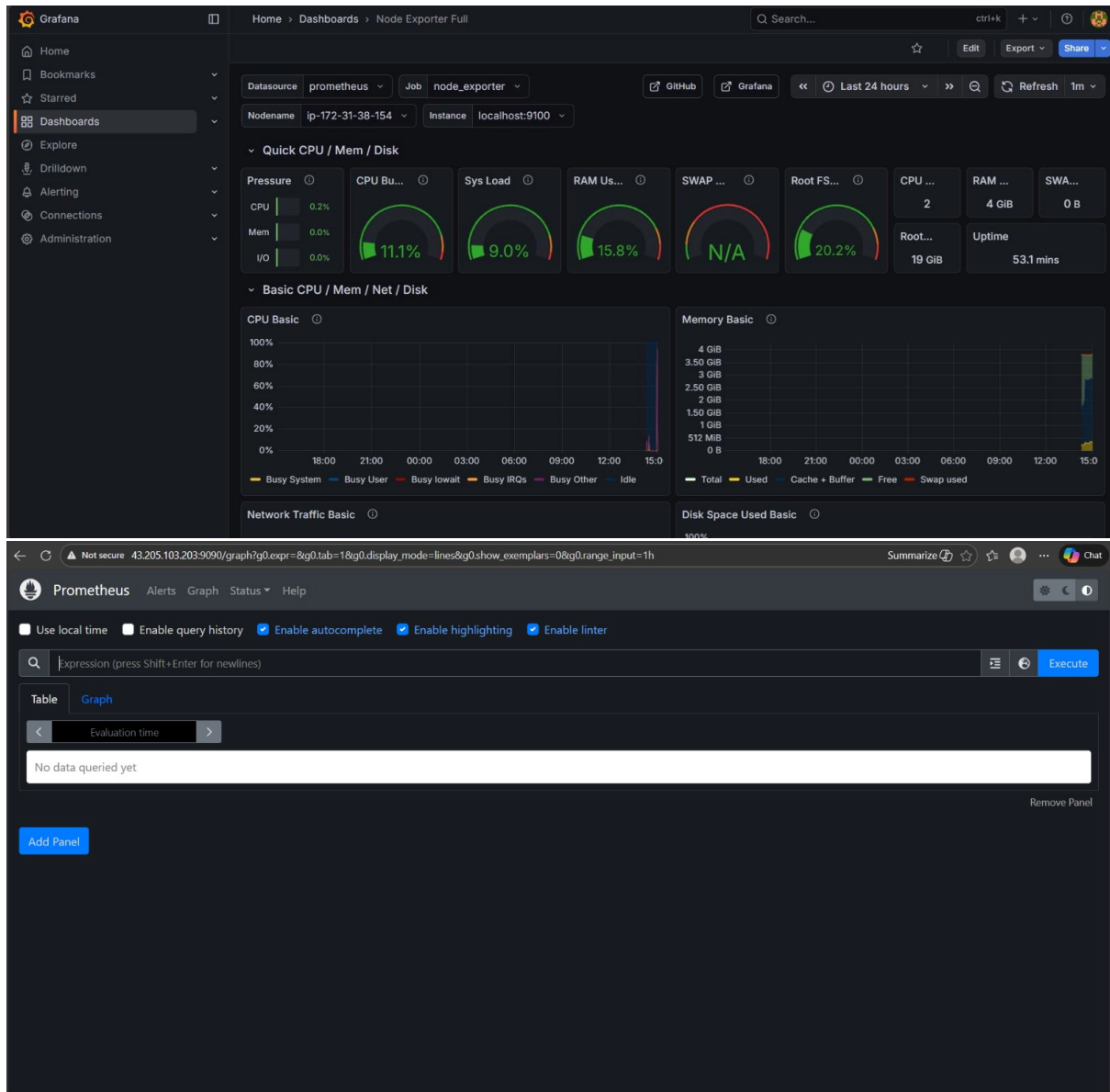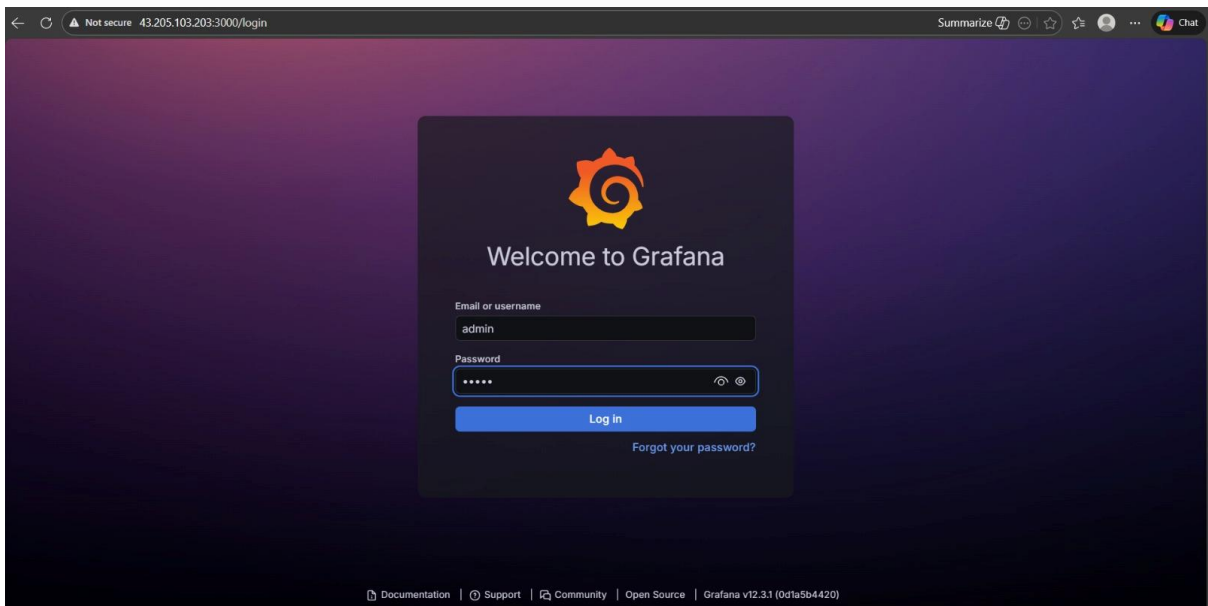# Prometheus and Grafana Observability

"Grafana successfully queried the Prometheus API, confirming end-to-end connectivity between visualization and metrics storage."

Welcome to Grafana

Email or username

admin

Password

••••

Log in

Forgot your password?

Documentation | Support | Community | Open Source | Grafana v12.3.1 (0d1a5b4420)

```
Resolving release-assets.githubusercontent.com (release-assets.githubusercontent.com)... 185.199.111.133, 185.199.108.133, 185.199.109.133, ...
Connecting to release-assets.githubusercontent.com (release-assets.githubusercontent.com)|185.199.111.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 97181258 (93M) [application/octet-stream]
Saving to: 'prometheus-2.49.1.linux-amd64.tar.gz'

prometheus-2.49.1.linux-amd64. 100%[===================================================>]  92.68M  31.5MB/s    in 2.9s

2026-01-15 08:47:58 (31.5 MB/s) - 'prometheus-2.49.1.linux-amd64.tar.gz' saved [97181258/97181258]

prometheus-2.49.1.linux-amd64/
prometheus-2.49.1.linux-amd64/NOTICE
prometheus-2.49.1.linux-amd64/LICENSE
prometheus-2.49.1.linux-amd64/prometheus
prometheus-2.49.1.linux-amd64/consoles/
prometheus-2.49.1.linux-amd64/consoles/prometheus-overview.html
prometheus-2.49.1.linux-amd64/consoles/node-cpu.html
prometheus-2.49.1.linux-amd64/consoles/node.html
prometheus-2.49.1.linux-amd64/consoles/prometheus.html
prometheus-2.49.1.linux-amd64/consoles/index.html.example
prometheus-2.49.1.linux-amd64/consoles/node-overview.html
prometheus-2.49.1.linux-amd64/consoles/node-disk.html
prometheus-2.49.1.linux-amd64/prometheus.yml
prometheus-2.49.1.linux-amd64/promtool
prometheus-2.49.1.linux-amd64/console_libraries/
prometheus-2.49.1.linux-amd64/console_libraries/menu.lib
prometheus-2.49.1.linux-amd64/console_libraries/prom.lib
tlxp@ip-172-31-38-154:/tmp$ sudo mv prometheus-2.49.1.linux-amd64/prometheus /usr/local/bin/
sudo mv prometheus-2.49.1.linux-amd64/promtool /usr/local/bin/
tlxp@ip-172-31-38-154:/tmp$ sudo mkdir -p /etc/prometheus /var/lib/prometheus
sudo useradd --no-create-home --shell /bin/false prometheus
sudo chown -R prometheus:prometheus /etc/prometheus /var/lib/prometheus
tlxp@ip-172-31-38-154:/tmp$ sudo nano /etc/prometheus/prometheus.yml
tlxp@ip-172-31-38-154:/tmp$ promtool check config /etc/prometheus/prometheus.yml
Checking /etc/prometheus/prometheus.yml
 SUCCESS: /etc/prometheus/prometheus.yml is valid prometheus config file syntax

tlxp@ip-172-31-38-154:/tmp$ sudo nano /etc/systemd/system/prometheus.service
tlxp@ip-172-31-38-154:/tmp$ sudo systemctl daemon-reload
sudo systemctl start prometheus
sudo systemctl enable prometheus
Created symlink /etc/systemd/system/multi-user.target.wants/prometheus.service → /etc/systemd/system/prometheus.service.
tlxp@ip-172-31-38-154:/tmp$ curl ifconfig.me
43.205.103.203tlxp@ip-172-31-curl http://169.254.169.254/latest/meta-data/public-ipv4ca/public-ipv4
tlxp@ip-172-31-38-154:/tmp$
```
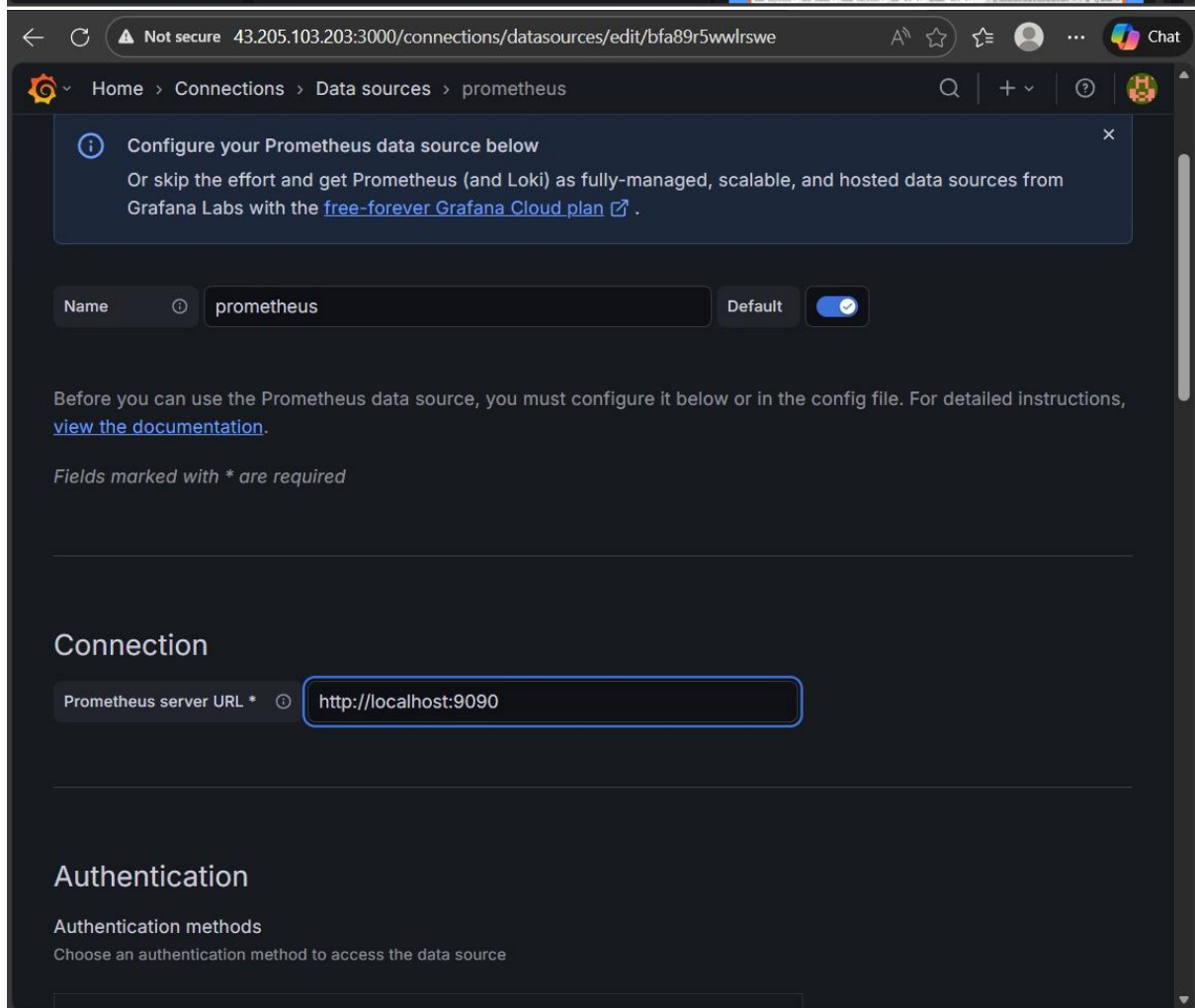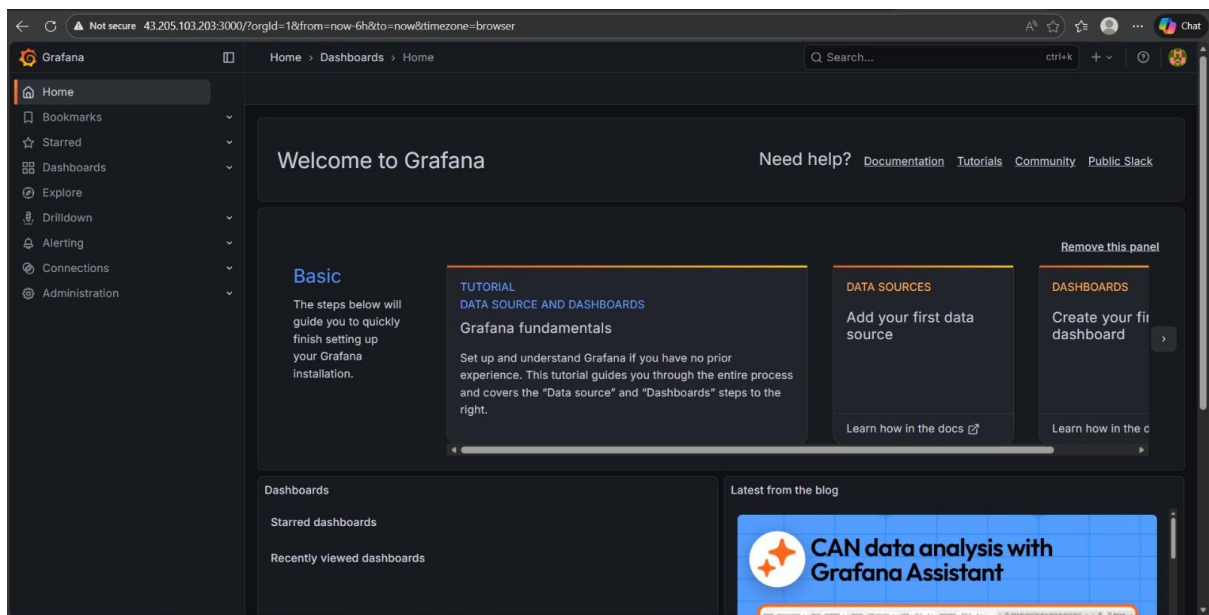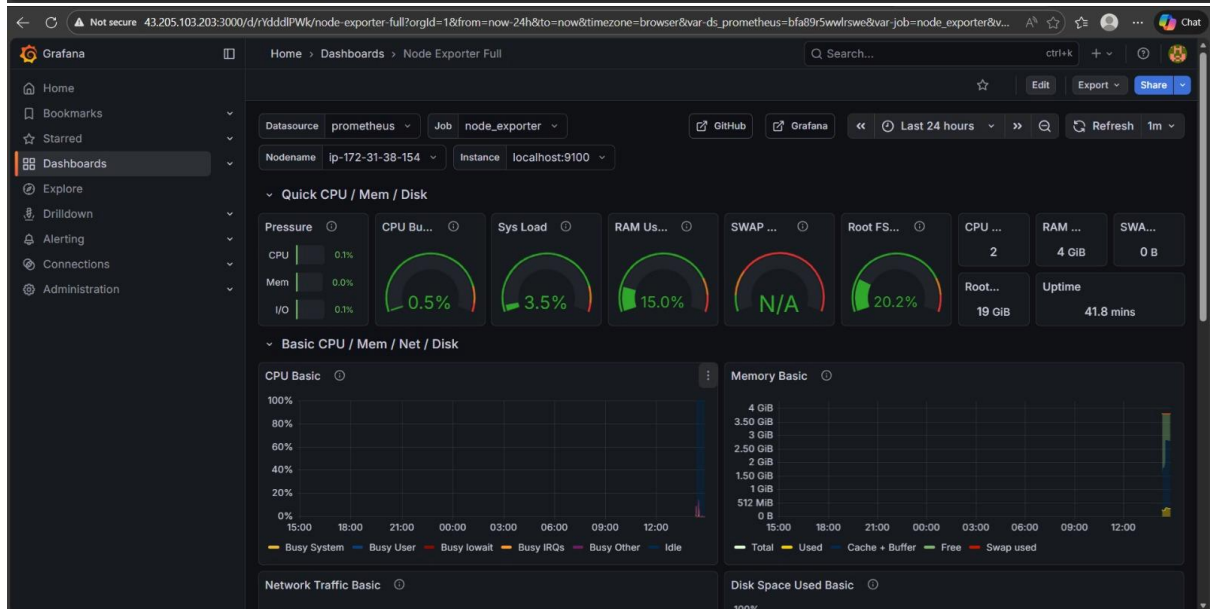

```
