



# Prometheus loves Grafana

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[github.com/grobie](https://github.com/grobie)

# Prometheus

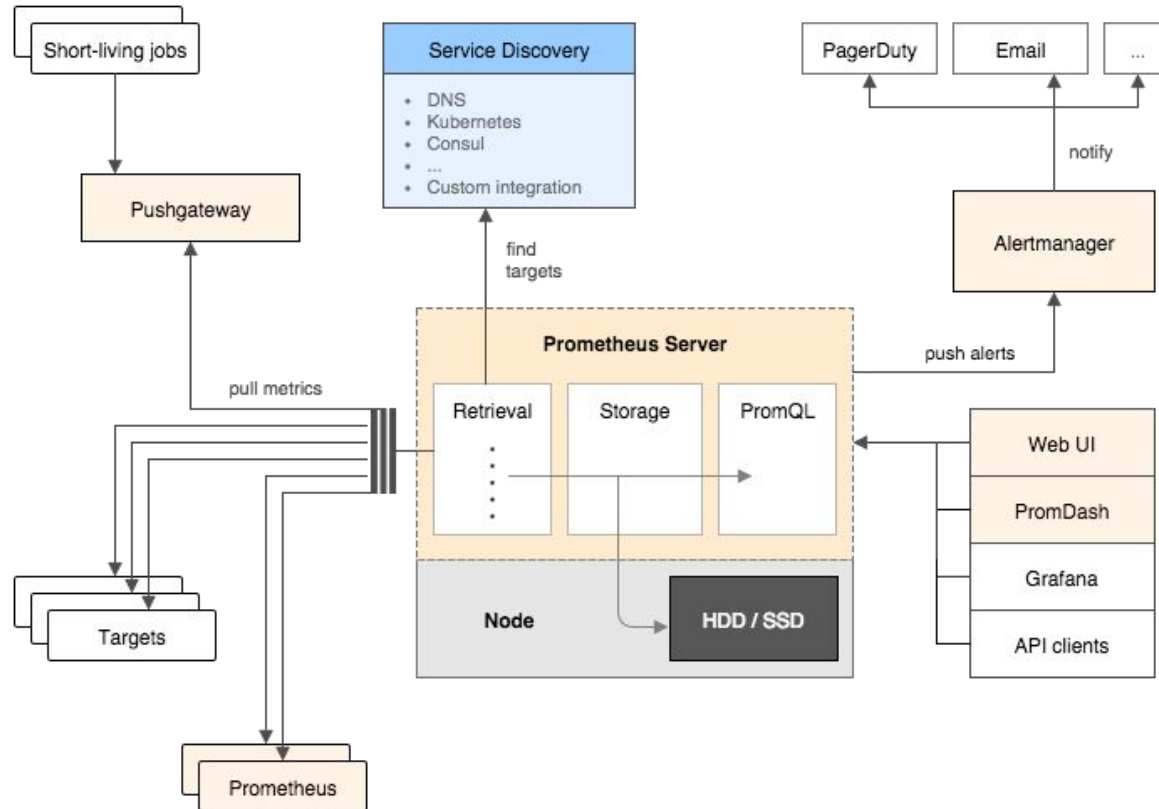
<http://prometheus.io>

An open-source service monitoring system and time series database.

# Prometheus - Overview

- multi-dimensional data model
- PromQL - a flexible query language
- operationally very simple, just a single binary
- pull model to collect data
- many client libraries available (Go, Java, Python, Ruby, ...)
- growing amount of exporters
- several graphing solutions available

