Project

Integrate Grafana with Linux Server for high cpu utilization and create a graph in Grafana.

Note:

Ø Grafana is an Open Source tool.

Ø You have to create pictorial representation of your project.

Ø You have to create presentation for your project as guided.

Ø Please make sure that you have created sprint and working accordingly.

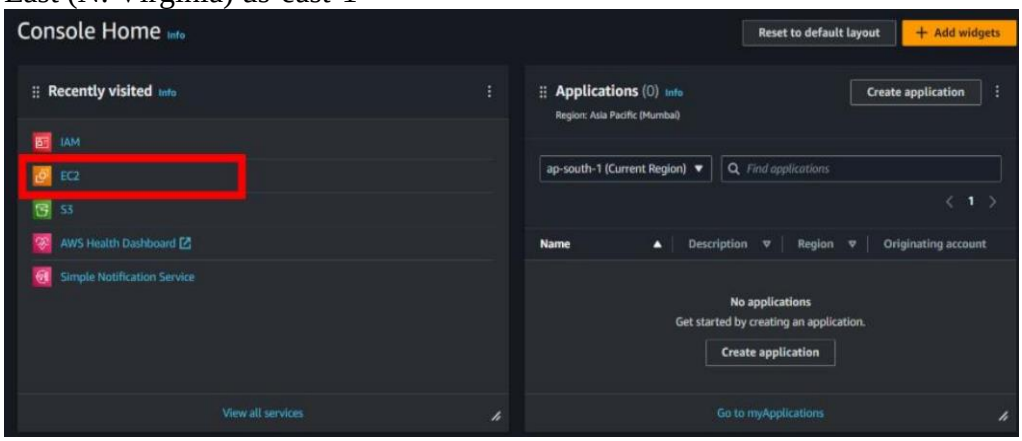
Sign in to AWS Management Console

1. Click on the Open Console button, and you will get redirected to AWS Console in a new browser tab.

   • On the AWS sign-in page, Leave the Account ID as default. Never edit/remove the 12-digit Account ID present in the AWS Console. otherwise, you cannot proceed with the lab

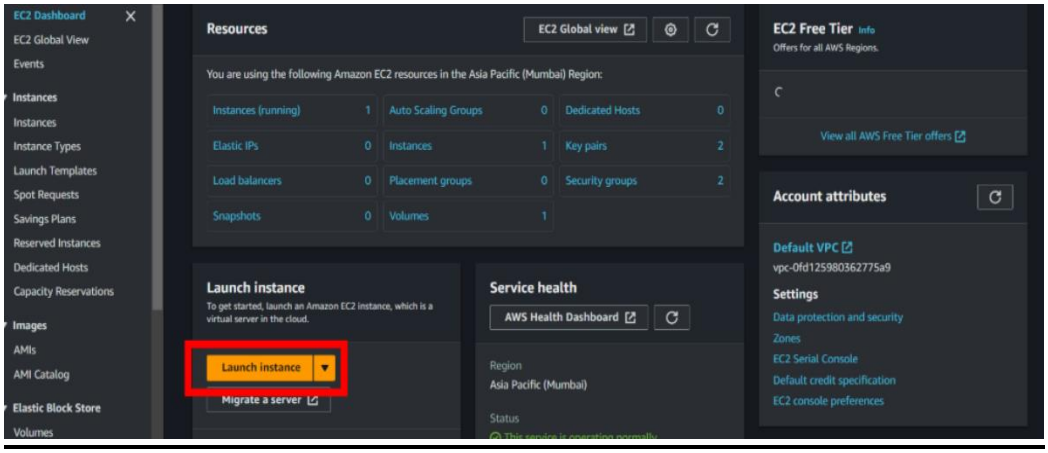
   . • Now copy your User Name and Password in the Lab Console to the IAM Username and Password in AWS Console and click on the Sign in button

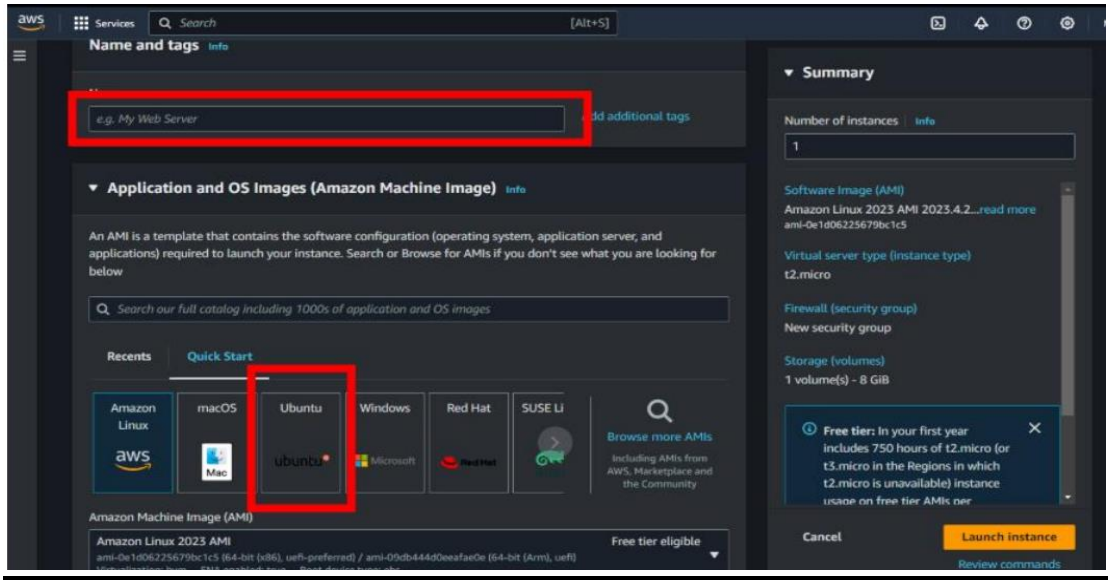
2. Once Signed in to the AWS Management Console, Make the default AWS Region as US East (N. Virginia) us-east-1



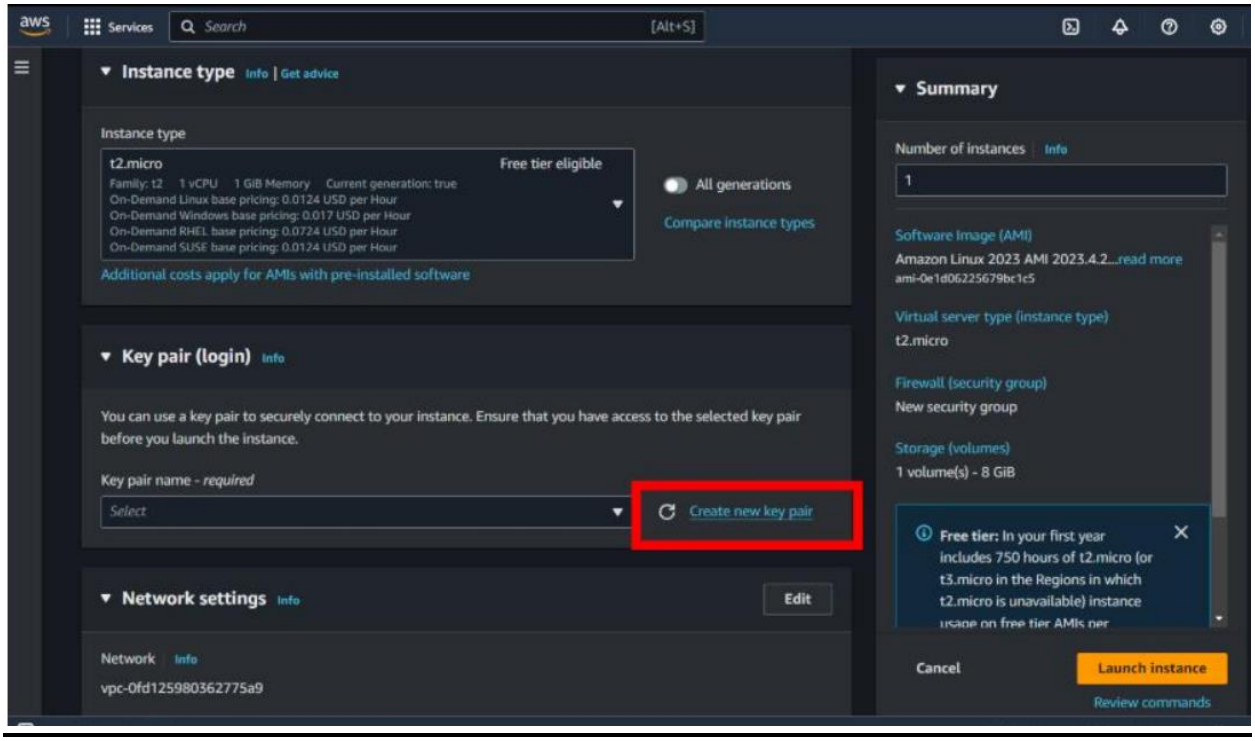
Create an EC2 Instance(ubuntu):

• For creating an EC2 instance follow the following steps as shown in snapshots.

