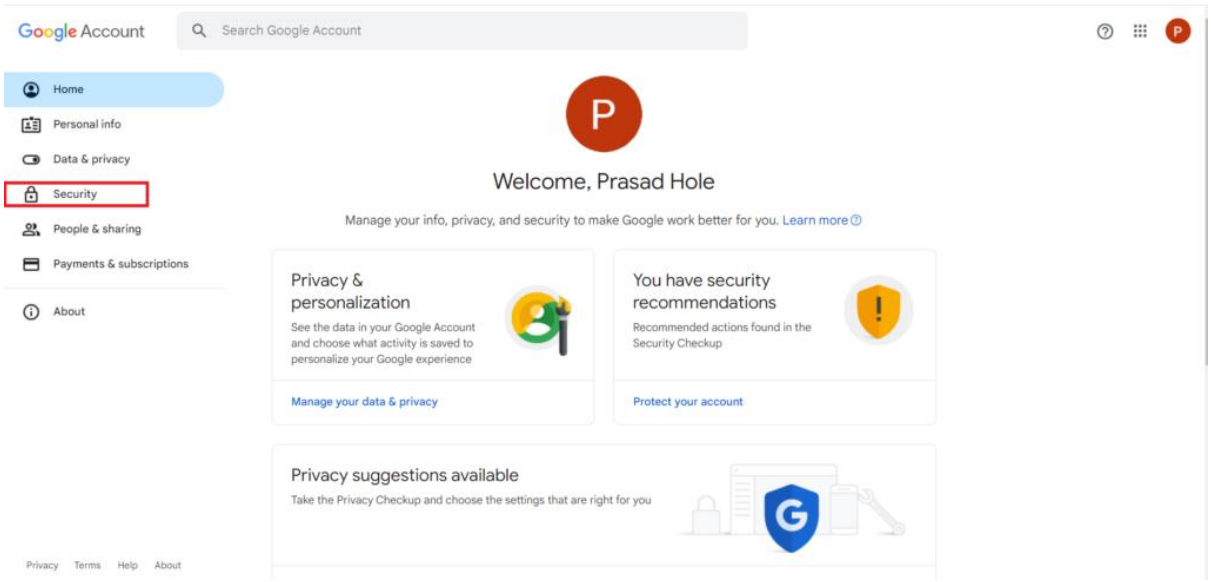
1:Configure SMTP Settings

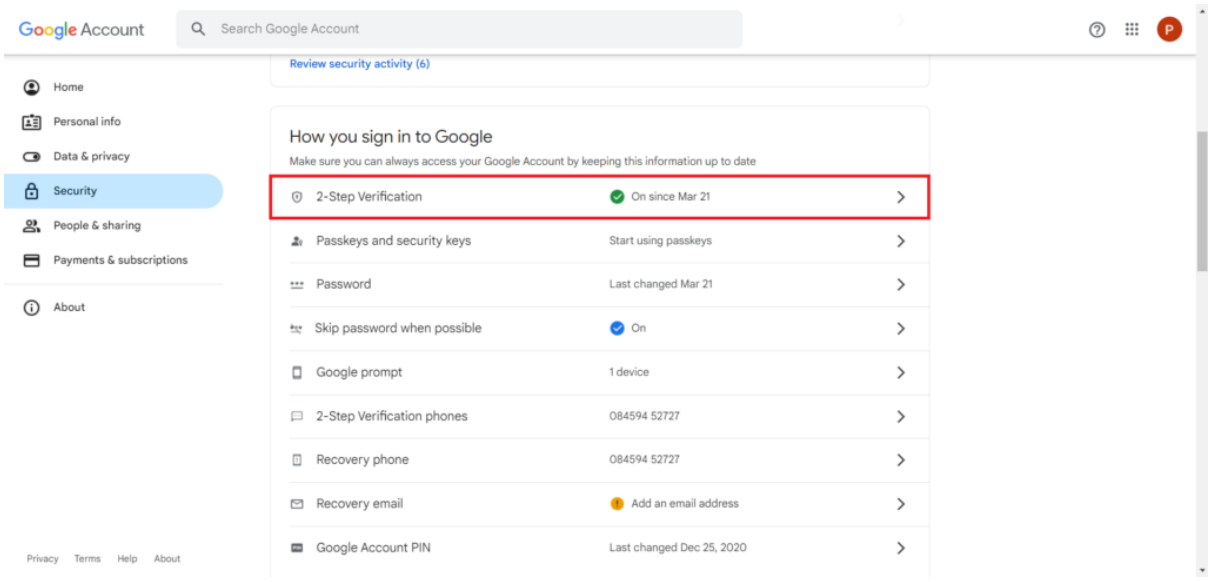
To enable email alerts, Grafana requires SMTP (Simple Mail Transfer Protocol) configuration. SMTP settings specify the email server through which Grafana will send alert notifications.

So first we need to retrieve the password to give in smtp configuration.

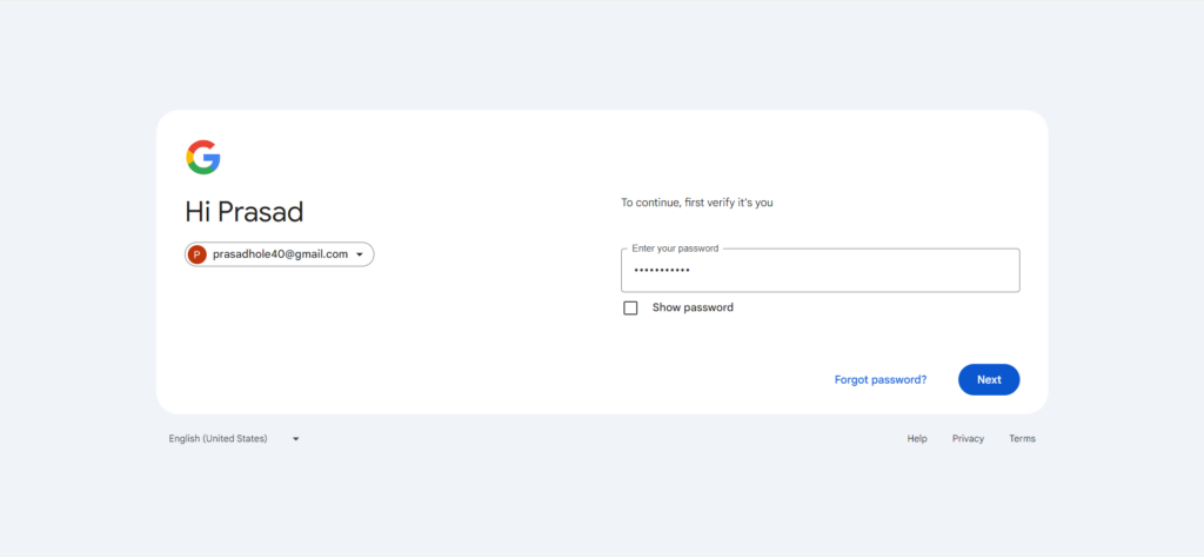
Go to your google account.. Then go to security.



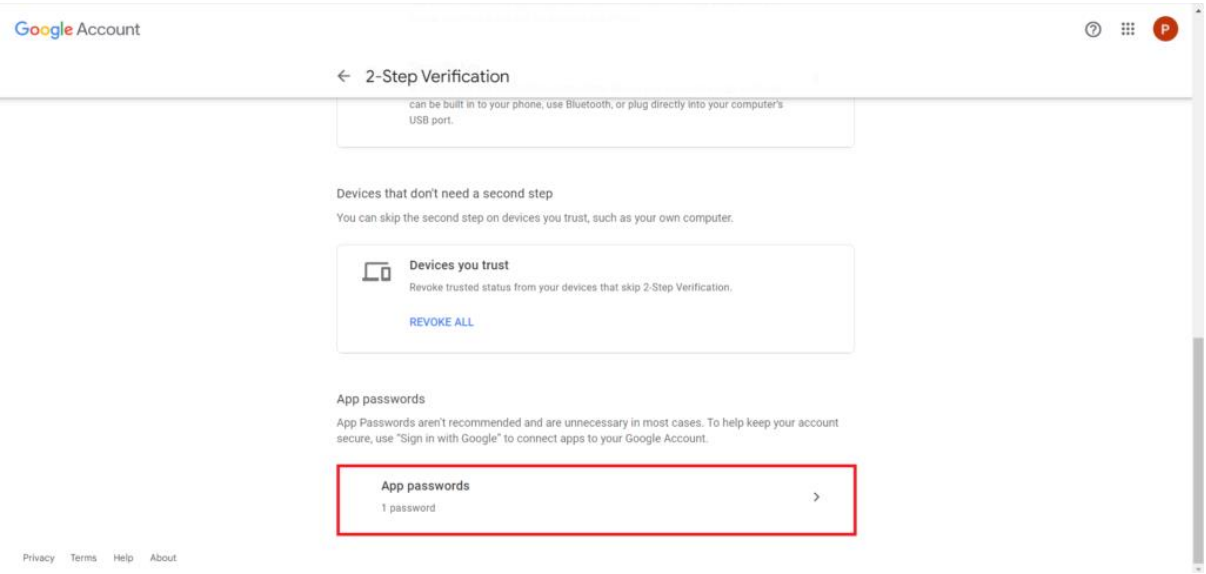
In the How you sign in to Google, select 2-step verification.



