

# **Installation of “LEMP” server, based on Ubuntu 14.04 server**

Based on guidance notes at

<https://www.digitalocean.com/community/articles/how-to-install-linux-nginx-mysql-php-lemp-stack-on-ubuntu-12-04>

Revised by Nick for Ubuntu 14.04

During initial Ubuntu server installation the only additional package required is the OpenSSH server package. Do not install the LAMP package. We'll install MySQL, PHP and Nginx separately.

After first boot of the new server, login and follow these steps to install MySQL, Nginx and PHP.

## **Install all available updates**

```
sudo apt-get update  
sudo apt-get upgrade
```

## **Install Midnight Commander (Utility for file editing and management)**

```
sudo apt-get install mc
```

## **Install the MySQL database server and PHP with MySQL support**

```
sudo apt-get install mysql-server php5-mysql
```

## **Activate and secure the MySQL database server**

```
sudo mysql_install_db  
sudo mysql_secure_installation
```

## **Install the Nginx web server**

```
sudo apt-get install nginx
```

## **Start Nginx web server**

```
sudo service nginx start
```

Check the web server is running by accessing from a browser on another computer

## **Install the PHP FastCGI Process Manager (fpm)**

```
sudo apt-get install php5-fpm
```

## **Make recommended changes in PHP configuration**

In the file /etc/php5/fpm/php.ini

```
change  
;cgi.fix_pathinfo=1  
to  
cgi.fix_pathinfo=0
```

## **Restart PHP**

```
sudo service php5-fpm restart
```

## **Configure Nginx to use PHP**

Edit the file /etc/nginx/sites-available/default

Change line 25, adding index.php to the start of the list of index files

Remove comment mark "#" from lines 54, 55, 61-64

Then insert 2 new lines after line 62:

```
try_files $uri =404;  
fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;
```

Lines 52-66 should now read...

```
# pass the PHP scripts to FastCGI server listening on 127.0.0.1:9000  
#  
location ~ \.php$ {  
    fastcgi_split_path_info ^(.+\.php)(/.+)$;  
    # NOTE: You should have "cgi.fix_pathinfo = 0;" in php.ini  
    #  
    # With php5-cgi alone:  
    #    fastcgi_pass 127.0.0.1:9000;  
    # With php5-fpm:  
    fastcgi_pass unix:/var/run/php5-fpm.sock;  
    fastcgi_index index.php;  
    try_files $uri =404;  
    fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;  
    include fastcgi_params;  
}
```

## **Restart Nginx and test**

```
sudo service nginx restart
```

Test by creating the file /usr/share/nginx/html/index.php with the following content:

```
<?php  
phpinfo();
```

Try accessing from browser (you will probably need to refresh browser to avoid seeing the previous cached page)

Nginx log files are in /var/log/nginx/

For information on Nginx visit [wiki.nginx.org](http://wiki.nginx.org)