

Installing and Configuring PHP 5 on WinXP

Before you begin, having a firewall up and running, such as Zone Alarm, can cause problems with Apache installations. I recommend that you turn off Zone Alarm before beginning. You do not need to turn off Microsoft's built in firewall. We will focus on configuring Zone Alarm after we get Apache 2 up and running.

I'm using AVG free edition anti-virus and this installation works fine next to AVG.

The first step in this process is to visit the php.net and download PHP 5.0.3. The latest release is 5.0.5, however, this latest release does not have debugging support in the Eclipse IDE as of this writing. We will install Eclipse later.

PHP Download Page:

<http://www.php.net/releases.php>

5.0.3Released:

Released: 15 Dec 2004

Windows binary [7,433Kb]

md5: 50f3d62e7bb4526fd1deefdb263f9fa7

Installing PHP 5.0.3 as CGI application:

I believe I read somewhere that running as CGI offers the ability for IDE (integrated development environment) to be able to debug scripts – and I need all the debugging benefits I can get! PHP 5 can also run as an Apache module with superior security and performance. I'm willing to give up some security and performance on my development machine because I promised to hack my own computer and enabling debugging is very important to me. I could be wrong here, but I do know CGI allows me to debug in xxxxxxxxxxxxxx. I do not know I can debug in the same manner using PHP installed as a module. “If it ain't broke, don't fix it” applies here. Having said that, you may want to install Apache as a module if you ever set up a production server.

Create a directory php under the c: drive ([c:\php](#)).

Unzip php-5.0.3-Win32.zip (insert your filename, if different) into [c:\php](#). Don't put in “Program Files” to avoid web server problems with the space “ “ between “Program” and “Files”.

Note: The file unzips into its components and not a single main directory. This is why we create the php directory – it is the single main directory.

We want [c:\php](#) to be part of our windows path so it can be found when necessary.

Start -> Control Panel -> System (double click) -> Advanced tab -> System Variables -> find Path variable -> Edit -> add append “;[C:\php](#)” (no quotes) to the end. Be sure to include the leading “;” character.

Restart your computer for this change to take effect.

We don't put this file in the Windows directory because it can complicate upgrades and cause problems.

Next, we set up PHPRC environment variable:

Start -> Control Panel -> System -> Advanced Tab -> Environment variables button -> look into System variables pane -> Click on "new" -> enter "PHPRC" (no quotes) as the variable name and "C:\php" (no quotes) as the variable value (the location of php.ini) -> Click OK -> click OK -> exit Control Panel -> Restart computer.

Note: Make sure that the user running the web server has read permissions to php.ini (shouldn't be a problem, but if it is, make it readable for everyone).

Copy php.ini-recommended into the same directory ([c:\php](#)). Rename it to php.ini.

Put a shortcut into c:\web\webdev\conf.

Find and update doc_root to:

```
doc_root = .c:\web\html
```

Pay special attention to the "." period before the "c". Without it, virtual hosts doesn't work properly in Apache (and maybe other web servers, too).

Update the path to your extensions directory: from extension_dir = "./" to:

```
extension_dir = c:\php\ext
```

Note the backslashes!

