



Fall In Love With Graphs And
Metrics Using Grafana

grafana.org
github.com/grafana/grafana
[@grafana](https://twitter.com/grafana)





Logins

190



Sign ups

269

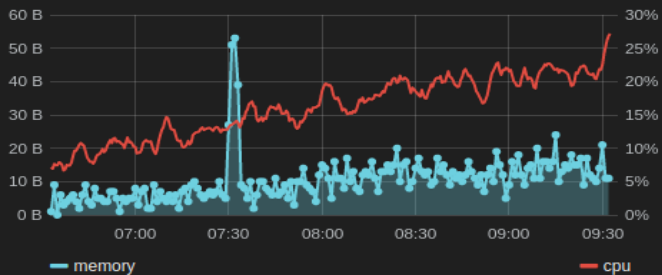


Sign outs

273



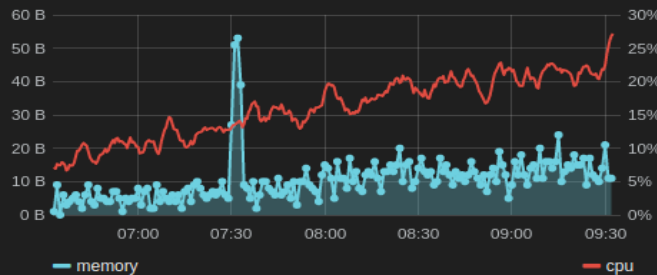
Memory / CPU



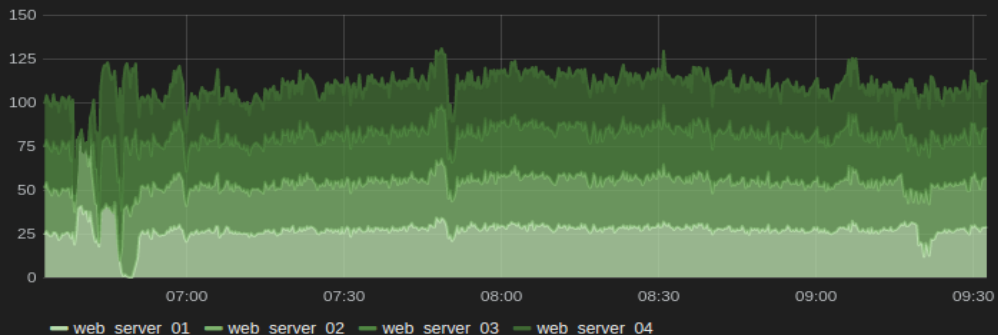
logins



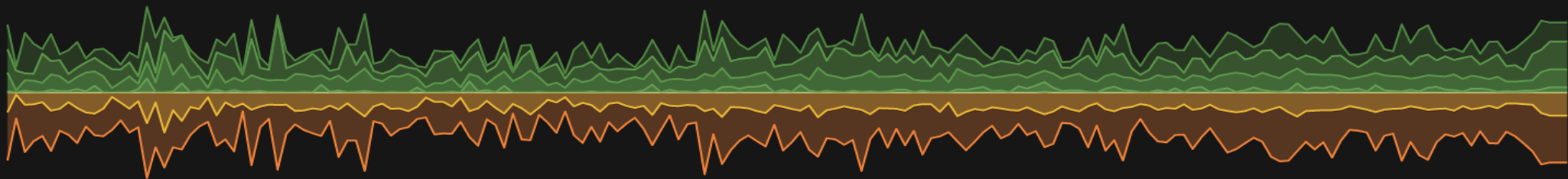
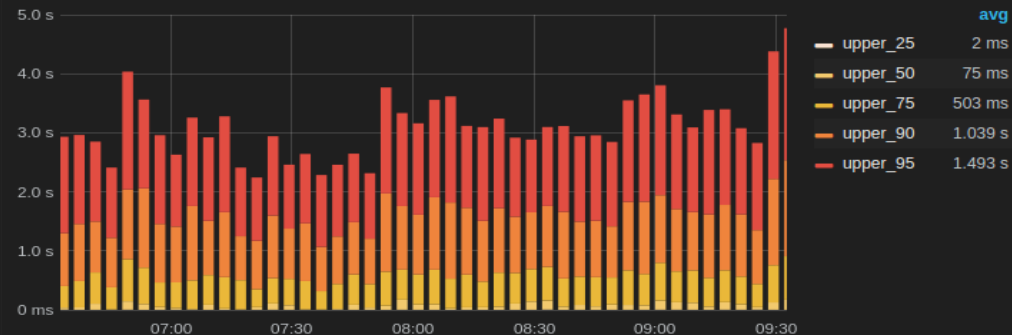
Memory / CPU



server requests



client side full page load





Torkel Ödegaard

- Stockholm, Sweden
- @torkelo



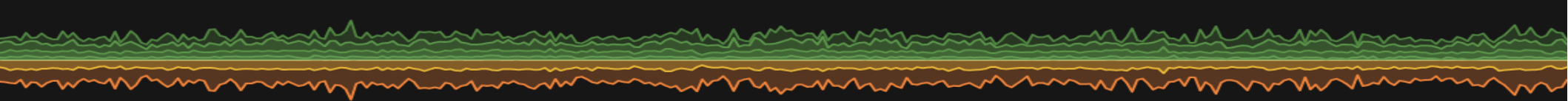
Open Source

THE YEAR WITHOUT PANTS

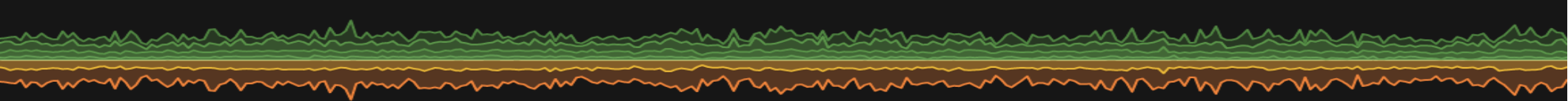


WORDPRESS.COM
and the *future* of work
SCOTT BERKUN

JOSSEY-BASS
A Wiley Brand



1 years later







Plugins.

Plugin Type:

- ☒ All
- ☐ Panels
- ☐ Data source
- ☐ Apps



worldPing by Raintank

worldPing is a plug-in for Grafana that continually tests, stores and alerts on the global performance and...

