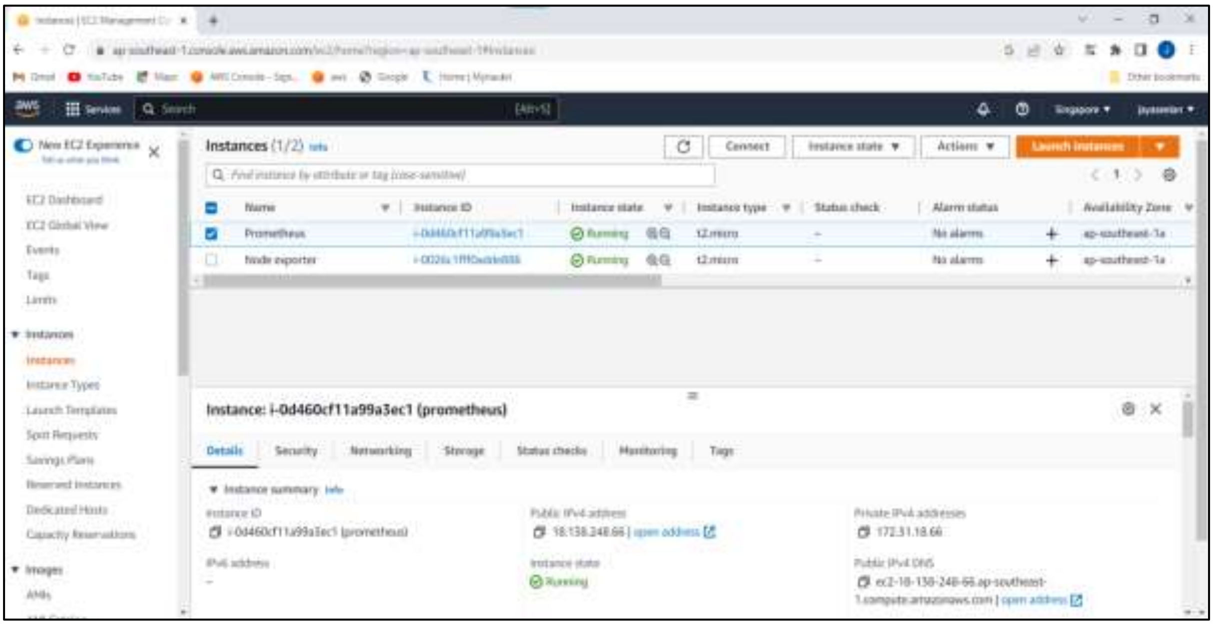
PROMETHEUS

Prometheus is a monitoring solution for storing time series data like metrics.

Steps To Create Prometheus

Step1:create two EC2 Linux Server

2 servr name(prometheus and node exporter)--->security group(all traffic)---->storage(30 gb)---->launch instance



Instances (1/2)

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
☑	Prometheus	i-0d460cf11a99a3ec1	Running	t2.micro	–	No alarms	ap-southeast-1a
□	Node exporter	[illegible]	Running	t2.micro	–	No alarms	ap-southeast-1a

Instance: i-0d460cf11a99a3ec1 (prometheus)

Instance summary

Instance ID: i-0d460cf11a99a3ec1 (prometheus)

Public IPv4 address: 18.138.248.66

Private IPv4 addresses: 172.31.18.66

IPv6 address: –

Instance state: Running

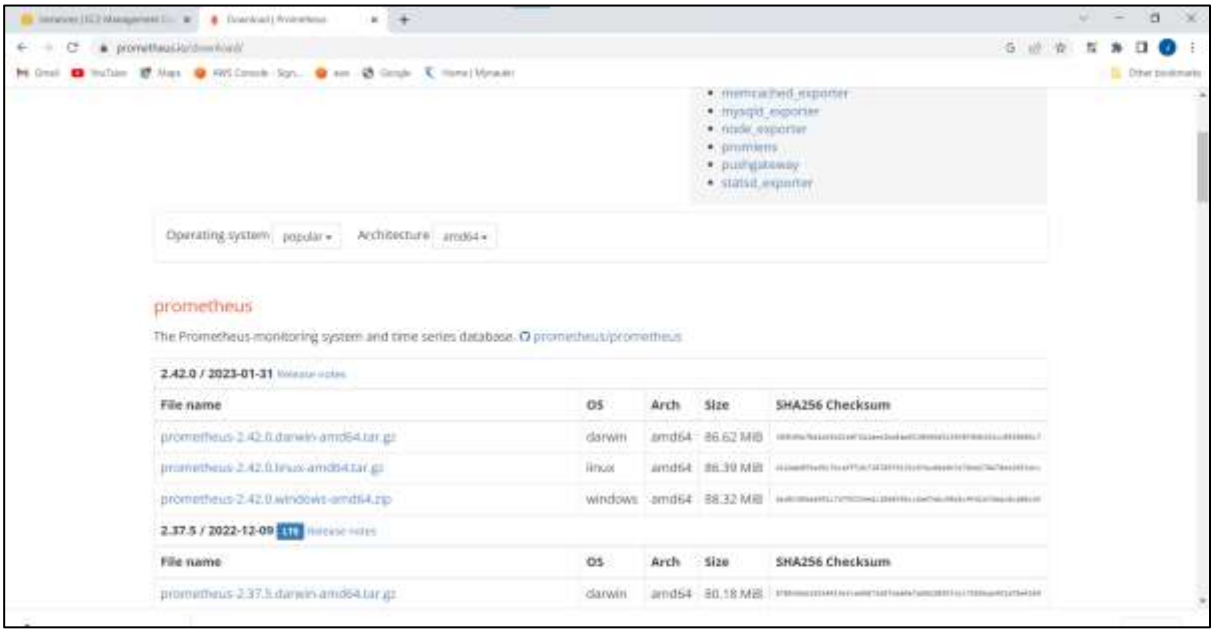
Public IPv4 DNS: ec2-18-138-248-66.ap-southeast-1.compute.amazonaws.com

Step2: Login Prometheus server and give sudo –i

Wget (Prometheus download link)

Note:how to Prometheus link copy ---->google--->Prometheus.io--->download click --->Prometheus(linux link --->right click copy link address)

```
#wget  https://github.com/prometheus/prometheus/releases/download/v2.42.0/prometheus-2.42.0.linux-amd64.tar.gz
```



- memcached_exporter
- mysqld_exporter
- node_exporter
- promlens
- pushgateway
- statsd_exporter

Operating system popular ▾ Architecture amd64 ▾

prometheus

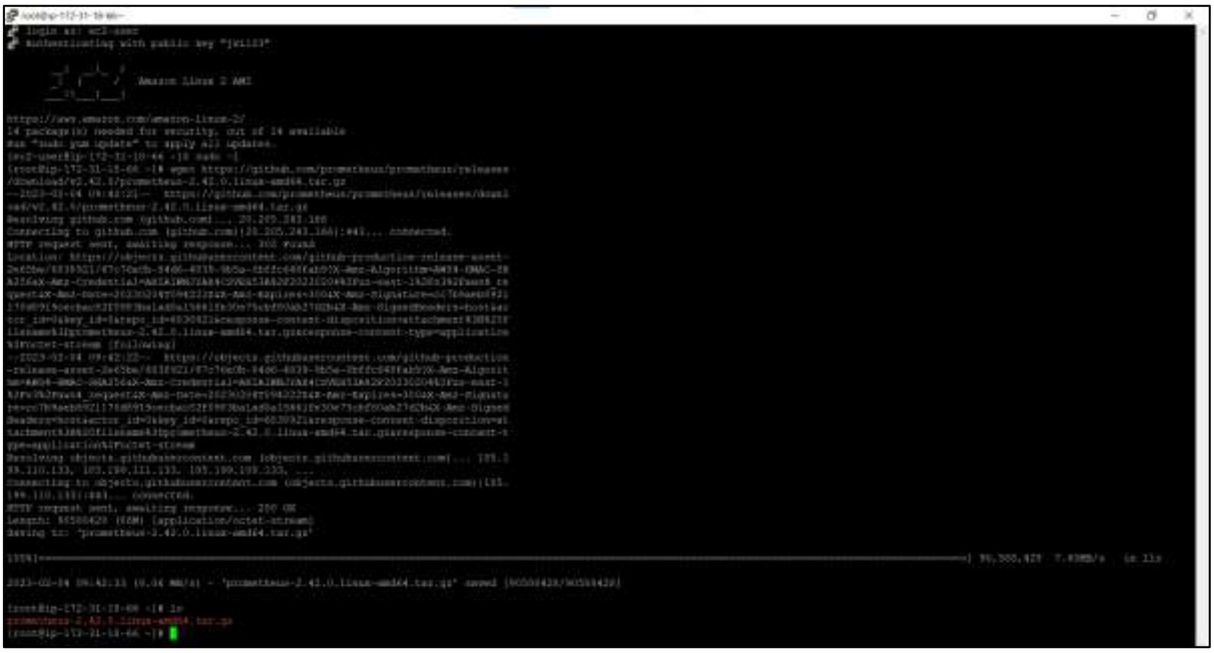
The Prometheus monitoring system and time series database. prometheus/prometheus

2.42.0 / 2023-01-31 Release notes

File name	OS	Arch	Size	SHA256 Checksum
prometheus-2.42.0.darwin-amd64.tar.gz	darwin	amd64	86.62 MiB	[illegible]
prometheus-2.42.0.linux-amd64.tar.gz	linux	amd64	86.39 MiB	[illegible]
prometheus-2.42.0.windows-amd64.zip	windows	amd64	88.32 MiB	[illegible]

2.37.5 / 2022-12-09 LTS Release notes

File name	OS	Arch	Size	SHA256 Checksum
prometheus-2.37.5.darwin-amd64.tar.gz	darwin	amd64	80.18 MiB	[illegible]

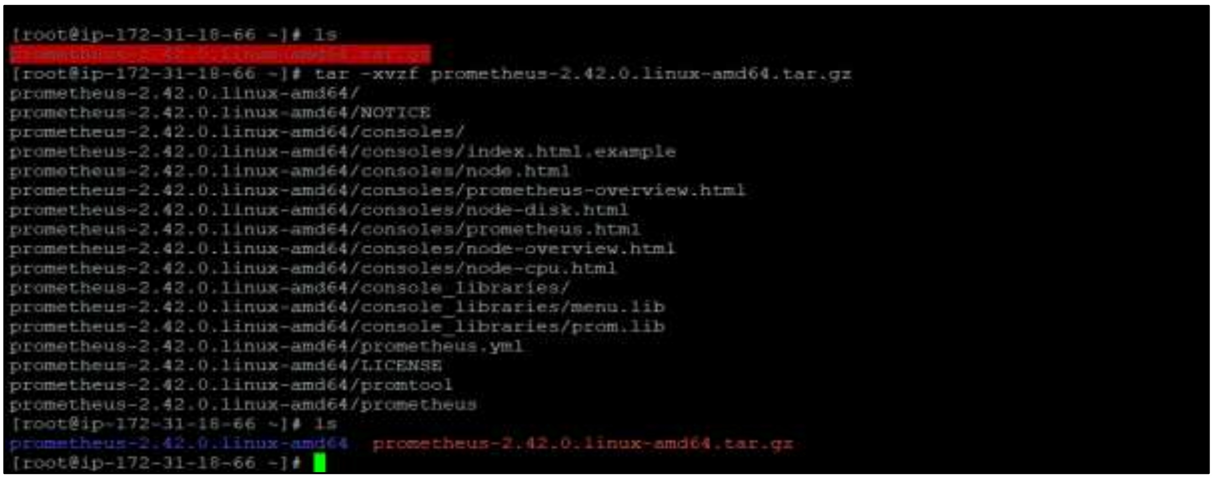


```
login as: ec2-user
Authenticating with public key "[illegible]"

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
14 package(s) needed for security, out of 14 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-18-66 ~]$ sudo -i
[root@ip-172-31-18-66 ~]# wget https://github.com/prometheus/prometheus/releases
/download/v2.42.0/prometheus-2.42.0.linux-amd64.tar.gz
--2023-02-04 09:42:21--  https://github.com/prometheus/prometheus/releases/downl
oad/v2.42.0/prometheus-2.42.0.linux-amd64.tar.gz
Resolving github.com (github.com)... 20.205.243.166
Connecting to github.com (github.com)|20.205.243.166|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://objects.githubusercontent.com/github-production-release-asset-
[illegible]
%2Foctet-stream [following]
--2023-02-04 09:42:22--  https://objects.githubusercontent.com/github-production
-release-asset-[illegible]
ype=application%2Foctet-stream
Resolving objects.githubusercontent.com (objects.githubusercontent.com)... 185.1
99.110.133, 185.199.111.133, 185.199.109.133, ...
Connecting to objects.githubusercontent.com (objects.githubusercontent.com)|185.
199.110.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 90500420 (86M) [application/octet-stream]
Saving to: 'prometheus-2.42.0.linux-amd64.tar.gz'

100%[=====================================================================>] 90,500,420  7.40MB/s   in 11s

2023-02-04 09:42:33 (8.04 MB/s) - 'prometheus-2.42.0.linux-amd64.tar.gz' saved [90500420/90500420]

[root@ip-172-31-18-66 ~]# ls
prometheus-2.42.0.linux-amd64.tar.gz
[root@ip-172-31-18-66 ~]#
```

