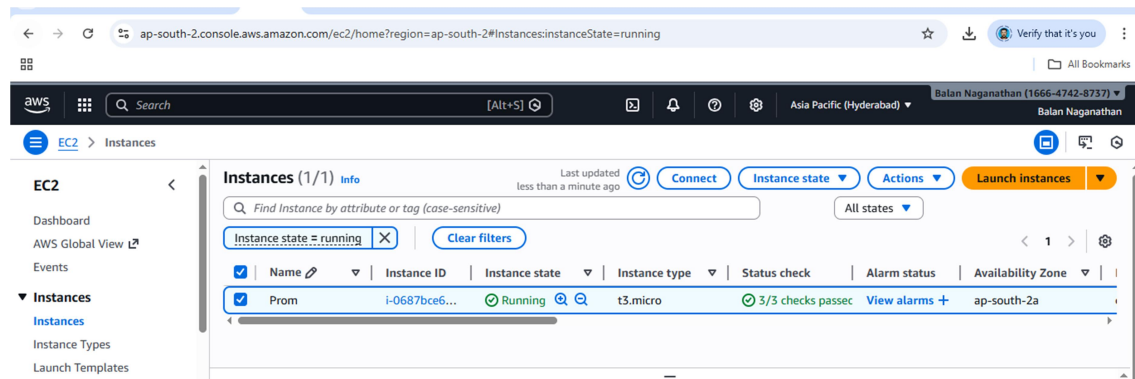


Install Prometheus and Grafana on a Linux EC2 machine, connect Prometheus to Grafana, and create a dashboard to view metrics.

EC2 Instance created with opened Ports 3000,9100,9090



Prometheus Config:

```
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"]

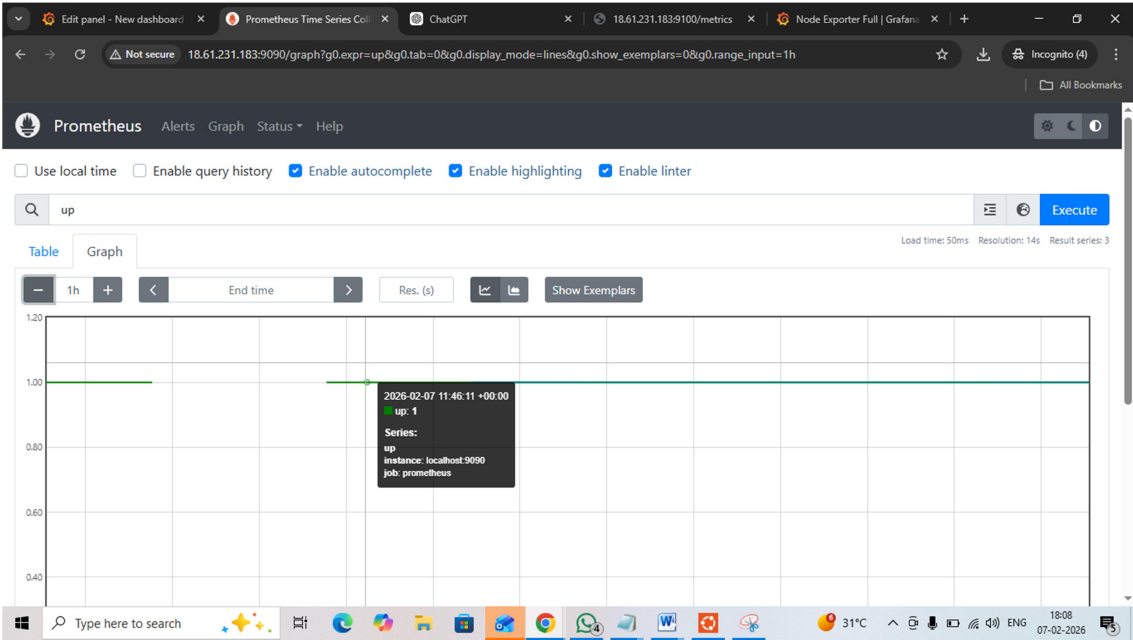
  - job_name: "Node Exporter"
    static_configs:
      - targets: ["localhost:9100"]
root@ip-172-31-6-232:~/node_exporter-1.8.1.linux-amd64#
```