 APPLICATION

Snap App by Raintank

Snap Data Source and API UI

 APPLICATION

Example App by Grafana Project

Example app for Grafana

 APPLICATION

Zabbix by Alexander Zobnin

Zabbix plugin for Grafana

 APPLICATION

Clock by Grafana Project

Clock panel for grafana

 PANEL



Agile

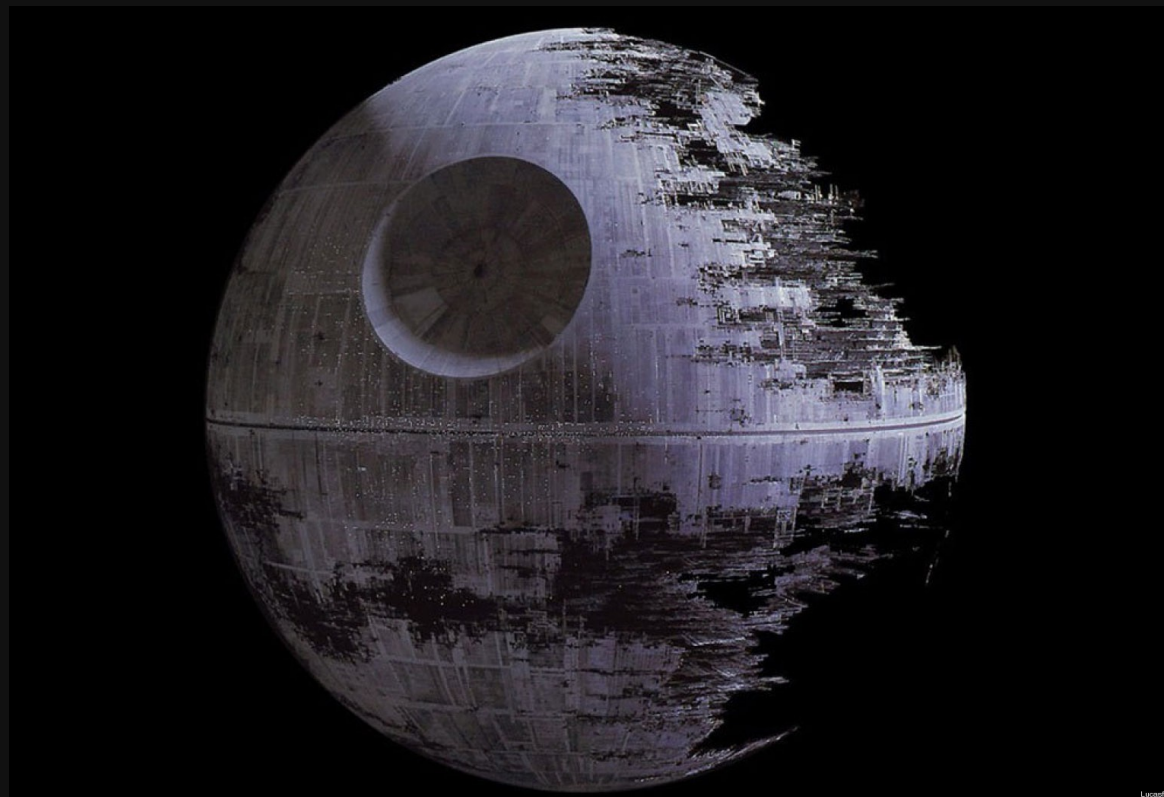
TTD



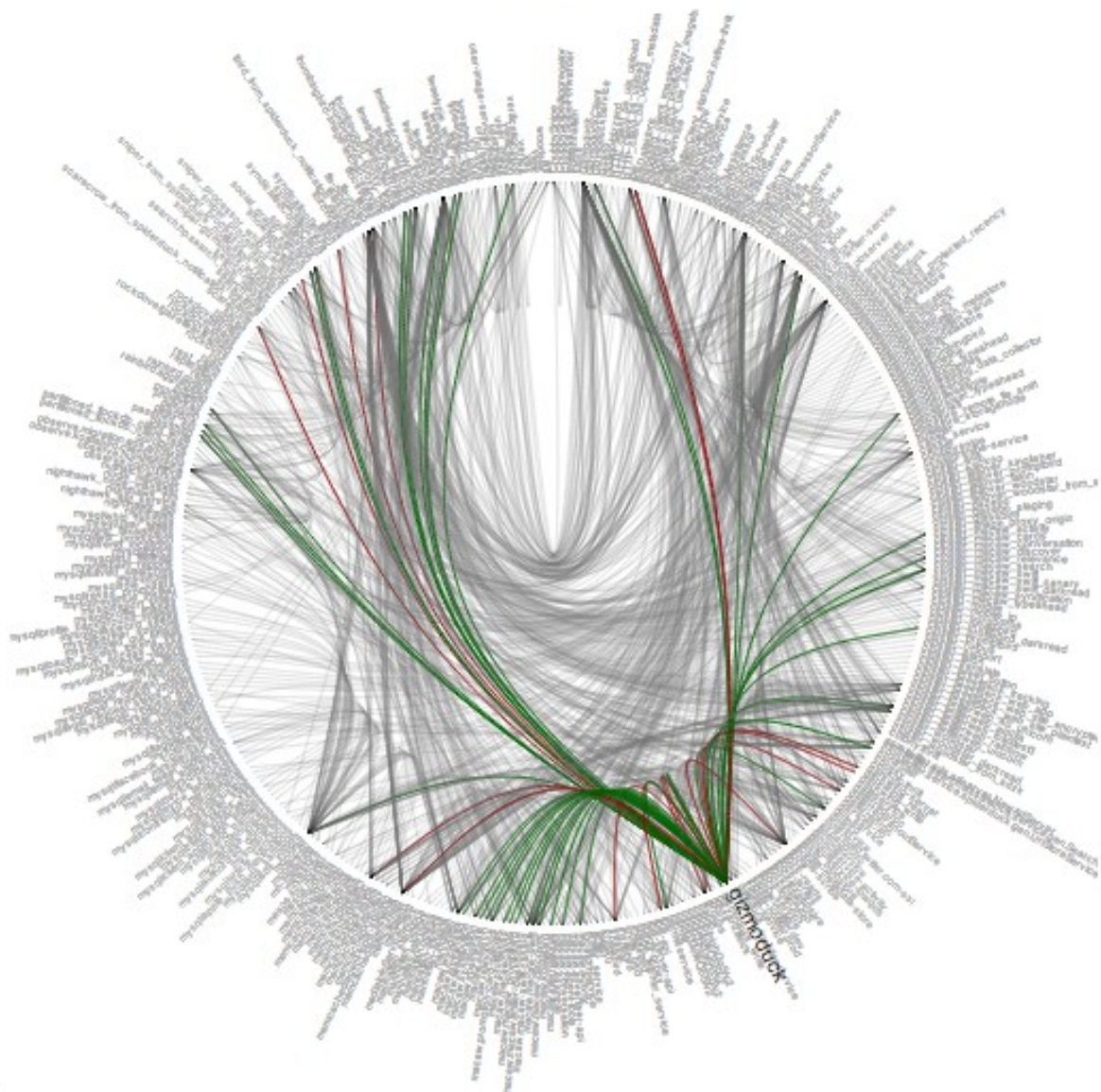
Continuous Delivery

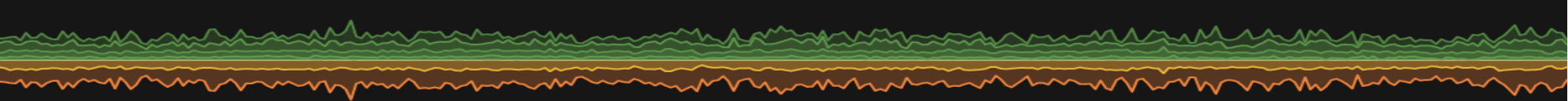
Micro Services

Death Star Architecture



Lucasfilm



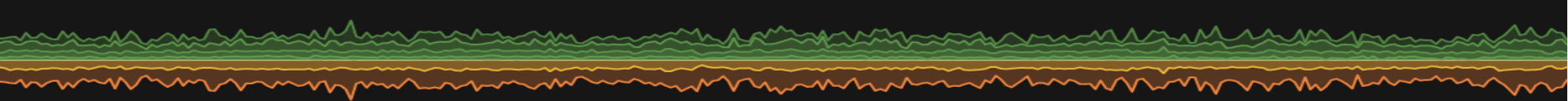


Observability



Time Series Database (TSDB)

