Prometheus Installation:

Username Creation:

```
sudo useradd \

--system \

--no-create-home \

--shell /bin/false Prometheus
```

Command:

```
wget https://github.com/prometheus/prometheus/releases/download/v2.47.1/prometheus-2.47.1.linux-amd64.tar.gz

tar -xvf prometheus-2.47.1.linux-amd64.tar.gz

sudo mkdir -p /data /etc/prometheus

cd prometheus-2.47.1.linux-amd64/

sudo mv prometheus promtool /usr/local/bin/

sudo mv consoles/ console_libraries/ /etc/prometheus/

sudo mv prometheus.yml /etc/prometheus/prometheus.yml

sudo chown -R prometheus:prometheus /etc/prometheus/ /data/

cd

rm -rf prometheus-2.47.1.linux-amd64.tar.gz

prometheus --version

sudo vim /etc/systemd/system/prometheus.service
```

```
prometheus-2.47.1.linux-amd64/consoles/prometheus.html
prometheus-2.47.1.linux-amd64/consoles/prometheus-overview.html
prometheus-2.47.1.linux-amd64/consoles/node-cpu.html
prometheus-2.47.1.linux-amd64/consoles/index.html.example
prometheus-2.47.1.linux-amd64/consoles/node.html
prometheus-2.47.1.linux-amd64/consoles/node-disk.html
prometheus-2.47.1.linux-amd64/consoles/node-overview.html
prometheus-2.47.1.linux-amd64/promtool
^[[A
gzip: stdin: unexpected end of file
tar: Unexpected EOF in archive
tar: Unexpected EOF in archive
tar: Error is not recoverable: exiting now
^[[Amv: cannot stat 'prometheus': No such file or directory
mv: cannot stat 'console_libraries/': No such file or directory
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64$ wget https://github.com/prometheus/prometheus/releases/download/v2.47.1/prometheus-2.47.1.lin
ux-amd64.tar.gz
tar -xvf prometheus-2.47.1.linux-amd64.tar.gz
sudo mkdir -p /data /etc/prometheus
cd prometheus-2.47.1.linux-amd64
sudo mv prometheus promtool /usr/local/bin/
sudo mv consoles/ console_libraries/ /etc/prometheus/
sudo mv prometheus.yml /etc/prometheus/prometheus.yml
sudo chown -R prometheus:prometheus /etc/prometheus/ /data/
--2025-03-22 06:31:46--  https://github.com/prometheus/prometheus/releases/download/v2.47.1/prometheus-2.47.1.linux-amd64.tar.gz
Resolving github.com (github.com)... 20.207.73.82
Connecting to github.com (github.com)|20.207.73.82|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://objects.githubusercontent.com/github-production-release-asset-2e65be/6838921/2f9b7b37-63a0-428b-adb5-0294482fd743?X-Amz-Algori
thm=AWS4-HMAC-SHA256&X-Amz-Credential=releaseassetproduction%2F20250322%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20250322T063045Z&X-Amz-Expire
s=300&X-Amz-Signature=ed575488b40968463d4d5aa828b8b4c87cbfe8c835d5f52ce11c05389b4809d9&X-Amz-SignedHeaders=host&response-content-disposition=att
achment%3B%20filename%3Dprometheus-2.47.1.linux-amd64.tar.gz&response-content-type=application%2Foctet-stream [following]
--2025-03-22 06:31:46--  https://objects.githubusercontent.com/github-production-release-asset-2e65be/6838921/2f9b7b37-63a0-428b-adb5-0294482fd7
43?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=releaseassetproduction%2F20250322%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20250322T06304
5Z&X-Amz-Expires=300&X-Amz-Signature=ed575488b40968463d4d5aa828b8b4c87cbfe8c835d5f52ce11c05389b4809d9&X-Amz-SignedHeaders=host&response-content-
disposition=attachment%3B%20filename%3Dprometheus-2.47.1.linux-amd64.tar.gz&response-content-type=application%2Foctet-stream
Resolving objects.githubusercontent.com (objects.githubusercontent.com)... 185.199.110.133, 185.199.111.133, 185.199.108.133, ...
Connecting to objects.githubusercontent.com (objects.githubusercontent.com)|185.199.110.133|:443... connected.
```

```
rm -rf prometheus-2.47.1.linux-amd64.tar.gz
prometheus --version
sudo vim /etc/systemd/system/prometheus.service
prometheus, version 2.47.1 (branch: HEAD, revision: c4d1a8beff37cc004f1dc4ab9d2e73193f51aaeb)
  build user:       root@4829330363be
  build date:       20231004-10:31:16
  go version:       go1.21.1
  platform:         linux/amd64
  tags:             netgo,builtinassets,stringlabels
ragu_ubuntu@Kavin:~$ ls
deploy.yaml  docker-compose.yaml  ns.yaml  pod-ns.yaml  pod.yaml  prometheus-2.47.1.linux-amd64  rs.yaml
ragu_ubuntu@Kavin:~$ cd
.aws/                     .docker/              .landscape/           prometheus-2.47.1.linux-amd64/
.azure/                   .jenkins/             .local/
.cache/                   .kube/                .minikube/
ragu_ubuntu@Kavin:~$ cd prometheus-2.47.1.linux-amd64/
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64$ ld
ld: no input files
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64$ ls
LICENSE  NOTICE  prometheus-2.47.1.linux-amd64  prometheus-2.47.1.linux-amd64.tar.gz
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64$ rm
LICENSE                       prometheus-2.47.1.linux-amd64/
NOTICE                        prometheus-2.47.1.linux-amd64.tar.gz
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64$ rm prometheus-2.47.1.linux-amd64
prometheus-2.47.1.linux-amd64/       prometheus-2.47.1.linux-amd64.tar.gz
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64$ rm prometheus-2.47.1.linux-amd64.tar.gz
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64$ ls
LICENSE  NOTICE  prometheus-2.47.1.linux-amd64
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64$ cd prometheus-2.47.1.linux-amd64/
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64/prometheus-2.47.1.linux-amd64$ prometheus --version
prometheus, version 2.47.1 (branch: HEAD, revision: c4d1a8beff37cc004f1dc4ab9d2e73193f51aaeb)
  build user:       root@4829330363be
  build date:       20231004-10:31:16
  go version:       go1.21.1
  platform:         linux/amd64
  tags:             netgo,builtinassets,stringlabels
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64/prometheus-2.47.1.linux-amd64$ sudo vim /etc/systemd/system/prometheus.service
ragu_ubuntu@Kavin:~/prometheus-2.47.1.linux-amd64/prometheus-2.47.1.linux-amd64$
```