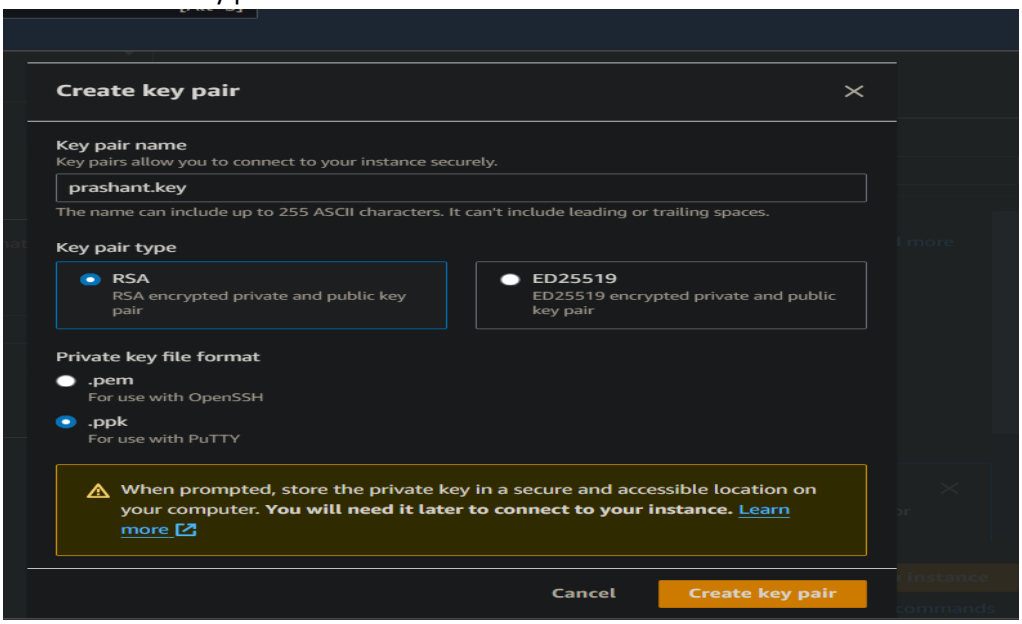




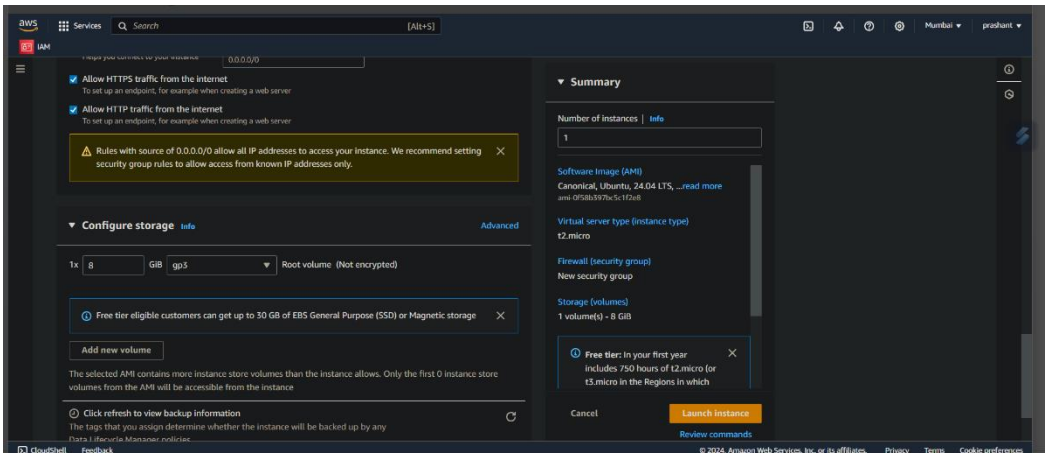
- Provide the EC2 name of your choise and select”Ubuntu”as an OS Image.



• Create a new key pair.

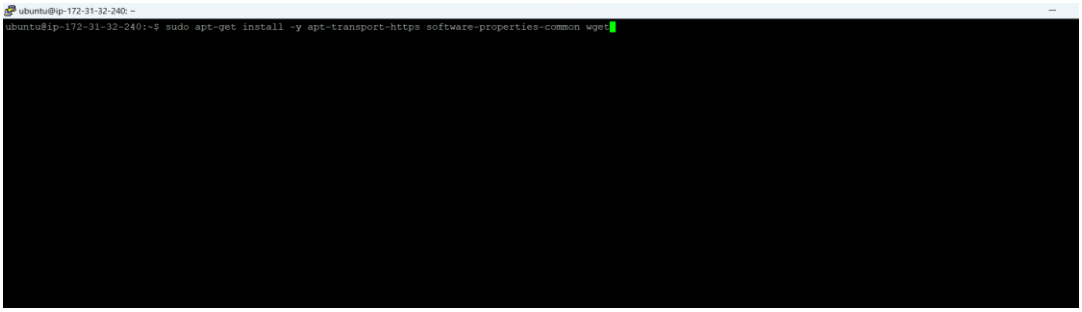


• Scroll down and click on “LAUNCH INSTANCE “

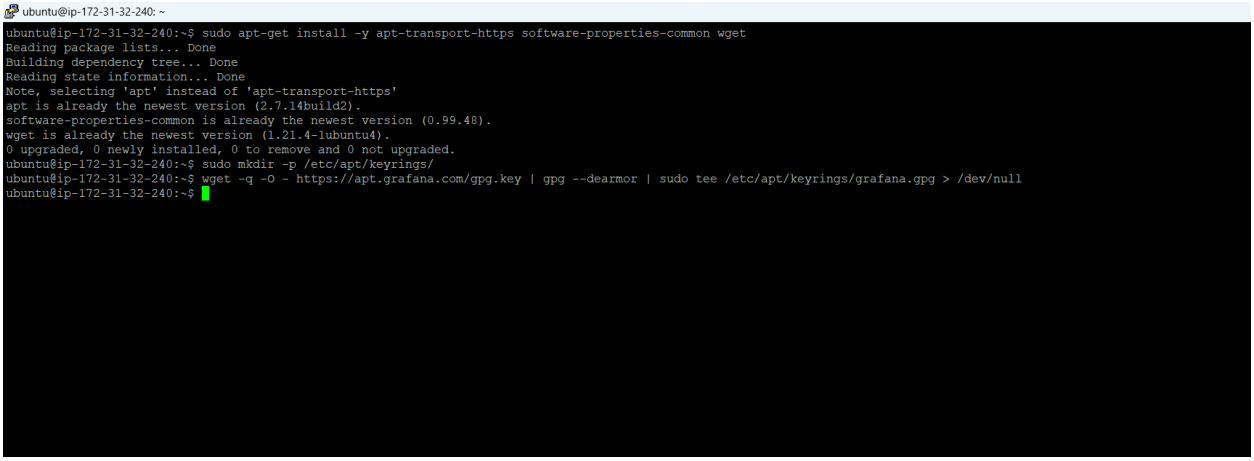


• Then open your instance and connect that instance by putty or on web browser.

• After connecting the instance follow the given command or read Grafana documentation for help.