deb [signed-by=/etc/apt/keyrings/grafana.key] https://apt.grafana.com stable main
tlxp@ip-172-31-38-154:/tmp$ sudo apt update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:4 https://apt.grafana.com stable InRelease [7661 B]
Hit:5 http://security.ubuntu.com/ubuntu jammy-security InRelease
Get:6 https://apt.grafana.com stable/main amd64 Packages [455 kB]
Fetched 463 kB in 2s (208 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
104 packages can be upgraded. Run 'apt list --upgradable' to see them.
tlxp@ip-172-31-38-154:/tmp$ sudo apt install -y grafana
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  musl
The following NEW packages will be installed:
  grafana musl
0 upgraded, 2 newly installed, 0 to remove and 104 not upgraded.
Need to get 194 MB of archives.
After this operation, 710 MB of additional disk space will be used.
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 musl amd64 1.2.2-4 [407 kB]
Get:2 https://apt.grafana.com stable/main amd64 grafana amd64 12.3.1 [194 MB]
Fetched 194 MB in 27s (7219 kB/s)
Selecting previously unselected package musl:amd64.
(Reading database ... 99777 files and directories currently installed.)
Preparing to unpack .../musl_1.2.2-4_amd64.deb ...
Unpacking musl:amd64 (1.2.2-4) ...
Selecting previously unselected package grafana.