Enable pgsql (PostgreSQL) support by changing

```
;extension=php_pgsql.dll
```

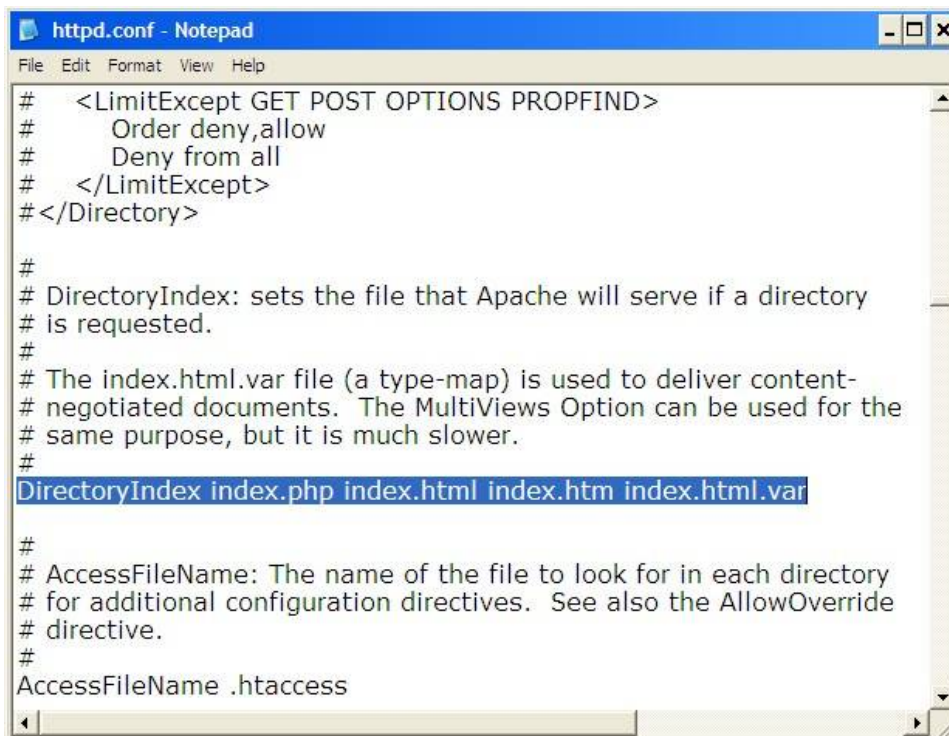
to

```
extension=php_pgsql.dll
```

Notice the missing ";". the ";" indicates a comment and we are uncommenting this line.

Open httpd.conf, find DirectoryIndex and update it as follows:

```
DirectoryIndex index.php index.html index.htm index.html.var
```



```
httpd.conf - Notepad
File Edit Format View Help
# <LimitExcept GET POST OPTIONS PROPFIND>
#   Order deny,allow
#   Deny from all
# </LimitExcept>
#</Directory>

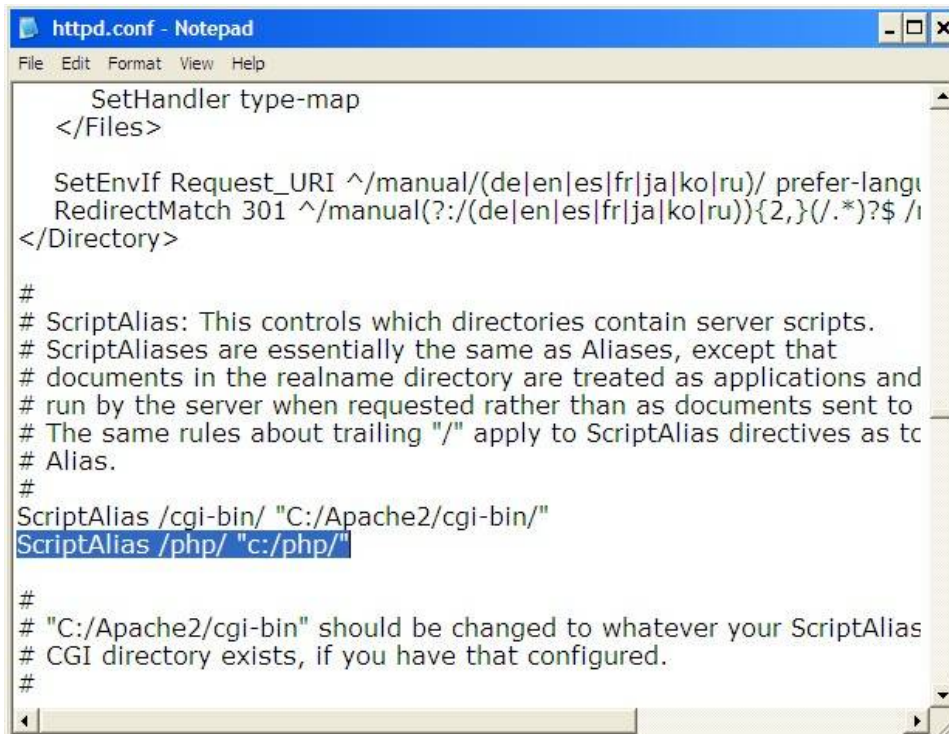
#
# DirectoryIndex: sets the file that Apache will serve if a directory
# is requested.
#
# The index.html.var file (a type-map) is used to deliver content-
# negotiated documents.  The MultiViews Option can be used for the
# same purpose, but it is much slower.
#
DirectoryIndex index.php index.html index.htm index.html.var

#
# AccessFileName: The name of the file to look for in each directory
# for additional configuration directives.  See also the AllowOverride
# directive.
#
AccessFileName .htaccess
```

