### **1 Preliminary Note**

In this tutorial I use the hostname server1.example.com with the IP address 192.168.0.100. These settings might differ for you, so you have to replace them where appropriate.

I'm running all the steps in this tutorial with root privileges, so make sure you're logged in as root:

**sudo su**

### **2 Installing MySQL 5**

First we install MySQL 5 like this:

**apt-get install mysql-server mysql-client**

You will be asked to provide a password for the MySQL root user - this password is valid for the user root@localhost as well as root@server1.example.com, so we don't have to specify a MySQL root password manually later on:

New password for the MySQL "**root**" user: <-- yourrootsqlpassword  
Repeat password for the MySQL "**root**" user: <-- yourrootsqlpassword

### **3 Installing Apache2**

Apache2 is available as an Ubuntu package, therefore we can install it like this:

**apt-get install apache2**

Now direct your browser to http://192.168.0.100, and you should see the Apache2 placeholder page (It works!):

Apache's default document root is /var/www on Ubuntu, and the configuration file is /etc/apache2/apache2.conf. Additional configurations are stored in subdirectories of the /etc/apache2 directory such as /etc/apache2/mods-enabled (for Apache modules), /etc/apache2/sites-enabled (for virtual hosts), and /etc/apache2/conf.d.

### **4 Installing PHP5**

We can install PHP5 and the Apache PHP5 module as follows:

apt-get install php5 libapache2-mod-php5

We must restart Apache afterwards:

**/etc/init.d/apache2 restart**

### **5 Testing PHP5 / Getting Details About Your PHP5 Installation**

The document root of the default web site is /var/www. We will now create a small PHP file (info.php) in that directory and call it in a browser. The file will display lots of useful details about our PHP installation, such as the installed PHP version.

**vi /var/www/info.php**

|  |
| --- |
| <?php  phpinfo();  ?> |

Now we call that file in a browser (e.g. http://192.168.0.100/info.php):

As you see, PHP5 is working, and it's working through the Apache 2.0 Handler, as shown in the Server API line. If you scroll further down, you will see all modules that are already enabled in PHP5. MySQL is not listed there which means we don't have MySQL support in PHP5 yet.

### **6 Getting MySQL Support In PHP5**

To get MySQL support in PHP, we can install the php5-mysql package. It's a good idea to install some other PHP5 modules as well as you might need them for your applications. You can search for available PHP5 modules like this:

**apt-cache search php5**

Pick the ones you need and install them like this:

**apt-get install php5-mysql php5-curl php5-gd php5-idn php-pear php5-imagick php5-imap php5-mcrypt php5-memcache php5-ming php5-ps php5-pspell php5-recode php5-snmp php5-sqlite php5-tidy php5-xmlrpc php5-xsl**

Now restart Apache2:

**/etc/init.d/apache2 restart**

Now reload http://192.168.0.100/info.php in your browser and scroll down to the modules section again. You should now find lots of new modules there, including the MySQL module:

### **7 phpMyAdmin**

[phpMyAdmin](about:blank) is a web interface through which you can manage your MySQL databases. It's a good idea to install it:

**apt-get install phpmyadmin**

You will see the following questions:

Web server to reconfigure automatically: <-- **apache2**  
Configure database for phpmyadmin with **dbconfig-common**? <-- **No**

Afterwards, you can access phpMyAdmin under http://192.168.0.100/phpmyadmin/: