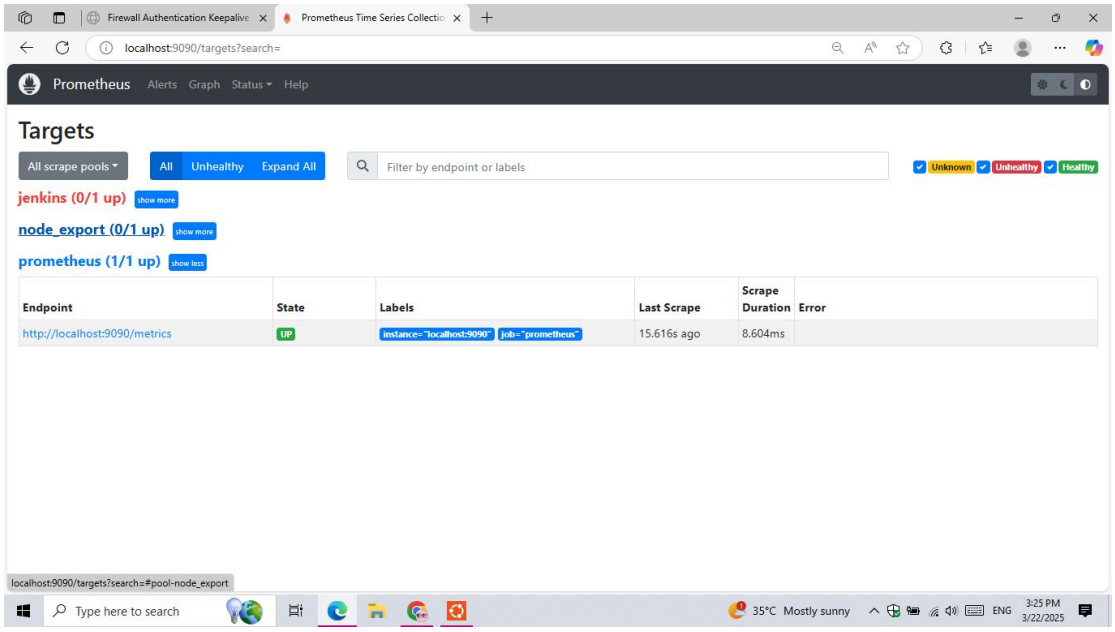
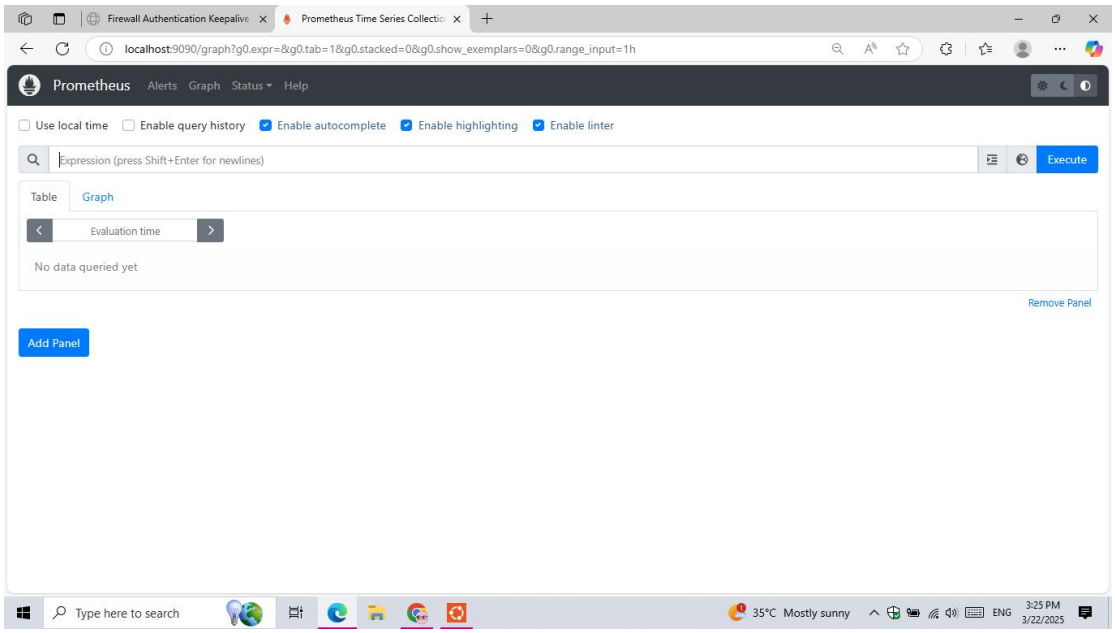
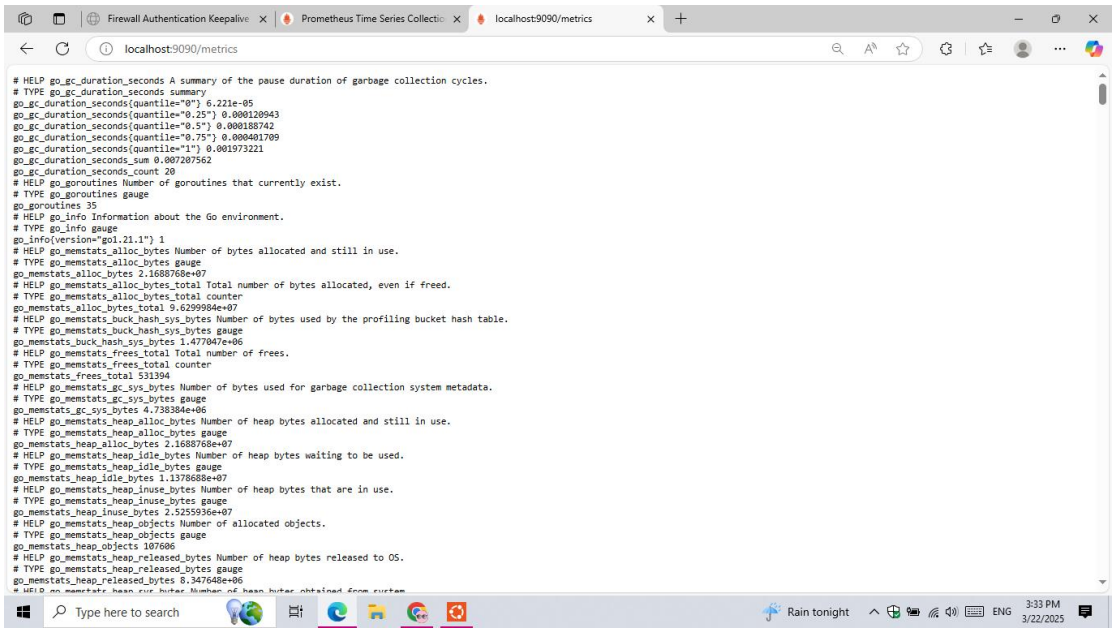
