

LAMP Installation steps & Configuration steps

Installation:

1. Install Apache

```
sudo apt-get install apache2
```

2. Install MySQL

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

3. Install PHP

```
sudo apt-get install php5 libapache2-mod-php5
```

4. Restart Server

```
sudo /etc/init.d/apache2 restart
```

5. Check Apache

<http://localhost/>

6. Check PHP

```
php -r 'echo "\n\nYour PHP installation is working fine.\n\n\n";'
```

Configuration

Creating the first CGI script in Perl

Create the /var/cgi-bin directory

```
mkdir /var/cgi-bin
```

and create a file called /var/cgi-bin/echo.pl with the following content:

```
#!/usr/bin/perl
use strict;
use warnings;
print qq(Content-type: text/plain\n\n);
print "hi\n";
```

Make the file executable by

```
chmod +x /var/cgi-bin/echo.pl
```

and run it on the command line:

```
/var/cgi-bin/echo.pl
```

It should print:

Content-type: text/plain
hi

Configure Apache to serve CGI files

**Open the configuration file of Apache /etc/apache2/sites-enabled/000-default.conf
It has the following in it with a bunch of comments between the lines:**

```
<VirtualHost *:80>
    ServerAdmin webmaster@localhost
    DocumentRoot /var/www

    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

Add the following lines after the DocumentRoot line:

```
ScriptAlias /cgi-bin/ /var/cgi-bin/
<Directory "/var/cgi-bin">
    AllowOverride None
    Options +ExecCGI -MultiViews +SymLinksIfOwnerMatch
    Require all granted
</Directory>
```

Now you should have:

```
<VirtualHost *:80>
    ServerAdmin webmaster@localhost
    DocumentRoot /var/www

    ScriptAlias /cgi-bin/ /var/cgi-bin/
    <Directory "/var/cgi-bin">
        AllowOverride None
        Options +ExecCGI -MultiViews +SymLinksIfOwnerMatch
        Require all granted
    </Directory>

    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

```
ls -l /etc/apache2/mods-enabled/ | grep cgi
ls -l /etc/apache2/mods-available/ | grep cgi
ln -s /etc/apache2/mods-available/cgid.load /etc/apache2/mods-enabled/
ln -s /etc/apache2/mods-available/cgid.conf /etc/apache2/mods-enabled/
ls -l /etc/apache2/mods-enabled/ | grep cgi
service apache2 reload
```