I used the mouse to highlight the line I updated – you aren't doing anything wrong if your line is not highlighted in blue. The key points here are that you are telling Apache what file name/extensions to automatically display in a directory and the order of the name/extensions is important! If index.html and index.php are in the same root directory, Apache will display index.php since it is listed to before index.html.

Next, scroll down to the ScriptAlias directive and add the following line:

```
ScriptAlias /php/ "c:/php/"
```



```
SetHandler type-map
</Files>

SetEnvIf Request_URI ^/manual/(de|en|es|fr|ja|ko|ru)/ prefer-lang
RedirectMatch 301 ^/manual(?:/(de|en|es|fr|ja|ko|ru)){2,}/(.*)?$ /i
</Directory>

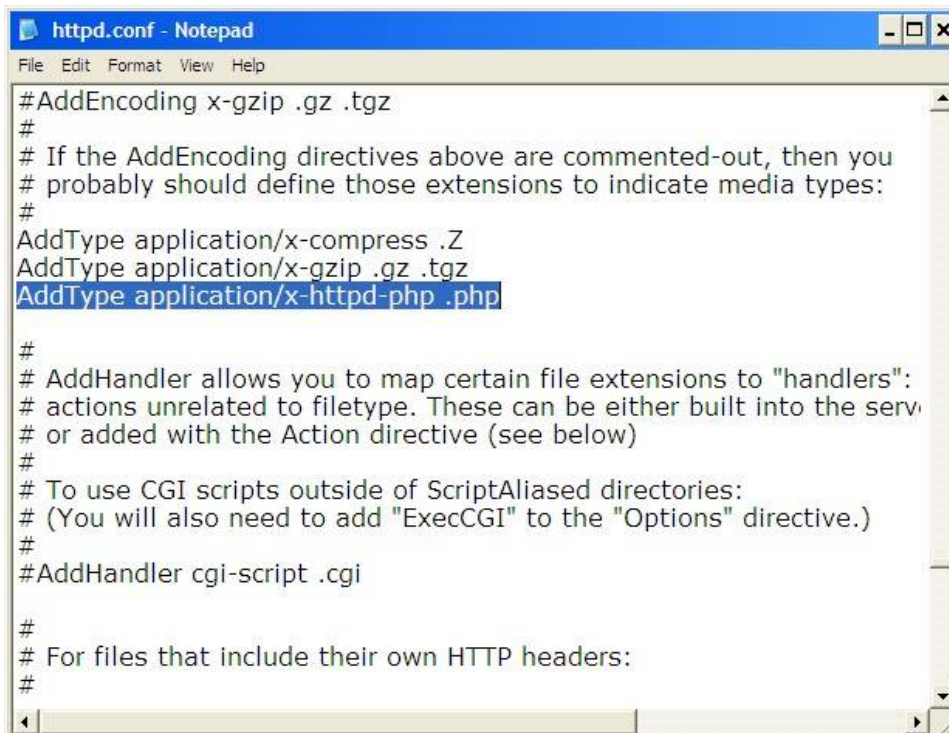
#
# ScriptAlias: This controls which directories contain server scripts.
# ScriptAliases are essentially the same as Aliases, except that
# documents in the realname directory are treated as applications and
# run by the server when requested rather than as documents sent to
# The same rules about trailing "/" apply to ScriptAlias directives as to
# Alias.
#
ScriptAlias /cgi-bin/ "C:/Apache2/cgi-bin/"
ScriptAlias /php/ "c:/php/"

#
# "C:/Apache2/cgi-bin" should be changed to whatever your ScriptAlias
# CGI directory exists, if you have that configured.
#
```

“c:/php/” was our install directory so we will leave it intact. “c:/php/” is the exact same as “C:/php/”, so don't fret over the lowercase “c”.

