Grafana Server –

Create 3 ec2 with below name –

Name	Instance ID	Instance state	Instance type
grafana	i-00f7f57639f74d361	Running	t2.micro
prometheus	i-0730957e4df296f52	Running	t2.micro
worker node need to monitor	i-0836a50c4aafa56ff	Running	t2.micro

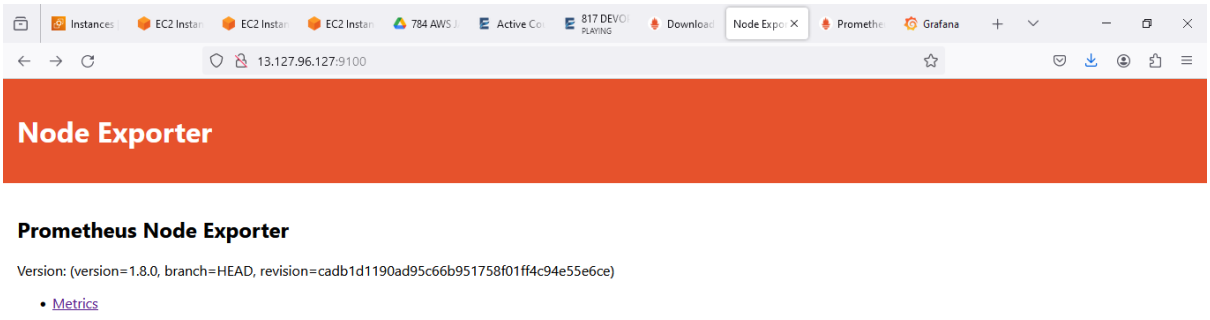
1. Login to ec2 servers and install rpm extract file from Grafana portal –

```
ts=2024-05-01T16:52:06.204Z caller=node_exporter.go:118 level=info collector=vmstat
ts=2024-05-01T16:52:06.204Z caller=node_exporter.go:118 level=info collector=watchdog
ts=2024-05-01T16:52:06.204Z caller=node_exporter.go:118 level=info collector=xfs
ts=2024-05-01T16:52:06.204Z caller=node_exporter.go:118 level=info collector=zfs
ts=2024-05-01T16:52:06.205Z caller=tls_config.go:313 level=info msg="Listening on" address=[::]:9100
ts=2024-05-01T16:52:06.205Z caller=tls_config.go:316 level=info msg="TLS is disabled." http2=false address=[::]:9100
^C
[root@ip-172-31-38-248 node_exporter-1.8.0.linux-amd64]# history
    1  wget https://github.com/prometheus/node_exporter/releases/download/v1.8.0/node_exporter-1.8.0.linux-amd64.tar.gz
    2  ls -ltr
    3  tar -xvf https://github.com/prometheus/node_exporter/releases/download/v1.8.0/node_exporter-1.8.0.linux-amd64.tar.gz
    4  tar -xvf node_exporter-1.8.0.linux-amd64.tar.gz
    5  cd node_exporter-1.8.0.linux-amd64.tar.gz
    6  ls -l
    7  cd node_exporter-1.8.0.linux-amd64
    8  ls
    9  cd node_exporter
   10  cd node_exporter-1.8.0.linux-amd64
   11  ./node_exporter &
   12  history
[root@ip-172-31-38-248 node_exporter-1.8.0.linux-amd64]#
```

