Prometheus & Grafana

Prometheus

Prometheus is an open-source systems monitoring and alerting toolkit originally built at SoundCloud. Since its inception in 2012, many companies and organizations have adopted Prometheus, and the project has a very active developer and user community. It is now a standalone open source project and maintained independently of any company

Grafana

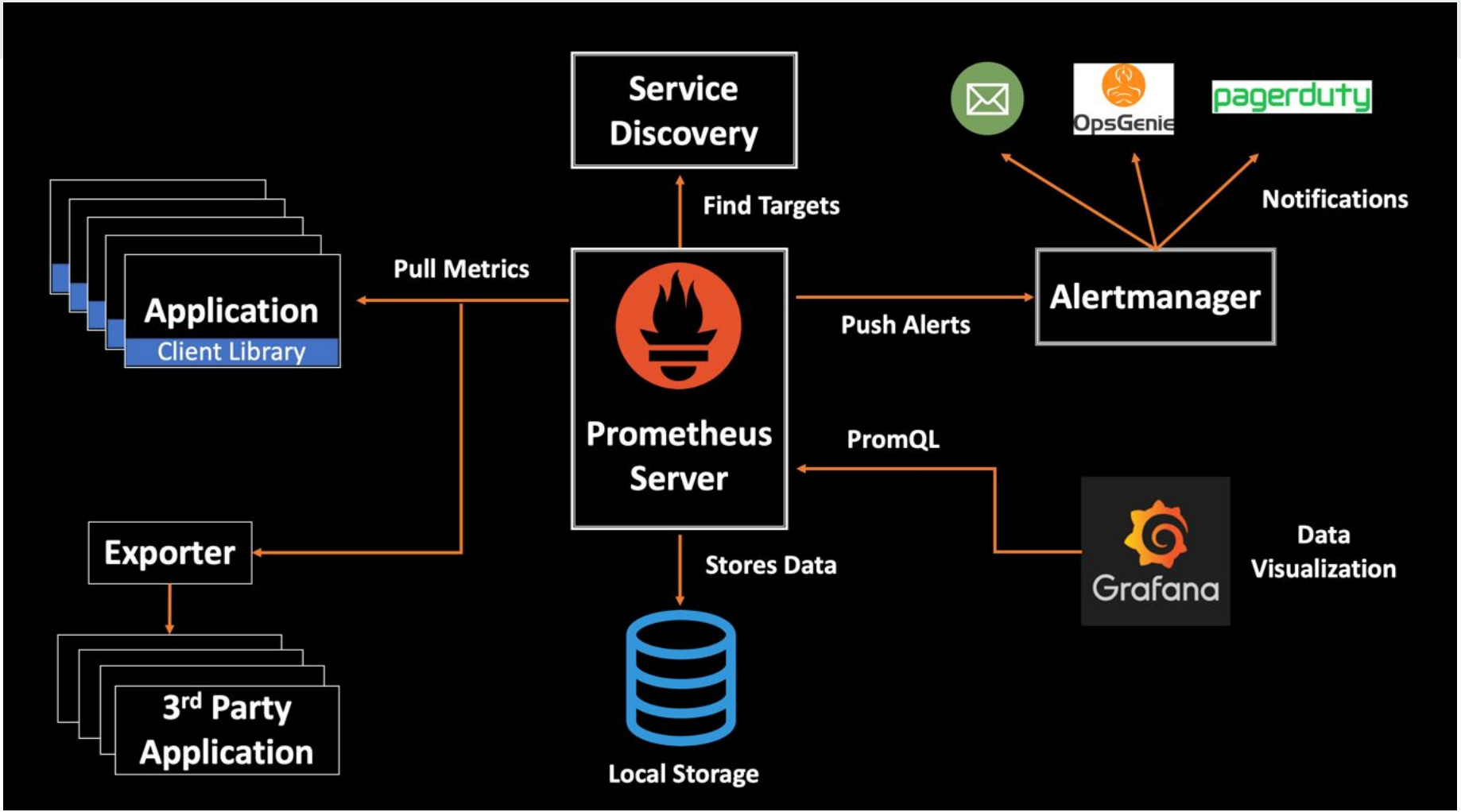
Grafana **allows you to query, visualize, alert on, and understand your metrics no matter where they are stored**. Create, explore, and share beautiful dashboards with your team and foster a data-driven culture.

Prometheus exporter

A Prometheus Exporter is **a piece of software that. Can fetch statistics from another**, non-Prometheus system. Can turn those statistics into Prometheus metrics, using a client library.

Prometheus Alertmanager

The Alertmanager handles alerts sent by client applications such as the Prometheus server. It takes care of deduplicating, grouping, and routing them to the correct receiver integration such as email, PagerDuty, or OpsGenie. It also takes care of silencing and inhibition of alerts.


Service Discovery
Find Targets
Application
Client Library
Pull Metrics
Prometheus Server
Push Alerts
Alertmanager
Notifications
OpsGenie
pagerduty
PromQL
Grafana
Data Visualization
Exporter
Stores Data
3rd Party Application
Local Storage

Assignment

Create a docker-compose file with Prometheus, Grafana and Node-exporter

Optional : if you want you can deploy this on docker swarm too