Next, scroll down to the AddType directive and add the following line:

AddType application/x-httpd-php .php



```
#AddEncoding x-gzip .gz .tgz
#
# If the AddEncoding directives above are commented-out, then you
# probably should define those extensions to indicate media types:
#
AddType application/x-compress .Z
AddType application/x-gzip .gz .tgz
AddType application/x-httpd-php .php

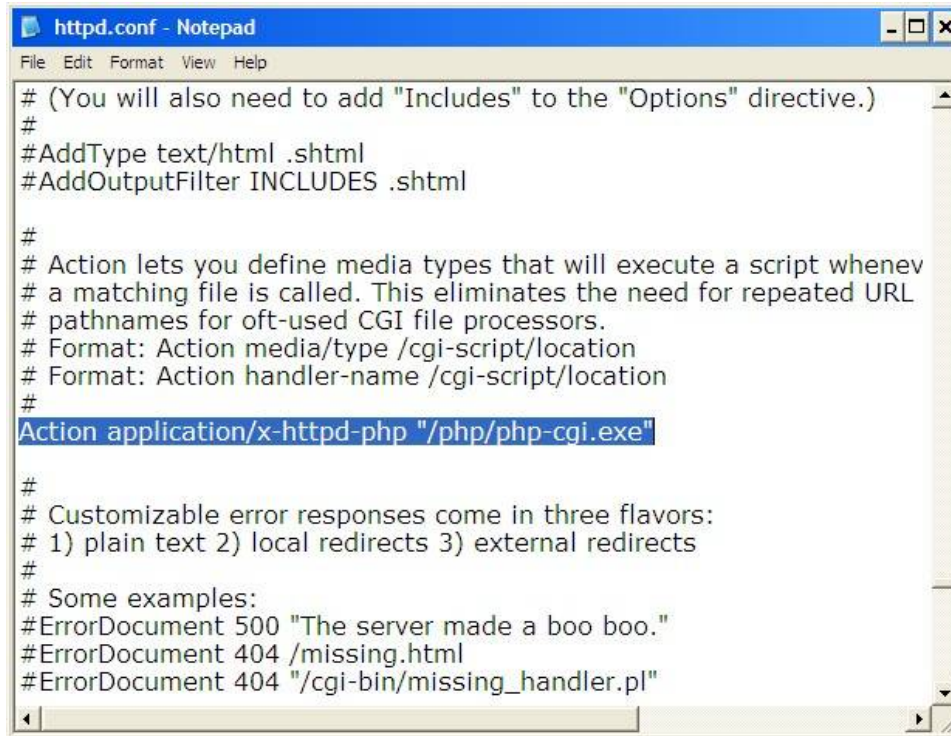
#
# AddHandler allows you to map certain file extensions to "handlers":
# actions unrelated to filetype. These can be either built into the server
# or added with the Action directive (see below)
#
# To use CGI scripts outside of ScriptAliased directories:
# (You will also need to add "ExecCGI" to the "Options" directive.)
#
AddHandler cgi-script .cgi

#
# For files that include their own HTTP headers:
#
```

This tells Apache that files ending in .php need to be run through the CGI PHP interpreter.

Next, scroll down to the Actions directive and add the following line:

Action application/x-httpd-php "/php/php-cgi.exe"



```
httpd.conf - Notepad
File Edit Format View Help
# (You will also need to add "Includes" to the "Options" directive.)
#
#AddType text/html .shtml
#AddOutputFilter INCLUDES .shtml

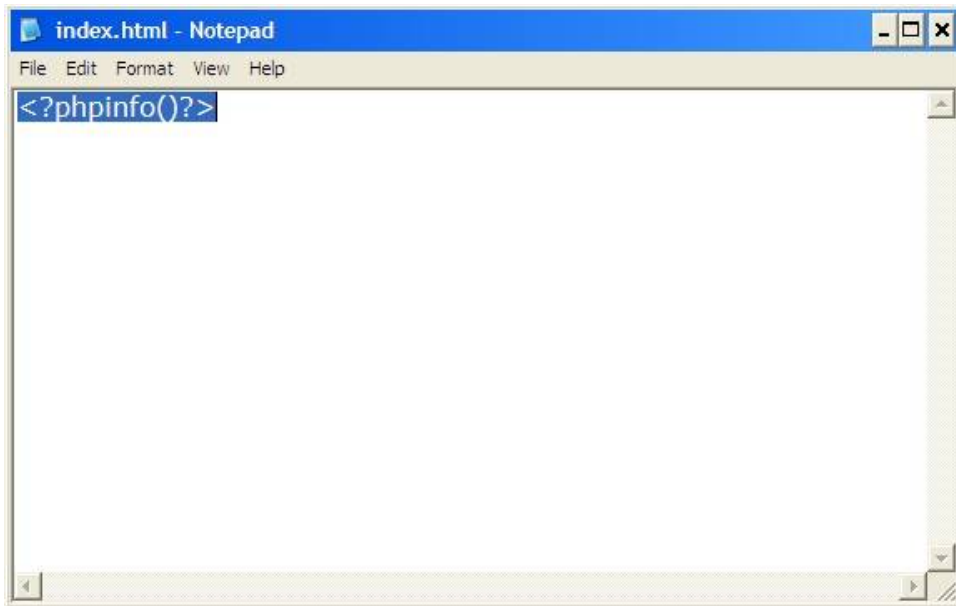
#
# Action lets you define media types that will execute a script whenever
# a matching file is called. This eliminates the need for repeated URL
# pathnames for oft-used CGI file processors.
# Format: Action media/type /cgi-script/location
# Format: Action handler-name /cgi-script/location
#
Action application/x-httpd-php "/php/php-cgi.exe"

#
# Customizable error responses come in three flavors:
# 1) plain text 2) local redirects 3) external redirects
#
# Some examples:
#ErrorDocument 500 "The server made a boo boo."
#ErrorDocument 404 /missing.html
#ErrorDocument 404 "/cgi-bin/missing_handler.pl"
```

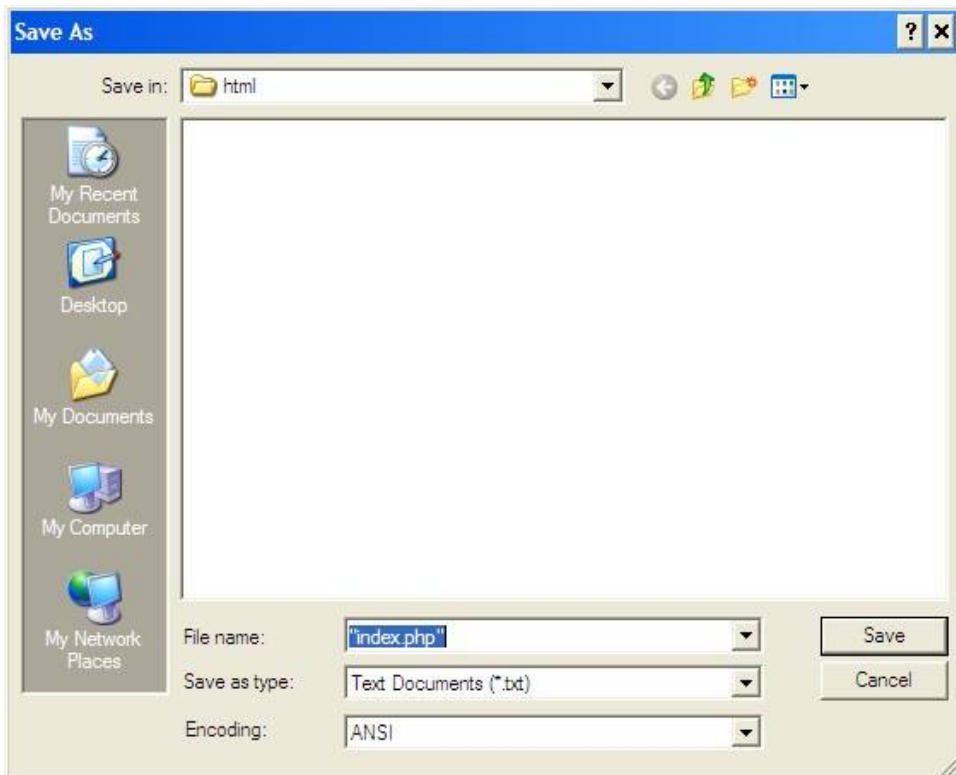
Save httpd.conf and restart the Apache server. Note - the Action statement for PHP 4 is different, so if you are trying to get PHP 4 to work, you must add `Action application/x-httpd-php "/php/php.exe"` instead.

