Grafana-1

Overview:

Grafana needs a database to keep its application related database.

Grafana supports the following Database:

- **SQLite**
- **MySQL**
- **PostgreSQL**
  By Default Grafana install and uses SQLite which is an embedded database stored in the Grafana installation location.

List of Browser supports:

- Chrome
- Safari
- firefox
- Edge
- Brave

Grafana Web URL runs on port 3000 by default -
This is configurable and can be changed.

Installing Grafana on Linux Machine.

```
# Install the Prerequisite Packages:

sudo apt-get install -y apt-transport-https
software-properties-common wget

# Import the GPG Key:

sudo mkdir -p /etc/apt/keyrings/
wget -q -O - https://apt.grafana.com/gpg.key
| gpg --dearmor | sudo tee
/etc/apt/keyrings/grafana.gpg > /dev/null

# To add a repository for stable release ,
run the following command:

echo "deb [signed-
by=/etc/apt/keyrings/grafana.gpg]
https://apt.grafana.com stable main" | sudo
tee -a /etc/apt/sources.list.d/grafana.list

# Run the following command to update the
list of available packages:

sudo apt-get update
```

```
# To install Grafana OSS, run the following
command:

sudo apt-get install grafana

sudo /bin/systemctl start grafana-
server.service

sudo /bin/systemctl status grafana-
server.service
```

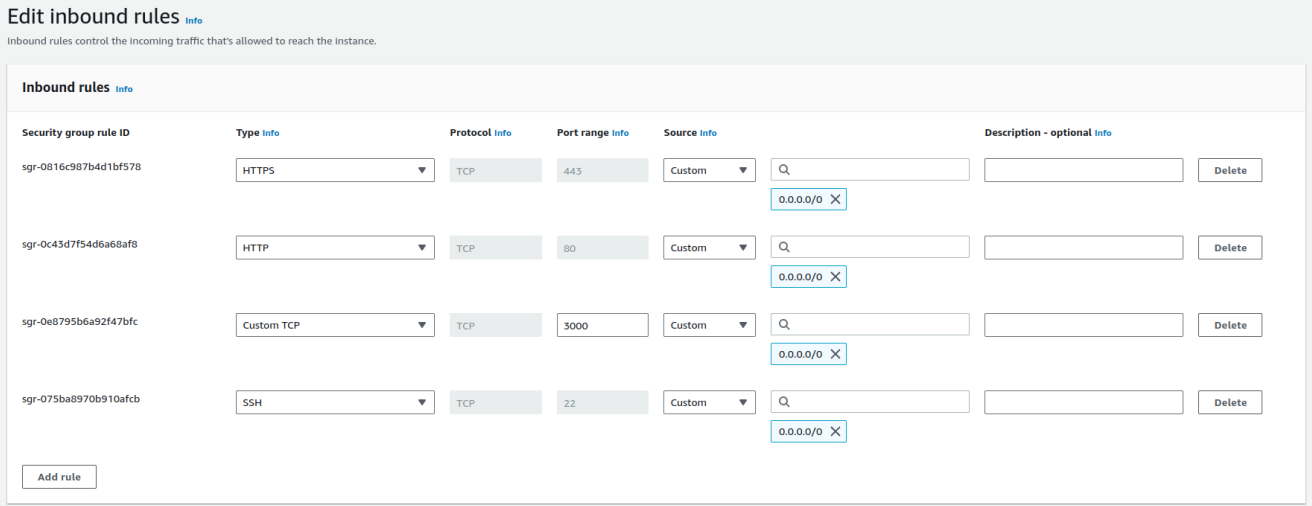
For uninstalling Grafana on Debian or Ubuntu.

```
# If you configured Grafana to run with
systemd, stop the sustemd service for
Grafana server:

sudo systemctl stop grafana-server

# To Uninstall Grafana OSS:

sudo apt-get remove grafana

# Optional: To remove the Grafana
```

```
Repository:

sudo rm -i
/etc/apt/sources.list.d/grafana.list
```

After this we can login to Grafana Dashboard.

- If am using EC2 instance followed by `IP Address:3000` for login Page.
- By Default we have Username: admin
- By Default we have Password: admin



Port Changing in Grafana

- Its very simple as we have to configure port before starting the service check the status of it.

```
sudo /bin/systemctl status grafana-
server.service
```

- For port Changing we do

```
sudo vim /etc/grafana/grafana.ini
```

- Check for the http port to use and change according which are easily available to you.

```
# Before : The http port to use
;http_port = 3000

# After : The http port to use
http port = 4000
```

- Now we should start the Grafana service for the newly configured port.

```
`sudo /bin/systemctl start grafana-server.service`
```

Changing Grafana Database from SQLite to MySQL:

- Before changing Database from SQLite to MySQL we need to install the Database we want to replace.

- For example here we are using **MySQL** in place of **SQLite**.

Installation of MySQL Server

```
sudo apt update
sudo apt install mysql-server
sudo systemctl status mysql.service
sudo mysql
sudo mysql_secure_installation
sudo mysql -u root -p
# password = root
```

Starting MySQL Server

```
sudo systemctl start mysql
sudo systemctl status mysql
```

Creating a New Database in MySQL Database

```
# Before creating Database create new
password also it ask to change password for
root so NO.
# Remove anonymous users YES (default sample
database installed so it ask to remove those
```

```
stuff).
# Remote server login (According to need).
# Reload Privilege tables YES.

sudo mysql_secure_installation
```

- How to login into MySQL Server.

```
mysql  -u root -p
```

- Creating a Database named Grafanadb.

```
create database grafanadb;

show database;
```

- Creating a User with password.

```
CREATE USER 'grafana'@'localhost' IDENTIFIED
BY 'grafana@123';
```

- Now we assigning all the privileges on this Database to the User.

```
GRANT ALL PRIVILEGES ON grafanadb.* TO
'grafana'@'localhost';
```

- This is a default command after we write all the privileges.

```
FLUSH PRIVILEGES;
```

- Exit from the Database.

```
exit
```

Now let's login into the grafana Database.

```
mysql -u grafana -p
```

Let's select the Database.

```
show databases;
use grafanadb;

#If not in use we can exit from it.
exit
```

Now Let's Change the Database from SQLite to MySQL

- Changing the Database URL in **/etc/grafana/grafana.ini**

```
sudo vim /etc/grafana/grafana.ini
```

- Use of URL to configure the database.

```
url
=mysql://grafana:"grafana@123"@13.233.157.10
5:3306/grafanadb
```

```
# Also change this if sudden get an error
type = mysql
host = <Public-IP of EC2>:3306
name = grafanadb
user = grafana

# Also add the password
password = grafana@123
```

- After this we can stop and start the Grafana so that we have refresh the database for the same.

```
sudo /bin/systemctl stop grafana-
server.service
sudo /bin/systemctl start grafana-
server.service
```