

# Prometheus, Node Exporter, and Grafana Setup Documentation

## ## 1. Prometheus Setup

### ### Installing Prometheus

```
```bash
wget https://github.com/prometheus/prometheus/releases/download/v2.47.1/prometheus-2.47.1.linux-amd64.tar.gz
tar -xvf prometheus-2.47.1.linux-amd64.tar.gz
sudo mkdir -p /data /etc/prometheus
cd prometheus-2.47.1.linux-amd64/
sudo mv prometheus promtool /usr/local/bin/
sudo mv consoles/ console_libraries/ /etc/prometheus/
sudo mv prometheus.yml /etc/prometheus/prometheus.yml
sudo chown -R prometheus:prometheus /etc/prometheus/ /data/
```
```

### ### Configuring Prometheus Service

Create a systemd service file:

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

Add the following content:

```
```ini
[Unit]
Description=Prometheus
Wants=network-online.target
After=network-online.target
```

StartLimitIntervalSec=500

StartLimitBurst=5

[Service]

User=prometheus

Group=prometheus

Type=simple

Restart=on-failure

RestartSec=5s

ExecStart=/usr/local/bin/prometheus \

--config.file=/etc/prometheus/prometheus.yml \

--storage.tsdb.path=/data \

--web.console.templates=/etc/prometheus/consoles \

--web.console.libraries=/etc/prometheus/console\_libraries \

--web.listen-address=0.0.0.0:9090 \

--web.enable-lifecycle

[Install]

WantedBy=multi-user.target

...

### Starting Prometheus

```bash

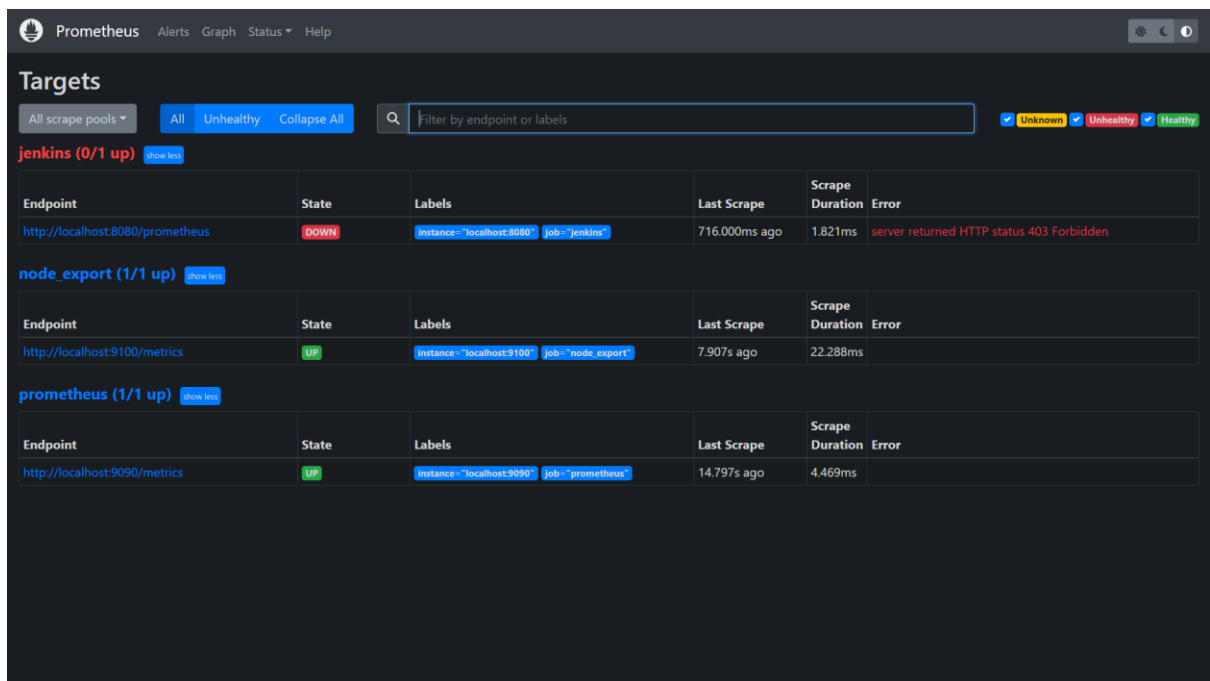
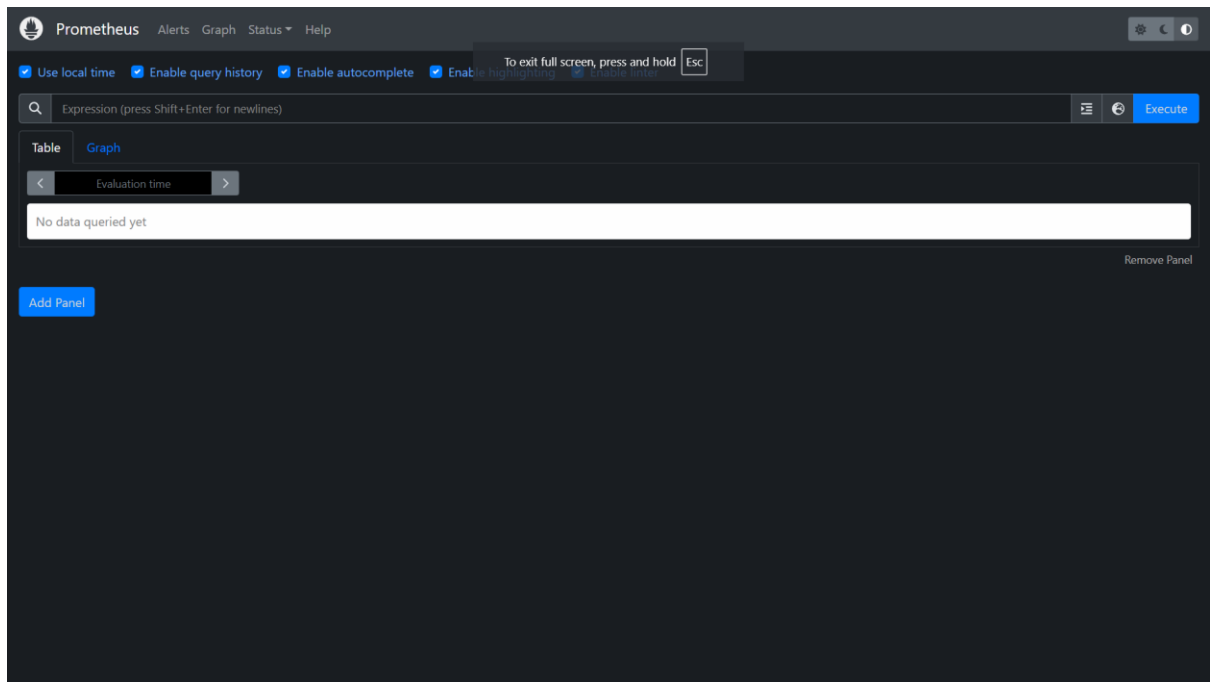
sudo systemctl enable prometheus

