Install Prometheus Server

- **Configuration basic authentication username/password**
- **Screenshot of login prompt while trying to access prometheus**
- **Screenshot of prometheus dashboard**

Download and Install Prometheus using,

VERSION=$(curl
https://raw.githubusercontent.com/prometheus/prometheus/master/VERSION
)

wget
https://github.com/prometheus/prometheus/releases/download/v${VERSION}/
prometheus-${VERSION}.linux-amd64.tar.gz

tar xvzf prometheus-${VERSION}.linux-amd64.tar.gz

```
lostinserver@lostinserver:~$ VERSION=$(curl https://raw.githubusercontent.com/pr
ometheus/prometheus/master/VERSION)
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100    12  100    12    0     0     10      0  0:00:01  0:00:01 --:--:--    10
lostinserver@lostinserver:~$ wget https://github.com/prometheus/prometheus/relea
ses/download/v${VERSION}/prometheus-${VERSION}.linux-amd64.tar.gz
--2021-12-06 11:16:09--  https://github.com/prometheus/prometheus/releases/downl
oad/v2.32.0-rc.0/prometheus-2.32.0-rc.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-
2e65be/6838921/d4b11ccb-c6e4-4401-9d93-1da7f6716c24?X-Amz-Algorithm=AWS4-HMAC-SH
A256&X-Amz-Credential=AKIAIWNJYAX4CSVEH53A%2F20211206%2Fus-east-1%2Fs3%2Faws4_re
quest&X-Amz-Date=20211206T053110Z&X-Amz-Expires=300&X-Amz-Signature=66e0dc227ad4
90dabb4045189cb325260694eab395c876e647bc3e4408d0cbf7&X-Amz-SignedHeaders=host&ac
tor_id=0&key_id=0&repo_id=6838921&response-content-disposition=attachment%3B%20f
ilename%3Dprometheus-2.32.0-rc.0.linux-amd64.tar.gz&response-content-type=applic
ation%2Foctet-stream [following]
--2021-12-06 11:16:10--  https://objects.githubusercontent.com/github-production
-release-asset-2e65be/6838921/d4b11ccb-c6e4-4401-9d93-1da7f6716c24?X-Amz-Algorit
```

```
prometheus-2.32.0-r 100%[==================>]  71.61M  2.95MB/s    in 34s

2021-12-06 11:16:47 (2.09 MB/s) - 'prometheus-2.32.0-rc.0.linux-amd64.tar.gz' sa
ved [75092211/75092211]

lostinserver@lostinserver:~$ tar xvzf prometheus-${VERSION}.linux-amd64.tar.gz
prometheus-2.32.0-rc.0.linux-amd64/
prometheus-2.32.0-rc.0.linux-amd64/consoles/
prometheus-2.32.0-rc.0.linux-amd64/consoles/index.html.example
prometheus-2.32.0-rc.0.linux-amd64/consoles/node-cpu.html
prometheus-2.32.0-rc.0.linux-amd64/consoles/node-disk.html
prometheus-2.32.0-rc.0.linux-amd64/consoles/node-overview.html
prometheus-2.32.0-rc.0.linux-amd64/consoles/node.html
prometheus-2.32.0-rc.0.linux-amd64/consoles/prometheus-overview.html
prometheus-2.32.0-rc.0.linux-amd64/consoles/prometheus.html
prometheus-2.32.0-rc.0.linux-amd64/console_libraries/
prometheus-2.32.0-rc.0.linux-amd64/console_libraries/menu.lib
```

Now to create password using bcrypt module we do as,

python3

import getpass

import bcrypt

hashed_password = bcrypt.hashpw("centos".encode("utf-8"),

bcrypt.gensalt())

hashed_password.decode()

```
lostinserver@lostinserver:~$ python3
Python 3.8.10 (default, Sep 28 2021, 16:10:42)
[GCC 9.3.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import getpass
>>> import bcrypt
>>> hashed_password = bcrypt.hashpw("centos".encode("utf-8"), bcrypt.gensalt())
>>> hashed_password.decode()
'$2b$12$oKVzrlphQlu6MYHwLdV5Eem2RTFouYpla5Lv.WvUru7lj.XHRlgxe'
>>>
```

Now we set basic auth,

sudo vi /etc/prometheus/web.yml

```
basic_auth_users:
        admin: $2b$12$oKVzrlphQlu6MYHwLdV5Eem2RTFouYpla5Lv.WvUru7lj.XHRlgxe
~
~
~
~
```

$2b$12$oKVzrlphQlu6MYHwLdV5Eem2RTFouYpla5Lv.WvUru7lj.XHRl gxe is our hashed password.

```
lostinserver@lostinserver:~$ sudo cp prometheus-2.32.0-rc.0.linux-amd64/prometheus
prometheus      prometheus.yml
lostinserver@lostinserver:~$ sudo cp prometheus-2.32.0-rc.0.linux-amd64/prometheus /usr/local/bin
lostinserver@lostinserver:~$ sudo cp prometheus-2.32.0-rc.0.linux-amd64/promtool /usr/local/bin
lostinserver@lostinserver:~$ sudo cp prometheus-2.32.0-rc.0.linux-amd64/consoles/ /etc/prometheus/
cp: -r not specified; omitting directory 'prometheus-2.32.0-rc.0.linux-amd64/consoles/'
lostinserver@lostinserver:~$ sudo cp prometheus-2.32.0-rc.0.linux-amd64/consoles /etc/prometheus/
cp: -r not specified; omitting directory 'prometheus-2.32.0-rc.0.linux-amd64/consoles'
lostinserver@lostinserver:~$ sudo cp -r prometheus-2.32.0-rc.0.linux-amd64/consoles /etc/prometheus/
lostinserver@lostinserver:~$ sudo cp -r prometheus-2.32.0-rc.0.linux-amd64/console_libraries /etc/prometheus/
lostinserver@lostinserver:~$
```

Now we create service file and modify as below:

sudo vi /etc/systemd/system/prometheus.service

```
[Unit]
Description=Prometheus service file
After=network.target

[Service]
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 \
    --web.config.file /etc/prometheus/web.yml

[Install]
WantedBy=multi-user.target
~
~
~
```
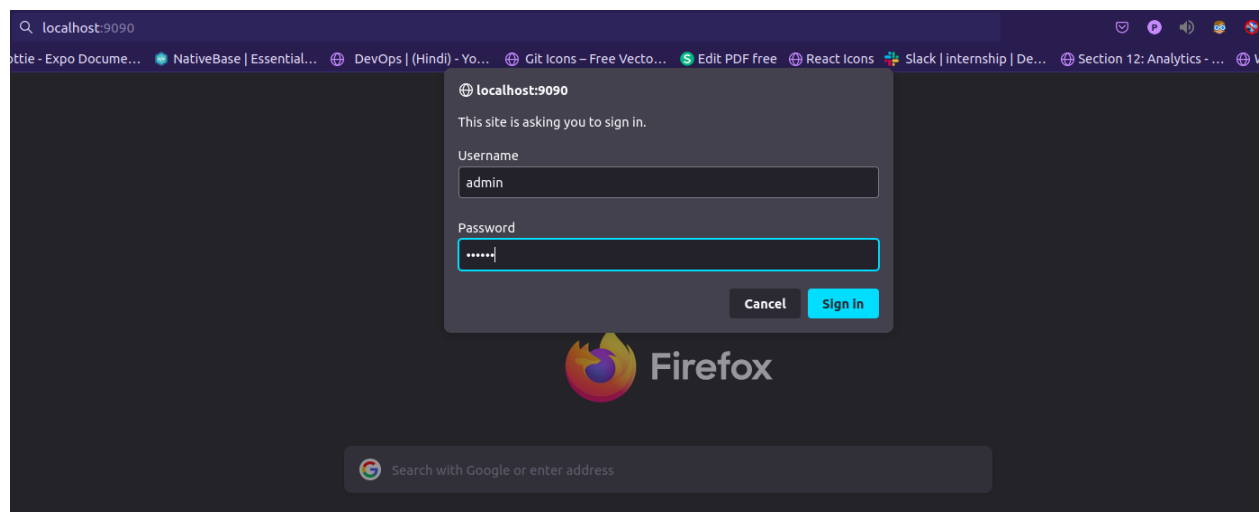
Now run the below,

Systemctl daemon-reload
Systemctl restart prometheus.service
Systemctl status prometheus.service

Login to the port **9090** with user **admin** and password as **centos** as,

We can finally see the **prometheus** homepage as,