### LAMP Configuration

## Prerequisites

a regular, non-root user with sudo privileges configured on server.

OS - Ubuntu 12.04

**Packages Required:**

apache2

mysql-server

libapache2-mod-auth-mysql

php5-mysql

php5

php5-mcrypt

<http://wordpress.org/latest.tar.gz>

### Configuration files

### /etc/apache2/apache2.conf

/etc/apache2/sites-available/default

/etc/apache2/sites-available/000-default.conf

**Cofiguration file details**

### /etc/apache2/apache2.conf

This is the main configuration file that ultimately controls how Apache functions.

Some of the values of interest in here are:

* Timeout

Length of time in seconds that Apache attempts to fulfill a request. Default: 300

* KeepAlive

Define if persistent connections is allowed, which allows more than one request per connection. Default: On

* MaxKeepAliveRequests

Define the maximum number of requests allowed for each KeepAlive persistent connection. Default: 100

* KeepAliveTimeout

Define the number of seconds to wait for another request before ending the KeepAlive persistent connection. Default: 5

* MPM Configuration

Debian and Ubuntu have different Apache packages that are optimized for different situations. Each package is a different flavor of MPM (multi-processing module) and settings for each are defined near the end of this file. The packages available are apache2-mpm-prefork, apache2-mpm-worker, and apache2-mpm-event.

Default : apache2-mpm-worker.

### /etc/apache2/sites-available/default

Defines what Apache should do when it gets a request that matches no other virtual hosts.

**Default VirtualHost settings:**

1. DirectoryIndex

/etc/apache2.mods-available/dir.conf -- Contains default index page entries

e.g. “index.html , inidex.cgi , index.htm”

Options -Indexes --- Restricts default indexing of documents in DocumentRoot.

1. ErrorDocument

can define specific error pages

e.g. ErrorDocument 404 /404\_not\_found.html

1. CustomLog

### /etc/apache2/sites-available/YOURSITEHERE

### Managing Virtual Host files

When you have your sites virtual host file setup, you can enable/disable it by entering the following commands:

$sudo a2ensite

Provides a list of sites files that you can enable.

$sudo a2dissite

Provides a list of sites files you can disable.

$service apache2 reload

Reloads apache to make the change live after you enable or disable a site.

These commands create a symlink for your sites file from /etc/apache2/sites-enabled to its corresponding file in /etc/apache2/sites-available.

## Modules

Modules can be enabled or disabled by the following commands:

$sudo a2ensite

$sudo a2dissite

**/etc/apache2/sites-available/000-default.conf**

1. VirtualHost

Block for each website.can define multiple blocks in single file or we can make seperate files for each block.

1. ServerAdmin

error mail are saint on this

e.g. webmaster@localhost

1. Listen

Listen on port or IP address and port

e.g. Listen 80

Listen 127.0.0.1:80

1. ServerName

Name of server/website

1. ServerAlias

Alias for ServerName

1. DocumentRoot

Path to document root directory where all documents are stored

1. ErrorLog

Path to the file where error log should be maintained

1. AccessLog

Path to file where access log should be maintained.

**Steps:**

## Install Apache

$sudo apt-get update  
$sudo apt-get install apache2

To check : enter your server’s ip in browser,output should be:

“It works!"

## How to Find your Server’s IP address

$ifconfig eth0 | grep inet | awk '{ print $2 }'

1. **Install MySQL**

$sudo apt-get install mysql-server libapache2-mod-auth-mysql php5-mysql

Once you have installed MySQL, we should activate it with this command:

$sudo mysql\_install\_db

Finish up by running the MySQL set up script:

$sudo /usr/bin/mysql\_secure\_installation

1. **Install PHP**

$sudo apt-get install php5 libapache2-mod-php5 php5-mcrypt

It may also be useful to add php to the directory index, to serve the relevant php index files:

$sudo nano /etc/apache2/mods-enabled/dir.conf

Add index.php to the beginning of index files. The page should now look like this:

<IfModule mod\_dir.c>  
  
 DirectoryIndex index.php index.html index.cgi index.pl index.php index.xhtml index.htm  
  
</IfModule>

## PHP Modules

PHP also has a variety of useful libraries and modules that you can add onto your virtual server. You can see the libraries that are available.

$apt-cache search php5-

Terminal will then display the list of possible modulesOnce you decide to install the module:

$sudo apt-get install *name of the module*

## RESULTS: See PHP on your Server

create a new file:

$sudo nano /var/www/info.php

Add in the following line:

<?php  
phpinfo();  
?>

Restart apache so that all of the changes take effect:

$sudo service apache2 restart

Finish up by visiting your php info page

e.g. http://12.34.56.789/info.php

**\*\*Notes:**

1. To remove apache from autostart at boot

$sudo update-rc.d -f apache2 remove

1. Restore back to autostart list

$sudo update-rc.d apache2 defaults

1. To restrict .htaccess

in directory block:

AllowOverride None

1. $apache2ctl -S

Apache Status