WAZUH

Grafana

Mod:37

Grafana Creating Visualization, Dashboard and Integrated Wazuh

Grafana is a powerful **open-source analytics and visualization platform** used to monitor and visualize metrics from various data sources in real time.

What Grafana Does

Grafana helps you:

- **Visualize** data using interactive graphs, charts, and dashboards.
- **Monitor** infrastructure, applications, and services.
- **Alert** on anomalies and thresholds (e.g., high CPU usage).
- **Query** multiple data sources (like Aws, Elasticsearch, etc.).

Data Sources:
Grafana connects to various backends like:

- Prometheus
- InfluxDB
- Loki (logs)
- MySQL, PostgreSQL
- Elasticsearch
- AWS CloudWatch, Google Cloud, and more

Dashboards:
Users create custom dashboards using panels that can:

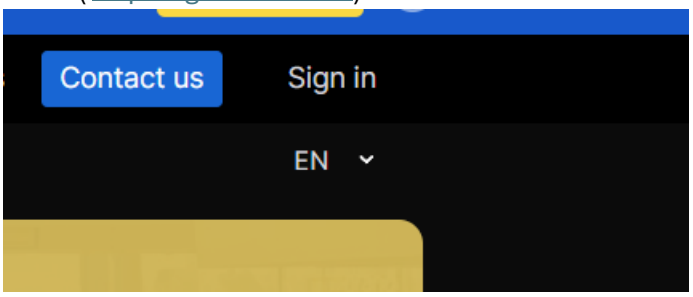
- Display time series (e.g., CPU over time)
- Show logs
- Visualize tables, pie charts, heatmaps, etc.

Alerts:

- Set alert conditions on graphs.
- Notify via Slack, email, Teams, PagerDuty, etc.

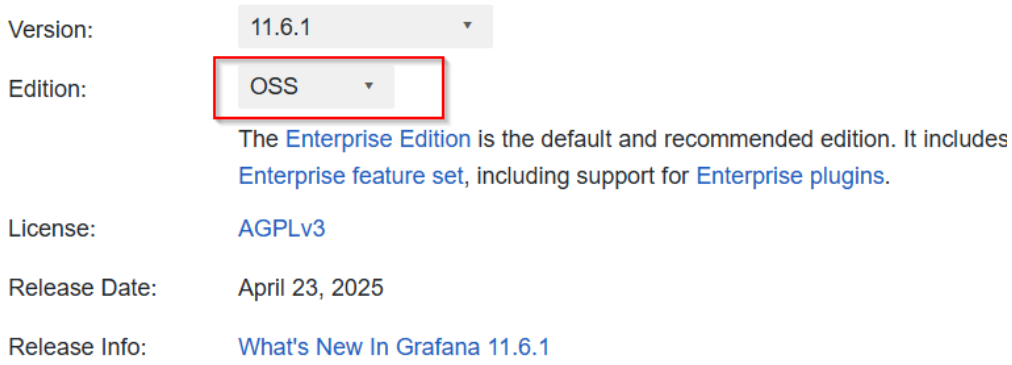
Plugins:
Grafana supports plugins to extend functionality — data sources, panels, and apps.

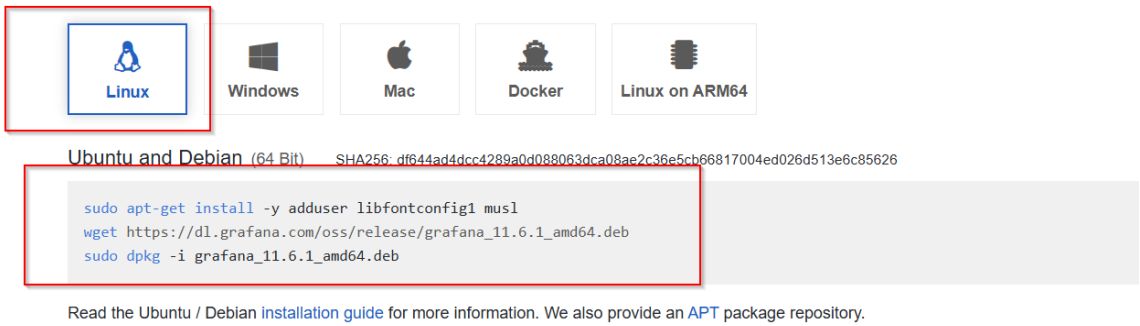
Step:1 Create the account in official websites with your mail and create the password and and verify code in Gmail or outlook .