Enter your google account password to verify it’s you.

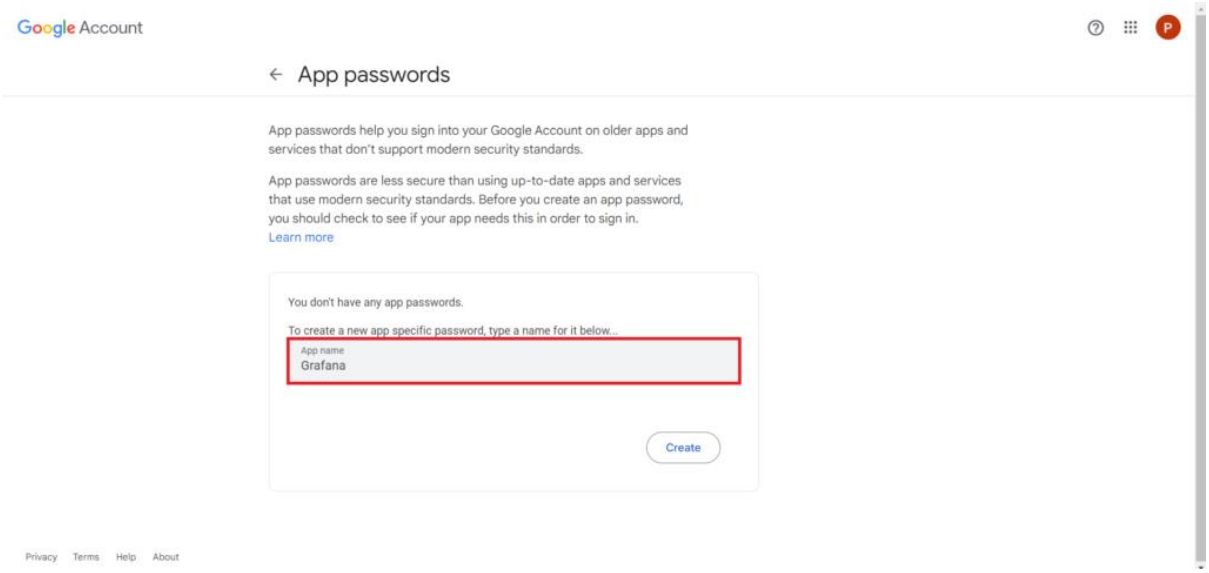


Scroll down and select the App passwords

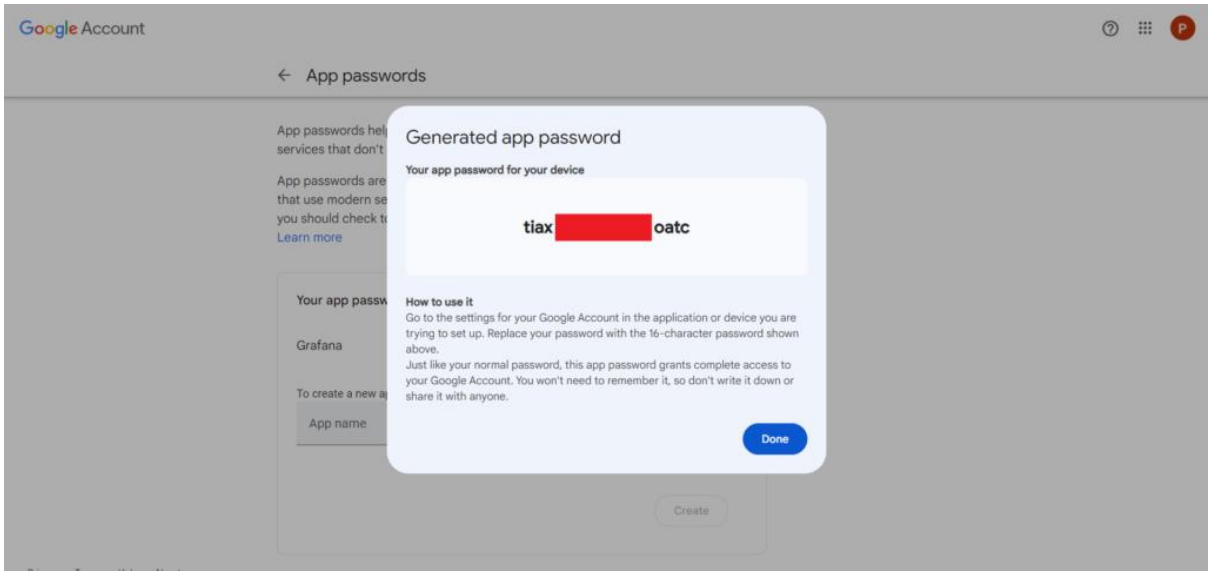


Now Enter the app name for which you wanted to get the app password like Grafana.

And click on Create to create it



the password will be generated. Note it down cause will be using it in SMTP configuration.



now open **/etc/grafana/grafana.ini** file.

```
sudo nano /etc/grafana/grafana.ini
```

```
ubuntu@ip-172-31-4-8:~$ sudo nano /etc/grafana/grafana.ini
```

edit it as shown below.

```
[smtp]

enabled = true

host = smtp.gmail.com:587
```

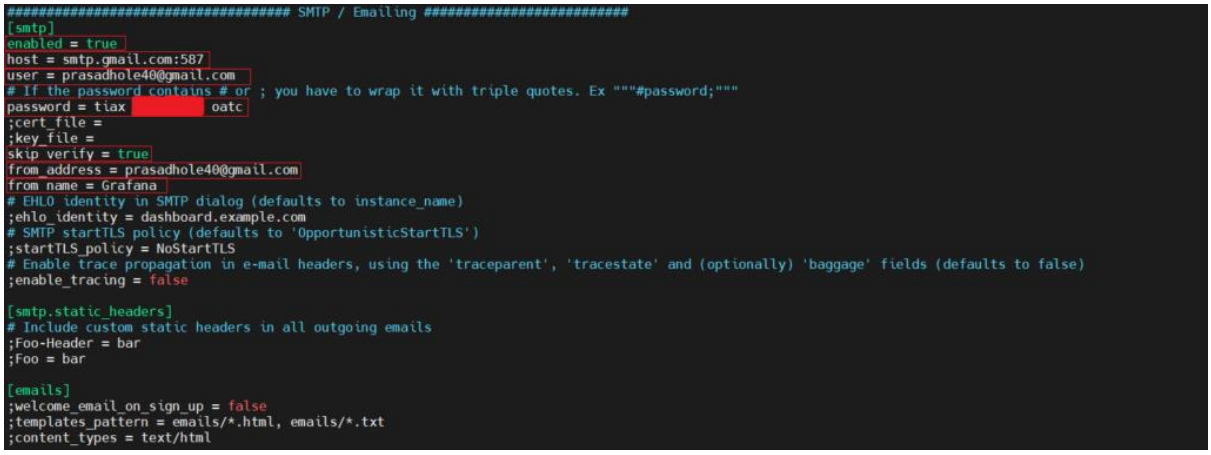
```
user = prasad@gmail.com

password = your app password

skip_verify = true

from_address = prasad@gmail.com


from_name = Grafana
```



save it and restart the grafana server.

