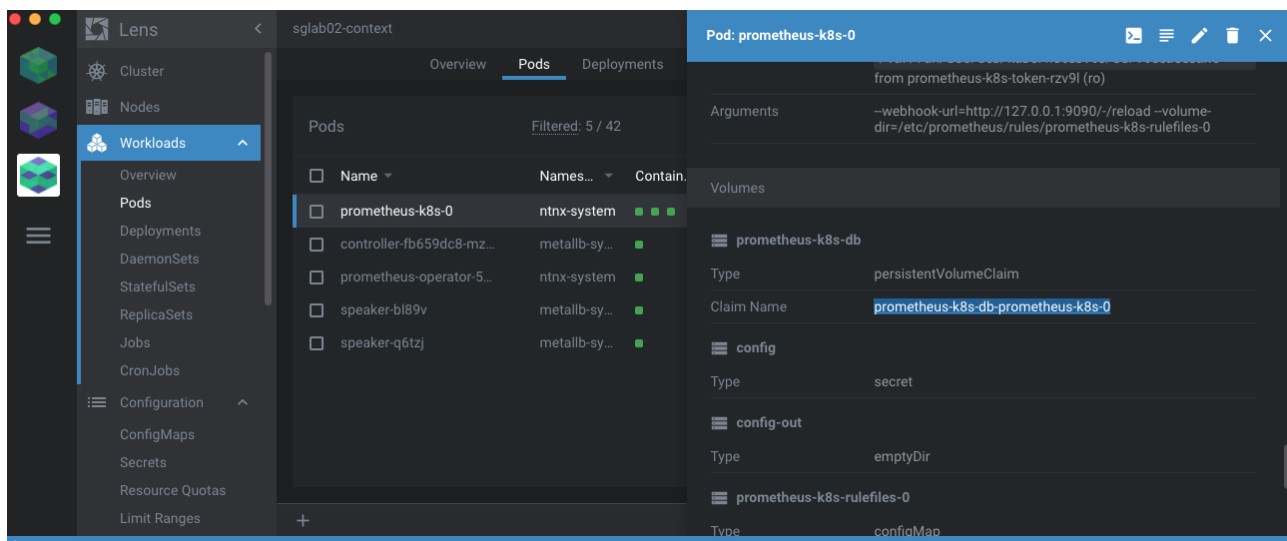
確認：

Lens > Workloads > Pods, 「All Namespaces」を選択します



prometheus-k8s-0 を選択

Volumesの配下「persistentVolume Claim」を選択

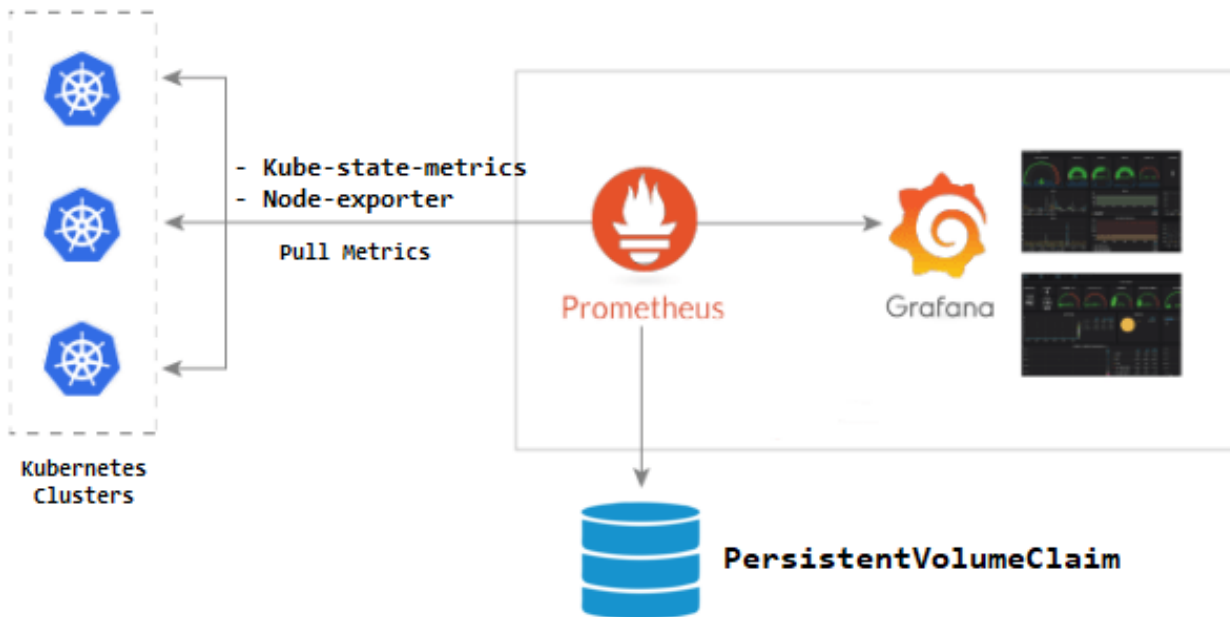


kubectlで確認

NAME	STATUS	VOLUME	CAPACITY	ACCESS MODES	STORAGECLASS	AGE
elasticsearch-logging-data-elasticsearch-logging-0	Bound	pvc-afd98827-e95b-4065-9706-7597659153d1	32Gi	RWO	default-storageclass	46h
prometheus-k8s-db-prometheus-k8s-0	Bound	pvc-7762a445-d9c1-43a2-ac51-1c8a25c50b9c	30Gi	RWO	default-storageclass	46h

2. Grafana

構成：



ingress作成

```
apiVersion: networking.k8s.io/v1
kind: Ingress
metadata:
  name: ingress-grafana
  namespace: monitoring
  annotations:
    kubernetes.io/ingress.class: "nginx"
spec:
  rules:
  - host: "grafana.local"
    http:
      paths:
      - path: /
        pathType: Prefix
        backend:
          service:
            name: grafana
            port:
              number: 3000
```

