

# Installation Manual

(Apache, PHP, mysql, phpmyadmin)

Go with this flow:

1. Apache
2. PHP
3. Mysql
4. Phpmyadmin

Open your terminal in your system for installation process:

**Operating System:** The installation instructions provided assume you are using a Debian-based Linux distribution such as Ubuntu. Ensure your system is running a compatible version.

## ● Apache installation

### ● Installing Apache Web Server:

Open a terminal window.

Update the package index:

```
sudo apt update
```

### ● Install the Apache package:

```
sudo apt install apache2
```

### ● Once the installation is complete, start the Apache service:

```
sudo systemctl start apache2
```

### d. Enable Apache to start on boot:

```
sudo systemctl enable apache2
```

## ● PHP installation

### ○ Select PHP8.3 version (RECOMMENDED)

Add the repository for PHP 8.3:

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

Update the package index:

```
sudo apt update
```

Install PHP 8.3 and required extensions:

```
sudo apt install php8.3 libapache2-mod-php8.3 php8.3-mysql
```

After the installation, restart the Apache service:

```
sudo systemctl restart apache2
```

Verify the PHP installation by creating a PHP info file:

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

Visit <http://localhost/info.php> in a web browser. You should see the PHP configuration details.

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## ● MySql installation

### ● Update Package Index:

Before installing MySQL, it's a good practice to update your system's package index to ensure you have the latest version information:

```
sudo apt update
```

### ● Install MySQL Server

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

- **Secure MySQL Installation:**

After the installation, you can run the MySQL security script to improve the security of your MySQL installation:

```
sudo mysql_secure_installation
```

This script will guide you through several security options, including setting a root password, removing anonymous users, disallowing remote root login, and removing test databases.

Fix the root password as “root” itself (RECOMMENDED)

- **Start and Enable MySQL Service**

```
sudo systemctl start mysql
```

```
sudo systemctl enable mysql
```

- **Verify MySQL Installation**

```
sudo systemctl status mysql (It will be running state)
```

- **You can log in to the MySQL shell to verify the installation and test connectivity:**

```
sudo mysql -u root -p
```

Use the root password for login

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- **PhpMyAdmin installation**

- **Update Package Index:**

Before installing phpmyadmin, it's a good practice to update your system's package index to ensure you have the latest version information:

```
sudo apt update
```

- **Install phpMyAdmin:**

```
sudo apt install phpmyadmin
```

- **Select Web Server:**

During the installation process, you'll be prompted to select the web server you're using. Since you've already installed Apache, you should choose **Apache**. Use the arrow keys to navigate and press Enter to select Apache.

```
sudo mysql_secure_installation
```

- **Configure Database for phpMyAdmin:**

After selecting Apache, the installer will prompt you to configure a database for phpMyAdmin with dbconfig-common. Choose **Yes** and press Enter. You'll be asked to provide your **MySQL root password**. Enter the password and press Enter.

- **Set Up phpMyAdmin User Interface:**

Once phpMyAdmin is installed, Apache should automatically detect it and set up the necessary configuration files. However, to access phpMyAdmin, you need to configure Apache to recognize it. To do this, create a symbolic link to the phpMyAdmin configuration file in the Apache configuration directory:

```
sudo ln -s /etc/phpmyadmin/apache.conf /etc/apache2/conf-available/phpmyadmin.conf
```

- **Enable the phpMyAdmin Configuration:**

```
sudo a2enconf phpmyadmin
```

- **Enable the phpMyAdmin Configuration:**

```
sudo systemctl restart apache2
```

- **Access phpMyAdmin:**

You should now be able to access phpMyAdmin by opening your web browser and navigating to <http://localhost/phpmyadmin>. You'll be prompted to log in with your MySQL username and password.

If you followed the above instructions, your username will be “**phpmyadmin**” and password will be “**root**”.

Before login, make sure to do this,

Login on to your mysql server through terminal:

```
sudo mysql -u root -p
```

**Give the query :**

```
GRANT ALL PRIVILEGES ON *.* TO 'phpmyadmin'@'localhost';
```

Then restart your apache server, and then login

That's it! You've successfully installed phpMyAdmin on your Linux system. You can now use it to manage your MySQL databases through a user-friendly web interface.