- Links:(https://grafana.com/)
- 

Step2: Next install separated machine ubuntu or centos, rocky once setup and installation (Install the Grafana in ubuntu)

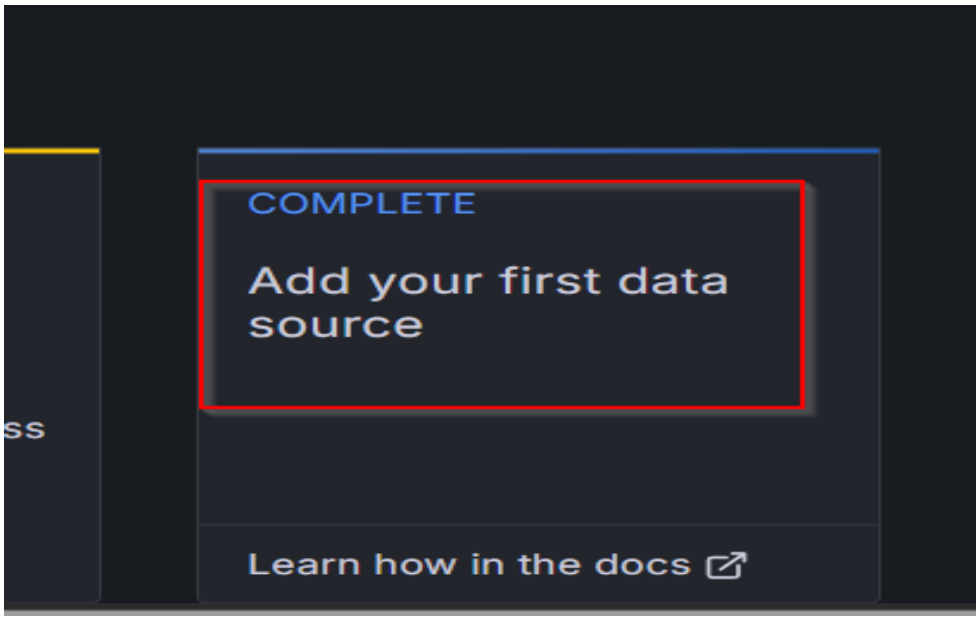
- https://grafana.com/grafana/download (Download Edition: OBB) Noted: Grafana Free-trail 15-days





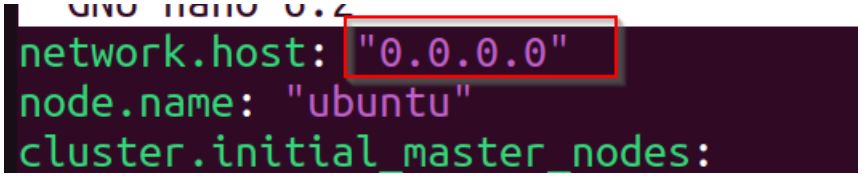
- Installtion it take time max 5 mins and once Grafana download start and enable the server (Systemctl enable Grafana-server and systemctl start Grafana-server) and next the status Grafana-server active or not ..
- Next check your ip address in machine go to browswer type the ip address with port 3000
- http://192.168.1.1:3000 login page pop-up will open username and password admin and admin

- Once login there will user interface -Name called Data Sources click it and open



Step3: Navigate to Wazuh-server and set Wazuh-indexer bind ip address and because Grafana gonna monitoring entire of wazuh-alert messages and logs and give us visualization graphs