ホスト名： grafana.localを作業PCのhostsファイルに追記

```
#Mac:
sudo echo "<<ingress-nginx-controllerのEXTERNAL-IP>> grafana.local >>
/etc/hosts"

# Windows:
Add-Content -Path C:\Windows\System32\drivers\etc\hosts -Value "<EXTERNAL-
```

```
IP>`grafana.local" -Force  
cat C:\Windows\System32\drivers\etc\hosts
```

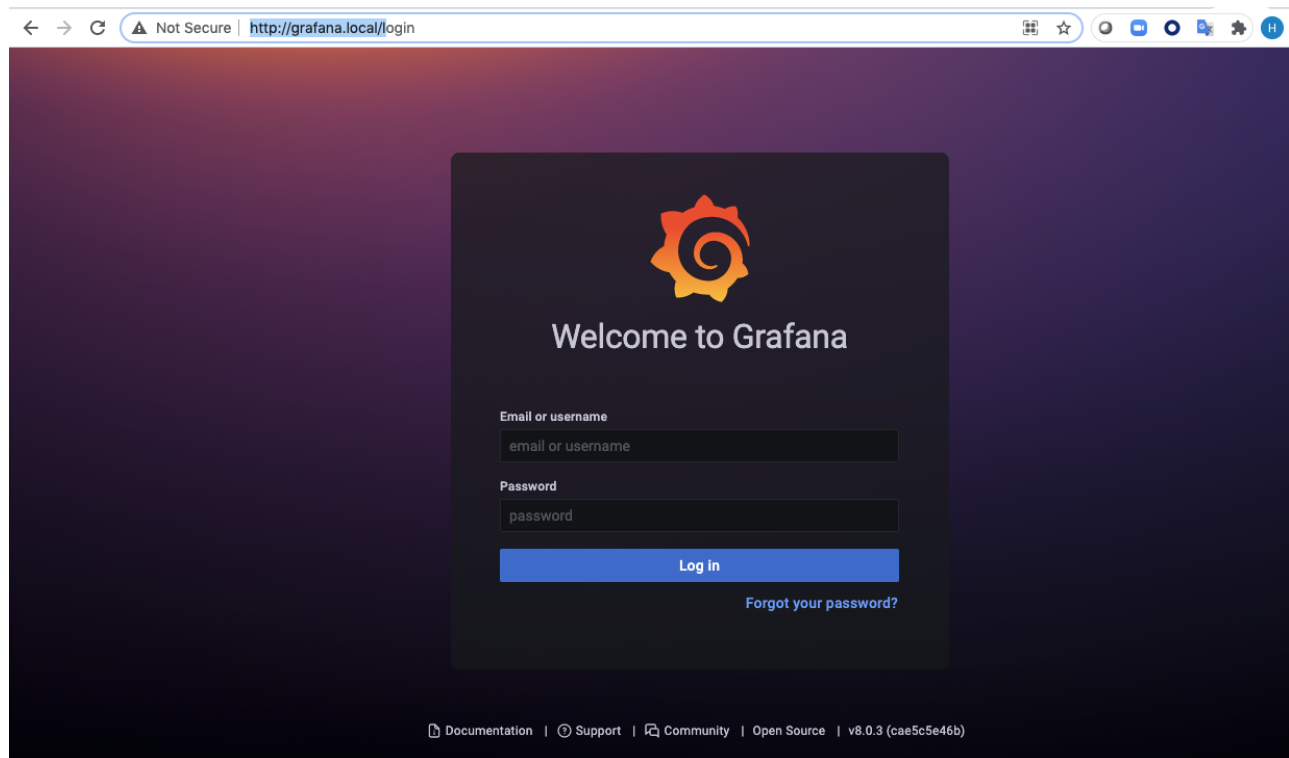
Deploy

```
kubectl -f grafana-deployment.yaml  
kubectl -f ingress-grafana.yaml
```

