

How to use Prometheus monitor for dummies.

Past 1 : how to start monitor service

```
[root@promemaster prom-monitor]# docker service ls
```

ID	NAME	MODE	REPLICAS	IMAGE	PORTS
prom-alertmanager	prom_alertmanager	replicated	1/3	prom/alertmanager:v0.15.3	*:9093->9093/tcp
prom-blackbox-exporter	prom_blackbox_exporter	global	1/1	prom/blackbox-exporter:v0.12.0	*:9115->9115/tcp
prom-cadvisor	prom_cadvisor	global	3/3	google/cadvisor:v0.32.0	*:8080->8080/tcp
prom-grafana	prom_grafana	replicated	1/3	grafana/grafana:5.4.2	*:3000->3000/tcp
prom-node-exporter	prom_node-exporter	global	3/3	prom/node-exporter:v0.17.0	*:9100->9100/tcp
prom-prometheus	prom_prometheus	replicated	1/3	prom/prometheus:v2.5.0	*:9090->9090/tcp
prom-remote-storage-adapter	prom_remotestorageadapter	replicated	1/1	gavind/prometheus-remote-storage-adapter:1.0	*:9201->9201/tcp
prom-unsee	prom_unsee	replicated	1/1	cloudflare/unsee:v0.8.0	*:9094->8080/tcp

```
[root@promemaster prom-monitor]#
```

1.1 All service to use on monitor system

Note:

Prome-cluster(swarm cluster) : promemaster(192.168.x.x) , promeworker1(192.168.x.x) , promeworker2(192.168.x.x)

Step 1 : goto prome-monitor folder

```
[root@promemaster prom-monitor]#  
login as: root  
root@192.168.252.61's password:  
Last login: Tue Jan 22 09:31:16 2019 from 10.24.10.141  
[root@promemaster ~]# cd prom-monitor/  
[root@promemaster prom-monitor]# ll  
total 28  
drwxr-xr-x. 4 root root 30 Dec 28 09:36 alertmanager  
-rw-r--r--. 1 root root 3151 Jan 21 11:04 back-swarm.yaml  
drwxr-xr-x. 2 root root 26 Dec 28 09:36 blackbox-exporter  
-rw-r--r--. 1 root root 2800 Nov 27 16:26 compose.yml  
-rw-r--r--. 1 root root 2605 Nov 23 15:26 docker-compose.yml  
-rw-r--r--. 1 root root 57 Nov 12 18:13 Dockerfile  
-rw-r--r--. 1 root root 892 Dec 28 11:32 font-swarm.yml  
drwxr-xr-x. 4 root root 58 Dec 28 09:36 grafana  
-rw-r--r--. 1 root root 1209 Nov 28 16:51 LICENSE  
drwxr-xr-x. 3 root root 77 Jan 11 12:04 prometheus  
-rw-r--r--. 1 root root 12 Nov 12 18:13 README.md  
drwxr-xr-x. 2 root root 22 Dec 28 09:36 snmp-exporter  
drwxr-xr-x. 3 root root 83 Dec 28 09:36 webhook  
[root@promemaster prom-monitor]#
```

1.1.1 list file to start service

Step 2 : check running container

docker ps -a

- Kill all container is running or dead with # docker rm -f [container ID]

```
[root@promemaster prom-monitor]# docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
7764e2596c9e	grafana/grafana:5.4.2	"/run.sh"	4 hours ago	Up 4 hours (healthy)	3000/tcp	promie_grafa
na.1.k5ofwasv6cu349fsqy6y732k	prom/alertmanager:v0.15.3	"/bin/alertmanager -..."	4 hours ago	Up 4 hours	9093/tcp	promie_alert
54dlff097ael	manager.3.4yxh6qphbz74vtwe93q2duq78					
ada848b8c675	prom/node-exporter:v0.17.0	"/bin/node_exporter ..."	4 hours ago	Up 4 hours	9100/tcp	promie_node-
exporter.5amg6xyn2dr9jg8yg9ixluak.myat39wk3vs8lea2rrvg4eqck						
752cc65671b3	prom/prometheus:v2.5.0	"/bin/prometheus --c..."	4 hours ago	Up 4 hours	9090/tcp	promie_prome
theus.3.1fnt4e0kuzynq687wly3pwk3						
c4dd3070a62	prom/blackbox-exporter:v0.12.0	"/bin/blackbox_expor..."	4 hours ago	Up 4 hours	9115/tcp	promie_black
box_exporter.5amg6xyn2dr9jg8yg9ixluak.itk6zimdp8tu7sgtprx2iaep						
8db4dbe29a31	google/cadvisor:v0.32.0	"/usr/bin/cadvisor -..."	4 hours ago	Up 4 hours	8080/tcp	promie_cadvi
sor.5amg6xyn2dr9jg8yg9ixluak.gf6qphe0nbbb0swldt6rzbvov						
adddd8c0b6e7	py-webhook	"python ./webhook.py"	2 weeks ago	Up 2 weeks	0.0.0.0:5000->5000/tcp	webhook

```
[root@promemaster prom-monitor]#
```

docker service ls

- Kill all container is running or dead with # docker service rm [container ID]
- Or we can down all container in cluster with # docker stack rm [swarm cluster name]

```
[root@promemaster prom-monitor]# docker service ls
```

ID	NAME	MODE	REPLICAS	IMAGE	PORTS
ya13iqoo40b2	promie_alertmanager	replicated	1/3	prom/alertmanager:v0.15.3	*:9093->9093/tcp
kt0esok7dmk7	promie_blackbox_exporter	global	1/1	prom/blackbox-exporter:v0.12.0	*:9115->9115/tcp
wlmxfaf7ud916	promie_cadvisor	global	3/3	google/cadvisor:v0.32.0	*:8080->8080/tcp
a892bup6zq1x	promie_grafana	replicated	1/3	grafana/grafana:5.4.2	*:3000->3000/tcp
m28ewhjnt3e	promie_node-exporter	global	3/3	prom/node-exporter:v0.17.0	*:9100->9100/tcp
yy0wnktuuzmw	promie_prometheus	replicated	1/3	prom/prometheus:v2.5.0	*:9090->9090/tcp
ijjinkgjsbyt	promie_remotestorageadapter	replicated	1/1	gavind/prometheus-remote-storage-adapter:1.0	*:9201->9201/tcp
y6hviyhqlfgm	promie_unsee	replicated	1/1	cloudflare/unsee:v0.8.0	*:9094->8080/tcp

