Monitoring with Prometheus and Grafana

How we're using it in the BU-Team

Jan Baer

10. Juni 2019





What is Prometheus

- Prometheus is an open-source systemmonitoring and alerting toolkit originally built at SoundCloud.
- Prometheus joined the Cloud Native Computing Foundation in 2016 as the second hosted project, after Kubernetes.

What is Grafana

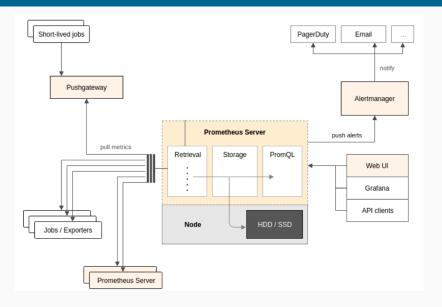
- · The leading open source software for time series analytics
- Fast and flexible client side graphs with a multitude of options. Panel plugins for many different way to visualize metrics and log
- Visually define alert rules for your most important metrics. Grafana will
 continuously evaluate them and can send notifications.
- When an alert changes state it sends out notifications. Receive email notifications or get them from Slack, PagerDuty, VictorOps, OpsGenie, or via webhook.
- Mix different data sources in the same graph! You can specify a data source on a per-query basis. This works for even custom datasources.
- Official & community built dashboards

Grafana Dashboards



· Grafana Dashboards

Architecture



Why are we using it?

- · Because it has been developed to work with containers
- · It adapts to different environments
- · It allows persistance of metrics for a long periods of time
- $\boldsymbol{\cdot}$ It's free and Open Source and it's widely used

Exporters

- node-exporter
- cAdvisor
- · blackbox-exporter
- · haproxy-exporter
- · Write you own exporters

Alertmanager

- · Create alerts with a simple query of Prometheus with PromQL
- Support working with groups, severity and high-availability
- · Compatibility with Slack, Email, Pagerduty and Webhook
- Supported from Grafana

Alertmanager