動作確認

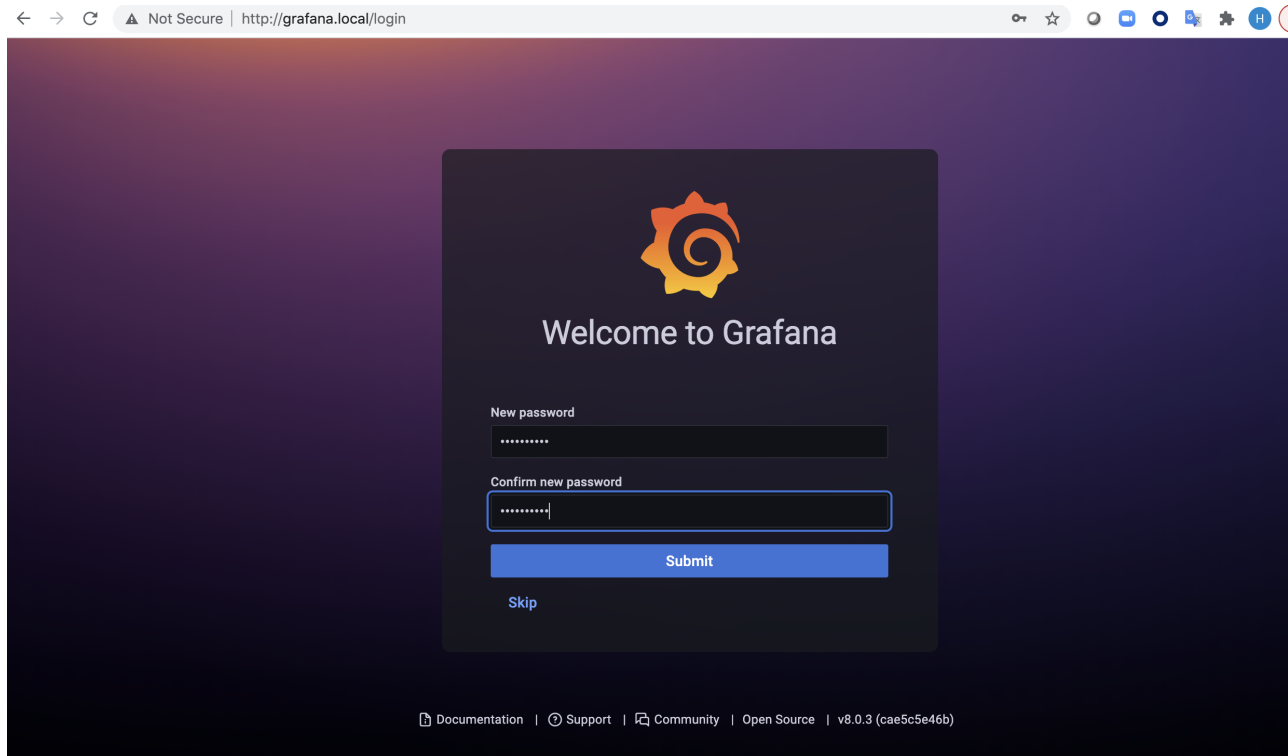
ブラウザで<http://grafana.local>にアクセス

以下の画面が表示されます。

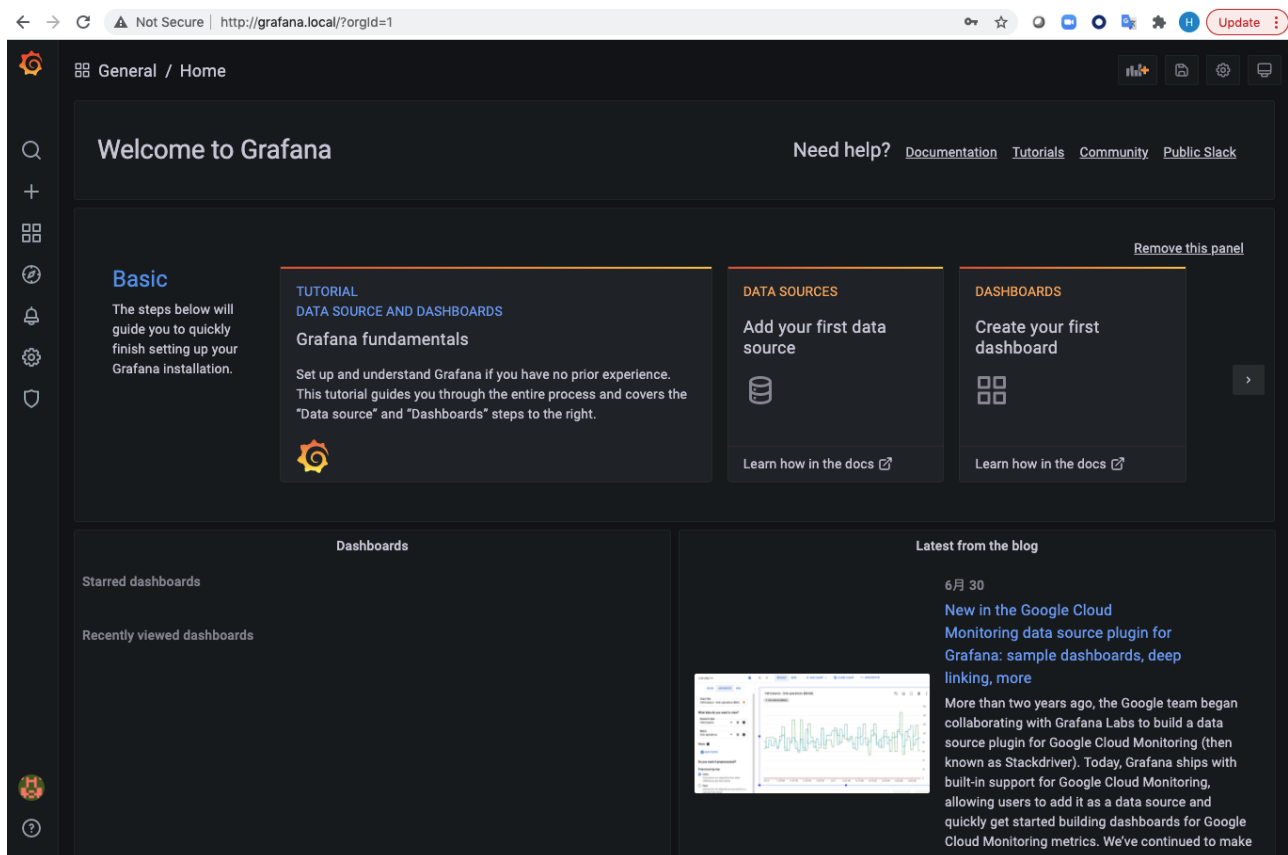


初回ログイン：

- Username - admin
- Password - admin



初期表示画面：



Datasourceを設定

