LTK+ Ubuntu Server Setup Guide

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Overview

This guide describes the basic steps required in order to configure a LAMP server on Ubuntu for installing the LTK+. LAMP stands for Linux, Apache, MySQL, and PHP which are the names of the server software this type of web server will use.

These instructions were written following a fresh install of **Ubuntu 22.04 LTS** with the **amd64** processor architecture.

Installing Security Updates

Open a terminal and enter the following commands to update the system with the latest security updates:

```
sudo apt update
sudo apt upgrade
```

Web Server Setup (Apache)

Open a terminal and enter the following command to install the Tasksel tool:

```
sudo apt install tasksel
```

Once installed, enter the following command to run the Tasksel tool to install the basic web server components:

```
sudo tasksel install web-server
```

When the software installation completes, the Apache web server should also be automatically configured. You can test this by entering "localhost" into a web browser.

PHP Setup

Open a terminal and enter the following command to install the base PHP packages, as well as the following additional packages for PHP extensions required by the LTK+ that will not be installed by the base PHP package:

```
sudo apt install php php-gd php-mbstring php-mysql php-xml php-zip
```

When the installation completes, you will need to edit the **php.ini** file to make changes to the PHP configuration for the LTK+. This file will be located at:

```
/etc/php/8.1/apache2/php.ini
```

Search for the following configurations within that file and change their values as shown below:

```
memory_limit = 128M

post_max_size = 25M

upload_max_filesize = 20M

session.gc maxlifetime = 10800
```

When done editing php.ini, save and close the file. Note that whenever a modification is done to php.ini, the Apache service must be restarted in order for the changes to take effect.

Enter the following command to restart Apache:

```
sudo systemctl restart apache2
```

MySQL Setup

Open a terminal and enter the following command to install MySQL:

```
sudo apt install mysql-server
```

Set a password for the MySQL root user...

```
sudo mysql
ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY
'password';
quit
```

...where password is the password you want to give the root user.

Make sure to remember this password, you will need it in order to access the MySQL server!

To secure your MySQL server installation, run the following command:

```
mysql_secure_installation
```

This will output a series of prompts. Enter the root password for your database server. Select "No" for changing your root password. Select "Yes" to all the other prompts.

OPTIONAL: Change Owner of the WebRoot Folder

By default the WebRoot folder is located at:

```
/var/www/html
```

and is owned by root. For convenience, you can change the owner of this folder so that you don't need root permissions whenever you need to add/remove/edit files in the WebRoot.

To change owner of the WebRoot, open a terminal and enter the following command...

```
sudo chown -R username.username /var/www/html
```

...where username is the username of the user you wish to make the new owner.