



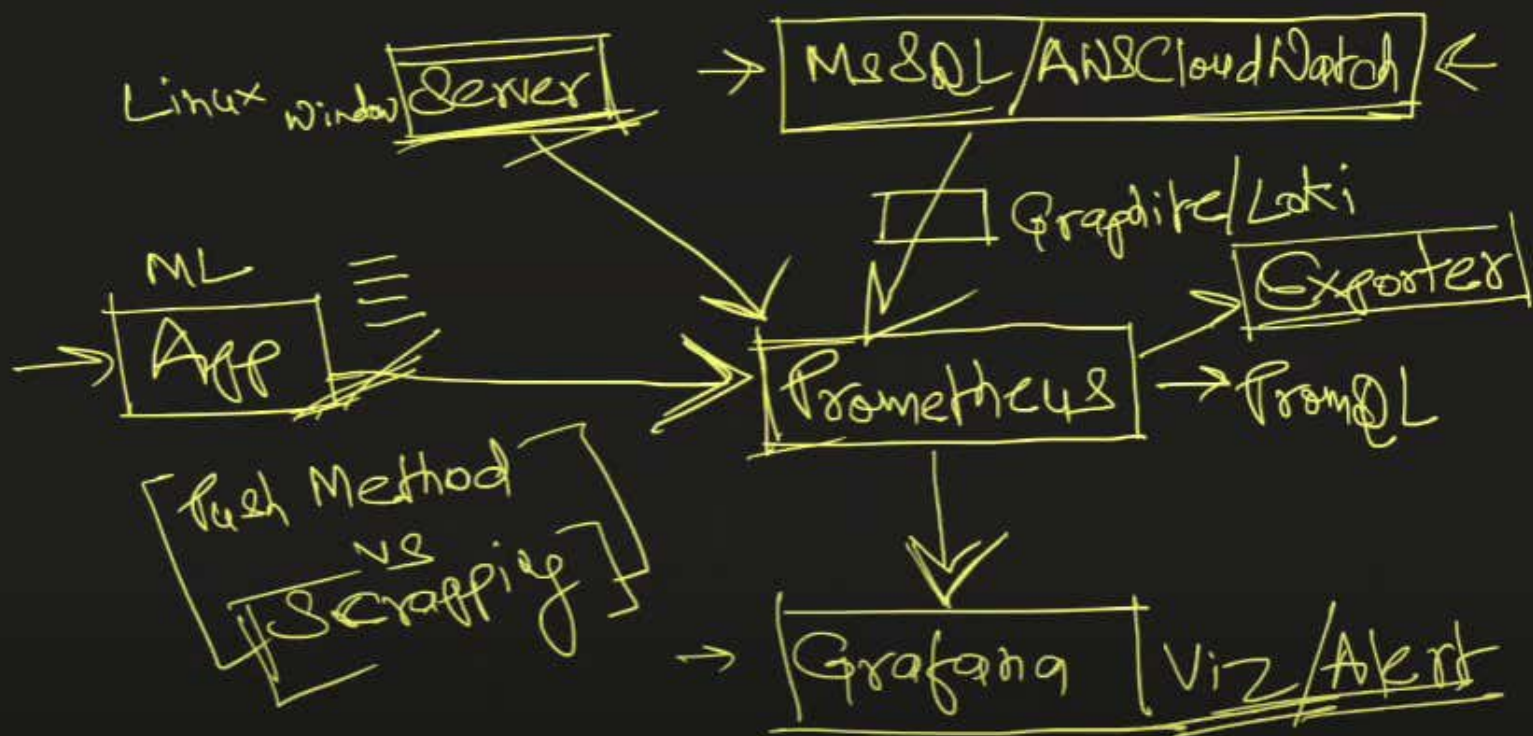
Monitoring/Alerting/Obs


- Is the service on?
- done as expected?

- performance? $\boxed{3\text{sec} - 5\text{sec}}$
5min $\rightarrow \boxed{20\text{sec}}$

> monitoring vs Observability

> Data collected for monitoring is called Telemetry data.



 Prometheus

Query Alerts Status

Light Dark User

Settings Bookmarks

>_ go_gc_heap_allocs_by_size_bytes_bucket{le="8.999999999999998"} + 1000

⋮ Execute


Table Graph Explain

< Evaluation time >

Load time: 47ms Result series: 1

(instance="localhost:9090", job="prometheus", le="8.999999999999998")15097




+ Add query



 Prometheus

Query

Alerts

Status





>_ go_gc_heap_allocs_by_size_bytes_bucket{le="8.999999999999998"} / 2

Execute

Table

Graph

Explain

< Evaluation time >

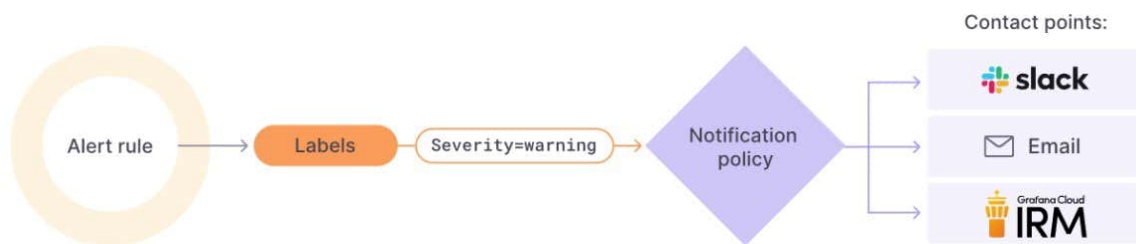
Load time: 12ms Result series: 1

{instance="localhost:9090", job="prometheus", le="8.999999999999998"}

7048.5

+ Add query

How Grafana Alerting works



Labels match alert instances to notification policies and silences and can be used to group your alerts by severity.

Notification policy is the set of rules for where, when, and how the alerts get routed. Notification policies have a tree structure, where each policy can also match specific alert labels.

Contact points define how your contacts are notified when an alert fires. We support a multitude of ChatOps tools to ensure the alerts come to your team — not the other way around.

m INTRODUCTION

□ CONCEPTS

□ PROMETHEUS SERVER

Version: latest (3.0) ▾

Getting started

Installation

Configuration

Querying

Basics

Operators

Functions

FUNCTIONS

Some functions have default arguments, e.g.

`year(v=vector(time()) instant-vector)`. This means that there is one argument `v` which is an instant vector, which if not provided it will default to the value of the expression `vector(time())`.

Notes about the experimental native histograms:

- Ingesting native histograms has to be enabled via a [feature flag](#). As long as no native histograms have been ingested into the TSDB, all functions will behave as usual.
- Functions that do not explicitly mention native histograms in their documentation (see below) will ignore histogram samples.
- Functions that do already act on native histograms might still change their behavior in the future.
- If a function requires the same bucket layout between multiple native histograms it acts on, it will automatically convert them appropriately. (With the currently supported

- `abs()`
- `absent()`
- `absent_over_time()`
- `ceil()`
- `changes()`
- `clamp()`
- `clamp_max()`
- `clamp_min()`
- `day_of_month()`
- `day_of_week()`
- `day_of_year()`
- `days_in_month()`
- `delta()`
- `deriv()`
- `exp()`
- `floor()`
- `histogram_avg()`

Insights

Get started

Monitor the status of your system

Last 1 week

Grafana-managed alert rules

Top 10 firing instances

Alert rule name	Number of fires
Disk Space 90%	2248
Mythical Alert HC	2117
Support-155221	1154
Last Chance Disk Space 99	1001
Grafana Demo Day India	960
Kubernetes CPU Throttling	721

Active rules

316

Paused rules

16

Alert instances by state

Firing instances

1761

Recovering instan...

0

Pending instances

11

No data instances


7

Error instances

0

Alert rule evaluation




% of alert rule evaluation

 Prometheus

Query

Alerts

Status > Target health




Select scrape pool

Filter by target health

Filter by endpoint or labels

my-windows-machine

1 / 1 up 

Endpoint

Labels

Last scrape

State

<http://localhost:9102/metrics>

instance="localhost:9102"


job="my-windows-machine"

14.554s ago

27ms

UP

prometheus

1 / 1 up 

Endpoint

Labels

Last scrape

State

<http://localhost:9090/metrics>

app="prometheus"

instance="localhost:9090"

job="prometheus"

2.89s ago

3ms

UP

Home > Connections > Data sources > prometheus-2

Home

Bookmarks

Starred

Dashboards

Explore

Alerting

Connections

Add new connection

Data sources

More apps

Administration

Search or jump to...

ctrl+k

+ | ⌂

prometheus-2

Type: Prometheus

Alerting

Supported

Explore data

Build a dashboard

Settings

Dashboards

Name

prometheus-2

Default

Before you can use the Prometheus data source, you must configure it below or in the config file. For detailed instructions, [view the documentation](#).

Fields marked with * are required

Connection

Prometheus server URL *

http://localhost:9090

Please enter a valid URL

Authentication

Authentication methods

Choose an authentication method to access the data source

No Authentication

TLS settings

ScreenRec

