

Installation of LAMP

To download the WordPress. we need to install LAMP. WordPress requires a full LAMP (Linux, Apache, MySQL, PHP)

Step1. Install Apache

1. Run the following commands:

```
# apt install apache2 -y  
  
# systemctl start apache2  
  
# systemctl enable apache2
```

2. Verify Apache is running:

```
# systemctl status apache2
```

```
root@node215348-env-9987419:~# systemctl status apache2  
● apache2.service - The Apache HTTP Server  
   Loaded: loaded (/lib/systemd/system/apache2.service; disabled; vendor preset: enabled)  
   Active: active (running) since Fri 2024-12-13 05:53:26 UTC; 13s ago  
     Docs: https://httpd.apache.org/docs/2.4/  
   Process: 2231 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)  
    Main PID: 2235 (apache2)  
       Tasks: 7 (limit: 19660)  
      Memory: 30.1M
```

Step 2. Install MySQL

1. If MySQL is not already installed, use:

```
# apt install mysql-server -y
```

```
root@node215348-env-9987419:~# mysql --version  
mysql Ver 8.0.40-0ubuntu0.22.04.1 for Linux on x86_64 ((Ubuntu))  
root@node215348-env-9987419:~#
```

2. Create a database for WordPress:

Log in to MySQL:

```
# mysql -u root -p
```

3. Create the database and user for wordpress:

```
# CREATE DATABASE wordpress;  
  
# CREATE USER 'worduser'@'localhost' IDENTIFIED BY '12345678';  
  
# GRANT ALL PRIVILEGES ON wordpress.* TO 'worduser'@'localhost';  
  
# FLUSH PRIVILEGES;
```

EXIT;

```
root@node215348-env-9987419:~# mysql -u worduser -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.40-0ubuntu0.22.04.1 (Ubuntu)

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owners.

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

mysql> █
```

Step 3. Install PHP

1. Install PHP and required extensions for WordPress:

```
# apt install php php-mysql php-curl php-gd php-mbstring php-xml
php-xmllrpc libapache2-mod-php -y
```

```
root@node215348-env-9987419:~# php --version
PHP 7.4.33 (cli) (built: Nov 24 2024 08:40:54) ( NTS )
Copyright (c) The PHP Group
Zend Engine v3.4.0, Copyright (c) Zend Technologies
    with Zend OPcache v7.4.33, Copyright (c), by Zend Technologies
```

2. Restart Apache to load PHP modules:

```
# systemctl restart apache2
```

Step 4. Download and Install WordPress

1. First, download the version of WordPress with the following command.

```
# cd /tmp
# wget https://wordpress.org/latest.tar.gz
# tar -xvf latest.tar.gz
```

2. Move WordPress Files Move the extracted files to the Apache web directory:

```
# mv wordpress /var/www/html/
```

```
root@node215348-env-9987419:/var/www/html# cd wordpress/
root@node215348-env-9987419:/var/www/html/wordpress# ls
index.php  wp-activate.php  wp-comments-post.php  wp-content  wp-links-opml.php  wp-mail.php  wp-trackback.php
license.txt  wp-admin  wp-config.php  wp-cron.php  wp-load.php  wp-settings.php  xmllrpc.php
readme.html  wp-blog-header.php  wp-config-sample.php  wp-includes  wp-login.php  wp-signup.php
```

3. Set Permissions Adjust permissions for WordPress to function properly

```
# chown -R www-data:www-data /var/www/html/wordpress
```

```
# chmod -R 755 /var/www/html/wordpress
```

4. Configure Apache for WordPress

Create a Virtual Host File Create a configuration file for your WordPress site:

```
# vim /etc/apache2/sites-available/wordpress.conf
```

Add the following configuration:

```
1 <VirtualHost *:80>
2
3     ServerName tjwp.gpuoncloud.com
4
5     DocumentRoot /var/www/html/wordpress
6
7     <Directory /var/www/html/wordpress>
8
9         AllowOverride All
10
11     </Directory>
12
13     ErrorLog ${APACHE_LOG_DIR}/error.log
14
15     CustomLog ${APACHE_LOG_DIR}/access.log combined
16
17 RewriteEngine on
18 RewriteCond %{SERVER_NAME} =tjwp.gpuoncloud.com
19 RewriteRule ^ https://%{SERVER_NAME}%{REQUEST_URI} [END,NE,R=permanent]
20 </VirtualHost>
```

5. Enable Apache Modules and Site

```
# a2ensite wordpress.conf
```

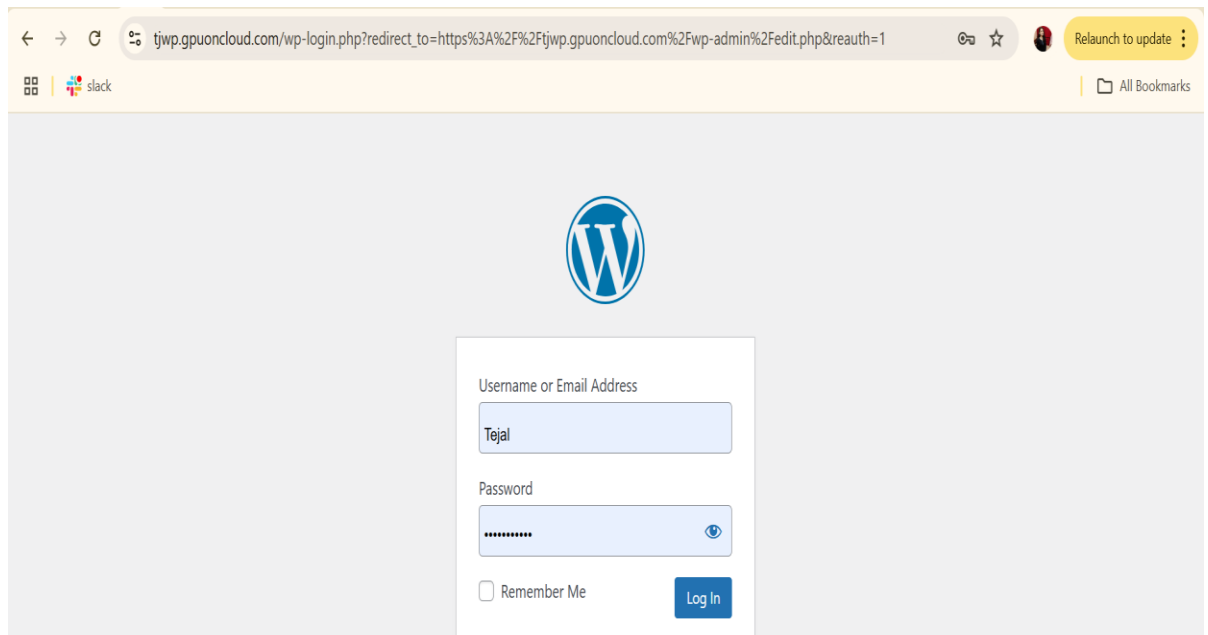
```
# a2enmod rewrite
```

```
# systemctl restart apache2
```

6. Complete WordPress Setup via Browser

Open your browser and navigate to:

<http://tjwp.gpuoncloud.com>



Step 5. Installation of Owncloud

1. First, download the version of owncloud with the following command.

```
cd /tmp
```

```
# wget https://download.owncloud.org/community/owncloud-10.10.0.zip
```
2. Unzip the downloaded file:

```
# unzip owncloud-10.10.0.zip
```
3. Move the new directory to the Apache document root. This example uses the default directory for Apache site files:

```
# mv owncloud /var/www/html/
```
4. Change the ownership of the owncloud directory:

```
# chown -R www-data: /var/www/owncloud
```
5. Create an Apache configuration file using the vim text editor:

```
# vim /etc/apache2/sites-available/owncloud.conf
```
6. Paste the following text into the new file.

File: vim /etc/apache2/sites-available/owncloud.conf

```

1 VirtualHost *:80>
2
3     ServerName tjoc.gpuoncloud.com
4
5     DocumentRoot /var/www/owncloud
6
7
8     <Directory /var/www/owncloud>
9
10        Options FollowSymlinks
11
12        AllowOverride All
13
14        Require all granted
15
16    </Directory>
17
18
19
20    ErrorLog ${APACHE_LOG_DIR}/error.log
21
22
23
24    CustomLog ${APACHE_LOG_DIR}/access.log combined
25

