THANOS

PROMETHEUS

ALERT MANAGER   GRAFANA

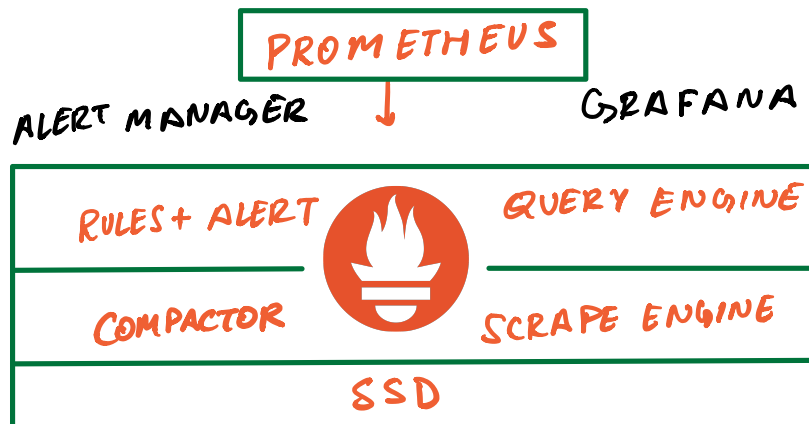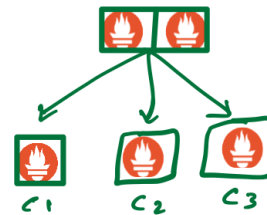| RULES + ALERT | QUERY ENGINE |
| COMPACTOR | SCRAPE ENGINE |
| SSD | |

Prometheus Goes Down. ?   Storage ?   Scaling ?

Scraping metrics from 1000's clusters ?

FEDERATED ARCHITECTURE

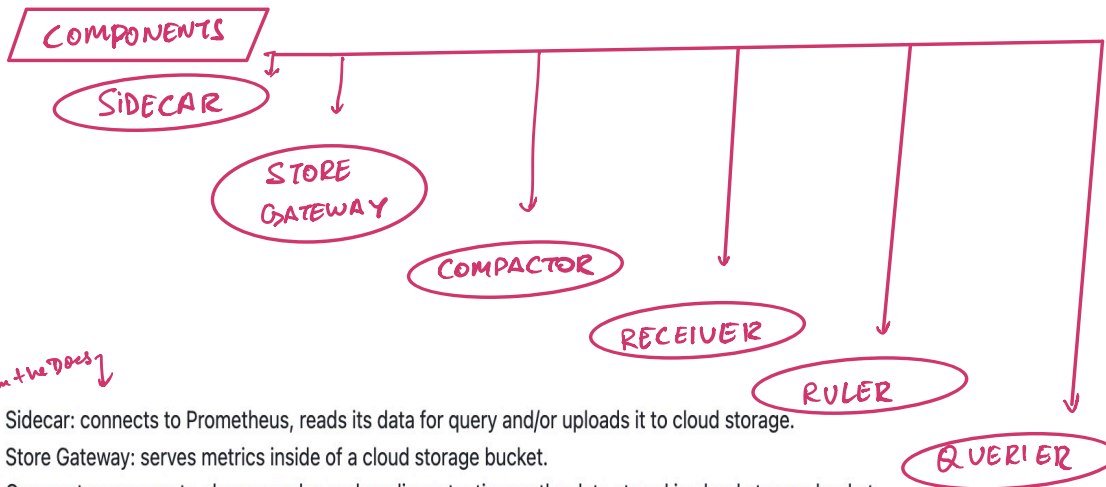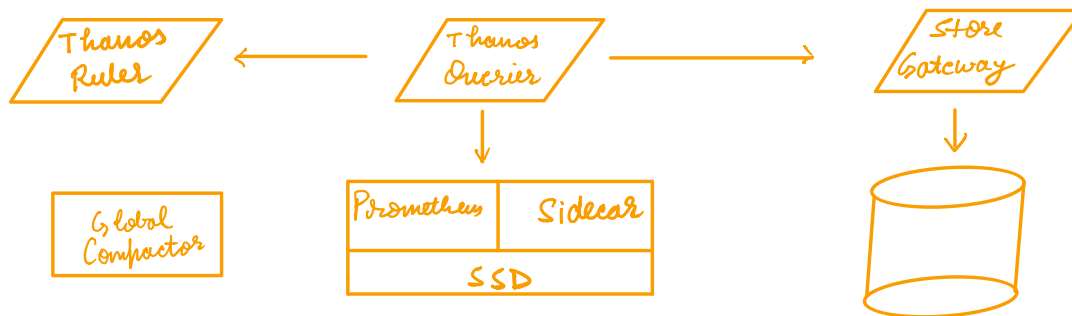C1   C2   C3

THIS IS WHERE THANOS COMES IN

Thanos

THANOS -

- HA PROMETHEUS
- GLOBAL QUERY VIEW
- LONG TERM STORAGE
- DOWNSAMPLING

NOV 2017
CNCF INCUBATING

THANOS
⇓
Distributed prometheus
⇓
Scaling Prometheus
⇓

Thanos Ruler ← Thanos Querier → Store Gateway

Global Compactor

Prometheus	Sidecar
SSD	

COMPONENTS
- SIDECAR
- STORE GATEWAY
- COMPACTOR
- RECEIVER
- RULER
- QUERIER

from the Docs

- Sidecar: connects to Prometheus, reads its data for query and/or uploads it to cloud storage.
- Store Gateway: serves metrics inside of a cloud storage bucket.
- Compactor: compacts, downsamples and applies retention on the data stored in cloud storage bucket.
- Receiver: receives data from Prometheus's remote-write WAL, exposes it and/or upload it to cloud storage.
- Ruler/Rule: evaluates recording and alerting rules against data in Thanos for exposition and/or upload.
- Querier/Query: implements Prometheus's v1 API to aggregate data from the underlying components.