Write & Query API designed for Time Series



Graphite

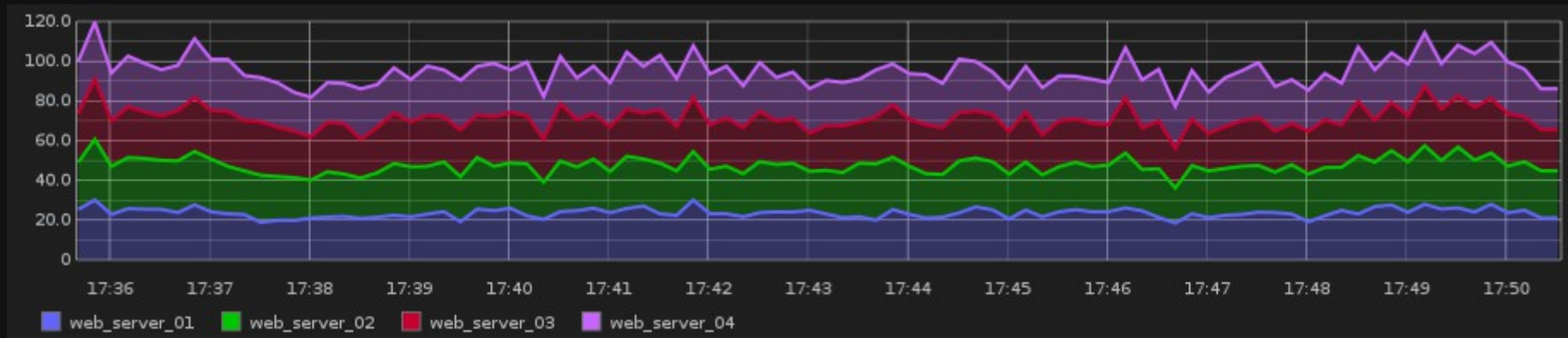


INPUT

```
apps.server1.counter.login.count 10 1398969187
```

QUERY

`prod.apps.*.counter.login.count`





QUERY

```
sumSeries(prod.apps.*.counter.login.count)
```



QUERY

```
movingAverage(scaleToSeconds(prod.apps.*.counter.login.count, 1), 5min)
```



QUERY

```
timeShift(prod.apps.*.counter.login.count, 1d)
```



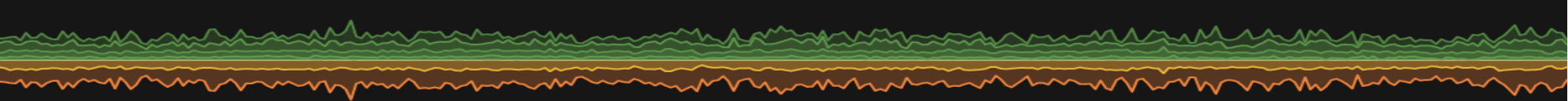
Measure Anything, Measure Everything 2011

StatsD

```
stats.increment("logins")
```


SHOW ME THE DATA!





Visualization Tools



Logins

190



Sign ups

269

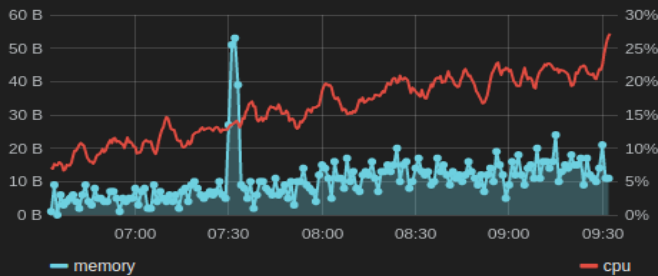


Sign outs

273



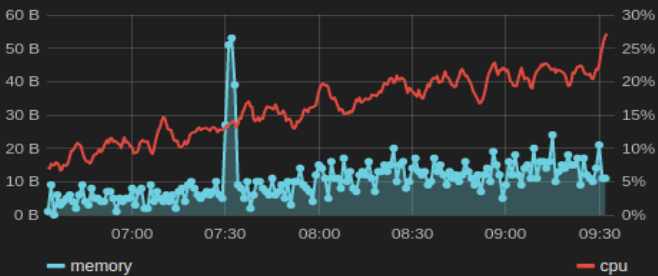
Memory / CPU



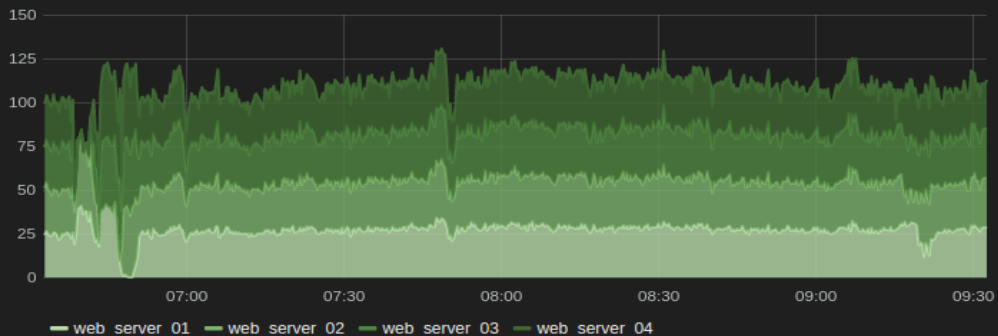
logins



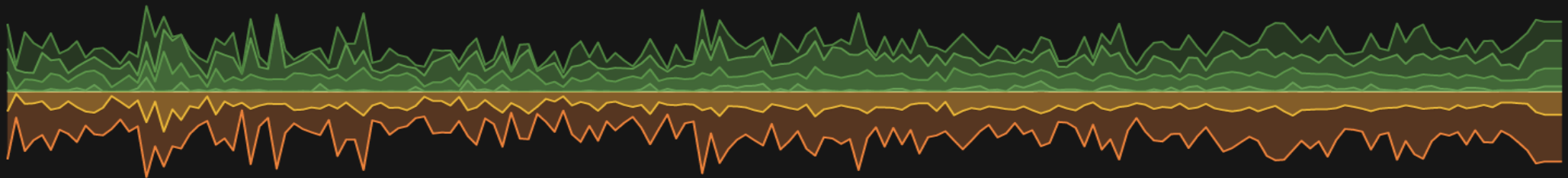
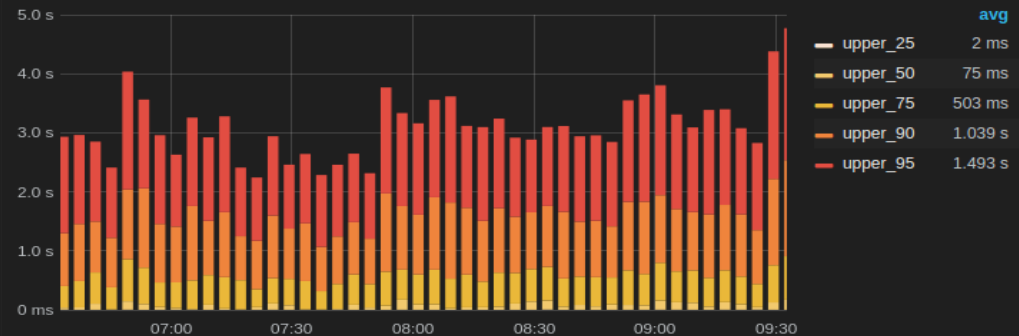
Memory / CPU



server requests



client side full page load

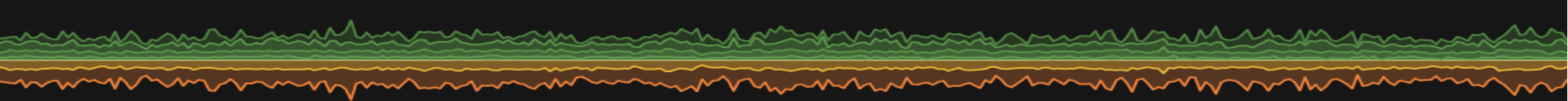




Why Build Grafana?



Scratching my own itch



Infrastructure monitoring

Application metrics

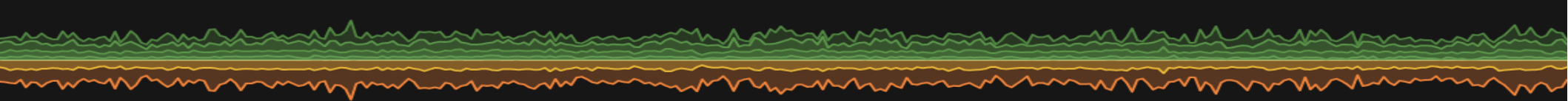
Process control

Time series visualization

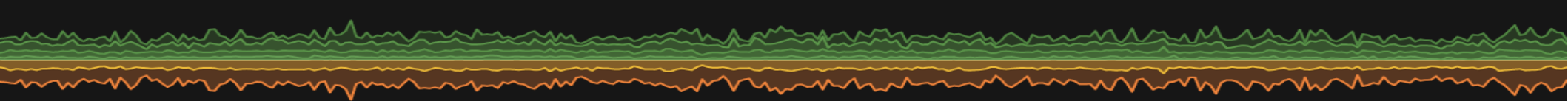
Industrial sensors

Weather

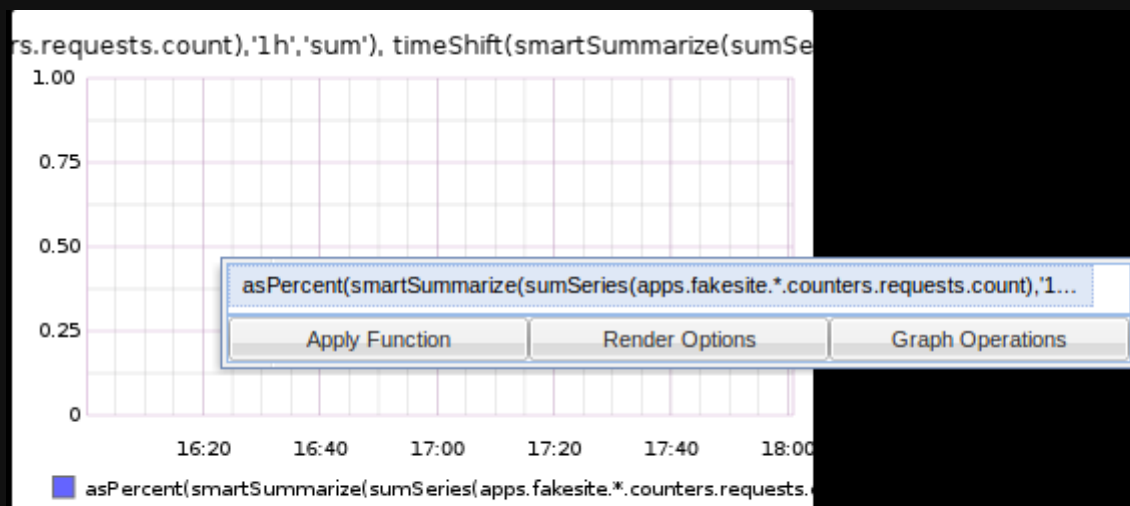
Home automation

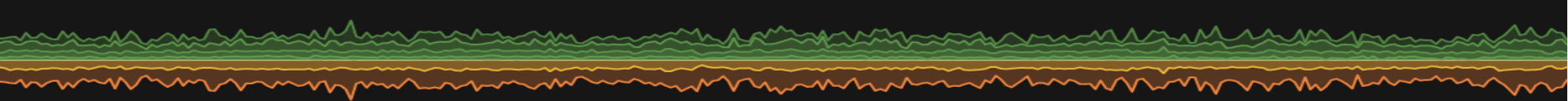




Accessible



```
movingAverage(scaleToSeconds(prod.apps.*.counter.login.count, 1), 5min)
```