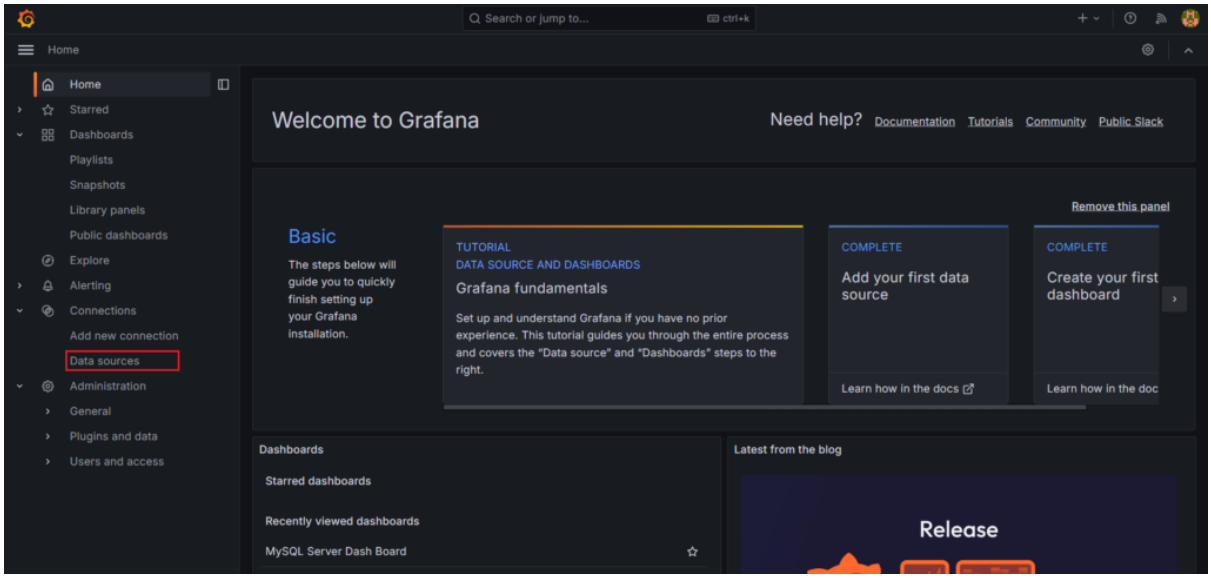
```
sudo systemctl restart grafana-server
```

```
ubuntu@ip-172-31-4-8:~$ sudo systemctl restart grafana-server
```

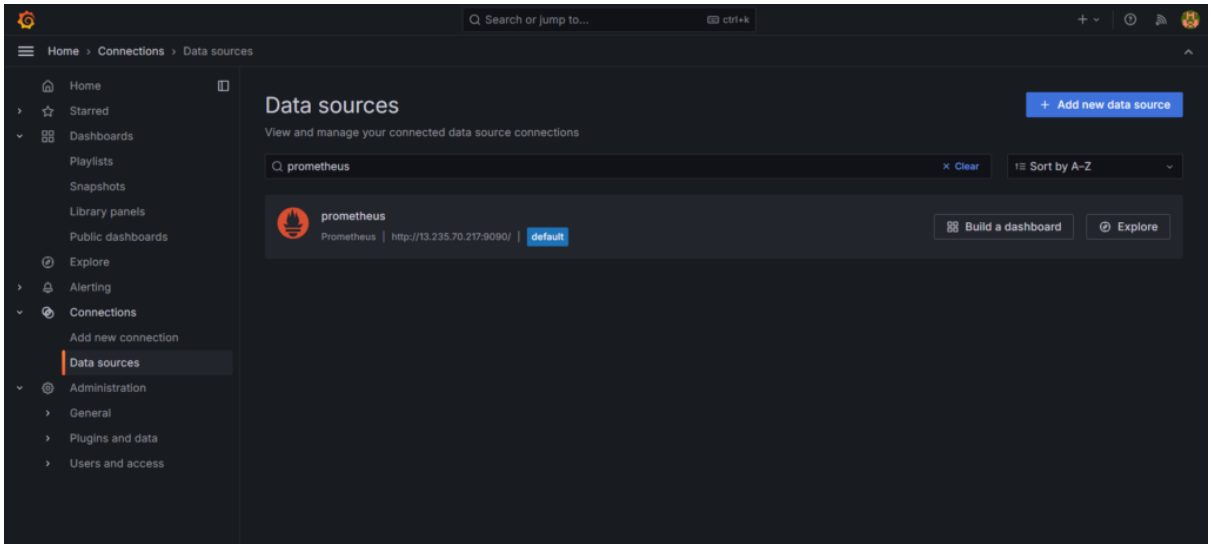
2:Add Prometheus as a data source in Grafana

Now go to the Grafana welcome page. Go to the `Home` in the left top corner.

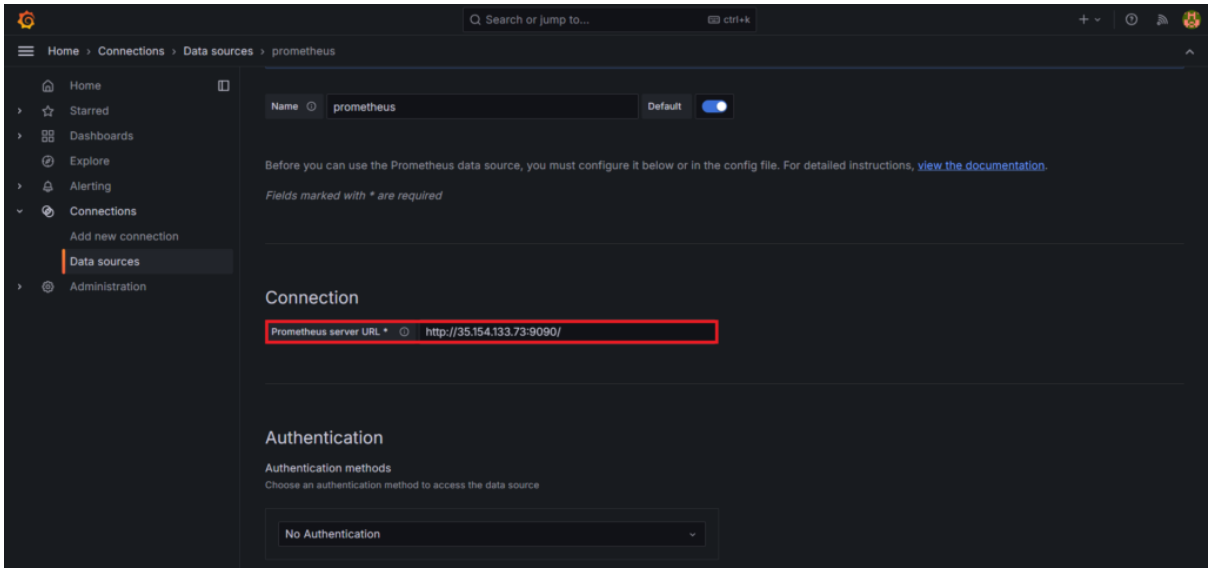
Then go to the `Connections` and select the `Data sources` option.



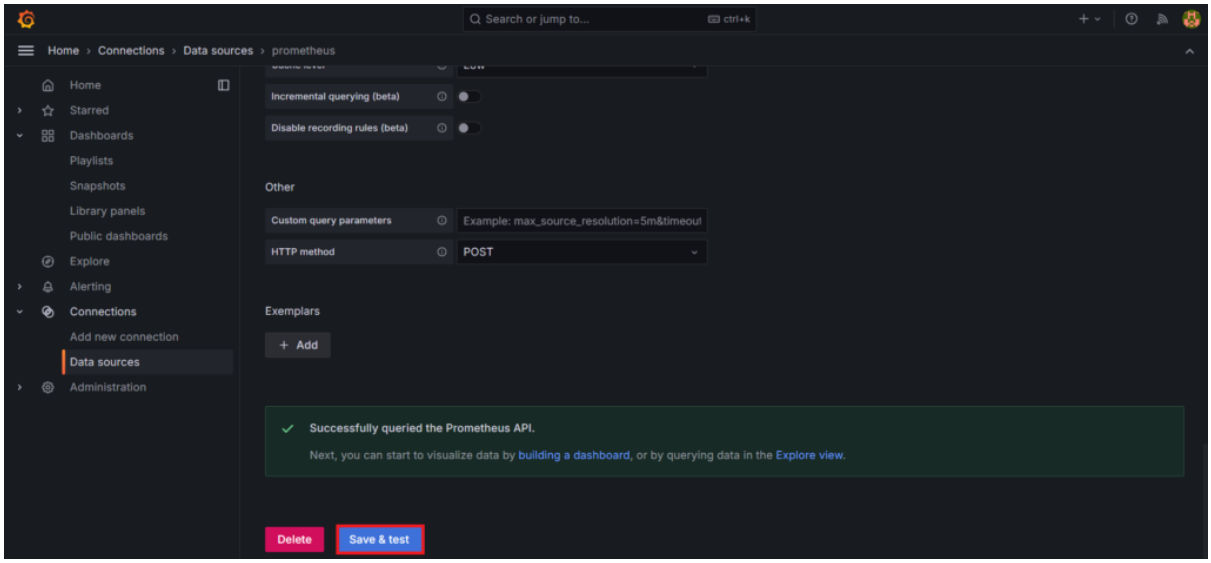
Search for Prometheus in the search bar and select it.