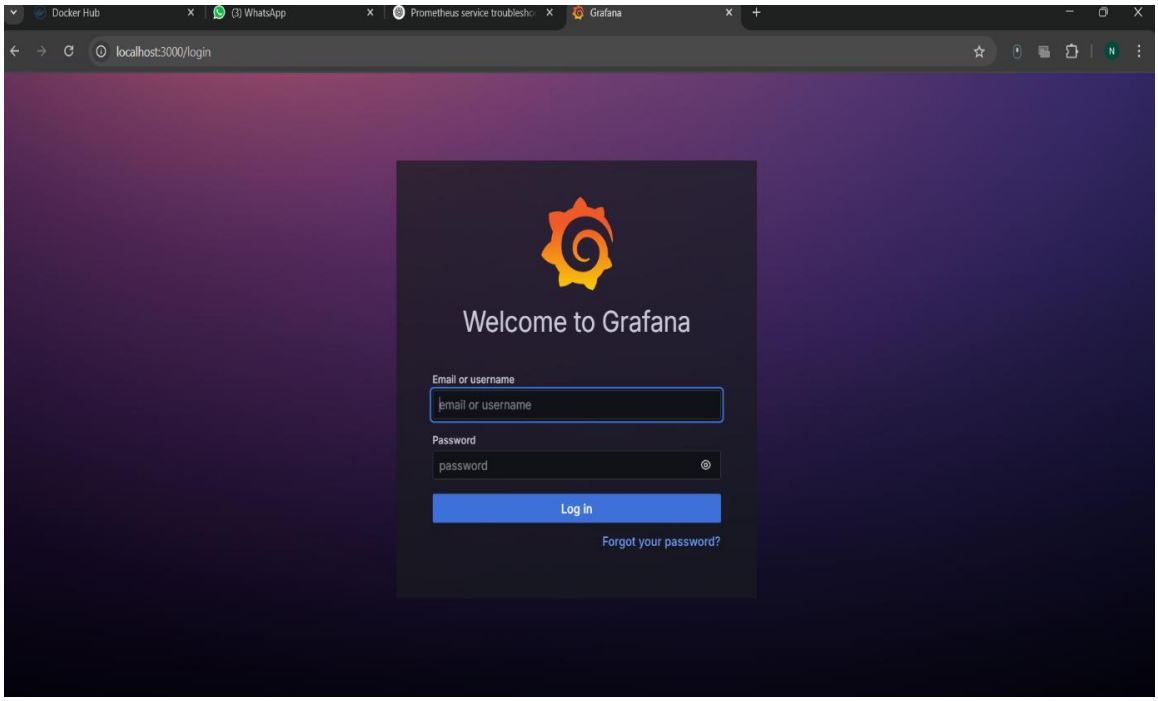
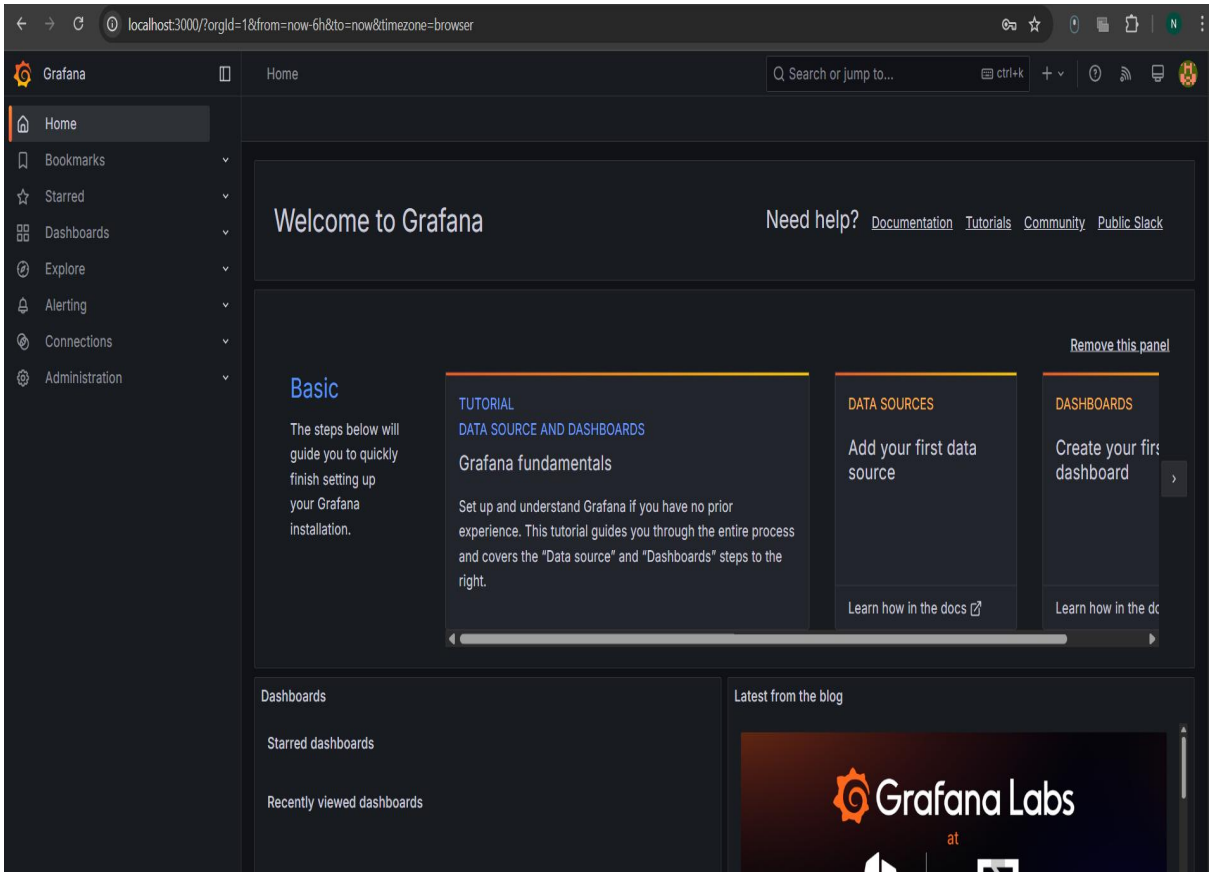
PROMETHEUS AND GRAFANA

