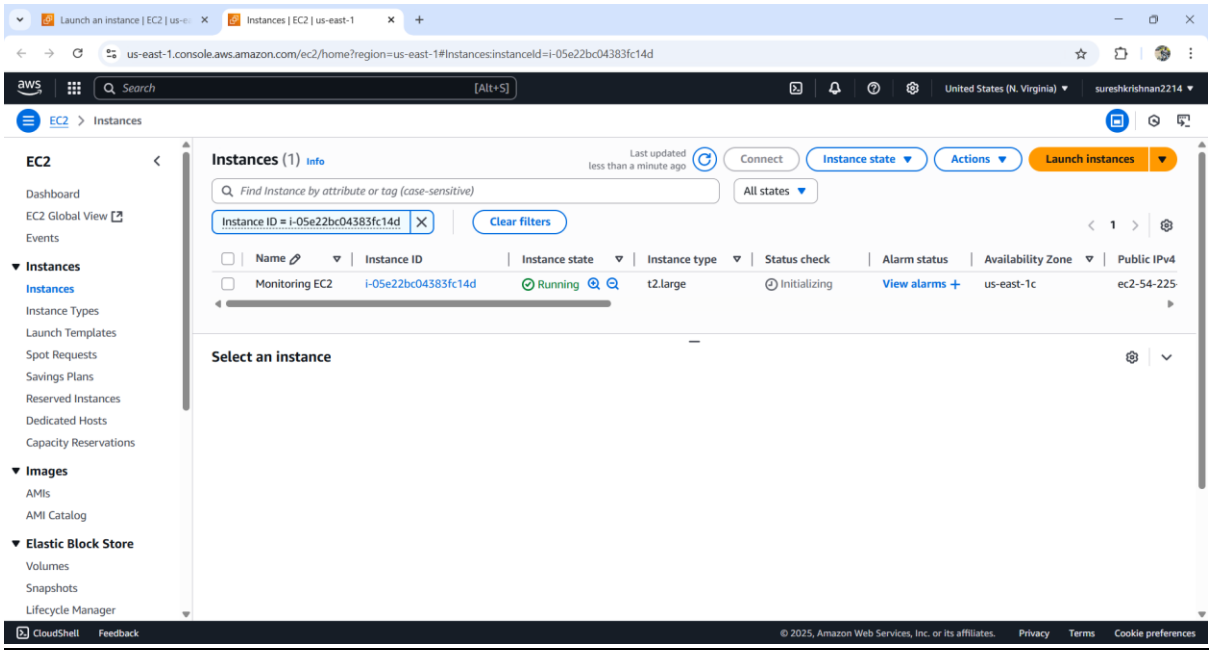
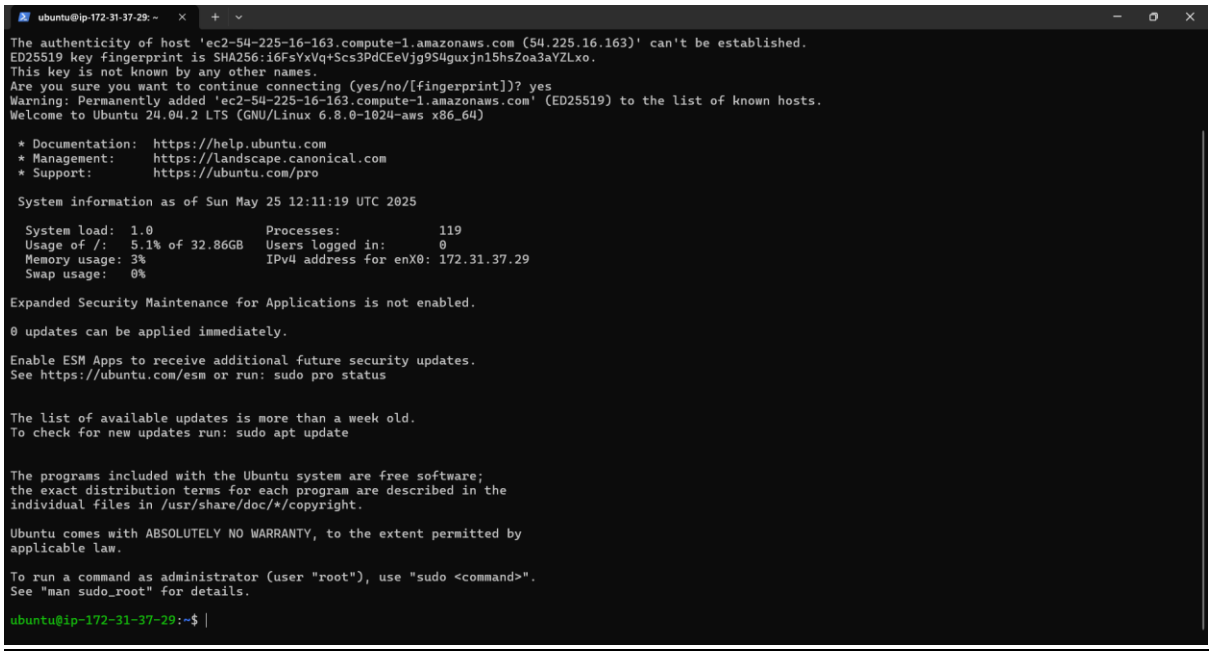
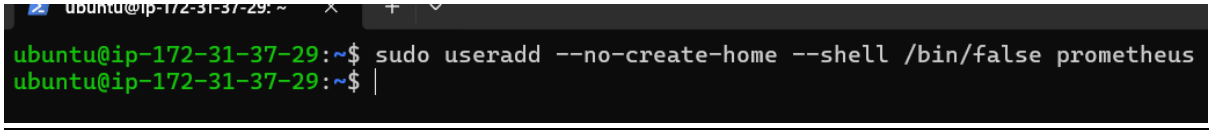
Monitoring Task

Connecting EC2 Instance:





Installing Prometheus:



```
ubuntu@ip-172-31-37-29: ~
ubuntu@ip-172-31-37-29:~$ sudo useradd --no-create-home --shell /bin/false prometheus
ubuntu@ip-172-31-37-29:~$ sudo mkdir /etc/prometheus /var/lib/prometheus
ubuntu@ip-172-31-37-29:~$
```

```
ubuntu@ip-172-31-37-29: /tm
ubuntu@ip-172-31-37-29:~$ sudo useradd --no-create-home --shell /bin/false prometheus
ubuntu@ip-172-31-37-29:~$ sudo mkdir /etc/prometheus /var/lib/prometheus
ubuntu@ip-172-31-37-29:~$ cd /tmp
curl -LO https://github.com/prometheus/prometheus/releases/download/v2.52.0/prometheus-2.52.0.linux-amd64.tar.gz
tar xvf prometheus-2.52.0.linux-amd64.tar.gz
cd prometheus-2.52.0.linux-amd64
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
  0     0    0     0    0     0      0      0 --:--:-- --:--:-- --:--:--     0
100 99.8M  100 99.8M    0     0  92.5M      0  0:00:01  0:00:01 --:--:--  113M
prometheus-2.52.0.linux-amd64/
prometheus-2.52.0.linux-amd64/LICENSE
prometheus-2.52.0.linux-amd64/promtool
prometheus-2.52.0.linux-amd64/console_libraries/
prometheus-2.52.0.linux-amd64/console_libraries/prom.lib
prometheus-2.52.0.linux-amd64/console_libraries/menu.lib
prometheus-2.52.0.linux-amd64/prometheus
prometheus-2.52.0.linux-amd64/consoles/
prometheus-2.52.0.linux-amd64/consoles/node-overview.html
prometheus-2.52.0.linux-amd64/consoles/prometheus.html
prometheus-2.52.0.linux-amd64/consoles/node.html
prometheus-2.52.0.linux-amd64/consoles/index.html.example
prometheus-2.52.0.linux-amd64/consoles/node-disk.html
prometheus-2.52.0.linux-amd64/consoles/node-cpu.html
prometheus-2.52.0.linux-amd64/consoles/prometheus-overview.html
prometheus-2.52.0.linux-amd64/prometheus.yml
prometheus-2.52.0.linux-amd64/NOTICE
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$
```

```
ubuntu@ip-172-31-37-29: /tm
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ sudo cp prometheus /usr/local/bin/
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ sudo cp promtool /usr/local/bin/
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ sudo cp -r consoles/ console_libraries/ /etc/prometheus/
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ sudo cp prometheus.yml /etc/prometheus/
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ sudo chown -R prometheus:prometheus /etc/prometheus /var/lib/prometheus /usr/local/bin/prometheus
 /usr/local/bin/promtool
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$
```

Creating systemd service:

```
ubuntu@ip-172-31-37-29: /tm
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ sudo tee /etc/systemd/system/prometheus.service > /dev/null <<EOF
[Unit]
Description=Prometheus
Wants=network-online.target
After=network-online.target

[Service]
User=prometheus
Group=prometheus
Type=simple
ExecStart=/usr/local/bin/prometheus \
  --config.file=/etc/prometheus/prometheus.yml \
  --storage.tsdb.path=/var/lib/prometheus/ \
  --web.console.templates=/etc/prometheus/consoles \
  --web.console.libraries=/etc/prometheus/console_libraries

[Install]
WantedBy=multi-user.target
EOF
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$
```

Starting Prometheus:

```
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ sudo systemctl daemon-reexec
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ sudo systemctl daemon-reload
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ sudo systemctl enable prometheus
Created symlink /etc/systemd/system/multi-user.target.wants/prometheus.service → /etc/systemd/system/prometheus.service.
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ sudo systemctl start prometheus
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$
```

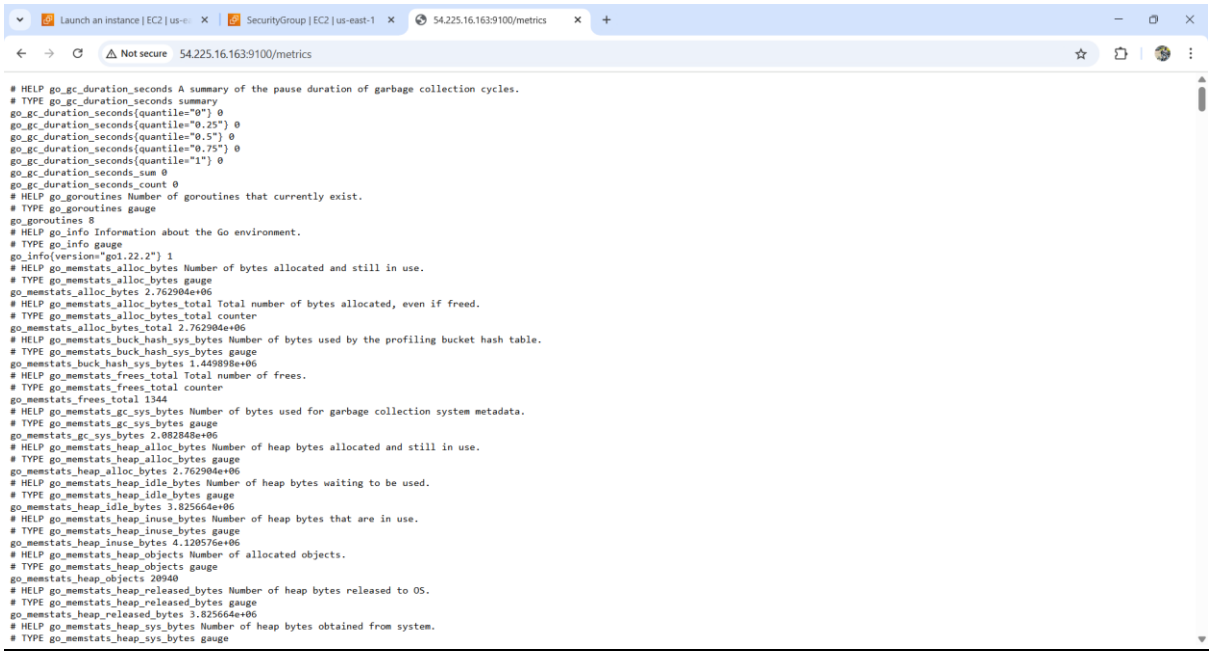
Installing Node Exporter:

```
ubuntu@ip-172-31-37-29:/tmp/prometheus-2.52.0.linux-amd64$ cd /tmp
curl -LO https://github.com/prometheus/node_exporter/releases/download/v1.8.0/node_exporter-1.8.0.linux-amd64.tar.gz
tar xvf node_exporter-1.8.0.linux-amd64.tar.gz
cd node_exporter-1.8.0.linux-amd64
sudo cp node_exporter /usr/local/bin/
sudo useradd -rs /bin/false node_exporter
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
  0     0    0     0    0     0      0      0 --:--:-- --:--:-- --:--:--     0
100 10.1M  100 10.1M    0     0  54.1M      0 --:--:-- --:--:-- --:--:-- 54.1M
node_exporter-1.8.0.linux-amd64/
node_exporter-1.8.0.linux-amd64/NOTICE
node_exporter-1.8.0.linux-amd64/node_exporter
node_exporter-1.8.0.linux-amd64/LICENSE
ubuntu@ip-172-31-37-29:/tmp/node_exporter-1.8.0.linux-amd64$
```