In connection, in Prometheus server URL, give the server url on which our prometheus is running.

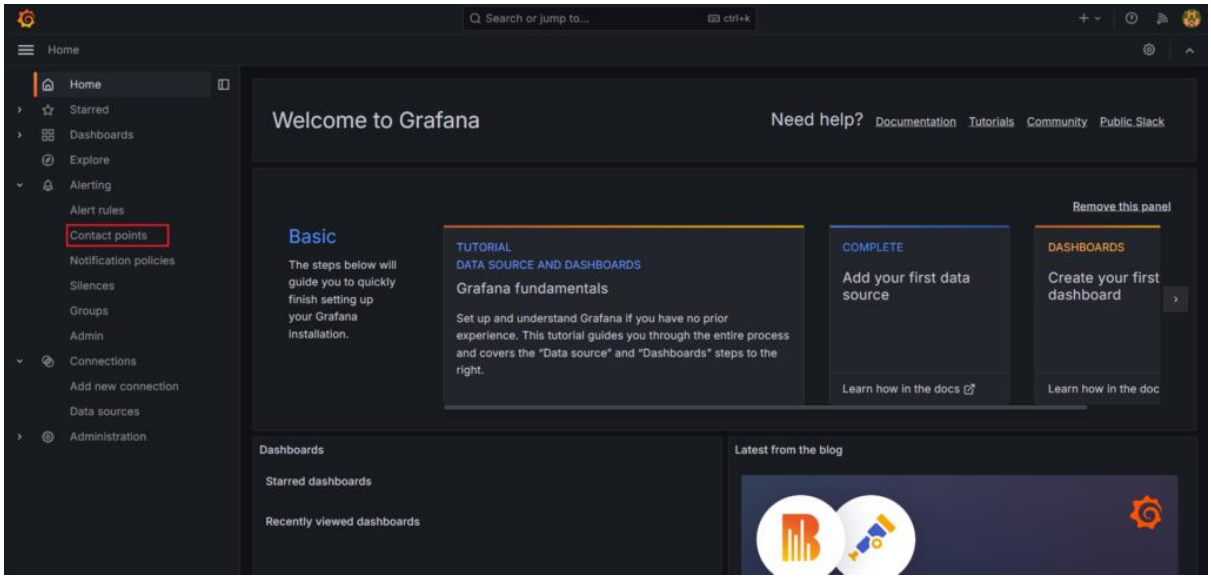


after this click on `save and test` button. You will see the message for prometheus being successfully queried.

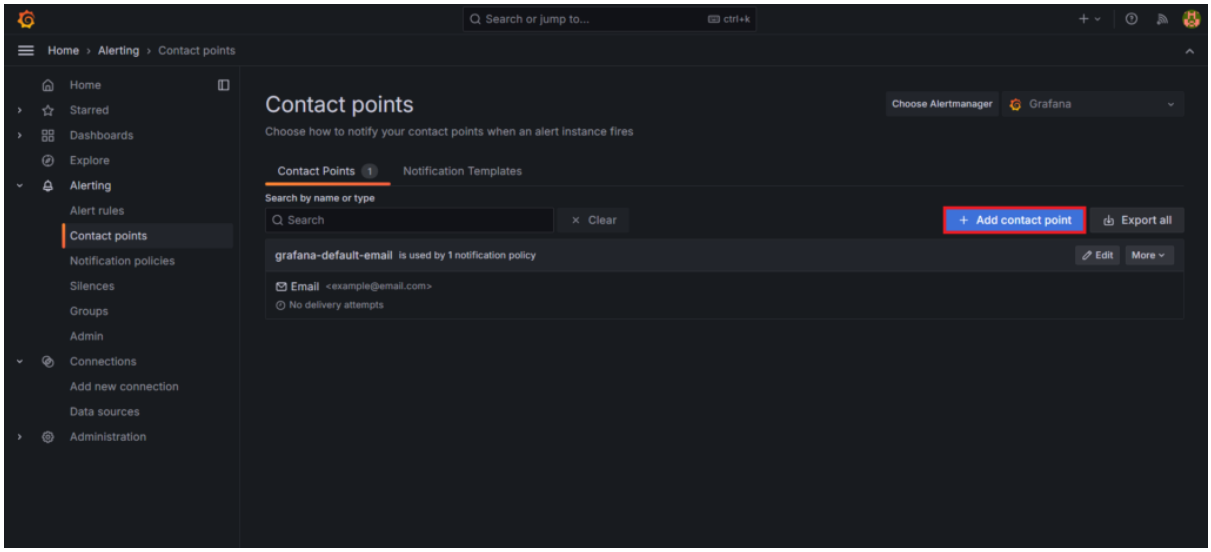


3:Add a Contact points

Get back to the Grafana home page and select the Alerting > Contact points.



click on `Add contact point.`

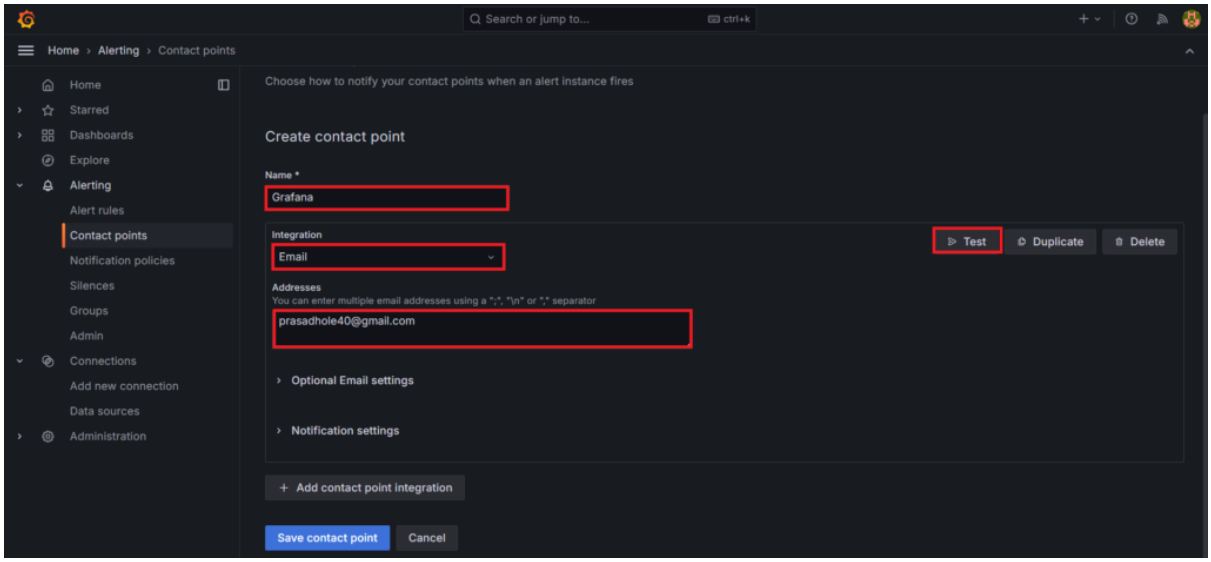


Give a appropriate `name` to your contact point. Like Grafana.

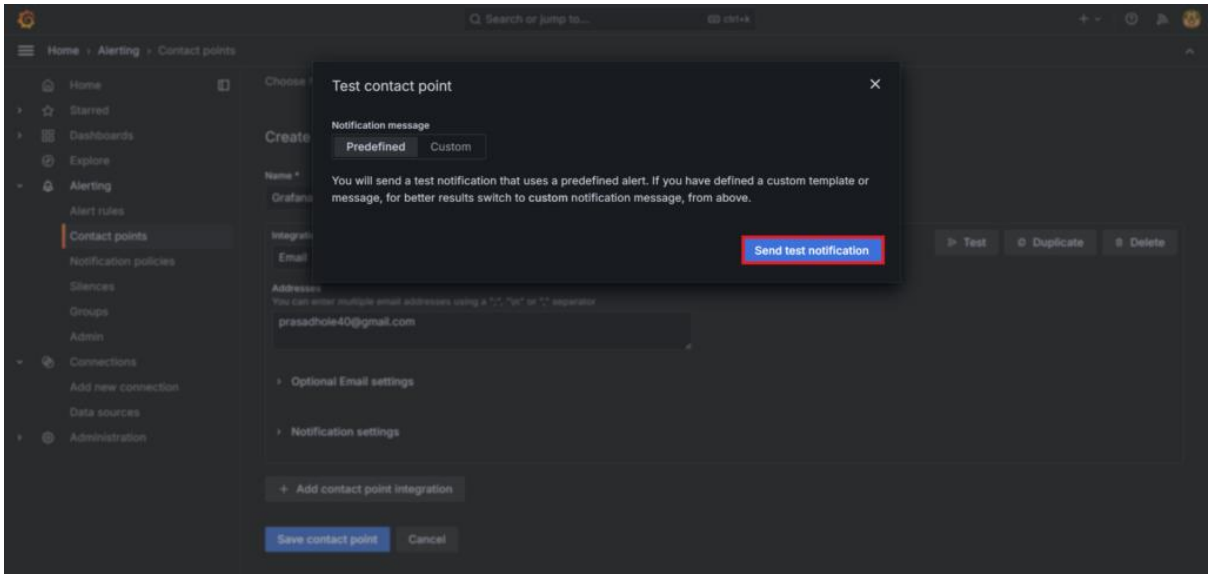
Select `Email` as a Integration

Then in `addresses` give the email id or id's with comma separating them.

