

Prometheus + Grafana =

Awesome Monitoring

About Me

- Henrique Galafassi Dalssaso
- 21 years old
- 5 years as SysAdmin
- 1 year as DevOps
- DevOps Engineer at DevGrid, UK Based company that provide software development solutions

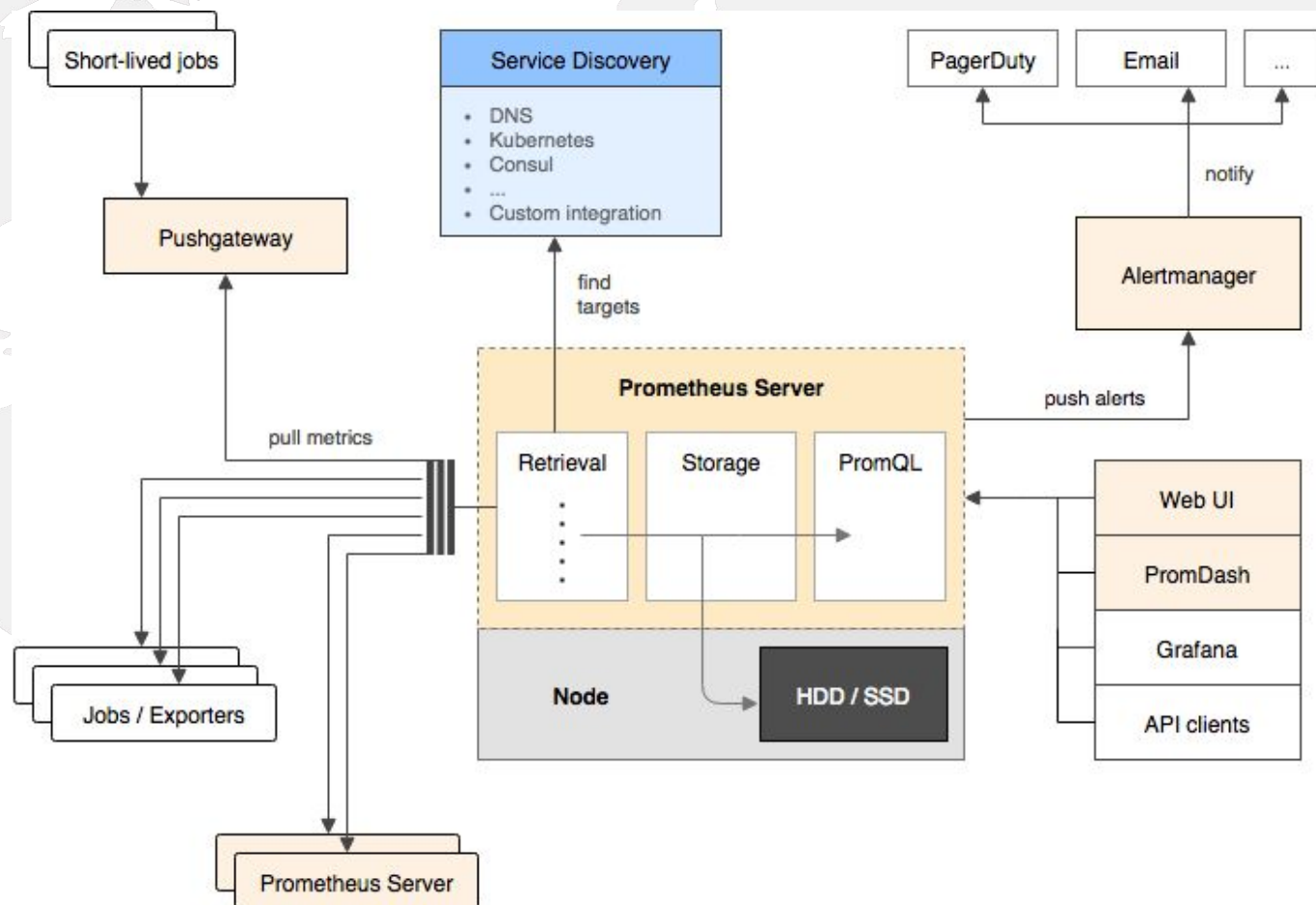
Agenda

- What is Prometheus?
 - How does it Work?
 - Main features
 - Components
 - Query Language
- Client Libraries and Exporters
- Grafana
 - What is it?
- Demo

What is Prometheus?

- Monitoring and Alerts tool
- Came out from a necessity at SoundCloud
- Based on Microservices approach

How does it Work?



AlertManager

- Microservice that provide and manage alerts
- Configuration based on YAML Syntax
- Alerts can be created using simple logic, like if statements

PushGateway

- Microservice used for short lived jobs
- It's not an aggregator and yes a cache
- All the pushes are made via REST APIs

PromDash

- Dashboard created using Ruby on Rails framework
- To be discontinued

PromQL (PQL)

- Easy to use Query Language that you'll use to get metrics into the Dashboards and alerts
- Easy Learning Curve

```
http_requests_total{job="apiserver", handler="/api/comments"}[5m]
```

Client Libraries

- 15+ Supported Languages (Go, Java, Python, Ruby, Haskell...)
- Easy Implementations

Exporters

- Microservices that will run side by side with the applications and export metrics to prometheus servers
- Most of the Exporters are made by the community



Grafana

- Dashboard tools
- Multiple Data Sources support (InfluxDB, Graphite, Prometheus, ElasticSearch...)
- Alerts

DEMO!!!



<https://github.com/dalssaso/prometheus-grafana-devops-floripa>



Thanks for your time



DEVGRID