```
[root@promemaster prom-monitor]#
```

Step 3 : start service with swarm mode

docker stack deploy -c back-swarm.yaml promie

Note :

stack = use swarm mode

-c = compose file path (.yaml or .yml)

promie = swarm cluster name

```
[root@promemaster prom-monitor]# docker stack deploy -c back-swarm.yaml promie
Creating network promie_default
Creating service promie_prometheus
Creating service promie_node-exporter
Creating service promie_alertmanager
Creating service promie_cadvisor
Creating service promie_blackbox_exporter
Creating service promie_remotestorageadapter
[root@promemaster prom-monitor]#
```

docker stack deploy -c font-swarm.yml promie

```
[root@promemaster prom-monitor]# docker stack deploy -c font-swarm.yml prome
Creating service prome_unsee
Creating service prome_grafana
[root@promemaster prom-monitor]#
```

docker stack ls

```
[root@promemaster prom-monitor]# docker stack ls
NAME                SERVICES  ORCHESTRATOR
prome                8         Swarm
[root@promemaster prom-monitor]#
```

list all swarm cluster node

docker service ls

```
[root@promemaster prom-monitor]# docker service ls
ID                NAME                MODE                REPLICAS            IMAGE                PORTS
lznq5dy4apoy     prome_alertmanager  replicated          1/3                 prom/alertmanager:v0.15.3  *:9093->9093/tcp
fxuogisofoze     prome_blackbox_exporter  global             1/1                 prom/blackbox-exporter:v0.12.0  *:9115->9115/tcp
dtfzb30t6lkp     prome_cadvisor        global              3/3                 google/cadvisor:v0.32.0      *:8080->8080/tcp
fupzhzj3ujvb     prome_grafana         replicated          1/3                 grafana/grafana:5.4.2        *:3000->3000/tcp
uun04lq5oapd     prome_node_exporter    global              3/3                 prom/node-exporter:v0.17.0    *:9100->9100/tcp
ozkpvtz02f15     prome_prometheus       replicated          1/3                 prom/prometheus:v2.5.0       *:9090->9090/tcp
q59ki9k9nhh8     prome_remotestorageadapter  replicated          1/1                 gavind/prometheus-remote-storage-adapter:1.0  *:9201->9201/tcp
e256amvcy47s     prome_unsee           replicated          1/1                 cloudflare/unsee:v0.8.0      *:9094->8080/tcp
[root@promemaster prom-monitor]#
```

check all container replicas is not 0

Step 3 : check web service

- Prometheus : http://{your_IP}:9090/

Prometheus Alerts Graph Status Help

☒ Enable query history

Warning! Detected 152.12 seconds time difference between your browser and the server. Prometheus relies on accurate time and time drift might cause unexpected query results.

Expression (press Shift+Enter for newlines)

Execute - insert metric at cursor -

Graph Console

Element	Value
no data	

Remove Graph

Add Graph

- Alertmanager : http://{your_IP}:9090/

Alertmanager Alerts Silences Status [New Silence](#)

Filter Group Receiver: All ☐ Silenced ☐ Inhibited

+

Custom matcher, e.g. `env="production"`

alertname="InstanceDown" +

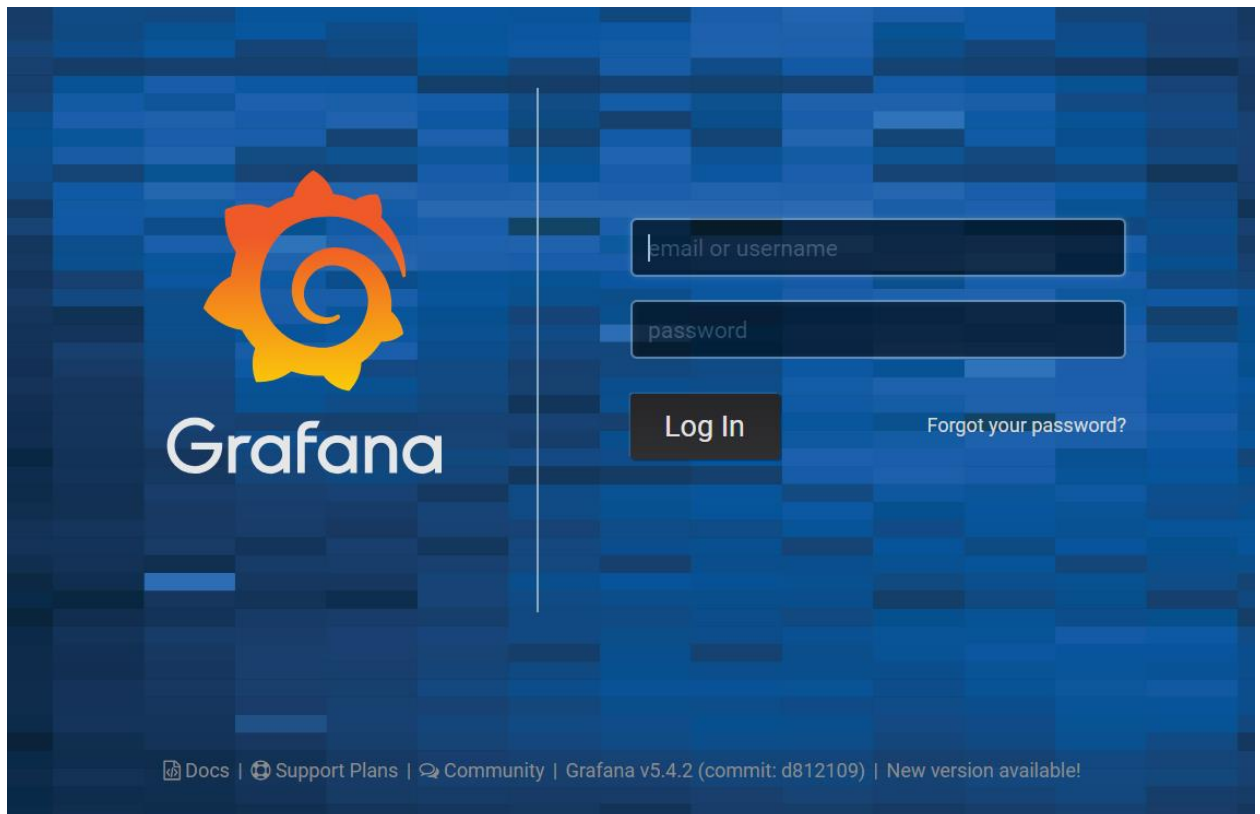
07:28:08, 2019-01-22 [+ Info](#) [Source](#) [Silence](#)

severity="critical" + projects="Goodchoize" + monitor="ptvn-prom" + job="wmi-gz" + instance="192.168.2.14:9182" +

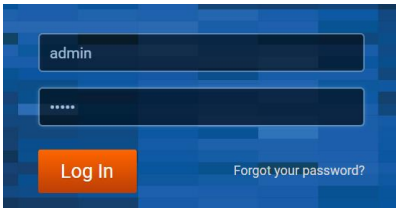
group="gz-node-windows" +

alertname="NodeLowAvailableMemory" +

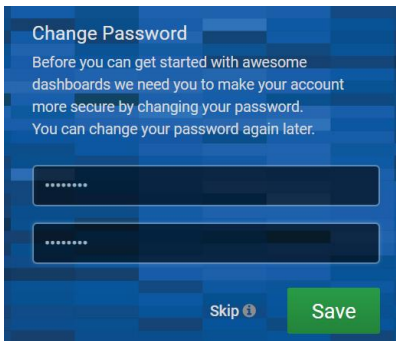
- Grafana frontend : http://{your_IP}:9090/



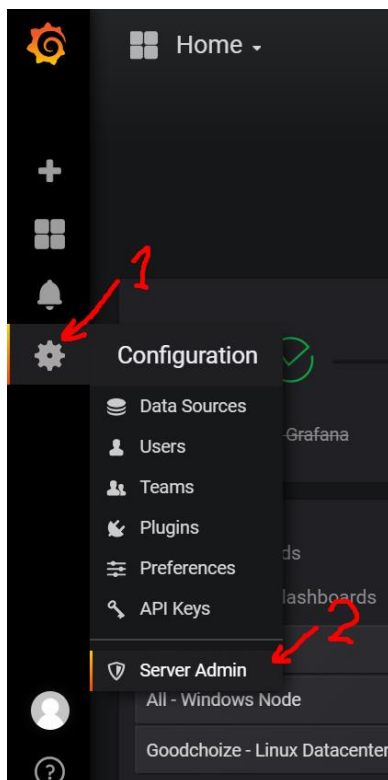
○ Login user : admin , password : admin

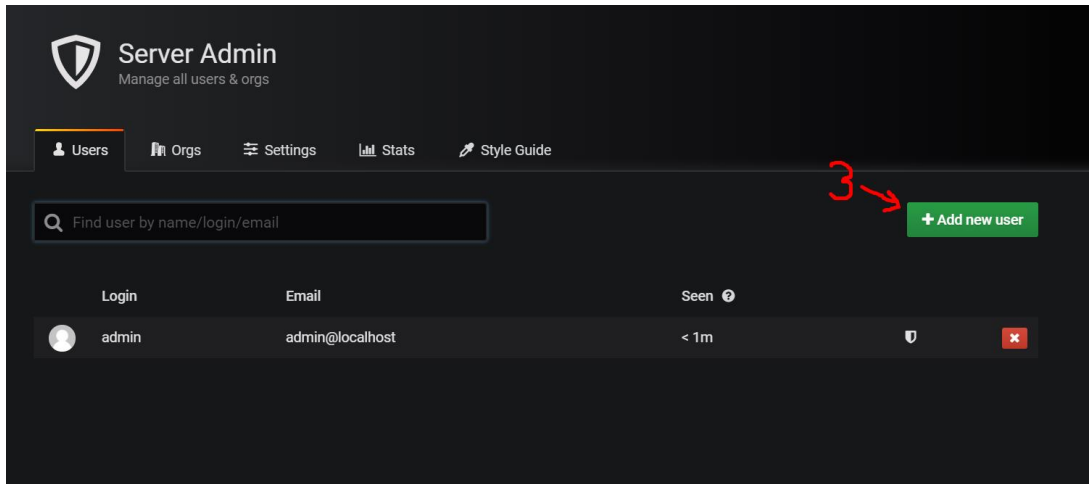


- Change admin password



- Add other user



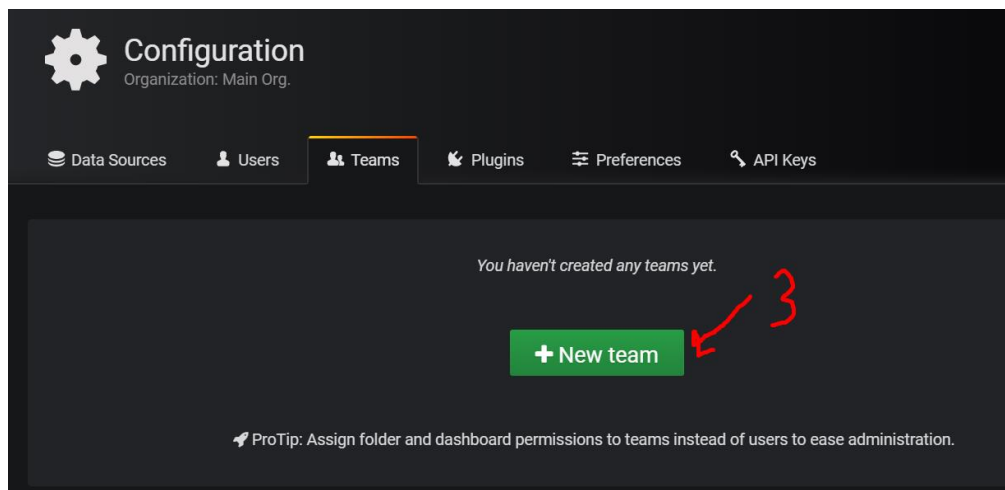
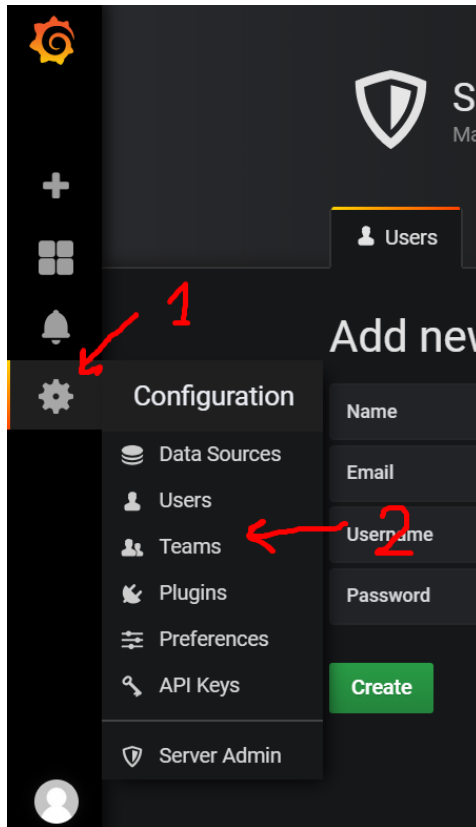


The screenshot shows the 'Add new user' form. Red arrows indicate the following fields and actions:

- 4: Points to the 'Name' field containing 'Oneplanet-UAT'.
- 5: Points to the 'Username' field containing 'op-uat'.
- 6: Points to the 'Password' field containing '.....'.
- 7: Points to the 'Create' button.

The form also includes an 'Email' field which is currently empty.


- Create team and add user



New Team


Name

Email


 Create

4

5

 Teams / OP-UAT
Manage members & settings


Members Settings


 + Add a member

6

Name	Email
------	-------

Add Team Member

 admin - admin@localhost


 op-uat

7

8

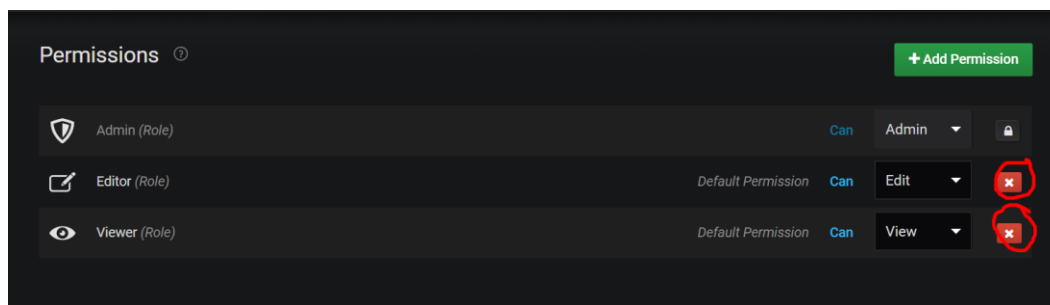
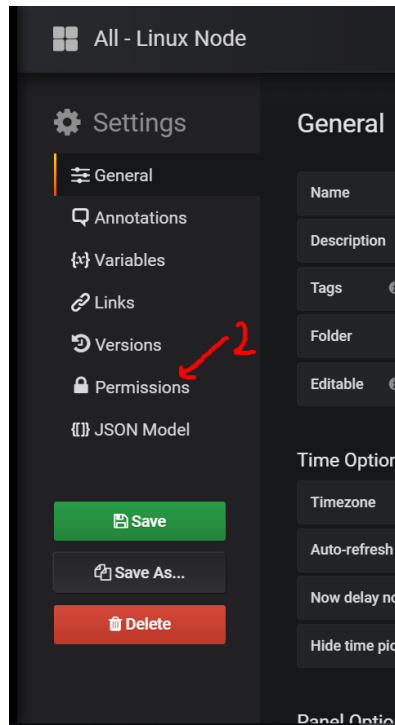
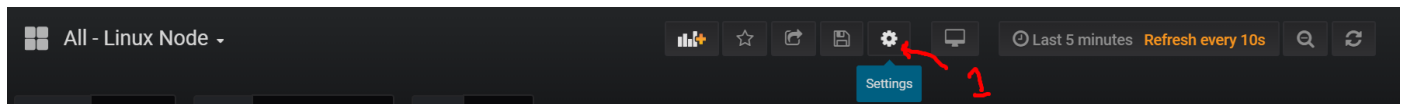
Email

Add Team Member

 Add to team

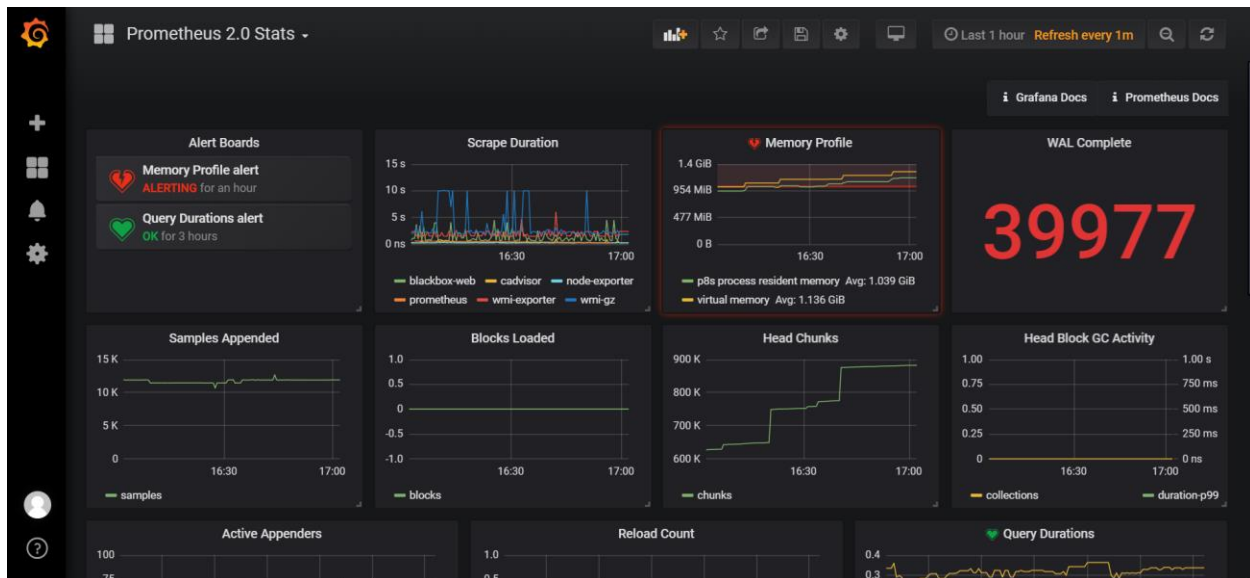
9

- Change permission on dashboards



click X button to delete permission roles

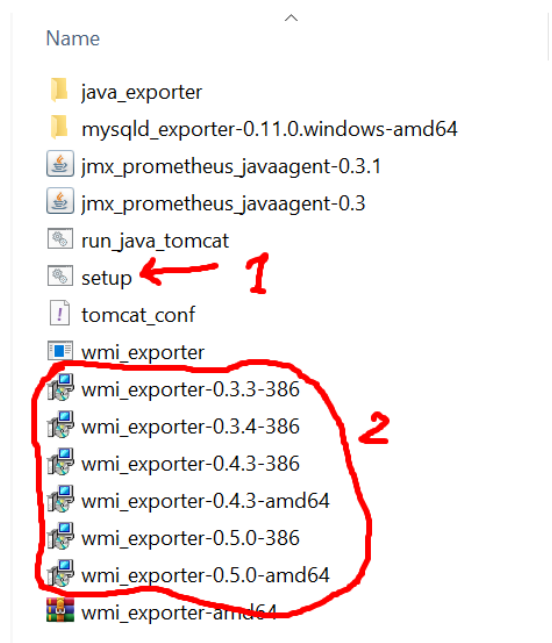
- Open dashboards to monitor



Past 2 : install agent

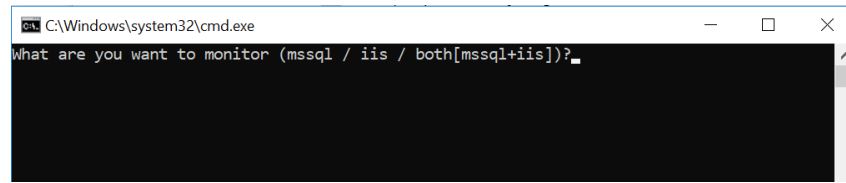
\$ in windows host

Step 1 : copy script and one of msi files to same folder in host



Step 2 : run setup.bat to start script

Insert key for allow tools : mssql(for database server) , iis(for web server) , both(for not sure about server or both service)



\$ in linux host

In case login **with** root user

Step 1 : copy files from follow list to target host

- setup.sh
- cleanup.sh
- one of folder [./node_exporter-*/]

Name	Date modified	Type	Size
demo_apache	11/21/2018 3:12 PM	File folder	
docker	12/27/2018 1:59 PM	File folder	
influxdb_exporter-0.1.0.linux-amd64	1/11/2019 4:38 PM	File folder	
node_exporter-0.16.0.linux-amd64	12/21/2018 9:58 AM	File folder	
node_exporter-0.17.0-rc.0.linux-386	11/16/2018 2:33 PM	File folder	
node_exporter-0.17.0-rc.0.linux-amd64	11/16/2018 2:34 PM	File folder	
tomcat_exporter	1/7/2019 11:37 AM	File folder	
cleanup	1/11/2019 4:48 PM	SH Source File	1
cleanup_nonroot	12/21/2018 10:26 AM	SH Source File	1
node-influx_cleanup	1/11/2019 4:47 PM	SH Source File	1
node-influx_setup	1/11/2019 4:48 PM	SH Source File	3
setup	1/11/2019 4:48 PM	SH Source File	2
setup_nonroot	12/21/2018 10:25 AM	SH Source File	2

In case login **without** root user

Step 1 : copy files from follow list to target host

- setup_nonroot.sh
- cleanup_nonroot.sh
- one of folder [./node_exporter-*/]

Name	Date modified	Type	Size
demo_apache	11/21/2018 3:12 PM	File folder	
docker	12/27/2018 1:59 PM	File folder	
influxdb_exporter-0.1.0.linux-amd64	1/11/2019 4:38 PM	File folder	
node_exporter-0.16.0.linux-amd64	12/21/2018 9:58 AM	File folder	
node_exporter-0.17.0-rc.0.linux-386	11/16/2018 2:33 PM	File folder	
node_exporter-0.17.0-rc.0.linux-amd64	11/16/2018 2:34 PM	File folder	
tomcat_exporter	1/7/2019 11:37 AM	File folder	
cleanup	1/11/2019 4:48 PM	SH Source File	4
cleanup_nonroot	12/21/2018 10:26 AM	SH Source File	1
node-influx_cleanup	1/11/2019 4:47 PM	SH Source File	1
node-influx_setup	1/11/2019 4:48 PM	SH Source File	3
setup	1/11/2019 4:48 PM	SH Source File	2
setup_nonroot	12/21/2018 10:25 AM	SH Source File	2

Step 2 : run shell script [setup.sh]

chmod +x *

```
[root@promeworker01 app]# ll
total 8
-rw-r--r--. 1 root root 456 Jan 11 16:48 cleanup.sh
drwxr-xr-x. 2 root root 121 Nov 16 15:39 docker
drwxr-xr-x. 2 root root 56 Jan 23 09:39 node_exporter-0.17.0-rc.0.linux-amd64
-rw-r--r--. 1 root root 1457 Jan 11 16:48 setup.sh
[root@promeworker01 app]# chmod +x *
[root@promeworker01 app]# ll
total 8
-rwxr-xr-x. 1 root root 456 Jan 11 16:48 cleanup.sh
drwxr-xr-x. 2 root root 121 Nov 16 15:39 docker
drwxr-xr-x. 2 root root 56 Jan 23 09:39 node_exporter-0.17.0-rc.0.linux-amd64
-rwxr-xr-x. 1 root root 1457 Jan 11 16:48 setup.sh
[root@promeworker01 app]#
```

change permission file to all user can execute.

./setup.sh

./setup_nonroot.sh

```

[root@promeworker01 app]# ./setup.sh
[+] Initial setup : in create prome-user and copy script.
[+] Initial setup : success..
[+] Change permission : for any file script.
[+] Change permission : success..
[+] Create service file
#### Node_exporter for OS metrics ####

[Unit]
Description=Node Exporter
Wants=network-online.target
After=network-online.target

[Service]
User=prometheus
ExecStart=/etc/node_exporter/node_exporter
Restart=on-failure

[Install]
WantedBy=multi-user.target
[+] Warm reload configuration file on service
Created symlink from /etc/systemd/system/multi-user.target.wants/node_exporter.s
ervice to /etc/systemd/system/node_exporter.service.
● node_exporter.service - Node Exporter
   Loaded: loaded (/etc/systemd/system/node_exporter.service; enabled; vendor pr
   eset: disabled)
   Active: activating (auto-restart) (Result: exit-code) since Wed 2019-01-23 09
:48:15 +07; 157ms ago
   Main PID: 21200 (code=exited, status=1/FAILURE)

Jan 23 09:48:15 promeworker01 systemd[1]: Unit node_exporter.service entered....
Jan 23 09:48:15 promeworker01 systemd[1]: node_exporter.service failed.
Hint: Some lines were ellipsized, use -l to show in full.

```

script run success.

Step 3 : check service is running

systemctl status [-l] node_exporter

Note : -l = long term log display

```

[root@dvptvnwb02 ~]# systemctl status node_exporter
● node_exporter.service - Node Exporter
   Loaded: loaded (/etc/systemd/system/node_exporter.service; enabled; vendor pr
   eset: disabled)
   Active: active (running) since Tue 2019-01-22 15:04:24 +07; 18h ago
   Main PID: 936 (node_exporter)
   CGroup: /system.slice/node_exporter.service
           └─936 /etc/node_exporter/node_exporter

Jan 22 15:04:29 dvptvnwb02 node_exporter[936]: time="2019-01-22T15:04:29+07:..."
Jan 22 15:04:29 dvptvnwb02 node_exporter[936]: time="2019-01-22T15:04:29+07:..."
Jan 22 15:04:29 dvptvnwb02 node_exporter[936]: time="2019-01-22T15:04:29+07:..."
Jan 22 15:04:29 dvptvnwb02 node_exporter[936]: time="2019-01-22T15:04:29+07:..."
Jan 22 15:04:29 dvptvnwb02 node_exporter[936]: time="2019-01-22T15:04:29+07:..."
Jan 22 15:04:29 dvptvnwb02 node_exporter[936]: time="2019-01-22T15:04:29+07:..."
Jan 22 15:04:29 dvptvnwb02 node_exporter[936]: time="2019-01-22T15:04:29+07:..."
Jan 22 15:04:29 dvptvnwb02 node_exporter[936]: time="2019-01-22T15:04:29+07:..."
Jan 22 15:04:29 dvptvnwb02 node_exporter[936]: time="2019-01-22T15:04:29+07:..."
Hint: Some lines were ellipsized, use -l to show in full.
[root@dvptvnwb02 ~]#

```

this terminal show normally service node_exporter

Step 4 : if you want to uninstall node_exporter

./cleanup.sh





./cleanup_nonroot.sh

```
[root@promeworker01 app]# ./cleanup.sh
[+] Stop and disabled node_exporter service.
Removed symlink /etc/systemd/system/multi-user.target.wants/node_exporter.service.
[+] Force delete service file
[+] Delete prome-user
[+] Cleaning complete.
[root@promeworker01 app]#
```

\$ in docker env host

Step 1 : copy requirement file to target host

- setup-docker-node.sh
- cleanup-docker-node.sh
- node_exporter.docker
- cadvisor_images.docker

Name	Date modified	Type
 cadvisor_image.docker	11/16/2018 2:34 PM	DOCKER File
 cleanup-docker-node	11/16/2018 4:22 PM	SH Source File
 node_exporter.docker	11/16/2018 2:32 PM	DOCKER File
 setup-docker-node	12/27/2018 5:39 PM	SH Source File

Step 2 : change permission file

chmod +x *

```
[root@promeworker01 docker]# ll
total 85368
-rw-r--r--. 1 root root 63077888 Nov 16 14:34 cadvisor_image.docker
-rw-r--r--. 1 root root      819 Nov 16 16:22 cleanup-docker-node.sh
-rw-r--r--. 1 root root 24328704 Nov 16 14:32 node_exporter.docker
-rw-r--r--. 1 root root    1074 Dec 27 17:39 setup-docker-node.sh
[root@promeworker01 docker]# chmod +x *
[root@promeworker01 docker]# ll
total 85368
-rwxr-xr-x. 1 root root 63077888 Nov 16 14:34 cadvisor_image.docker
-rwxr-xr-x. 1 root root      819 Nov 16 16:22 cleanup-docker-node.sh
-rwxr-xr-x. 1 root root 24328704 Nov 16 14:32 node_exporter.docker
-rwxr-xr-x. 1 root root    1074 Dec 27 17:39 setup-docker-node.sh
[root@promeworker01 docker]#
```

Step 3 : run script [setup-docker-node.sh]

./setup-docker-node.sh

```
[root@dvdocker01 node_exporter]# ./setup-docker-node.sh
ad68498f8d86: Loading layer 4.628MB/4.628MB
ad8512dce2a7: Loading layer 2.781MB/2.781MB
ccladb06ef21: Loading layer 16.9MB/16.9MB
Loaded image: prom/node-exporter:latest
52a5560f4ca0: Loading layer 5.06MB/5.06MB
f04a25da66bf: Loading layer 31.51MB/31.51MB
f60e27acaccf: Loading layer 26.49MB/26.49MB
Loaded image: google/cadvisor:latest
5f90dccc46a7aba93e1b956fe37def0d3acba39ac208da4d6d873e6d2a3ddddd4
1d56e97d0c0f4002129b69a40301379fee18d97acab35bd7293e3f7f509f1617
```

Step 4 : check container running

docker ps

```
[root@dvdocker01 node_exporter]# docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS
PORTS              NAMES
1d56e97d0c0f        google/cadvisor    "/usr/bin/cadvisor  6 minutes ago      Up 6 minu
0.0.0.0:9090->8080/tcp      cadvisor
5f90dccc46a7        prom/node-exporter "/bin/node_exporter  6 minutes ago      Up 6 minu
0.0.0.0:9100->9100/tcp      node-exporter
db22a6204fd2        sonatype/nexus3    "sh -c ${SONATYPE_DI  2 months ago       Up 2 mont
0.0.0.0:8081->8081/tcp      nexus
032a4bce6a73        jenkinsci/blueocean "/sbin/tini -- /usr/  2 months ago       Up 2 mont
0.0.0.0:8080->8080/tcp, 0.0.0.0:50000->50000/tcp  ocean
[root@dvdocker01 node_exporter]#
```

Step 5 : if you want to stop and cleanup container

./cleanup-docker-node.sh

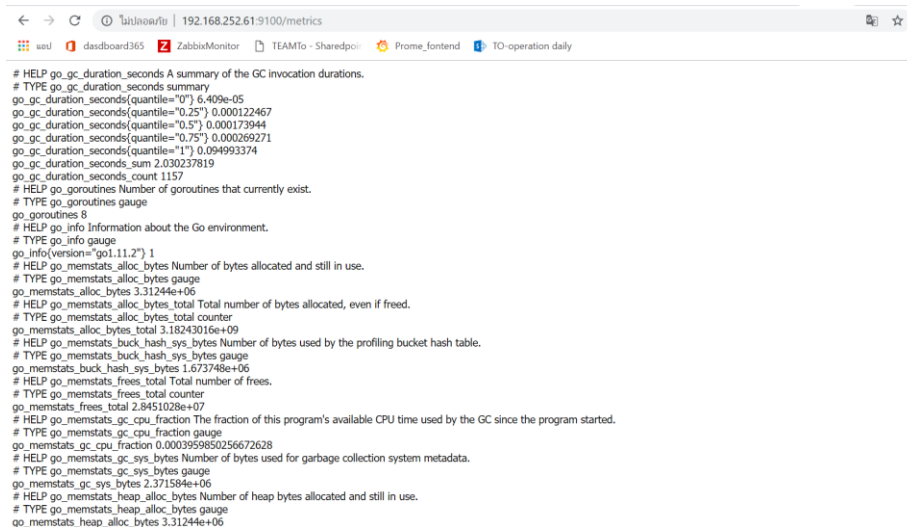
```

[root@dvdocker01 node_exporter]# ./cleanup-docker-node.sh
ceb26851c170
ceb26851c170
Untagged: prom/node-exporter:latest
Deleted: sha256:188af75e2de0203eac7c6e982feff45f9c340eaac4c7a0f59129712524fa2984
Deleted: sha256:da145bfaa38bb41109657eebb1415b50a9dbeb2af38131ae8839394d29ad9868
Deleted: sha256:57b2a48fa43eda6fe50ffe81f9162553704837bb2f7a8a6bc4467cd9906cccb9
Deleted: sha256:ad68498f8d863de25f68df0708e790f16aaf67f3088217be89e6e80f4fa9cf27
44089d07617b
44089d07617b
Untagged: google/cadvisor:latest
Deleted: sha256:75f88e3ec333cbb410297e4f40297ac615e076b4a50aeae49f287093ff01ab1
Deleted: sha256:81d2f700310845b28ec3fe27eb25a421824246bfb976c5736f0e24e06b088df3
Deleted: sha256:f6224b5679b6084e545b20324f3b9d39c1360850ecf432faf37fcc7a6f24d4e0
Deleted: sha256:52a5560f4ca0b62c53985258faceddc20afe53fca394aec8a32083e01659d9fd

```

Past 3 : check agent is normally

- goto webbrowser and insert url : `http://{IP host}:9100/metrics`



```

# HELP go_gc_duration_seconds A summary of the GC invocation durations.
# TYPE go_gc_duration_seconds summary
go_gc_duration_seconds{quantile="0"} 6.409e-05
go_gc_duration_seconds{quantile="0.25"} 0.000122467
go_gc_duration_seconds{quantile="0.5"} 0.000173944
go_gc_duration_seconds{quantile="0.75"} 0.000269271
go_gc_duration_seconds{quantile="1"} 0.094993374
go_gc_duration_seconds_sum 2.030237819
go_gc_duration_seconds_count 1157
# 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="go1.11.2"} 1
# HELP go_memstats_alloc_bytes Number of bytes allocated and still in use.
# TYPE go_memstats_alloc_bytes gauge
go_memstats_alloc_bytes 3.31244e+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 3.18243016e+09
# 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 1.673748e+06
# HELP go_memstats_frees_total Total number of frees.
# TYPE go_memstats_frees_total counter
go_memstats_frees_total 2.9451028e+07
# HELP go_memstats_gc_cpu_fraction The fraction of this program's available CPU time used by the GC since the program started.
# TYPE go_memstats_gc_cpu_fraction gauge
go_memstats_gc_cpu_fraction 0.0003959850256672628
# 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 2.371584e+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 3.31244e+06

```

Past 4 : add host to prome monitor

Step 1 : goto Prometheus.yml

copy following config to under scrape_config:

```

scrape_configs:
- job_name: [Job_name]
  scrape_interval: 10s
  scrape_timeout: 10s
  static_configs:

```

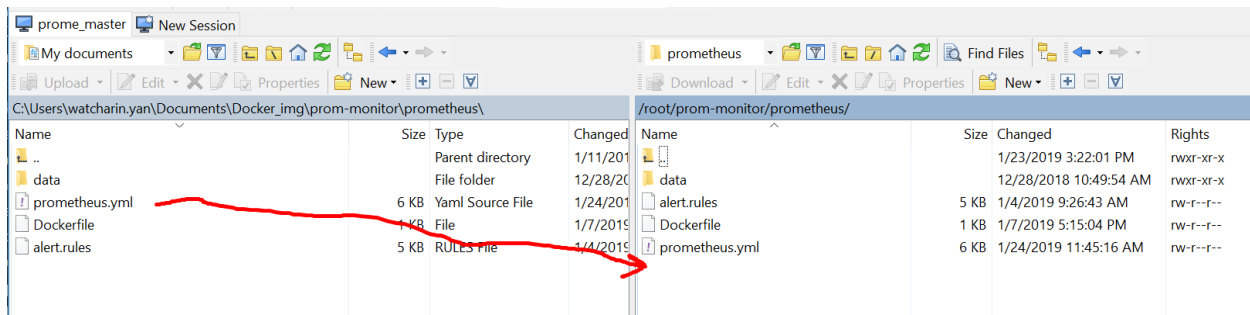


```

- targets:
  - [IP / DNS name : port]
  labels:
    group: [Group name]
    projects: [projects name]
- targets:
  - [IP / DNS name : port]
  labels:
    group: [Group name]
    projects: [projects name]

```

Step 2 : copy edited file to promemaster(192.168.252.61) server



Step 3 : rebuild Prometheus container

docker service ls

docker service rm [promemaster container id]

```

[root@promemaster prom-monitor]# docker service ls
ID                NAME                MODE                REPLICAS                IMAGE                PORTS
vmd6pnpy3aut     prom_alertmanager   replicated          1/3                      prom/alertmanager:v0.15.3    *:9093->9093/tcp
10239t6w1l8l     prom_blackbox_exporter global              1/1                      prom/blackbox-exporter:v0.12.0  *:9115->9115/tcp
f40j1hl1qfz55    prom_cadvisor        global              3/3                      google/cadvisor:v0.32.0       *:8080->8080/tcp
i0oty5xv6q4      prom_grafana         replicated          1/3                      grafana/grafana:5.4.2         *:3000->3000/tcp
p0oquz4p0n7      prom_node-exporter    global              3/3                      prom/node-exporter:v0.17.0     *:9100->9100/tcp
32kxf3zugmow     prom_prometheus      replicated          1/3                      prom/prometheus:v2.5.0        *:9090->9090/tcp
3rgt6t9dk75k     prom_remotestorageadapter replicated          1/1                      gavind/prometheus-remote-storage-adapter:1.0  *:9201->9201/tcp
vznz0lj6kwf3     prom_unsee           replicated          1/1                      cloudflare/unsee:v0.8.0       *:9094->8080/tcp

[root@promemaster prom-monitor]# docker service rm 32kxf3zugmow
32kxf3zugmow
[root@promemaster prom-monitor]#

```

docker stack deploy -c back-swarm.yaml promemaster

```
[root@promemaster prom-monitor]# docker stack deploy -c back-swarm.yaml prome
Updating service prome_blackbox_exporter (id: 10239t6wli8lyh413t1rxp9w2)
Updating service prome_remotestorageadapter (id: 3rgt6t9dk75ky3in3z9klsiyq)
Creating service prome_prometheus
Updating service prome_node-exporter (id: p0oguzp4p0n732f7y3uhrjgo1)
Updating service prome_alertmanager (id: vmdepnpy3autorfj6q2abjox0)
Updating service prome_cadvisor (id: f40jhlh1qfz554lme9kxkvow48)
[root@promemaster prom-monitor]#
```

Step 3 : check host on prome webUI

The screenshot shows the Prometheus web UI at the URL 192.168.252.61:9090/targets. The page title is 'Targets'. There are two tabs: 'All' and 'Unhealthy'. The 'Unhealthy' tab is selected, showing a list of targets that are not healthy. The targets are listed with their names, status, and a 'show more' link. The targets are: blackbox-web (37/37 up), cadvisor (2/2 up), influx-exporter (1/1 up), node-exporter (3/3 up), node-gz (2/2 up), node-op-uat (0/2 up), prometheus (1/1 up), tomcat-exporter (1/1 up), wmi-exporter (2/2 up), and wmi-gz (16/17 up). The 'node-op-uat' and 'wmi-gz' targets are highlighted in red, indicating they are unhealthy.

Target	Status	show more
blackbox-web (37/37 up)	Up	show more
cadvisor (2/2 up)	Up	show more
influx-exporter (1/1 up)	Up	show more
node-exporter (3/3 up)	Up	show more
node-gz (2/2 up)	Up	show more
node-op-uat (0/2 up)	Unhealthy	show more
prometheus (1/1 up)	Up	show more
tomcat-exporter (1/1 up)	Up	show more
wmi-exporter (2/2 up)	Up	show more
wmi-gz (16/17 up)	Unhealthy	show more