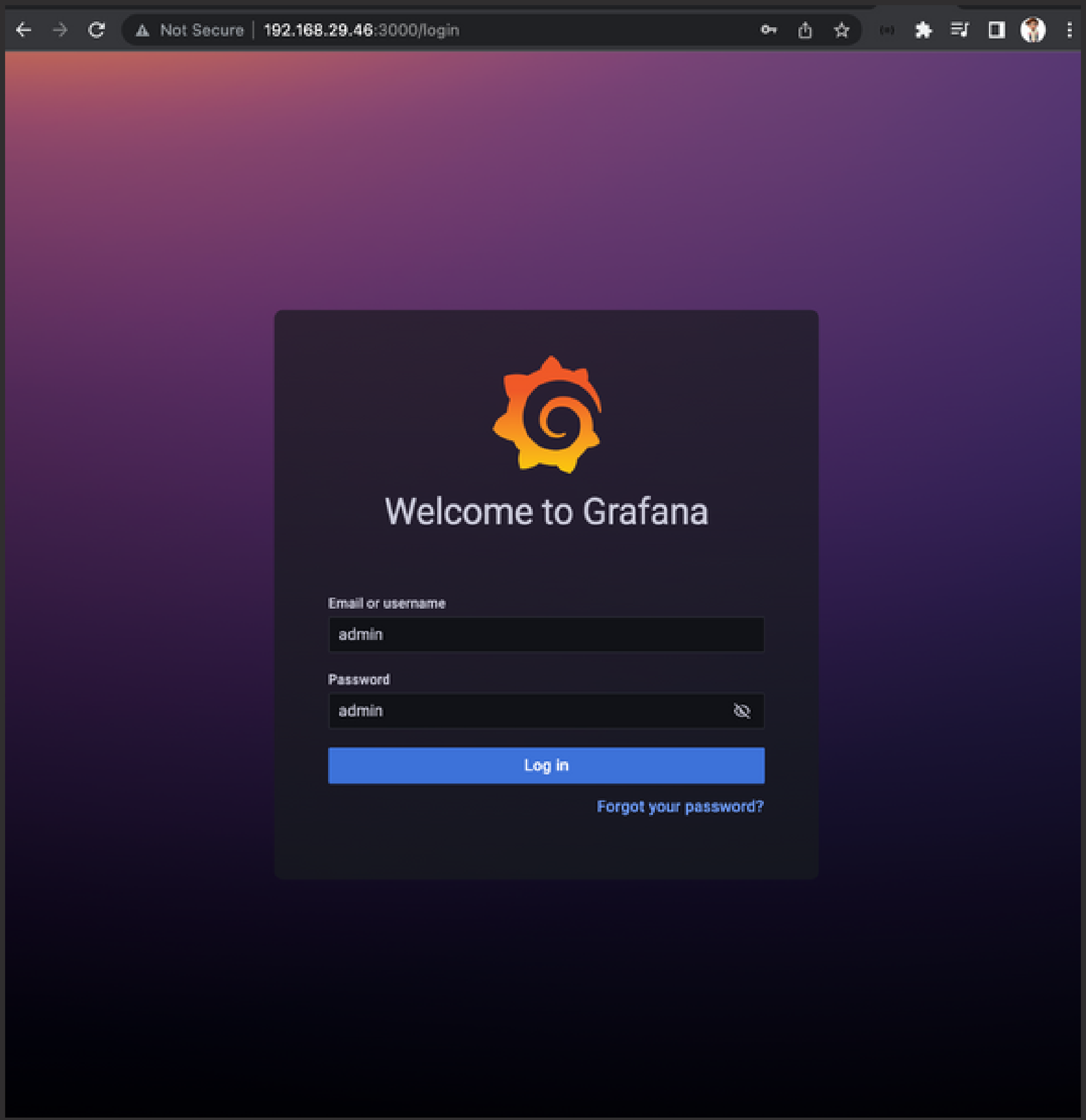
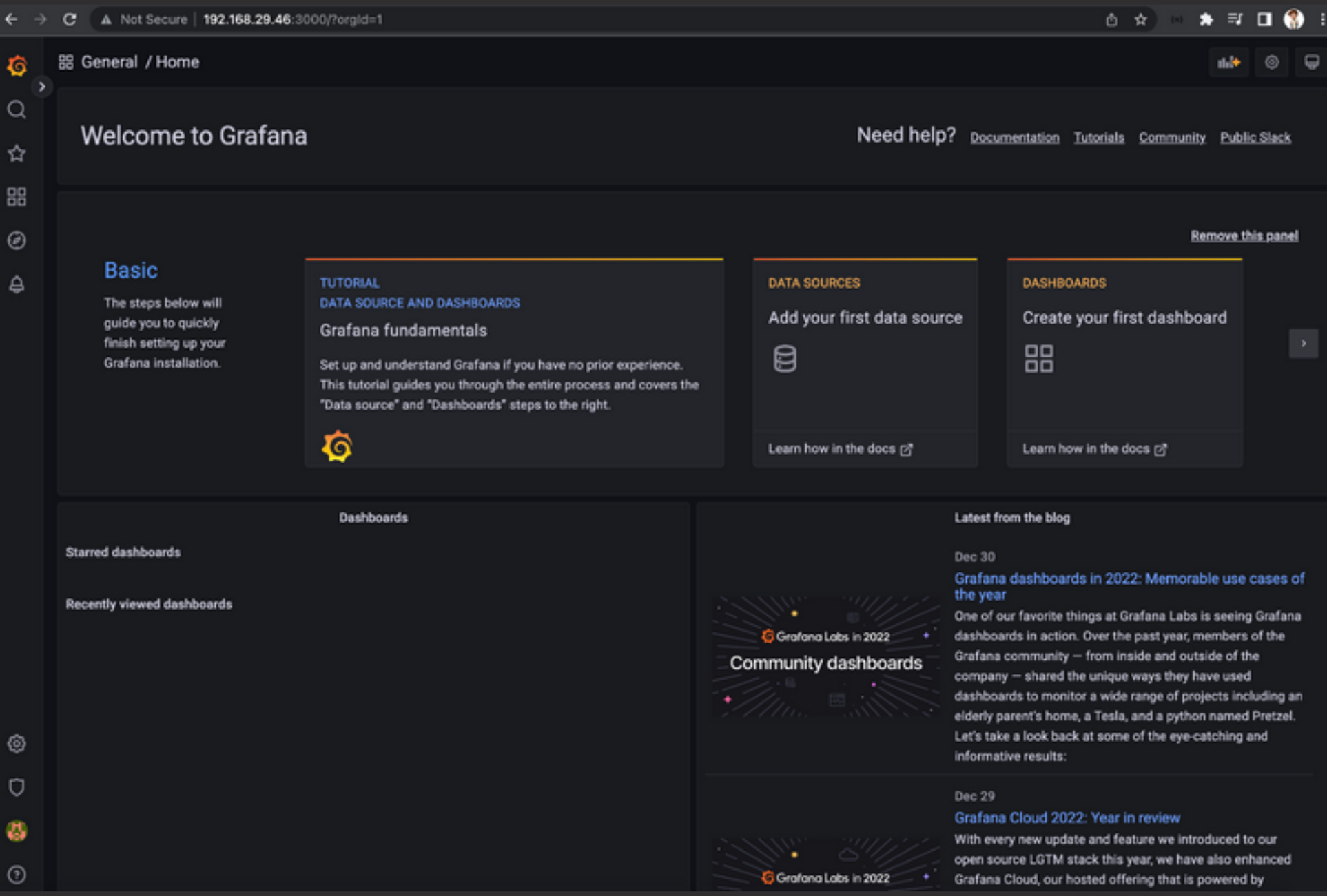
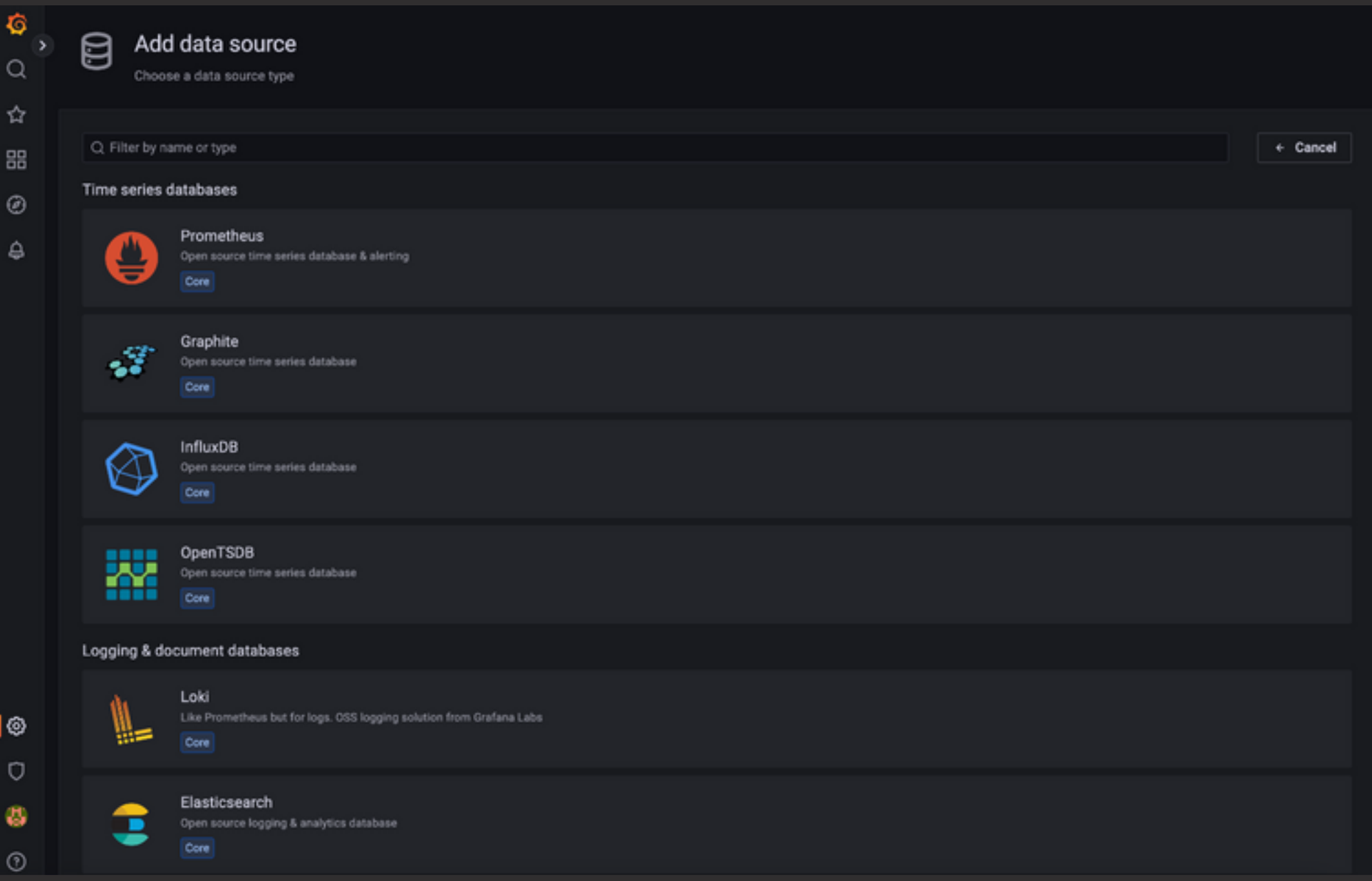
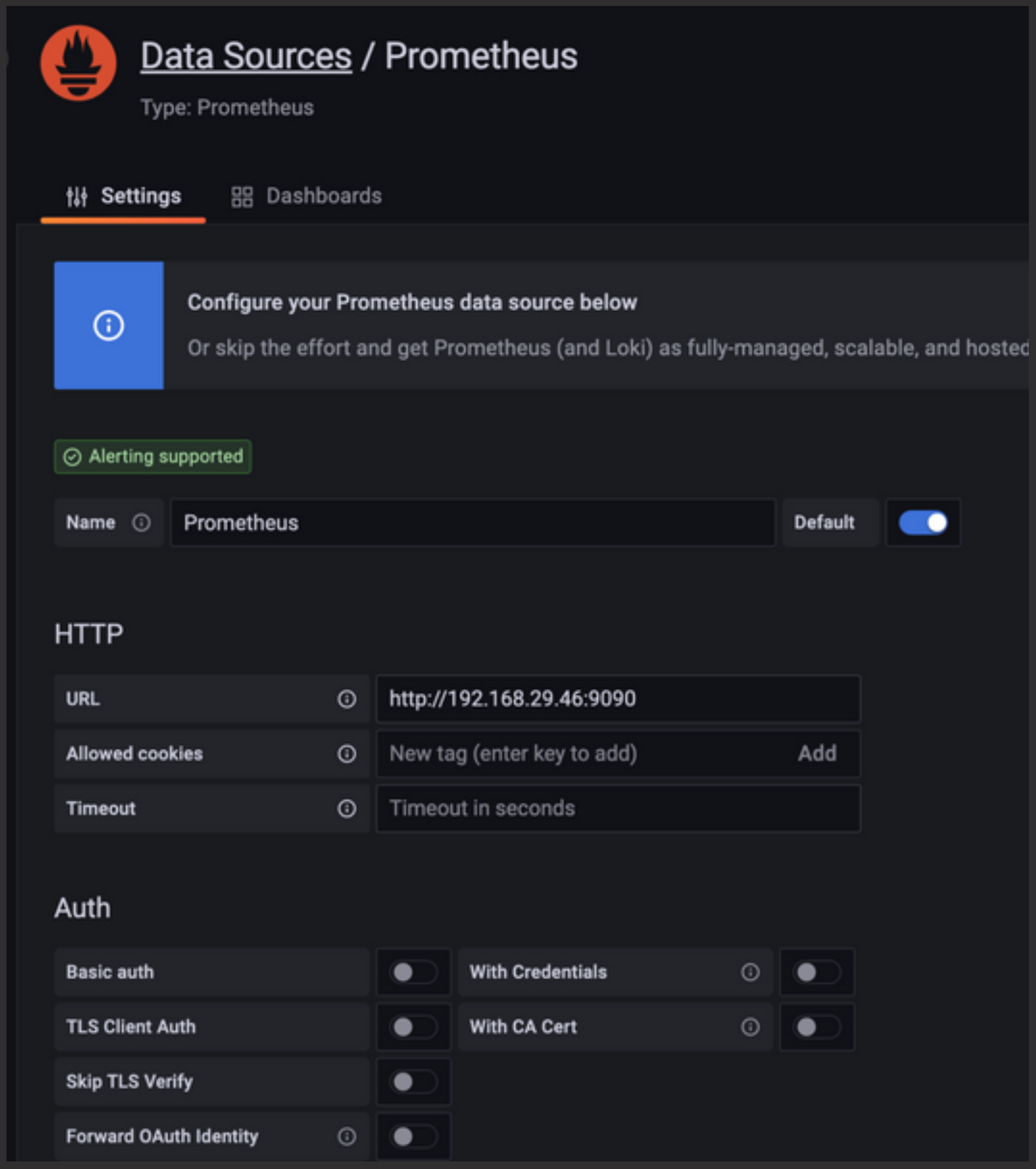
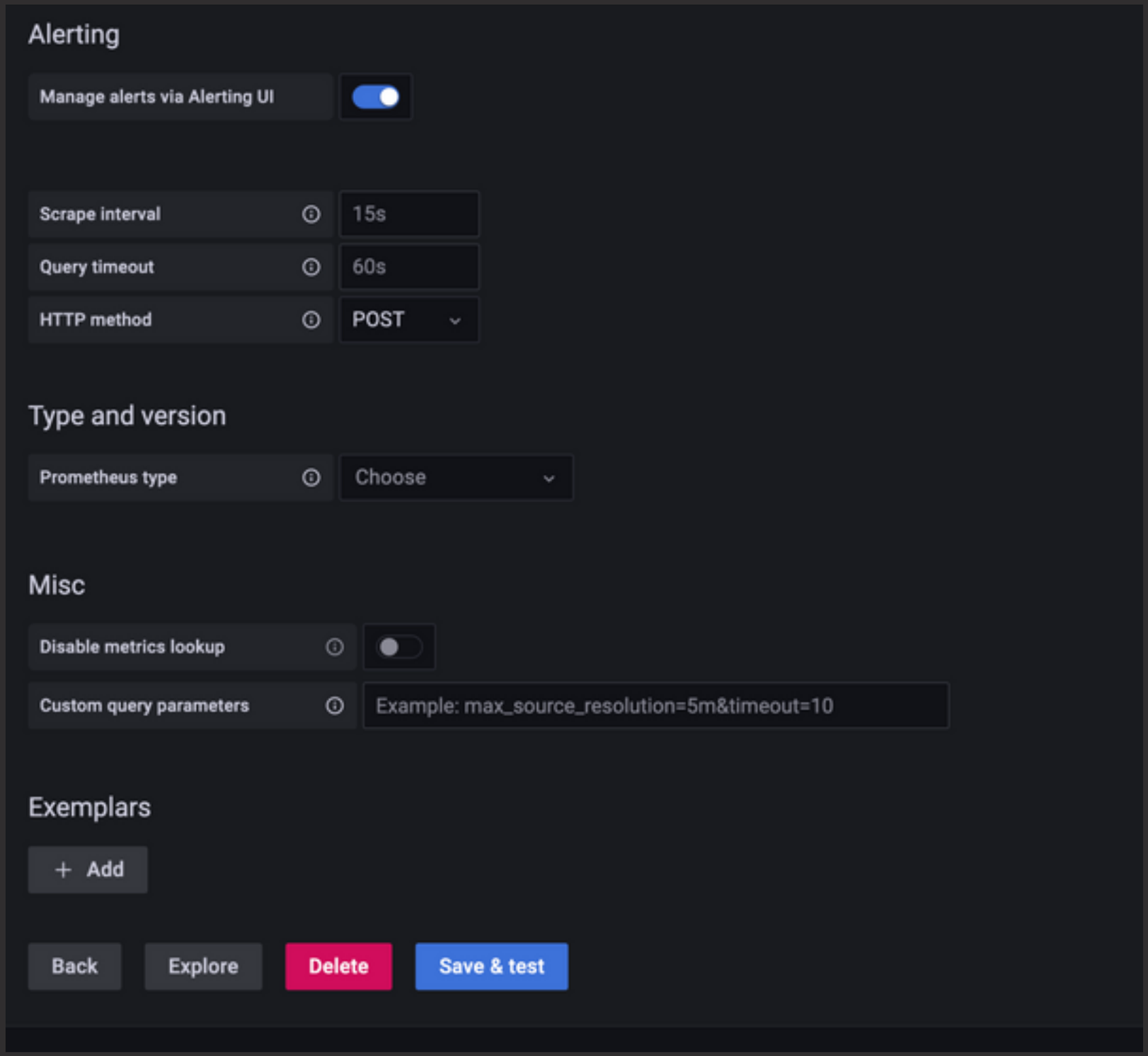

Spring Boot
Prometheus
Grafana

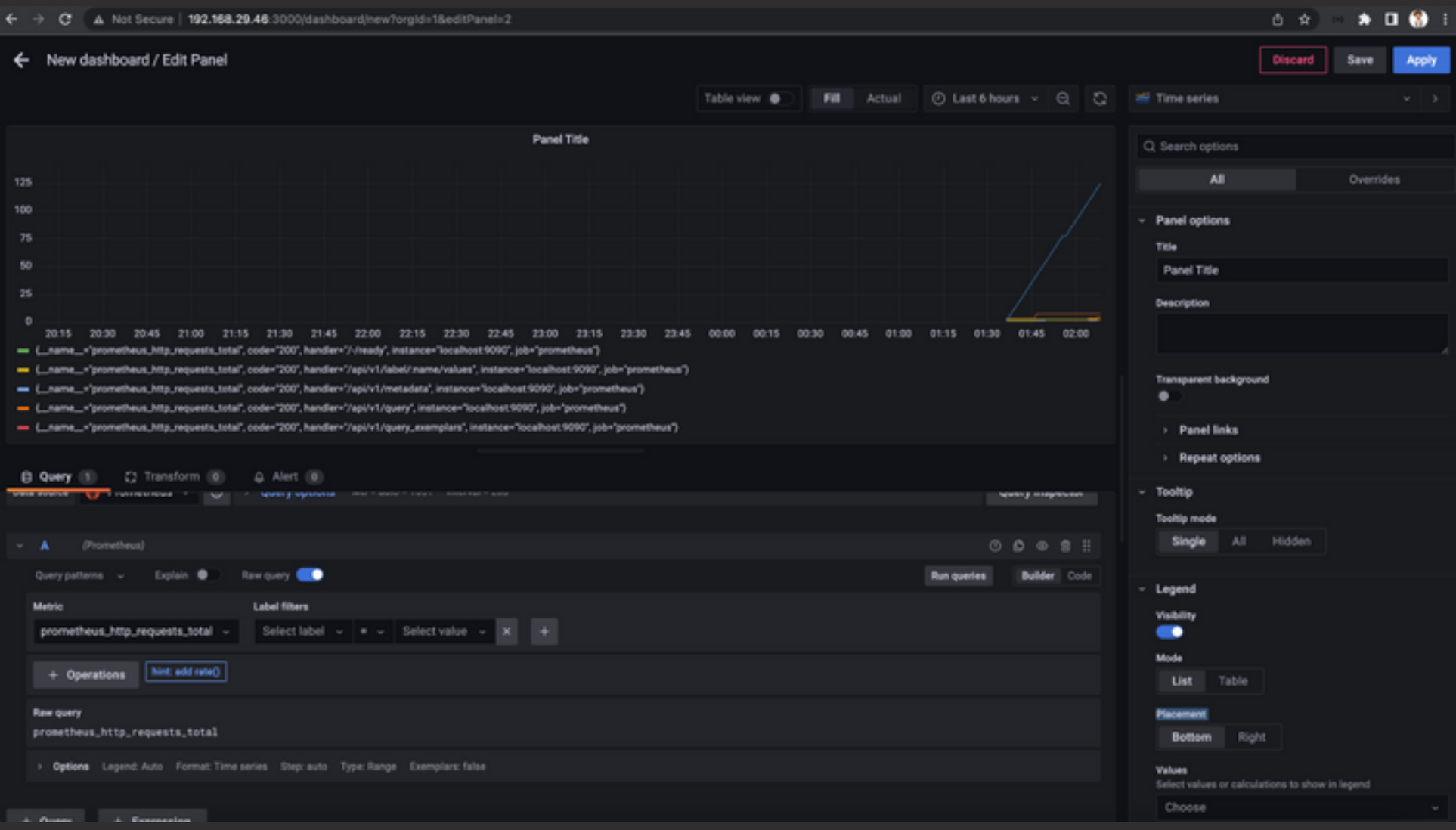

Not Secure | 192.168.29.46:3000/login
Welcome to Grafana
Email or username
admin
Password
admin
Log in
Forgot your password?

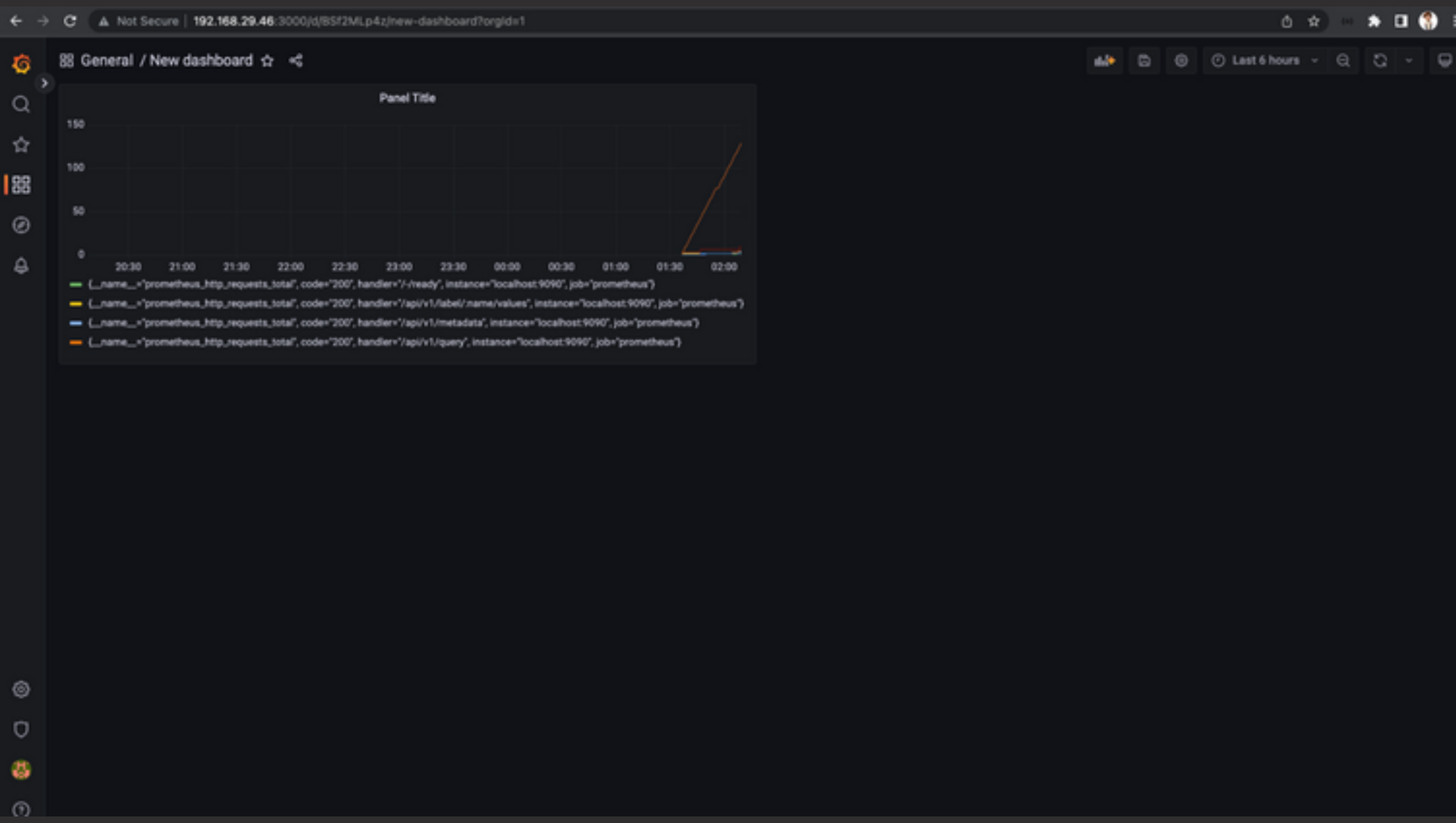

Not Secure | 192.168.29.46:3000/?orgId=1
General / Home
Welcome to Grafana
Need help? Documentation Tutorials Community Public Slack
Remove this panel
Basic
The steps below will guide you to quickly finish setting up your Grafana installation.
TUTORIAL
DATA SOURCE AND DASHBOARDS
Grafana fundamentals
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.
DATA SOURCES
Add your first data source
Learn how in the docs
DASHBOARDS
Create your first dashboard
Learn how in the docs
Dashboards
Starred dashboards
Recently viewed dashboards
Latest from the blog
Grafana Labs in 2022
Community dashboards
Dec 30
Grafana dashboards in 2022: Memorable use cases of the year
One of our favorite things at Grafana Labs is seeing Grafana dashboards in action. Over the past year, members of the Grafana community — from inside and outside of the company — shared the unique ways they have used dashboards to monitor a wide range of projects including an elderly parent's home, a Tesla, and a python named Pretzel. Let's take a look back at some of the eye-catching and informative results:
Dec 29
Grafana Cloud 2022: Year in review
With every new update and feature we introduced to our open source LGTM stack this year, we have also enhanced Grafana Cloud, our hosted offering that is powered by
Grafana Labs in 2022

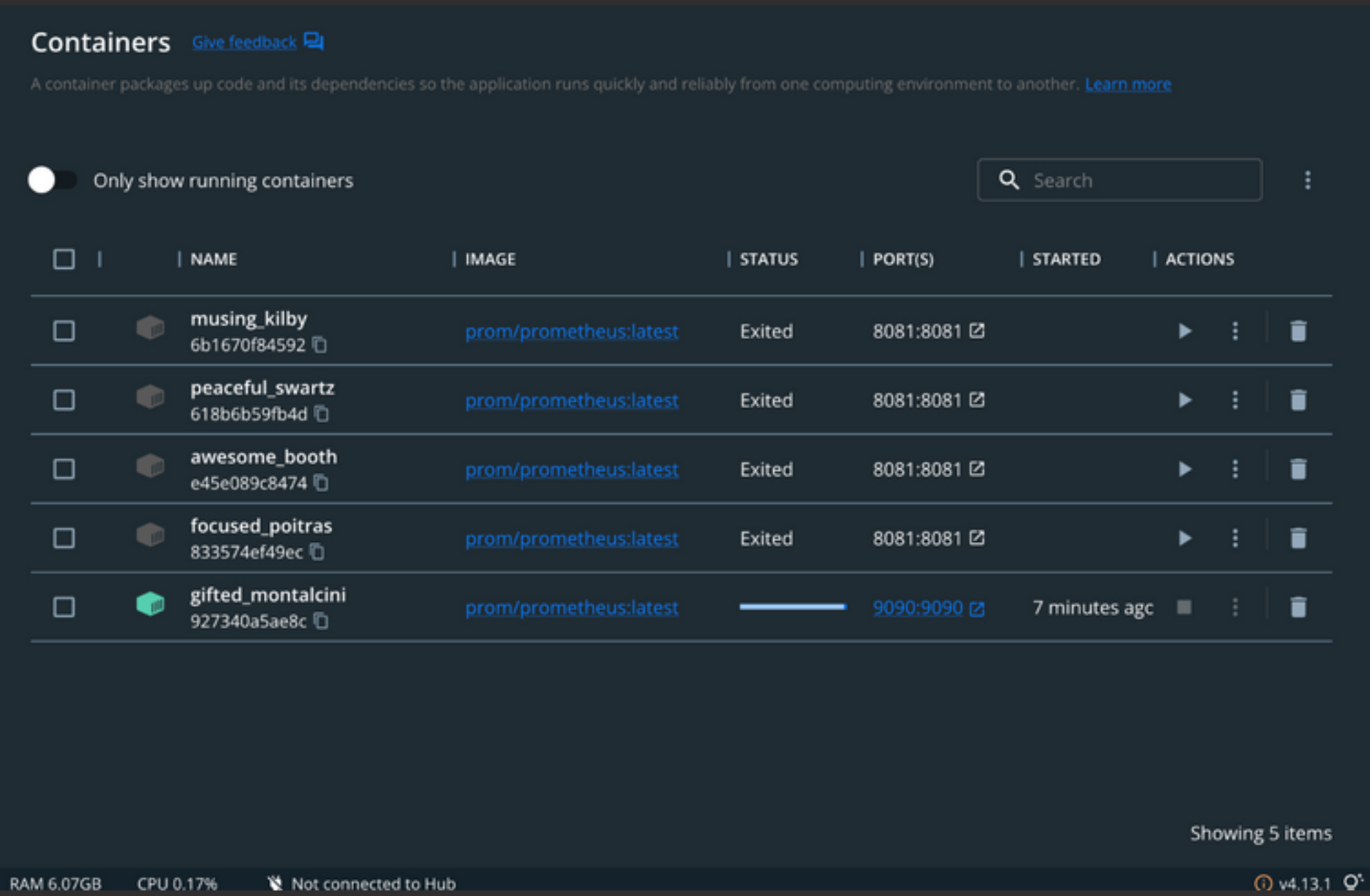

Add data source
Choose a data source type
Filter by name or type
Cancel
Time series databases
Prometheus
Open source time series database & alerting
Core
Graphite
Open source time series database
Core
InfluxDB
Open source time series database
Core
OpenTSDB
Open source time series database
Core
Logging & document databases
Loki
Like Prometheus but for logs. OSS logging solution from Grafana Labs
Core
Elasticsearch
Open source logging & analytics database
Core


Data Sources / Prometheus
Type: Prometheus
Settings
Dashboards
Configure your Prometheus data source below
Or skip the effort and get Prometheus (and Loki) as fully-managed, scalable, and hosted
Alerting supported
Name
Prometheus
Default
HTTP
URL
http://192.168.29.46:9090
Allowed cookies
New tag (enter key to add)
Add
Timeout
Timeout in seconds
Auth
Basic auth
With Credentials
TLS Client Auth
With CA Cert
Skip TLS Verify
Forward OAuth Identity


Alerting
Manage alerts via Alerting UI
Scrape interval
15s
Query timeout
60s
HTTP method
POST
Type and version
Prometheus type
Choose
Misc
Disable metrics lookup
Custom query parameters
Example: max_source_resolution=5m&timeout=10
Exemplars
+ Add
Back
Explore
Delete
Save & test


Not Secure | 192.168.29.46:3000/dashboard/new?orgId=1&editPanel=2
New dashboard / Edit Panel
Discard
Save
Apply
Table view
Fill
Actual
Last 6 hours
Time series
Panel Title
125
100
75
50
25
0
20:15 20:30 20:45 21:00 21:15 21:30 21:45 22:00 22:15 22:30 22:45 23:00 23:15 23:30 23:45 00:00 00:15 00:30 00:45 01:00 01:15 01:30 01:45 02:00
{__name__="prometheus_http_requests_total", code="200", handler="/-/ready", instance="localhost:9090", job="prometheus"}
{__name__="prometheus_http_requests_total", code="200", handler="/api/v1/label/:name/values", instance="localhost:9090", job="prometheus"}
{__name__="prometheus_http_requests_total", code="200", handler="/api/v1/metadata", instance="localhost:9090", job="prometheus"}
{__name__="prometheus_http_requests_total", code="200", handler="/api/v1/query", instance="localhost:9090", job="prometheus"}
{__name__="prometheus_http_requests_total", code="200", handler="/api/v1/query_exemplars", instance="localhost:9090", job="prometheus"}
Query 1
Transform 0
Alert 0
A (Prometheus)
Query patterns
Explain
Raw query
Run queries
Builder
Code
Metric
prometheus_http_requests_total
Label filters
Select label
Select value
Operations
hint: add rate()
Raw query
prometheus_http_requests_total
Options Legend: Auto Format: Time series Step: auto Type: Range Exemplars: false
Search options
All
Overrides
Panel options
Title
Panel Title
Description
Transparent background
Panel links
Repeat options
Tooltip
Tooltip mode
Single
All
Hidden
Legend
Visibility
Mode
List
Table
Placement
Bottom
Right
Values
Select values or calculations to show in legend
Choose


Not Secure | 192.168.29.46:3000/d/BSf2MLp4z/new-dashboard?orgId=1
General / New dashboard
Last 6 hours
Panel Title
150
100
50
0
20:30
21:00
21:30
22:00
22:30
23:00
23:30
00:00
00:30
01:00
01:30
02:00
{__name__="prometheus_http_requests_total", code="200", handler="/-/ready", instance="localhost:9090", job="prometheus"}
{__name__="prometheus_http_requests_total", code="200", handler="/api/v1/label/:name/values", instance="localhost:9090", job="prometheus"}
{__name__="prometheus_http_requests_total", code="200", handler="/api/v1/metadata", instance="localhost:9090", job="prometheus"}
{__name__="prometheus_http_requests_total", code="200", handler="/api/v1/query", instance="localhost:9090", job="prometheus"}


Containers
Give feedback
A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. Learn more
Only show running containers
Search
NAME
IMAGE
STATUS
PORT(S)
STARTED
ACTIONS
musing_kilby
6b1670f84592
prom/prometheus:latest
Exited
8081:8081
peaceful_swartz
618b6b59fb4d
prom/prometheus:latest
Exited
8081:8081
awesome_booth
e45e089c8474
prom/prometheus:latest
Exited
8081:8081
focused_poitras
833574ef49ec
prom/prometheus:latest
Exited
8081:8081
gifted_montalcini
927340a5ae8c
prom/prometheus:latest
9090:9090
7 minutes agc
Showing 5 items
RAM 6.07GB
CPU 0.17%
Not connected to Hub
v4.13.1

application.properties

```
management.endpoints.web.exposure.include=*
management.endpoint.health.show-details=always
```

application.properties

```
management.endpoints.web.exposure.include=*
management.endpoint.health.show-details=always
```

```
open -a Docker
docker pull prom/prometheus
```

```
docker image ls
REPOSITORY        TAG       IMAGE ID       CREATED       SIZE
prom/prometheus   latest    932c2dbe7d3e   10 days ago   231MB
```

```
ifconfig | grep "inet " | grep -Fv 127.0.0.1 | awk '{print $2}'

192.168.29.46
```

```
docker run -d --name=grafana88 -p 3000:3000 grafana/grafana
Unable to find image 'grafana/grafana:latest' locally
latest: Pulling from grafana/grafana
9621f1afde84: Pull complete
db7fbc631880: Pull complete
afb29f8d05c6: Pull complete
2d9c2cfef851: Pull complete
0f9c8679de96: Pull complete
d8d1a816d728: Pull complete
09aac180a7fc: Pull complete
1c5ec5c4e84a: Pull complete
0b0714ac27d7: Pull complete
Digest: sha256:2a73ae33c9f0c51af6eced2ef185d5d3682b4c378c4fdd6941a14e8ea4a3e95b
Status: Downloaded newer image for grafana/grafana:latest
81e3c926a838c78a6e45a05e750e960f261dea0b5bc5de5f081718d4fe5be7e6
```

```
docker ps
CONTAINER ID   IMAGE             COMMAND                  CREATED          STATUS          PORTS
81e3c926a838   grafana/grafana   "/run.sh"                19 minutes ago   Up 19 minutes   0.0.0.0
927340a5ae8c   prom/prometheus   "/bin/prometheus --c…"   41 minutes ago   Up 41 minutes   0.0.0.0

docker stop 81e
81e

docker stop 927
927
```

```
docker run -p 9090:9090 -v
/Users/saiashish/Desktop/sai/projects/PrometheusAndGrafana/src/main/resources/prometheus.yml prom/prometheus

ts=2022-12-30T20:05:54.696Z caller=main.go:512 level=info msg="No time or size retention was set so using the defaul
ts=2022-12-30T20:05:54.696Z caller=main.go:556 level=info msg="Starting Prometheus Server" mode=server version="(ver
ts=2022-12-30T20:05:54.696Z caller=main.go:561 level=info build_context="(go=go1.19.4, platform=linux/amd64, user=ro
ts=2022-12-30T20:05:54.696Z caller=main.go:562 level=info host_details="(Linux 5.15.49-linuxkit #1 SMP Tue Sep 13 07
ts=2022-12-30T20:05:54.696Z caller=main.go:563 level=info fd_limits="(soft=1048576, hard=1048576)"
ts=2022-12-30T20:05:54.696Z caller=main.go:564 level=info vm_limits="(soft=unlimited, hard=unlimited)"
ts=2022-12-30T20:05:54.697Z caller=web.go:559 level=info component=web msg="Start listening for connections" address
ts=2022-12-30T20:05:54.698Z caller=main.go:993 level=info msg="Starting TSDB ..."
ts=2022-12-30T20:05:54.700Z caller=tls_config.go:232 level=info component=web msg="Listening on" address=[::]:9090
ts=2022-12-30T20:05:54.700Z caller=tls_config.go:235 level=info component=web msg="TLS is disabled." http2=false add
ts=2022-12-30T20:05:54.703Z caller=head.go:562 level=info component=tsdb msg="Replaying on-disk memory mappable chun
ts=2022-12-30T20:05:54.703Z caller=head.go:606 level=info component=tsdb msg="On-disk memory mappable chunks replay
ts=2022-12-30T20:05:54.703Z caller=head.go:612 level=info component=tsdb msg="Replaying WAL, this may take a while"
ts=2022-12-30T20:05:54.703Z caller=head.go:683 level=info component=tsdb msg="WAL segment loaded" segment=0 maxSegme
ts=2022-12-30T20:05:54.703Z caller=head.go:720 level=info component=tsdb msg="WAL replay completed" checkpoint_repla
ts=2022-12-30T20:05:54.704Z caller=main.go:1014 level=info fs_type=EXT4_SUPER_MAGIC
ts=2022-12-30T20:05:54.704Z caller=main.go:1017 level=info msg="TSDB started"
ts=2022-12-30T20:05:54.704Z caller=main.go:1197 level=info msg="Loading configuration file" filename=/etc/prometheus
ts=2022-12-30T20:05:54.705Z caller=main.go:1234 level=info msg="Completed loading of configuration file" filename=/e
ts=2022-12-30T20:05:54.705Z caller=main.go:978 level=info msg="Server is ready to receive web requests."
ts=2022-12-30T20:05:54.705Z caller=manager.go:953 level=info component="rule manager" msg="Starting rule manager..."
```

```xml
<dependencies>
        <dependency>
                <groupId>org.springframework.boot</groupId>
                <artifactId>spring-boot-starter-actuator</artifactId>
        </dependency>
        <dependency>
                <groupId>org.springframework.boot</groupId>
                <artifactId>spring-boot-starter-web</artifactId>
        </dependency>
        <dependency>
                <groupId>io.micrometer</groupId>
                <artifactId>micrometer-registry-prometheus</artifactId>
        </dependency>
        <dependency>
                <groupId>org.springframework.boot</groupId>
                <artifactId>spring-boot-starter-test</artifactId>
                <scope>test</scope>
        </dependency>
</dependencies>
```