PROMETHEUS_LAB02

1-How do I trigger a Prometheus alert?

Answer:

1. Setup and configure AlertManager.
2. Configure the config file on Prometheus so it can talk to the AlertManager.
3. Define alert rules in Prometheus server configuration.
4. Define alert mechanism in AlertManager to send alerts via Slack and Mail

2-What is the difference between node exporter and mysql exporter ?

Answer:

Node Exporter is a Prometheus exporter for server level and OS level metrics with configurable metric collectors. It helps us in measuring various server resources such as RAM, disk space, and CPU utilization.

MySQL Exporter is a client application used to get MySQL metrics and export to Prometheus server. The installation and usage of Prometheus MySQL Exporter to monitor MySQL/MariaDB servers were covered in Monitoring MySQL / MariaDB with Prometheus in five minutes.

3-what is the maximum retention period to save data in Prometheus and how to increase it ?

Answer:

The Prometheus server will store the metrics in a local folder, for a period of 15 days, by default. We can increase it by changing the polarity of the mobile phase (if you want, the mobile phase is competing with the solute). Thus a more polar mobile phase will increase retention, and a more non-polar mobile phase will decrease retention.

4-What are the different PromQL data types available in Prometheus Expression language?

Answer:

PromQL uses three data types: scalars, range vectors, and instant vectors. It also uses strings, but only as literals. This intro will provide basic PromQL examples and concepts to understand as you get used to Prometheus queries.

5-How To calculate the average request duration over the last 5 minutes from a histogram ?

```
 rate(http_request_duration_seconds_sum[5m])
/
 rate(http_request_duration_seconds_count[5m])
```

6-What is Thanos Prometheus?

Thanos is based on Prometheus. With Thanos you use more or less Prometheus features depending on the deployment model, however Prometheus always stays as integral foundation for collecting metrics and alerting using local data. Thanos bases itself on vanilla Prometheus.

7-what is promtool and how i can use it ?

Prometheus ships with a very useful supporting command-line tool called promtool . This small Golang binary can be used to quickly perform several troubleshooting actions and is packed with helpful subcommands.

SYNOPSIS:

>> promtool [<flags>] <command> [<args> ...]

COMMANDS:

>> check config <config-files>...

=> Check if the config files are valid or not.

>> check web-config <web-config-files>...

=> Check if the web config files are valid or not.

>> check rules <rule-files>...

=> Check if the rule files are valid or not.

8-What types of Monitoring can be done via Grafana?

Answer:
1. Logs.

2. Visualization.

3. Traces.

4. Metrics.

5. Plugins.
6. Performance testing.
7. Cloud.

9-Can we see different Servers CPU comparison
Grafana

Answer:

Yes, we can see many servers cpu from a Grafana dashboard.