# Prometheus - Architecture



# Prometheus - Expression browser

Prometheus Consoles Alerts Graph Status Help

node\_filesystem\_free

Load time: 226ms  
Resolution: 14s

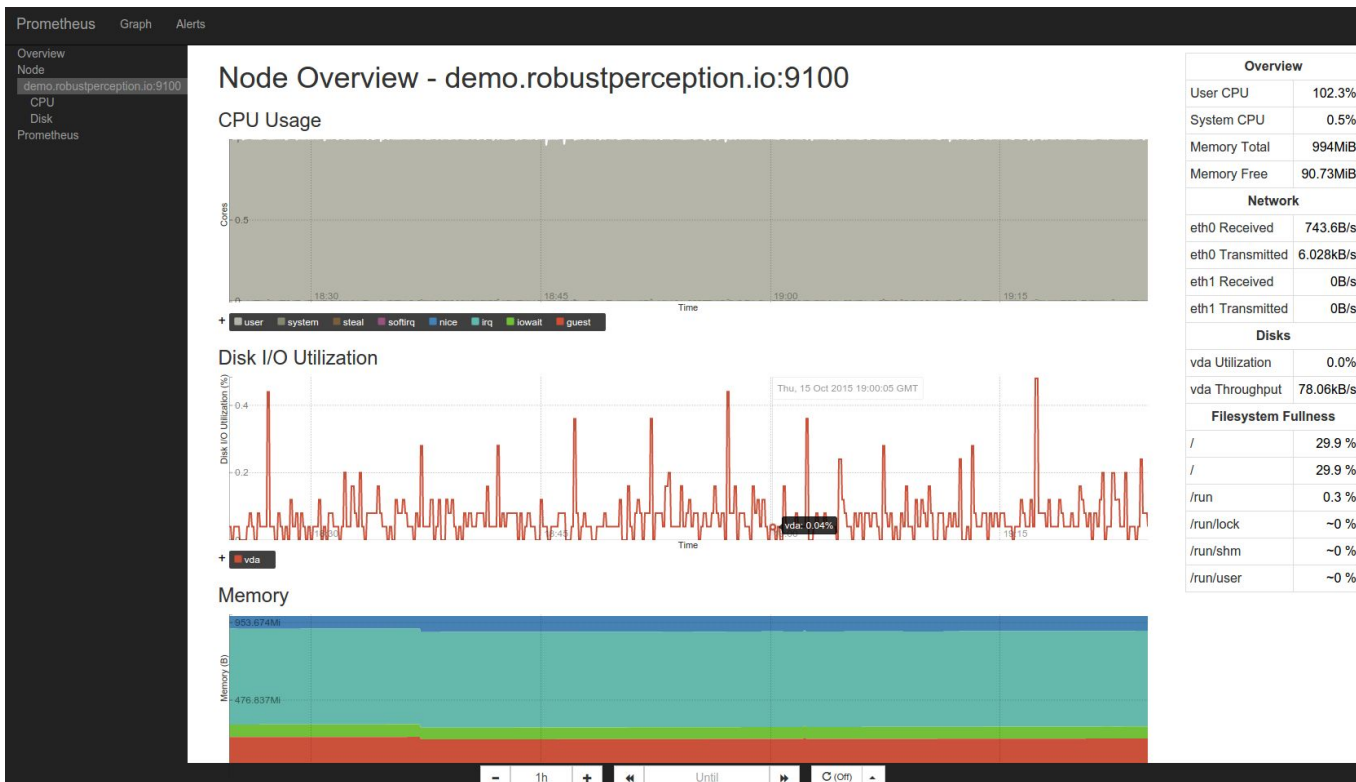
Execute - insert metric at cursor -

Graph Console

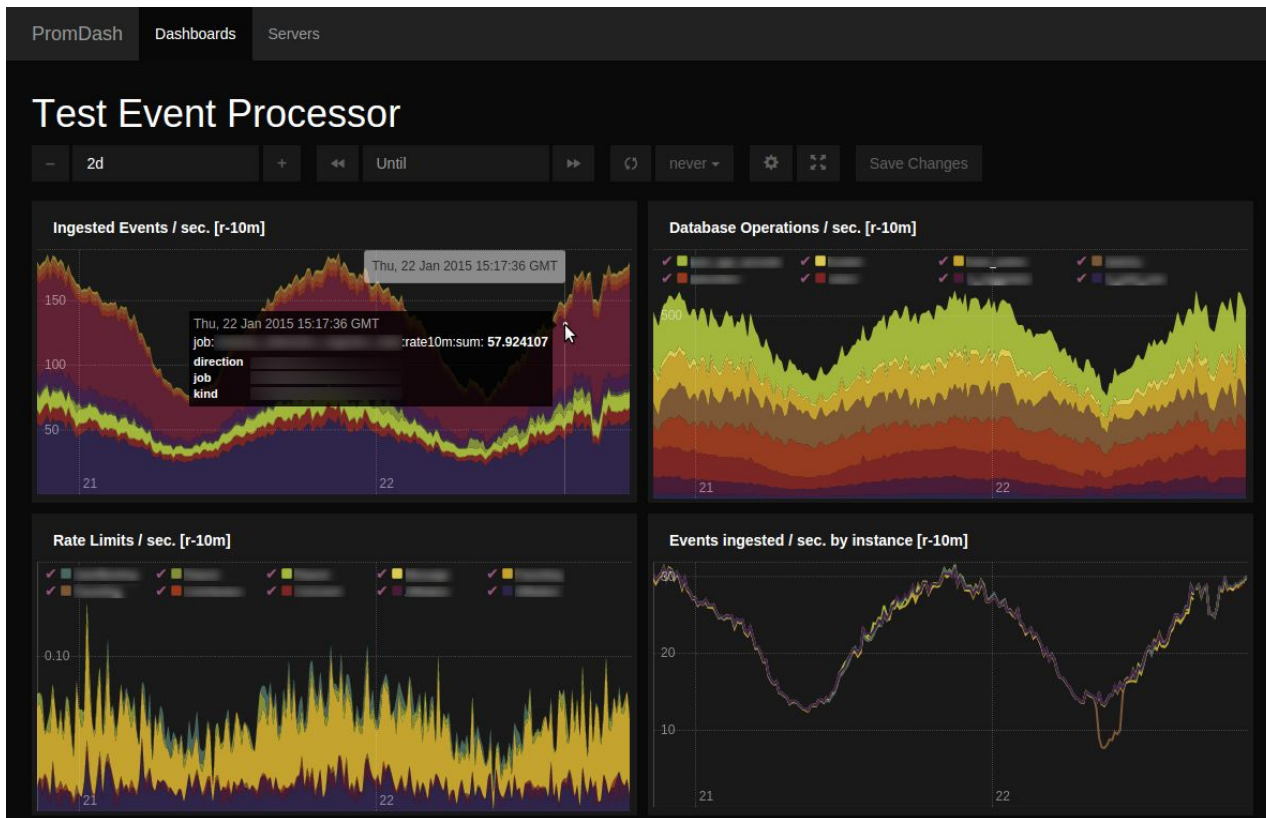
Element	Value
node_filesystem_free{device="rootfs",fstype="rootfs",instance="demo.robustperception.io:9100",job="node",mountpoint="/"}	22140063744
node_filesystem_free{device="none",fstype="tmpfs",instance="demo.robustperception.io:9100",job="node",mountpoint="/run/lock"}	5242880
node_filesystem_free{device="none",fstype="tmpfs",instance="demo.robustperception.io:9100",job="node",mountpoint="/run/user"}	104857600
node_filesystem_free{device="/dev/disk/by-label/DOROOT",fstype="ext4",instance="demo.robustperception.io:9100",job="node",mountpoint="/"}	22140063744
node_filesystem_free{device="none",fstype="tmpfs",instance="demo.robustperception.io:9100",job="node",mountpoint="/run/shm"}	521150464
node_filesystem_free{device="tmpfs",fstype="tmpfs",instance="demo.robustperception.io:9100",job="node",mountpoint="/run"}	103870464

Add Graph

# Prometheus - Consoles



# PromDash



# PromDash - Overview

- Prometheus' dashboard editor
- Started mid 2013
- GUI to build dashboards
- Rails+MySQL backend, dashboards saved as JSON
- Angular+Rickshaw(D3) frontend



Demo



*“The power of Prometheus meets the beauty of Grafana. Dashboard all the things!”*

Jimmi Dyson @jimmidyson

main contributor of the Grafana  
Prometheus integration

# Comparison

## Promdash

- metric source templating
- legend formatting
- easier to move in time
- native iframe panel support
- some workflows are faster\*

## Grafana

- better navigation
- powerful templating
- lots of graph styling options
- flexible dashboard arrangement
- more mature
- active and big community

\* subjective

# Suggested roadmap

1. Support metric source templating in Grafana
2. Write Grafana exporter for PromDash
3. Let SoundCloud test Grafana and the migration
4. Propose official switch to the Prometheus community

# Thank you

@dagrobie

<http://prometheus.io>

<https://github.com/grobie>