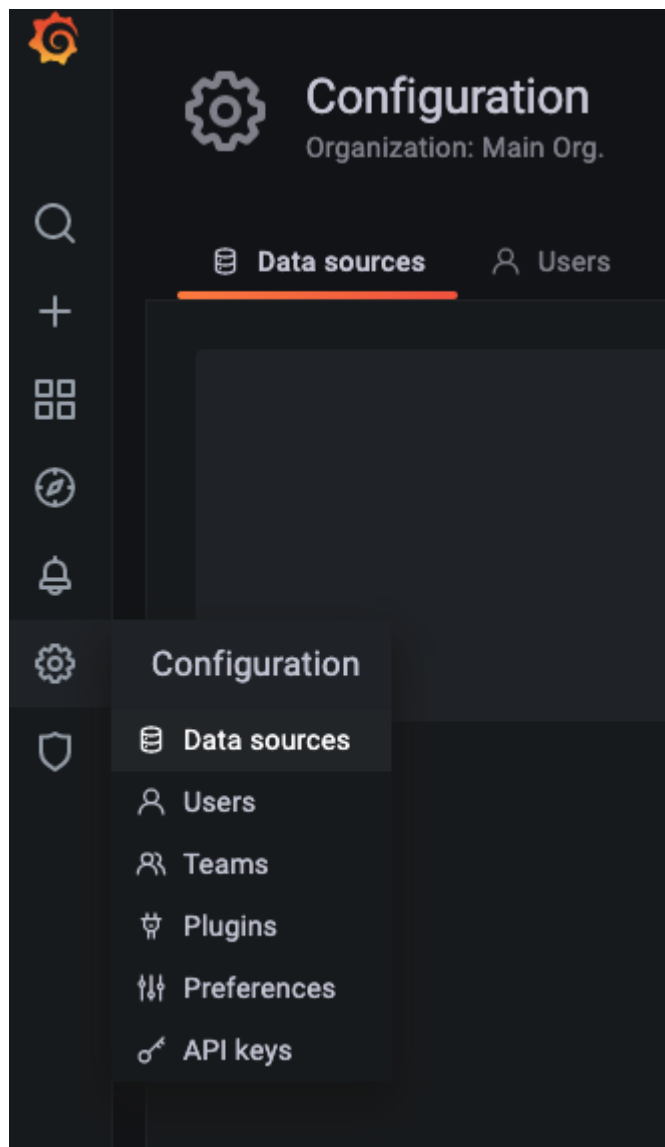
1. Prometheus-operatedのEndpointを取得

```
kubectl get ep -n ntnx-system | grep prometheus-operated
```

例：

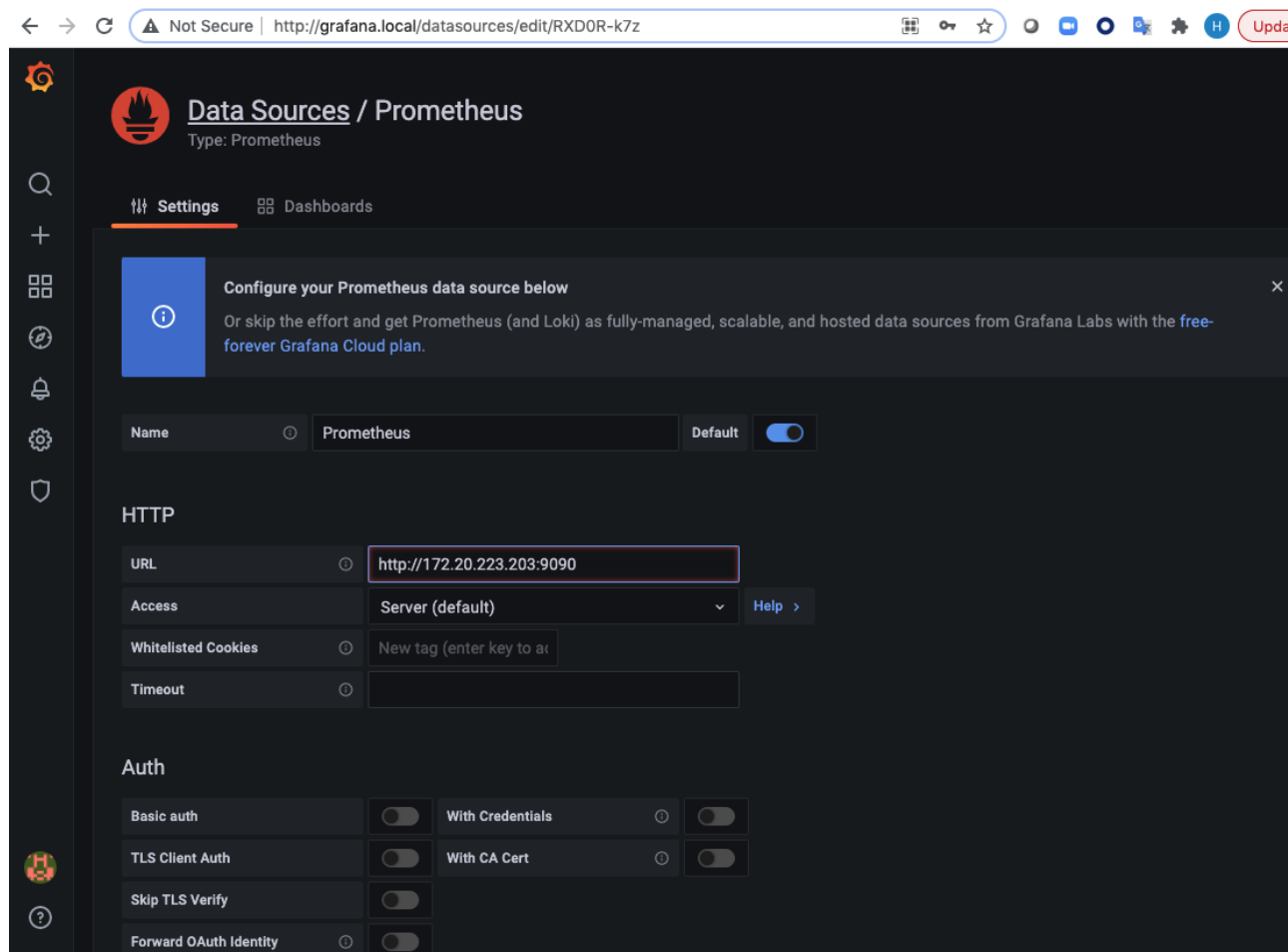
```
prometheus-operated          172.20.223.203:9090
```