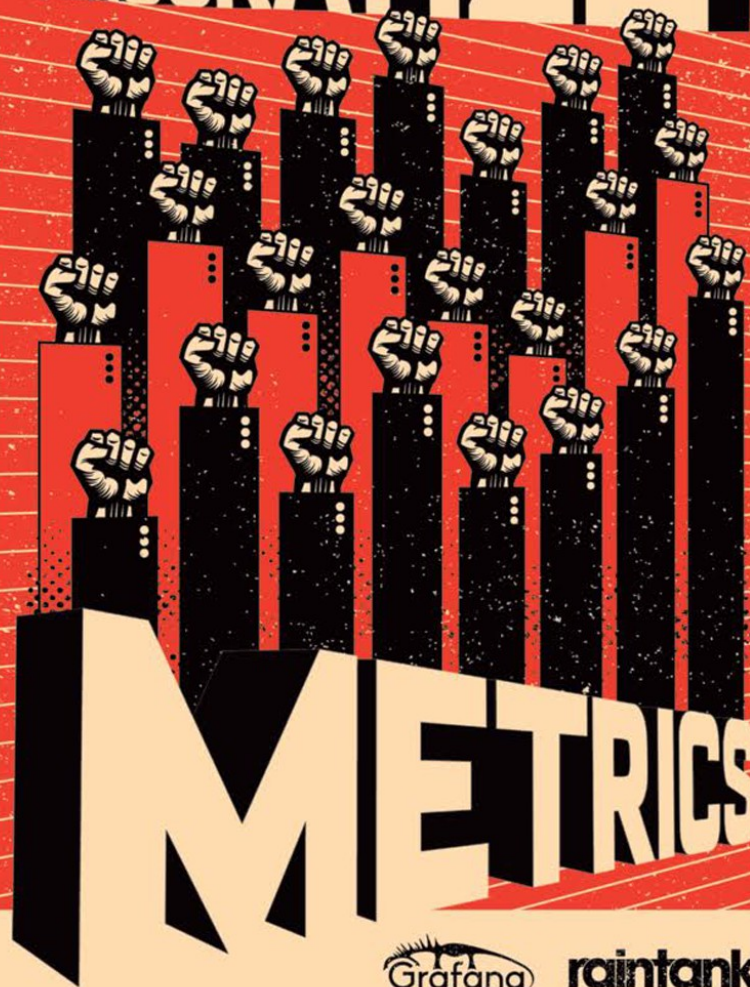


A		apps		backend_03	counters	requests	count	+
---	---	------	---	------------	----------	----------	-------	---