- Open with nano or vim editor /etc/wazuh-indexer/opensearch.yml

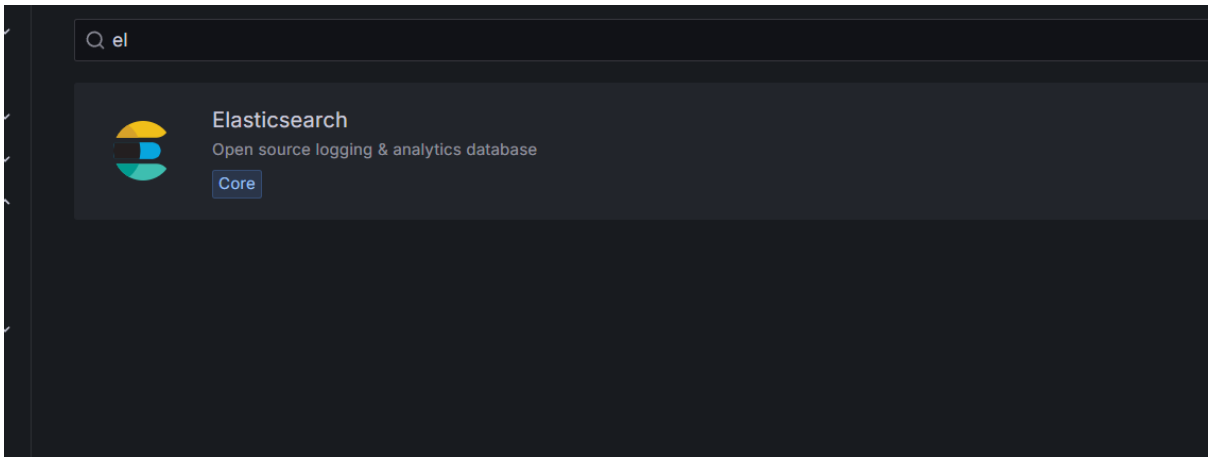


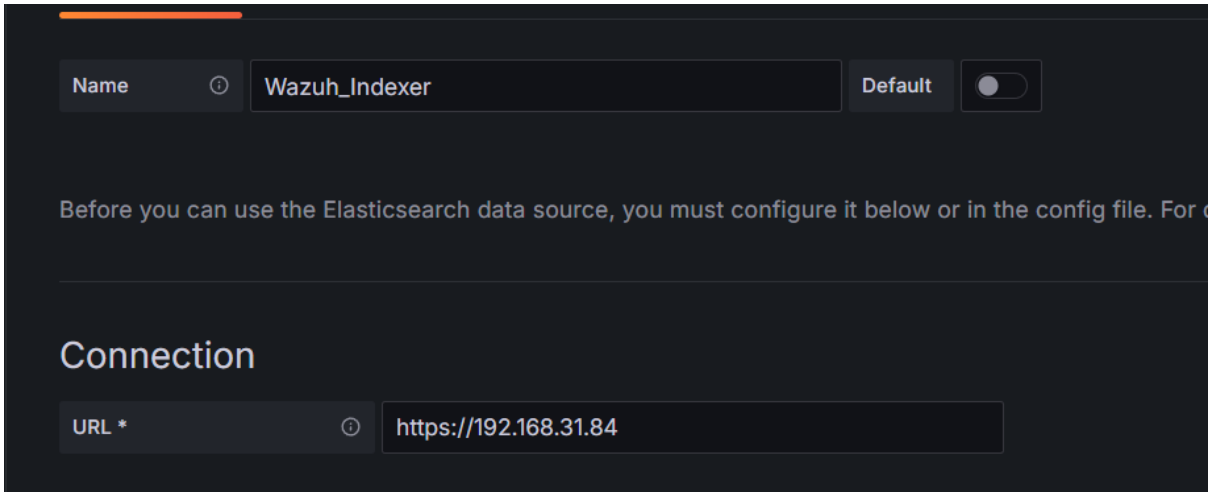
Above the images I have remove the previous Ip address and change to bind-address save and exit next,

- Systemctl restart wazuh-manager ,Systemctl restart wazuh-indexer, systemctl restart wazuh-dashboard

```
systemctl restart wazuh-manager
systemctl restart wazuh-indexer
systemctl restart wazuh-dashboard
nano /etc/wazuh-indexer/opensearch.yml
```

