

Steps for Installing PHP 5.1.5

Login to aludra - the process will go faster if you do.

Change directory to the /tmp directory. You are going to do most of the installation steps outside your own account, so your disk space is not used up completely. If you have tried to do the PHP install in your own account, delete the php-5.1.5 directory in its entirety before trying this new procedure.

Make a directory in /tmp. The name of the directory does not matter, as long as the directory name you pick is not already there. For example, I want to create a directory called 'crowley'. The commands are:

```
cd /tmp
mkdir crowley
```

Move into this directory. From the above example, the command is 'cd crowley'.

Untar PHP directly from the 350 account. The command is:

```
gtar xvf /home/scf-22/csci350/php-5.4.29.tar
```

This will untar the files in the directory you created in /tmp. This will require no disk space in your own account to the php-5.1.5 directory. You must run the configure script. The command is given below. Make sure you enter it all on one line. It assumes that mysql is installed at the same directory level as apache, which is a direct subdirectory to your home directory. You must specify your Unix ID for MYUNIXID. You must also specify the proper two-digit number for the scf directory for your Unix account. The ABSOLUTE_PATH_FOR_PHP_INSTALL is just like the equivalent parameter for the Apache install. Pick a directory to which you want PHP to be installed. Don't make it the php-5.1.5 directory.

```
./configure --with-mysql=/home/scf-XX/MYUNIXID/mysql --with-config-file-  
path=ABSOLUTE_PATH_FOR_PHP_INSTALL --with-apxs=/home/scf-  
XX/MYUNIXID/apache/bin/apxs --enable-versioning
```

You must put in your own installation paths to mysql and apache and apxs. You can use full path names if you want. Apxs is in the bin directory of your Apache install.

You have to make some changes to the make file ('Makefile') so that it actually works. I used emacs, you can use whatever editor you want. The file name is Makefile and it is in the *php-5.4.29* directory.

You need to check the `APACHE_INCLUDE` and `MYSQL_INCLUDE` lines to ensure the path there is correct for your Apache and Mysql installations.

You also need to add the following to the `EXTRA_LIBS` line. I added mine to the end. Be sure that you use YOUR correct full path. I added the following:

```
-L/home/scf-22/csci402/crowley/mysql/lib/libmysqlclient.a -L/home/scf-22/csci402/crowley/mysql/lib
```

If you use emacs to make the changes, you may get a warning about 'suspicious' lines - there are 3 of them. It looks to be a line that has a tab all by itself - which might be a problem. I deleted the tabs and then saved without the warning.

There are two versions of the sed utility program. The proper one is in `/usr/bin/sed`. You need to make sure that the 'libtool' script file, in php-5.4.29, has the path as `'/usr/bin/sed'`. If it is anything else, change it.

After you make all the above edits, then type in 'make'. If it works, it will create a file called 'libphp5.so' in your 'libs' sub-directory. You're going to get a lot of output from make. If you enter 'ls -ltr libs/' after you get your prompt back, you should see the last file called 'libphp5.so'. If you don't see this - you probably had some errors by not making the paths correct in the changes to the Makefile. Check your changes

Copy the library file, `libs/libphp5.so`, into your apache libexec directory. Change into that directory to ensure that the `libphp5.so` file was actually copied. Once you see it, go back to `/tmp` and delete the directory that you created earlier.

You must tell Apache what to do with files that end in php. To do this, you must edit the `httpd.conf` file and add the following 2 lines to the end of the `httpd.conf` file. I added the two lines just below the commented out `LoadModule` example line.

```
LoadModule php5_module libexec/libphp5.so
AddType application/x-httpd-php .php
```

The `LoadModule` tells Apache to load your php library file created above and the `AddType` tells Apache to run this module on any file that ends with '.php'.

The last preparatory step is to copy two library files into your apache libexec directory. I'm not sure why they can't be found in `/lib`, but they can't. cd to your apache libexec directory and enter the two commands below.

```
cp /lib/libresolv.so.2 .
cp /lib/libnsl.so.1 .
```

Don't leave out the final period. That's what causes the copy command to copy the file to the directory you are currently in.

Login to cs-server.usc.edu and restart Apache so that your httpd.conf changes go into effect. If you look at the Apache log file you should see a line saying something about PHP 5.4.29 configured.

Now you're ready to create PHP files. Put them in your htdocs directory, or in a subdirectory under htdocs.