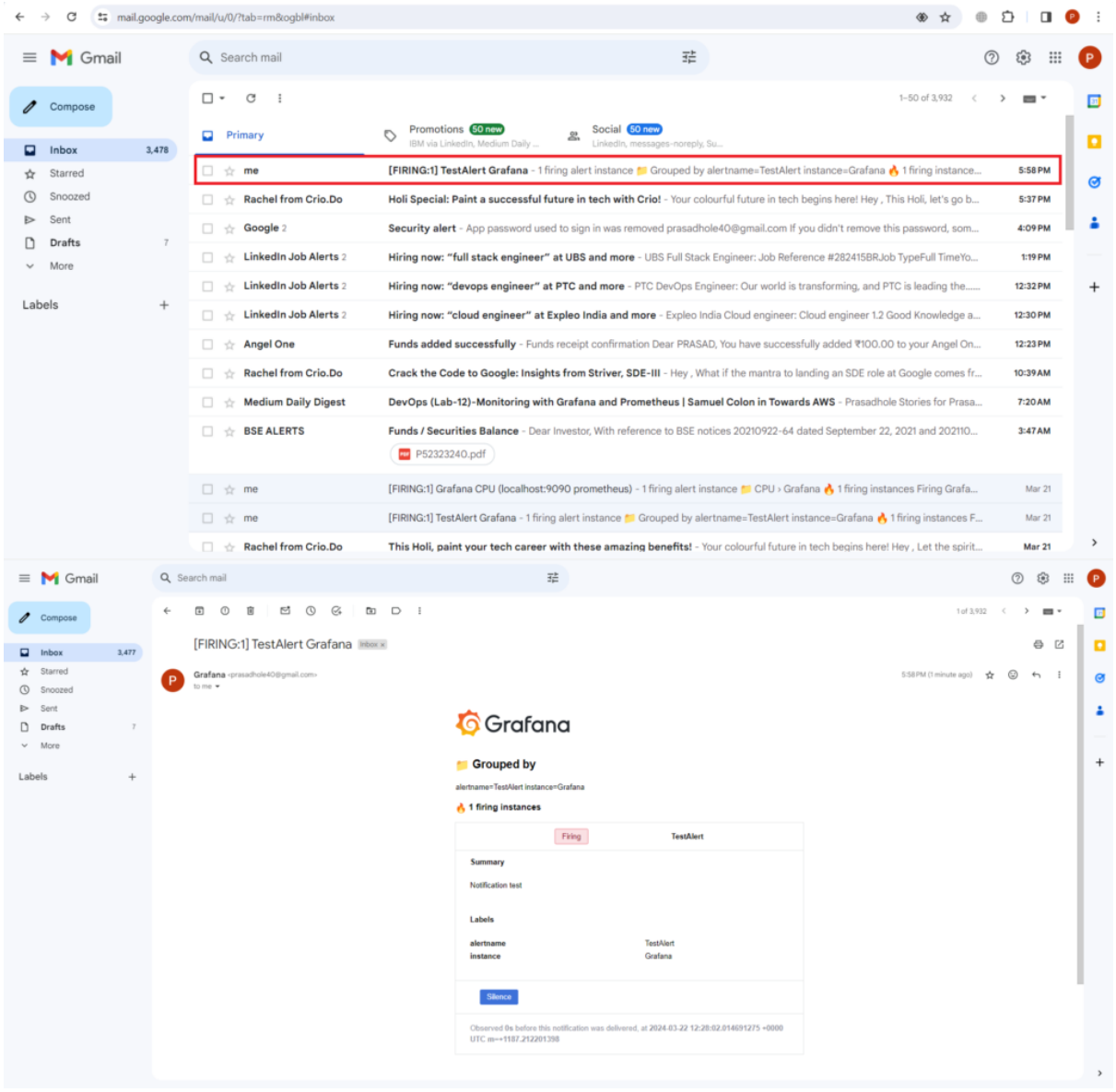
And click on `Test` to test it.



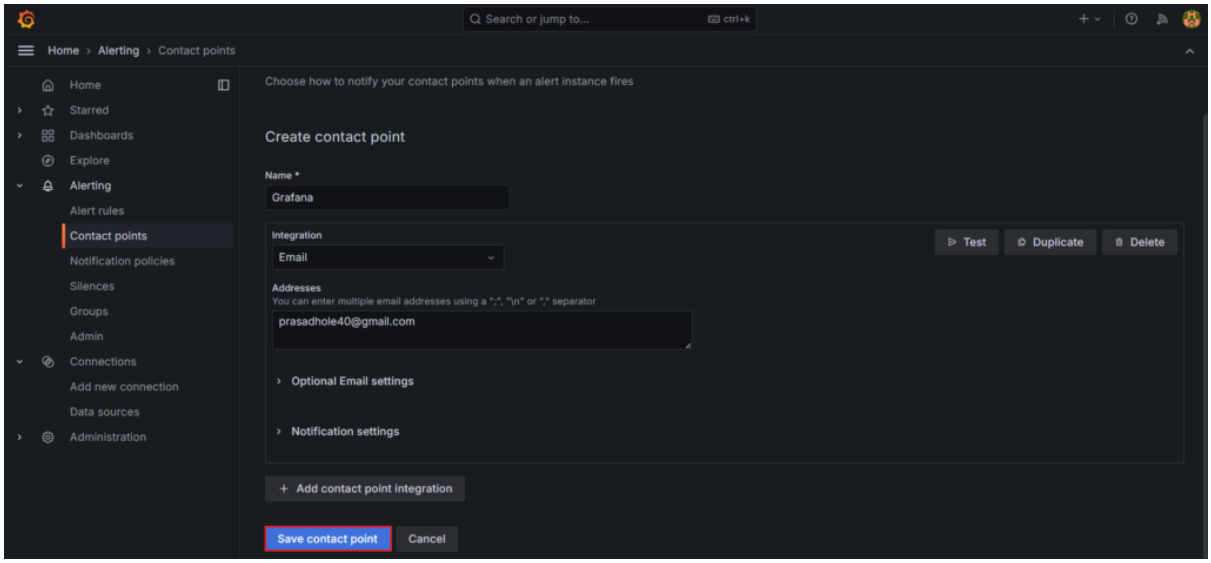
Click on `Send test notification` .



Now open your email id you've given, there you can see the test alert. Click on it.

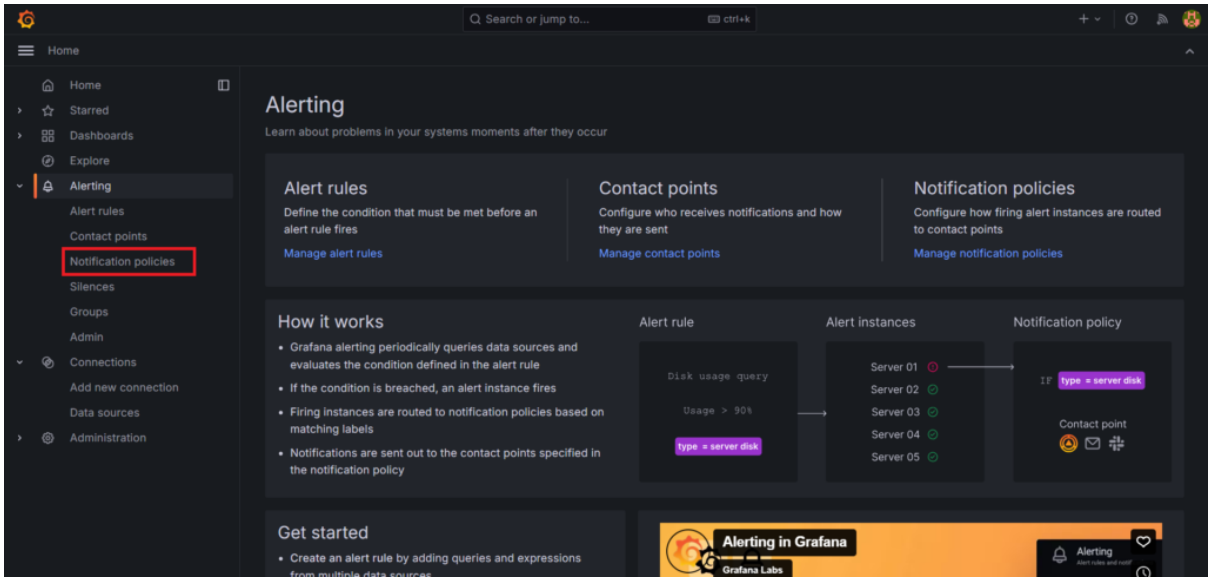


after this go back to grafana and click on save contact point to save it.