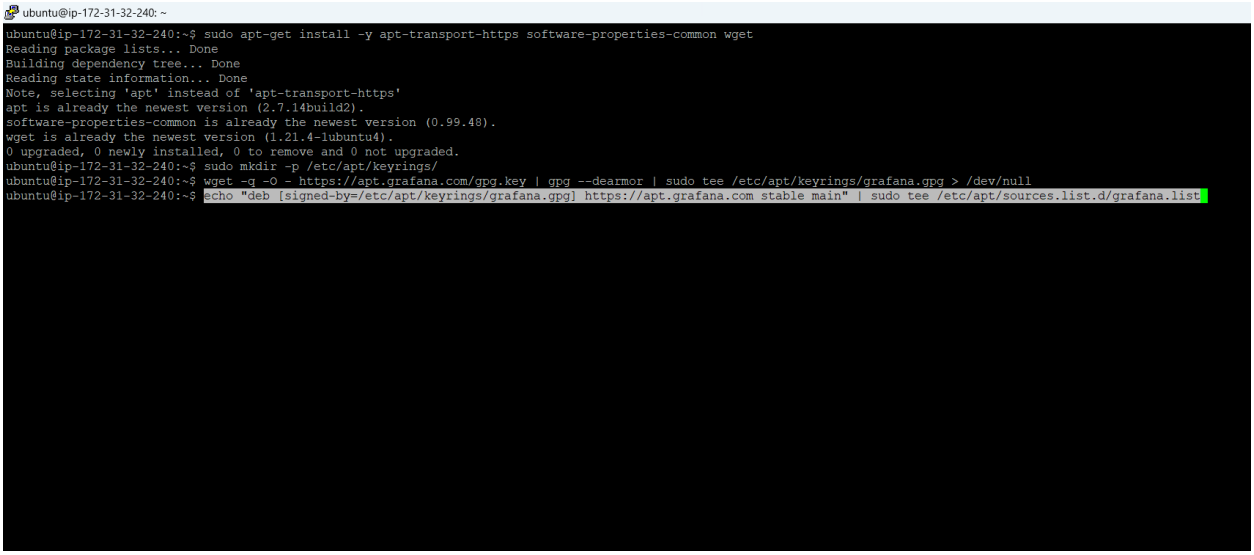


sudo apt-get install -y apt-transport-https software-properties-common wget

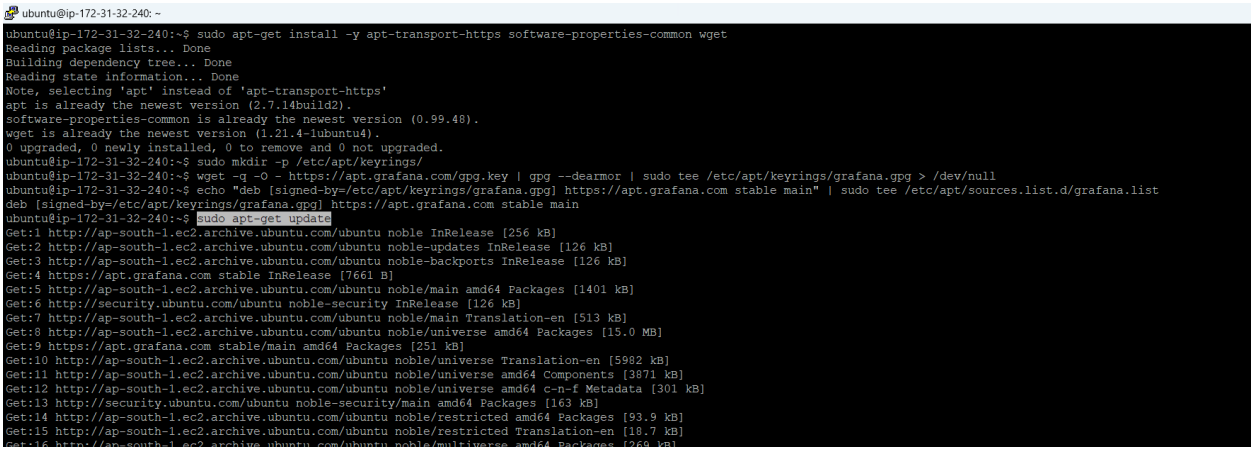


sudo mkdir -p /etc/apt/keyrings/

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

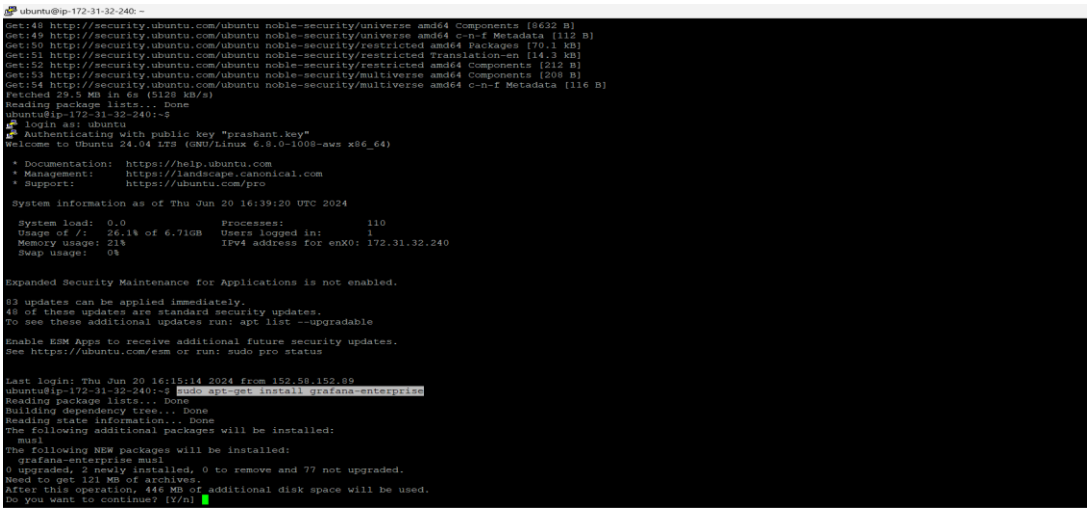


echo "deb [signed-by=/etc/apt/keyrings/grafana.gpg] https://apt.grafana.com stable main" | sudo tee -a /etc/apt/sources.list.d/grafana.list



To updates the list of available packages

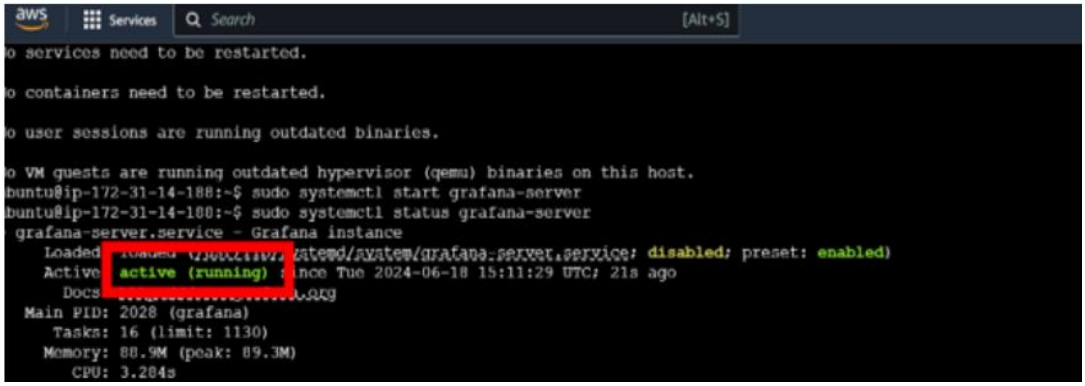
sudo apt-get update



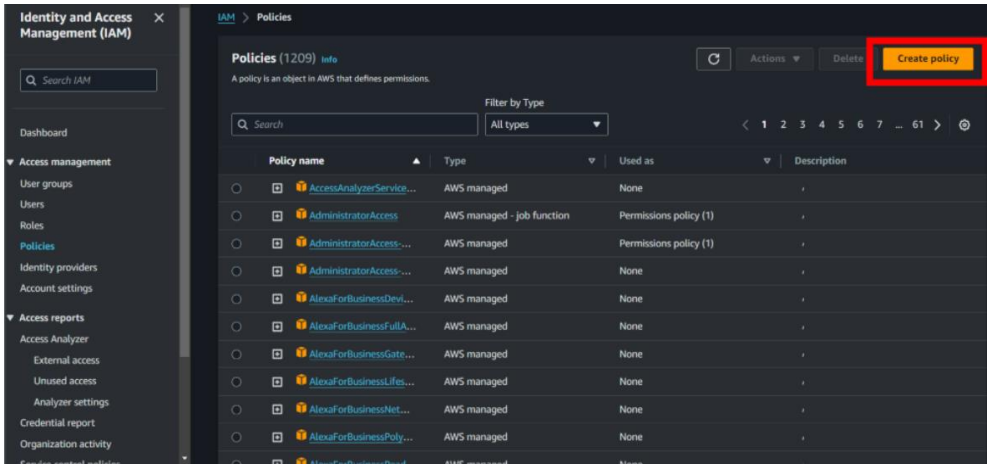
To installs the latest Enterprise release:

sudo apt-get install grafana-enterprise

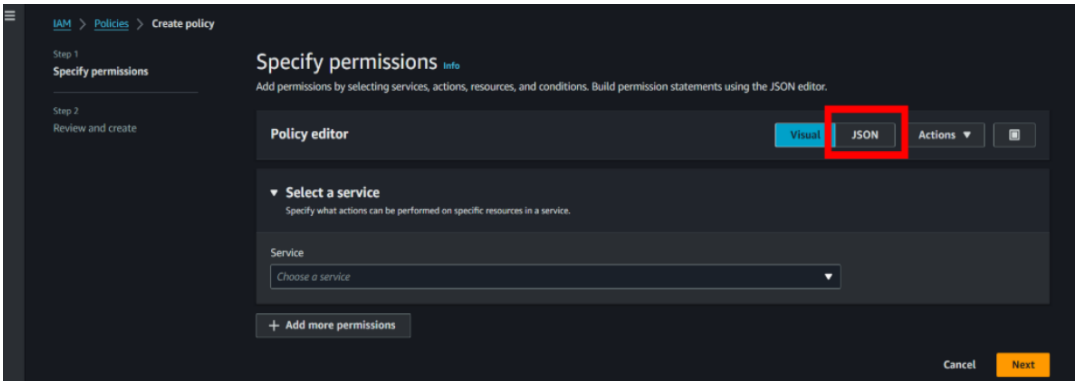
sudo systemctl status grafana-server.service



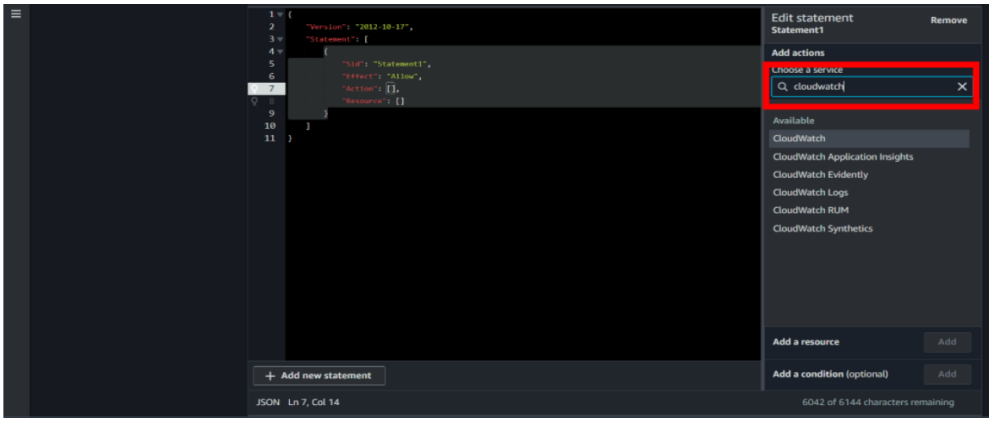
• Then search IAM role and go to policies and click on Create policies.



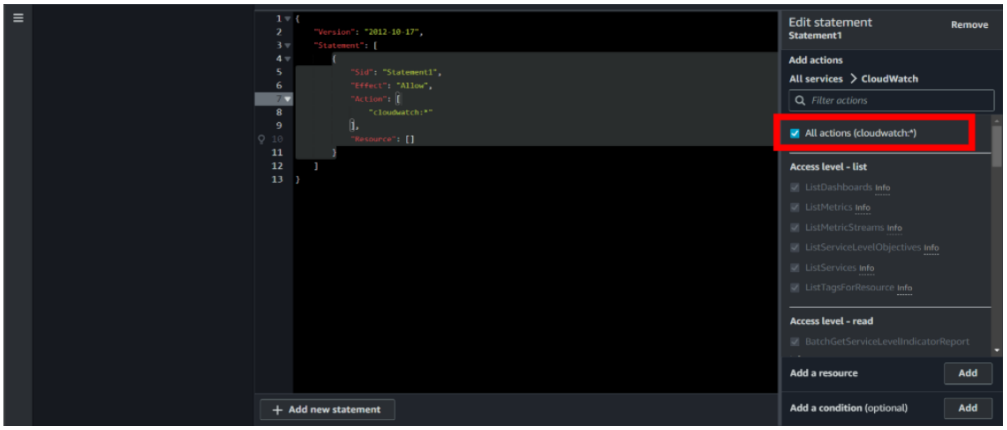
• Then go to JSON type



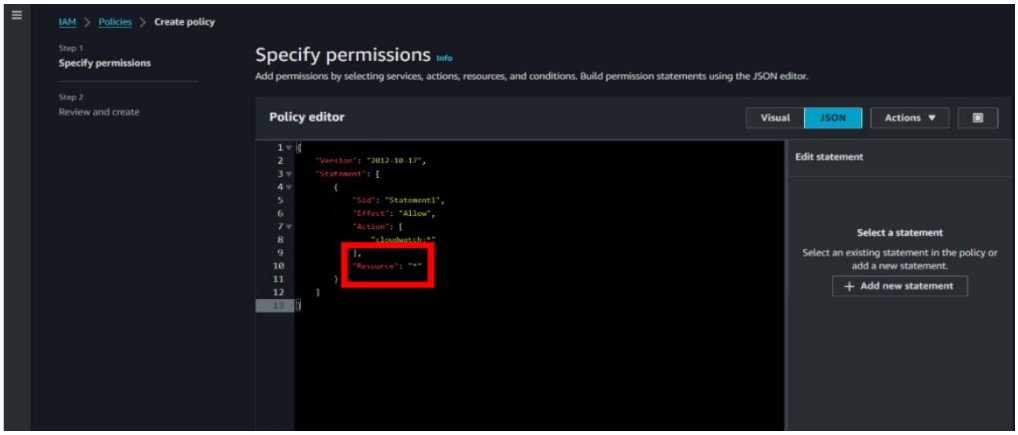
• Click on add action and search for “Cloudwatch”.



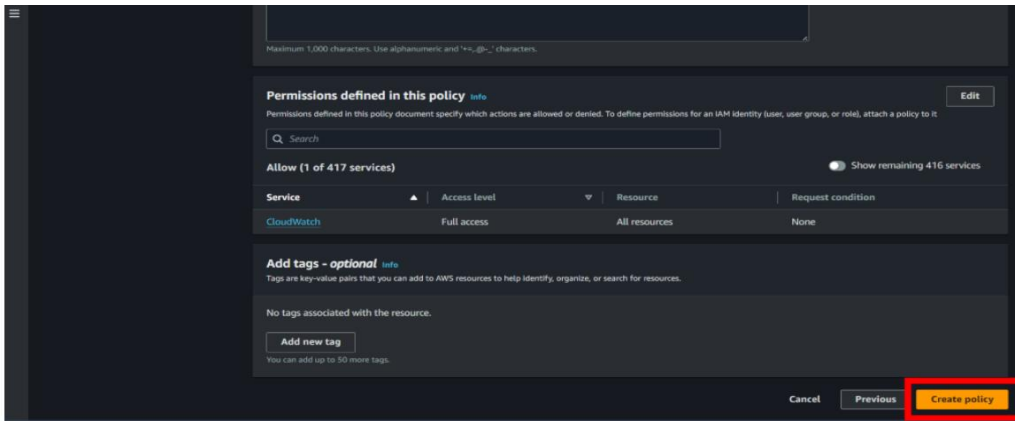
• After selecting cloudwatch select “All actions “.