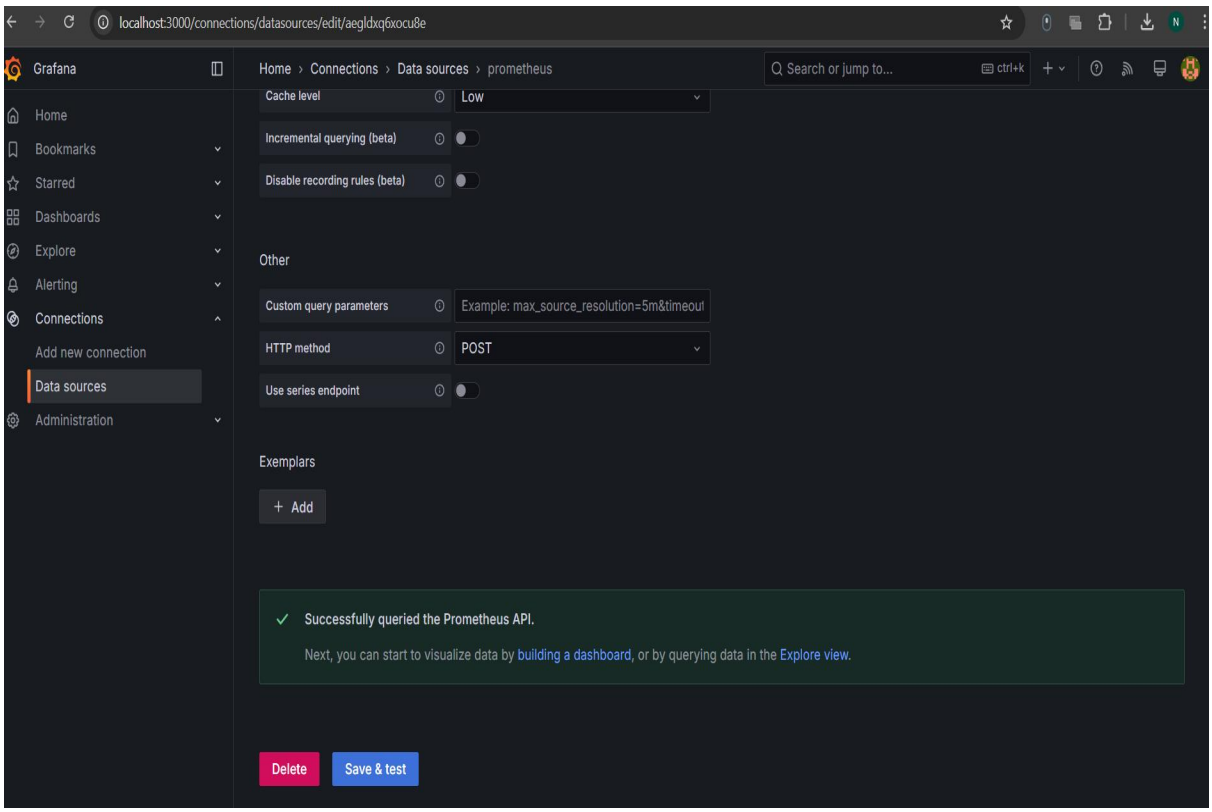


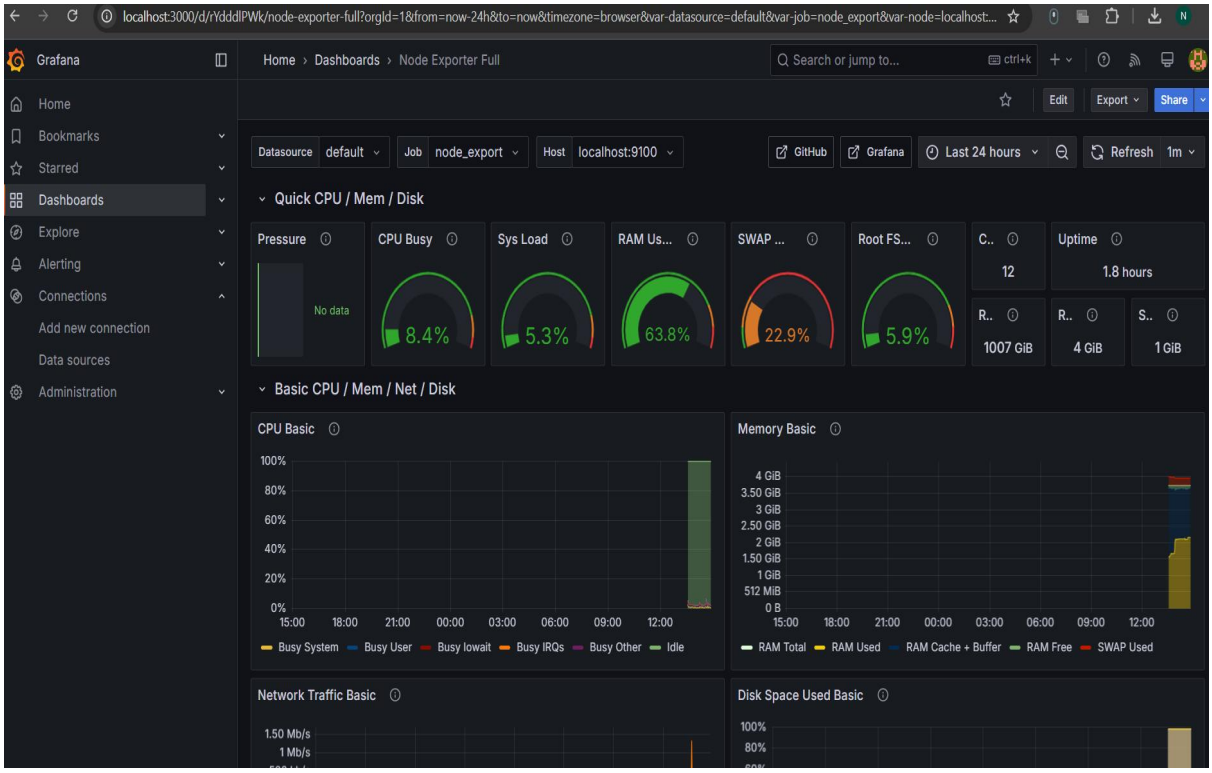


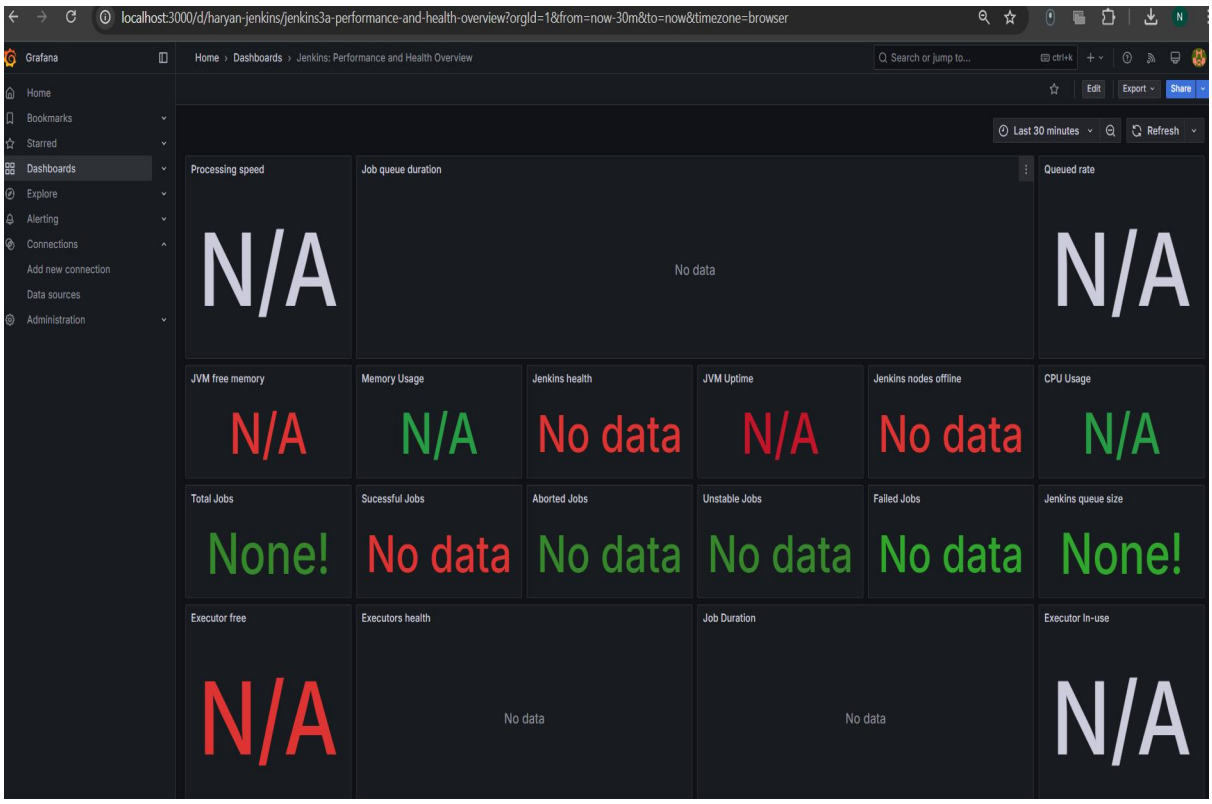

Firewall Authentication Keepalive
Prometheus Time Series Collectio
localhost:9090/metrics
localhost:9090/metrics
HELP go_gc_duration_seconds A summary of the pause duration of garbage collection cycles.
TYPE go_gc_duration_seconds summary
go_gc_duration_seconds{quantile="0"} 6.221e-05
go_gc_duration_seconds{quantile="0.25"} 0.000120943
go_gc_duration_seconds{quantile="0.5"} 0.000188742
go_gc_duration_seconds{quantile="0.75"} 0.000401709
go_gc_duration_seconds{quantile="1"} 0.001973221
go_gc_duration_seconds_sum 0.007207562
go_gc_duration_seconds_count 20
