

ASSESSMENT - 23

Setting up PHP Application

**TO
THE
NEW**™



1. Setup Wordpress with Apache + php fpm.

- Install Packages

```
garima@garima:~$ sudo apt-get install apache2 php-fpm
Reading package lists... Done
Building dependency tree
Reading state information... Done
php-fpm is already the newest version (2:7.4+75+ubuntu18.04.1+deb.sury.org+1).
The following additional packages will be installed:
```

```
garima@garima:~$ apache2 -version
Server version: Apache/2.4.29 (Ubuntu)
Server built: 2020-03-13T12:26:16
garima@garima:~$
```

- Create apache virtual host config file

```
garima@garima:/etc/apache2/sites-available$ sudo vim site.conf
garima@garima:/etc/apache2/sites-available$ cat site.conf
<VirtualHost *:80>
    ServerName site.com
    DocumentRoot /var/www/wordpress
    <FilesMatch \.php>
        SetHandler proxy:fcgi://127.0.0.1:9000
    </FilesMatch>
</VirtualHost>
```

- Enable proxy_fcgi module and site.conf:

```
garima@garima:/etc/apache2/sites-available$ sudo a2enmod proxy_fcgi
Considering dependency proxy for proxy_fcgi:
Enabling module proxy.
Enabling module proxy_fcgi.
To activate the new configuration, you need to run:
    systemctl restart apache2
garima@garima:/etc/apache2/sites-available$ sudo systemctl restart apache2
garima@garima:/etc/apache2/sites-available$ sudo a2ensite site
Enabling site site.
To activate the new configuration, you need to run:
    systemctl reload apache2
garima@garima:/etc/apache2/sites-available$ sudo systemctl restart apache2
garima@garima:/etc/apache2/sites-available$
```

- Navigate to php-fpm pool directory and use default template as a base for the pool for our new website.

```
garima@garima:/etc/php/7.2/fpm/pool.d$ sudo cp www.conf site.conf
garima@garima:/etc/php/7.2/fpm/pool.d$ ls
site.conf  www.conf
```

- Then open site.conf and change two parameters:
- - pool name: replace [www] => [site]
- - listen:

listen = /run/php/php7.0-fpm.sock

- change it to this:

;listen = /run/php/php7.0-fpm.sock

listen = 127.0.0.1:9000

- Restart php-fpm
- Restart apache server.

- Install mysql and create a database

```
garima@garima:~$ sudo mysql -u root -p
[sudo] password for garima:
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 5.7.29-0ubuntu0.18.04.1 (Ubuntu)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current
statement.

mysql> show databases;
+-----+
| Database                |
+-----+
| information_schema      |
| db1                     |
| dd1                     |
| drupal                  |
| garima                  |
| mysql                   |
| performance_schema      |
| student                 |
| sys                     |
| tomcat                  |
+-----+
10 rows in set (0.03 sec)

mysql> create database wordpress;
Query OK, 1 row affected (0.00 sec)
```


- Grant access to the database

```
mysql> GRANT ALL ON wordpress.* TO 'wordpressuser'@'localhost' IDENTIFIED BY 'password';
Query OK, 0 rows affected, 1 warning (0.01 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)

mysql> EXIT;
Bye
garima@garima:~$
```

- Download Wordpress

```
garima@garima:/var/www/wordpress$ sudo wget wordpress.org/latest.zip
--2020-04-14 23:00:25-- http://wordpress.org/latest.zip
Resolving wordpress.org (wordpress.org)... 198.143.164.252
Connecting to wordpress.org (wordpress.org)|198.143.164.252|:80... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://wordpress.org/latest.zip [following]
--2020-04-14 23:00:25-- https://wordpress.org/latest.zip
Connecting to wordpress.org (wordpress.org)|198.143.164.252|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 13211108 (13M) [application/zip]
Saving to: 'latest.zip'

latest.zip      100%[=====>] 12.60M  935KB/s   in 43s
2020-04-14 23:01:10 (302 KB/s) - 'latest.zip' saved [13211108/13211108]
```