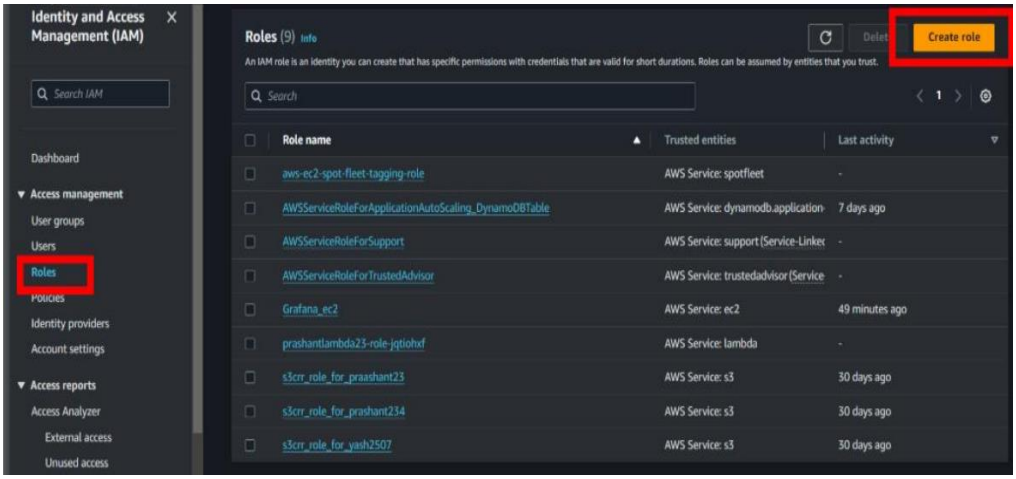
• Then put “Resource “ : ”*”



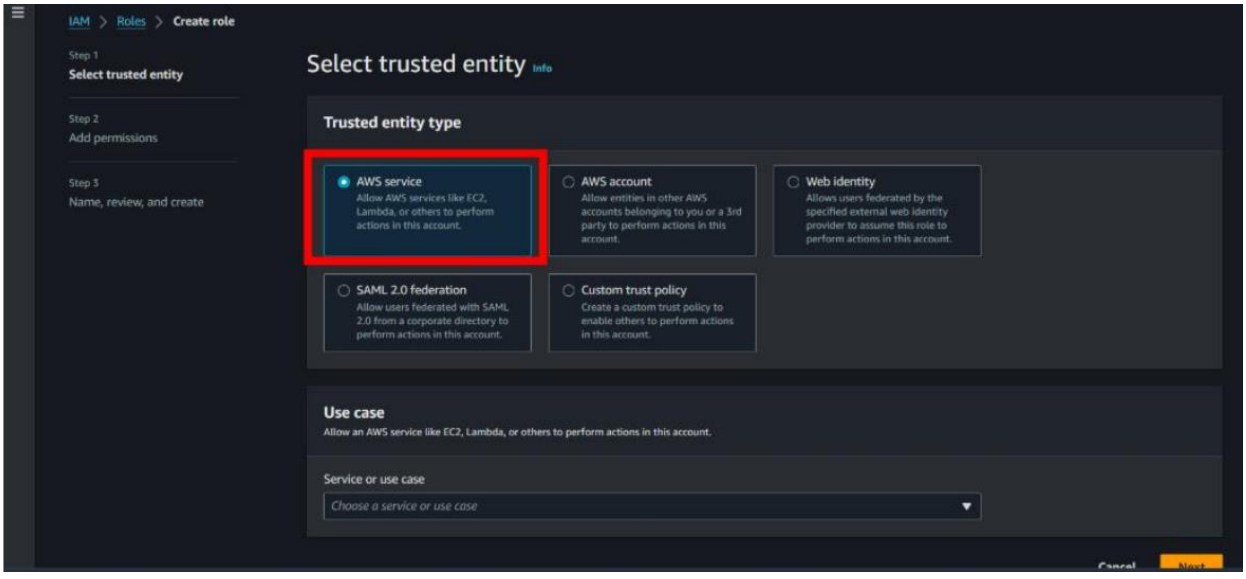
• Scroll down and click on Create policy.



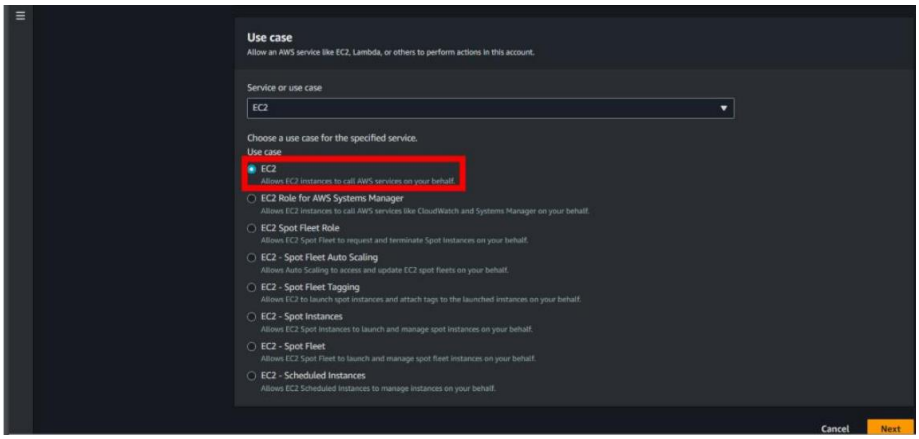
• Then go to roles and click on Create roles.



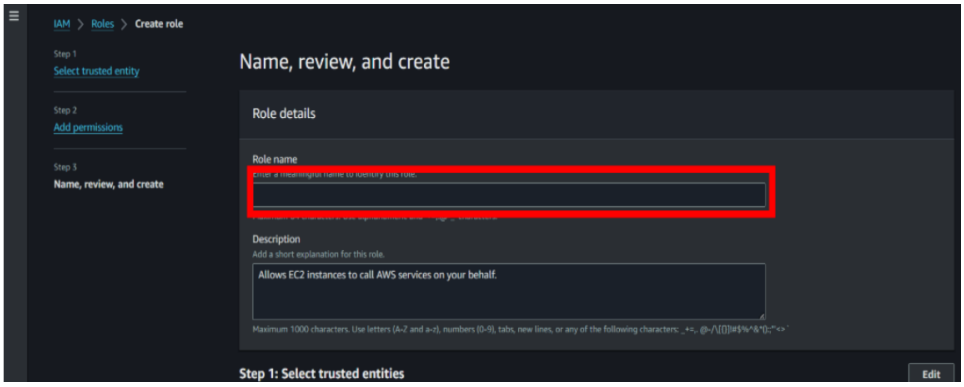
• Then select entity type is AWS services



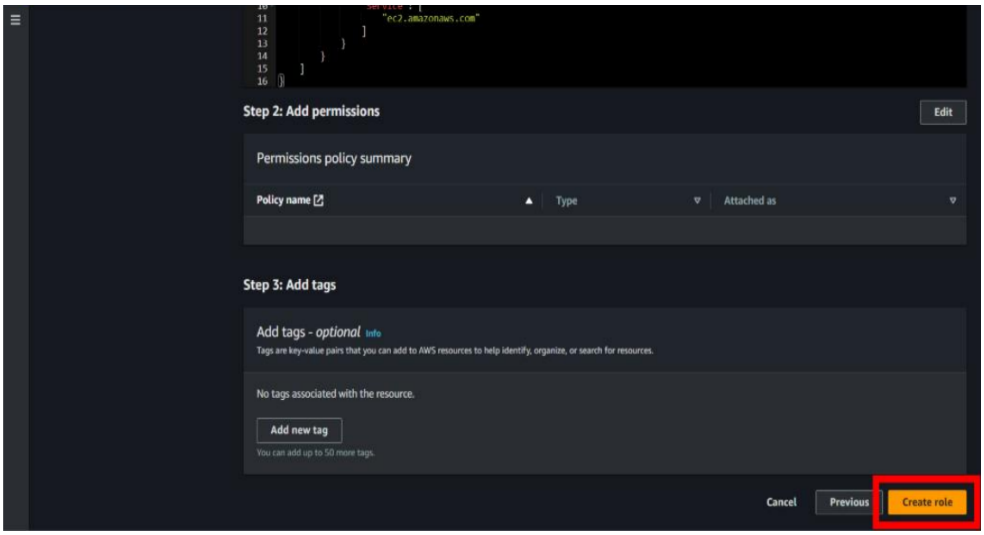
• Now , select use case as EC2 .



• Then give a name of your choise to the role .

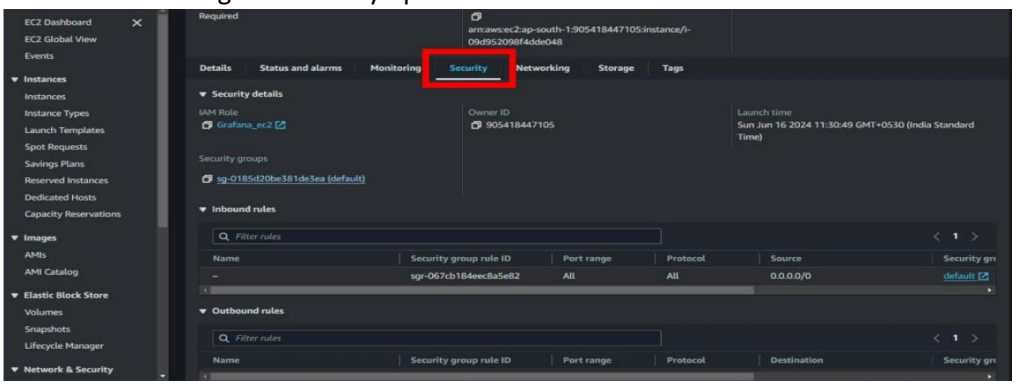


• Then scroll down and click on the Create role .

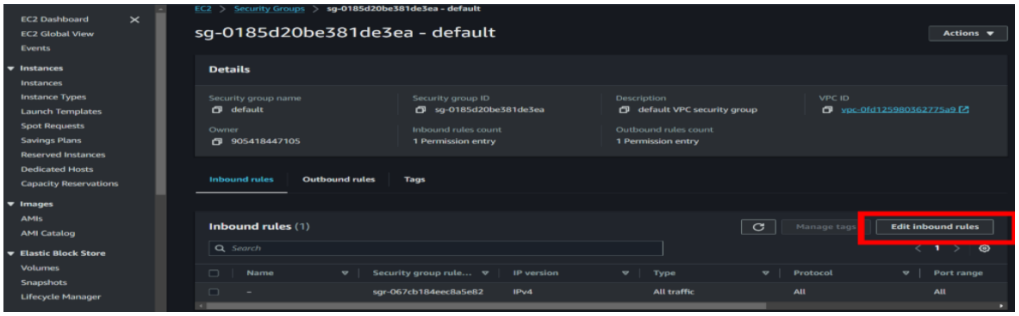


• After creating your role and policy go to instance and open your instance , which you have already created.

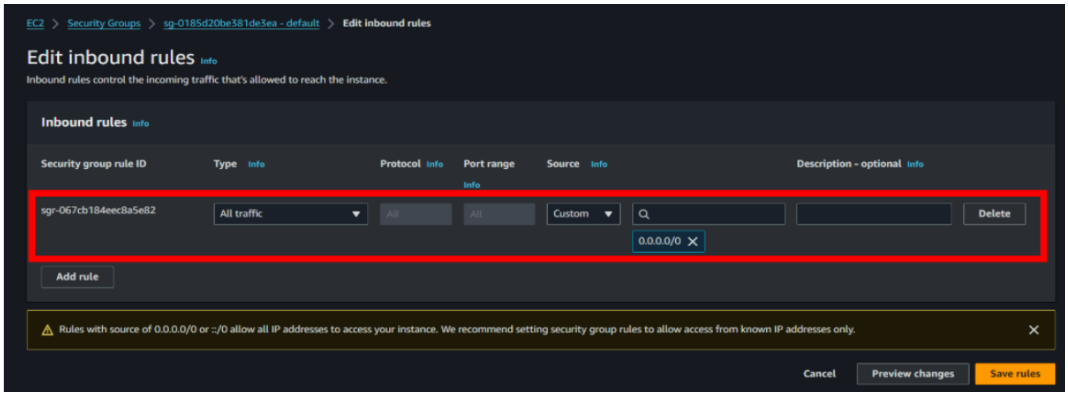
• Scroll down and go to Security option



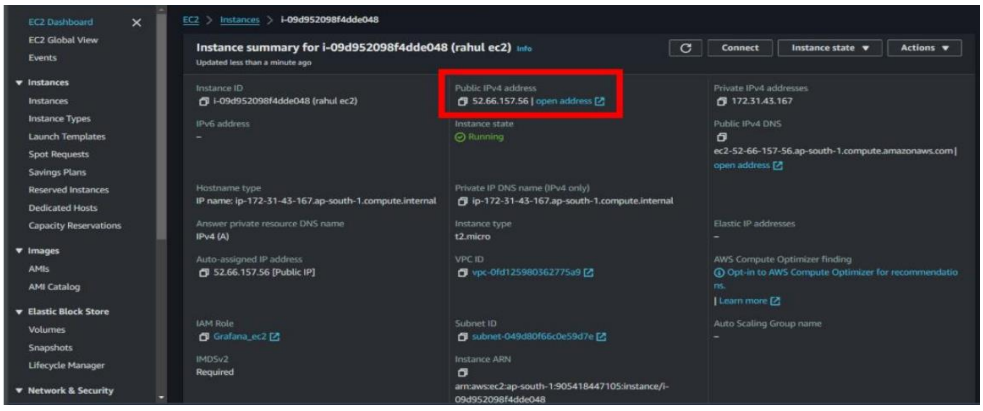
• Then click on Edit inbound rule .



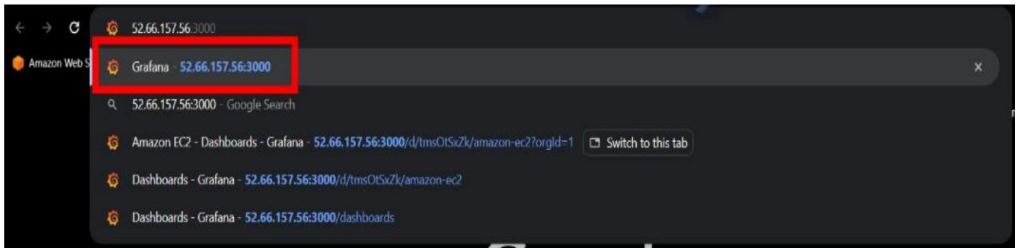
• Then modify your rule select type = All traffic and source =0.0.0.0/0



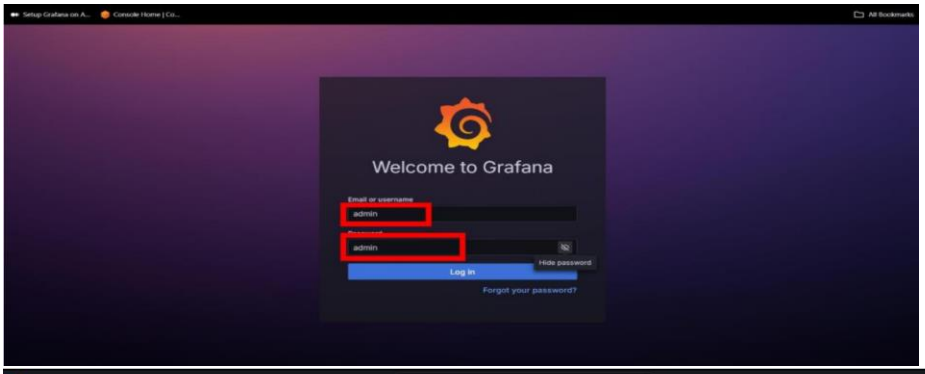
- Then copy your public IPv4 address of your instance .