Prometheus.sevice:

[Unit]

Description=Prometheus

Wants=network-online.target

After=network-online.target

StartLimitIntervalSec=500

StartLimitBurst=5

[Service]

User=prometheus

Group=prometheus

Type=simple

Restart=on-failure

RestartSec=5s

ExecStart=/usr/local/bin/prometheus \

  --config.file=/etc/prometheus/prometheus.yml \

  --storage.tsdb.path=/data \

  --web.console.templates=/etc/prometheus/consoles \

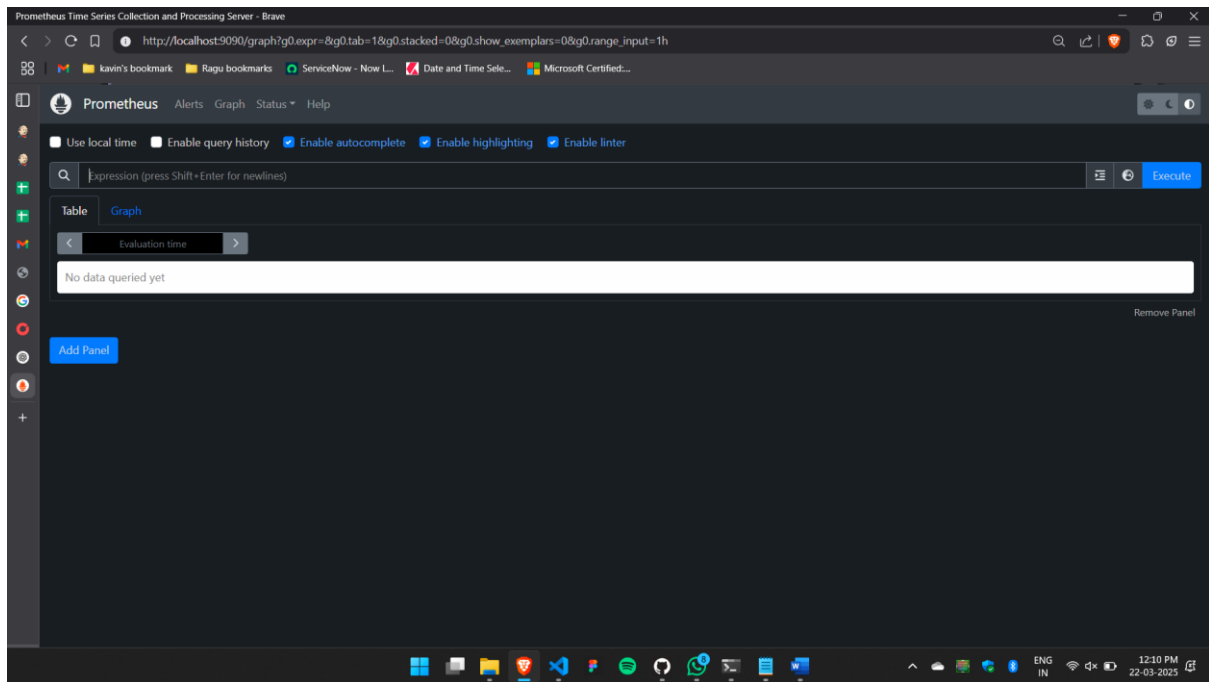 --web.console.libraries=/etc/prometheus/console_libraries \

  --web.listen-address=0.0.0.0:9090 \

  --web.enable-lifecycle

[Install]

WantedBy=multi-user.target

Node Exporter:

Commands for installation:

sudo mv \

  node_exporter-1.6.1.linux-amd64/node_exporter \

  /usr/local/bin/

rm -rf node_exporter*

Node exporter file:

[Unit]

Description=Node Exporter

Wants=network-online.target

After=network-online.target

StartLimitIntervalSec=500

StartLimitBurst=5

[Service]

User=node_exporter

Group=node_exporter

Type=simple

Restart=on-failure

RestartSec=5s

ExecStart=/usr/local/bin/node_exporter \

   --collector.logind

[Install]

WantedBy=multi-user.target

Service check : sudo systemctl enable node_exporter

sudo systemctl start node_exporter

sudo systemctl status node_exporter

journalctl -u node_exporter -f --no-pager

Reload Promotheus: curl -X POST http://localhost:9090/-/reload

Grafana:

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

wget -q -O - https://packages.grafana.com/gpg.key | sudo apt-key add -

echo "deb https://packages.grafana.com/oss/deb stable main" | sudo tee -a /etc/apt/sources.list.d/grafana.list
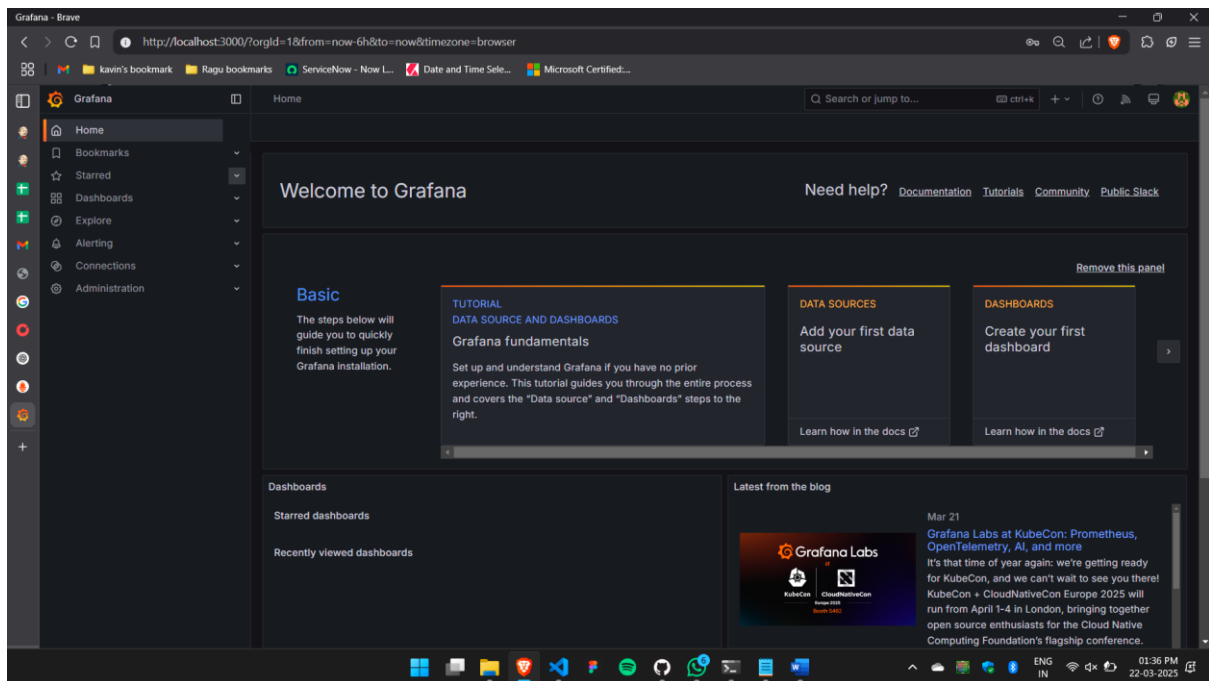
sudo apt-get update

