Toggle navigation

# HowTo[dot]com

##### Your guide how to...

### Glossary

#### travel

The following commands are used for traversing the directory structure of the Ubuntu terminal

##### ls

**ls :** is used to display the current contents of the current directory

* **ls -l :** will give a formated list that includes rights to the directory
* **ls /path/to/dir :** will display current contents of the path parameter

##### cd

**cd /path/to/dir/ :** is used to change directory to path parameter

* **cd / :** This will take you to the root folder. You may get a access denied if the administrator is restricting access to this directory
* **cd ~ :** This will take you to your Home folder.

##### pwd

**pwd :** is used to display the current directory this is often helpful if you get lost.

#### creation and destruction

The following commands are used in creating and deleting directories(folders) and files

##### touch

**touch somefile.txt :** This will create a file in the current path with the name of the file parameter

##### mkdir

**mkdir somedir :** This will create a folder(dir) with the name given to the name parameter

##### rm

* **rm somefile.txt :** will delete the file
* **rm -r somedir :** will delete a folder and all it contents

##### To days how to is brought to you by the Internet "...why read a book when you can use the Internet to find out how it ends."

The LAMP stack is one of the most popular web server configurations. To break it down first we have Linux which is similar but not UNIX. Was created in 1991 by Linus Benedict Torvalds [[Listserv]](#ref1). It is often used by developers due the operating system be free. Though the rest of the LAMP stack can be used with Windows/MacOS/Unix. It is really meant to be coupled with linux. I chose to use Ubuntu 12.04 Linux. Due to my familiarity with the operation system. Though you can certainly use any version of Linux. *One word of the wise this tutorial uses the ubuntu/debian apt package manager to install the packages for the rest of the lamp stack. Though it will be a similar process to install packages using other types of Linux. There will be some differences. Please look up the package manager for your version of Linux*

The second layers is the Apache web server. Created in 1995 by some Computer Scientist [[apache\_about]](#ref2). It has become one of the most popular webservers on the web. For our purposes we are going to use the out of the box experience. With no change to any configuration files.

The third layers is our language layer PHP. Love it or hate it PHP is one of the most popular langue’s of the World Wide Web.  
The website [php.net](http://us2.php.net/history) says this about the history of PHP:

"PHP has come a long way since its birth in the mid-1990. From humble beginnings to becoming one of the most prominent languages powering the web, the evolution of PHP is a geek's fairy tale." [[php.net]](#ref3)

We will be writing a simple pup program that will query our database full of fake data and display it to the screen.

Our last and final layer is MySQL the database. This is where all the information that our website will display.

So that’s the LAMP stack Linux, Apache, MySQL, and PhP.

Our goal today is to create a Linux server, install apache, MySQL and PHP. Build a small php program to make it all works.

* 1. Installing the operation system. You best bet is to use a VM or another computer. To install the ubuntu server. Since ubuntu Server is done entry from a terminal and no graphical interface it can be tough to follow along with a website. Though you certainly use a tablet or your phone. You could even print this out this tutorial.

If don’t believe in reinventing the wheel, unless you can well make it better. So on install Linux onto a computer physical or virtual if will leave it up to the experts at [ubuntu](http://www.ubuntu.com/download/desktop/try-ubuntu-before-you-install) your best bet it to follow the directions to create a bootable Live-CD and then install it using [Virtual Box](https://www.virtualbox.org/)

Once you have Linux in your preferred form up and running you should a see a screen like this.

You will select "Install Ubuntu Server" *remember no mice just keyboard*.

Use the following screen shots as guilds following along with the commands or highlighted options.

##### Choose Language

##### Choose Location

##### Configure keyboard

##### Loading please be patient

##### Choose a hostname or computer name. If you have an admin telling you what to type ask them you really don’t want to mess this up. If at home on your home network and you have never done this before ubuntu will be fine. I'm user Deserver.

##### Name your user and give it a password. This is a development server and will never see the light of production so how strong you make your password is up you.

##### As mentioned this is a dev. server and you should not need to encrypt your home folder.

##### Partioning is out of scope of this tutorial so were going to use guided and use lame

##### We will manually install updates

##### We will install our own software press the {tab} key and continue

##### Heed the warning if you are dual-booting Linux alongside another OS don't do this. Though if this is a VM or different computer go right ahead.

##### Finish the install ****remove the CD****

##### We will now install apache :)

##### Upgrade apt-get

##### Update apt-get

##### Install apache

##### DONE! Well that was easy. Go here using a web browser on a different computer

##### 

##### Now a quick word from our sponsors MySQL "... it's My Sql not yours."

##### We will now install MySQL

##### It’s a dev server but give it a nice password.

##### Create a user table like this

##### Don’t forget ( )

##### Put some fake data into the database

##### Now exit

##### Let’s install php we're almost done

##### Also need the php-mysql module

##### Well php is done

##### Ok some quick admin work so we can write to the www folder and create are little app. Follow the commands from the pictures.

##### add current user to www-data

##### change owner of /var/www

##### create index.php

##### make small app

##### see it work

# REFERENCES GO HERE