2. Grafana画面で,左側のギアアイコンを選択し、「Configuration」配下の「Data source」を選択

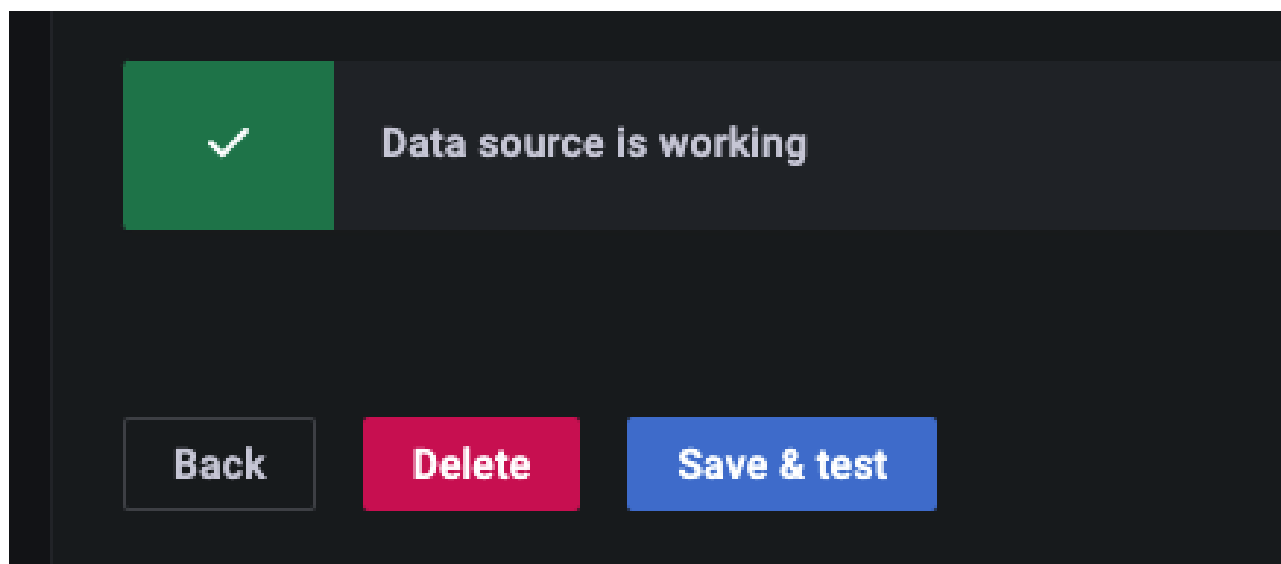


3. Prometheusを選択し、URLにPrometheus-operatedのEndpointを設定

例：http://172.20.223.203:9090

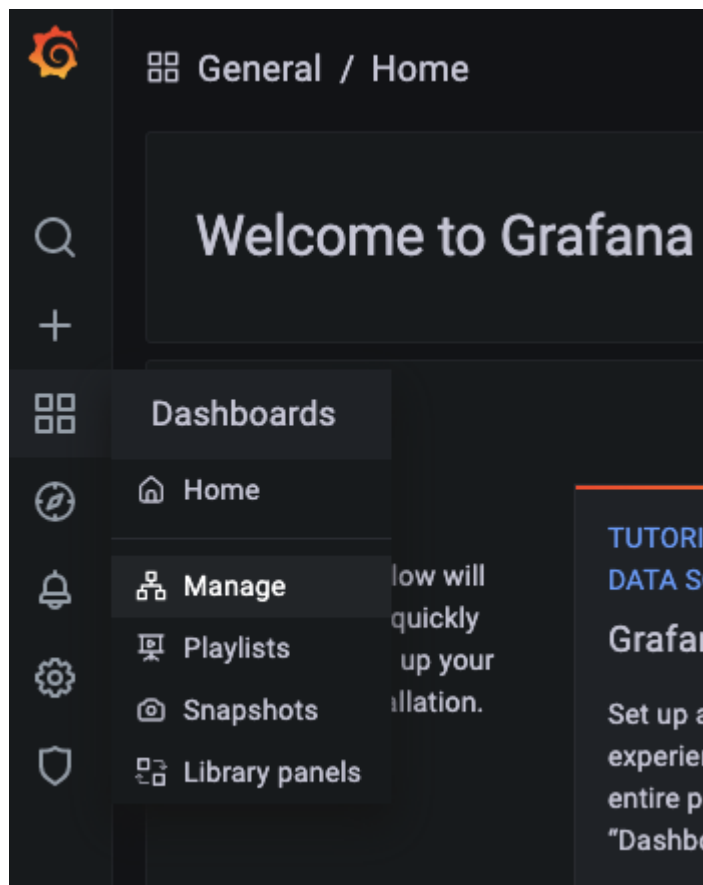


4. Save & Test をクリック



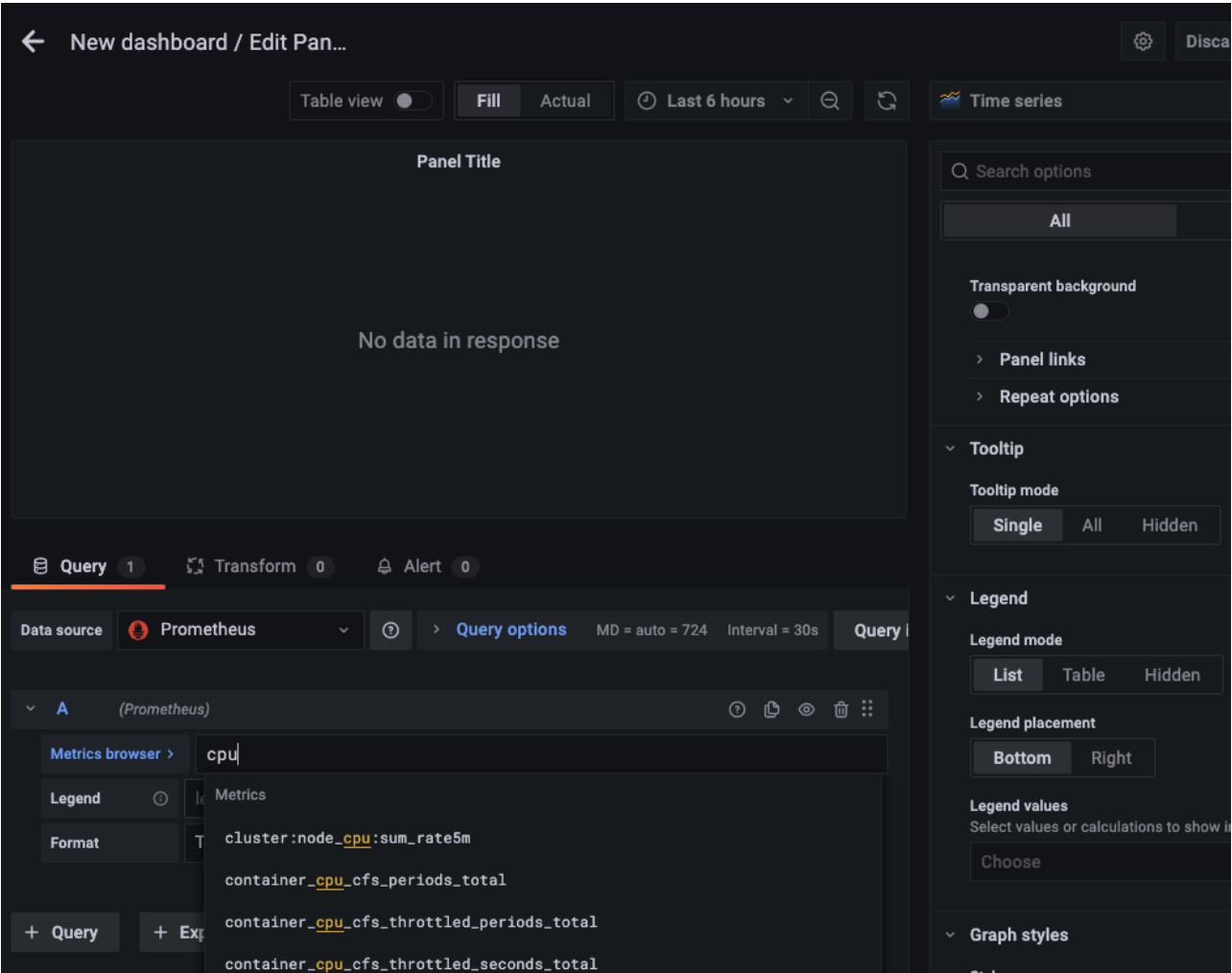
ダッシュボード作成

1. Grafana画面からDashboard > Manageを選択

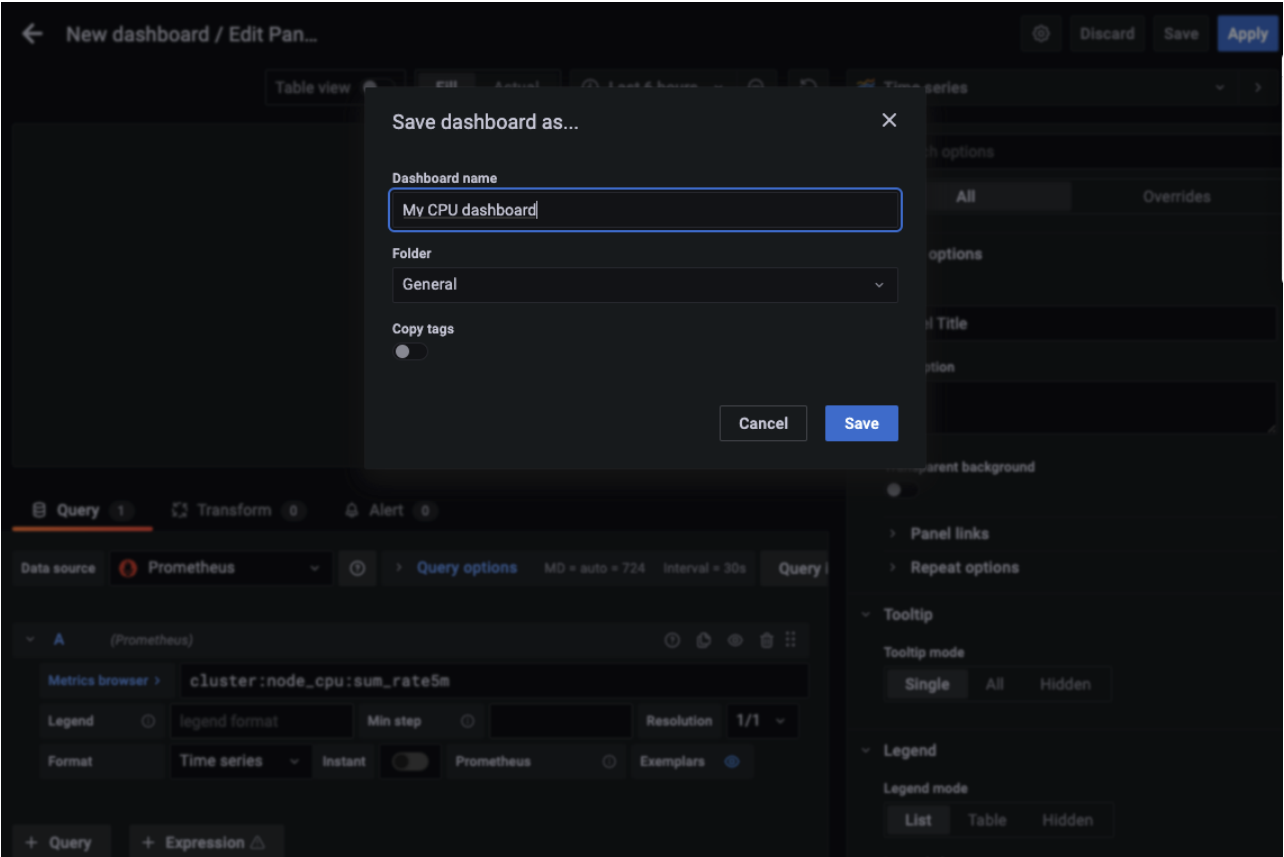


2. New Dashboard > + Add an empty panel をクリック

metricsにcpuで検索し、cluster:node_cpu:sum_rate5m を選択



保存



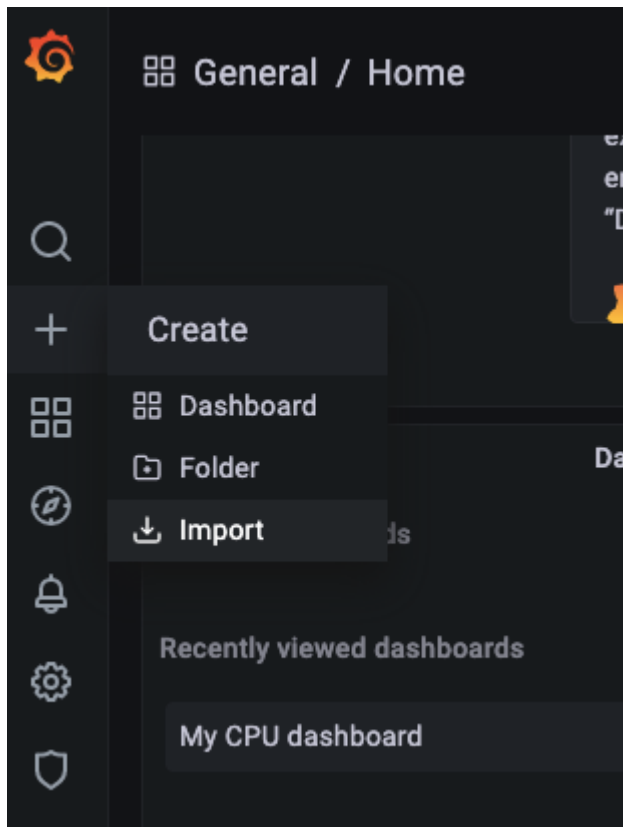
グラフ表示