Prometheus ,Grafana,Node exporter status validation

```
root@ip-172-31-6-232:~/node_exporter-1.8.1.linux-amd64# sudo systemctl status prometheus.service
● prometheus.service - Prometheus
   Loaded: loaded (/etc/systemd/system/prometheus.service; enabled; preset: enabled)
   Active: active (running) since Sat 2026-02-07 11:51:50 UTC; 41min ago
     Main PID: 12064 (prometheus)
        Tasks: 8 (limit: 1008)
       Memory: 33.3M (peak: 44.0M)
          CPU: 1.802s
      CGroup: /system.slice/prometheus.service
              └─12064 /usr/local/bin/prometheus --config.file=/etc/prometheus/prometheus.yml --storage.tsdb.path=/var/lib/prometheus
```

```
root@ip-172-31-6-232:~/node_exporter-1.8.1.linux-amd64# sudo systemctl status node_exporter
● node_exporter.service - Node Exporter
   Loaded: loaded (/etc/systemd/system/node_exporter.service; enabled; preset: enabled)
   Active: active (running) since Sat 2026-02-07 11:02:45 UTC; 1h 31min ago
     Main PID: 11870 (node_exporter)
        Tasks: 4 (limit: 1008)
       Memory: 7.6M (peak: 8.6M)
          CPU: 1.793s
      CGroup: /system.slice/node_exporter.service
              └─11870 /usr/local/bin/node_exporter
```

```
root@ip-172-31-6-232:~# sudo systemctl status grafana-server
grafana-server.service - Grafana instance
Loaded: loaded (/usr/lib/systemd/system/grafana-server.service; enabled; preset: enabled)
Active: active (running) since Sat 2026-02-07 10:22:43 UTC; 9min ago
Docs: http://docs.grafana.org
Main PID: 11226 (grafana)
Tasks: 15 (limit: 1008)
Memory: 343.8M (peak: 355.2M)
CPU: 5.610s
CGroup: /system.slice/grafana-server.service
└─11226 /usr/share/grafana/bin/grafana server --config=/etc/grafana/grafana.ini --pidfile=/run/grafana/grafana
```



Targets

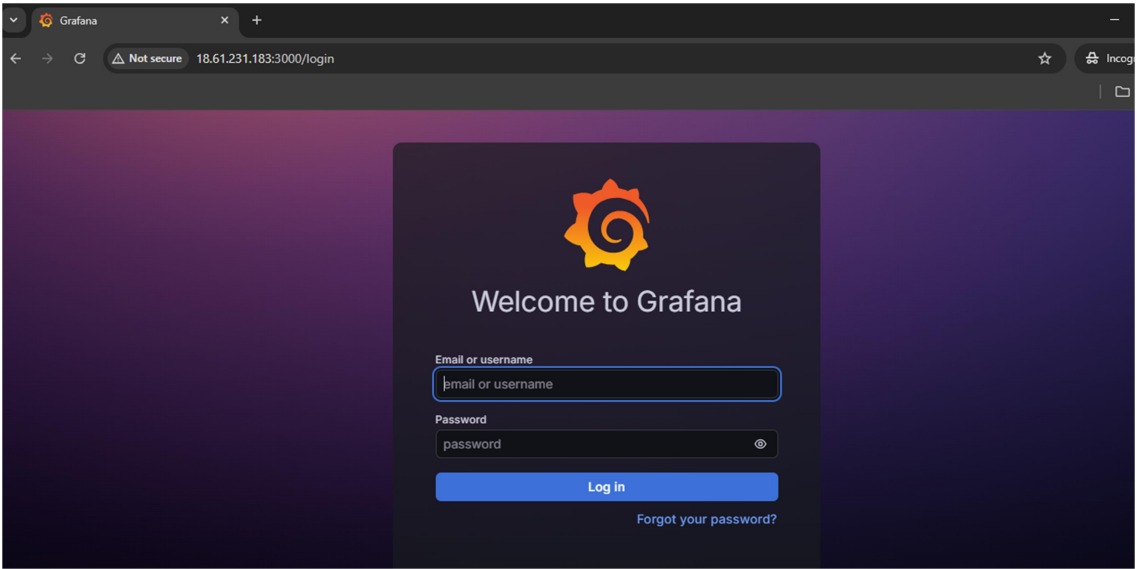
All scrape pools ▾ All Unhealthy Collapse All Filter by endpoint or labels