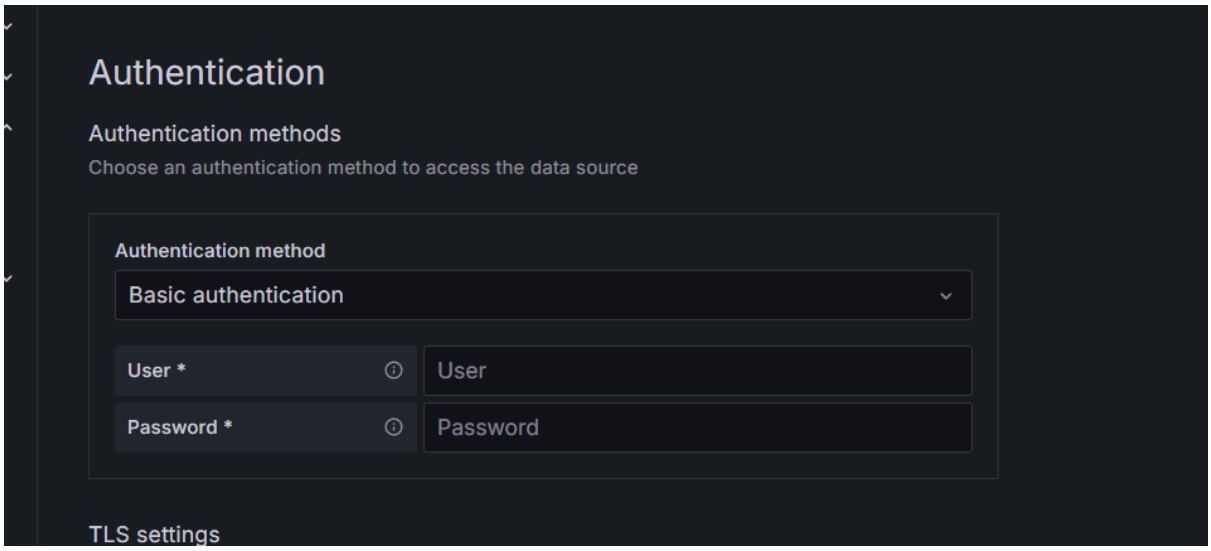
Step:4 Lets deploy in Grafana server go to add data source there will be search bar inside on ELASTICSEARCH and open the bar and we set the ip address of wazuh-server and some configuration.



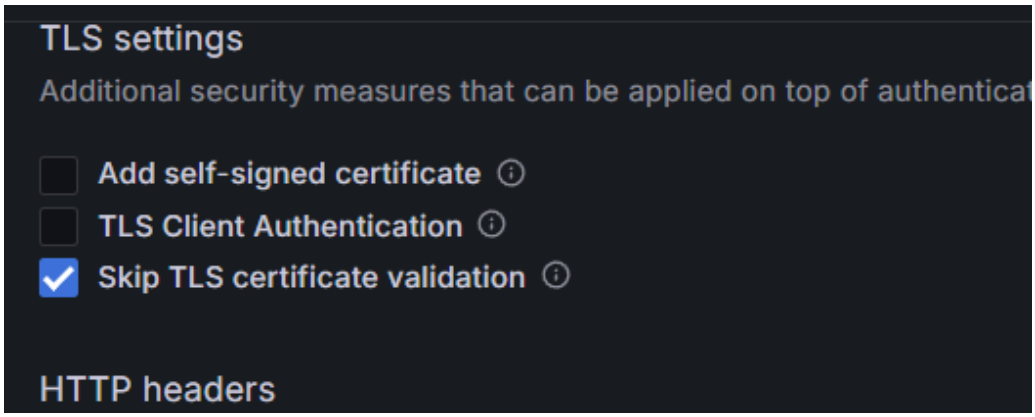


Above the images I have rename the Wazuh_indexer and connection set our wazuh-server ip address with 9200

