

CONFIGUREING PROMETHEUS

Prometheus is an open-source monitoring and alerting toolkit designed for collecting and analysing time-series data. It's widely used for monitoring infrastructure and applications.

Here we are creating a new instance of Ubuntu in Amazone Web Server.

1. Update the packages using

```
sudo apt update
```

2. Install Prometheus in the server using

```
sudo apt install Prometheus -y
```

3. Create a new Group and a user using the commands

Create a group:

- `sudo groupadd --system <Groupname>`

create a new user in the above created group:

- `sudo useradd -s /sbin/nologin --system -g <groupname> <username>`

4. Create Directories for Data and Configurations-

Create Data Directory:

```
sudo mkdir /var/lib/Prometheus
```

Create Configuration Directories:

```
sudo mkdir /etc/prometheus/rules
sudo mkdir /etc/prometheus/rules.d
sudo mkdir /etc/prometheus/files_sd
```

5. Download Prometheus Binary

Download Prometheus:

Use the below command to download prometheus

Wget

```
https://github.com/prometheus/prometheus/releases/download/v2.33.1/prometheus-2.33.1.linux-amd64.tar.gz
```

Extract the Package:

Use the below command for extracting the downloaded package

```
tar -xvf prometheus-2.33.1.linux-amd64.tar.gz
```

```
cd prometheus-2.33.1.linux-amd64
```

6. Move binary files

```
sudo mv prometheus /usr/local/bin/
```

```
sudo mv prometheus.yml /etc/prometheus/
```

7. Configure prometheus

Edit configuration file using the command

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

Now we add the below configuration for Prometheus in the opened window

global:

scrape_interval: 15s

evaluation_interval: 15s

external_labels:

monitor: 'codelab-monitor'

scrape_configs:

- job_name: 'prometheus'

static_configs:

- targets: ['localhost:9090']

```
- job_name: 'your-application'
static_configs:
  - targets: ['your-application:9090']
```

use ctrl + o for saving the file

use ctrl + x for exiting the window

8. Setting up basic authentication for nginx

➤ Install nginx

```
Sudo apt install nginx -y
```

➤ Create a password file

```
sudo apt install apache2-utils
```

```
sudo htpasswd -c /etc/nginx/.htpasswd
<your_username>
```

➤ Configure nginx to use the password file

```
sudo nano /etc/nginx/sites-available/Prometheus
```

add the following configuration

```
server {
    listen 80;
    server_name your_domain_or_ip;

    location / {
        proxy_pass http://localhost:9090;
        auth_basic "Restricted Access";
        auth_basic_user_file /etc/nginx/.htpasswd;
    }
}
```

➤ Enable nginx configuration

```
sudo ln -s /etc/nginx/sites-available/prometheus
/etc/nginx/sites-enabled/
sudo systemctl restart nginx
```

9. Start Prometheus

- `sudo systemctl start prometheus`
- `sudo systemctl enable prometheus`

10. Verify prometheus is working

➤ Check status:

`sudo systemctl status prometheus`

➤ Access Prometheus:

Open your browser and go to `http://your_domain_or_ip`. You should be prompted for a username and password.