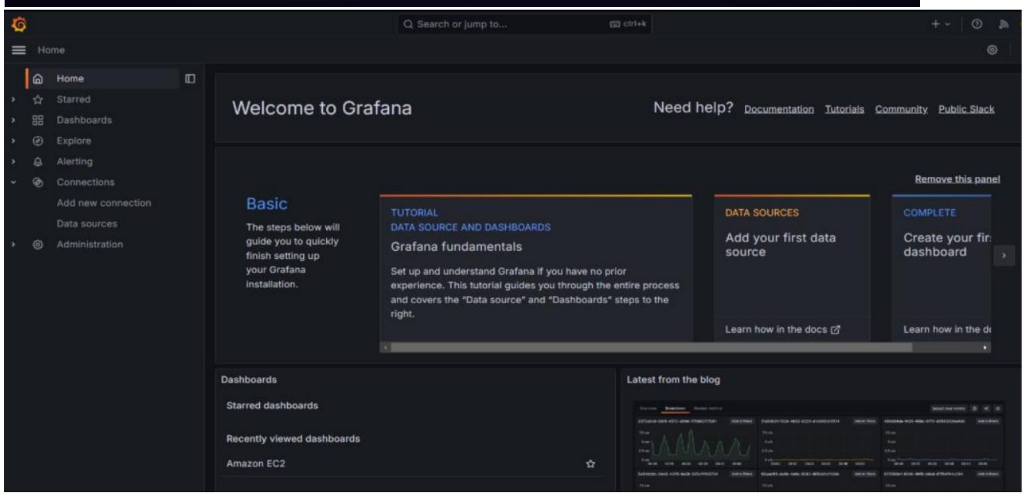


• Then paste your copied ip address and type ":3000" after ip address and search it.

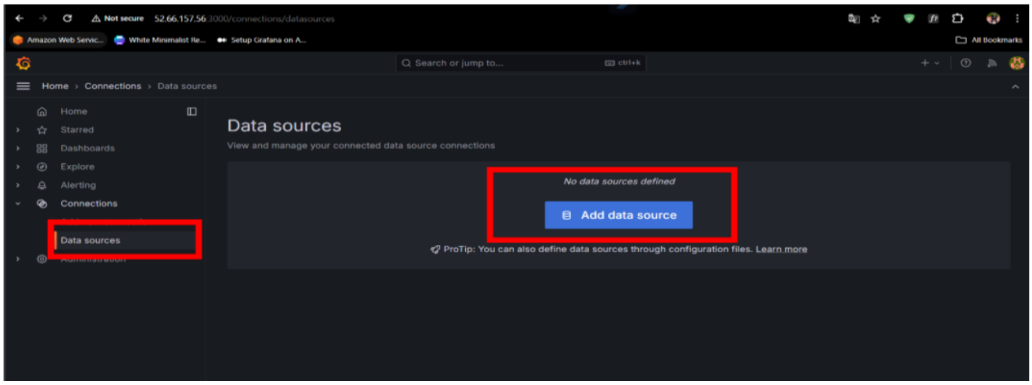


• Then login in Grafana by the help of credientials shown in above snapshot.

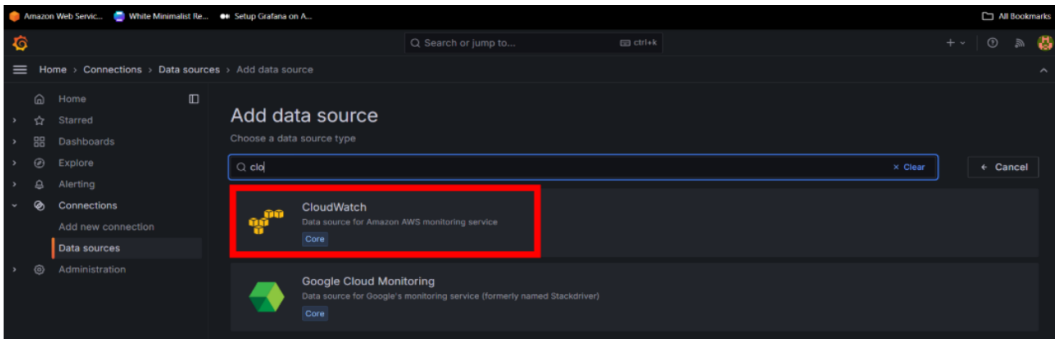




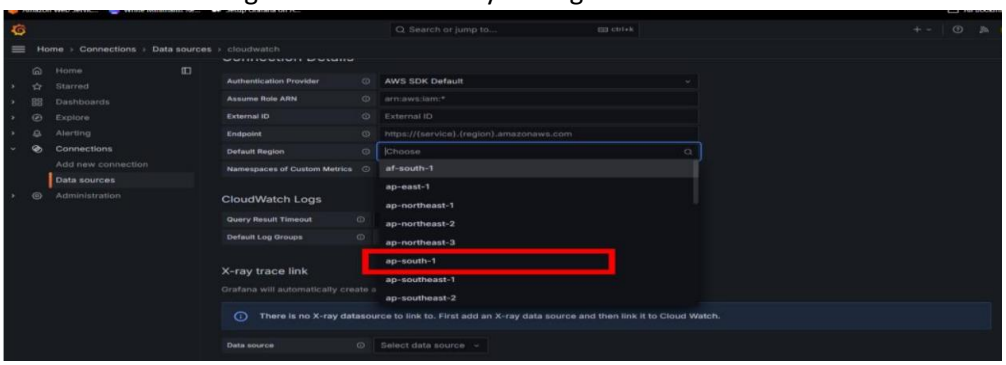
• Then go to Dashboard and click on Add data source



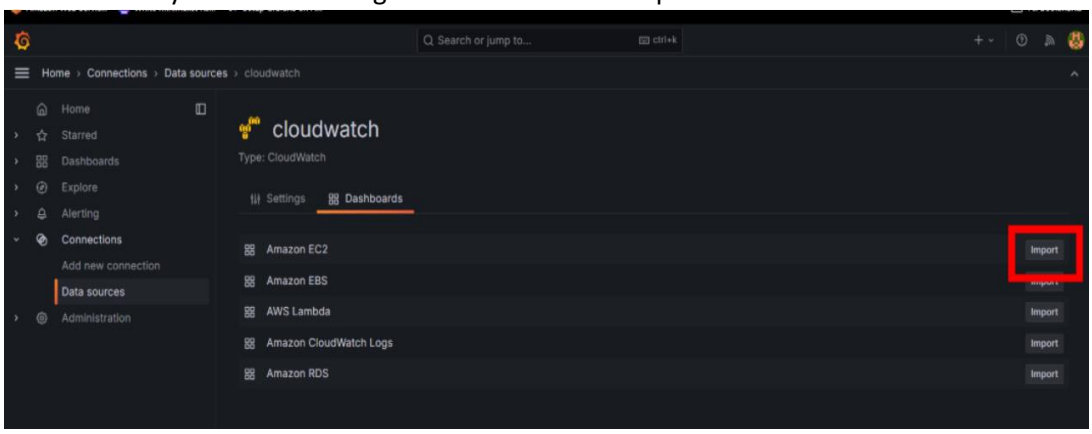
• Now , select “Cloudwatch” as an data source .



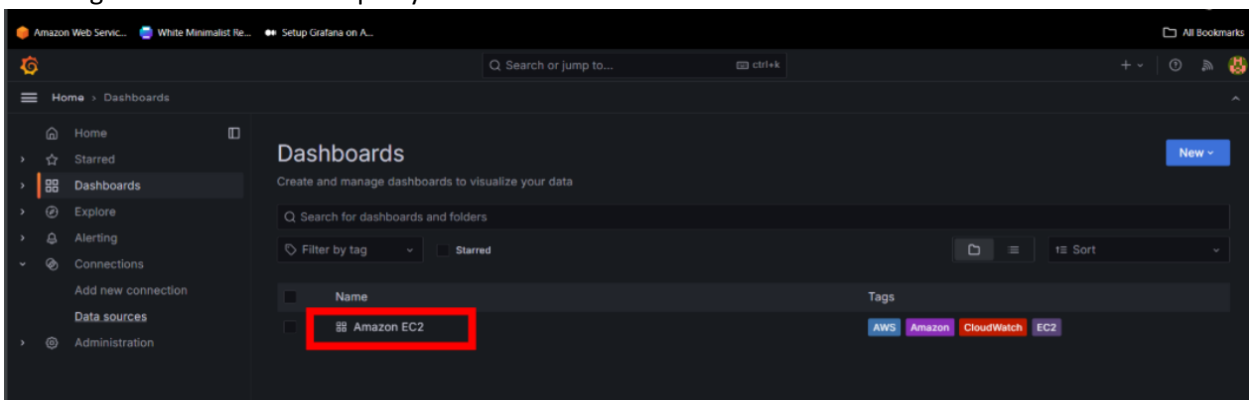
• Then after selecting cloudwatch select your region