HELP go_goroutines Number of goroutines that currently exist.
TYPE go_goroutines gauge
go_goroutines 35
HELP go_info Information about the Go environment.
TYPE go_info gauge
go_info{version="go1.21.1"} 1
HELP go_memstats_alloc_bytes Number of bytes allocated and still in use.
TYPE go_memstats_alloc_bytes gauge
go_memstats_alloc_bytes 2.1688768e+07
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 9.6299904e+07
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 1.477047e+06
HELP go_memstats_frees_total Total number of frees.
TYPE go_memstats_frees_total counter
go_memstats_frees_total 531394
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 4.738384e+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 2.1688768e+07
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 1.1378688e+07
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 2.5255936e+07
HELP go_memstats_heap_objects Number of allocated objects.
TYPE go_memstats_heap_objects gauge
go_memstats_heap_objects 107606
HELP go_memstats_heap_released_bytes Number of heap bytes released to OS.
TYPE go_memstats_heap_released_bytes gauge
go_memstats_heap_released_bytes 8.347648e+06
Type here to search
Rain tonight
ENG
3:33 PM
3/22/2025

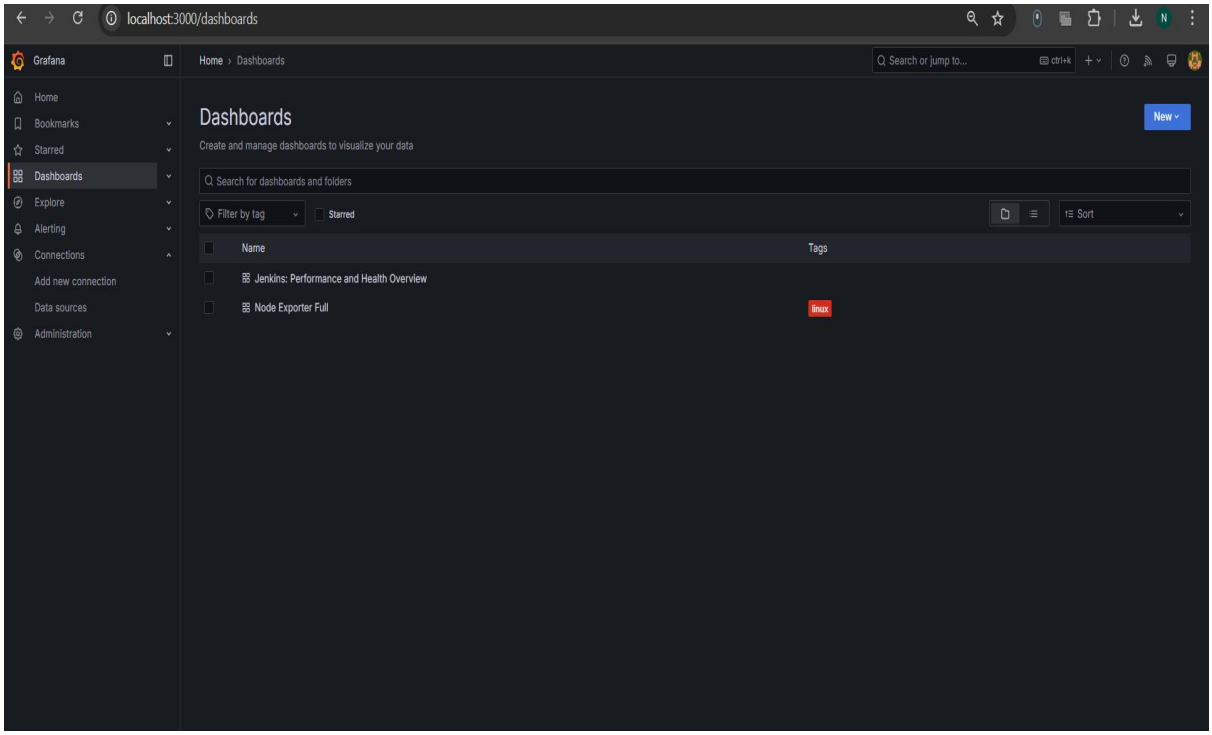

Docker Hub
(3) WhatsApp
Prometheus service troubleshoo
Grafana
localhost:3000/login
Welcome to Grafana
Email or username
email or username
Password
password
Log in
Forgot your password?

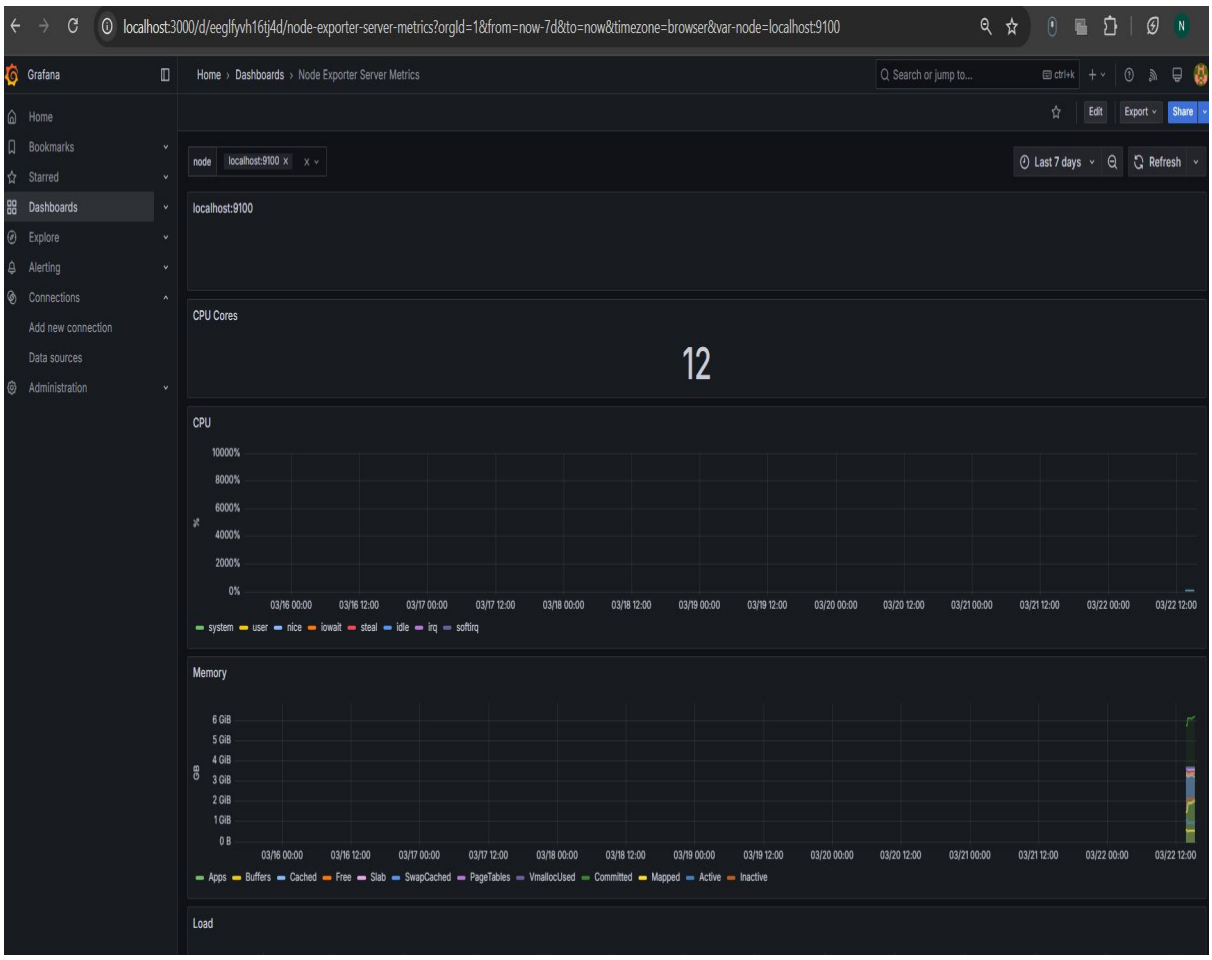

localhost:3000/?orgId=1&from=now-6h&to=now&timezone=browser
Grafana
Home
Search or jump to...
ctrl+k
Home
Bookmarks
Starred
Dashboards
Explore
Alerting
Connections
Administration
Welcome to Grafana
Need help?
Documentation
Tutorials
Community
Public Slack
Remove this panel
Basic
The steps below will guide you to quickly finish setting up your Grafana installation.
TUTORIAL
DATA SOURCE AND DASHBOARDS
Grafana fundamentals
Set up and understand Grafana if you have no prior experience. This tutorial guides you through the entire process and covers the "Data source" and "Dashboards" steps to the right.
DATA SOURCES
Add your first data source
Learn how in the docs
DASHBOARDS
Create your first dashboard
Learn how in the do
Dashboards
Starred dashboards
Recently viewed dashboards
Latest from the blog
Grafana Labs
at

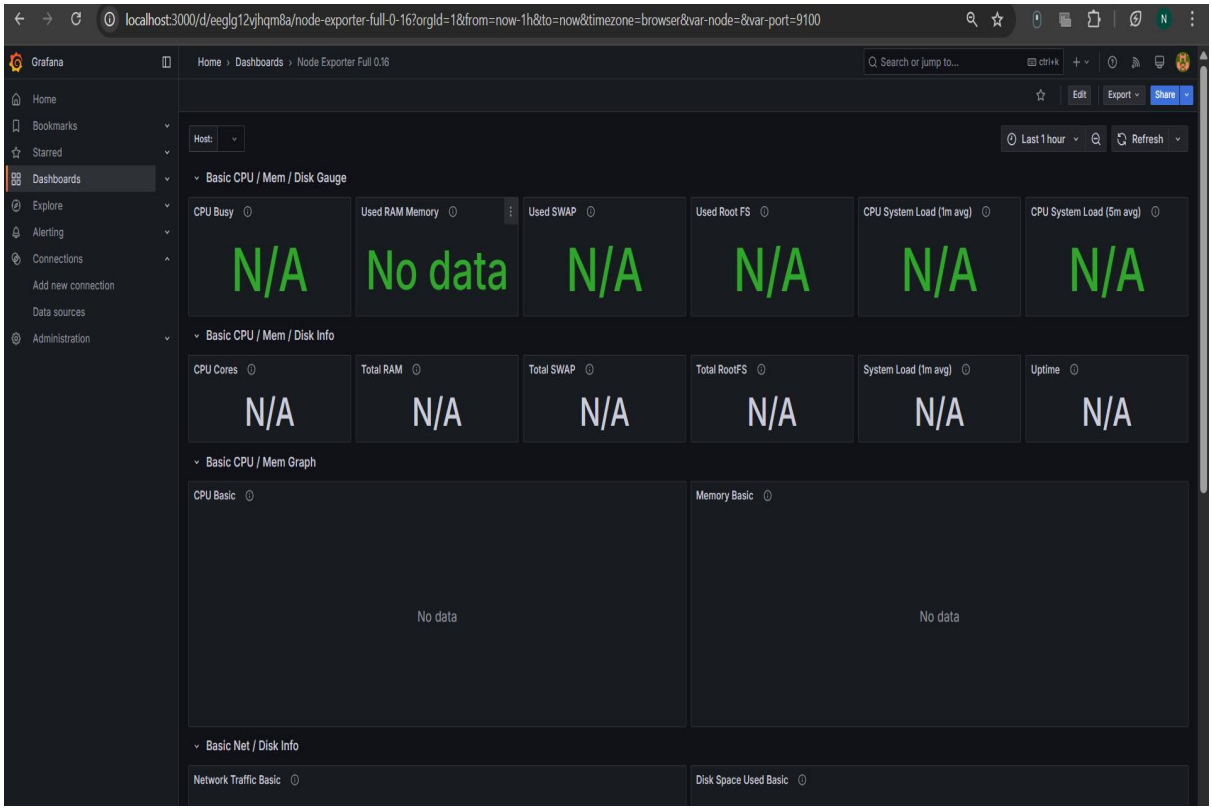

localhost:3000/connections/datasources/edit/aegldxq6xocu8e
Grafana
Home › Connections › Data sources › prometheus
Search or jump to...
ctrl+k
Home
Bookmarks
Starred
Dashboards
Explore
Alerting
Connections
Add new connection
Data sources
Administration
Cache level
Low
Incremental querying (beta)
Disable recording rules (beta)
Other
Custom query parameters
Example: max_source_resolution=5m&timeout
HTTP method
POST
Use series endpoint
Exemplars
+ Add
Successfully queried the Prometheus API.
Next, you can start to visualize data by building a dashboard, or by querying data in the Explore view.
Delete
Save & test


localhost:3000/d/rYdddlPWk/node-exporter-full?orgId=1&from=now-24h&to=now&timezone=browser&var-datasource=default&var-job=node_export&var-node=localhost:...
Grafana
Home › Dashboards › Node Exporter Full
Search or jump to... ctrl+k
Edit
Export
Share
Home
Bookmarks
Starred
Dashboards
Explore
Alerting
Connections
Add new connection
Data sources
Administration
Datasource default
Job node_export
Host localhost:9100
GitHub
Grafana
Last 24 hours
Refresh 1m
Quick CPU / Mem / Disk
Pressure
No data
CPU Busy
8.4%
Sys Load
5.3%
RAM Us...
63.8%
SWAP ...
22.9%
Root FS...
5.9%
C..
12
Uptime
1.8 hours
R..
1007 GiB
R..
4 GiB
S..
1 GiB
Basic CPU / Mem / Net / Disk
CPU Basic
100%
80%
60%
40%
20%
0%
15:00 18:00 21:00 00:00 03:00 06:00 09:00 12:00
Busy System
Busy User
Busy Iowait
Busy IRQs
Busy Other
Idle
Memory Basic
4 GiB
3.50 GiB
3 GiB
2.50 GiB
2 GiB
1.50 GiB
1 GiB
512 MiB
0 B
15:00 18:00 21:00 00:00 03:00 06:00 09:00 12:00
RAM Total
RAM Used
RAM Cache + Buffer
RAM Free
SWAP Used
Network Traffic Basic
1.50 Mb/s
1 Mb/s
Disk Space Used Basic
100%
80%


localhost:3000/d/haryan-jenkins/jenkins3a-performance-and-health-overview?orgId=1&from=now-30m&to=now&timezone=browser
Grafana
Home › Dashboards › Jenkins: Performance and Health Overview
Search or jump to... ctrl+k
Edit
Export
Share
Home
Bookmarks
Starred
Dashboards
Explore
Alerting
Connections
Add new connection
Data sources
Administration
Last 30 minutes
Refresh
Processing speed
N/A
Job queue duration
No data
Queued rate
N/A
JVM free memory
N/A
Memory Usage
N/A
Jenkins health
No data
JVM Uptime
N/A
Jenkins nodes offline
No data
CPU Usage
N/A
Total Jobs
None!
Sucessful Jobs
No data
Aborted Jobs
No data
Unstable Jobs
No data
Failed Jobs
No data
Jenkins queue size
None!
Executor free
N/A
Executors health
No data
Job Duration
No data
Executor In-use
N/A


localhost:3000/dashboards
Grafana
Home › Dashboards
Search or jump to...
ctrl+k
Home
Bookmarks
Starred
Dashboards
Explore
Alerting
Connections
Add new connection
Data sources
Administration
Dashboards
Create and manage dashboards to visualize your data
New
Search for dashboards and folders
Filter by tag
Starred
Sort
Name
Tags
Jenkins: Performance and Health Overview
Node Exporter Full
linux


localhost:3000/d/eeglfyvh16tj4d/node-exporter-server-metrics?orgId=1&from=now-7d&to=now&timezone=browser&var-node=localhost:9100
Grafana
Home › Dashboards › Node Exporter Server Metrics
Search or jump to...
ctrl+k
Edit
Export
Share
Home
Bookmarks
Starred
Dashboards
Explore
Alerting
Connections
Add new connection
Data sources
Administration
node
localhost:9100
Last 7 days
Refresh
localhost:9100
CPU Cores
12
CPU
10000%
8000%
6000%
4000%
2000%
0%
%
03/16 00:00
03/16 12:00
03/17 00:00
03/17 12:00
03/18 00:00
03/18 12:00
03/19 00:00
03/19 12:00
03/20 00:00
03/20 12:00
03/21 00:00
03/21 12:00
03/22 00:00
03/22 12:00
system
user
nice
iowait
steal
idle
irq
softirq
Memory
6 GiB
5 GiB
4 GiB
3 GiB
2 GiB
1 GiB
0 B
GiB
Apps
Buffers
Cached
Free
Slab
SwapCached
PageTables
VmallocUsed
Committed
Mapped
Active
Inactive
Load


localhost:3000/d/eeglg12vjhqm8a/node-exporter-full-0-16?orgId=1&from=now-1h&to=now&timezone=browser&var-node=&var-port=9100
Grafana
Home
Bookmarks
Starred
Dashboards
Explore
Alerting
Connections
Add new connection
Data sources
Administration
Home › Dashboards › Node Exporter Full 0.16
Search or jump to...
Edit
Export
Share
Host:
Last 1 hour
Refresh
Basic CPU / Mem / Disk Gauge
CPU Busy
N/A
Used RAM Memory
No data
Used SWAP
N/A
Used Root FS
N/A
CPU System Load (1m avg)
N/A
CPU System Load (5m avg)
N/A
Basic CPU / Mem / Disk Info
CPU Cores
N/A
Total RAM
N/A
Total SWAP
N/A
Total RootFS
N/A
System Load (1m avg)
N/A
Uptime
N/A
Basic CPU / Mem Graph
CPU Basic
No data
Memory Basic
No data
Basic Net / Disk Info
Network Traffic Basic
Disk Space Used Basic

localhost:9090/graph?g0.expr=rate(node_cpu_seconds_total%7Bmode%3D"system"%7D%5B1m%5D)&g0.tab=0&g0.stacked=0&g0.show_exemplars=0&g0.range_input...
Prometheus
Alerts
Graph
Status
Help
Use local time
Enable query history
Enable autocomplete
Enable highlighting
Enable linter
rate(node_cpu_seconds_total{mode="system"}[1m])
Execute
Table
Graph
1h
End time
Res. (s)
Show Exemplars
{cpu="0", instance="localhost:9100", job="node_export", mode="system"}
{cpu="1", instance="localhost:9100", job="node_export", mode="system"}
{cpu="10", instance="localhost:9100", job="node_export", mode="system"}
{cpu="11", instance="localhost:9100", job="node_export", mode="system"}
{cpu="2", instance="localhost:9100", job="node_export", mode="system"}
{cpu="3", instance="localhost:9100", job="node_export", mode="system"}
{cpu="4", instance="localhost:9100", job="node_export", mode="system"}
{cpu="5", instance="localhost:9100", job="node_export", mode="system"}
{cpu="6", instance="localhost:9100", job="node_export", mode="system"}

PROMETHEUS:

- Prometheus is an open-source system monitoring and alerting toolkit originally built at SoundCloud. It is now a standalone open source project . Prometheus joined the Cloud Native
- Computing Foundation in 2016 as the second hosted project, after Kubernetes.

FEATURES:

1. A multi-dimensional data model with time series data identified by metric name and key/value pairs
2. PromQL, a flexible query language to leverage this dimensionality
3. No reliance on distributed storage; single server nodes are autonomous
4. Time series collection happens via a pull model over HTTP
5. Pushing time series is supported via an intermediary gateway
6. Targets are discovered via service discovery or static configuration
7. Multiple modes of graphing and dashboarding support