sudo apt-get -y install grafana

sudo systemctl enable grafana-server

sudo systemctl start grafana-server
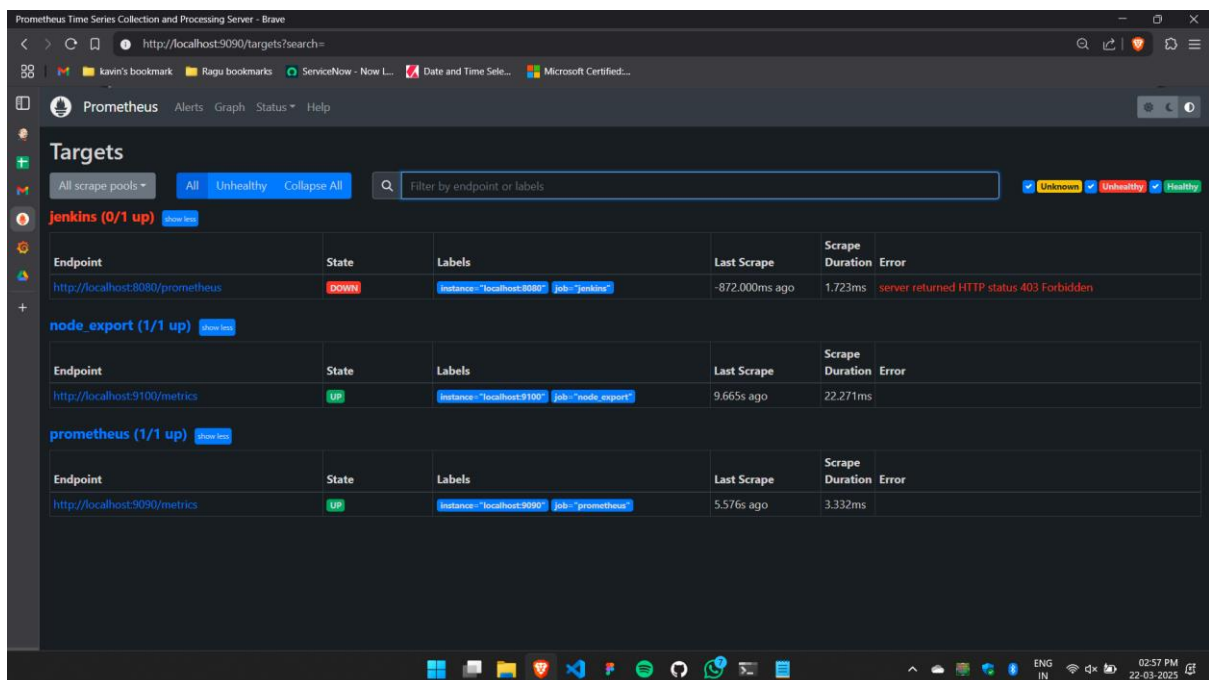