Prometheus download in zip formate

Now unzip

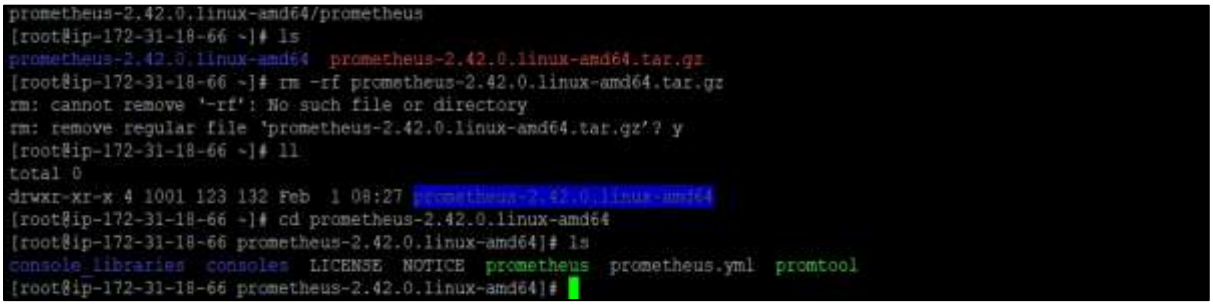
#tar –xvzf prometheus-2.42.0.linux-amd64.tar.gz



```
[root@ip-172-31-18-66 ~]# ls
prometheus-2.42.0.linux-amd64.tar.gz
[root@ip-172-31-18-66 ~]# tar -xvzf prometheus-2.42.0.linux-amd64.tar.gz
prometheus-2.42.0.linux-amd64/
prometheus-2.42.0.linux-amd64/NOTICE
prometheus-2.42.0.linux-amd64/consoles/
prometheus-2.42.0.linux-amd64/consoles/index.html.example
prometheus-2.42.0.linux-amd64/consoles/node.html
prometheus-2.42.0.linux-amd64/consoles/prometheus-overview.html
prometheus-2.42.0.linux-amd64/consoles/node-disk.html
prometheus-2.42.0.linux-amd64/consoles/prometheus.html
prometheus-2.42.0.linux-amd64/consoles/node-overview.html
prometheus-2.42.0.linux-amd64/consoles/node-cpu.html
prometheus-2.42.0.linux-amd64/console_libraries/
prometheus-2.42.0.linux-amd64/console_libraries/menu.lib
prometheus-2.42.0.linux-amd64/console_libraries/prom.lib
prometheus-2.42.0.linux-amd64/prometheus.yml
prometheus-2.42.0.linux-amd64/LICENSE
prometheus-2.42.0.linux-amd64/promtool
prometheus-2.42.0.linux-amd64/prometheus
[root@ip-172-31-18-66 ~]# ls
prometheus-2.42.0.linux-amd64  prometheus-2.42.0.linux-amd64.tar.gz
[root@ip-172-31-18-66 ~]#
```

Now remove zip file

#rm –rf prometheus-2.42.0.linux-amd64.tar.gz



```
prometheus-2.42.0.linux-amd64/prometheus
[root@ip-172-31-18-66 ~]# ls
prometheus-2.42.0.linux-amd64  prometheus-2.42.0.linux-amd64.tar.gz
[root@ip-172-31-18-66 ~]# rm -rf prometheus-2.42.0.linux-amd64.tar.gz
rm: cannot remove '-rf': No such file or directory
rm: remove regular file 'prometheus-2.42.0.linux-amd64.tar.gz'? y
[root@ip-172-31-18-66 ~]# ll
total 0
drwxr-xr-x 4 1001 123 132 Feb  1 08:27 prometheus-2.42.0.linux-amd64
[root@ip-172-31-18-66 ~]# cd prometheus-2.42.0.linux-amd64
[root@ip-172-31-18-66 prometheus-2.42.0.linux-amd64]# ls
console_libraries  consoles  LICENSE  NOTICE  prometheus  prometheus.yml  promtool
[root@ip-172-31-18-66 prometheus-2.42.0.linux-amd64]# 
```

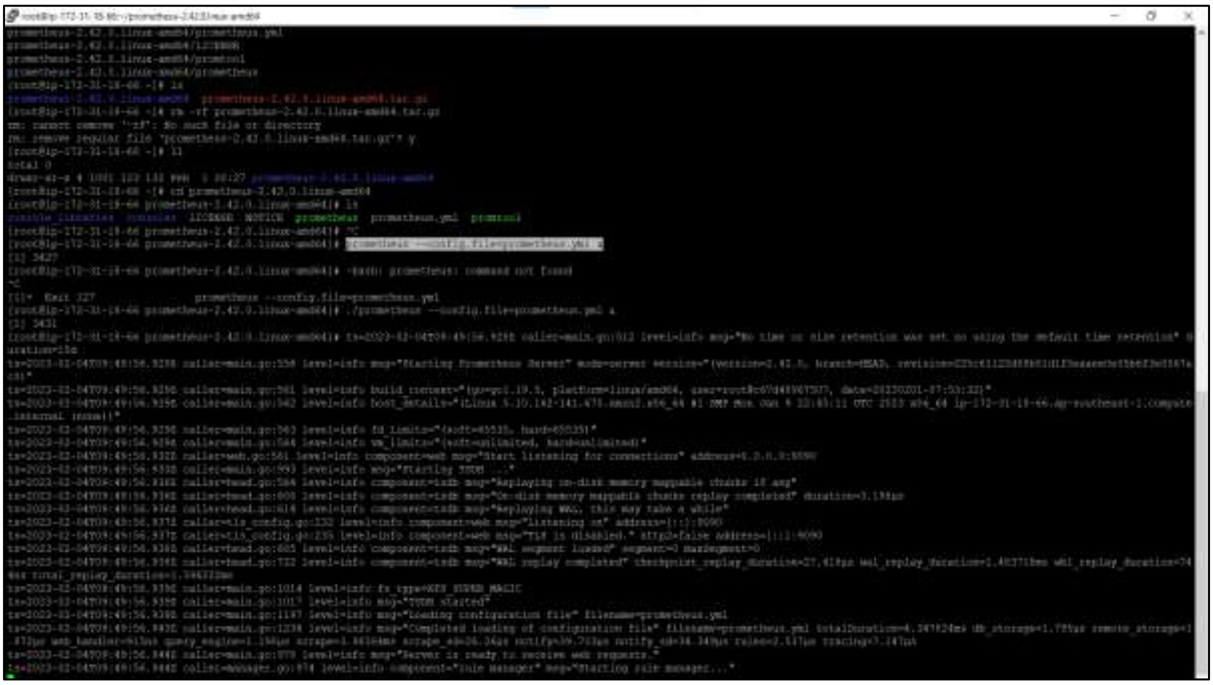
#cd (unzip file-->Prometheus)

#cd prometheus-2.42.0.linux-amd64

#ls --->shown Prometheus files

Now start Prometheus

./prometheus --config.file=prometheus.yml &



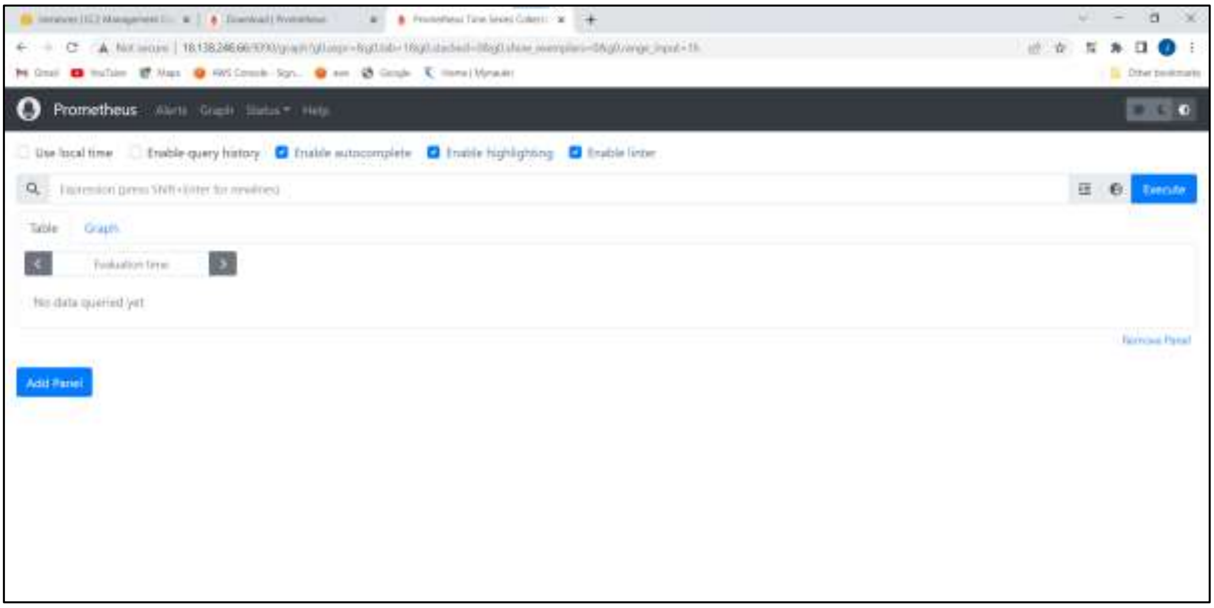
root@ip-172-31-18-66:~/prometheus-2.42.0.linux-amd64

```
prometheus-2.42.0.linux-amd64/prometheus.yml
prometheus-2.42.0.linux-amd64/LICENSE
prometheus-2.42.0.linux-amd64/promtool
prometheus-2.42.0.linux-amd64/prometheus
[root@ip-172-31-18-66 ~]# ls
prometheus-2.42.0.linux-amd64  prometheus-2.42.0.linux-amd64.tar.gz
[root@ip-172-31-18-66 ~]# rm -rf prometheus-2.42.0.linux-amd64.tar.gz
rm: cannot remove '-rf': No such file or directory
rm: remove regular file 'prometheus-2.42.0.linux-amd64.tar.gz'? y
[root@ip-172-31-18-66 ~]# ll
total 0
drwxr-xr-x 4 1001 123 132 Feb  1 08:27 prometheus-2.42.0.linux-amd64
[root@ip-172-31-18-66 ~]# cd prometheus-2.42.0.linux-amd64
[root@ip-172-31-18-66 prometheus-2.42.0.linux-amd64]# ls
console_libraries  consoles  LICENSE  NOTICE  prometheus  prometheus.yml  promtool
[root@ip-172-31-18-66 prometheus-2.42.0.linux-amd64]# ^C
[root@ip-172-31-18-66 prometheus-2.42.0.linux-amd64]# prometheus --config.file=prometheus.yml &
[1] 3427
[root@ip-172-31-18-66 prometheus-2.42.0.linux-amd64]# -bash: prometheus: command not found
^C
[1]+  Exit 127                prometheus --config.file=prometheus.yml
[root@ip-172-31-18-66 prometheus-2.42.0.linux-amd64]# ./prometheus --config.file=prometheus.yml &
[1] 3431
[root@ip-172-31-18-66 prometheus-2.42.0.linux-amd64]# ts=2023-02-04T09:49:56.929Z caller=main.go:512 level=info msg="No time or size retention was set so using the default time retention" d
uration=15d
ts=2023-02-04T09:49:56.929Z caller=main.go:556 level=info msg="Starting Prometheus Server" mode=server version="(version=2.42.0, branch=HEAD, revision=[illegible]
c8)"
ts=2023-02-04T09:49:56.929Z caller=main.go:561 level=info build_context="(go=go1.19.5, platform=linux/amd64, user=root@c67d48967507, date=20230201-07:53:32)"
ts=2023-02-04T09:49:56.929Z caller=main.go:562 level=info host_details="(Linux 5.10.162-141.675.amzn2.x86_64 #1 SMP Mon Jan 9 22:45:11 UTC 2023 x86_64 ip-172-31-18-66.ap-southeast-1.compute
.internal (none))"
ts=2023-02-04T09:49:56.929Z caller=main.go:563 level=info fd_limits="(soft=65535, hard=65535)"
ts=2023-02-04T09:49:56.929Z caller=main.go:564 level=info vm_limits="(soft=unlimited, hard=unlimited)"
ts=2023-02-04T09:49:56.932Z caller=web.go:561 level=info component=web msg="Start listening for connections" address=0.0.0.0:9090
ts=2023-02-04T09:49:56.933Z caller=main.go:993 level=info msg="Starting TSDB ..."
ts=2023-02-04T09:49:56.936Z caller=head.go:564 level=info component=tsdb msg="Replaying on-disk memory mappable chunks if any"
ts=2023-02-04T09:49:56.936Z caller=head.go:608 level=info component=tsdb msg="On-disk memory mappable chunks replay completed" duration=3.198µs
ts=2023-02-04T09:49:56.936Z caller=head.go:614 level=info component=tsdb msg="Replaying WAL, this may take a while"
ts=2023-02-04T09:49:56.937Z caller=tls_config.go:232 level=info component=web msg="Listening on" address=[::]:9090
ts=2023-02-04T09:49:56.937Z caller=tls_config.go:235 level=info component=web msg="TLS is disabled." http2=false address=[::]:9090
ts=2023-02-04T09:49:56.938Z caller=head.go:685 level=info component=tsdb msg="WAL segment loaded" segment=0 maxSegment=0
ts=2023-02-04T09:49:56.938Z caller=head.go:722 level=info component=tsdb msg="WAL replay completed" checkpoint_replay_duration=27.419µs wal_replay_duration=1.403715ms wbl_replay_duration=74
ns total_replay_duration=1.546333ms
ts=2023-02-04T09:49:56.939Z caller=main.go:1014 level=info fs_type=XFS_SUPER_MAGIC
ts=2023-02-04T09:49:56.939Z caller=main.go:1017 level=info msg="TSDB started"
ts=2023-02-04T09:49:56.939Z caller=main.go:1197 level=info msg="Loading configuration file" filename=prometheus.yml
ts=2023-02-04T09:49:56.943Z caller=main.go:1234 level=info msg="Completed loading of configuration file" filename=prometheus.yml totalDuration=4.347824ms db_storage=1.775µs remote_storage=1
.872µs web_handler=913ns query_engine=1.198µs scrape=3.9816ms scrape_sd=26.24µs notify=39.733µs notify_sd=34.349µs rules=2.517µs tracing=7.147µs
ts=2023-02-04T09:49:56.944Z caller=main.go:978 level=info msg="Server is ready to receive web requests."
ts=2023-02-04T09:49:56.944Z caller=manager.go:974 level=info component="rule manager" msg="Starting rule manager..."
```

Prometheus port number ---->9090

Now Prometheus server public ip:9090 --->put chrome --->Prometheus home page open

18.138.248.66:9090



□ Use local time □ Enable query history ☑ Enable autocomplete ☑ Enable highlighting ☑ Enable linter

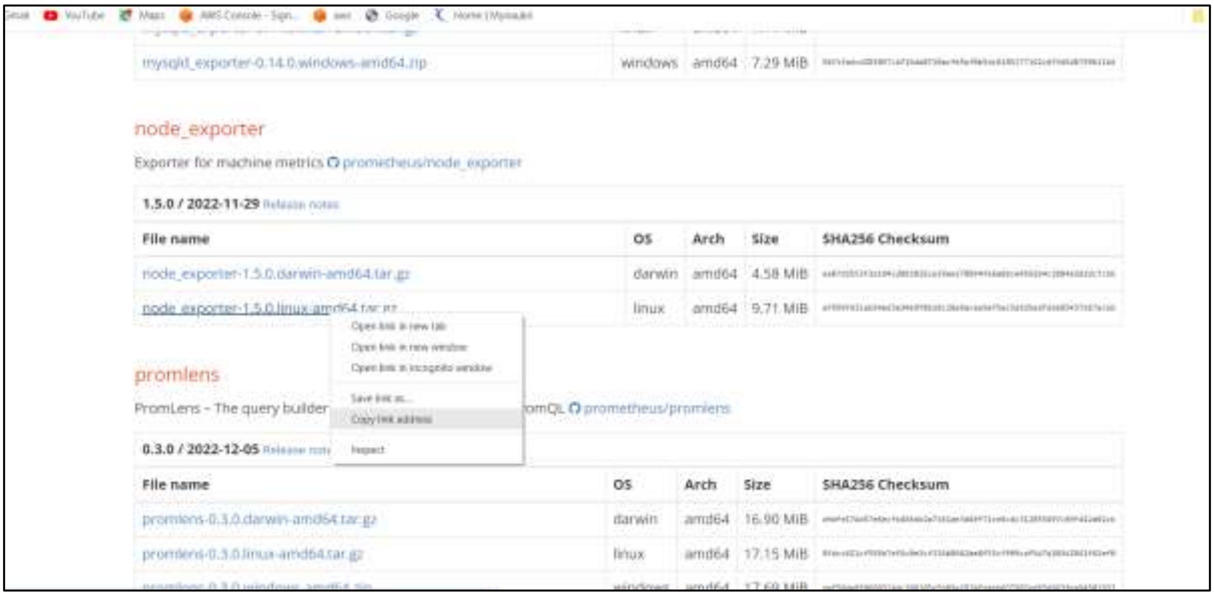
No data queried yet

Step3: Login node exporter server and give sudo –i

Wget (node exporter download link)

Note:how to Prometheus link copy ---->google--->Prometheus.io--->download click --->node exporter(linux link --->right click copy link address)

```
#wget  https://github.com/prometheus/node_exporter/releases/download/v1.5.0/node_exporter-1.5.0.linux-amd64.tar.gz
```



mysqld_exporter-0.14.0.windows-amd64.zip	windows	amd64	7.29 MiB	[illegible]

node_exporter

Exporter for machine metrics prometheus/node_exporter

1.5.0 / 2022-11-29 Release notes

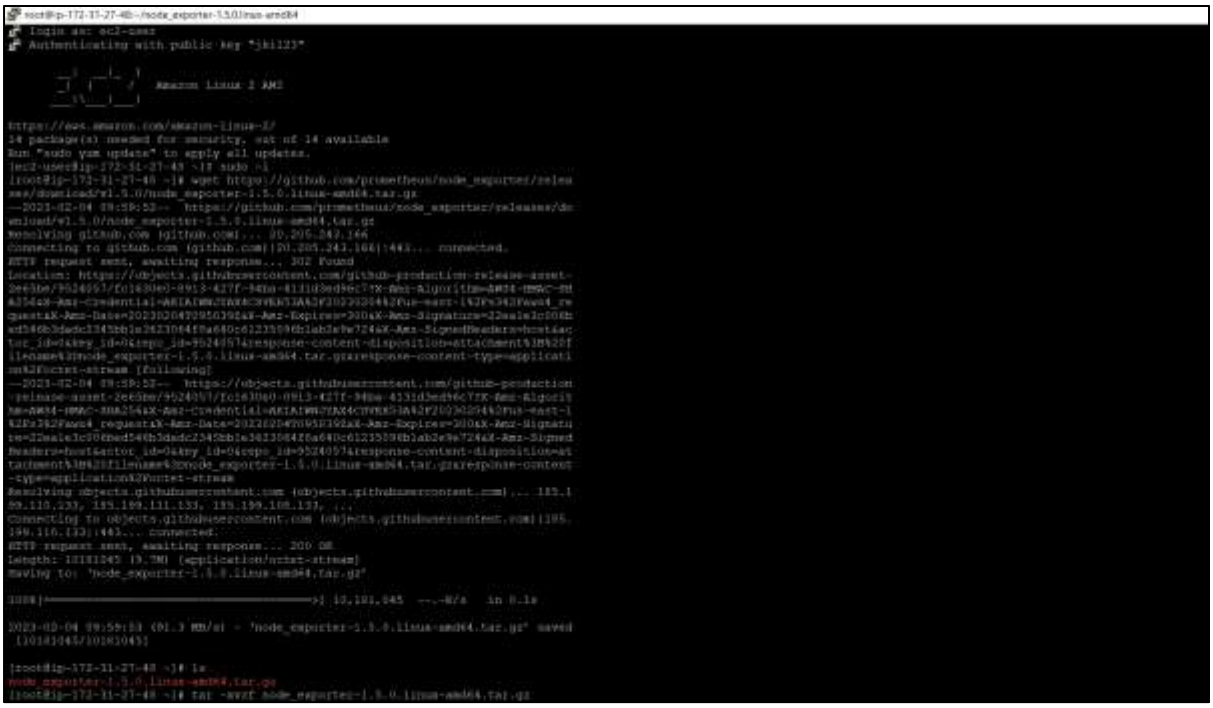
File name	OS	Arch	Size	SHA256 Checksum
node_exporter-1.5.0.darwin-amd64.tar.gz	darwin	amd64	4.58 MiB	[illegible]
node_exporter-1.5.0.linux-amd64.tar.gz	linux	amd64	9.71 MiB	[illegible]

promlens

PromLens - The query builder [illegible] omQL prometheus/promlens

0.3.0 / 2022-12-05 Release notes

File name	OS	Arch	Size	SHA256 Checksum
promlens-0.3.0.darwin-amd64.tar.gz	darwin	amd64	16.90 MiB	[illegible]
promlens-0.3.0.linux-amd64.tar.gz	linux	amd64	17.15 MiB	[illegible]
promlens-0.3.0.windows-amd64.zip	windows	amd64	17.69 MiB	[illegible]



```
root@ip-172-31-27-48:~/node_exporter-1.5.0.linux-amd64
login as: ec2-user
Authenticating with public key "jki123"

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
14 package(s) needed for security, out of 14 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-27-48 ~]$ sudo -i
[root@ip-172-31-27-48 ~]# wget https://github.com/prometheus/node_exporter/relea
ses/download/v1.5.0/node_exporter-1.5.0.linux-amd64.tar.gz
--2023-02-04 09:59:52--  https://github.com/prometheus/node_exporter/releases/do
wnload/v1.5.0/node_exporter-1.5.0.linux-amd64.tar.gz
Resolving github.com (github.com)... 20.205.243.166
Connecting to github.com (github.com)|20.205.243.166|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://objects.githubusercontent.com/github-production-release-asset-
[illegible]
--2023-02-04 09:59:52--  https://objects.githubusercontent.com/github-production
-release-asset-[illegible]
-type=application%2Foctet-stream
Resolving objects.githubusercontent.com (objects.githubusercontent.com)... 185.1
99.110.133, 185.199.111.133, 185.199.108.133, ...
Connecting to objects.githubusercontent.com (objects.githubusercontent.com)|185.
199.110.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 10181045 (9.7M) [application/octet-stream]
Saving to: 'node_exporter-1.5.0.linux-amd64.tar.gz'

100%[======================================>] 10,181,045  --.-K/s   in 0.1s

2023-02-04 09:59:53 (91.3 MB/s) - 'node_exporter-1.5.0.linux-amd64.tar.gz' saved
 [10181045/10181045]

[root@ip-172-31-27-48 ~]# ls
node_exporter-1.5.0.linux-amd64.tar.gz
[root@ip-172-31-27-48 ~]# tar -xvzf node_exporter-1.5.0.linux-amd64.tar.gz
```

Node exporter download in zip formate

Now unzip

#tar –xvzf node_exporter-1.5.0.linux-amd64.tar.gz

Now remove zip file

#rm –rf node_exporter-1.5.0.linux-amd64.tar.gz

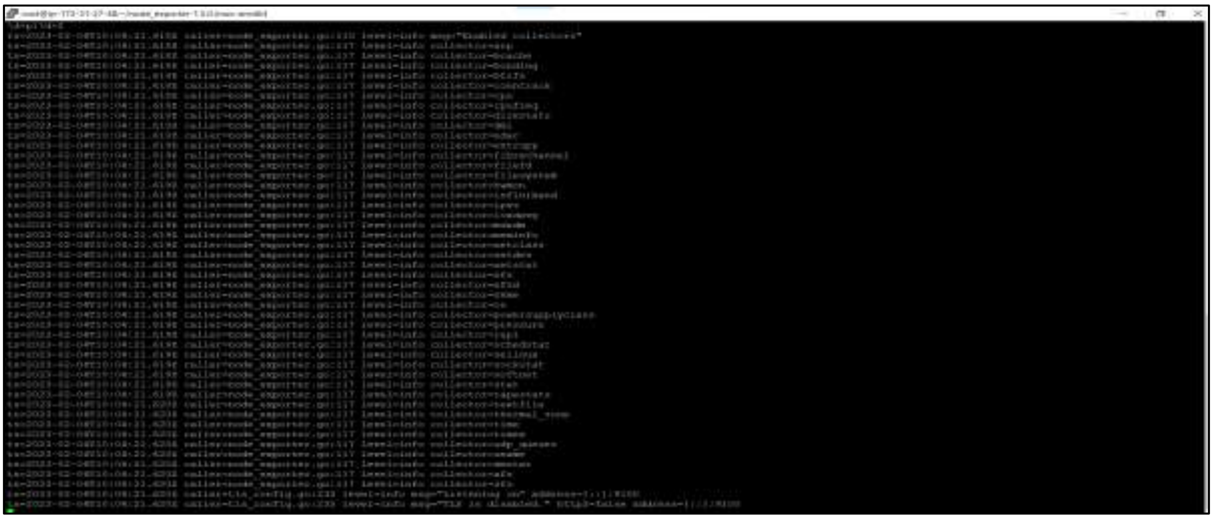
#cd (unzip file--> node_exporter)

#cd node_exporter-1.5.0.linux-amd64

#ls --->shown node_exporter files

Now start node_exporter

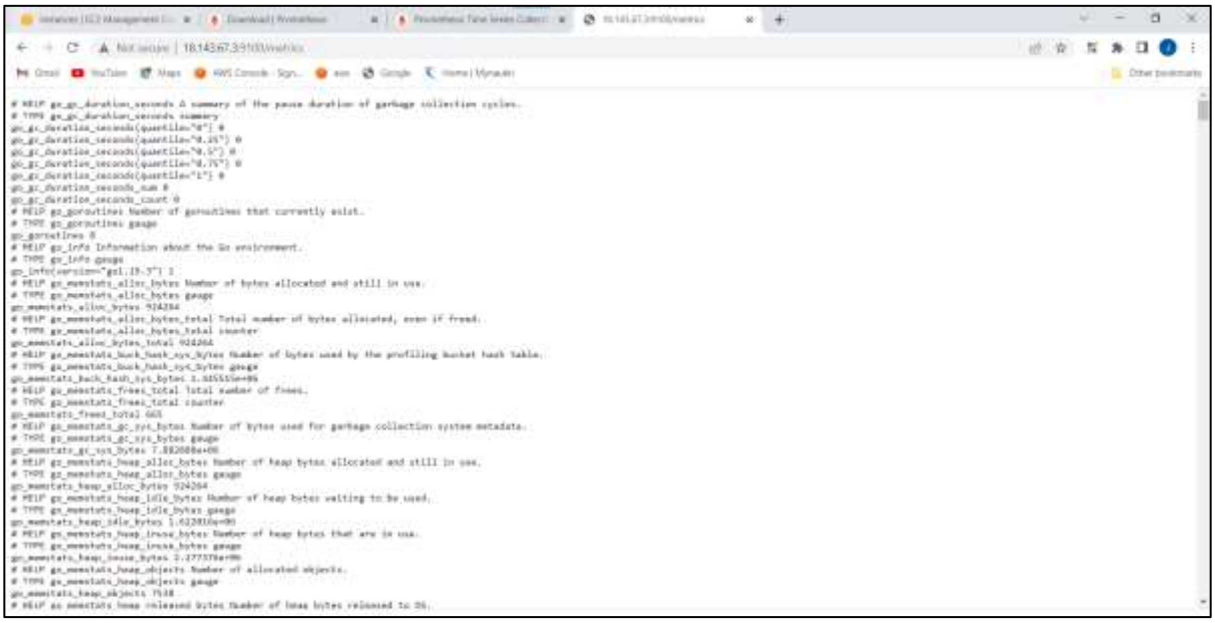
#./ node_exporter &



```
root@ip-172-31-27-48:~/node_exporter-1.5.0.linux-amd64
[illegible]
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:110 level=info msg="Enabled collectors"
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=arp
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=bcache
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=bonding
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=btrfs
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=conntrack
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=cpu
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=cpufreq
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=diskstats
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=dmi
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=edac
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=entropy
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=fibrechannel
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=filefd
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=filesystem
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=hwmon
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=infiniband
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=ipvs
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=loadavg
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=mdadm
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=meminfo
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=netclass
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=netdev
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=netstat
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=nfs
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=nfsd
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=nvme
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=os
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=powersupplyclass
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=pressure
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=rapl
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=schedstat
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=selinux
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=sockstat
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=softnet
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=stat
ts=2023-02-04T10:04:21.619Z caller=node_exporter.go:117 level=info collector=tapestats
ts=2023-02-04T10:04:21.620Z caller=node_exporter.go:117 level=info collector=textfile
ts=2023-02-04T10:04:21.620Z caller=node_exporter.go:117 level=info collector=thermal_zone
ts=2023-02-04T10:04:21.620Z caller=node_exporter.go:117 level=info collector=time
ts=2023-02-04T10:04:21.620Z caller=node_exporter.go:117 level=info collector=timex
ts=2023-02-04T10:04:21.620Z caller=node_exporter.go:117 level=info collector=udp_queues
ts=2023-02-04T10:04:21.620Z caller=node_exporter.go:117 level=info collector=uname
ts=2023-02-04T10:04:21.620Z caller=node_exporter.go:117 level=info collector=vmstat
ts=2023-02-04T10:04:21.620Z caller=node_exporter.go:117 level=info collector=xfs
ts=2023-02-04T10:04:21.620Z caller=node_exporter.go:117 level=info collector=zfs
ts=2023-02-04T10:04:21.620Z caller=tls_config.go:232 level=info msg="Listening on" address=[::]:9100
ts=2023-02-04T10:04:21.620Z caller=tls_config.go:235 level=info msg="TLS is disabled." http2=false address=[::]:9100
```

node_exporter port number ---->9100

Now node_exporter public ip:9100 --->put chrome --> node_exporter home page open



```
# 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 8
# HELP go_info Information about the Go environment.
# TYPE go_info gauge
go_info{version="go1.19.3"} 1
# HELP go_memstats_alloc_bytes Number of bytes allocated and still in use.
# TYPE go_memstats_alloc_bytes gauge
go_memstats_alloc_bytes 924264
# 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 924264
# 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 1.445555e+06
# HELP go_memstats_frees_total Total number of frees.
# TYPE go_memstats_frees_total counter
go_memstats_frees_total 665
# 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 7.882088e+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 924264
# 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 1.622016e+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 2.277376e+06
# HELP go_memstats_heap_objects Number of allocated objects.
# TYPE go_memstats_heap_objects gauge
go_memstats_heap_objects 7538
# HELP go_memstats_heap_released_bytes Number of heap bytes released to OS.
```

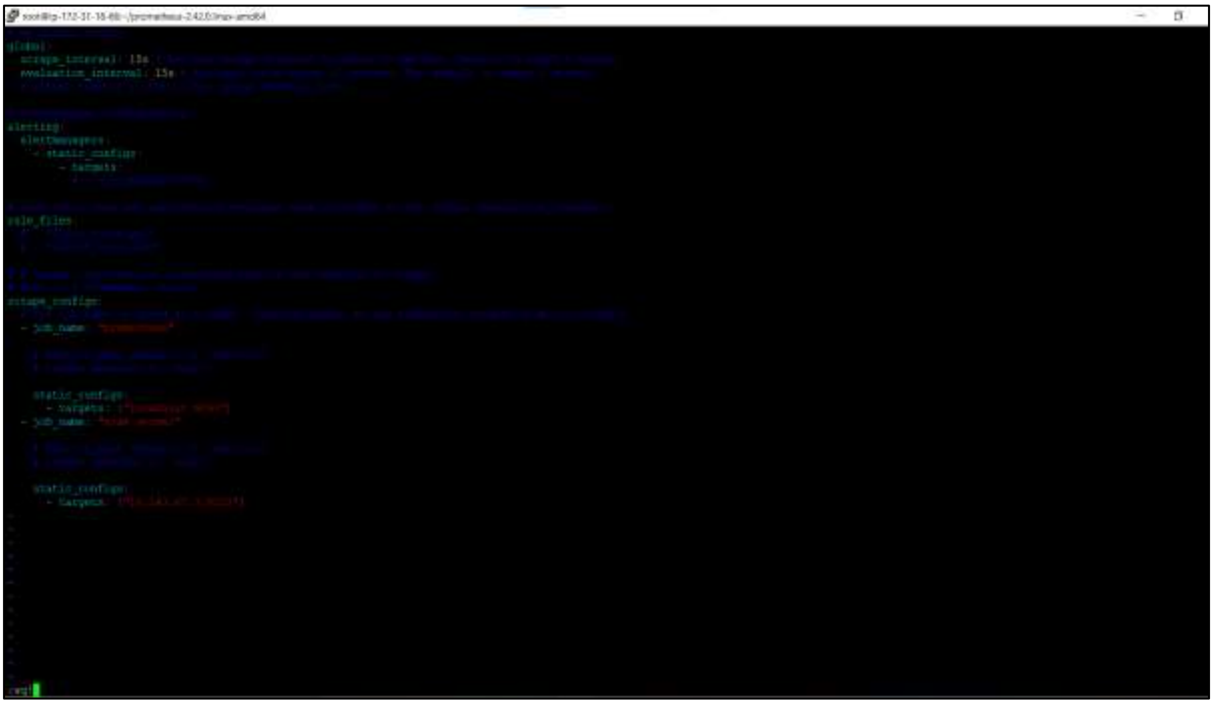
Step4:configure node exporter server into Prometheus server

Prometheus server --->#vi prometheus.yml

```
- job_name: "node server"

    # metrics_path defaults to '/metrics'

    # scheme defaults to 'http'.


    static_configs:

      - targets: ["18.143.67.3:9100"]
```

Name change

Node exporter server public ip:9100



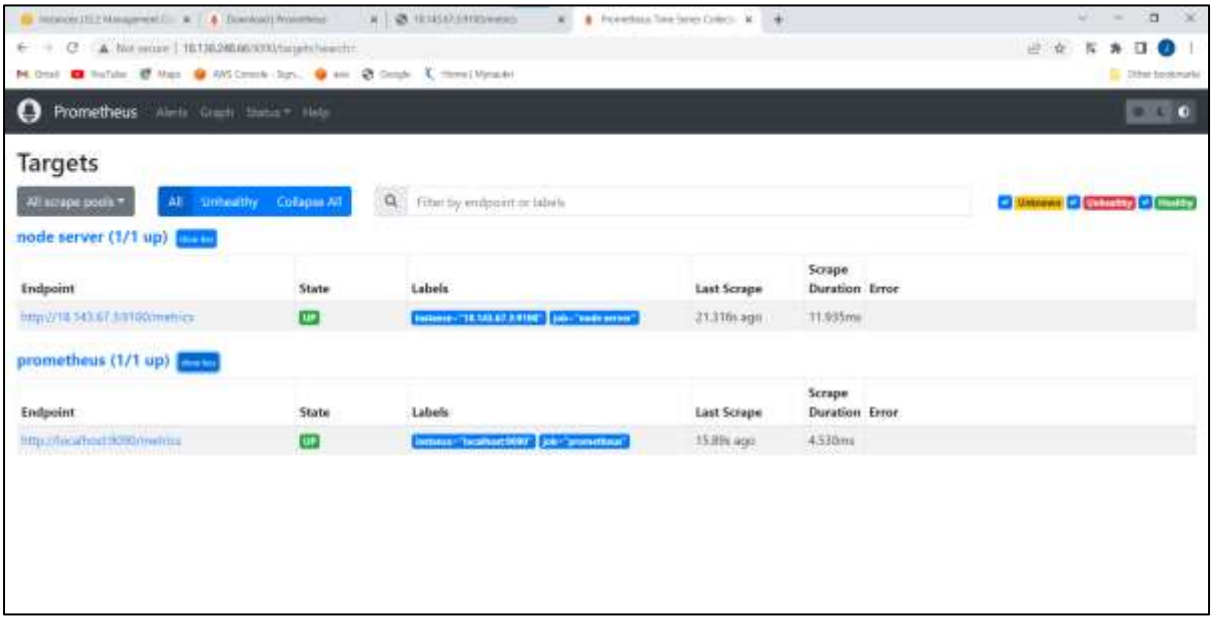
```
root@ip-172-31-18-88:~/prometheus-2.42.0.linux-amd64
# [illegible]
global:
  scrape_interval: 15s # [illegible]
  evaluation_interval: 15s # [illegible]
  # [illegible]

# [illegible]
alerting:
  alertmanagers:
    - static_configs:
        - targets:
          # [illegible]

# [illegible]
rule_files:
  # [illegible]
  # [illegible]

# [illegible]
# [illegible]
scrape_configs:
  # [illegible]
  - job_name: "prometheus"

    # [illegible]
    # [illegible]

    static_configs:
      - targets: ["localhost:9090"]
  - job_name: "node server"

    # [illegible]
    # [illegible]

    static_configs:
      - targets: ["18.143.67.3:9100"]
~
~
~
~
~
~
~
~
~
~
~
~
~
:wq!
```

Now check Prometheus process ip --->\# ps -ef | grep Prometheus

Kill Prometheus process--->kill -9 (process ip)-->#kill -9 3431

Now again start Prometheus ------>

# ./prometheus --config.file=prometheus.yml &



Targets

node server (1/1 up)

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://18.143.67.3:9100/metrics	UP	instance="18.143.67.3:9100" job="node server"	21.316s ago	11.935ms	

prometheus (1/1 up)

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://localhost:9090/metrics	UP	instance="localhost:9090" job="prometheus"	15.89s ago	4.530ms	

Prometheus home --->status---->target--->it will shown both Prometheus and node server status

GRAFANA

Grafana allows to visualize the data stored in Prometheus (and other sources).

Steps To Create Grafana

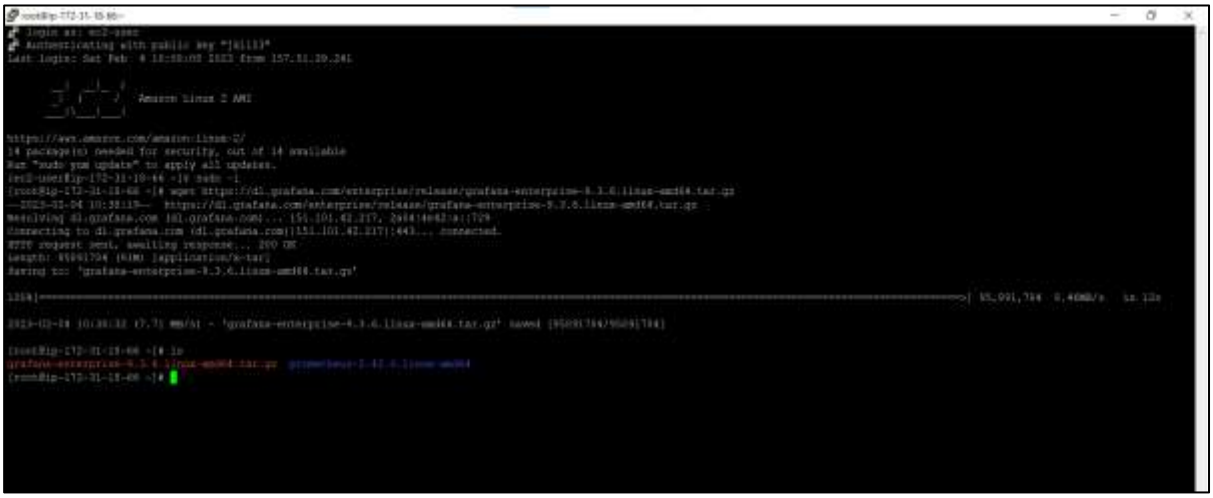
Step1:login Prometheus server

#cd .. ---->root

#wget grafana linux url

Note:how to grafana linux link copy ---->google--->grafana.com--->download grafana click ---> linux---> Standalone Linux Binaries(64 Bit)--->link copy

wget https://dl.grafana.com/enterprise/release/grafana-enterprise-9.3.6.linux-amd64.tar.gz



```
login as: ec2-user
Authenticating with public key "[illegible]"
Last login: Sat Feb  4 10:[illegible] 2023 from 157.51.20.241

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
14 package(s) needed for security, out of 14 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-18-66 ~]$ sudo -i
[root@ip-172-31-18-66 ~]# wget https://dl.grafana.com/enterprise/release/grafana-enterprise-9.3.6.linux-amd64.tar.gz
--2023-02-04 10:38:13--  https://dl.grafana.com/enterprise/release/grafana-enterprise-9.3.6.linux-amd64.tar.gz
Resolving dl.grafana.com (dl.grafana.com)... 151.101.42.217, 2a04:4e42:a::729
Connecting to dl.grafana.com (dl.grafana.com)|151.101.42.217|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 95091794 (91M) [application/x-tar]
Saving to: 'grafana-enterprise-9.3.6.linux-amd64.tar.gz'

100%[===================================================================================================>] 95,091,794  8.40MB/s    in 12s

2023-02-04 10:38:32 (7.71 MB/s) - 'grafana-enterprise-9.3.6.linux-amd64.tar.gz' saved [95091794/95091794]

[root@ip-172-31-18-66 ~]# ls
grafana-enterprise-9.3.6.linux-amd64.tar.gz  prometheus-2.42.0.linux-amd64
[root@ip-172-31-18-66 ~]#
```

grafana download in zip formate

Now unzip

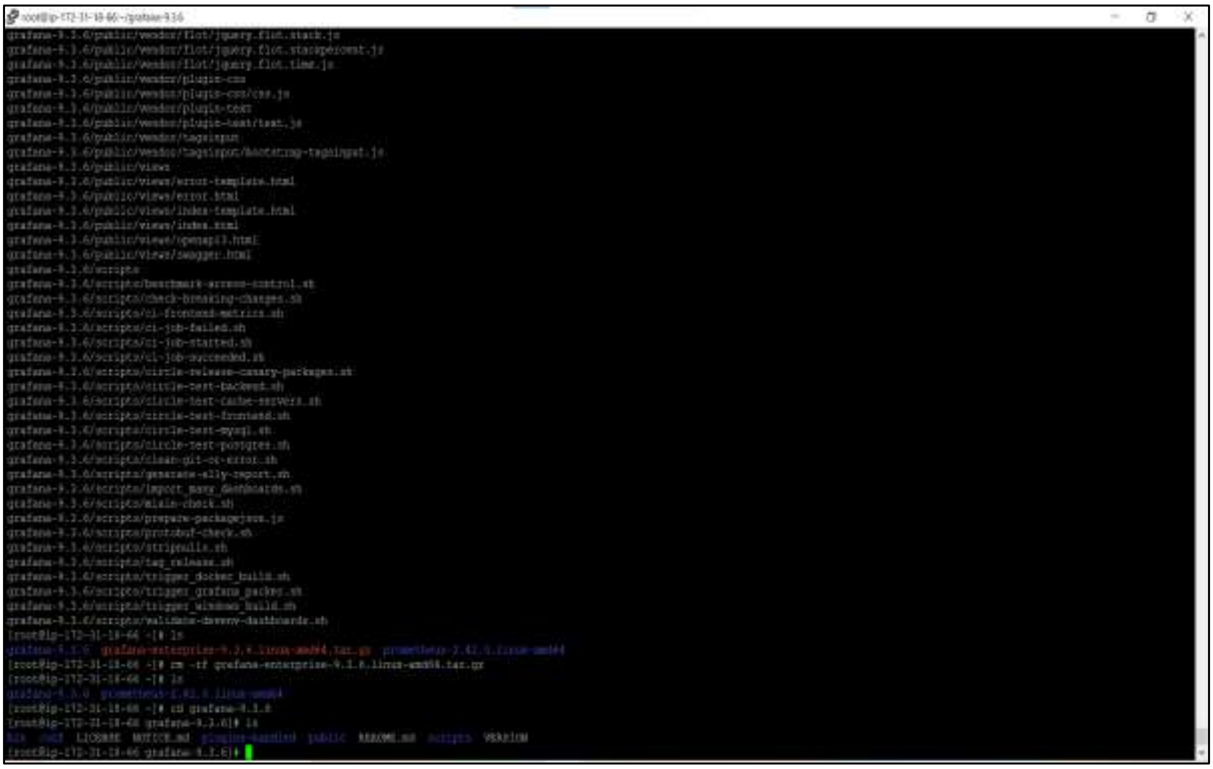
#tar –xvzf grafana-enterprise-9.3.6.linux-amd64.tar.gz

Now remove zip file

#rm –rf grafana-enterprise-9.3.6.linux-amd64.tar.gz

#cd (unzip file)--># cd grafana-9.3.6

#ls --->bin



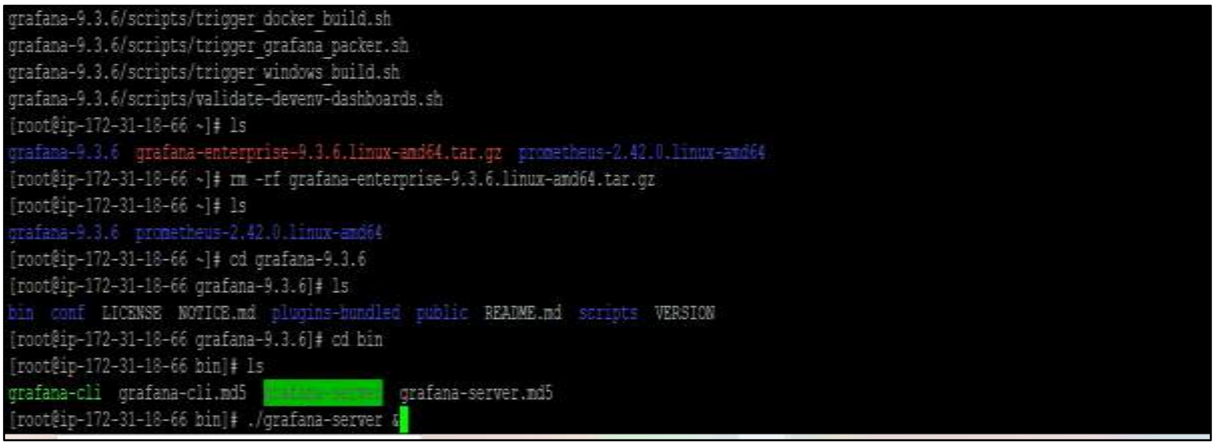
root@ip-172-31-18-66:~/grafana-9.3.6

```
grafana-9.3.6/public/vendor/flot/jquery.flot.stack.js
grafana-9.3.6/public/vendor/flot/jquery.flot.stackpercent.js
grafana-9.3.6/public/vendor/flot/jquery.flot.time.js
grafana-9.3.6/public/vendor/plugin-css
grafana-9.3.6/public/vendor/plugin-css/css.js
grafana-9.3.6/public/vendor/plugin-text
grafana-9.3.6/public/vendor/plugin-text/text.js
grafana-9.3.6/public/vendor/tagsinput
grafana-9.3.6/public/vendor/tagsinput/bootstrap-tagsinput.js
grafana-9.3.6/public/views
grafana-9.3.6/public/views/error-template.html
grafana-9.3.6/public/views/error.html
grafana-9.3.6/public/views/index-template.html
grafana-9.3.6/public/views/index.html
grafana-9.3.6/public/views/openapi3.html
grafana-9.3.6/public/views/swagger.html
grafana-9.3.6/scripts
grafana-9.3.6/scripts/benchmark-access-control.sh
grafana-9.3.6/scripts/check-breaking-changes.sh
grafana-9.3.6/scripts/ci-frontend-metrics.sh
grafana-9.3.6/scripts/ci-job-failed.sh
grafana-9.3.6/scripts/ci-job-started.sh
grafana-9.3.6/scripts/ci-job-succeeded.sh
grafana-9.3.6/scripts/circle-release-canary-packages.sh
grafana-9.3.6/scripts/circle-test-backend.sh
grafana-9.3.6/scripts/circle-test-cache-servers.sh
grafana-9.3.6/scripts/circle-test-frontend.sh
grafana-9.3.6/scripts/circle-test-mysql.sh
grafana-9.3.6/scripts/circle-test-postgres.sh
grafana-9.3.6/scripts/clean-git-or-error.sh
grafana-9.3.6/scripts/generate-a11y-report.sh
grafana-9.3.6/scripts/import_many_dashboards.sh
grafana-9.3.6/scripts/mixin-check.sh
grafana-9.3.6/scripts/prepare-packagejson.js
grafana-9.3.6/scripts/protobuf-check.sh
grafana-9.3.6/scripts/stripnulls.sh
grafana-9.3.6/scripts/tag_release.sh
grafana-9.3.6/scripts/trigger_docker_build.sh
grafana-9.3.6/scripts/trigger_grafana_packer.sh
grafana-9.3.6/scripts/trigger_windows_build.sh
grafana-9.3.6/scripts/validate-devenv-dashboards.sh
[root@ip-172-31-18-66 ~]# ls
grafana-9.3.6  grafana-enterprise-9.3.6.linux-amd64.tar.gz  prometheus-2.42.0.linux-amd64
[root@ip-172-31-18-66 ~]# rm -rf grafana-enterprise-9.3.6.linux-amd64.tar.gz
[root@ip-172-31-18-66 ~]# ls
grafana-9.3.6  prometheus-2.42.0.linux-amd64
[root@ip-172-31-18-66 ~]# cd grafana-9.3.6
[root@ip-172-31-18-66 grafana-9.3.6]# ls
bin  conf  LICENSE  NOTICE.md  plugins-bundled  public  README.md  scripts  VERSION
[root@ip-172-31-18-66 grafana-9.3.6]#
```

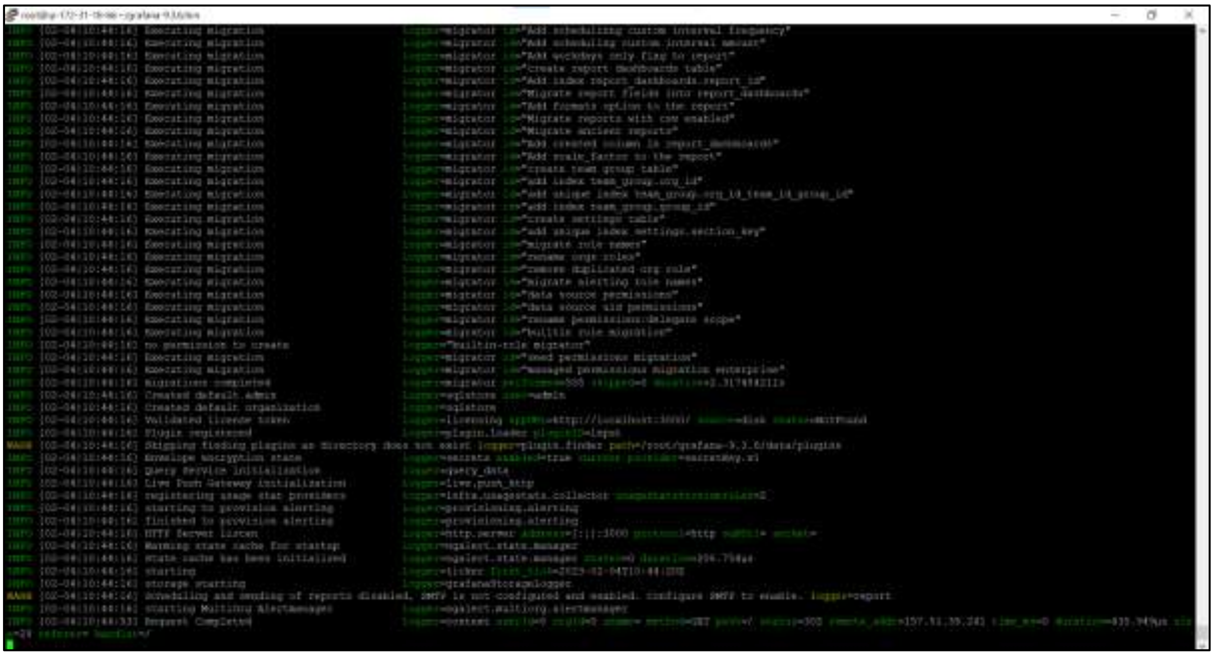
#cd bin

#ls ---> grafana-server

Start grafana ---->#./ grafana-server &



```
grafana-9.3.6/scripts/trigger_docker_build.sh
grafana-9.3.6/scripts/trigger_grafana_packer.sh
grafana-9.3.6/scripts/trigger_windows_build.sh
grafana-9.3.6/scripts/validate-devenv-dashboards.sh
[root@ip-172-31-18-66 ~]# ls
grafana-9.3.6  grafana-enterprise-9.3.6.linux-amd64.tar.gz  prometheus-2.42.0.linux-amd64
[root@ip-172-31-18-66 ~]# rm -rf grafana-enterprise-9.3.6.linux-amd64.tar.gz
[root@ip-172-31-18-66 ~]# ls
grafana-9.3.6  prometheus-2.42.0.linux-amd64
[root@ip-172-31-18-66 ~]# cd grafana-9.3.6
[root@ip-172-31-18-66 grafana-9.3.6]# ls
bin  conf  LICENSE  NOTICE.md  plugins-bundled  public  README.md  scripts  VERSION
[root@ip-172-31-18-66 grafana-9.3.6]# cd bin
[root@ip-172-31-18-66 bin]# ls
grafana-cli  grafana-cli.md5  grafana-server  grafana-server.md5
[root@ip-172-31-18-66 bin]# ./grafana-server &
```

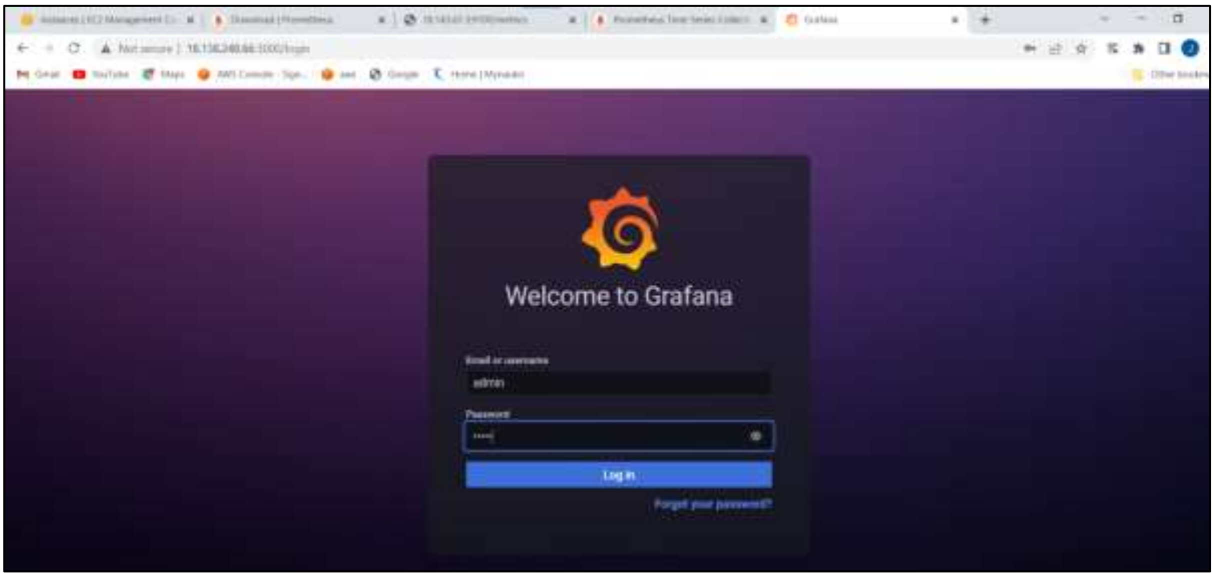


```
root@ip-172-31-19-66:~/grafana-9.3.6/bin
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="Add scheduling custom interval frequency"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="Add scheduling custom interval amount"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="Add weekdays only flag to report"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="create report dashboards table"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="Add index report_dashboards.report_id"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="Migrate report fields into report_dashboards"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="Add formats option to the report"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="Migrate reports with csv enabled"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="Migrate ancient reports"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="Add created column in report_dashboards"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="Add scale_factor to the report"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="create team group table"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="add index team_group.org_id"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="add unique index team_group.org_id_team_id_group_id"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="add index team_group.group_id"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="create settings table"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="add unique index settings.section_key"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="migrate role names"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="rename orgs roles"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="remove duplicated org role"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="migrate alerting role names"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="data source permissions"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="data source uid permissions"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="rename permissions:delegate scope"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="builtin role migration"
INFO [02-04|10:44:16] no permission to create             logger="builtin-role migrator"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="seed permissions migration"
INFO [02-04|10:44:16] Executing migration                 logger=migrator id="managed permissions migration enterprise"
INFO [02-04|10:44:16] migrations completed                logger=migrator performed=355 skipped=0 duration=2.317484211s
INFO [02-04|10:44:16] Created default admin               logger=sqlstore user=admin
INFO [02-04|10:44:16] Created default organization        logger=sqlstore
INFO [02-04|10:44:16] Validated license token             logger=licensing appURL=http://localhost:3000/ source=disk status=NotFound
INFO [02-04|10:44:16] Plugin registered                   logger=plugin.loader pluginID=input
WARN [02-04|10:44:16] Skipping finding plugins as directory does not exist logger=plugin.finder path=/root/grafana-9.3.6/data/plugins
INFO [02-04|10:44:16] Envelope encryption state           logger=secrets enabled=true current provider=secretKey.v1
INFO [02-04|10:44:16] Query Service initialization        logger=query_data
INFO [02-04|10:44:16] Live Push Gateway initialization    logger=live.push_http
INFO [02-04|10:44:16] registering usage stat providers    logger=infra.usagestats.collector usageStatsProvidersLen=2
INFO [02-04|10:44:16] starting to provision alerting      logger=provisioning.alerting
INFO [02-04|10:44:16] finished to provision alerting      logger=provisioning.alerting
INFO [02-04|10:44:16] HTTP Server Listen                  logger=http.server address=[::]:3000 protocol=http subUrl= socket=
INFO [02-04|10:44:16] Warming state cache for startup     logger=ngalert.state.manager
INFO [02-04|10:44:16] State cache has been initialized    logger=ngalert.state.manager states=0 duration=206.754µs
INFO [02-04|10:44:16] starting                            logger=ticker first_tick=2023-02-04T10:44:20Z
INFO [02-04|10:44:16] storage starting                    logger=grafanaStorageLogger
WARN [02-04|10:44:16] Scheduling and sending of reports disabled, SMTP is not configured and enabled. Configure SMTP to enable. logger=report
INFO [02-04|10:44:16] starting MultiOrg Alertmanager      logger=ngalert.multiorg.alertmanager
INFO [02-04|10:44:33] Request Completed                   logger=context userId=0 orgId=0 uname= method=GET path=/ status=302 remote_addr=157.51.35.241 time_ms=0 duration=835.949µs siz
e=29 referer= handler=/
```

Grafana port number ---->9100

Now prometheus public ip:3000 --->put chrome --> grafana home page open--->login(username & password ---->admin)

Ask to set new password set --->admin



16.136.248.66:3000/login

Welcome to Grafana

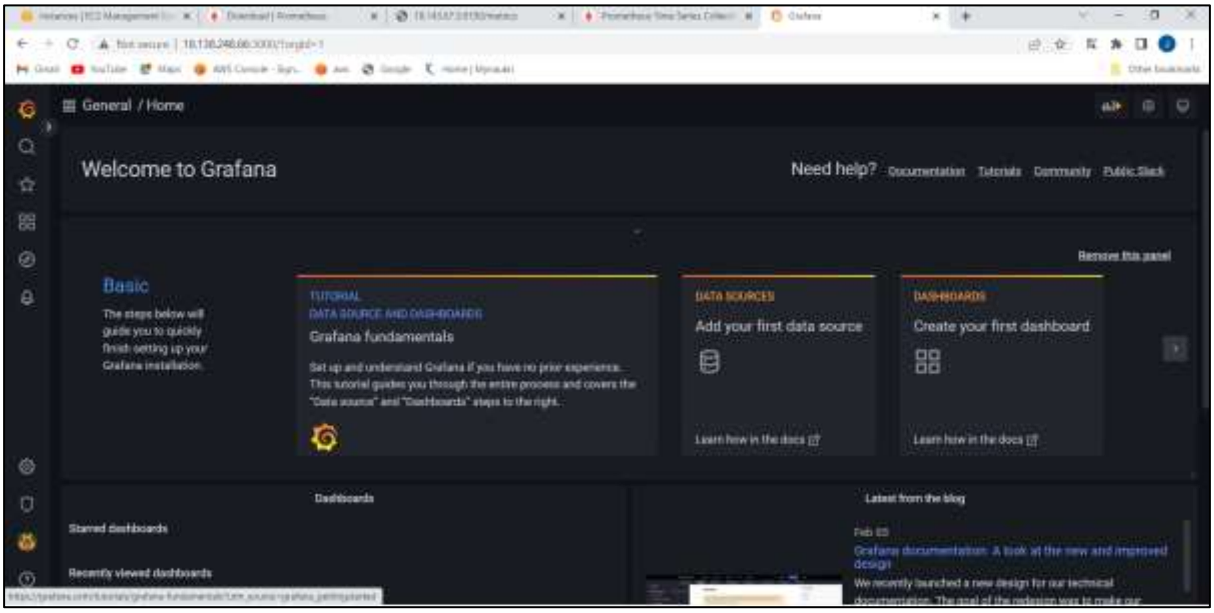
Email or username

admin

Password

Log in

Forgot your password?



Not secure | 18.138.248.66:3000/?orgId=1

General / Home

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 docs

Dashboards

Starred dashboards

Recently viewed dashboards

Latest from the blog

Grafana documentation: A look at the new and improved design

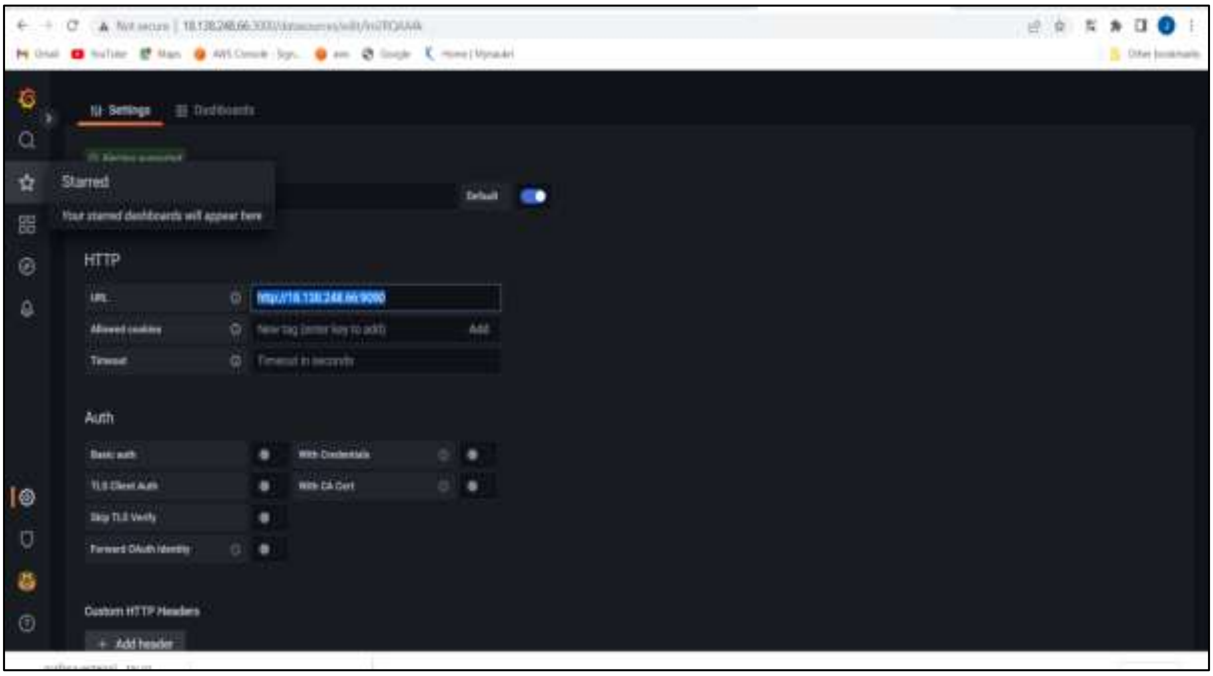
We recently launched a new design for our technical documentation. The goal of the redesign was to make our

Now configure Prometheus server

Setting --->data source--->add data source--->Prometheus---->

url---> http://18.138.248.66:9090 prometheus server public ip

save & test



Not secure | 18.138.248.66:3000/datasources/edit/

Settings

Dashboards

Starred

Your starred dashboards will appear here

Default

HTTP

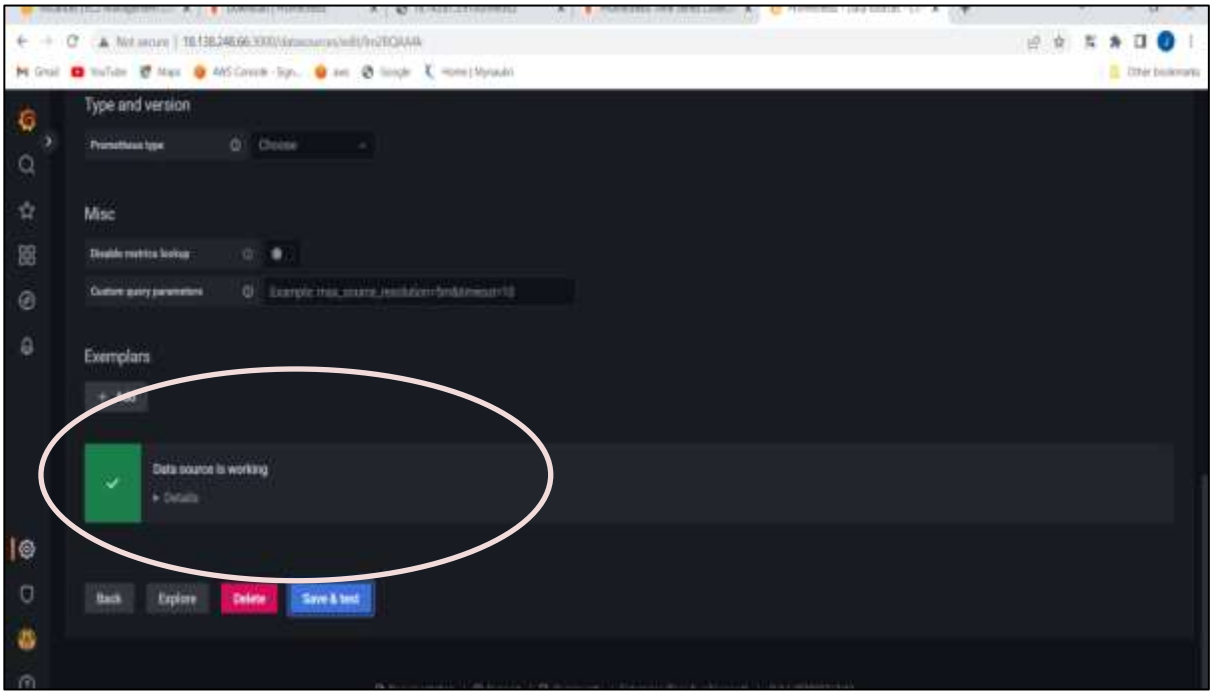
URL	http://18.138.248.66:9090
Allowed cookies	New tag (enter key to add) Add
Timeout	Timeout in seconds

Auth

Basic auth	●	With Credentials	●
TLS Client Auth	●	With CA Cert	●
Skip TLS Verify	●		
Forward OAuth Identity	●		

Custom HTTP Headers

+ Add header



Not secure | 18.138.248.66:3000/datasources/edit/lm2RQAA4k

Type and version

Prometheus type: Choose

Misc

Disable metrics lookup

Custom query parameters: Example: max_source_resolution=5m&timeout=10

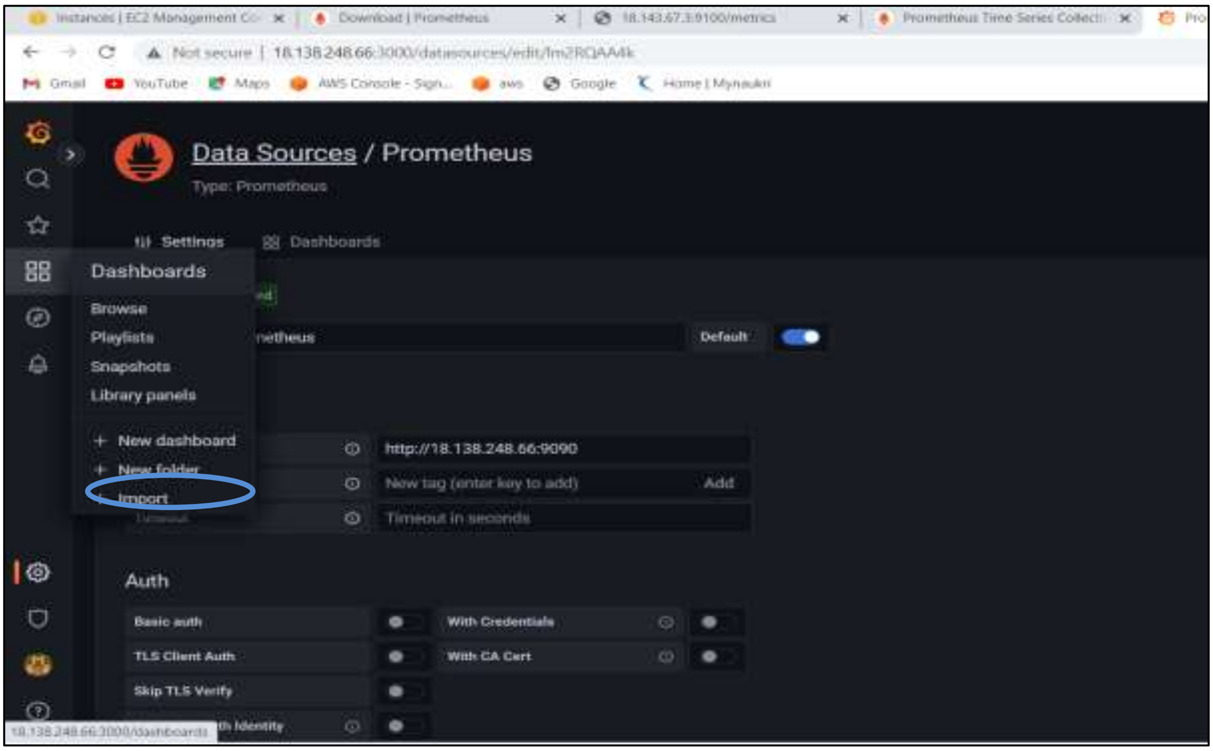
Exemplars

Data source is working

Data source is working..

Now configure dashboard

dashboard ---->import--->1860(graph id)--->load--->Prometheus select---->import



Not secure | 18.138.248.66:3000/datasources/edit/lm2RQAA4k

Data Sources / Prometheus

Type: Prometheus

Default ●

http://18.138.248.66:9090

New tag (enter key to add) Add

Timeout in seconds

Auth

Basic auth ●

With Credentials ●

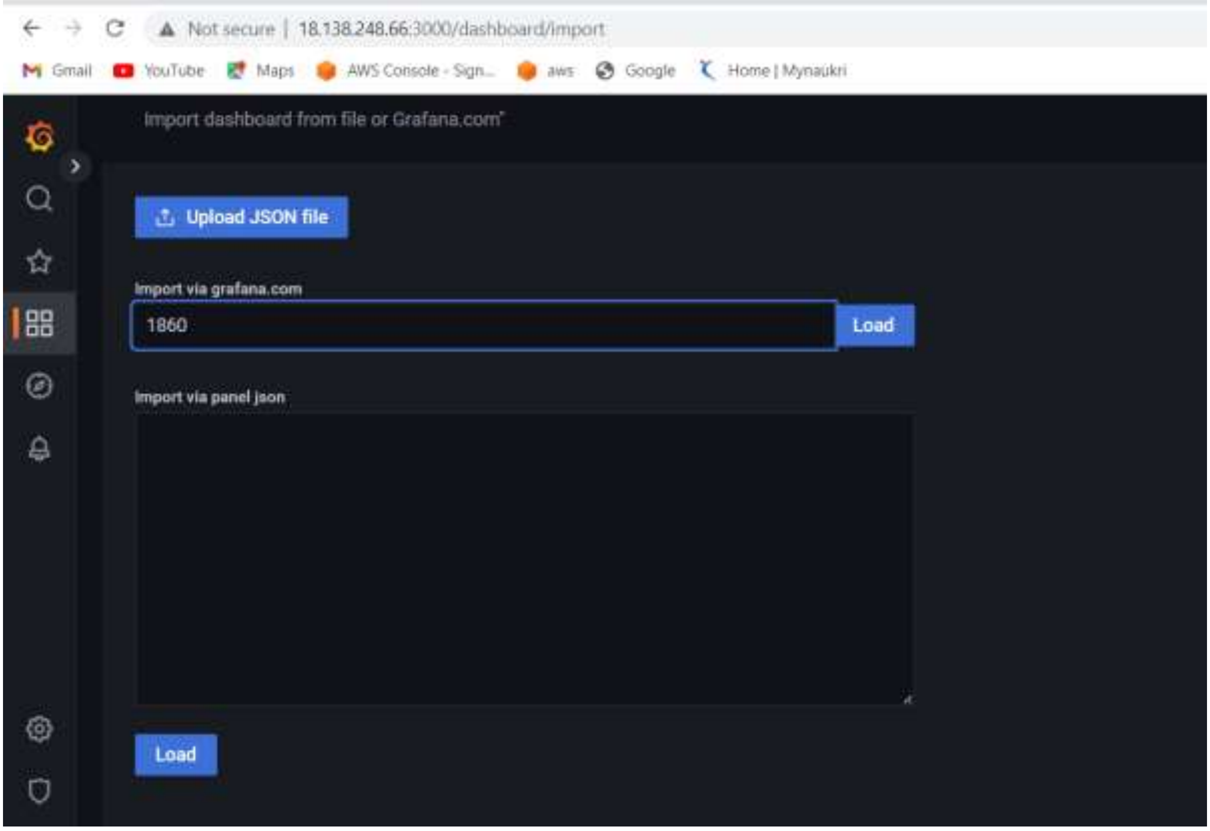
TLS Client Auth ●

With CA Cert ●

Skip TLS Verify ●

18.138.248.66:3000/dashboards

1860(graph id)



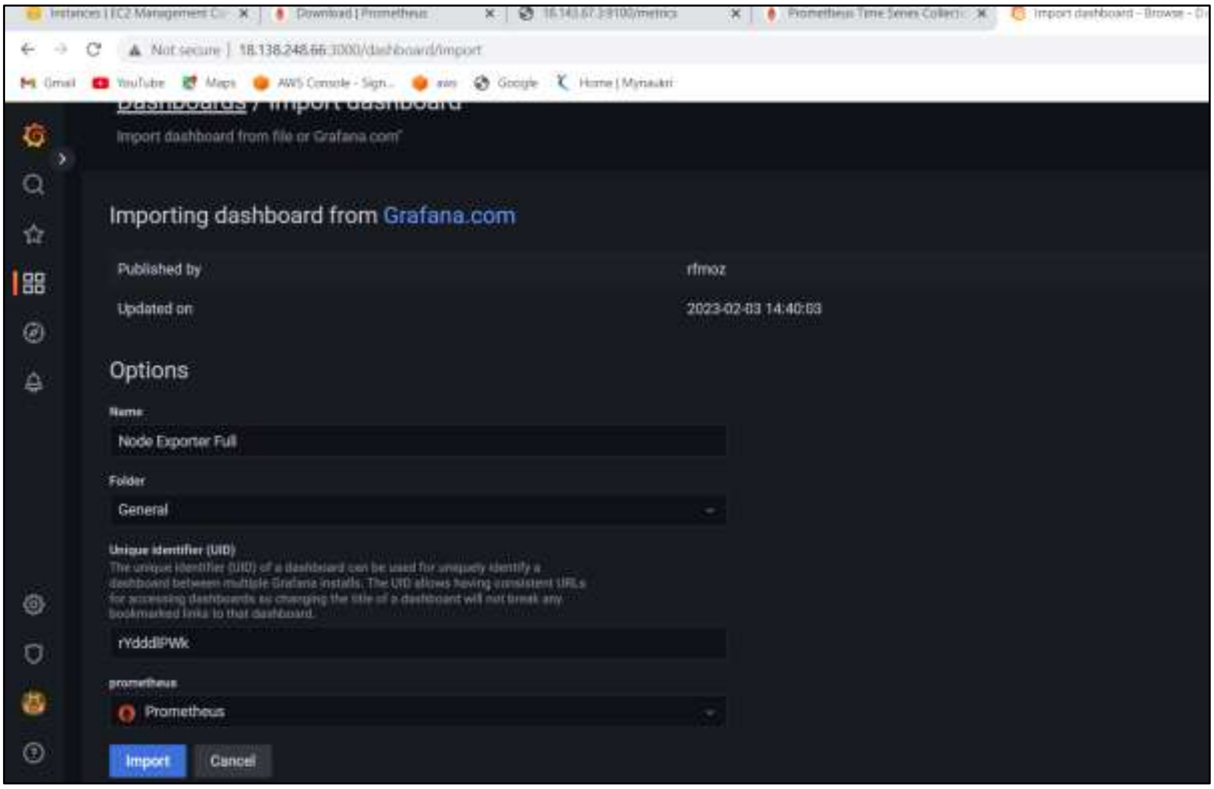
Not secure | 18.138.248.66:3000/dashboard/import

Import dashboard from file or Grafana.com"

Import via grafana.com: 1860

Import via panel json

Select premetheus and import



Not secure | 18.138.248.66:3000/dashboard/import

Dashboards / Import dashboard

Import dashboard from file or Grafana.com"

Importing dashboard from Grafana.com

Published by: rfmoz

Updated on: 2023-02-03 14:40:03

Options

Name: Node Exporter Full

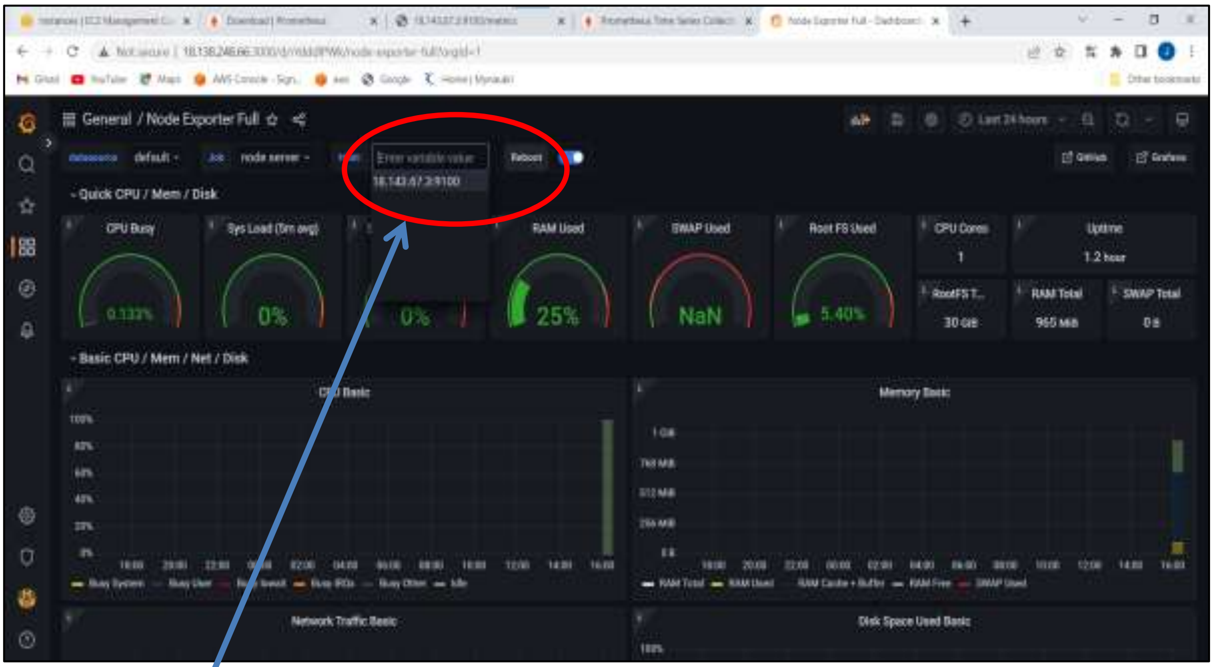
Folder: General

Unique identifier (UID)

The unique identifier (UID) of a dashboard can be used for uniquely identify a dashboard between multiple Grafana installs. The UID allows having consistent URLs for accessing dashboards so changing the title of a dashboard will not break any bookmarked links to that dashboard.

rYdddlPWk

prometheus: Prometheus



Which server is moniter that ip shown