```
dnf update -y
dnf install -y https://dl.grafana.com/enterprise/release/grafana-enterprise-11.1.4-1.x86_64.rpm
wget https://github.com/prometheus/prometheus/releases/download/v2.53.2/prometheus-2.53.2.linux-amd64.tar.gz


wget https://github.com/prometheus/node_exporter/releases/download/v1.8.2/node_exporter-1.8.2.linux-amd64.tar.gz

tar -xvf prometheus-2.53.2.linux-amd64.tar.gz

tar -xvf node_exporter-1.8.2.linux-amd64.tar.gz

cp -rvf node_exporter-1.8.2.linux-amd64/node_exporter /usr/local/bin

cp -rvf prometheus-2.53.2.linux-amd64/prom* /usr/local/bin

mkdir -p /etc/prometheus

cp -rvf prometheus-2.53.2.linux-amd64/prometheus.yml /etc/prometheus/
```

Config file mod

```
nano /etc/prometheus/prometheus.yml
```

#append at end

```
  - job_name: "node_exporter"

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

    static_configs:
      - targets: ["localhost:9100"]
```

Firewall mod

firewall-cmd --add-port=3000/tcp --permanent

firewall-cmd --add-port=9100/tcp --permanent

firewall-cmd --add-port=9090/tcp --permanent

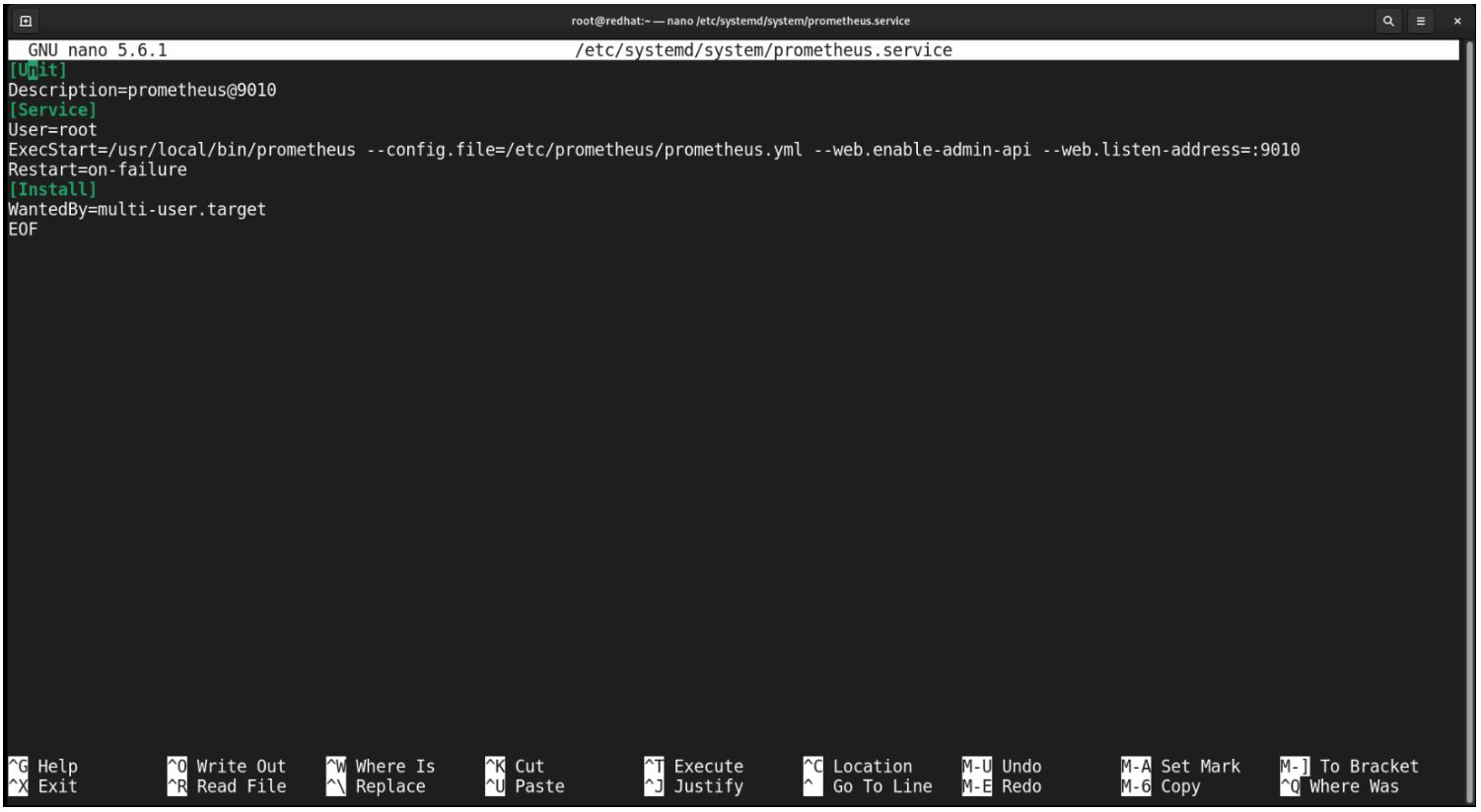
firewall-cmd --reload

Systemd unit conf for automatic execution

nano /etc/systemd/system/prometheus.service

##add content

```
[Unit]
Description=prometheus@9090
[Service]
User=root
ExecStart=/usr/local/bin/prometheus --config.file=/etc/prometheus/prometheus.yml
#--web.enable-admin-api --web.listen-address="0.0.0.0:9090"
Restart=on-failure
[Install]
WantedBy=multi-user.target
```



nano /etc/systemd/system/node_exporter.service

```
[Unit]
Description=node_exporter@9100
[Service]
User=root
ExecStart=/usr/local/bin/node_exporter
Restart=on-failure
[Install]
WantedBy=multi-user.target
```

systemctl daemon-reload

systemctl start node_exporter.service

systemctl start prometheus.service

systemctl enable node_exporter.service

systemctl enable prometheus.service

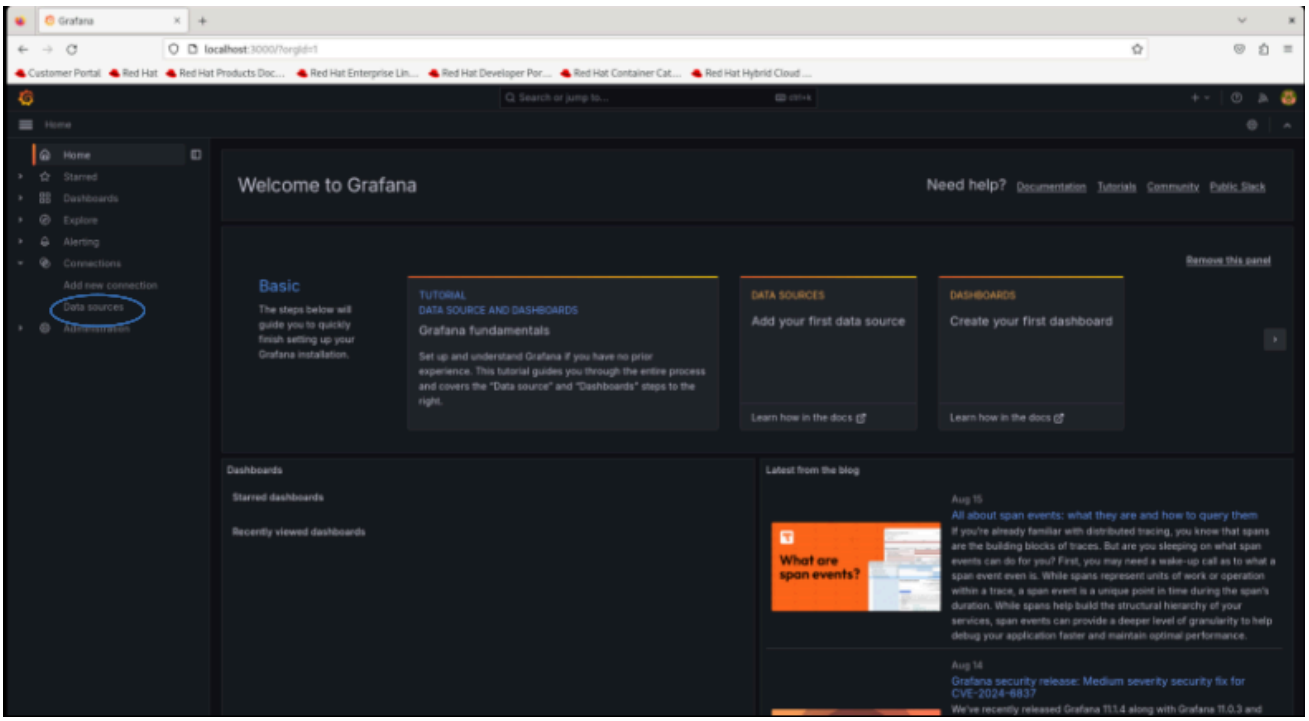
systemctl start grafana-server

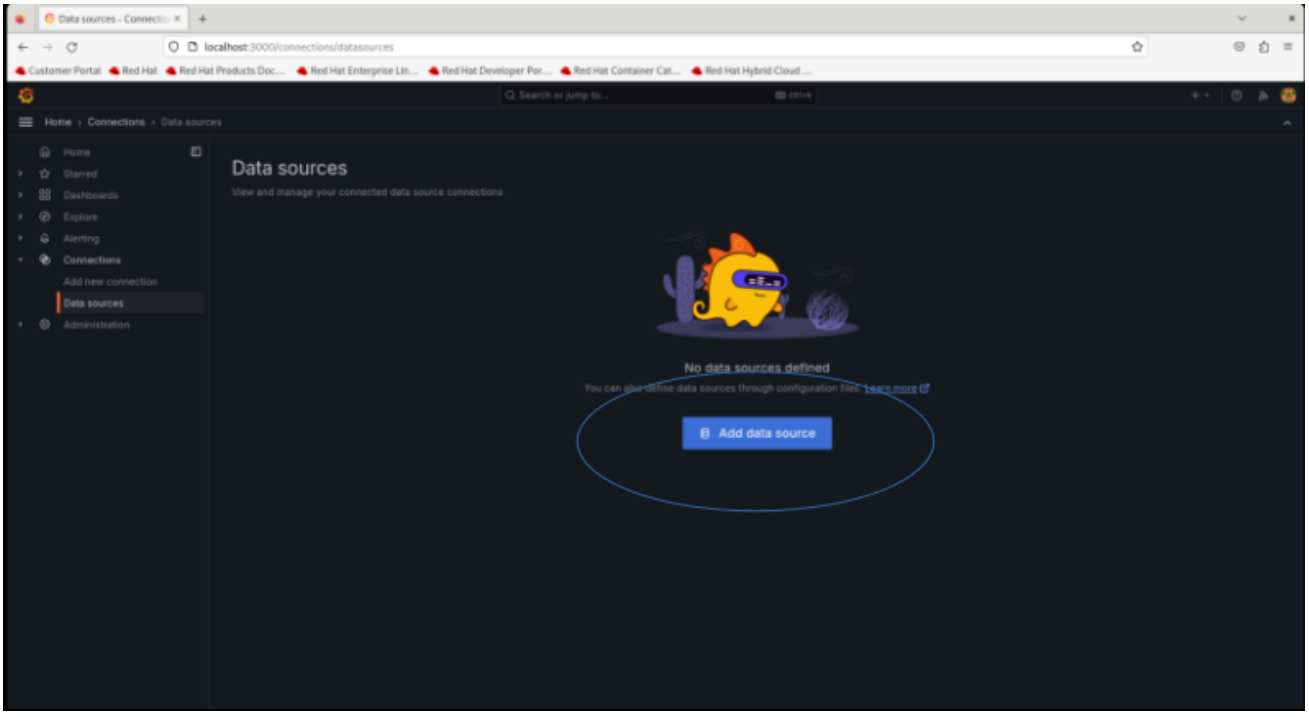
##check if the configured services are active

```
semanage port -a -t http_port_t -p tcp 9090
semanage port -a -t http_port_t -p tcp 9080
semanage port -a -t http_port_t -p tcp 9100
semanage port -a -t http_port_t -p tcp 3100
semanage port -a -t http_port_t -p tcp 3000
```

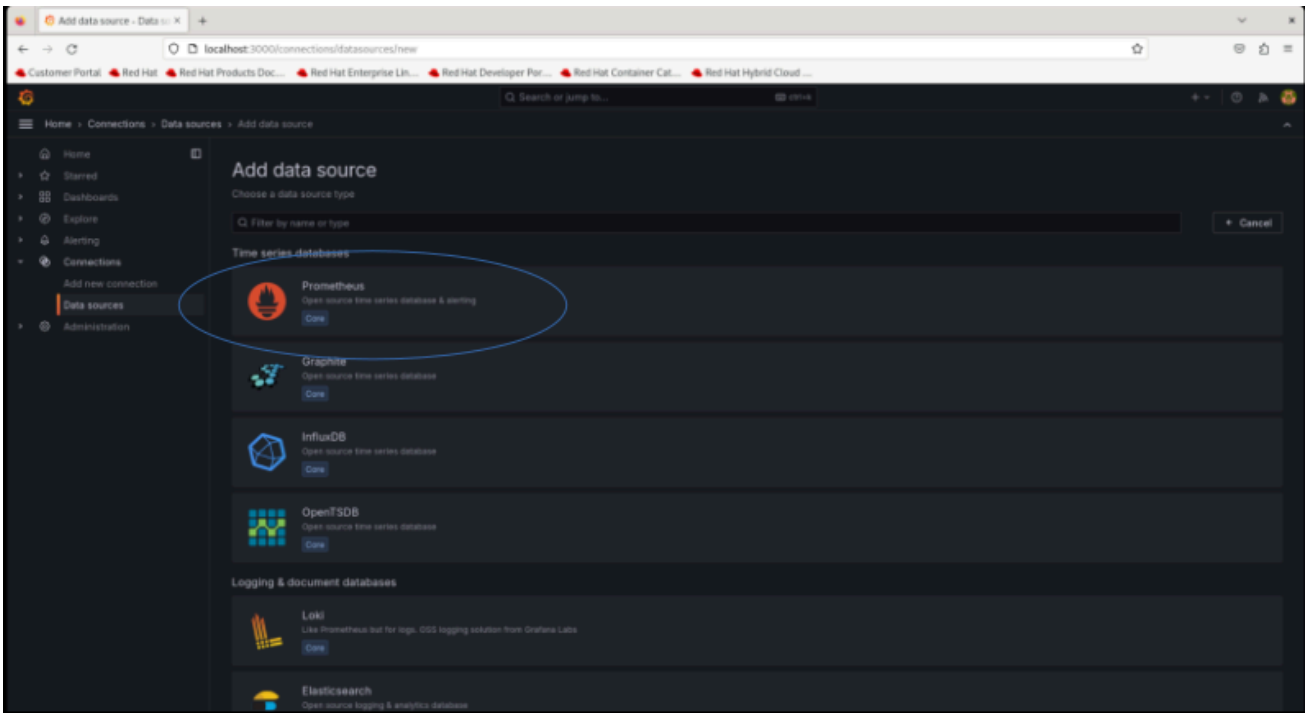
WEB Dashboard Configuration

http://localhost:3000

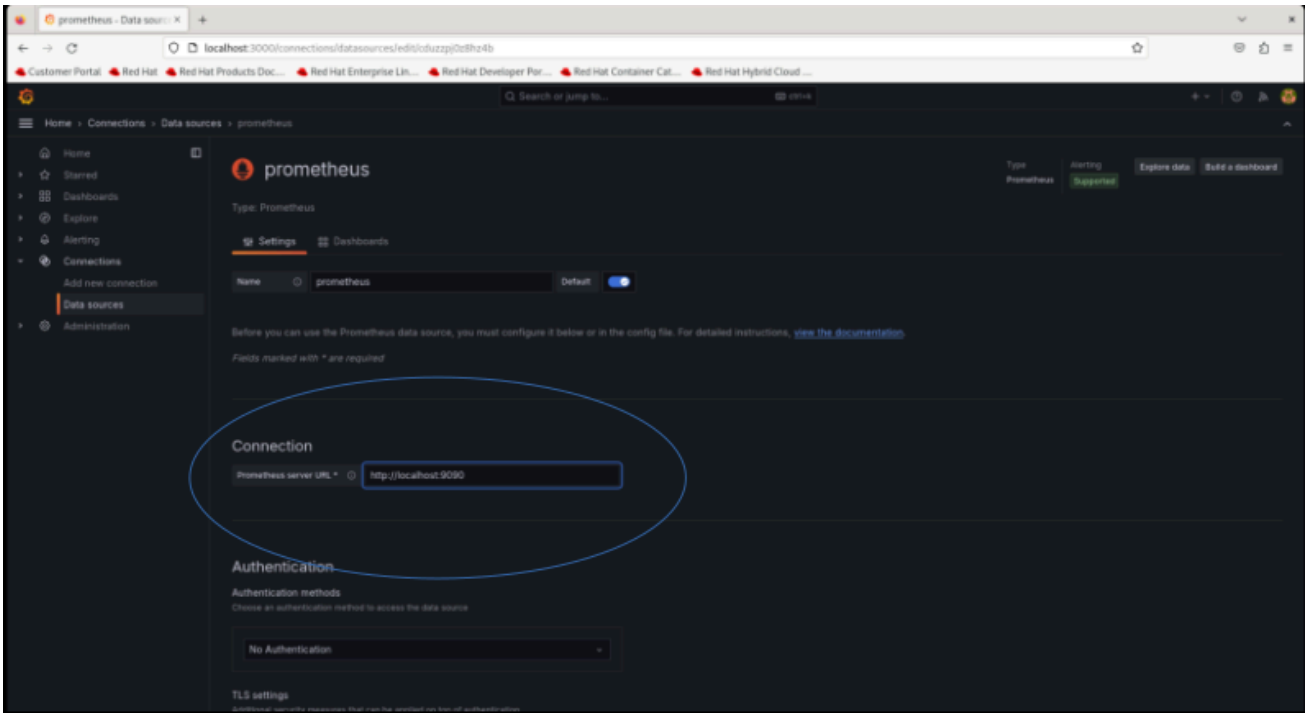




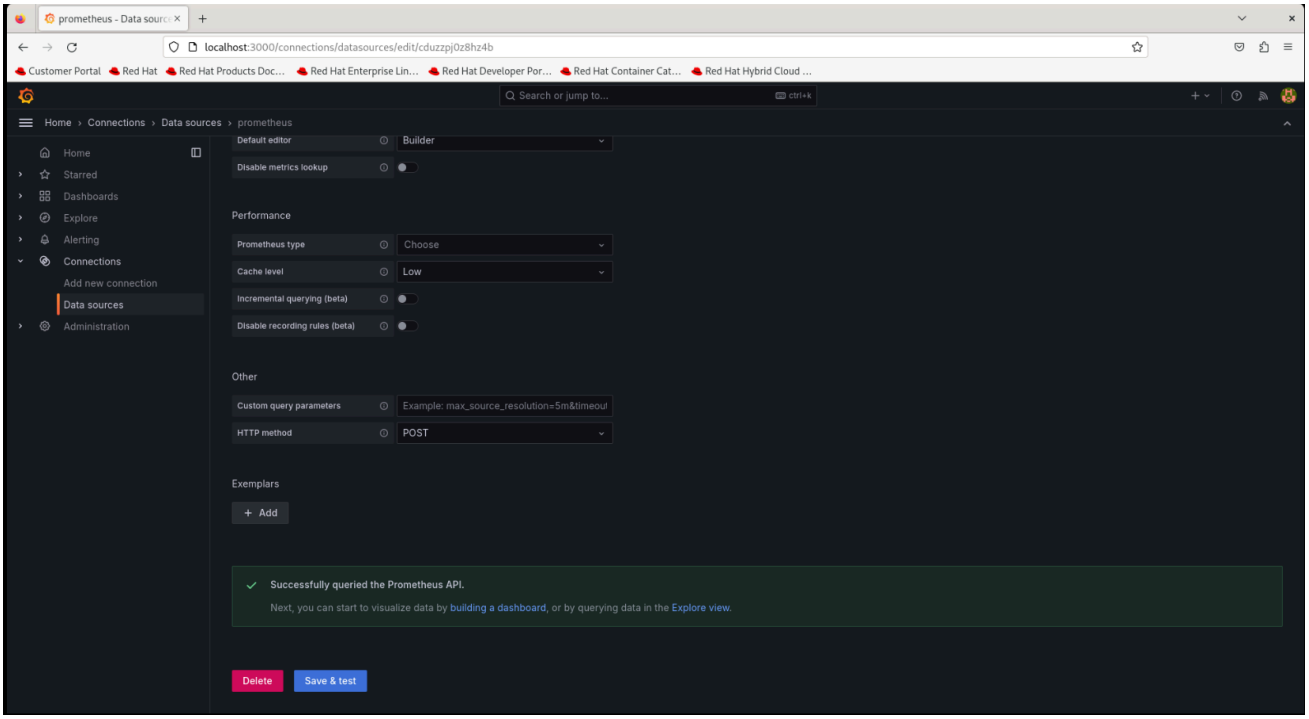
Add prometheus as data source



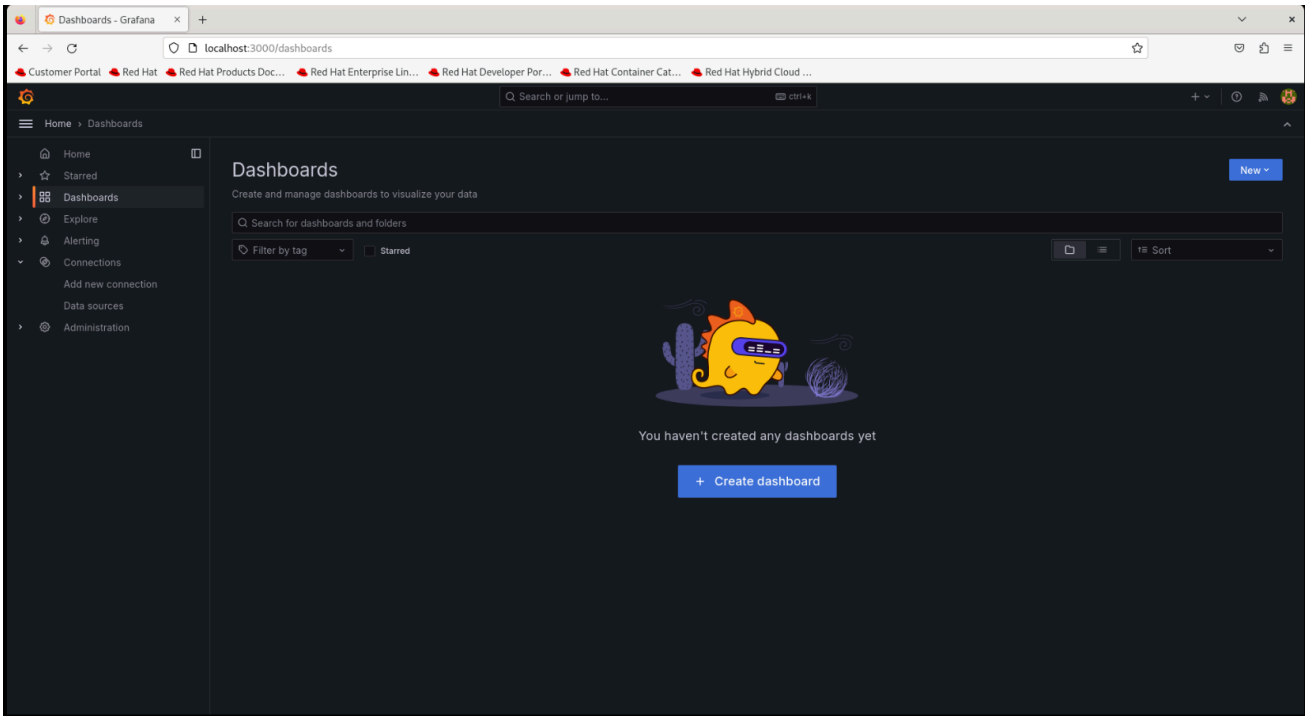
Edit Connection by add the url http://localhost:9090



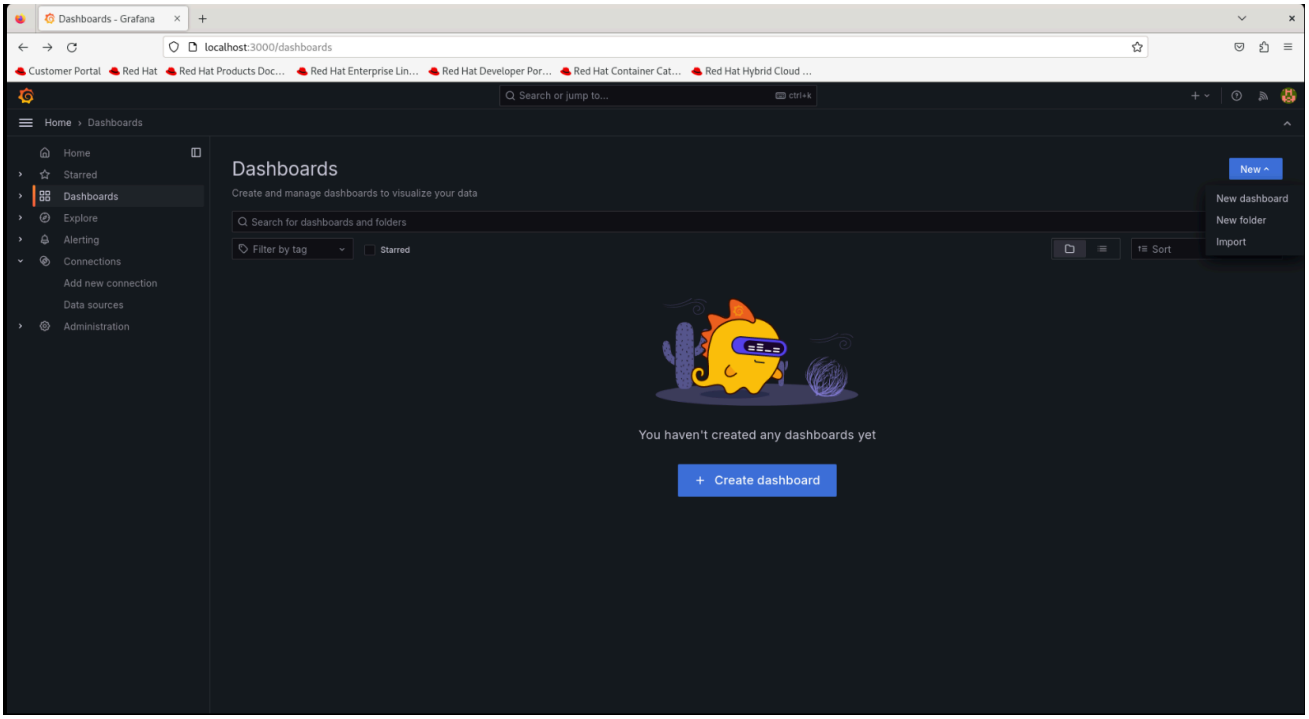
Save and test



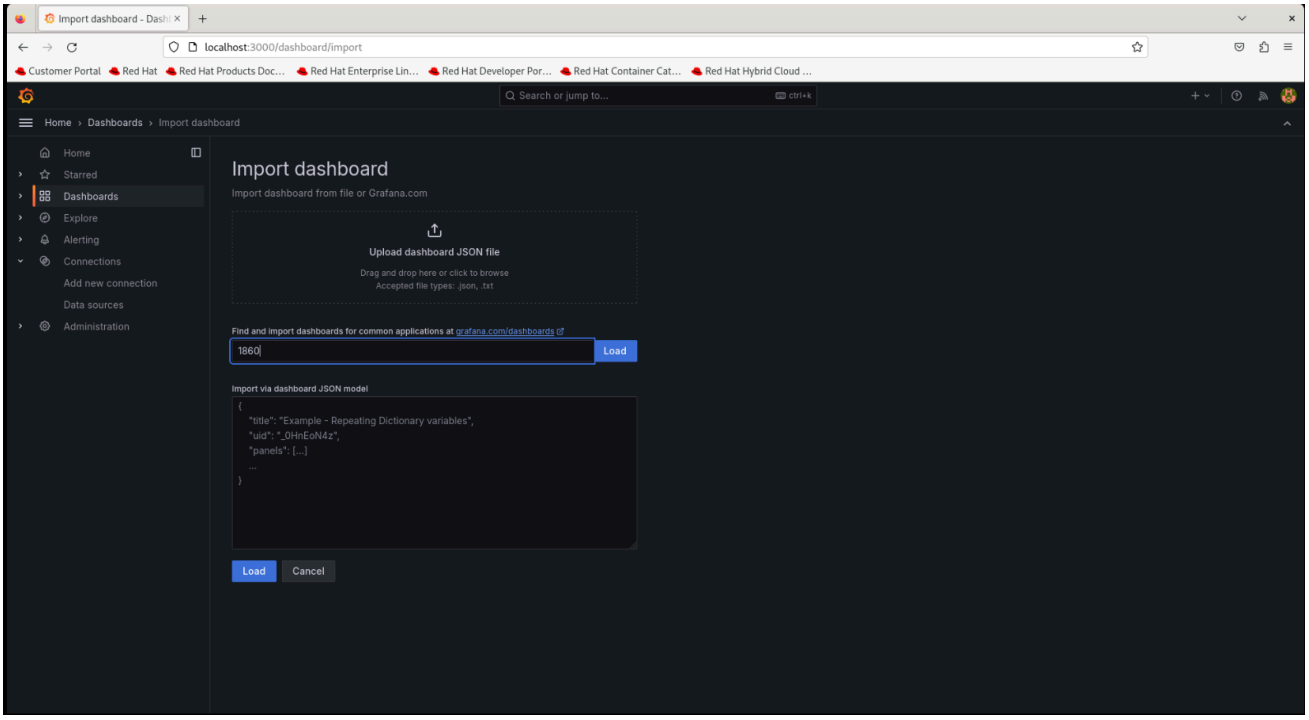
Select dashboard from the menu, then click new



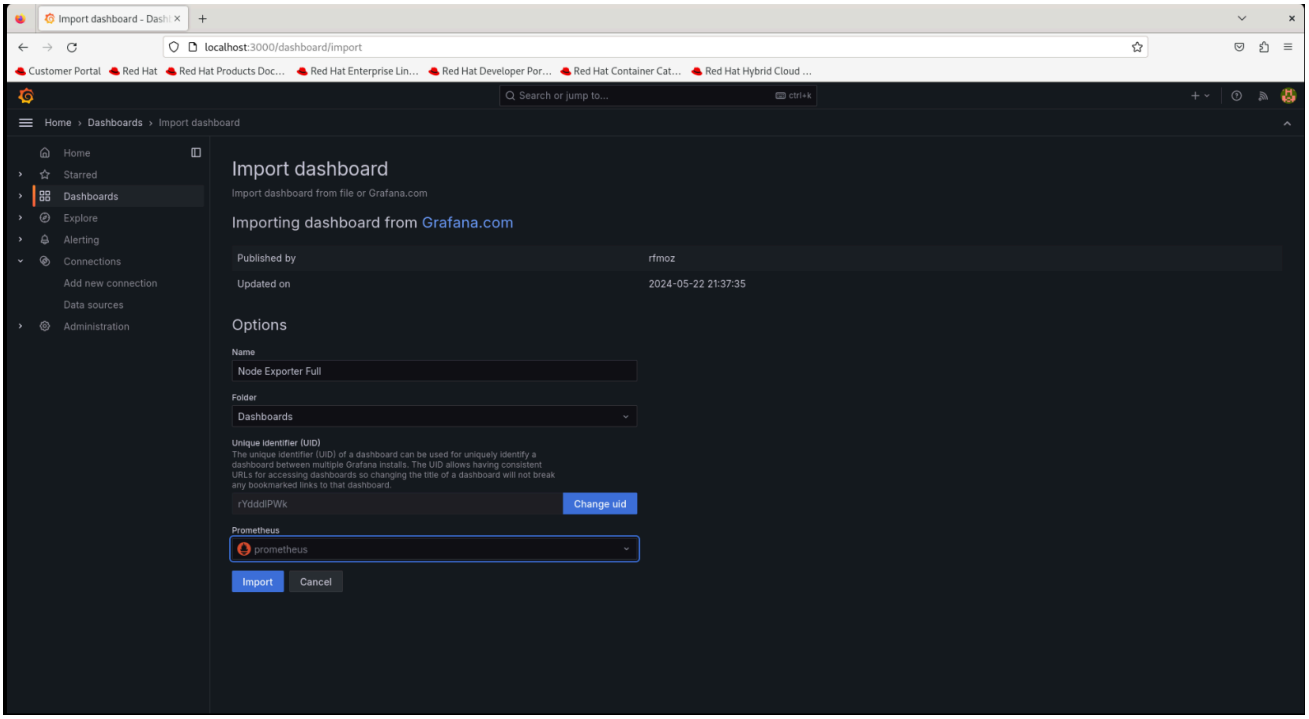
Select import



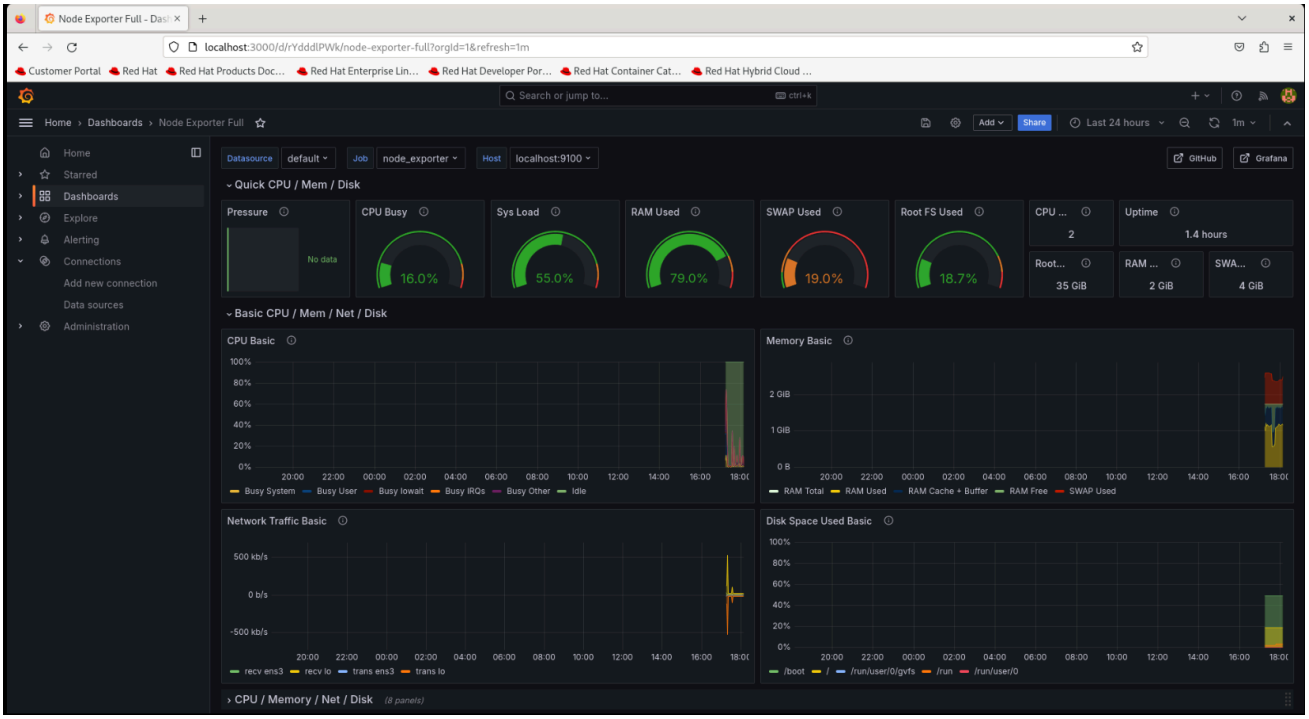
Click import and, value 1860 and then click load near the id field.



Select the created datasource, click import



Out:


Node Exporter Full - Dash
localhost:3000/d/rYdddlPWk/node-exporter-full?orgId=1&refresh=1m
Customer Portal
Red Hat
Red Hat Products Doc...
Red Hat Enterprise Lin...
Red Hat Developer Por...
Red Hat Container Cat...
Red Hat Hybrid Cloud ...
Search or jump to...
ctrl+k
Home › Dashboards › Node Exporter Full
Add
Share
Last 24 hours
1m
Home
Starred
Dashboards
Explore
Alerting
Connections
Add new connection
Data sources
Administration
Datasource
default
Job
node_exporter
Host
localhost:9100
GitHub
Grafana
Quick CPU / Mem / Disk
Pressure
No data
CPU Busy
16.0%
Sys Load
55.0%
RAM Used
79.0%
SWAP Used
19.0%
Root FS Used
18.7%
CPU ...
2
Uptime
1.4 hours
Root...
35 GiB
RAM ...
2 GiB
SWA...
4 GiB
Basic CPU / Mem / Net / Disk
CPU Basic
100%
80%
60%
40%
20%
0%
20:00
22:00
00:00
02:00
04:00
06:00
08:00
10:00
12:00
14:00
16:00
Busy System
Busy User
Busy Iowait
Busy IRQs
Busy Other
Idle
Memory Basic
2 GiB
1 GiB
0 B
RAM Total
RAM Used
RAM Cache + Buffer
RAM Free
SWAP Used
Network Traffic Basic
500 kb/s
0 b/s
-500 kb/s
recv ens3
recv lo
trans ens3
trans lo
Disk Space Used Basic
/boot
/
/run/user/0/gvfs
/run
/run/user/0
CPU / Memory / Net / Disk
(8 panels)

Logs monitor setup

wget -q -O gpg.key https://rpm.grafana.com/gpg.key

rpm --import gpg.key

##Create repo file with following content

nano /etc/yum.repos.d/grafana.repo

```
[grafana]
name=grafana
baseurl=https://rpm.grafana.com
repo_gpgcheck=1
enabled=1
gpgcheck=1
gpgkey=https://rpm.grafana.com/gpg.key
sslverify=1
sslcacert=/etc/pki/tls/certs/ca-bundle.crt
```

```
dnf update
dnf install loki promtail
```

```
systemctl start loki
systemctl enable loki
```

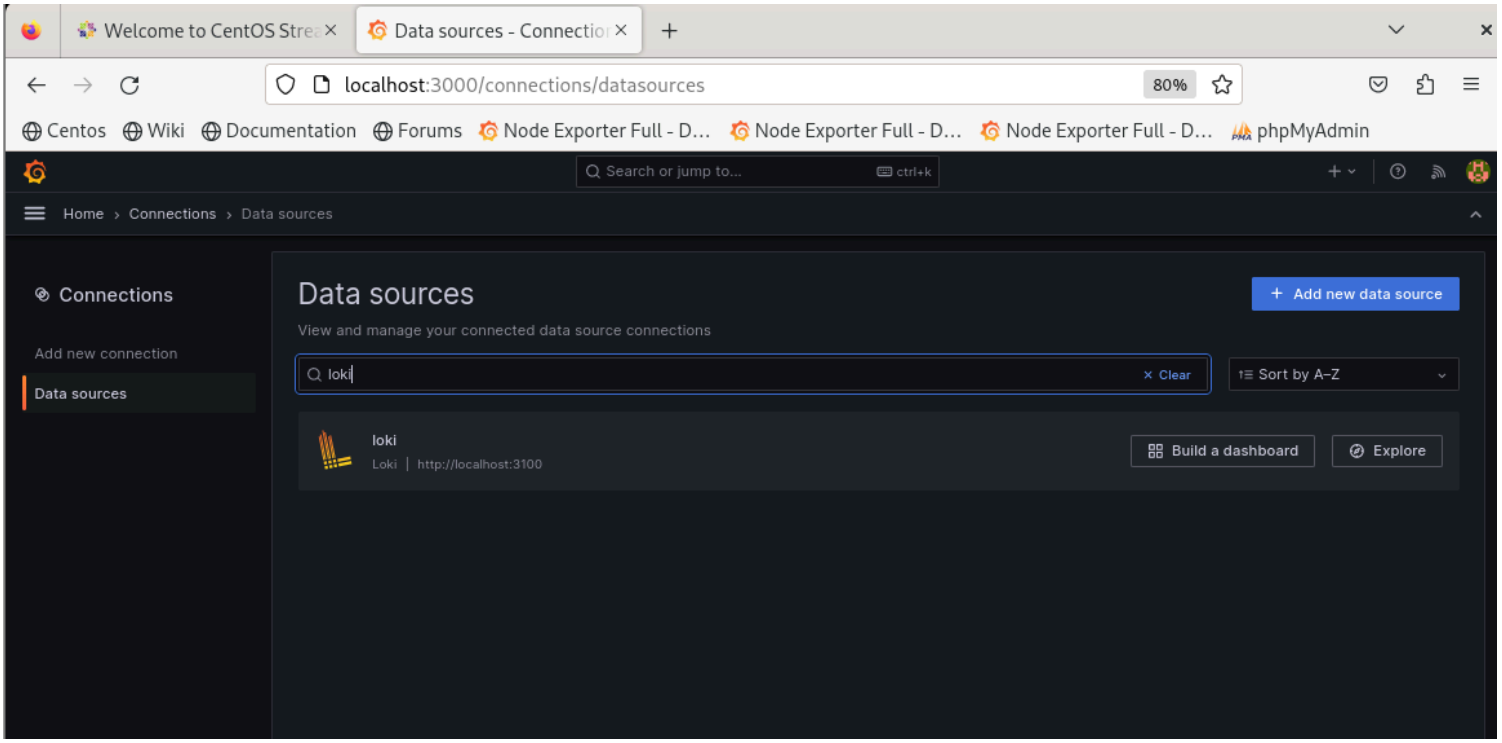
```
systemctl start promtail
systemctl enable promtail
```

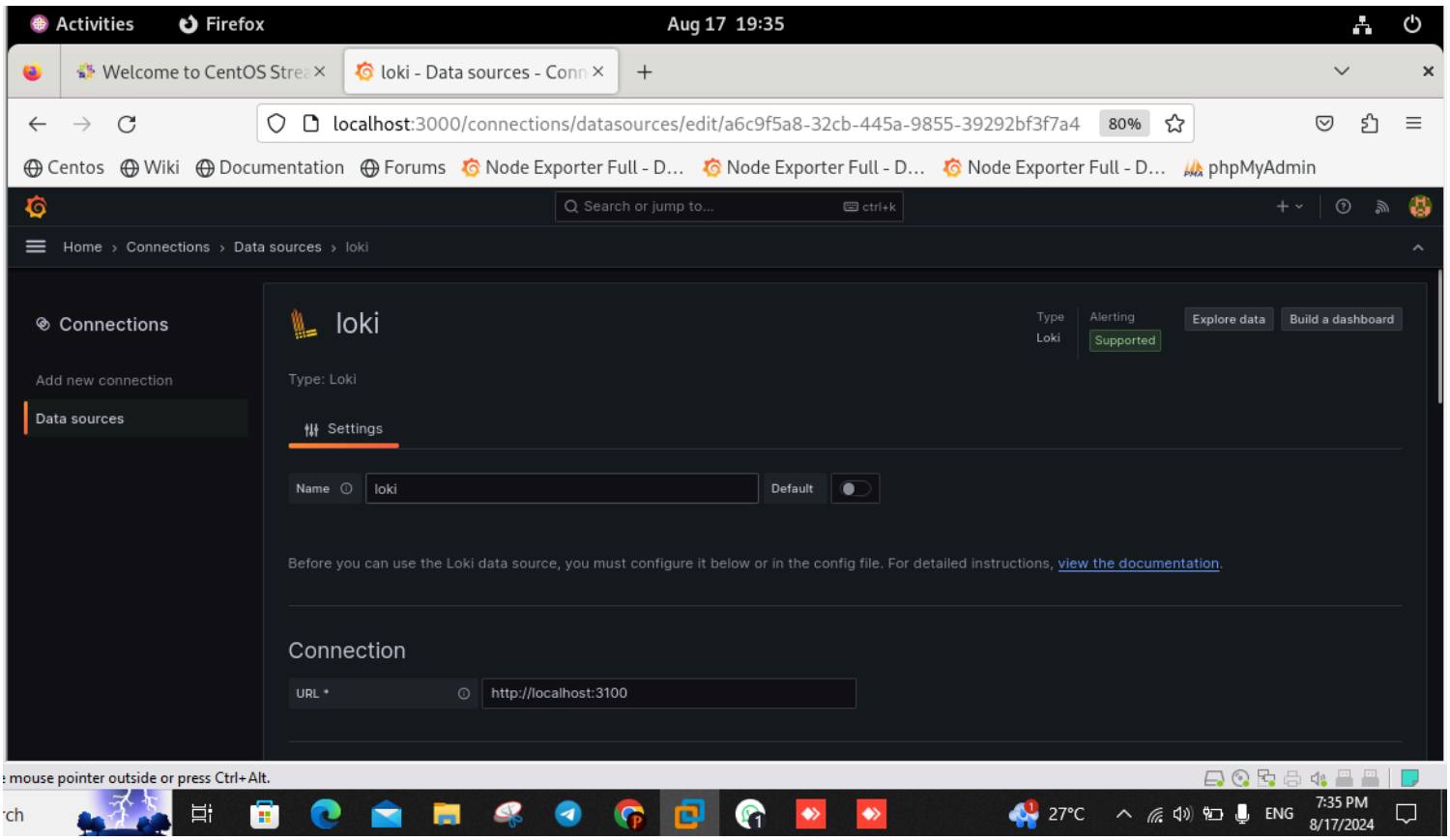
nano /etc/promtail/config.yml

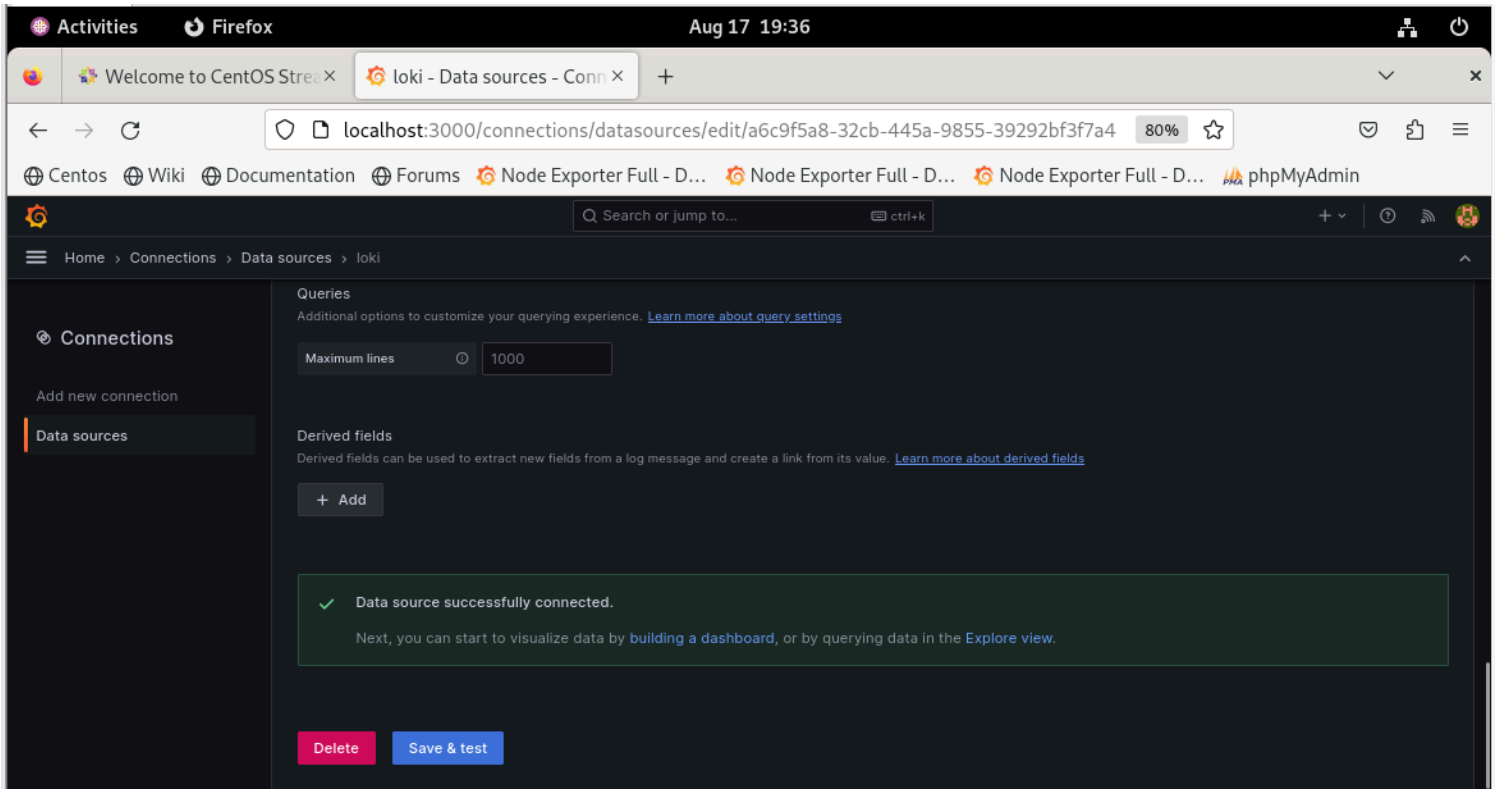
/var/log/messages → /var/log/*

firewall-cmd --add-port=3100/tcp --permanent
firewall-cmd --add-port=9080/tcp --permanent
firewall-cmd --reload

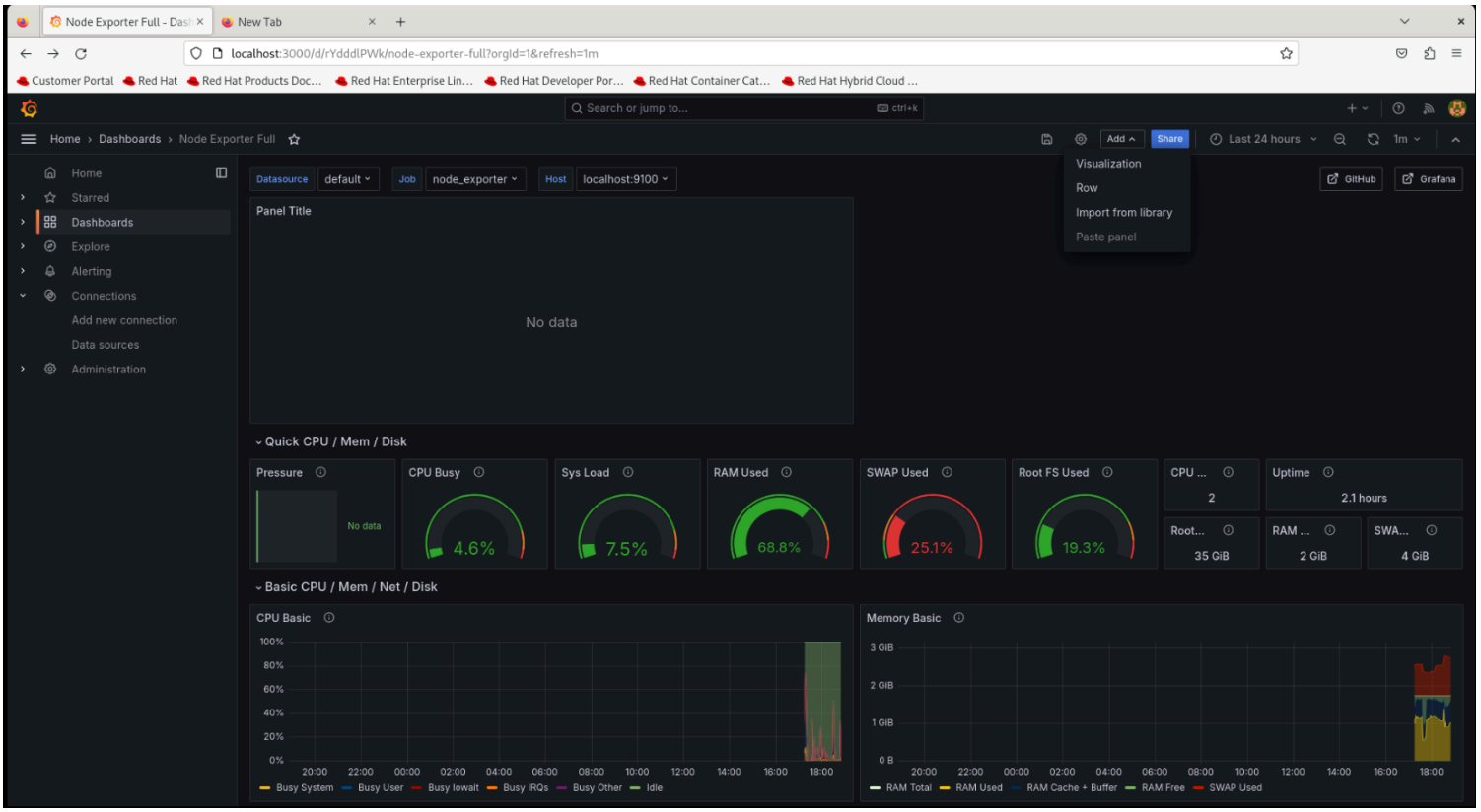
WEB Dashboard Configuration



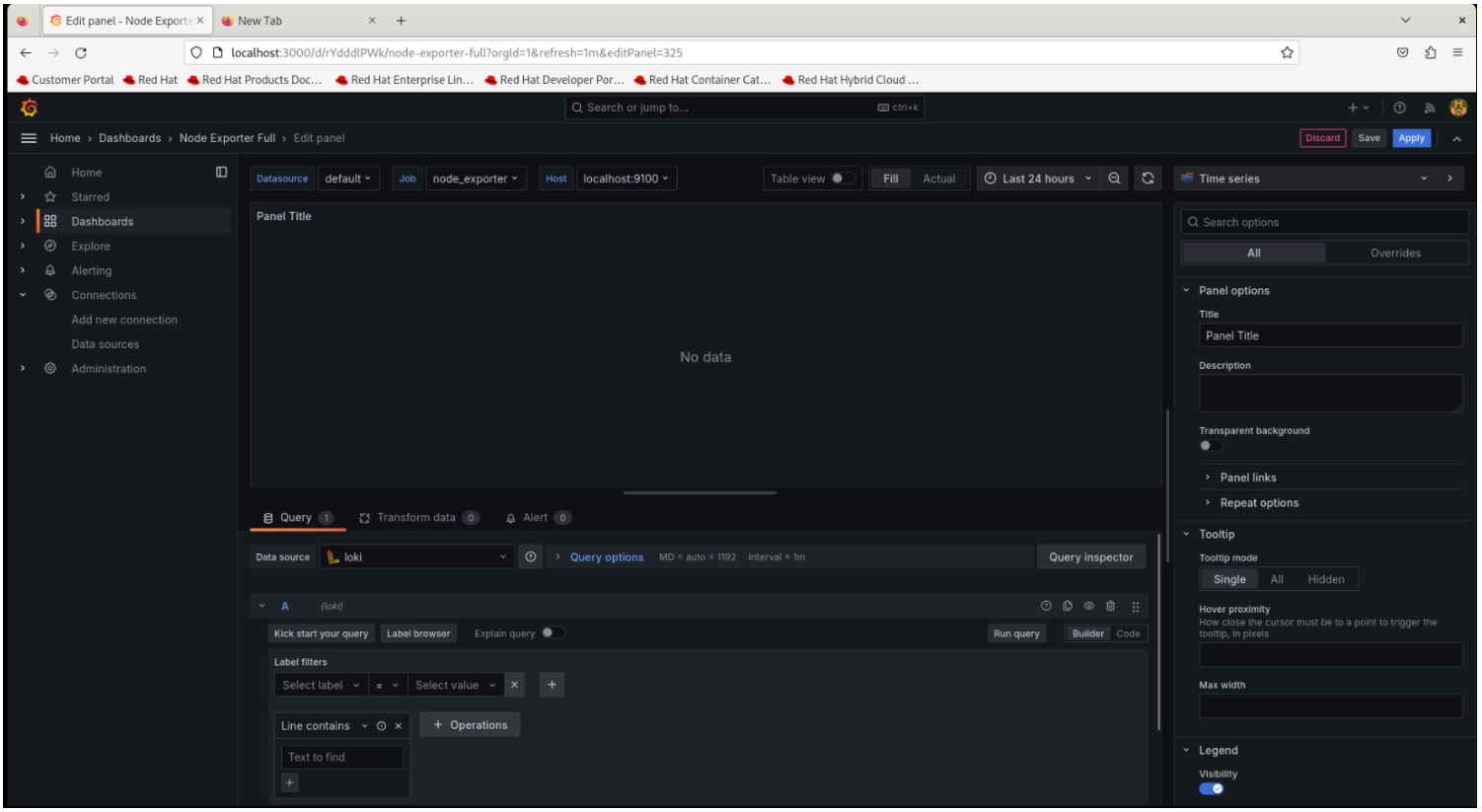

Activities
Firefox
Aug 17 19:35
Welcome to CentOS Stre
loki - Data sources - Conn
localhost:3000/connections/datasources/edit/a6c9f5a8-32cb-445a-9855-39292bf3f7a4
80%
Centos
Wiki
Documentation
Forums
Node Exporter Full - D...
Node Exporter Full - D...
Node Exporter Full - D...
phpMyAdmin
Search or jump to...
ctrl+k
Home › Connections › Data sources › loki
Connections
Add new connection
Data sources
loki
Type
Loki
Alerting
Supported
Explore data
Build a dashboard
Type: Loki
Settings
Name
loki
Default
Before you can use the Loki data source, you must configure it below or in the config file. For detailed instructions, view the documentation.
Connection
URL *
http://localhost:3100
mouse pointer outside or press Ctrl+Alt.
27°C
ENG
7:35 PM
8/17/2024


Activities
Firefox
Aug 17 19:36
Welcome to CentOS Stre
loki - Data sources - Conn
localhost:3000/connections/datasources/edit/a6c9f5a8-32cb-445a-9855-39292bf3f7a4
80%
Centos
Wiki
Documentation
Forums
Node Exporter Full - D...
Node Exporter Full - D...
Node Exporter Full - D...
phpMyAdmin
Search or jump to...
ctrl+k
Home › Connections › Data sources › loki
Connections
Add new connection
Data sources
Queries
Additional options to customize your querying experience. Learn more about query settings
Maximum lines
1000
Derived fields
Derived fields can be used to extract new fields from a log message and create a link from its value. Learn more about derived fields
+ Add
Data source successfully connected.
Next, you can start to visualize data by building a dashboard, or by querying data in the Explore view.
Delete
Save & test

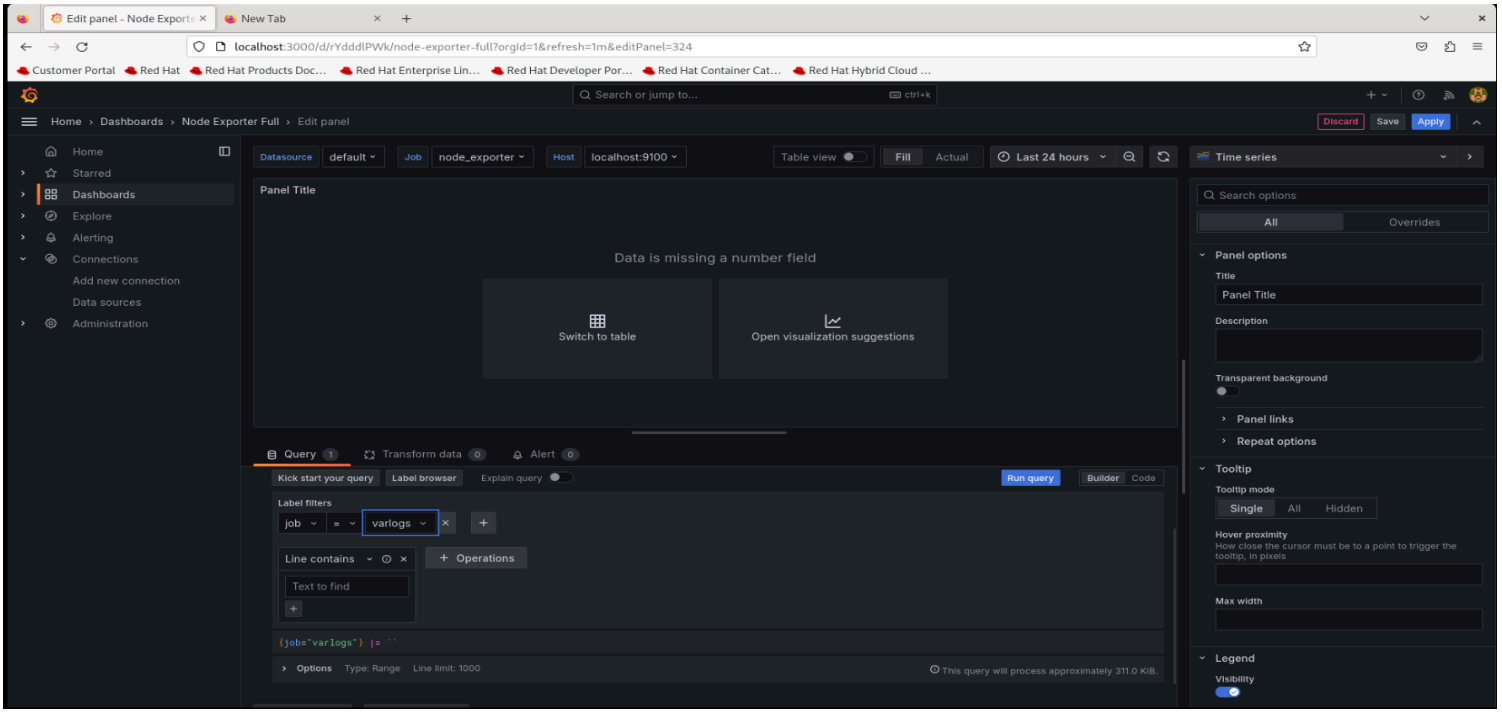
##select the visualisation option



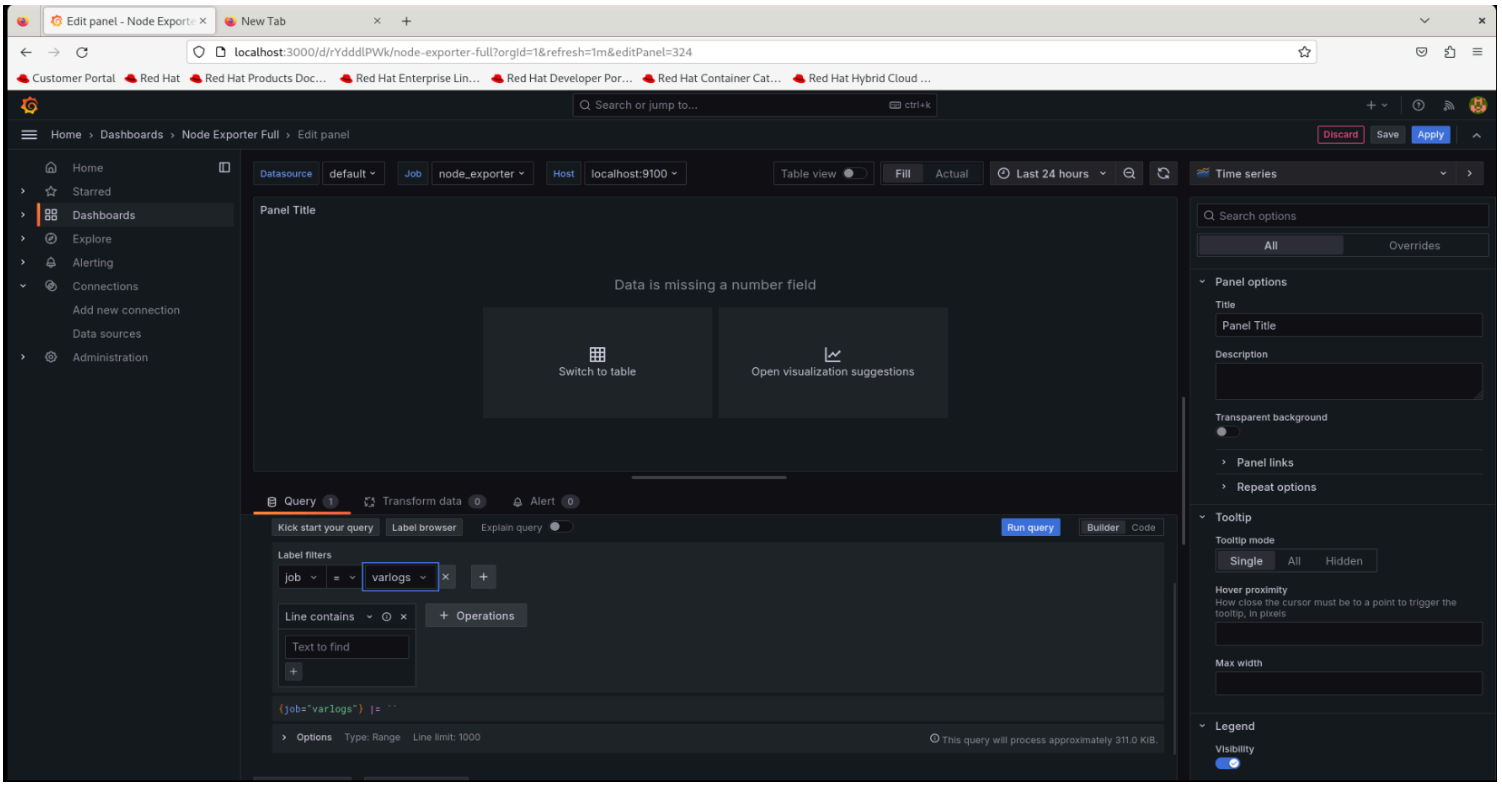
##select loki as data source



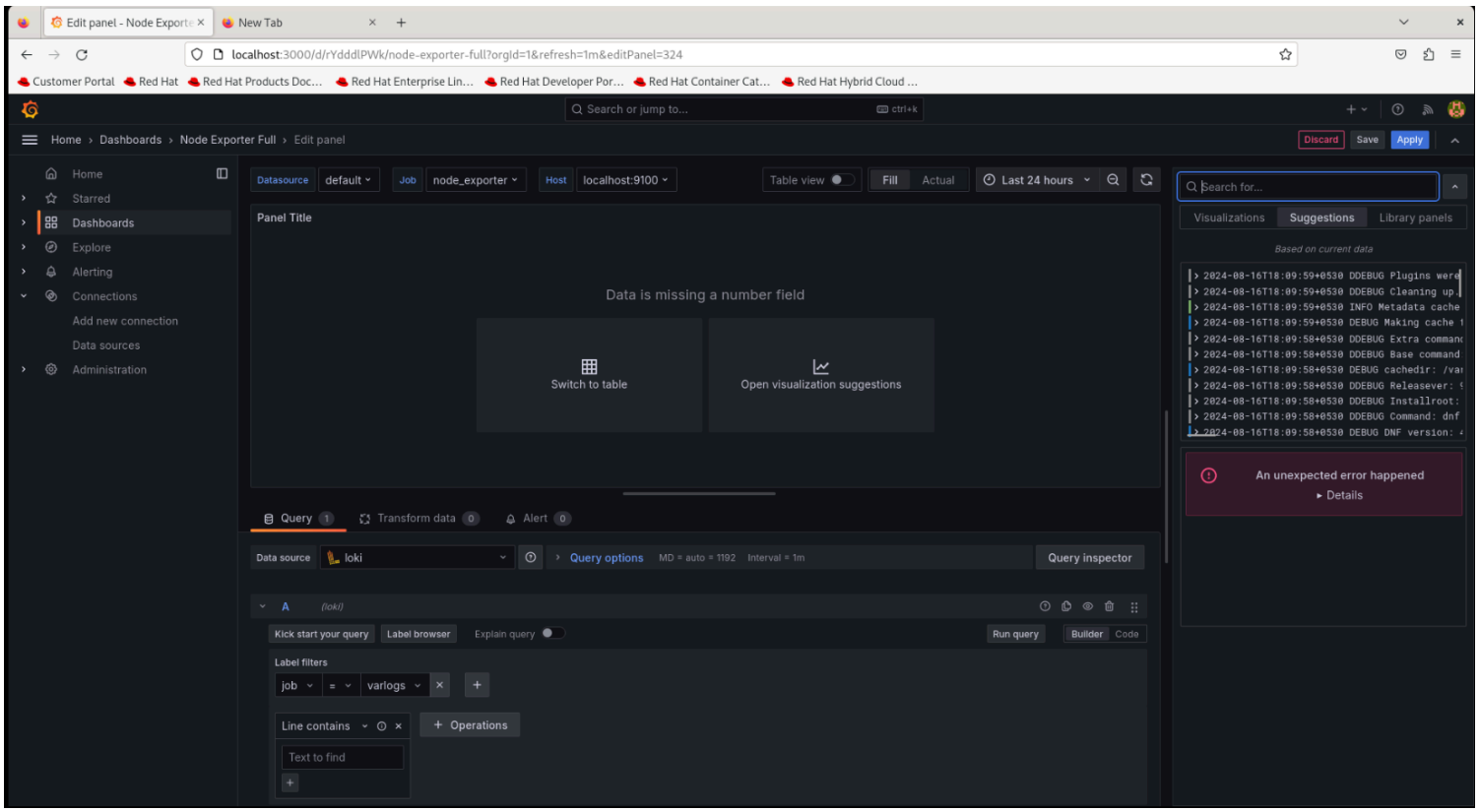
#select job and varlogs in the label and value



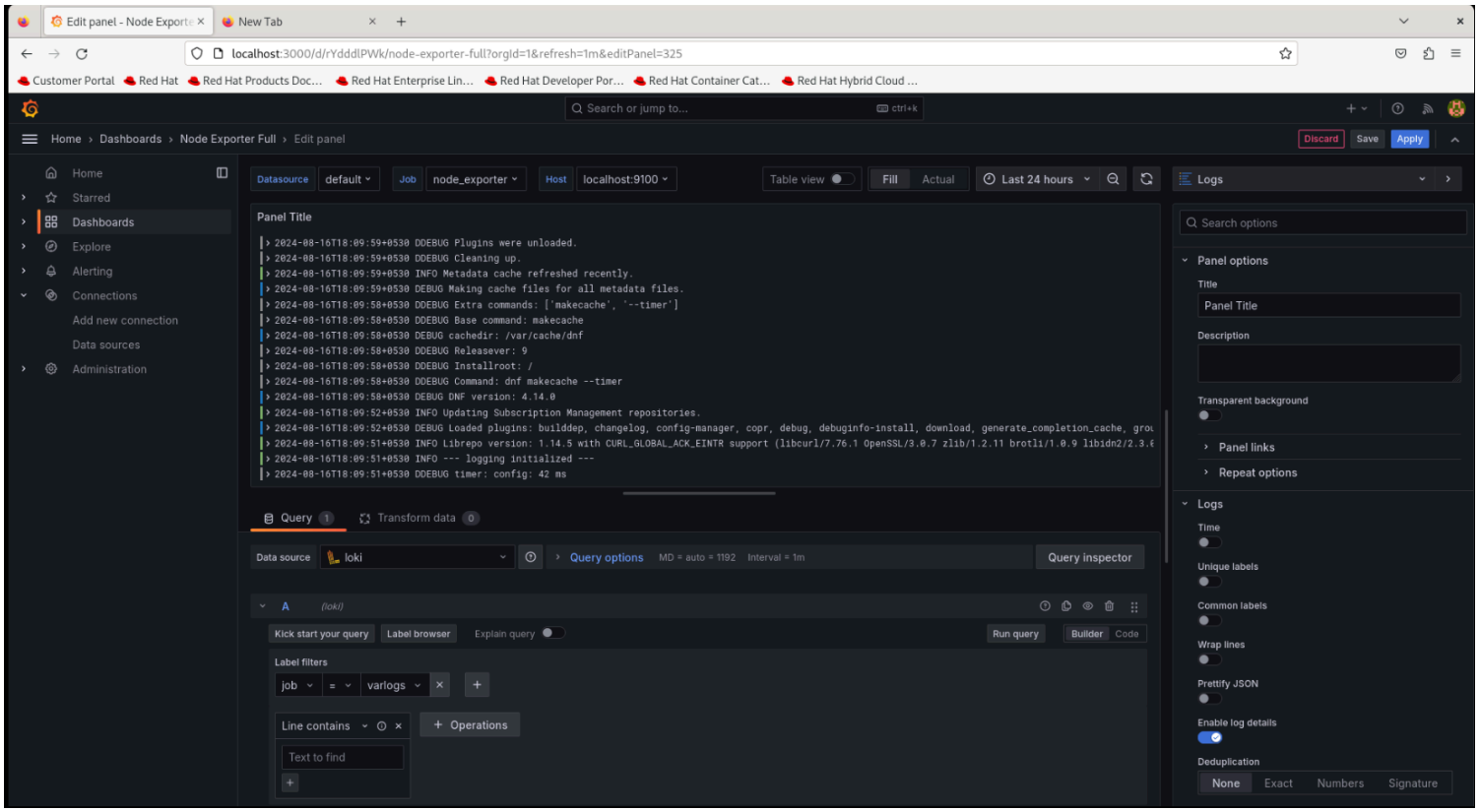
#run query

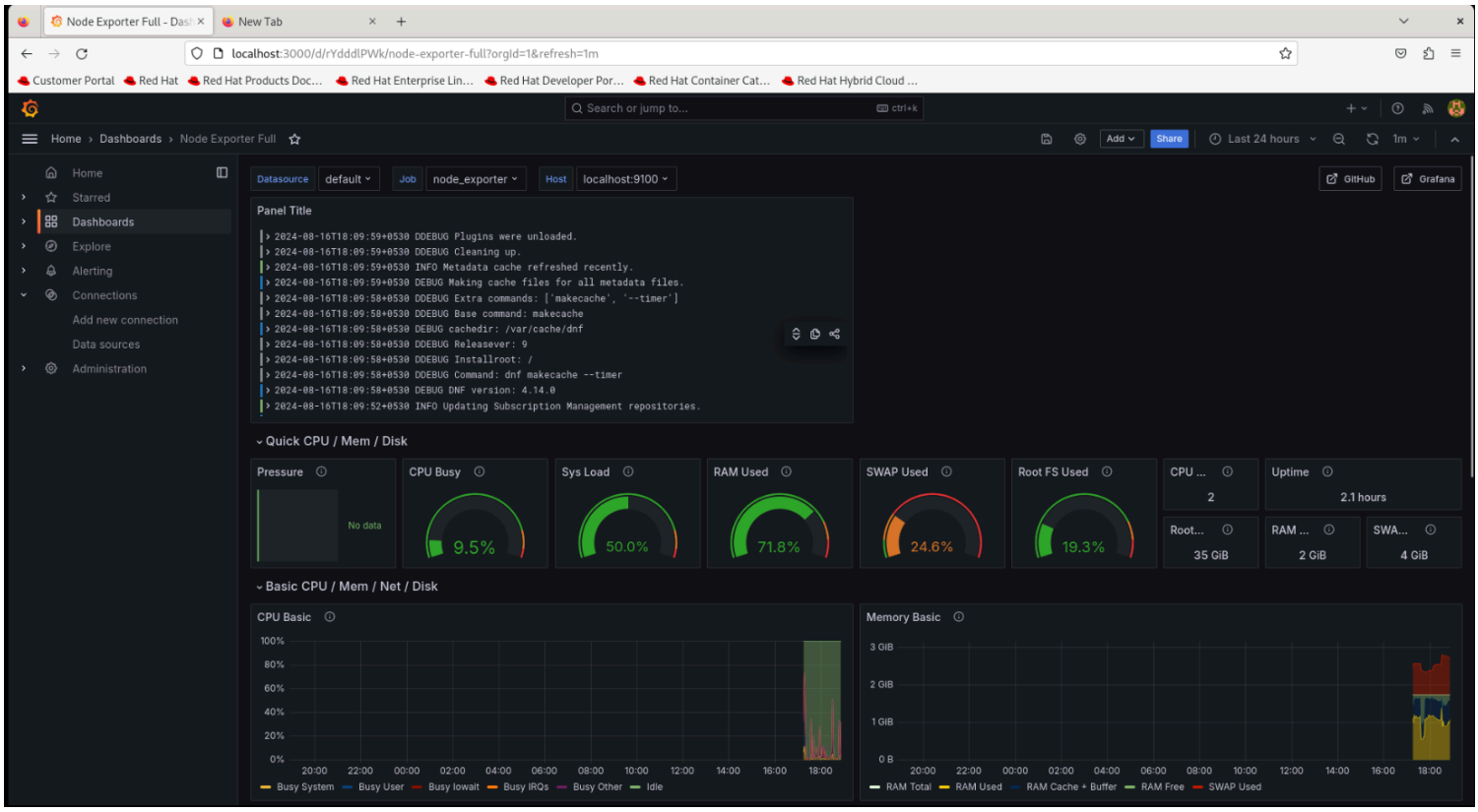


#select open visualization suggestions and select the suggestion by clicking the change in right side


Edit panel - Node Exporte
New Tab
localhost:3000/d/rYdddlPWk/node-exporter-full?orgId=1&refresh=1m&editPanel=324
Home › Dashboards › Node Exporter Full › Edit panel
Discard
Save
Apply
Datasource
default
Job
node_exporter
Host
localhost:9100
Table view
Fill
Actual
Last 24 hours
Panel Title
Data is missing a number field
Switch to table
Open visualization suggestions
Visualizations
Suggestions
Library panels
Based on current data
An unexpected error happened
Details
Query
Transform data
Alert
Data source
loki
Query options
MD = auto = 1192
Interval = 1m
Query inspector
Kick start your query
Label browser
Explain query
Run query
Builder
Code
Label filters
job
varlogs
Line contains
Operations
Text to find

#click apply


Edit panel - Node Exporte
New Tab
localhost:3000/d/rYdddlPWk/node-exporter-full?orgId=1&refresh=1m&editPanel=325
Home › Dashboards › Node Exporter Full › Edit panel
Discard
Save
Apply
Datasource
default
Job
node_exporter
Host
localhost:9100
Table view
Fill
Actual
Last 24 hours
Logs
Panel Title
2024-08-16T18:09:59+0530 DDEBUG Plugins were unloaded.
2024-08-16T18:09:59+0530 DDEBUG Cleaning up.
2024-08-16T18:09:59+0530 INFO Metadata cache refreshed recently.
2024-08-16T18:09:59+0530 DEBUG Making cache files for all metadata files.
2024-08-16T18:09:58+0530 DDEBUG Extra commands: ['makecache', '--timer']
2024-08-16T18:09:58+0530 DDEBUG Base command: makecache
2024-08-16T18:09:58+0530 DEBUG cachedir: /var/cache/dnf
2024-08-16T18:09:58+0530 DDEBUG Releasever: 9
2024-08-16T18:09:58+0530 DDEBUG Installroot: /
2024-08-16T18:09:58+0530 DDEBUG Command: dnf makecache --timer
2024-08-16T18:09:58+0530 DEBUG DNF version: 4.14.0
2024-08-16T18:09:52+0530 INFO Updating Subscription Management repositories.
2024-08-16T18:09:52+0530 DEBUG Loaded plugins: builddep, changelog, config-manager, copr, debug, debuginfo-install, download, generate_completion_cache,
2024-08-16T18:09:51+0530 INFO Librepo version: 1.14.5 with CURL_GLOBAL_ACK_EINTR support (libcurl/7.76.1 OpenSSL/3.0.7 zlib/1.2.11 brotli/1.0.9 libidn2/2.3.
2024-08-16T18:09:51+0530 INFO --- logging initialized ---
2024-08-16T18:09:51+0530 DDEBUG timer: config: 42 ms
Search options
Panel options
Title
Panel Title
Description
Transparent background
Panel links
Repeat options
Logs
Time
Unique labels
Common labels
Wrap lines
Prettify JSON
Enable log details
Deduplication
None
Exact
Numbers
Signature
Query
Transform data
Data source
loki
Query options
MD = auto = 1192
Interval = 1m
Query inspector
Kick start your query
Label browser
Explain query
Run query
Builder
Code
Label filters
job
varlogs
Line contains
Operations
Text to find


Node Exporter Full - Dash
New Tab
localhost:3000/d/rYdddlPWk/node-exporter-full?orgId=1&refresh=1m
Customer Portal
Red Hat
Red Hat Products Doc...
Red Hat Enterprise Lin...
Red Hat Developer Por...
Red Hat Container Cat...
Red Hat Hybrid Cloud ...
Search or jump to...
ctrl+k
Home › Dashboards › Node Exporter Full
Add
Share
Last 24 hours
1m
Home
Starred
Dashboards
Explore
Alerting
Connections
Add new connection
Data sources
Administration
Datasource
default
Job
node_exporter
Host
localhost:9100
GitHub
Grafana
Panel Title
2024-08-16T18:09:59+0530 DDEBUG Plugins were unloaded.
2024-08-16T18:09:59+0530 DDEBUG Cleaning up.
2024-08-16T18:09:59+0530 INFO Metadata cache refreshed recently.
2024-08-16T18:09:59+0530 DEBUG Making cache files for all metadata files.
2024-08-16T18:09:58+0530 DDEBUG Extra commands: ['makecache', '--timer']
2024-08-16T18:09:58+0530 DDEBUG Base command: makecache
2024-08-16T18:09:58+0530 DEBUG cachedir: /var/cache/dnf
2024-08-16T18:09:58+0530 DDEBUG Releasever: 9
2024-08-16T18:09:58+0530 DDEBUG Installroot: /
2024-08-16T18:09:58+0530 DDEBUG Command: dnf makecache --timer
2024-08-16T18:09:58+0530 DEBUG DNF version: 4.14.0
2024-08-16T18:09:52+0530 INFO Updating Subscription Management repositories.
Quick CPU / Mem / Disk
Pressure
No data
CPU Busy
9.5%
Sys Load
50.0%
RAM Used
71.8%
SWAP Used
24.6%
Root FS Used
19.3%
CPU ...
2
Uptime
2.1 hours
Root...
35 GiB
RAM ...
2 GiB
SWA...
4 GiB
Basic CPU / Mem / Net / Disk
CPU Basic
100%
80%
60%
40%
20%
0%
20:00
22:00
00:00
02:00
04:00
06:00
08:00
10:00
12:00
14:00
16:00
18:00
Busy System
Busy User
Busy Iowait
Busy IRQs
Busy Other
Idle
Memory Basic
3 GiB
2 GiB
1 GiB
0 B
RAM Total
RAM Used
RAM Cache + Buffer
RAM Free
SWAP Used

PHPMYADMIN

```
dnf install https://dl.fedoraproject.org/pub/epel/epel-release-latest-9.noarch.rpm
```

dnf update
dnf install httpd phpmyadmin mysql-server -y

nano /etc/httpd/conf.d/phpMyAdmin.conf

#Find and replace

<Directory /usr/share/phpMyAdmin/>
  AddDefaultCharset UTF-8

  Require all granted

</Directory>

Systemctl restart httpd

Systemctl enable –now mysqld

mysql_secure_installation

mysql -u root -p