

How to Install Apache, MySQL, and PHP (LAMP) Stack on Debian 11

Learn how to install and configure the LAMP stack (Linux, Apache, MySQL, PHP) on Debian 11 with our step-by-step guide for beginners and system administrators.

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Introduction

LAMP is a popular open-source web development stack consisting of Linux, Apache, MySQL or MariaDB, and PHP. This guide explains how to install a LAMP stack on Debian 11.

Prerequisites

- [Deploy a Debian 11 cloud server at Vultr.](#)
- [Update the server.](#)
- Create a non-root user with sudo privileges.
- Log in to your server as the non-root user.

1. Install Apache

Install Apache and related utilities.

```
$ sudo apt install apache2 apache2-utils -y
```

Enable the Apache service to start at system boot.

```
$ sudo systemctl enable apache2
```

Start the Apache service.

```
$ sudo systemctl start apache2
```

Check the status of the Apache service.

```
$ sudo systemctl status apache2
```

2. Install MariaDB

Install the database server.

```
$ sudo apt-get install mariadb-server -y
```

Start the MariaDB service and enable it to start at system boot.

```
$ sudo systemctl enable mariadb  
$ sudo systemctl start mariadb
```

Check the status of the MariaDB service.

```
$ sudo systemctl status mariadb
```

Secure the database with the `mysql_secure_installation` script and answer Y to all questions.

```
$ sudo mysql_secure_installation
```

3. Install PHP

Install PHP and common extensions.

```
$ sudo apt install php php-cli php-mysql libapache2-mod-php php-gd php-xml php-curl  
php-common -y
```

4. Configure the Firewall

Allow SSH, HTTP, and HTTPS in the firewall.

```
$ sudo ufw default deny incoming  
$ sudo ufw default allow outgoing
```

```
$ sudo ufw allow ssh
$ sudo ufw allow 80/tcp
$ sudo ufw allow 443/tcp
$ sudo ufw enable
$ sudo ufw reload
```

See our [UFW Quickstart Guide](#) for more information.

5. Test the LAMP Stack

Create a test PHP file in Apache's document root folder.

```
$ echo "<?php phpinfo(); ?>" > /var/www/html/info.php
```

Open the location in your browser. Replace `example.com` with your server's IP address or domain name.

```
https://example.com/info.php
```

You should see a PHP information page with details about your configuration.

More Information

- Learn about [Vultr's One-Click LAMP server](#).



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