

System Admin II: Lab5

- Using apt install nginx

```
maysara@Linux-Ubuntu:~$ sudo apt install nginx
[sudo] password for maysara:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libnginx-mod-http-geoip2 libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter libnginx-mod-mail
  libnginx-mod-stream libnginx-mod-stream-geoip2 nginx-common nginx-core
Suggested packages:
  fcgiwrap nginx-doc
The following NEW packages will be installed:
  libnginx-mod-http-geoip2 libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter libnginx-mod-mail
  libnginx-mod-stream libnginx-mod-stream-geoip2 nginx nginx-common nginx-core
0 upgraded, 9 newly installed, 0 to remove and 238 not upgraded.
Need to get 696 kB of archives.
After this operation, 2,395 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 nginx-common all 1.18.0-6ubuntu14.3 [40.0 kB]
Get:2 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnginx-mod-http-geoip2 amd64 1.18.0-6ubuntu14.3 [11.9 kB]
Get:3 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnginx-mod-http-image-filter amd64 1.18.0-6ubuntu14.3 [15.4 kB]
```

- Enable port 80 on the firewall

```
maysara@Linux-Ubuntu:~$ sudo ufw enable
Firewall is active and enabled on system startup
maysara@Linux-Ubuntu:~$ sudo ufw allow 80/tcp
Skipping adding existing rule
```

- Create index.html file on root directory of server section and test it

```
maysara@Linux-Ubuntu:~$ sudo systemctl start nginx
maysara@Linux-Ubuntu:~$ cd /var/www/html/iti-lab5
bash: cd: /var/www/html/iti-lab5: No such file or directory
maysara@Linux-Ubuntu:~$ cd /var/www/html
maysara@Linux-Ubuntu:/var/www/html$ mkdir iti-lab5
mkdir: cannot create directory 'iti-lab5': Permission denied
maysara@Linux-Ubuntu:/var/www/html$ sudo mkdir iti-lab5
maysara@Linux-Ubuntu:/var/www/html$ cd iti-lab5
maysara@Linux-Ubuntu:/var/www/html/iti-lab5$ sudo nano index.html
```

```
maysara@Linux-Ubuntu: /var/www/html/iti-lab5
GNU nano 6.2 index.html
<html><h1>Hello from maysara's nginx server</h1></html>
```



- Install php-pfm package

```
maysara@Linux-Ubuntu:/var/www/html/iti-lab5$ sudo apt-get install php-fpm
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  php8.1-fpm
Suggested packages:
  php-pear
The following NEW packages will be installed:
  php-fpm php8.1-fpm
0 upgraded, 2 newly installed, 0 to remove and 238 not upgraded.
Need to get 1,843 kB of archives.
After this operation, 5,634 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://eg.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 php8.1-fpm amd64 8.1.2-1ubuntu2.11 [1,840 kB]
Get:2 http://eg.archive.ubuntu.com/ubuntu jammy/universe amd64 php-fpm all 2:8.1+92ubuntu1 [2,838 B]
Fetched 1,843 kB in 5s (391 kB/s)
Selecting previously unselected package php8.1-fpm.
(Reading database ... 233948 files and directories currently installed.)
Preparing to unpack .../php8.1-fpm_8.1.2-1ubuntu2.11_amd64.deb ...
```

- Configure main site to enable php-pfm

```
maysara@Linux-Ubuntu:/var/www/html/iti-lab5$ sudo nano /etc/nginx/sites-available/default
maysara@Linux-Ubuntu:/var/www/html/iti-lab5$

GNU nano 6.2 /etc/nginx/sites-available/default *

# Add index.php to the list if you are using PHP
index index.html index.htm index.nginx-debian.html;

server_name _;

location / {
    # First attempt to serve request as file, then
    # as directory, then fall back to displaying a 404.
    try_files $uri $uri/ =404;
}

location ~ \.php$ {
    include snippets/fastcgi-php.conf;
    fastcgi_pass unix:/run/php/php8.1-fpm.sock;
}

# pass PHP scripts to FastCGI server
#
```

- Create index.php

```
maysara@Linux-Ubuntu:/var/www/html/iti-lab5$ sudo nano index.php
maysara@Linux-Ubuntu:/var/www/html/iti-lab5$

GNU nano 6.2 index.php *
<?php echo 'hello fro maysaras nginx server -php' ?>
```