- Copy the sample file to config file and make necessary changes.

```
garima@garima:/var/www/wordpress$ ls
index.php          wp-config-sample.php  wp-mail.php
license.txt        wp-content            wp-settings.php
readme.html        wp-cron.php          wp-signup.php
wp-activate.php    wp-includes           wp-trackback.php
wp-admin           wp-links-opml.php     xmlrpc.php
wp-blog-header.php wp-load.php
wp-comments-post.php wp-login.php
garima@garima:/var/www/wordpress$ sudo cp wp-config-sample.php wp-config.php
```

```
define( 'DB_NAME', 'wordpress' );

/** MySQL database username */
define( 'DB_USER', 'wordpressuser' );

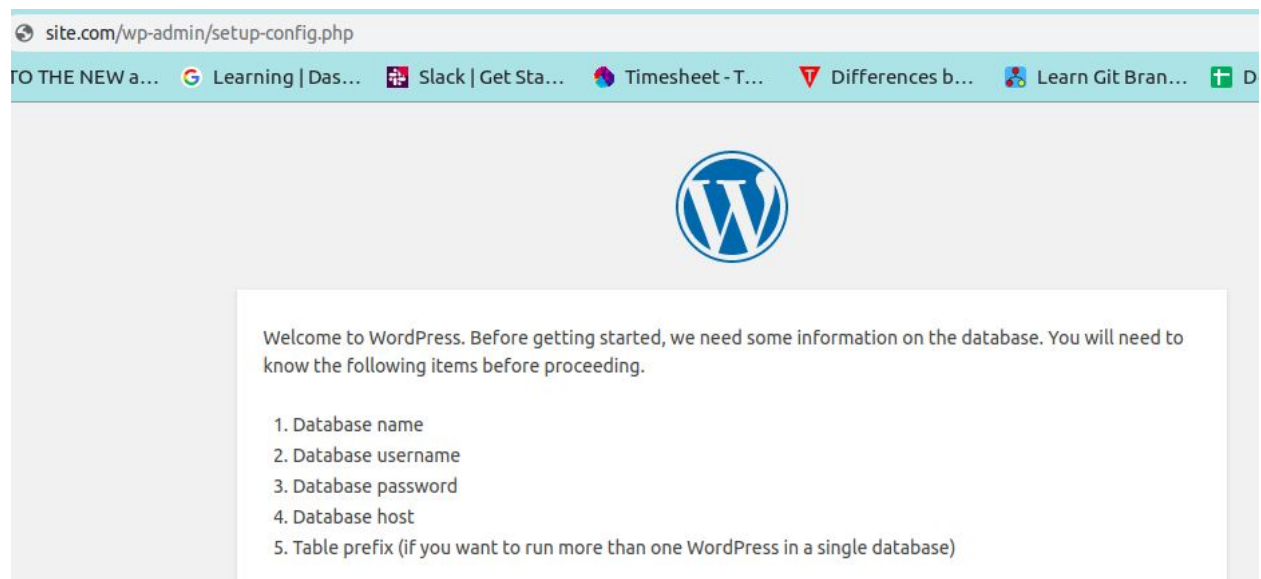
/** MySQL database password */
define( 'DB_PASSWORD', 'password' );

define( 'FS_METHOD', 'direct' );
```

- Changing the permissions so that user and group of php-fpm(www-data) can access the files and save files here.

```
garima@garima:/var/www/wordpress$ cd ..
garima@garima:/var/www$ sudo find wordpress/ -type f -exec chmod 660 {} \;
garima@garima:/var/www$ sudo find wordpress/ -type d -exec chmod 2770 {} \;
garima@garima:/var/www$
```

