**Nginx as a web server and reverse proxy for Apache on Ubuntu and changing the default Apache root path.**

Login to the server run the below cmd

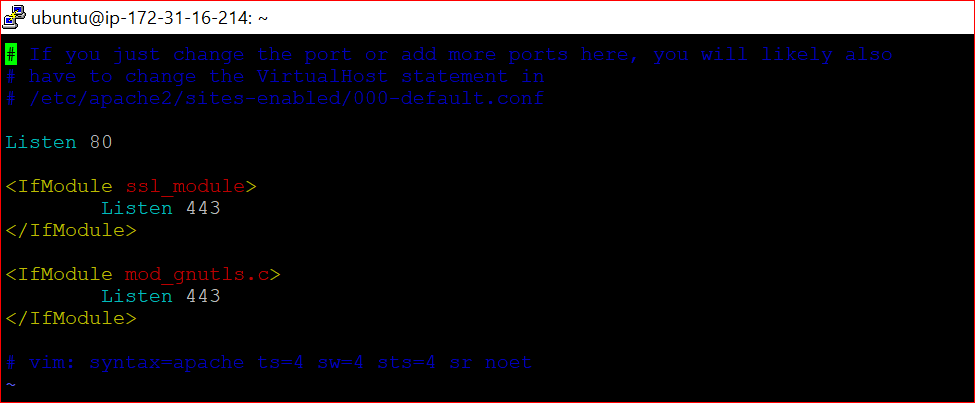
1. sudo apt update

A screen shot of a computer

Description automatically generated

Port change config file

sudo vi /etc/apache2/ports.conf



Once changed the port 80 to 8080.

A screenshot of a computer

Description automatically generated

Save Press esc :wq! And hit enter then restart the apache service.

**sudo systemctl restart apache2**

**sudo systemctl status apache2**

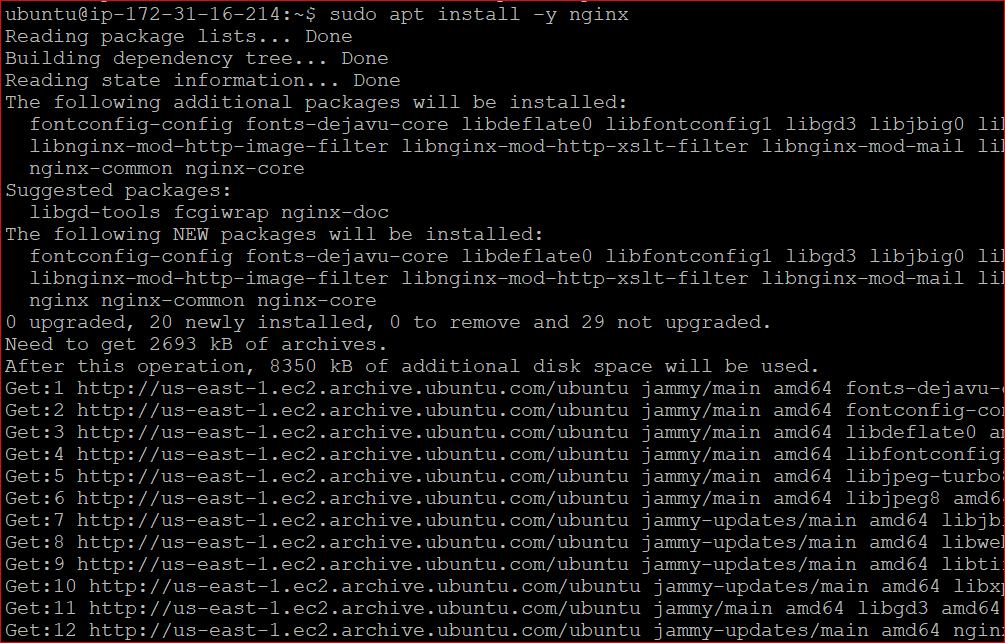
Apache status check

A computer screen with text on it

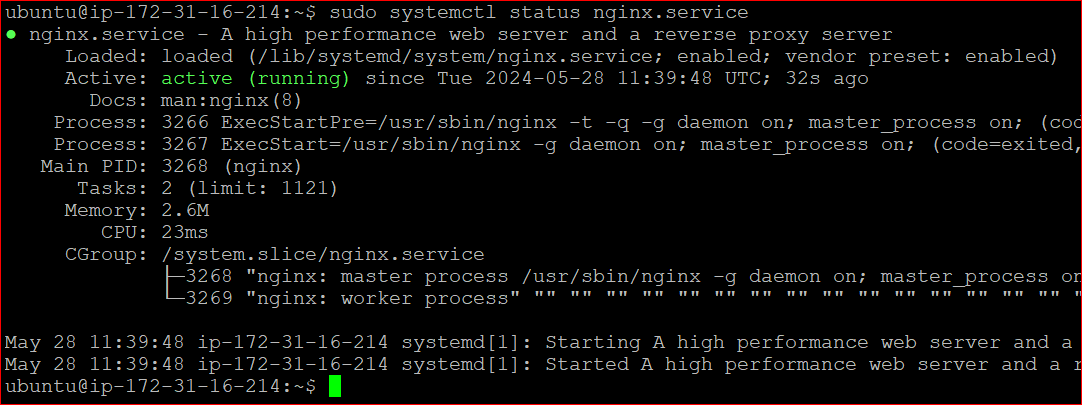
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Nginx installation