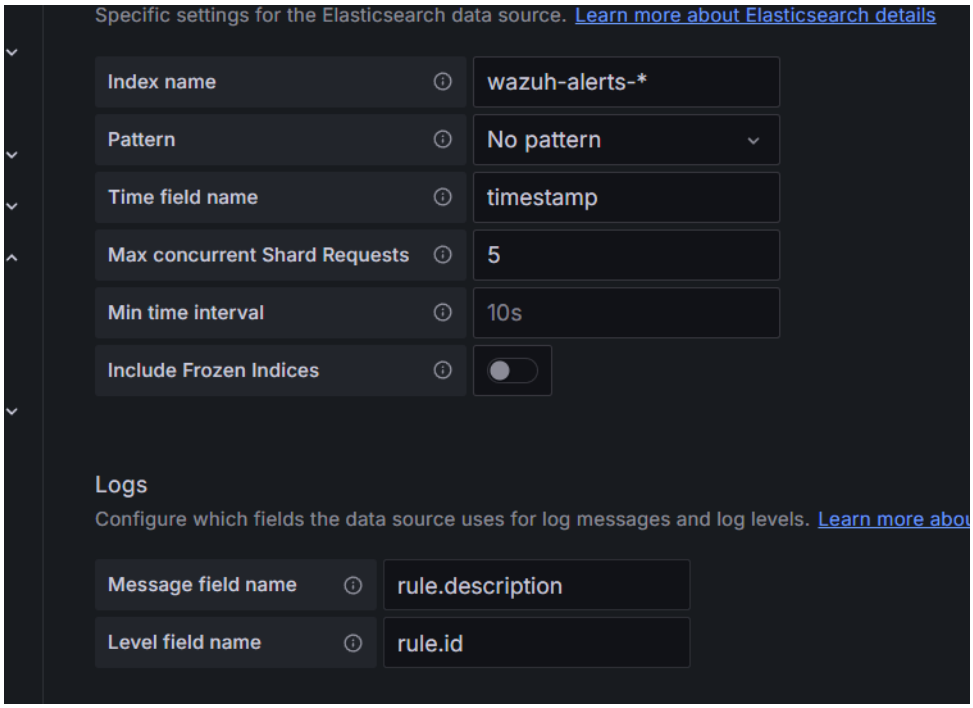
Step5: In Authentication side change to Basic Authentication and add the username and password of Wazuh-Server

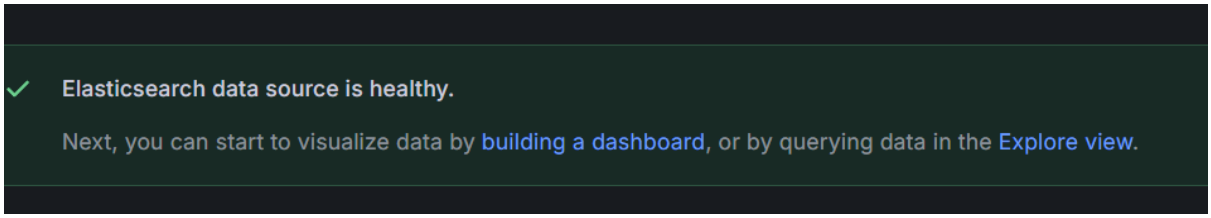


Next TlS Settings skip tls objections



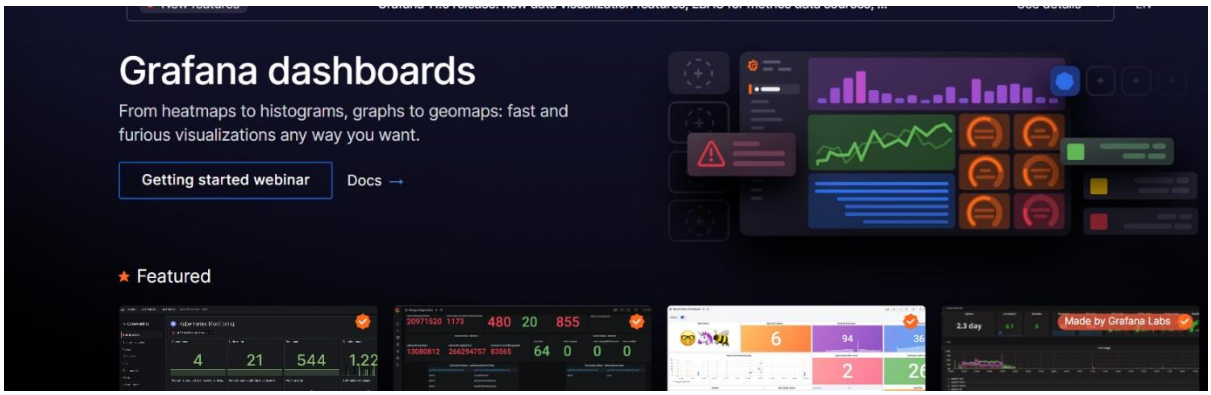
Step:6 Lets deploy add the wazuh-indexer and timestamp, rule.id, etc and next the SAVE and est config.