 Query

--	--	--	--	--	--

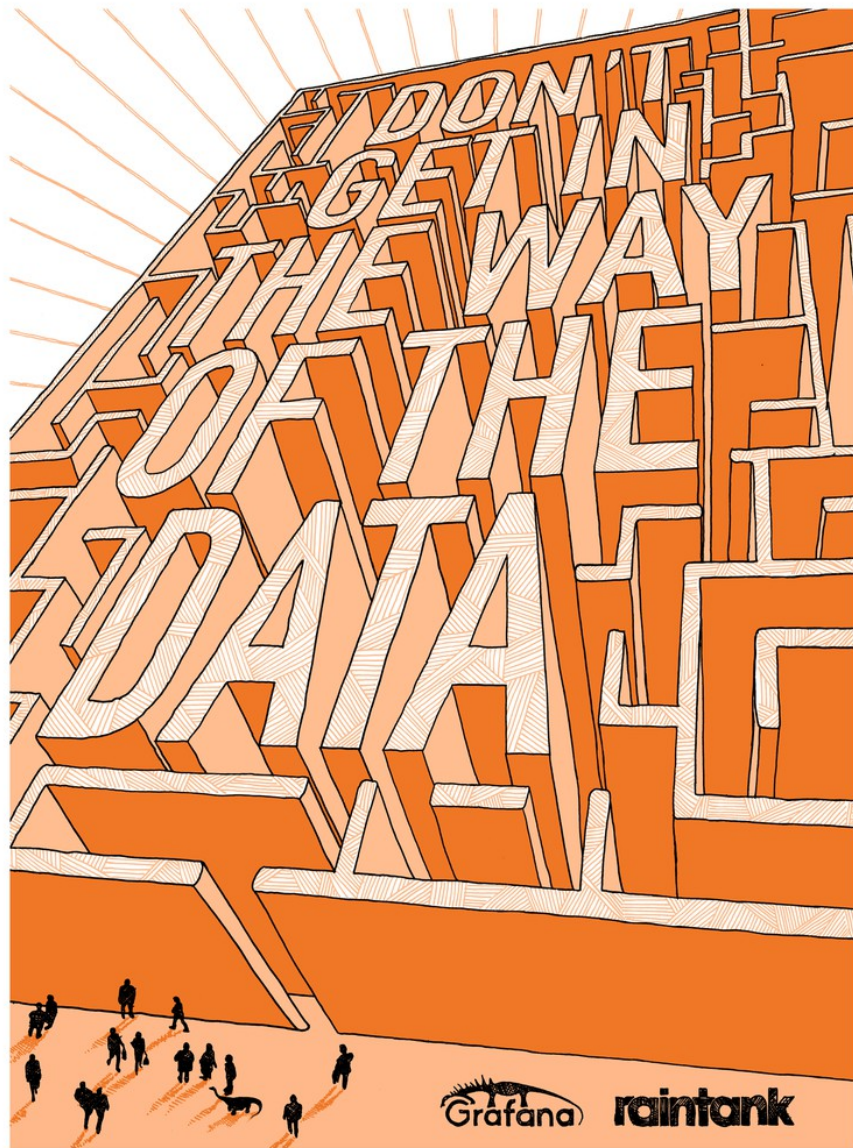
DEMOCRATIZE



raintank

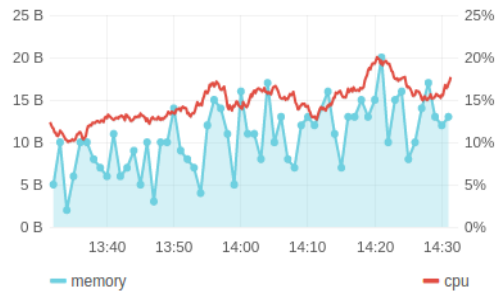


Beautiful





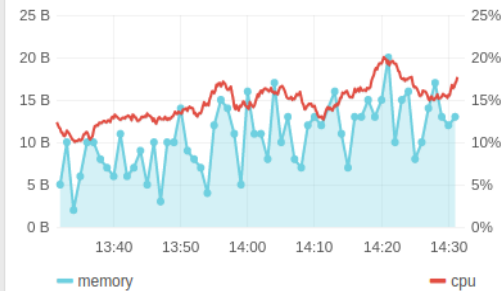
Memory / CPU



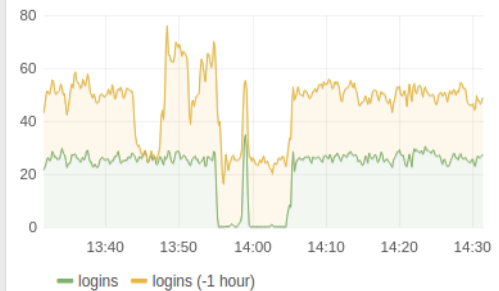
logins



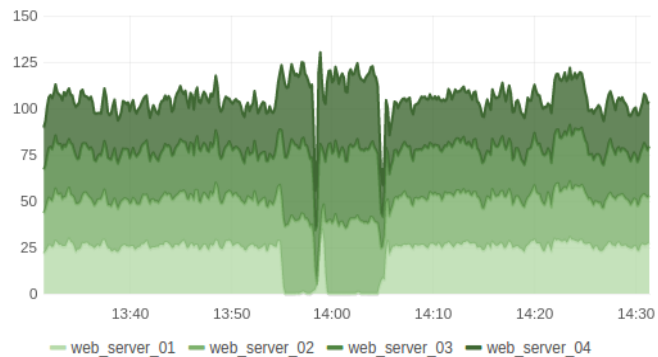
Memory / CPU



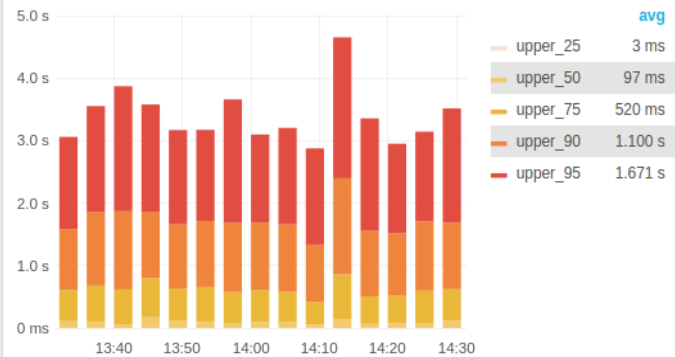
logins



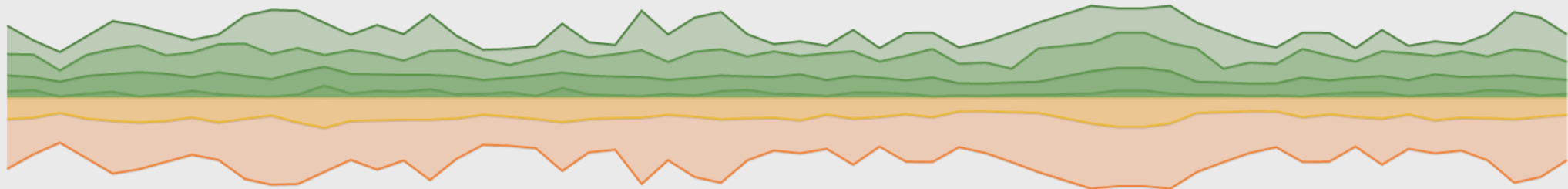
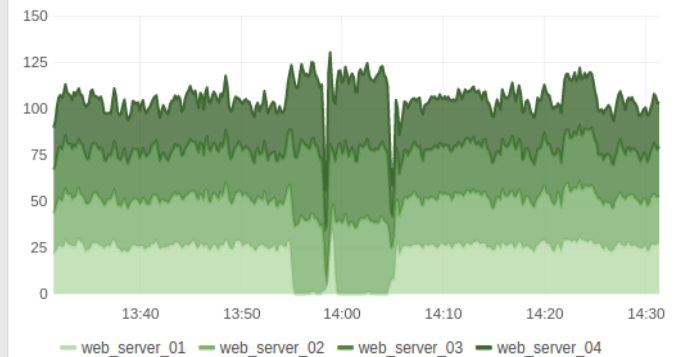
server requests



