**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 |

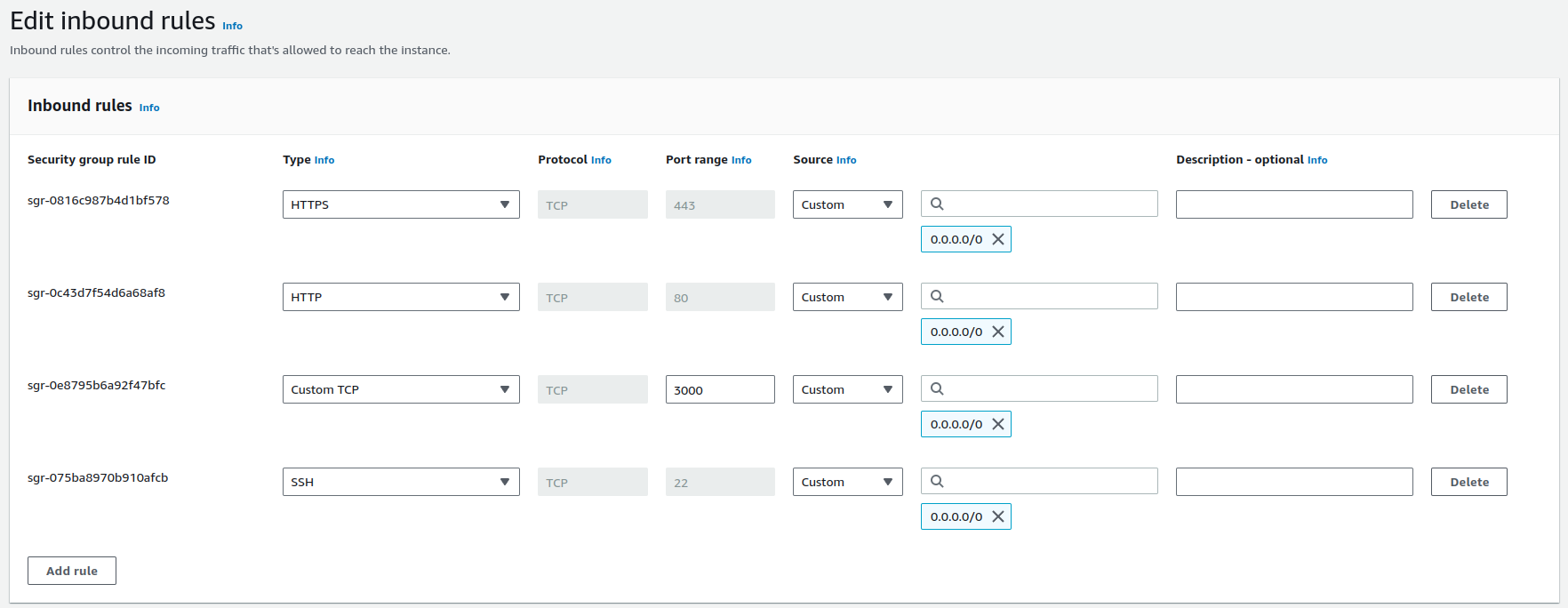
|  |
| --- |
| Grafana server: |

|  |
| --- |
| 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 |