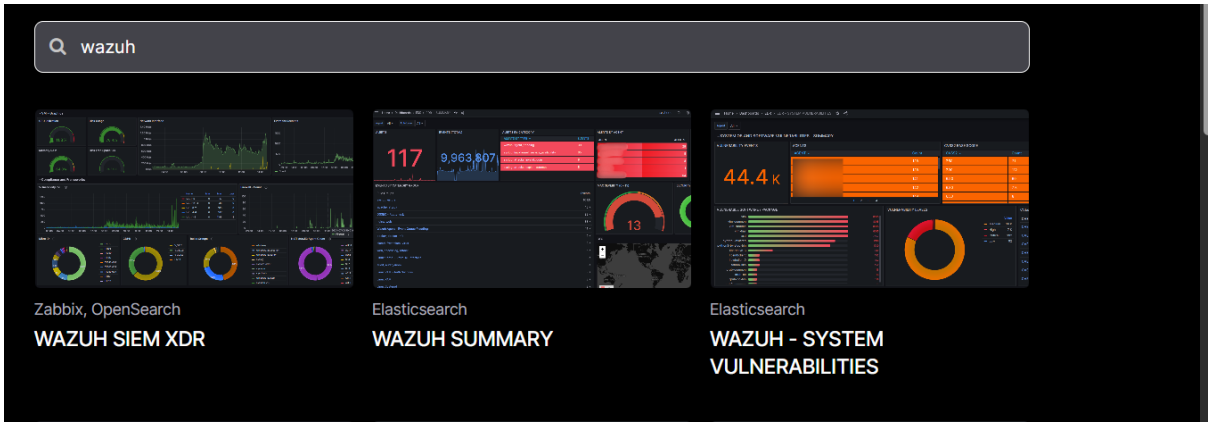




Above the images its success data source is healthy which it successfully connects to the wazuh-server.

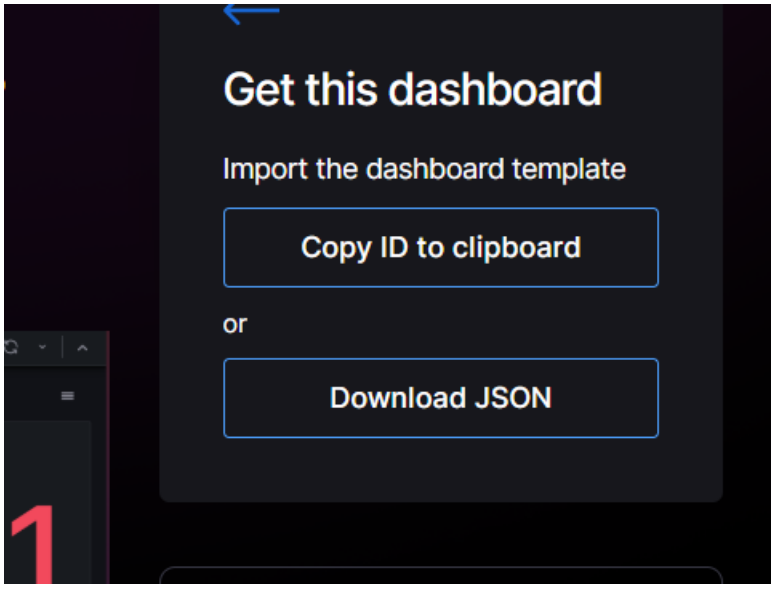
Step7: Next go to dashboard websites and check the visualization (https://grafana.com/grafana/dashboards/)