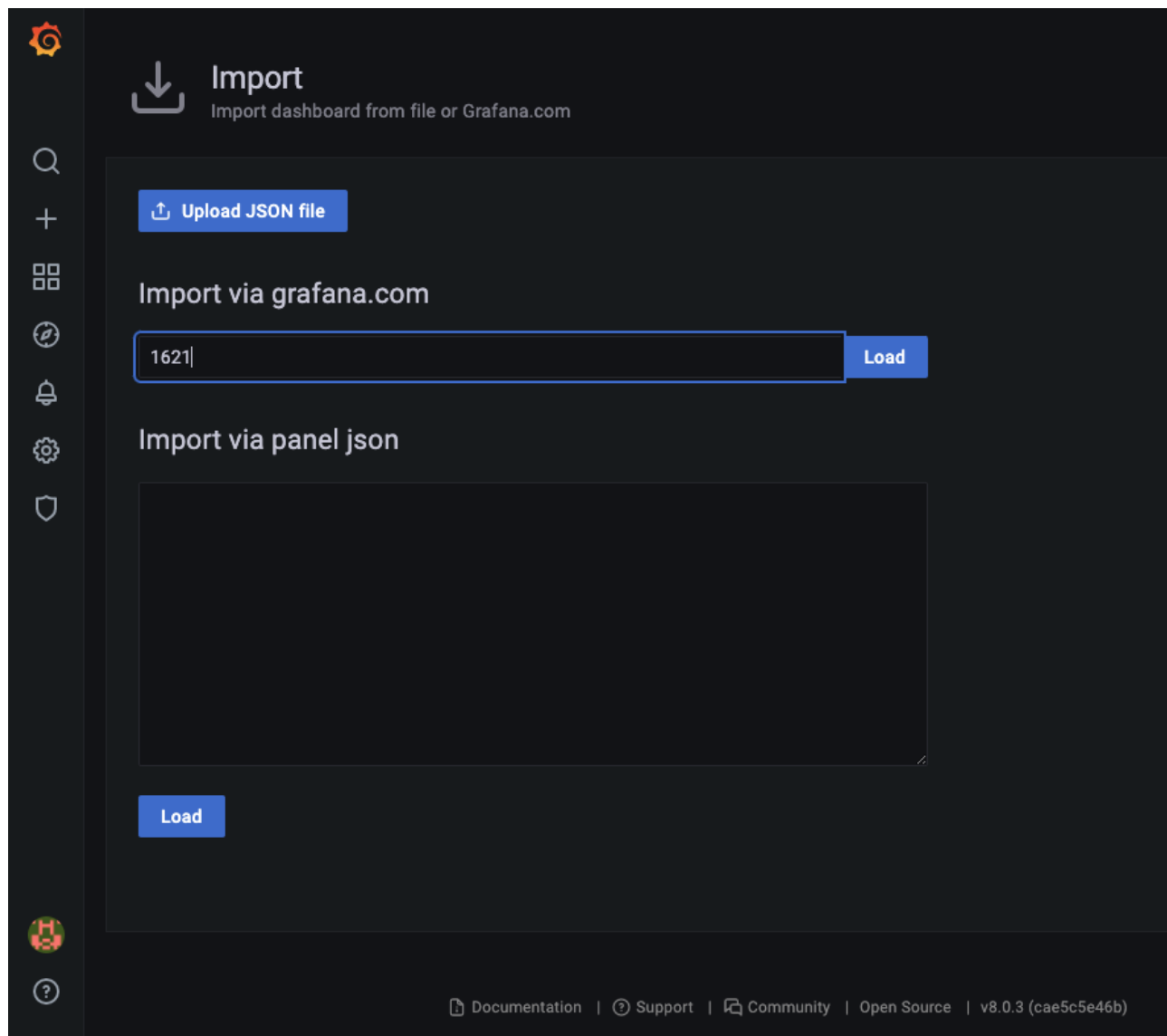
The screenshot shows the Grafana home page titled "General / Home". It features a "Welcome to Grafana" message and a "Need help?" section with links to "Documentation", "Tutorials", "Community", and "Public Slack". Below this, there are three tutorial cards: "Basic" (The steps below will guide you to quickly finish setting up your Grafana installation.), "TUTORIAL DATA SOURCE AND DASHBOARDS Grafana fundamentals" (Set up and understand Grafana if you have no prior experience. This tutorial guides you through the entire process and covers the "Data source" and "Dashboards" steps to the right.), and "COMPLETE Add your first data source" (Learn how in the docs). To the right of the "COMPLETE" cards is a "Remove this panel" link. Below the tutorials, there is a "Dashboards" section with "Starred dashboards" and "Recently viewed dashboards". The "Recently viewed dashboards" list includes "My CPU dashboard". To the right of the "Dashboards" section is a "Latest from the blog" section showing a preview of a blog post titled "VM Instance - Disk operations [MEAN]".

