

## LAMP Server

One of the most often uses for a Linux server is as a web server with a database backend.

One of the most common databases is MySQL.

The **LAMP** stands for Linux, Apache, MySQL, and PHP. Sometimes Perl or Python is suggested instead of PHP. It just depends on your comfort level with various programming languages. The intent is to create a web server that can pull content from a database and display it as a web page.

Think shopping web site where you have a lot of products listed with their price, description, weight, etc and you can buy them by adding them to a shopping cart. ZenCart is a commonly available open source implementation of this concept.

This will walk you through a basic setup of a LAMP server and a simple application to display information from a database.

Apt-get install mysql-server mysql-client

During the installation process, you will receive a screen asking you to create a root password for MySQL. Do not use your normal root password for your server, select something different.

mysql can be administered from a command prompt or by using a web-based GUI such as phpmyadmin.

Typically to log into mysql from the command line, you enter **mysql -h localhost -u root -p**

There are lots of commands you can use but we want to create a database for our address program so at the mysql prompt enter **mysql> create database address;** Note that command ends with a semicolon. To exit from the mysql prompt, enter **quit**.

We are going to install an address book application that is written in php. There are any number of free ones on the web but I chose this one: [http://www.phpkobo.com/address\\_book.php](http://www.phpkobo.com/address_book.php)

It is licensed under the GNU GPL license like Linux and is free to use and modify as you wish.

Once you download it to the /var/www folder in your installation, you need to create a user for the database and a password for them.

We will use phpmyadmin to create the new user and add their password.

Then you have to edit a config file to let the script know the new user name and password.

Open **web/config/config.db.inc.php** in a text editor and find the following code :

```
define( 'DB_HOSTNAME', 'Your Hostname Here' ); define( 'DB_DATABASE', 'Your Database Name Here' ); define( 'DB_USERNAME', 'Your Username Here' ); define( 'DB_PASSWORD', 'Your Password Here' );
```

Please replace the highlighted text with your **Hostname, Database, Username, and Password.**  
**About Hostname, Database, Username, and Password**

Save the file and on your client, open Iceweasel and go to `IP_Address/address/web/install`

If all goes well, it will install the script properly and create the necessary tables in the database.

It will then give you a link to go to the address book and start adding addresses.

Once we get to this stage, we will go back into the apache configs and create an alias to access the address book without having to search through some links.