sudo systemctl start prometheus

sudo systemctl status prometheus

journalctl -u prometheus -f --no-pager

```



## ## 2. Node Exporter Setup

### ### Installing Node Exporter

```
```bash
wget https://github.com/prometheus/node_exporter/releases/download/v1.6.1/node_exporter-1.6.1.linux-amd64.tar.gz
tar -xvf node_exporter-1.6.1.linux-amd64.tar.gz
sudo mv node_exporter-1.6.1.linux-amd64/node_exporter /usr/local/bin/
rm -rf node_exporter*
```
```

### ### Configuring Node Exporter Service

Create a systemd service file:

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

Add the following content:

```
```ini
[Unit]
Description=Node Exporter
Wants=network-online.target
After=network-online.target
StartLimitIntervalSec=500
StartLimitBurst=5

[Service]
User=node_exporter
Group=node_exporter
Type=simple
Restart=on-failure
```
```

RestartSec=5s

ExecStart=/usr/local/bin/node\_exporter --collector.logind

[Install]

WantedBy=multi-user.target

````

### Starting Node Exporter

```bash

sudo systemctl enable node\_exporter

sudo systemctl start node\_exporter

sudo systemctl status node\_exporter

journalctl -u node\_exporter -f --no-pager

````

## Node Exporter

### Prometheus Node Exporter

Version: (version=1.6.1, branch=HEAD, revision=4a1b77600c1873a8233f3ffb55afcedbb63b8d84)

- [Metrics](#)

## ## 3. Prometheus Configuration File

Modify Prometheus configuration:

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

Add the following content:

```
```yaml
scrape_configs:
  - job_name: node_export
    static_configs:
      - targets: ["localhost:9100"]

  - job_name: 'jenkins'
    metrics_path: '/prometheus'
    static_configs:
      - targets: ['<jenkins-ip>:8080']
```
```

Reload Prometheus configuration:

```
```bash
promtool check config /etc/prometheus/prometheus.yml
curl -X POST http://localhost:9090/-/reload
```
```

```

# my global config
global:
  scrape_interval: 15s # Set the scrape interval to every 15 seconds. Default is every 1 minute.
  evaluation_interval: 15s # Evaluate rules every 15 seconds. The default is every 1 minute.
  # scrape_timeout is set to the global default (10s).

# Alertmanager configuration
alerting:
  alertmanagers:
    - static_configs:
        - targets:
            # - alertmanager:9093

# Load rules once and periodically evaluate them according to the global 'evaluation_interval'.
rule_files:
  # - "first_rules.yml"
  # - "second_rules.yml"

# A scrape configuration containing exactly one endpoint to scrape:
# Here it's Prometheus itself.
scrape_configs:
  # The job name is added as a label 'job=<job_name>' to any timeseries scraped from this config.
  - job_name: "prometheus"

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

    static_configs:
      - targets: ["localhost:9090"]

  - job_name: node_export
    static_configs:
      - targets: ["localhost:9100"]
  - job_name: 'jenkins'
    metrics_path: '/prometheus'
    static_configs:
      - targets: ["localhost:8080"]
~
~
~
~

```

## ## 4. Grafana Setup

### ### Installing Grafana

```
```bash
sudo apt-get install -y apt-transport-https software-properties-common
wget -q -O - https://packages.grafana.com/gpg.key | sudo apt-key add -
echo "deb https://packages.grafana.com/oss/deb stable main" | sudo tee -a
/etc/apt/sources.list.d/grafana.list
sudo apt-get update
sudo apt-get -y install grafana
```
```

### ### Starting Grafana

```
```bash
sudo systemctl enable grafana-server
sudo systemctl start grafana-server
sudo systemctl status grafana-server
```
```