ダッシュボードのインポート

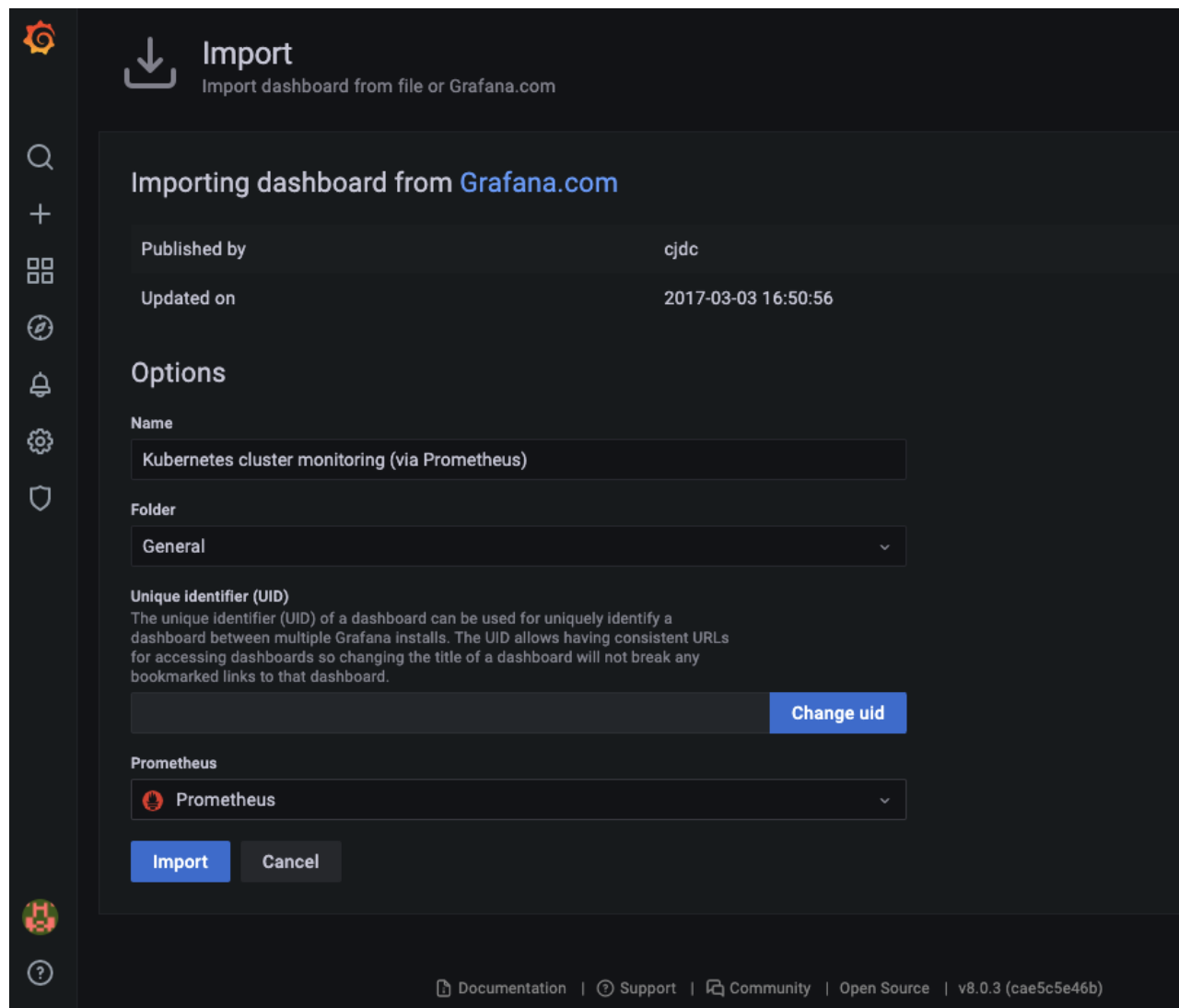
1. Dashboards > Manage を選択してからImportをクリック



2. Import via grafana.comに 1621 を指定し、Loadをクリック



3. Prometheusの配下Prometheus data sourceを選択し、Importをクリック



以下のようなダッシュボードが表示されます。