3.Worker node – install node exporter (server which need to monitor)

```
2024-05-01 16:46:27 (150 MB/s) - 'node_exporter-1.8.0.linux-amd64.tar.gz' saved [10675730/10675730]

[root@ip-172-31-38-248 ec2-user]# ls -ltr
total 10428
-rw-r--r--. 1 root root 10675730 Apr 24 13:20 node_exporter-1.8.0.linux-amd64.tar.gz
[root@ip-172-31-38-248 ec2-user]# tar -xvf https://github.com/prometheus/node_exporter/releases/download/v1.8.0/node_exporter-1.8.0.linux-amd64.t
ar.gztar: Cannot connect to https: resolve failed
[root@ip-172-31-38-248 ec2-user]# tar -xvf node_exporter-1.8.0.linux-amd64.tar.gz
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
[root@ip-172-31-38-248 ec2-user]# cd node_exporter-1.8.0.linux-amd64.tar.gz
bash: cd: node_exporter-1.8.0.linux-amd64.tar.gz: Not a directory
[root@ip-172-31-38-248 ec2-user]# ls -l
total 10428
drwxr-xr-x. 2 1001 1002       56 Apr 24 13:20 node_exporter-1.8.0.linux-amd64
-rw-r--r--. 1 root root 10675730 Apr 24 13:20 node_exporter-1.8.0.linux-amd64.tar.gz
[root@ip-172-31-38-248 ec2-user]# cd node_exporter-1.8.0.linux-amd64
[root@ip-172-31-38-248 node_exporter-1.8.0.linux-amd64]# ls
LICENSE  NOTICE  node_exporter
[root@ip-172-31-38-248 node_exporter-1.8.0.linux-amd64]# cd node_exporter
bash: cd: node_exporter: Not a directory
[root@ip-172-31-38-248 node_exporter-1.8.0.linux-amd64]# cd node_exporter-1.8.0.linux-amd64
bash: cd: node_exporter-1.8.0.linux-amd64: No such file or directory
[root@ip-172-31-38-248 node_exporter-1.8.0.linux-amd64]# ./node_exporter &
[1] 3268
[root@ip-172-31-38-248 node_exporter-1.8.0.linux-amd64]# ts=2024-05-01T16:52:06.197Z caller=node_exporter.go:193 level=info msg="Starting node_ex
porter" version="(version=1.8.0, branch=HEAD, revision=cadb1d1190ad95c66b951758f01ff4c94e55e6ce)"
ts=2024-05-01T16:52:06.197Z caller=node_exporter.go:194 level=info msg="Build context" build_context="(go=go1.22.2, platform=linux/amd64, user=ro
```