client side full page load



server requests





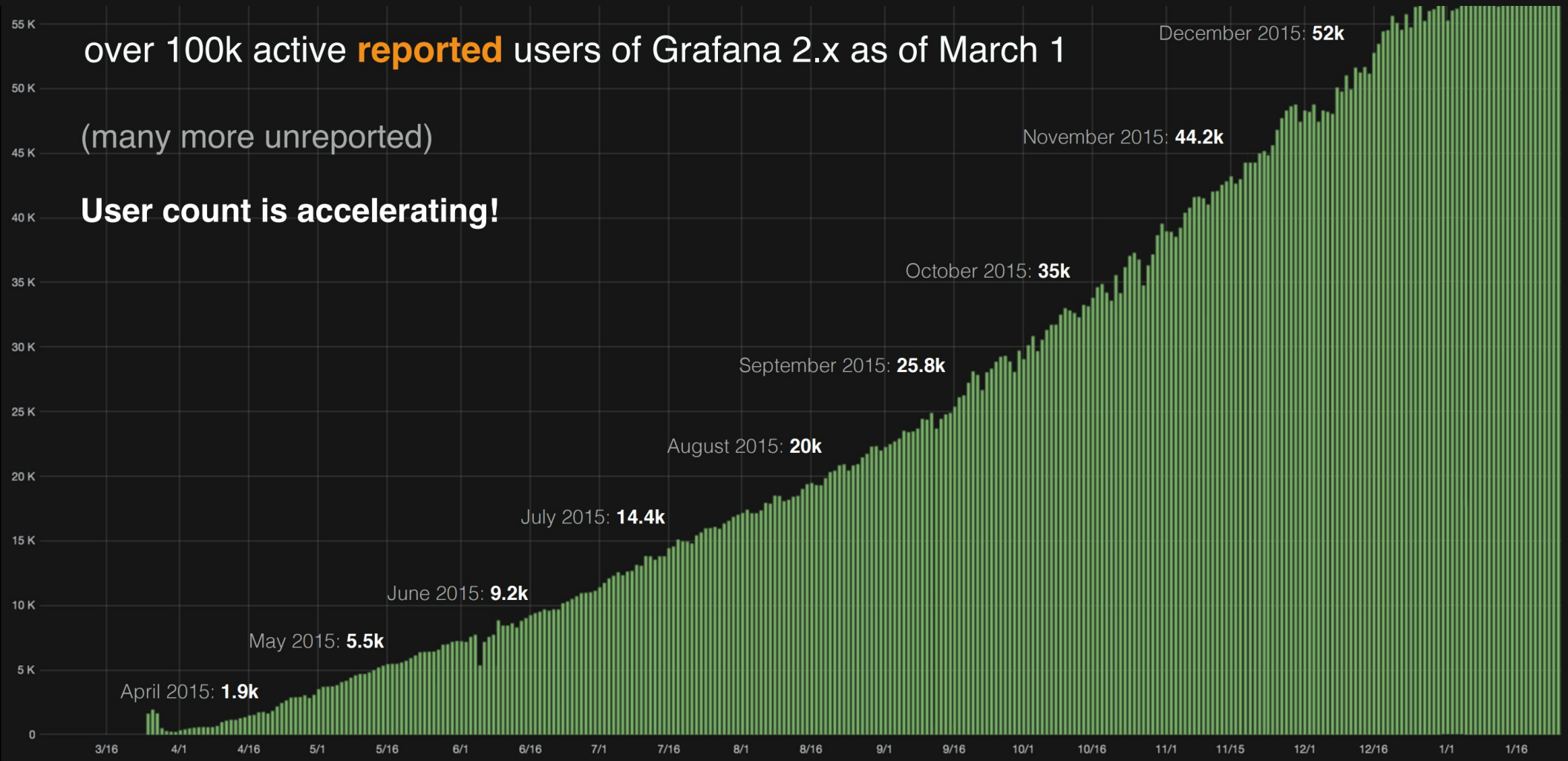
Grafana Project

- First Release Jan 2014
- 15 feature releases
- 9300+ stars on github
- 1372 forks
- 251 contributors

over 100k active **reported** users of Grafana 2.x as of March 1

(many more unreported)

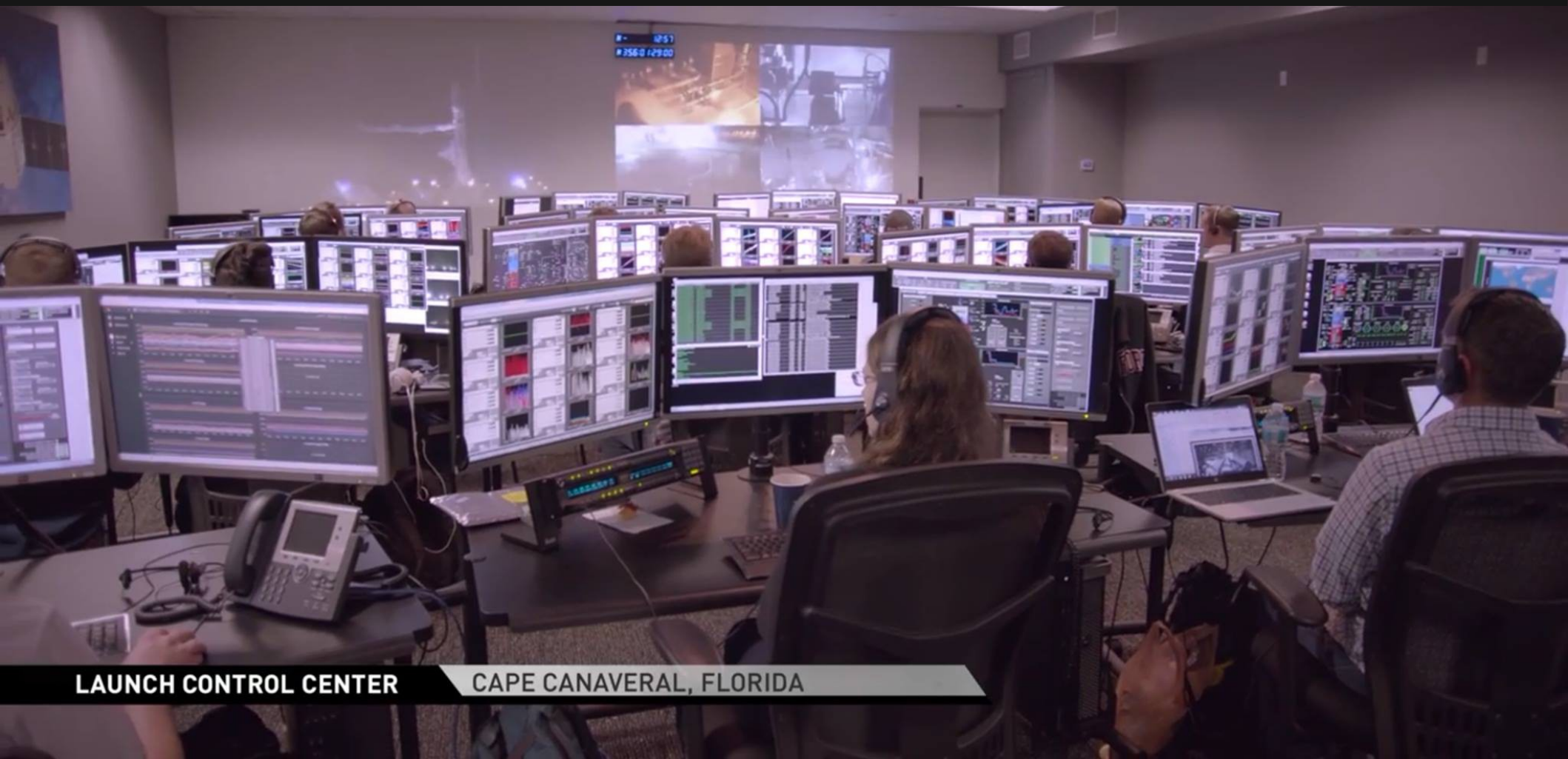
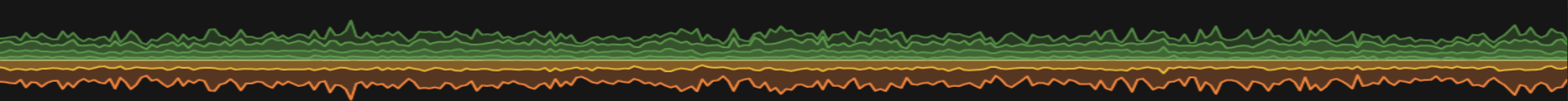
User count is accelerating!