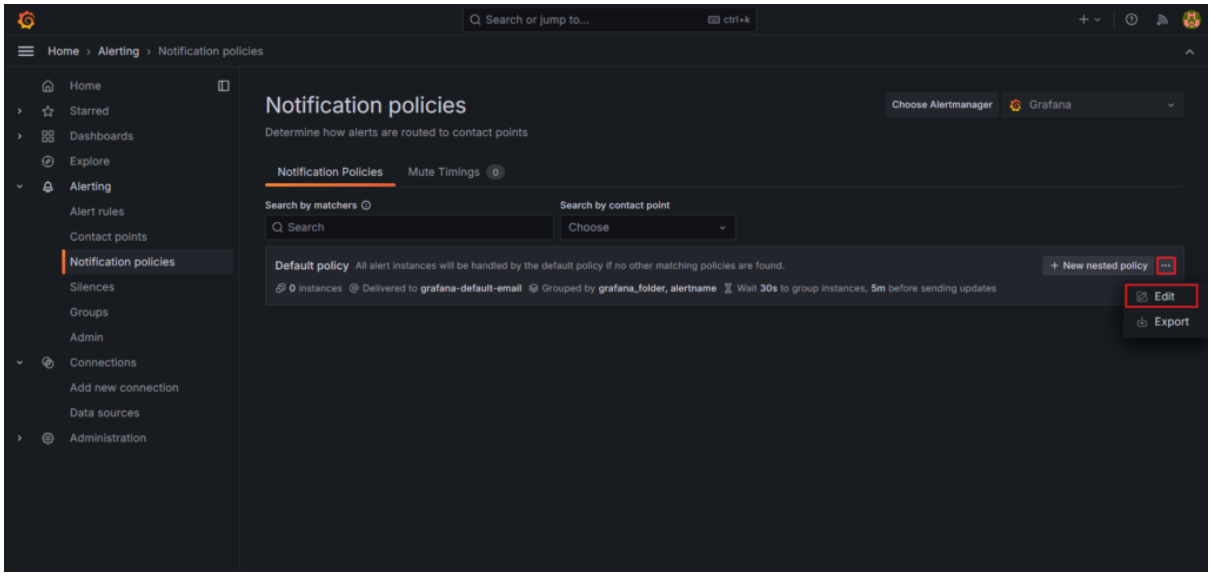


4:Configure the Notification Policies

Now in alerting select the `Notification policies.`

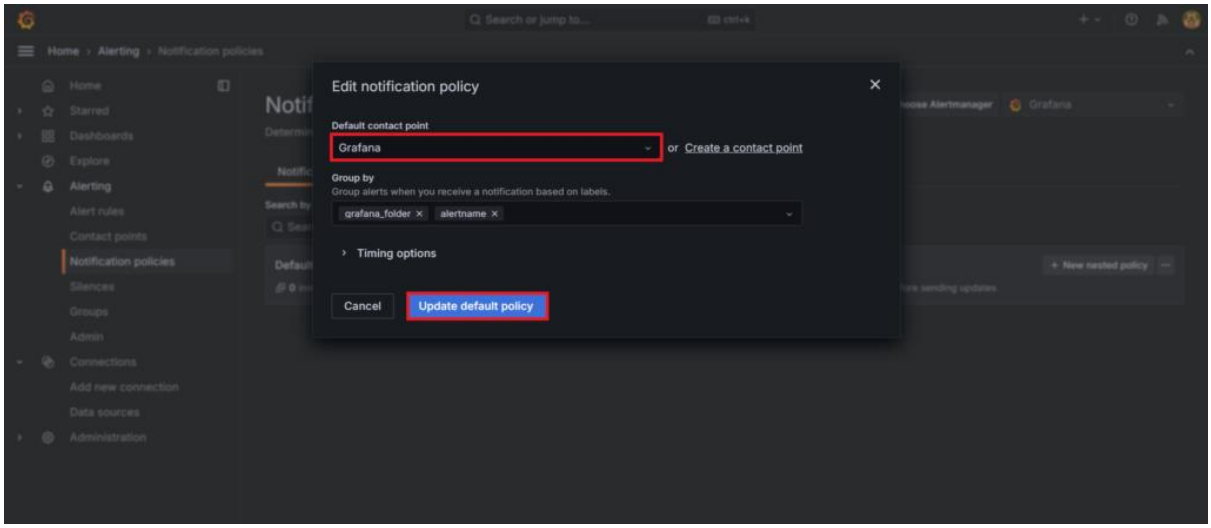


There will be a default policy click and edit it.



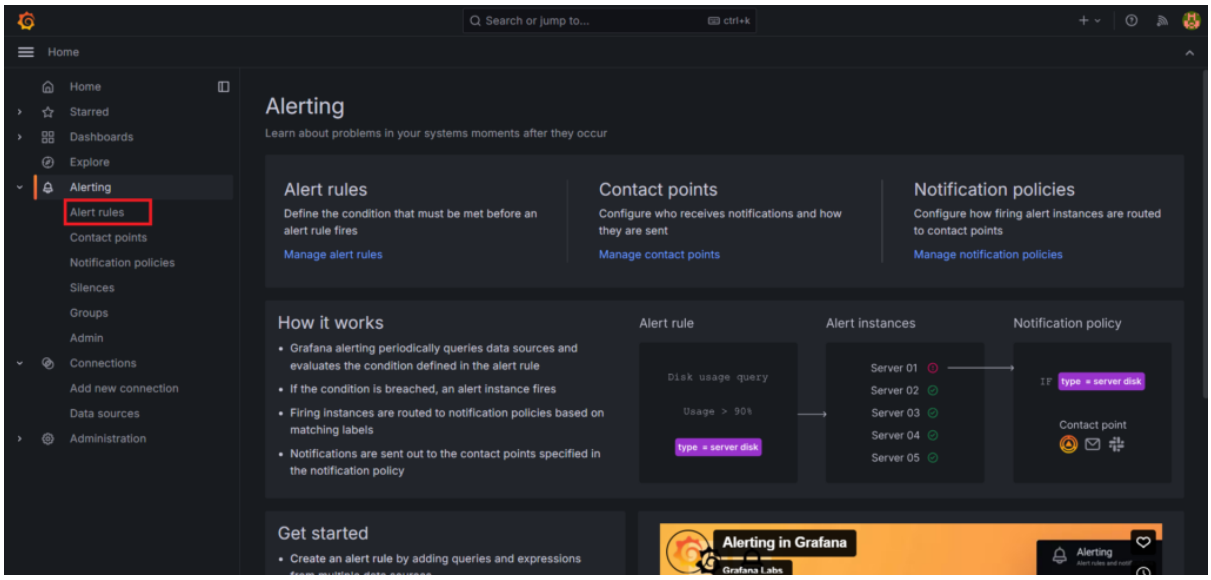
Change the default contact point to the one we had created. Here it is `Grafana`.