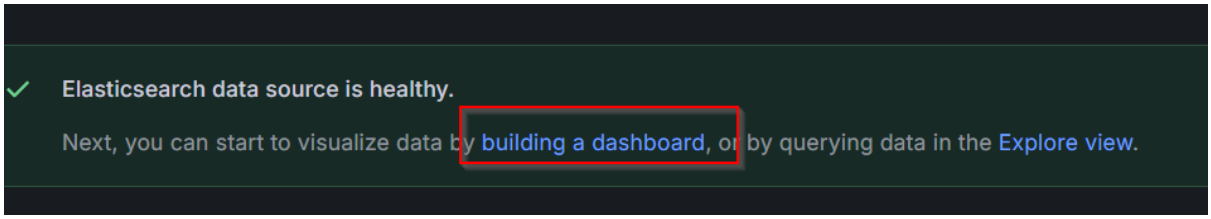


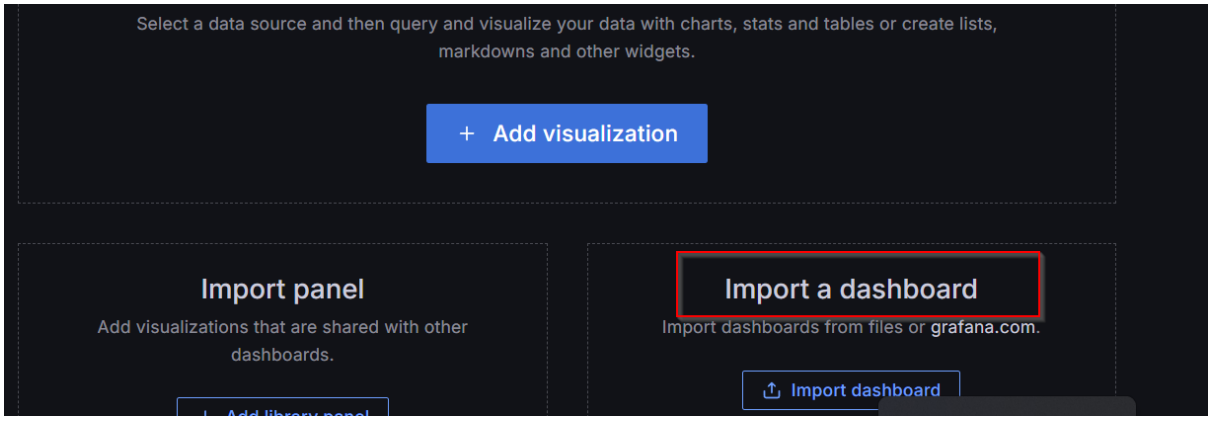
Let's select the WAZUH SUMMARY DASHBAORD

(https://grafana.com/grafana/dashboards/22448-wazuh-summary/) and open it we can download json file or copy id