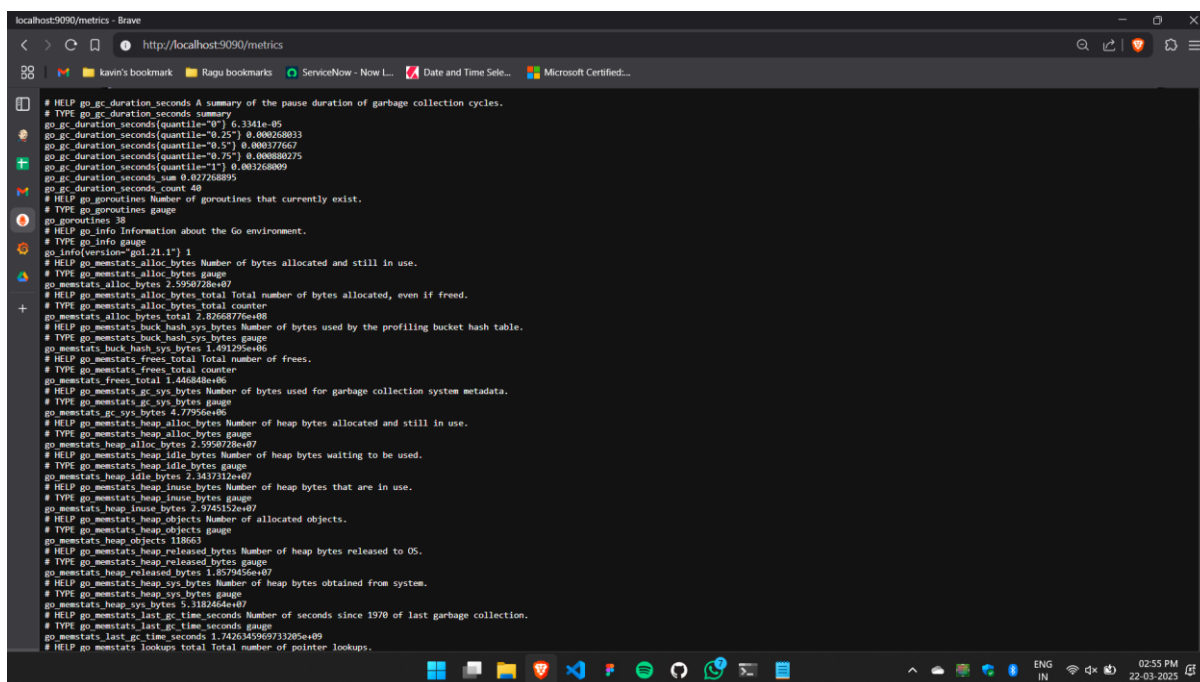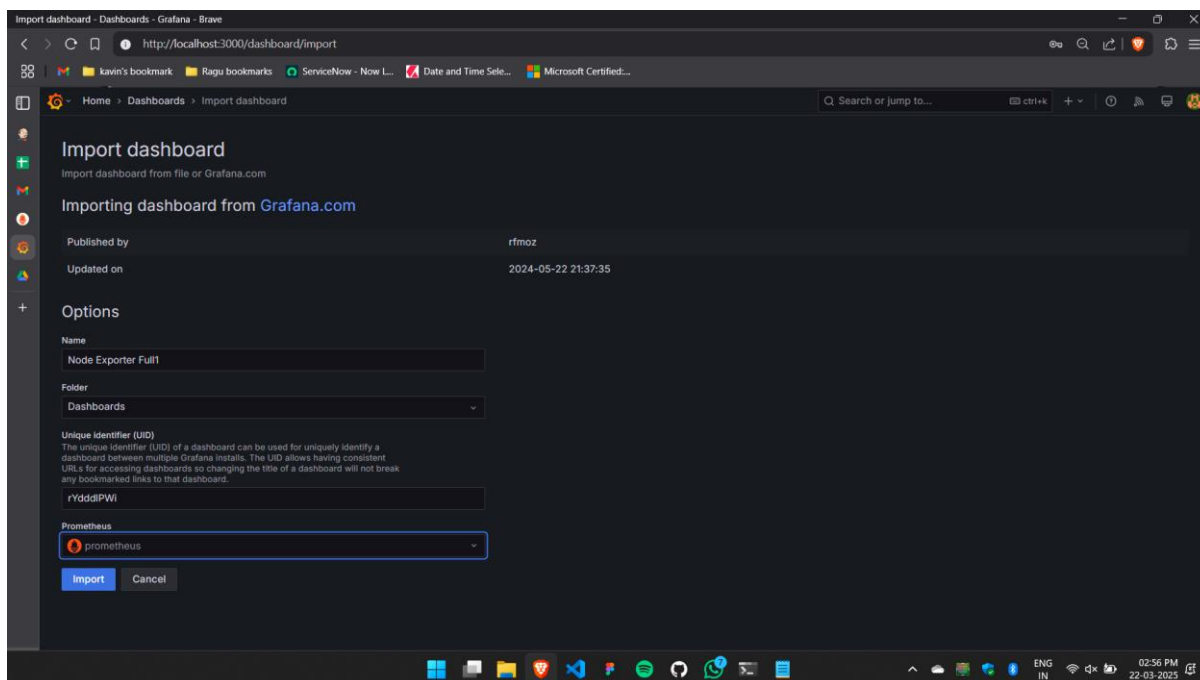
sudo systemctl status grafana-server