Then click on `Update default policy.`

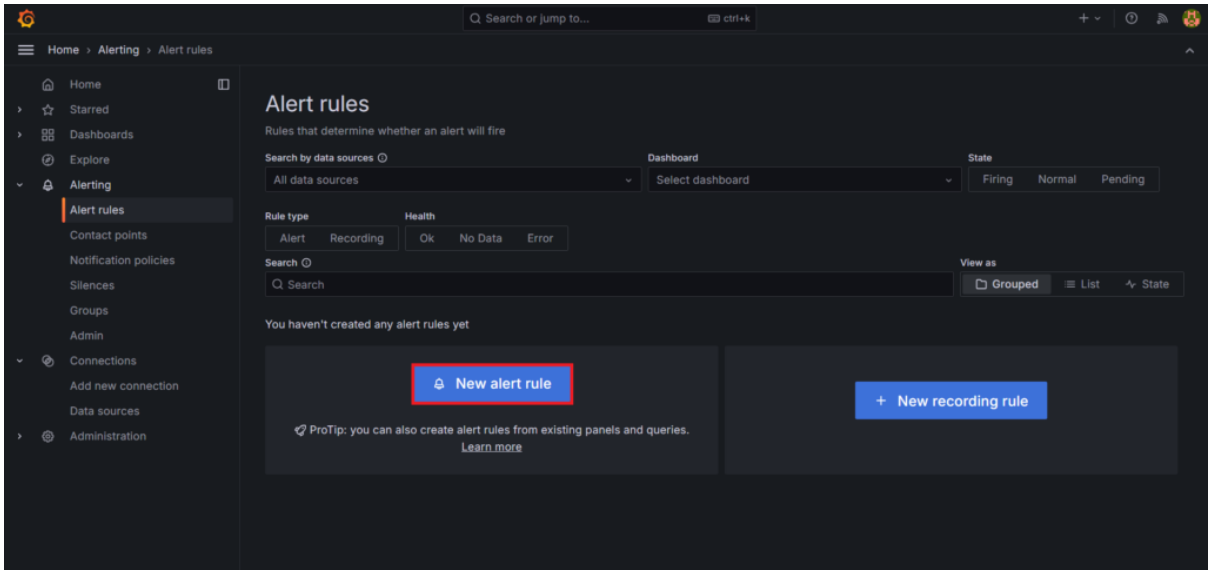


5:Configure Alert Rules to get email alerts

Now in Alerting Select the `Alert rules` .



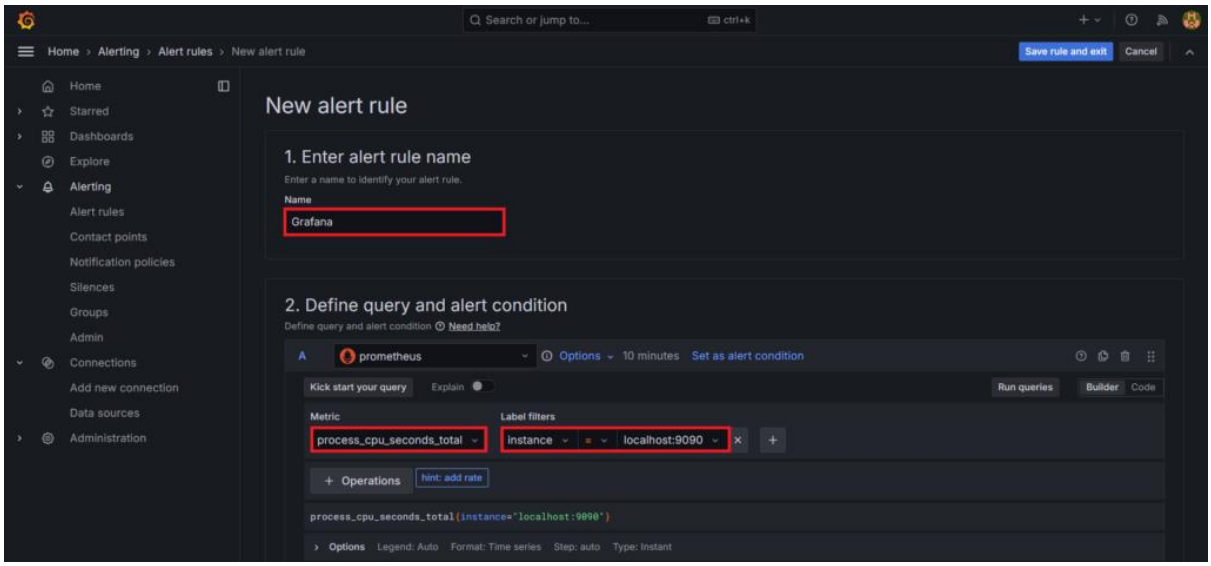
select the `New alert rule`.



Here `Enter alert rule name` to identify your alert.

Define the query and alert condition.

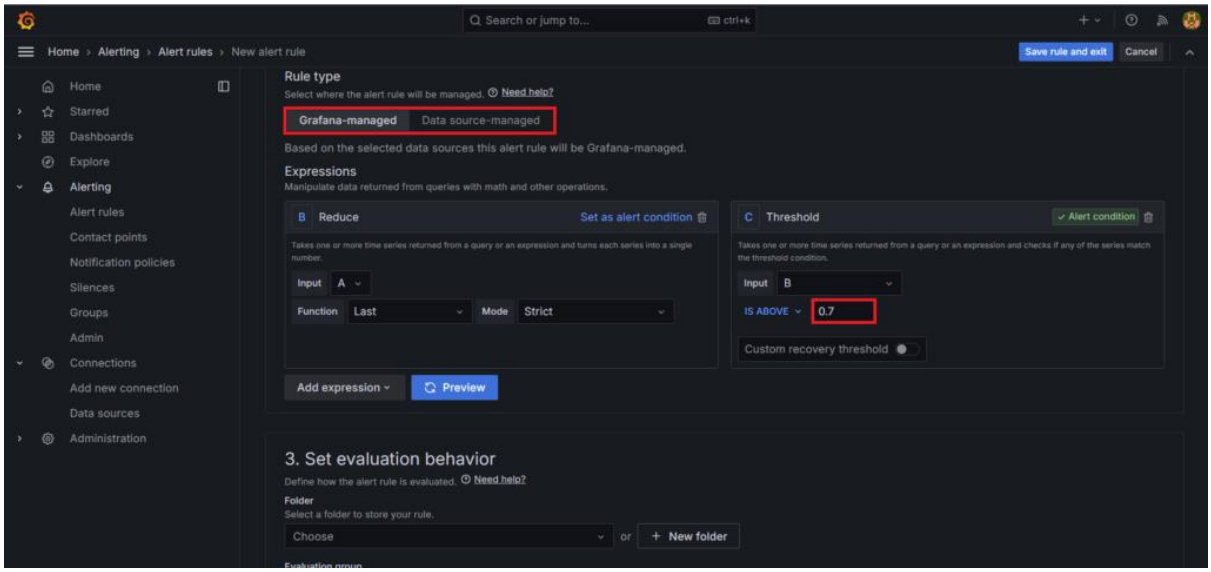
- metric: process_cpu_seconds_total
- label filters: instance = localhost:9090



This query would retrieve the total CPU time consumed by all processes over time.

Now Select the `Grafana-managed` as Rule type. In the Expressions, set `Threshold` as alert condition and change the `IS ABOVE to 0.7`

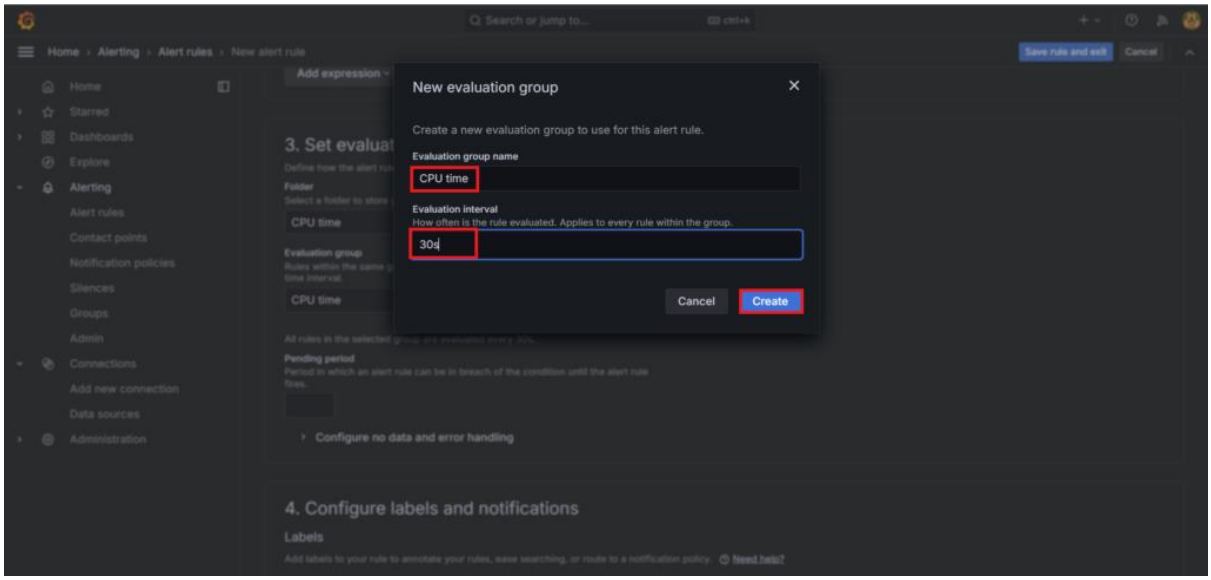
When setting “IS ABOVE” to 0.7, you’re specifying that the alert should trigger when the value of the metric being monitored is above 70%. This value could represent a percentage, ratio, or any other unit depending on the metric being monitored.



In Set evaluation behavior, create a new folder to store rule and evaluation group.

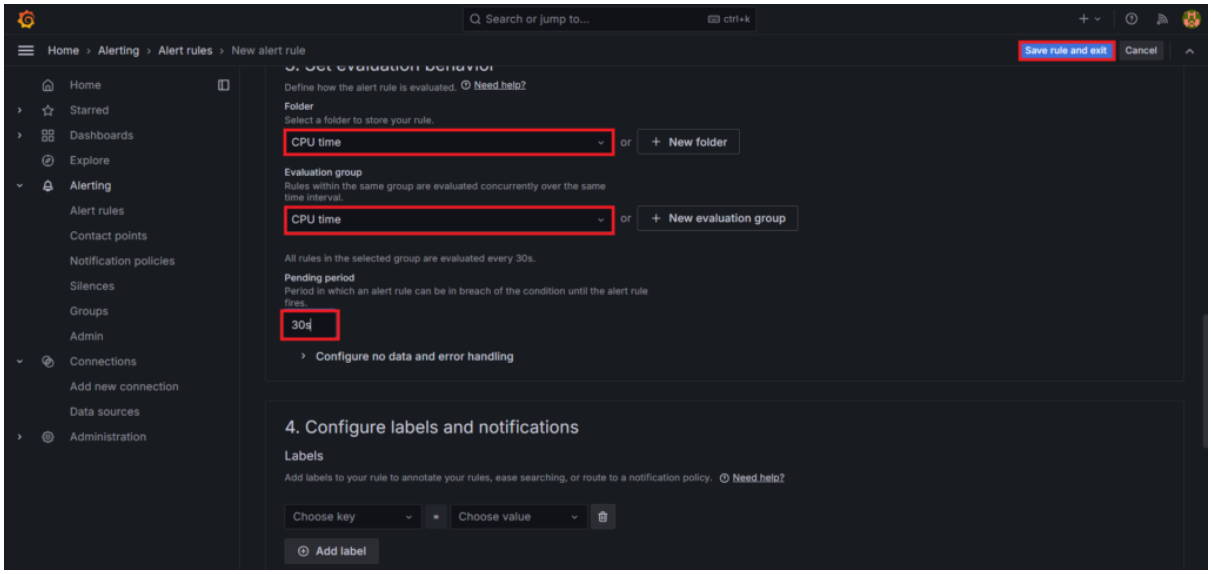
here folder name is `CPU time`.

Evaluation group name is `CPU time` and evaluation interval is `30 seconds` which tells how often the rule is evaluated. Click on `Create`.



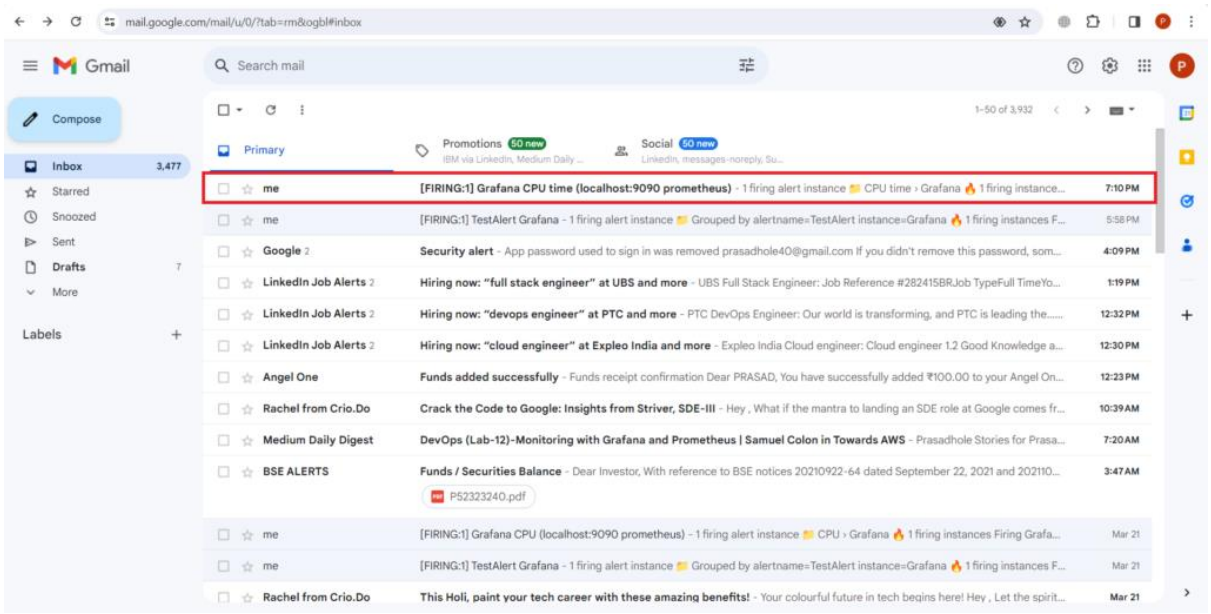
Change the `pending period` to `30 seconds`. It should be equal to evaluation interval or less than it.

Finally click on `Save rule and exit` to trigger the email alerts.



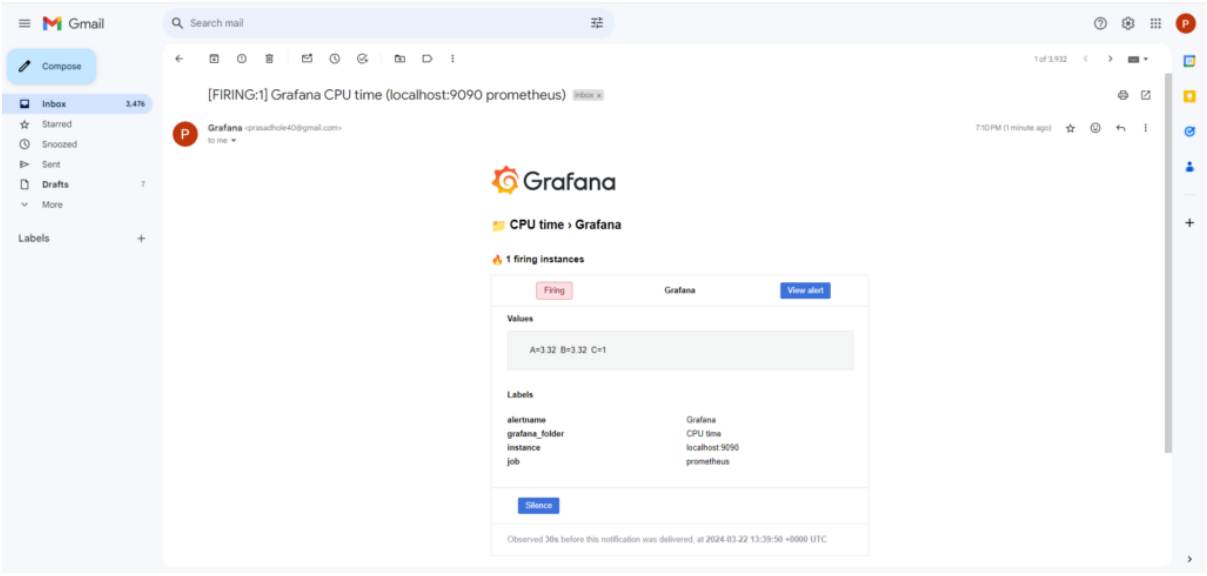
Now wait of 30 seconds till it fire the alert

Check your email box.



as you can see our alert is fired successfully.

with this you can receive timely Email alerts.


Gmail
Search mail
Compose
Inbox 3,476
Starred
Snoozed
Sent
Drafts 7
More
Labels
[FIRING:1] Grafana CPU time (localhost:9090 prometheus)
Inbox ×
Grafana <prasadhole40@gmail.com>
to me
7:10 PM (1 minute ago)
Grafana
CPU time › Grafana
1 firing instances
Firing
Grafana
View alert
Values
A=3.32 B=3.32 C=1
Labels
alertname Grafana
grafana_folder CPU time
instance localhost:9090
job prometheus
Silence
Observed 30s before this notification was delivered, at 2024-03-22 13:39:50 +0000 UTC

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