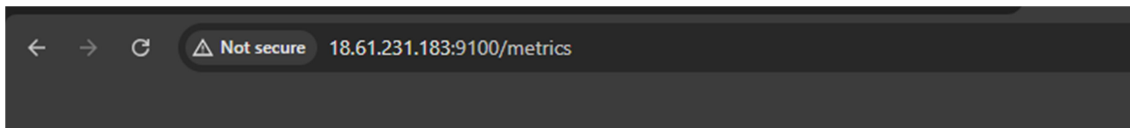
Node Exporter (1/1 up) [show logs](#)

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://localhost:9100/metrics	UP	instance="localhost:9100" job="Node Exporter"	747.000ms ago	10.240ms	

prometheus (1/1 up) [show logs](#)

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://localhost:9090/metrics	UP	instance="localhost:9090" job="prometheus"	748.000ms ago	4.817ms	





```
# HELP go_gc_duration_seconds A summary of the pause duration of garbage collection cycles.
# TYPE go_gc_duration_seconds summary
go_gc_duration_seconds{quantile="0"} 0
go_gc_duration_seconds{quantile="0.25"} 0
go_gc_duration_seconds{quantile="0.5"} 0
go_gc_duration_seconds{quantile="0.75"} 0
go_gc_duration_seconds{quantile="1"} 0
go_gc_duration_seconds_sum 0
go_gc_duration_seconds_count 0
# HELP go_goroutines Number of goroutines that currently exist.
# TYPE go_goroutines gauge
go_goroutines 7
# HELP go_info Information about the Go environment.
# TYPE go_info gauge
go_info{version="go1.22.3"} 1
# HELP go_memstats_alloc_bytes Number of bytes allocated and still in use.
# TYPE go_memstats_alloc_bytes gauge
go_memstats_alloc_bytes 2.74244e+06
# HELP go_memstats_alloc_bytes_total Total number of bytes allocated, even if freed.
# TYPE go_memstats_alloc_bytes_total counter
go_memstats_alloc_bytes_total 2.74244e+06
# HELP go_memstats_buck_hash_sys_bytes Number of bytes used by the profiling bucket hash table.
# TYPE go_memstats_buck_hash_sys_bytes gauge
go_memstats_buck_hash_sys_bytes 1.450634e+06
# HELP go_memstats_frees_total Total number of frees.
# TYPE go_memstats_frees_total counter
go_memstats_frees_total 1435
# HELP go_memstats_gc_sys_bytes Number of bytes used for garbage collection system metadata.
# TYPE go_memstats_gc_sys_bytes gauge
go_memstats_gc_sys_bytes 2.101352e+06
# HELP go_memstats_heap_alloc_bytes Number of heap bytes allocated and still in use.
# TYPE go_memstats_heap_alloc_bytes gauge
go_memstats_heap_alloc_bytes 2.74244e+06
# HELP go_memstats_heap_idle_bytes Number of heap bytes waiting to be used.
# TYPE go_memstats_heap_idle_bytes gauge
go_memstats_heap_idle_bytes 3.866624e+06
# HELP go_memstats_heap_inuse_bytes Number of heap bytes that are in use.
# TYPE go_memstats_heap_inuse_bytes gauge
go_memstats_heap_inuse_bytes 4.112384e+06
```