apt install nginx



**sudo systemctl status nginx**



**Change the apache default root path directory.**

Go to cd /etc/apache2/sites-available

Open sudo vi 000-default.conf

A screen shot of a computer

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Default Document root path /var/www/html/ changed to /home/ubuntu/myproject

A screenshot of a computer screen

Description automatically generated

Vi /etc/apache2/apache2.conf

<Directory /var/www/>

Options Indexes FollowSymLinks

AllowOverride None

Require all granted

</Directory>

Changed to as below

<Directory /home/ubuntu/myproject>

Options Indexes FollowSymLinks

AllowOverride None

Require all granted

Allow from all

</Directory>

A screenshot of a computer program

Description automatically generated

Once changed the path we should restart the apache service.

Sudo systemctl restart apache2

**Virtual host creation for apache and change document root and directory.**

Go to cd /etc/apache2/site-available/

Sudo vi virtualhost.conf

<VirtualHost \*:8080>

DocumentRoot /home/ubuntu/myproject/

<Directory /home/ubuntu/myproject>

Options Indexes FollowSymLinks

AllowOverride All

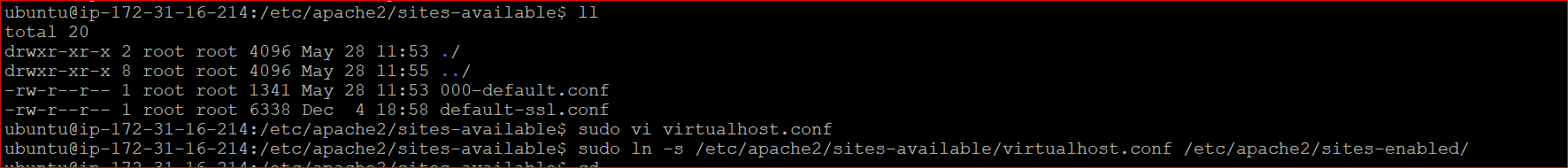
</Directory>

</VirtualHost>

Press esc :wq! Then press enter and create a symbolic link

ln -s /etc/apache2/sites-available/virtualhost.conf /etc/apache2/sites-enabled/

Sudo systemctl restart apache2



Go to cd /etc/nginx/site-available/

Create a file sudo vi ssl.conf

server {

listen 80;

server\_name 54.198.76.201;

root /home/ubuntu/myproject;

index index.html index.htm;

location / {

proxy\_pass http://127.0.0.1:8080; # This points to Apache running on port 8080

proxy\_set\_header Host $host;

proxy\_set\_header X-Real-IP $remote\_addr;

proxy\_set\_header X-Forwarded-For $proxy\_add\_x\_forwarded\_for;

proxy\_set\_header X-Forwarded-Proto $scheme;

}

}

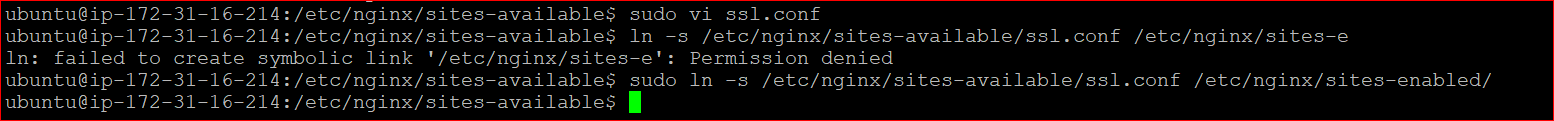
Press esc :wq! Then press enter and create a symbolic link.

sudo ln -s /etc/nginx/sites-available/ssl.conf /etc/nginx/sites-enabled/

sudo nginx -t

sudo systemctl restart nginx

Note : server name we should mention domain name but I mentioned the public Ip



* After configuring the reverse proxy, we need to push the code into a directory using either the ci/cd Jenkins pipeline or SFTP.
* We upload the files directly to the directory and then try to access the site using a public IP or domain name.
* When you access the site, you may encounter a prohibited permission issue. please run the below command

Sudo **chmod 755 /home/ubuntu**

A screenshot of a computer

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Description automatically generated

The Apache service has stopped due to memory or CPU issues, resulting in the site not working, but the nginx default page will appear as shown in the screenshot below.

