**Install and Configuring Grafana**

**Note :** Login to Ubuntu Server VM via Cli

1. Add Grafana gpg key which allows you to install signed packages :

**sudo apt install -y gnupg2 curl software-properties-common**

**curl -fsSL** [**https://packages.grafana.com/gpg.key|sudo**](https://gigamon.atlassian.net/wiki/spaces/QA/pages/748453891/Grafana+On-Prem+AMX+Deployment+Guide+using+Gigamon+Plugin) **gpg --dearmor -o /etc/apt/trusted.gpg.d/grafana.gpg**

1. Then install Grafana APT repository

**sudo add-apt-repository "deb** [**https://packages.grafana.com/oss/deb**](https://packages.grafana.com/oss/deb) **stable main"**

1. Once the repository is added, proceed to update your Apt repositories and install Grafana

**sudo apt update**

**sudo apt -y install grafana**

1. Start Grafana service

**sudo systemctl enable --now grafana-server**

1. The service should now be running

**systemctl status grafana-server.service**

1. Grafana default http port is **3000,**you’ll need to allow access to this port on the firewall. Ubuntu comes with ufw firewall.

**sudo apt -y install ufw**

1. Then enable the firewall service:

**sudo ufw enable**

1. Open the port on the firewall:

**sudo ufw allow ssh**

**sudo ufw allow 3000/tcp**

1. Access Grafana Dashboard using the server IP address or hostname and port  **The default credentials are : admin , admin**

**Eg:** <http://10.60.94.147:3000/>

**Install and Configuring Loki**

1. Go to Loki’s [Release Page](https://github.com/grafana/loki/releases/) and choose the latest version of Loki

**curl -s** <https://api.github.com/repos/grafana/loki/releases/latest> **| grep browser\_download\_url |  cut -d '"' -f 4 | grep loki-linux-amd64.zip | wget -i -**

1. Install unzip

**sudo apt install unzip**

1. Unzip the binary file to /usr/local/bin

**unzip loki-linux-amd64.zip**

**sudo mv loki-linux-amd64 /usr/local/bin/loki**

and confirm the version

**loki --version**

1. Create a YAML file for Loki under /usr/local/bin

**sudo mkdir -p /data/loki**

1. Download template configuration for Loki.

**sudo wget -O /etc/loki-local-config.yaml** [**https://raw.githubusercontent.com/grafana/loki/main/cmd/loki/loki-local-config.yaml**](https://raw.githubusercontent.com/grafana/loki/main/cmd/loki/loki-local-config.yaml)

1. Edit the file and set your values accordingly.

**sudo vim /etc/loki-local-config.yaml**

1. Modify the configurations on the file:

auth\_enabled: false

server:

  http\_listen\_port: 3100

  grpc\_listen\_port: 9096

  log\_level: debug

  grpc\_server\_max\_concurrent\_streams: 1000

common:

  instance\_addr: 127.0.0.1

  path\_prefix: /data/loki

  storage:

    filesystem:

      chunks\_directory: /data/loki/chunks

      rules\_directory: /data/loki/rules

  replication\_factor: 1

  ring:

    kvstore:

      store: inmemory

query\_range:

  results\_cache:

    cache:

      embedded\_cache:

        enabled: true

        max\_size\_mb: 100

schema\_config:

  configs:

* from: 2024-10-24

      store: tsdb

      object\_store: filesystem

      schema: v13

      index:

        prefix: index\_

        period: 24h

pattern\_ingester:

  enabled: true

  metric\_aggregation:

    enabled: true

    loki\_address: <<IP ADDRESS>>:3100

ruler:

  alertmanager\_url: [http://<<IP ADDRESS>>:9093](http://10.114.84.56:9093/)

frontend:

  encoding: protobuf

1. Create Loki service:  Create the following file under /etc/systemd/system to daemonize the Loki service:

          Modify the configurations on the file:

**sudo tee /etc/systemd/system/loki.service<<EOF**

**[Unit]**

**Description=Loki service**

**After=network.target**

**[Service]**

**Type=simple**

**User=root**

**ExecStart=/usr/local/bin/loki -config.file /etc/loki-local-config.yaml**

**[Install]**

**WantedBy=multi-user.target**

**EOF**

1. Reload system daemon then start Loki service:

**sudo systemctl daemon-reload**

**sudo systemctl start loki.service**

1. You can check and see if the service has started successfully:

**systemctl status loki**

    10. Allow 3100 port :

**sudo ufw allow 3100/tcp**

  11. You can now access Loki metrics via [http://server-IP:3100/metrics](http://server-ip:3100/metrics)