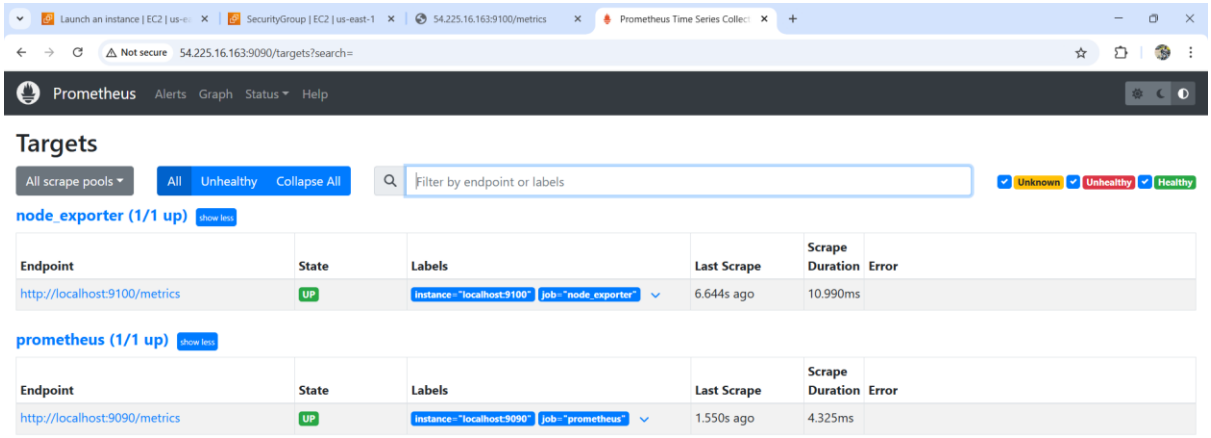
```
ubuntu@ip-172-31-37-29:/tmp/node_exporter-1.8.0.linux-amd64$ sudo tee /etc/systemd/system/node_exporter.service > /dev/null <<EOF
[Unit]
Description=Node Exporter
After=network.target

[Service]
User=node_exporter
Group=node_exporter
Type=simple
ExecStart=/usr/local/bin/node_exporter

[Install]
WantedBy=multi-user.target
EOF
ubuntu@ip-172-31-37-29:/tmp/node_exporter-1.8.0.linux-amd64$
```

Starting Node Exporter:

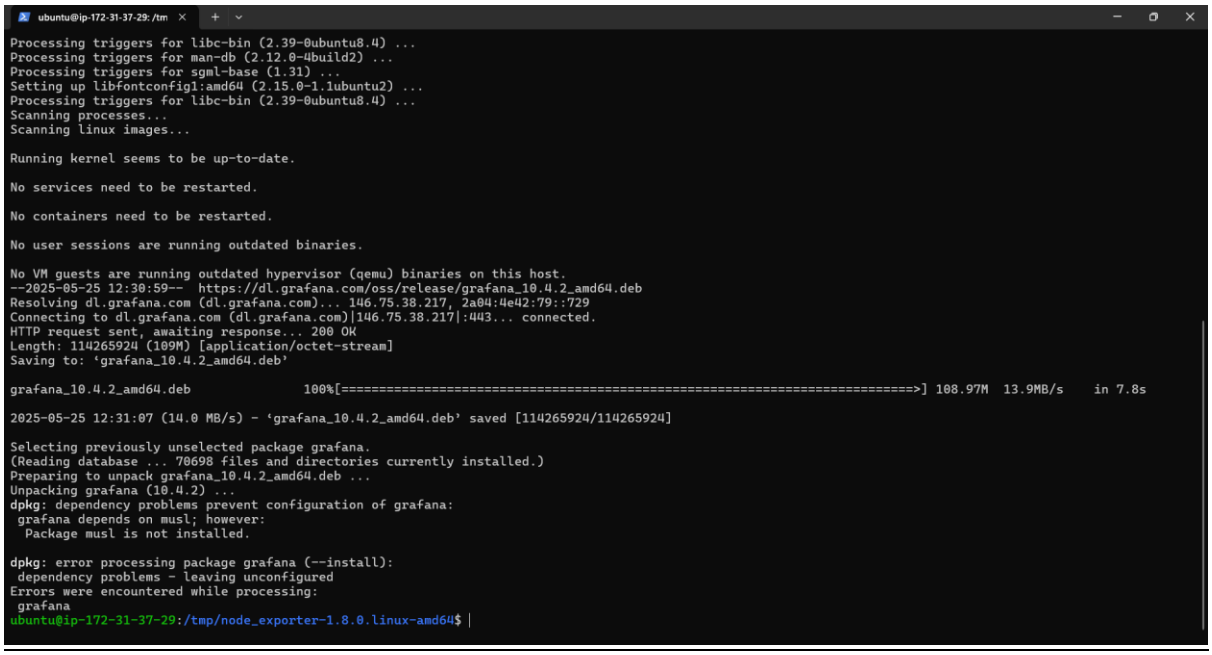
```
ubuntu@ip-172-31-37-29:/tmp/node_exporter-1.8.0.linux-amd64$ sudo systemctl daemon-reload
ubuntu@ip-172-31-37-29:/tmp/node_exporter-1.8.0.linux-amd64$ sudo systemctl enable node_exporter
Created symlink /etc/systemd/system/multi-user.target.wants/node_exporter.service → /etc/systemd/system/node_exporter.service.
ubuntu@ip-172-31-37-29:/tmp/node_exporter-1.8.0.linux-amd64$ sudo systemctl start node_exporter
ubuntu@ip-172-31-37-29:/tmp/node_exporter-1.8.0.linux-amd64$
```



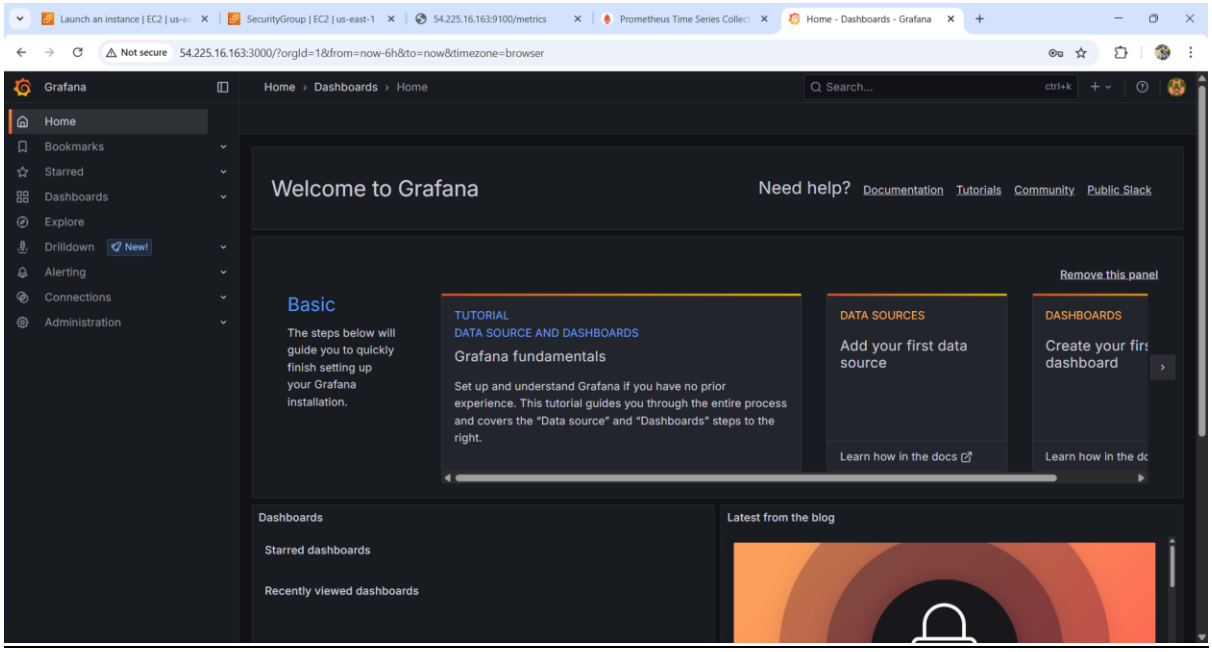
Connecting Node Exporter to Prometheus:

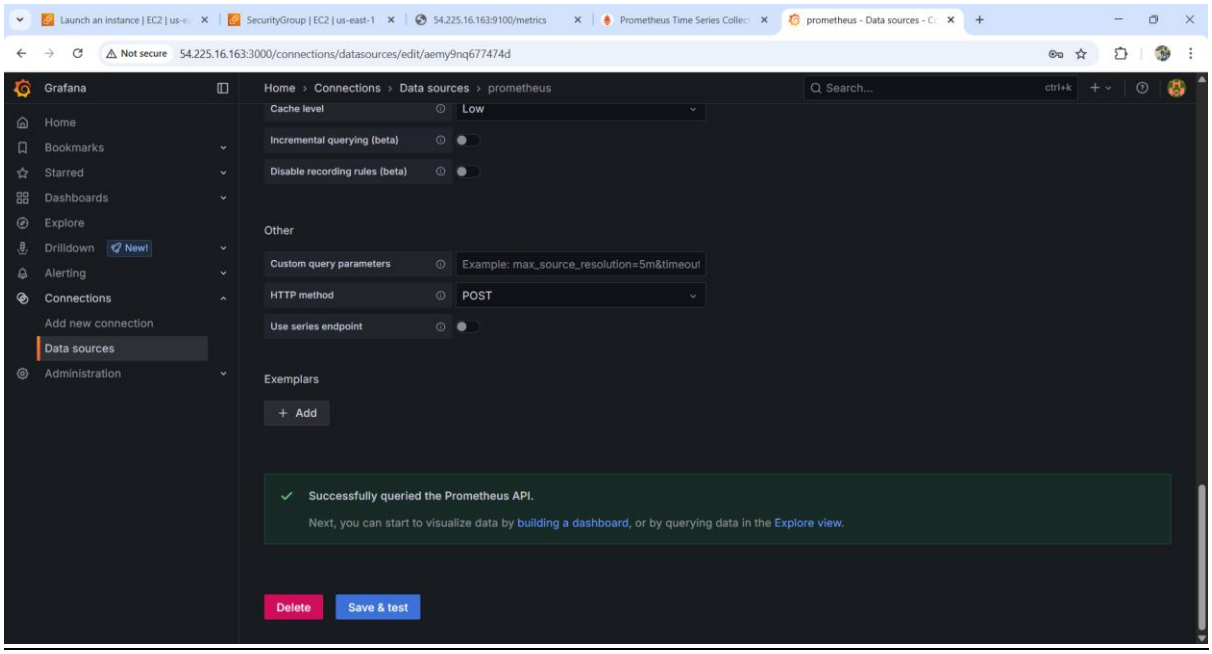


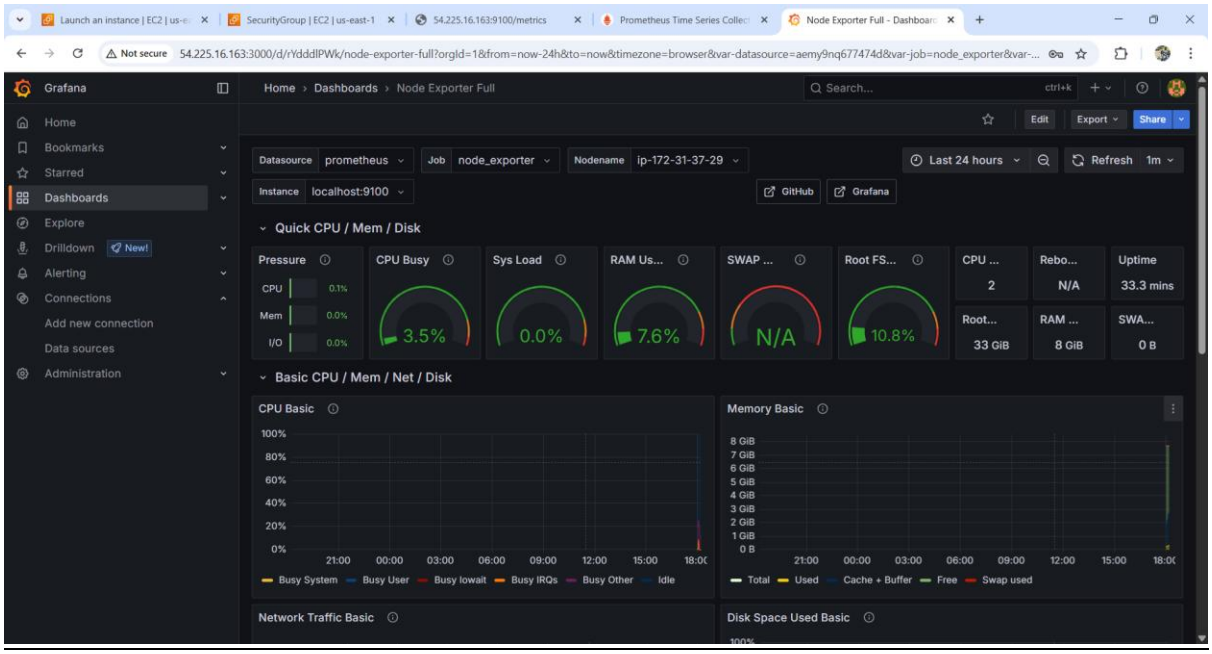
Installing Grafana:



Starting Grafana:






Launch an instance | EC2 | us-e
SecurityGroup | EC2 | us-east-1
54.225.16.163:9100/metrics
Prometheus Time Series Collec
Node Exporter Full - Dashboard
Not secure
54.225.16.163:3000/d/rYdddlPWk/node-exporter-full?orgId=1&from=now-24h&to=now&timezone=browser&var-datasource=aemy9nq677474d&var-job=node_exporter&var-...
Grafana
Home
Bookmarks
Starred
Dashboards
Explore
Drilldown
New!
Alerting
Connections
Add new connection
Data sources
Administration
Home › Dashboards › Node Exporter Full
Search...
ctrl+k
Edit
Export
Share
Datasource
prometheus
Job
node_exporter
Nodename
ip-172-31-37-29
Last 24 hours
Refresh
1m
Instance
localhost:9100
GitHub
Grafana
Quick CPU / Mem / Disk
Pressure
CPU
0.1%
Mem
0.0%
I/O
0.0%
CPU Busy
3.5%
Sys Load
0.0%
RAM Us...
7.6%
SWAP ...
N/A
Root FS...
10.8%
CPU ...
2
Rebo...
N/A
Uptime
33.3 mins
Root...
33 GiB
RAM ...
8 GiB
SWA...
0 B
Basic CPU / Mem / Net / Disk
CPU Basic
100%
80%
60%
40%
20%
0%
21:00
00:00
03:00
06:00
09:00
12:00
15:00
Busy System
Busy User
Busy Iowait
Busy IRQs
Busy Other
Idle
Memory Basic
8 GiB
7 GiB
6 GiB
5 GiB
4 GiB
3 GiB
2 GiB
1 GiB
0 B
Total
Used
Cache + Buffer
Free
Swap used
Network Traffic Basic
Disk Space Used Basic