Preparing to unpack .../grafana_12.3.1_amd64.deb ...
Unpacking grafana (12.3.1) ...
Setting up musl:amd64 (1.2.2-4) ...
Setting up grafana (12.3.1) ...
Adding system user `grafana' (UID 115) ...
Adding new user `grafana' (UID 115) with group `grafana' ...
Not creating home directory `/usr/share/grafana'.
### NOT starting on installation, please execute the following statements to configure grafana to start automatically using systemd
 sudo /bin/systemctl daemon-reload
● grafana-server.service - Grafana instance
     Loaded: loaded (/lib/systemd/system/grafana-server.service; enabled; vendor preset: enabled)
     Active: active (running) since Thu 2026-01-15 09:00:29 UTC; 8s ago
       Docs: http://docs.grafana.org
```

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
tlxp@ip-172-31-38-154:/tmp$ sudo mkdir -p /etc/apt/keyrings
wget -q -O - https://apt.grafana.com/gpg.key | sudo tee /etc/apt/keyrings/grafana.key > /dev/null
tlxp@ip-172-31-38-154:/tmp$ echo "deb [signed-by=/etc/apt/keyrings/grafana.key] https://apt.grafana.com stable main" | sudo tee /etc/apt/sources.list.d/grafana.list
deb [signed-by=/etc/apt/keyrings/grafana.key] https://apt.grafana.com stable main
tlxp@ip-172-31-38-154:/tmp$ sudo apt update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:4 https://apt.grafana.com stable InRelease [7661 B]
Hit:5 http://security.ubuntu.com/ubuntu jammy-security InRelease
Get:6 https://apt.grafana.com stable/main amd64 Packages [455 kB]
Fetched 463 kB in 2s (208 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
104 packages can be upgraded. Run 'apt list --upgradable' to see them.
tlxp@ip-172-31-38-154:/tmp$ sudo apt install -y grafana
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  musl
The following NEW packages will be installed:
  grafana musl
0 upgraded, 2 newly installed, 0 to remove and 104 not upgraded.
Need to get 194 MB of archives.
After this operation, 710 MB of additional disk space will be used.
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 musl amd64 1.2.2-4 [407 kB]
Get:2 https://apt.grafana.com stable/main amd64 grafana amd64 12.3.1 [194 MB]
Fetched 194 MB in 27s (7219 kB/s)
Selecting previously unselected package musl:amd64.
(Reading database ... 99777 files and directories currently installed.)
Preparing to unpack .../musl_1.2.2-4_amd64.deb ...
Unpacking musl:amd64 (1.2.2-4) ...
Selecting previously unselected package grafana.
Preparing to unpack .../grafana_12.3.1_amd64.deb ...
Unpacking grafana (12.3.1) ...
Setting up musl:amd64 (1.2.2-4) ...
Setting up grafana (12.3.1) ...
Adding system user `grafana' (UID 115) ...
Adding new user `grafana' (UID 115) with group `grafana' ...
Not creating home directory `/usr/share/grafana'.
### NOT starting on installation, please execute the following statements to configure grafana to start automatically using systemd
```

Grafana — Home › Dashboards › Node Exporter Full

Quick CPU / Mem / Disk

Pressure	CPU Bu...	Sys Load	RAM Us...	SWAP ...	Root FS...	CPU ...	RAM ...	SWA...
CPU 0.1% Mem 0.0% I/O 0.1%	0.5%	3.5%	15.0%	N/A	20.2%	2	4 GiB	0 B

Root... 19 GiB — Uptime 41.8 mins

Basic CPU / Mem / Net / Disk

CPU Basic — Busy System, Busy User, Busy Iowait, Busy IRQs, Busy Other, Idle

Memory Basic — Total, Used, Cache + Buffer, Free, Swap used

Network Traffic Basic — Disk Space Used Basic

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
tlxp@ip-172-31-38-154:~$ stress --cpu 2 --timeout 60
stress: info: [4296] dispatching hogs: 2 cpu, 0 io, 0 vm, 0 hdd
```