



Video:

<https://youtu.be/QwGm5m4AxNA>

# Install Grafana on Debian or Ubuntu

sudo apt-get install -y apt-transport-https

sudo apt-get install -y software-properties-common wget sudo wget -q -O /usr/share/keyrings/grafana.key

<https://apt.grafana.com/gpg.key>

## Stable release

echo "deb [signed-by=/usr/share/keyrings/grafana.key] https://apt.grafana.com stable main" | sudo tee -a

/etc/apt/sources.list.d/grafana.list

**Beta release**

**echo "deb [signed-by=/usr/share/keyrings/grafana.key] https://apt.grafana.com beta main" |** **sudo tee -a**

**/etc/apt/sources.list.d/grafana.list**

# Update the list of available packages sudo apt-get update

# Install the latest OSS release:

sudo apt-get install grafana #To start Grafana Server

sudo /bin/systemctl status grafana-server

# Install Loki and Promtail using Docker

## Download Loki Config

wget

https://raw.githubusercontent.com/grafana/loki/v2.8.0/cmd/loki/loki-local- config.yaml -O loki-config.yaml

## Run Loki Docker container

docker run -d --name loki -v $(pwd):/mnt/config -p 3100:3100 grafana/loki:2.8.0 --config.file=/mnt/config/loki-config.yaml

## Download Promtail Config

wget https://raw.githubusercontent.com/grafana/loki/v2.8.0/clients/cmd/promtail

/promtail-docker-config.yaml -O promtail-config.yaml

## Run Promtail Docker container

docker run -d --name promtail -v $(pwd):/mnt/config -v /var/log:/var/log

--link loki grafana/promtail:2.8.0

--config.file=/mnt/config/promtail-config.yaml

Install Prometheus and cAdvisor

[cAdvisor](https://github.com/google/cadvisor) (short for **c**ontainer **Advisor**) analyzes and exposes resource usage and

performance data from running containers. cAdvisor exposes Prometheus metrics out of the box.

Download the prometheus config file Wget

https://raw.githubusercontent.com/prometheus/prometheus/main/documentation/examples/prom

etheus.yml

Install Prometheus using Docker

docker run -d --name=prometheus -p 9090:9090 -v

<PATH\_TO\_prometheus.yml\_FILE>:/etc/prometheus/prometheus.yml prom/prometheus --config.file=/etc/prometheus/prometheus.yml

Add cAdvisor target

```

scrape\_configs:

- job\_name: cadvisor

scrape\_interval: 5s

static\_configs:

- targets:

- cadvisor:8080

#Using Docker Compose

version: '3.2' services:

prometheus:

image: prom/prometheus:latest

container\_name: prometheus

ports:

- 9090:9090

command:

- --config.file=/etc/prometheus/prometheus.yml

volumes:

- ./prometheus.yml:/etc/prometheus/prometheus.yml:ro

depends\_on:

- cadvisor

cadvisor:

image: gcr.io/cadvisor/cadvisor:latest

container\_name: cadvisor

ports:

- 8080:8080

volumes:

- /:/rootfs:ro

- /var/run:/var/run:rw

- /sys:/sys:ro

- /var/lib/docker/:/var/lib/docker:ro

depends\_on:

- redis

redis:

image: redis:latest

container\_name: redis

ports:

- 6379:6379

# Verify

docker-compose up -d docker-compose ps

Test PromQL rate(container\_cpu\_usage\_seconds\_total{name="redis"}[1m]) container\_memory\_usage\_bytes{name="redis"}