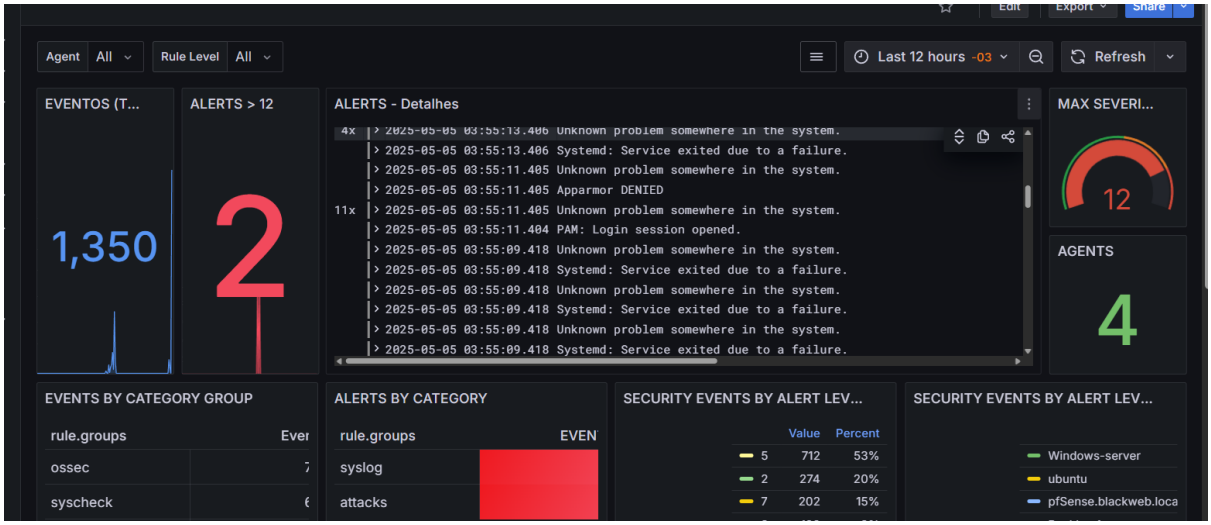


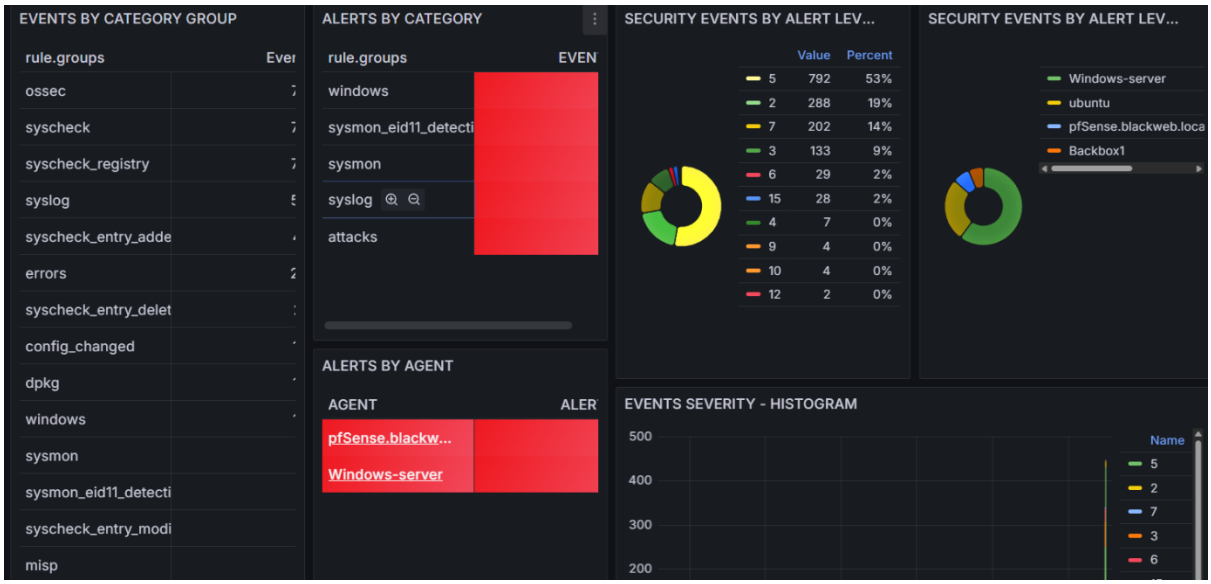
I have download Json format and next let's import the Json file and let's check visualization logs in dashboard and next check in data source is healthy pop-up there will be building a dashboard and click in and let's import wazuh summary Json format





Import the file form local to browser and next summary and visualization name set wazuh-dashboard-overview and id will be created automatically and next import it. (Noted: If we import it create visualization and some different kind of charts and alert messages log chart, etc)





EVENT ID	AGENT	IP ADDRESS	RULE DESCRIPTION	RULE LEVEL
JF5QoJYBrm06OukJWyI1	Windows-server	192.168.31.214	Registry Key Entry Deleted.	5
1V5PoJYBrm06OukJ2iA1	Windows-server	192.168.31.214	Software protection service scheduled successfully.	3
IV5QoJYBrm06OukJWyI1	Windows-server	192.168.31.214	Registry Key Entry Deleted.	5
1F5PoJYBrm06OukJ2iA1	Windows-server	192.168.31.214	MISP - Error connecting to API	5
IF5QoJYBrm06OukJWyI1	Windows-server	192.168.31.214	Registry Key Entry Deleted.	5
0I5PoJYBrm06OukJnyCc	Windows-server	192.168.31.214	Sysmon - Event 22: DNS Request by C:\\Windows\\Sy	3
HF5QoJYBrm06OukJWyI1	Windows-server	192.168.31.214	Registry Key Entry Deleted.	5
0V5PoJYBrm06OukJmyC2	Windows-server	192.168.31.214	Sysmon - Event 22: DNS Request by C:\\Windows\\System32\\spoolsv.exe	3
GI5QoJYBrm06OukJWyI1	Windows-server	192.168.31.214	Registry Key Entry Deleted.	5
2V5QoJYBrm06OukJGCC4	Windows-server	192.168.31.214	System time changed	5
KV5QoJYBrm06OukJWyI1	Windows-server	192.168.31.214	Registry Key Entry Deleted.	5
GF5QoJYBrm06OukJWyI1	Windows-server	192.168.31.214	Registry Key Entry Deleted.	5
KF5QoJYBrm06OukJWyI1	Windows-server	192.168.31.214	Registry Key Entry Deleted.	5
F15QoJYBrm06OukJWyI1	Windows-server	192.168.31.214	Registry Key Entry Deleted.	5