```

7. Enable Apache Modules and Site

```
#a2ensite owncloud.conf
```

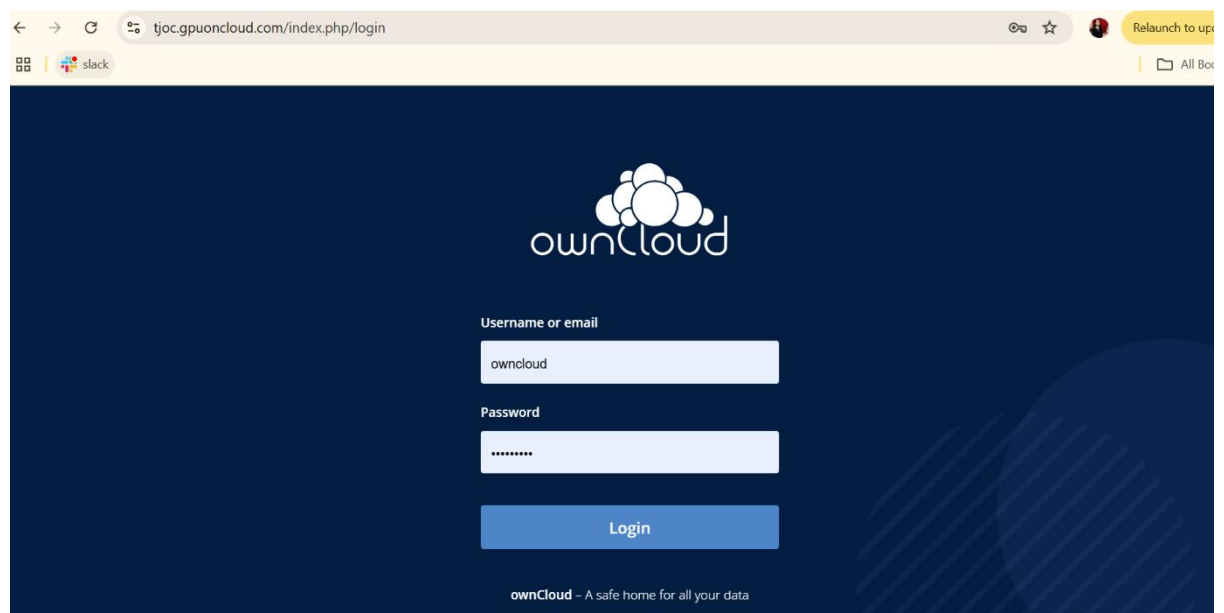
```
#a2enmod rewrite
```

```
#systemctl restart apache2
```

8. Complete owncloud Setup via Browser

Open your browser and navigate to:

<http://tjoc.gpuoncloud.com>



Step 6. Download and Install osTicket

1. First, download the version of osTicket with the following command.

```
# cd /tmp
```

```
# wget https://github.com/osTicket/osTicket/releases/download/v1.15.8/osTicket-v1.15.8.zip
```

2. Create a directory of osTicket and extract the downloaded file inside that directory.

```
# mkdir /var/www/html/osticket
```

3. Unzip the downloaded file

```
# osTicket-v1.15.8.zip -d /var/www/osticket
```

4. Next, change the ownership and permission of the osTicket directory

```
# chown -R www-data:www-data /var/www/osticket
```

```
# chmod -R 755 /var/www/osticket
```

5. create an Apache virtual host configuration file for osTicket.

```
# vim /etc/apache2/sites-available/osticket.conf
```

```
1 <VirtualHost *:80>
2
3     ServerName tjobt.gpuoncloud.com
4     ServerAdmin admin@localhost
5
6     DocumentRoot /var/www/osticket/upload
7
8
9
10    <Directory /var/www/osticket/upload>
11
12        Require all granted
13
14        Options FollowSymLinks
15
16        AllowOverride All
17
18    </Directory>
19
20
21
22    ErrorLog ${APACHE_LOG_DIR}/osticket.error.log
23
24    CustomLog ${APACHE_LOG_DIR}/osticket.access.log combined
25
26 RewriteEngine on
27 RewriteCond %{SERVER_NAME} =tjobt.gpuoncloud.com
28 RewriteRule ^ https://%{SERVER_NAME}%{REQUEST_URI} [END,NE,R=permanent]
```

6. Activate the osTicket virtual host and enable the Apache rewrite module

a2ensite osticket.conf

a2enmod rewrite

7. Complete osTicket Setup via Browser

Open your browser and navigate to:

<http://tjot.gpuoncloud.com>