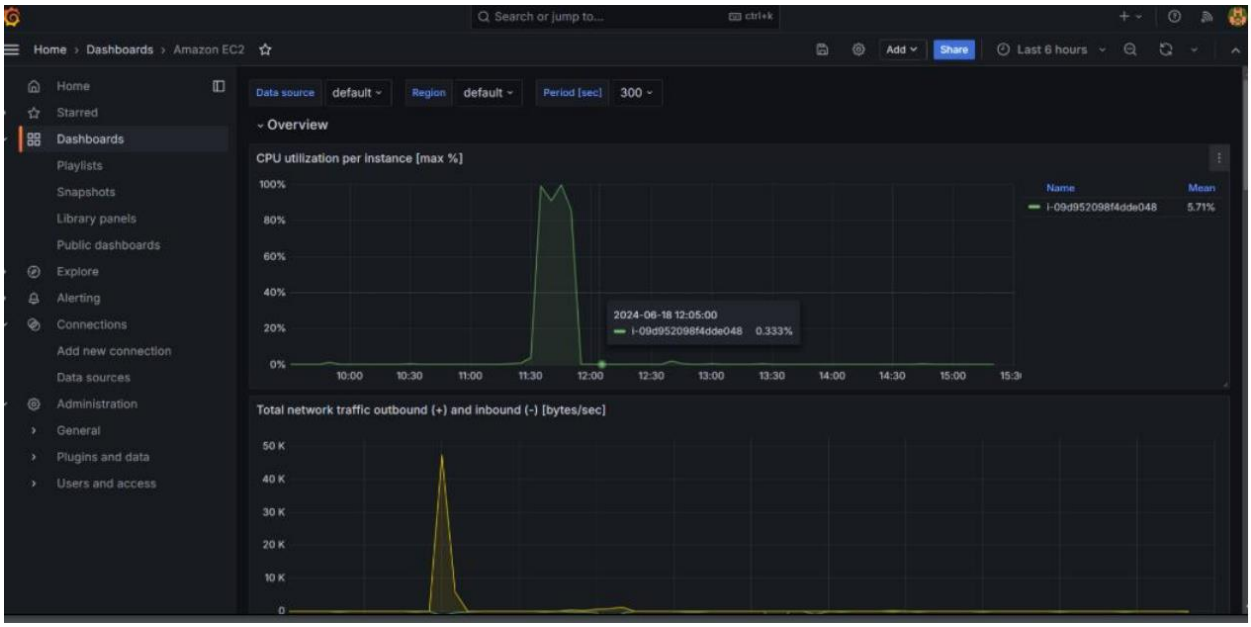


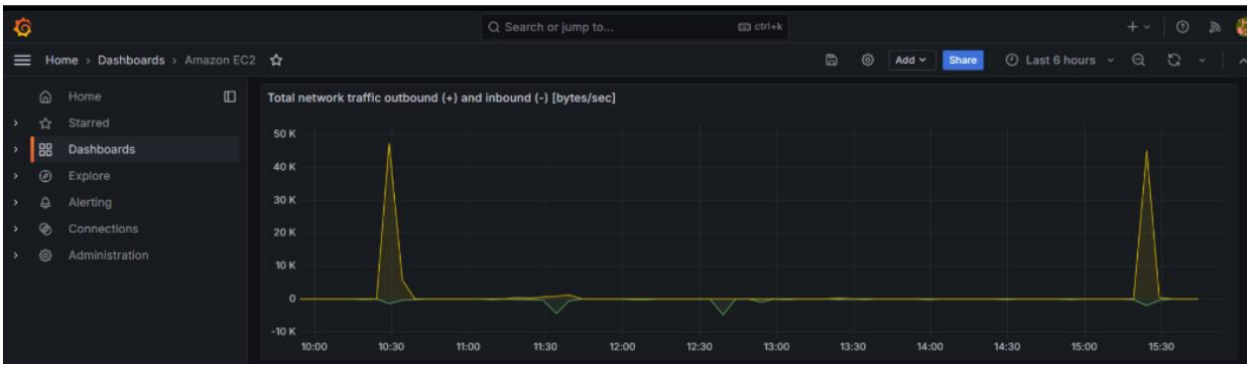
• Then inside your cloudwatch go to dashboard and Import EC2

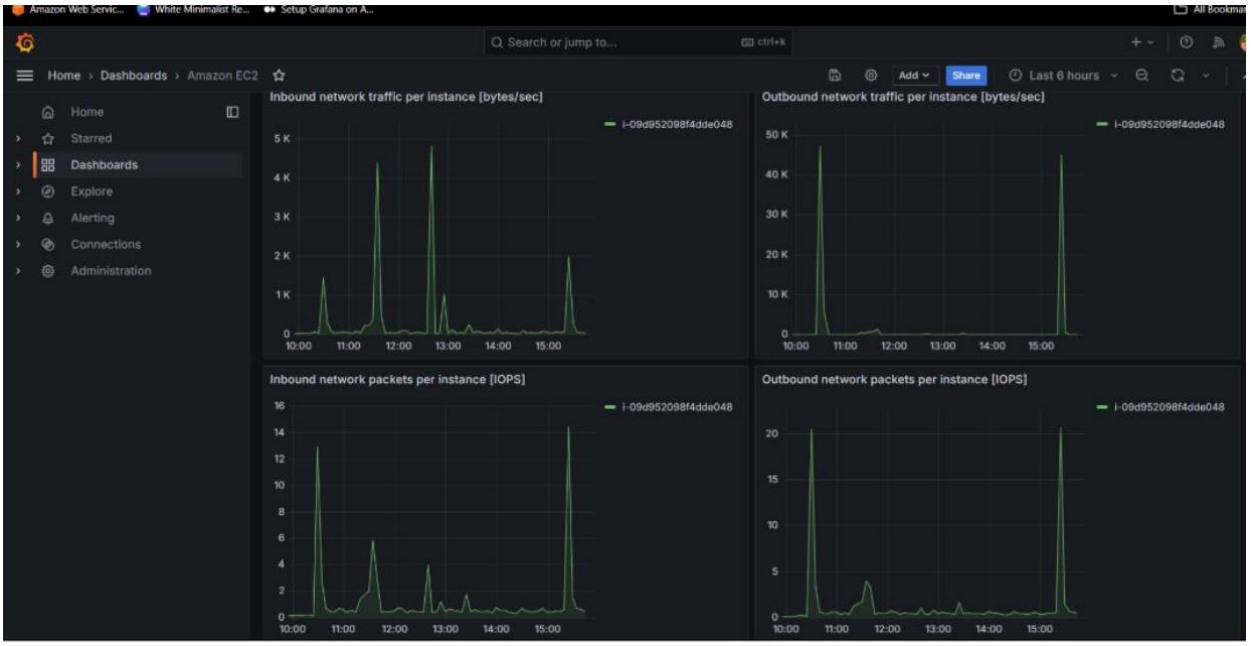


• Then go to dashboard and open your Amazon EC2




Search or jump to...
ctrl+k
Home › Dashboards › Amazon EC2
Add
Share
Last 6 hours
Home
Starred
Dashboards
Playlists
Snapshots
Library panels
Public dashboards
Explore
Alerting
Connections
Add new connection
Data sources
Administration
General
Plugins and data
Users and access
Data source
default
Region
default
Period [sec]
300
Overview
CPU utilization per instance [max %]
Name
Mean
i-09d952098f4dde048
5.71%
2024-06-18 12:05:00
i-09d952098f4dde048 0.333%
Total network traffic outbound (+) and inbound (-) [bytes/sec]


Search or jump to...
ctrl+k
Home › Dashboards › Amazon EC2
Add
Share
Last 6 hours
Home
Starred
Dashboards
Explore
Alerting
Connections
Administration
Total network traffic outbound (+) and inbound (-) [bytes/sec]


Search or jump to...
ctrl+k
Home › Dashboards › Amazon EC2
Add
Share
Last 6 hours
Home
Starred
Dashboards
Explore
Alerting
Connections
Administration
Inbound network traffic per instance [bytes/sec]
Outbound network traffic per instance [bytes/sec]
Inbound network packets per instance [IOPS]
Outbound network packets per instance [IOPS]
i-09d952098f4dde048