Output



2. Setup Drupal with Nginx and Perform FPM Configuration

- Install nginx server

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

- Install mysql server and create a database and grant all privileges.

```
sudo apt-get install mysql-server php-mysql  
I have created a database by the name drupal
```

```
garima@garima:~$ sudo mysql -u root -p  
[sudo] password for garima:  
Enter password:  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 11  
Server version: 5.7.29-0ubuntu0.18.04.1 (Ubuntu)  
  
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affiliates. Other names may be trademarks of their respective  
owners.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
mysql> show databases;  
+-----+  
| Database |  
+-----+  
| information_schema |  
| db1 |  
| dd1 |  
| drupal |
```

- Install PHP 7.1-FPM and Related Modules

```
sudo apt-get install software-properties-common
```

```
sudo add-apt-repository ppa:ondrej/php
```

- Download Drupal Latest Release

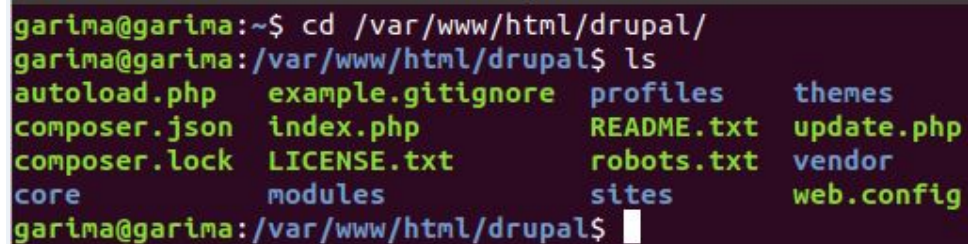
```
cd /tmp && wget
```

```
https://ftp.drupal.org/files/projects/drupal-8.3.7.tar.gz
```

- extract the download file and rename the folder drupal.

```
sudo tar -zxvf drupal*.gz -C /var/www/html
```

```
sudo mv /var/www/html/drupal-8.3.7/ /var/www/html/drupal/
```



```
garima@garima:~$ cd /var/www/html/drupal/
garima@garima:/var/www/html/drupal$ ls
autoload.php  example.gitignore  profiles      themes
composer.json index.php          README.txt    update.php
composer.lock LICENSE.txt        robots.txt    vendor
core          modules           sites         web.config
garima@garima:/var/www/html/drupal$
```

- Configure nginx
(i have setup the server configuration file by the name drupal)


```

garima@garima:/etc/nginx/sites-available$ cat drupal
server {
    listen 80;
    listen [::]:80;
    root /var/www/html/drupal;
    index index.php index.html index.htm;
    server_name _;

    location / {
        try_files $uri /index.php?$query_string;
    }

    location @rewrite {
        rewrite ^/(.*)$ /index.php?q=$1;
    }

    location ~ [^/]\.php(/|$) {
        include snippets/fastcgi-php.conf;
        fastcgi_pass unix:/var/run/php/php7.1-fpm.sock;
        fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;
        include fastcgi_params;
    }

    location ~ ^/sites/*/files/styles/ { # For Drupal >= 7
        try_files $uri @rewrite;
    }

    location ~ ^(/[a-z\~]+)?/system/files/ { # For Drupal >= 7
        try_files $uri /index.php?$query_string;
    }
}

```

- Create a soft link in sites-enabled and restart nginx.

```

garima@garima:/etc/nginx/sites-enabled$ sudo ln -s ../sites-available/drupal .
garima@garima:/etc/nginx/sites-enabled$ ls
drupal
garima@garima:/etc/nginx/sites-enabled$ sudo systemctl restart nginx
garima@garima:/etc/nginx/sites-enabled$

```

Output:

localhost/core/install.php

TO THE NEW a... Learning | Das... Slack | Get Sta... Timesheet - T... Differences b... Learn Git

Drupal 8.3.7

Choose language

Choose profile

Verify requirements

Set up database

Install site

Configure site

Choose language

English

Save and continue