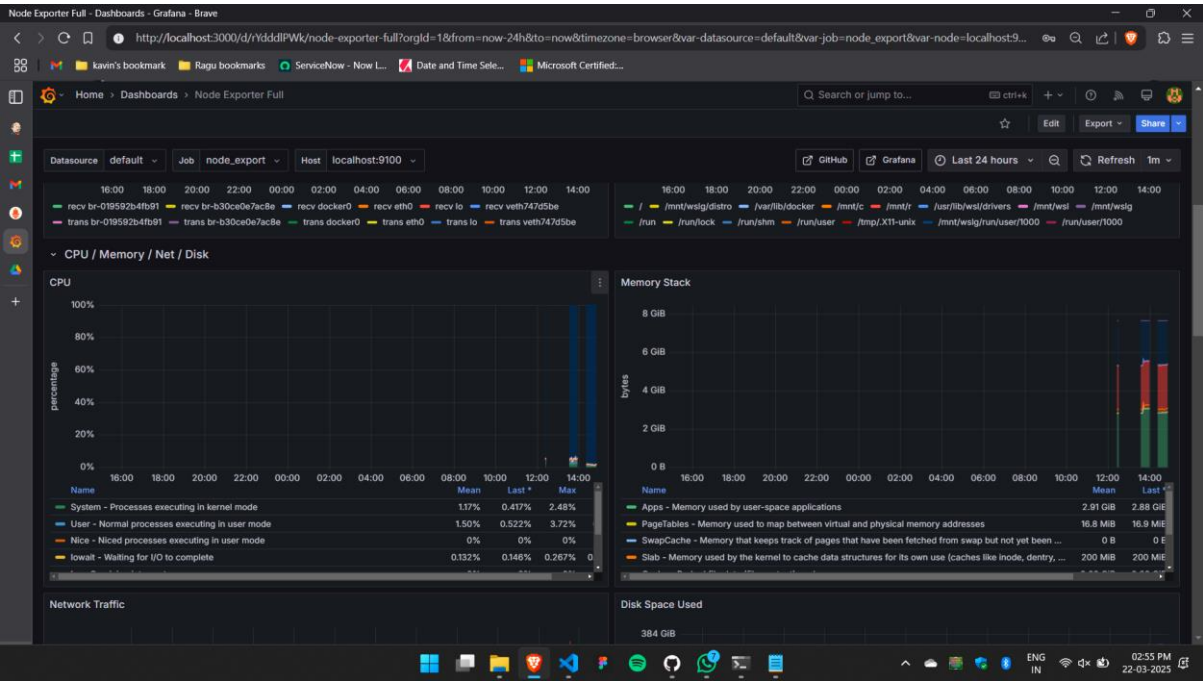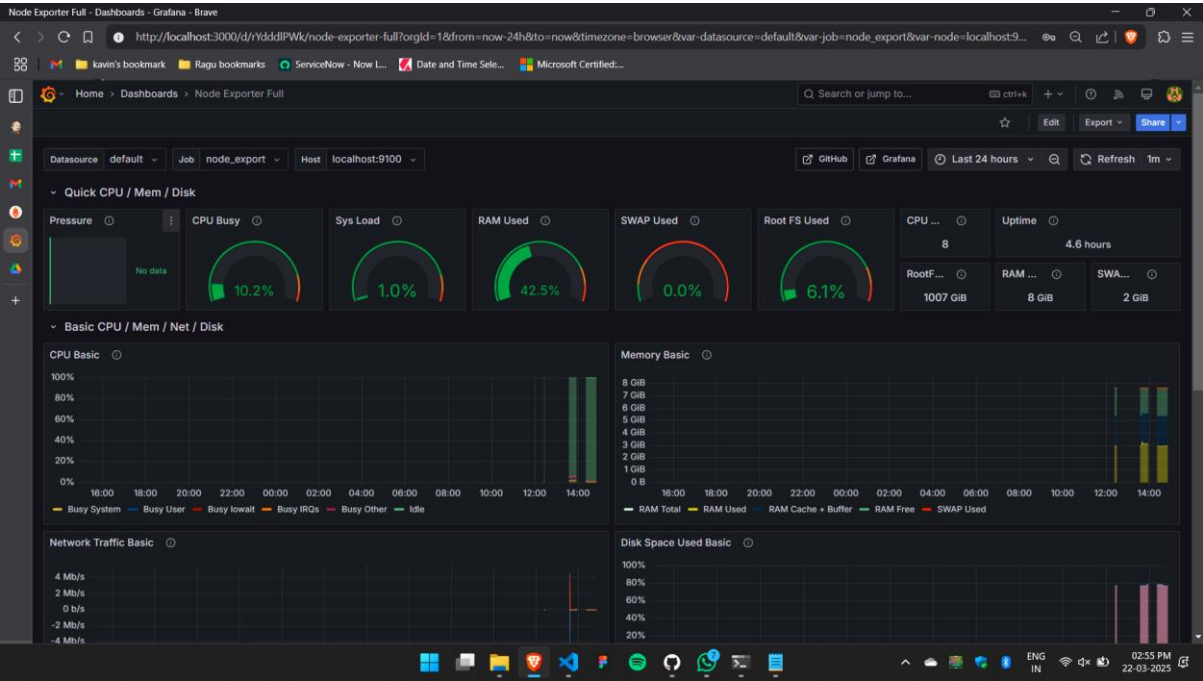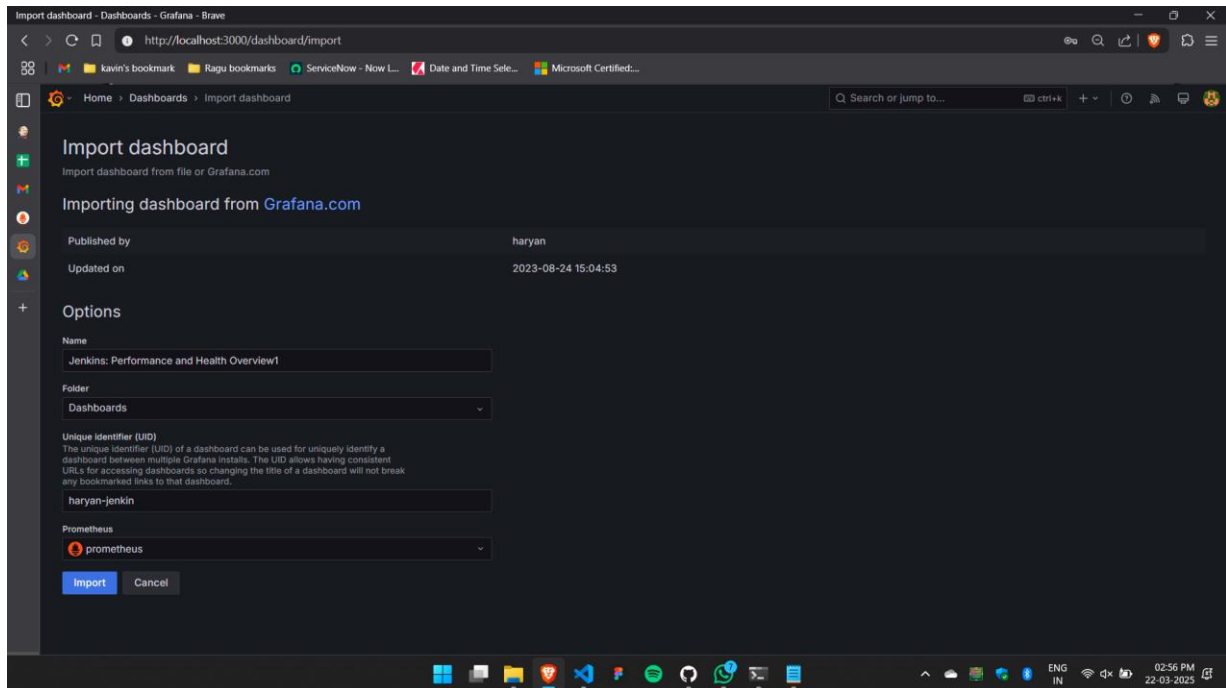Grafana UI:

Status in promethues:

Metrics in Prometheus:

Node Exporter:

Dashboard:

Jenkins Overview:

Dashboard: