

# Monitoring

Grafana / Prometheus / Node exporter / ...

- [Node exporter](#)
- [Prometheus](#)
- [Grafana](#)
- [InfluxDB](#)

# Node exporter

## Installation of node exporter

Download the package from the [github repository](#)

```
cd /tmp  
wget <link to the last release>  
tar xvfz node_exporter-*.*-amd64.tar.gz  
sudo mv node_exporter-*.*.linux-amd64/node_exporter /usr/local/bin/  
chmod +x /usr/local/bin/node_exporter  
.node_exporter
```

Then try to get the metrics with a curl command: `curl http://localhost:9100/metrics`

## Create a systemctl task

First create a nonlogin user to run the task

```
sudo useradd -rs /bin/false node_exporter
```

Create a systemctl file

```
sudo vim /etc/systemd/system/node_exporter.service
```

Past the following in it

```
[Unit]  
Description=Node Exporter  
After=network.target  
  
[Service]  
User=node_exporter  
Group=node_exporter
```

```
Type=simple  
ExecStart=/usr/local/bin/node_exporter  
  
[Install]  
WantedBy=multi-user.target
```

Then restart the systemctl daemon, start the task and enable it at system start up

```
sudo systemctl daemon-reload  
sudo systemctl start node_exporter  
sudo systemctl enable node_exporter  
sudo systemctl status node_exporter
```

# Prometheus

## Install Prometheus

First download the source from the [web site](#)

```
wget <link of the source>
tar xvf prometheus-*.*-amd64.tar.gz
mv prometheus-*.*-amd64 prometheus-files
```

Create an user to run **Prometheus** and give it the ownership

```
sudo useradd --no-create-home --shell /bin/false prometheus
sudo mkdir /etc/prometheus
sudo mkdir /var/lib/prometheus
sudo chown prometheus:prometheus /etc/prometheus
sudo chown prometheus:prometheus /var/lib/prometheus
```

Copy / past the source in the new folder

```
sudo cp prometheus-files/prometheus /usr/local/bin/
sudo cp prometheus-files/promtool /usr/local/bin/
sudo chown prometheus:prometheus /usr/local/bin/prometheus
sudo chown prometheus:prometheus /usr/local/bin/promtool
sudo cp -r prometheus-files/consoles /etc/prometheus
sudo cp -r prometheus-files/console_libraries /etc/prometheus
sudo chown -R prometheus:prometheus /etc/prometheus/consoles
sudo chown -R prometheus:prometheus /etc/prometheus/console_libraries
```

## Configuration of Prometheus targets

Create a `prometheus.yml` to setup the config

```
sudo vim /etc/prometheus/prometheus.yml
```

Past it the following and change the target **ip:port**

```
global:  
  scrape_interval: 10s  
  
scrape_configs:  
  - job_name: 'prometheus'  
    scrape_interval: 5s  
    static_configs:  
      - targets: ['localhost:9090']
```

Then give the ownership to the user previously created

```
sudo chown prometheus:prometheus /etc/prometheus/prometheus.yml
```

You can now access to the GUI in your browser

```
http://<prometheus-ip>:9090/graph
```

# Create a systemctl task

Create the systemctl file

```
sudo vim /etc/systemd/system/prometheus.service
```

Past it the following

```
[Unit]  
Description=Prometheus  
Wants=network-online.target  
After=network-online.target  
  
[Service]  
User=prometheus  
Group=prometheus
```

```
Type=simple
ExecStart=/usr/local/bin/prometheus \
--config.file /etc/prometheus/prometheus.yml \
--storage.tsdb.path /var/lib/prometheus/ \
--web.console.templates=/etc/prometheus/consoles \
--web.console.libraries=/etc/prometheus/console_libraries
```

[Install]

```
WantedBy=multi-user.target
```

Restart the systemctl daemon, start the task and enable it at system start up

```
sudo systemctl daemon-reload
sudo systemctl start prometheus
sudo systemctl enable prometheus
sudo systemctl status prometheus
```

# Grafana

# InfluxDB