Output – node exporter is displaying
http://publicip:9100

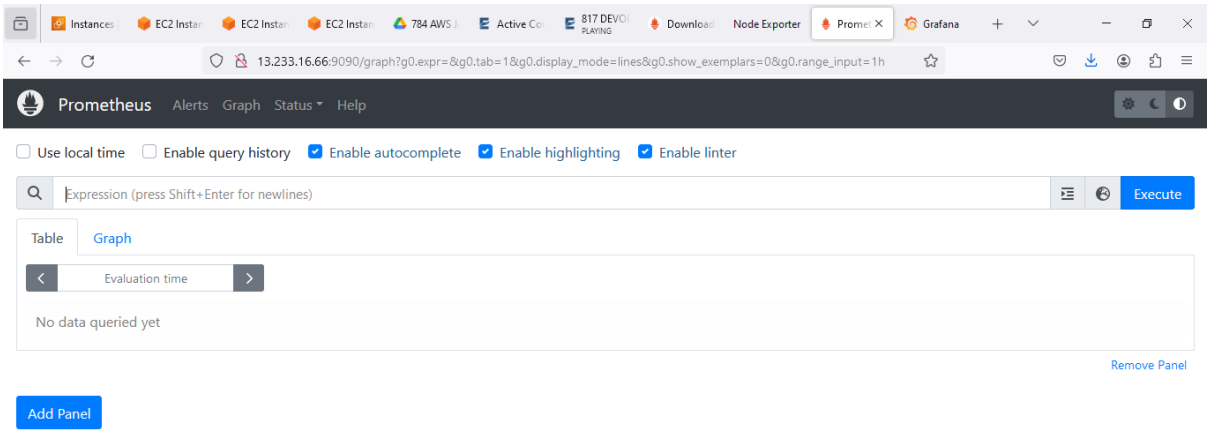


2. Prometheus – will collect data from server need to monitor
   Need to add node worker data in the target of Prometheus.yml file

```
ts=2024-05-01T17:05:48.269Z caller=main.go:1114 level=info msg="Server is ready to receive web requests."
ts=2024-05-01T17:05:48.269Z caller=manager.go:163 level=info component="rule manager" msg="Starting rule manager..."
^C
[ec2-user@ip-172-31-35-57 prometheus-2.52.0-rc.0.linux-amd64]$ history
    1  sudo su
    2  wget https://github.com/prometheus/prometheus/releases/download/v2.52.0-rc.0/prometheus-2.52.0-rc.0.linux-amd64.tar.gz
    3  ls -ltr
    4  tar -xvf prometheus-2.52.0-rc.0.linux-amd64.tar.gz
    5  vi prometheus.yml
    6  rm prometheus.yml
    7  ls-ltr
    8  cd prometheus-2.52.0-rc.0.linux-amd64.tar.gz
    9  tar -xvf prometheus-2.52.0-rc.0.linux-amd64.tar.gz
   10  cd prometheus-2.52.0-rc.0.linux-amd64.tar.gz
   11  tar -xvf prometheus-2.52.0-rc.0.linux-amd64.tar.gz
   12  cd prometheus-2.52.0-rc.0.linux-amd64.tar.gz
   13  ls -ltr
   14  cd prometheus-2.52.0-rc.0.linux-amd64
   15  ls -ltr
   16  vi prometheus.yml
   17  ./prometheus &
   18  history
[ec2-user@ip-172-31-35-57 prometheus-2.52.0-rc.0.linux-amd64]$
```

```
alerting:
  alertmanagers:
    - static_configs:
        - targets:
          # - alertmanager:9093

# Load rules once and periodically evaluate them according to the global 'evaluation_interval'.
rule_files:
  # - "first_rules.yml"
  # - "second_rules.yml"

# A scrape configuration containing exactly one endpoint to scrape:
# Here it's Prometheus itself.
scrape_configs:
  # The job name is added as a label `job=<job_name>` to any timeseries scraped from this config.
  - job_name: "prometheus"

    # metrics_path defaults to '/metrics'
    # scheme defaults to 'http'.

    static_configs:
      - targets: ["localhost:9090","13.127.96.127:9100"]
~
```

Output of Prometheus -http://publicip:9090



3. Grafana monitoring tool installed in ec2 – one Grafana server can monitor more then 1 prometheus servers.

```
May 01 17:14:11 ip-172-31-43-174.ap-south-1.compute.internal grafana[26556]: logger=ngalert.multiorg.alertmanager t=2024-05-01T17:14:
May 01 17:14:11 ip-172-31-43-174.ap-south-1.compute.internal grafana[26556]: logger=ngalert.scheduler t=2024-05-01T17:14:11.709464381
May 01 17:14:11 ip-172-31-43-174.ap-south-1.compute.internal grafana[26556]: logger=ticker t=2024-05-01T17:14:11.710531142 level=info
May 01 17:14:12 ip-172-31-43-174.ap-south-1.compute.internal grafana[26556]: logger=grafana.update.checker t=2024-05-01T17:14:12.1067
May 01 17:14:12 ip-172-31-43-174.ap-south-1.compute.internal grafana[26556]: logger=plugins.update.checker t=2024-05-01T17:14:12.1266
May 01 17:14:12 ip-172-31-43-174.ap-south-1.compute.internal grafana[26556]: logger=grafana-apiserver t=2024-05-01T17:14:12.550455166
May 01 17:14:12 ip-172-31-43-174.ap-south-1.compute.internal grafana[26556]: logger=grafana-apiserver t=2024-05-01T17:14:12.551680534
lines 1-21/21 (END)
[root@ip-172-31-43-174 ec2-user]# history
    1  sudo yum install -y https://dl.grafana.com/enterprise/release/grafana-enterprise-10.4.2-1.x86_64.rpm
    2  syatemctl status check
    3  sudo systemctl daemon-reload
    4  sudo systemctl status grafana-server
    5  sudo systemctl start grafana-server
    6  sudo systemctl status grafana-server
    7  history
[root@ip-172-31-43-174 ec2-user]#
```

Output of Grafana – http://publicip:3000