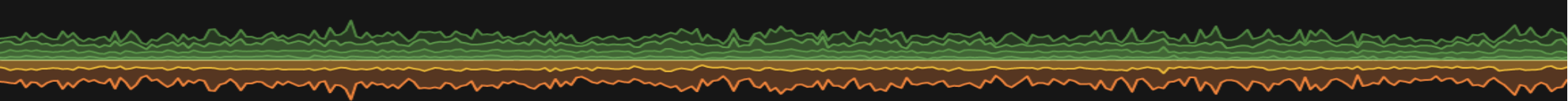






LAUNCH CONTROL CENTER

CAPE CANAVERAL, FLORIDA



OpenTSDB

Elasticsearch

Graphite

Cloudwatch

Data Sources

InfluxDB

Prometheus

KairosDB

Zabbix

Gnocchi

OpenNMS

DalmatinerDB

Druid



Plugins.

Plugin Type:

- ☒ All
- ☐ Panels
- ☐ Data source
- ☐ Apps



worldPing by Raintank

worldPing is a plug-in for Grafana that continually tests, stores and alerts on the global performance and...

 APPLICATION

Snap App by Raintank

Snap Data Source and API UI

 APPLICATION

Example App by Grafana Project

Example app for Grafana

 APPLICATION

Zabbix by Alexander Zobnin

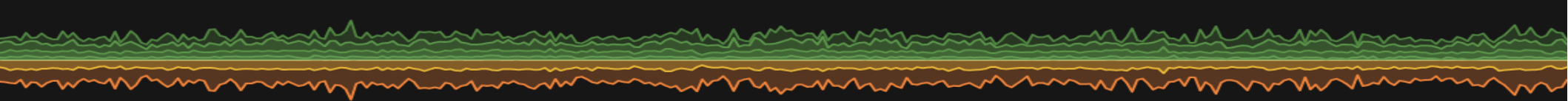
Zabbix plugin for Grafana

 APPLICATION

Clock by Grafana Project

Clock panel for grafana

 PANEL



Demo





Whats next for the Grafana Project

- More people
- More visualizations
- Alerting

Plugins.

Plugin Type:

- ☒ All
- ☐ Panels
- ☐ Data source
- ☐ Apps



worldPing by Raintank

worldPing is a plug-in for Grafana that continually tests, stores and alerts on the global performance and...

 APPLICATION

Snap App by Raintank

Snap Data Source and API UI

 APPLICATION

Example App by Grafana Project

Example app for Grafana

 APPLICATION

Zabbix by Alexander Zobnin

Zabbix plugin for Grafana

 APPLICATION

Clock by Grafana Project

Clock panel for grafana

 PANEL

The pillars of *Grafana.net*



Visualize and Analyze

Grafana provides a powerful and elegant way to create, explore and share dashboards and data with your team and the world. Hosted or on premise, new or existing installations, it's your choice.

[Learn More](#)



Extend and Share

Get a unified understanding of your existing data, and across your entire stack. Harness the power and creativity of our community, and discover and share new dashboards, panels, data sources, and entire applications.

[Learn More](#)



Host and Scale

Do you really want to be in the business of scaling Graphite? Combine your existing on-premise data sources with a fully interoperable, **hosted Graphite and Elasticsearch** data sources. It's the scalable, cost-efficient option for all your signals and metrics.

[Learn More](#)

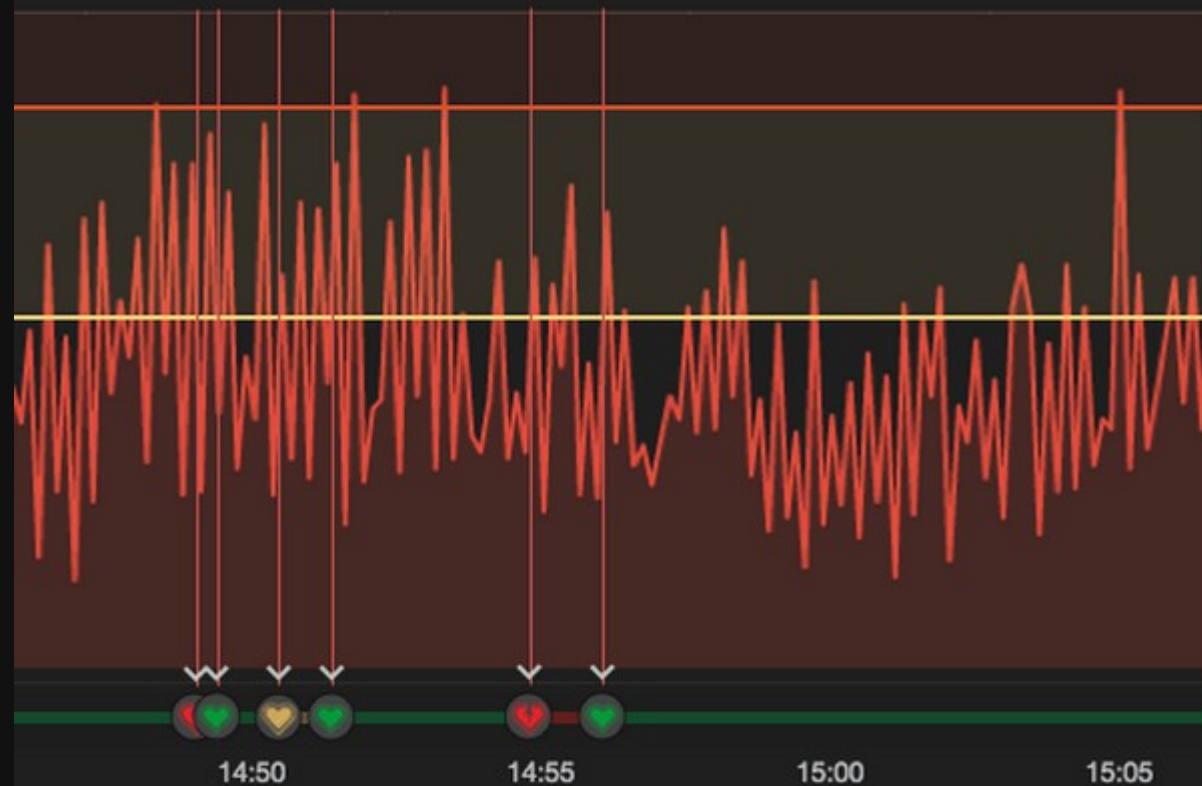


Support and Protect

Monitor the health of all your Grafana installations no matter where they are. Back up all your dashboards and get up to 24x7 production assurance, backed by the support and advice of the core Grafana team.

[Learn More](#)

Vebheads



Feel the alerting



≥ 36



>28

Immediate feedback when
dragging.
New range: 99% OK



Q & A

- grafana.org
- github.com/grafana/grafana
- grafana.net
- @grafana
- @torkelo