**1. What is Grafana & What Is It Used For?**

Grafana is an open source solution for running data analytics, pulling up metrics that make sense of the massive amount of data & to monitor our apps with the help of cool customizable dashboards.

Grafana connects with every possible data source, commonly referred to as databases such as *Graphite, Prometheus, Influx DB, ElasticSearch, MySQL, PostgreSQL* etc.

Grafana being an open source solution also enables us to write plugins from scratch for integration with several different data sources.

The tool helps us study, analyse & monitor data over a period of time, technically called *time series analytics.*

It helps us track the user behaviour, application behaviour, frequency of errors popping up in production or a pre-prod environment, type of errors popping up & the contextual scenarios by providing relative data.

A big upside of the project is it can be deployed on-prem by organizations which do not want their data to be streamed over to a vendor cloud for security & other reasons.

Over time this framework has gained a lot of popularity in the industry & is deployed by big guns such as PayPal, eBay, Intel & many more. I’ll talk about the industry use cases up ahead in the article.

Besides the core open source solution there are other two services offered by the Grafana team for businesses known as the *Grafana Cloud* & the *Enterprise*.

**2. What Are the Features Offered by Grafana?**

This open-source framework takes care of all the analytics of our app. We can easily query, visualize, set up alerts, understand the data with the help of metrics.

The dashboard is pretty equipped, & continually evolving, to make sense of complex data. From displaying graphs to heatmaps, histograms, Geo maps. The tool has a plethora of visualization options to understand data as per our business requirements.

Alerts are set up & triggered like trip wires whenever an anticipated scenario occurs. These happenings can be notified on Slack or whatever communication platform the monitoring team uses.

Grafana has native support for approx. a dozen databases. And with many more, facilitated by respective plugins.

Either host it on-prem or any cloud platform of your choice.

It has built-in support for Graphite & expressions like add, filter, avg, min, max functions etc. to custom fetch data.

**3. What is Grafana Cloud?**

Grafana Cloud is a cloud-native, highly available, fast fully managed open SaaS Software as a Service metrics platform. Pretty helpful for those who do not want to take the load of hosting the solution on-prem & want to stay worry free of managing the entire deployment infrastructure.

It runs on Kubernetes clusters. The backend is Prometheus & Graphite compatible. So, we can either chose Grafana cloud instance or both.

**4. What is Grafana Enterprise?**

The Enterprise service comes with all the Grafana Cloud features plus premium plugins, data sources, premium support from the core team. We get response SLAs, trainings & a lot more.

**5. What are the tools that are used for container monitoring?**

Tools that are used for container monitoring are:

* Heapster
* cAdvisor
* Prometheus
* InfluxDB
* **Grafana**