Navigate to index.html in the C:\web\html directory. Open it in notepad. Delete the existing html text and replace it with

`<?phpinfo()?>`

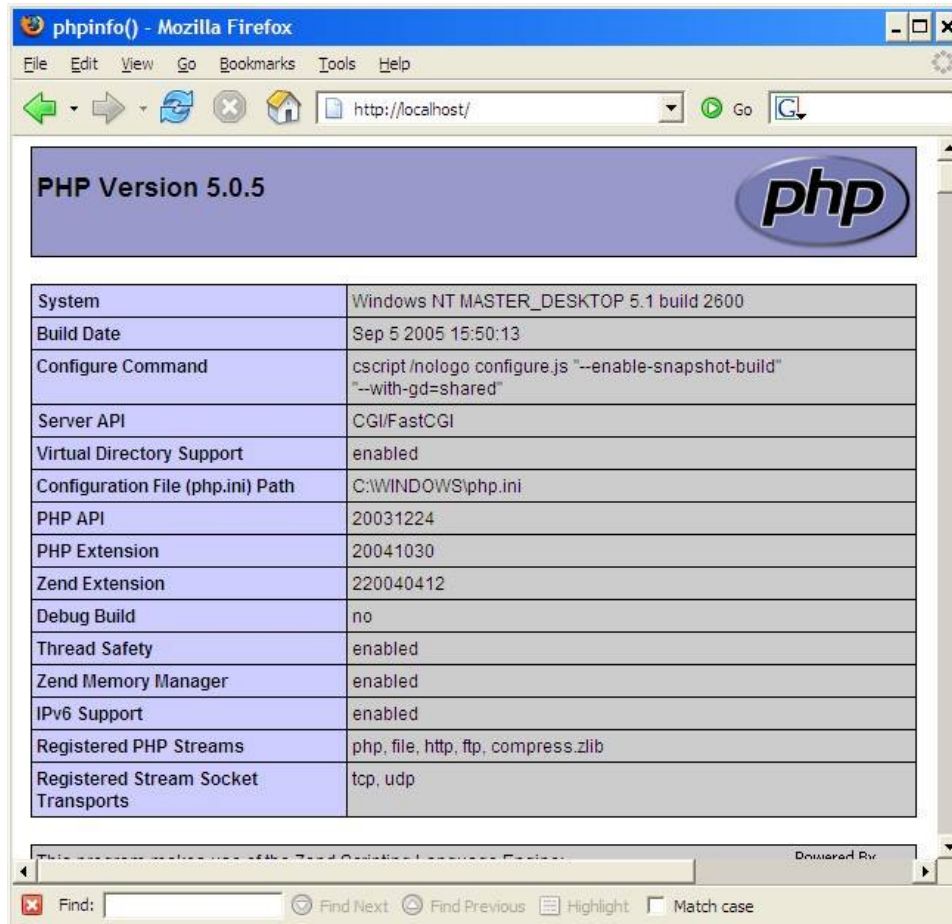


Save the file as index.php. Remember to enter the “ in notepad so it isn't saved as index.php.txt.



Are you ready to test your installation? Do you feel lucky? Not that lucky – be sure to restart your Apache2 server.

Type in <http://localhost> or mydomain.net into your browser's location bar. Press Go. You should see something like this:



If you didn't receive this output, try hitting refresh. If you receive an error message, try entering the error message, enclosed in quotation marks, into google web and google groups. You can reread the instructions and check for a minor detail you may have overlooked, too.

You can also visit this tutorial:

<http://www.devshed.com/c/a/Apache/Installing-and-Configuring-Apache-2-on-a-Windows-XP-Machine/>

or the apache Manual

<http://httpd.apache.org/docs/2.0/platform/windows.html>

or the PHP manual

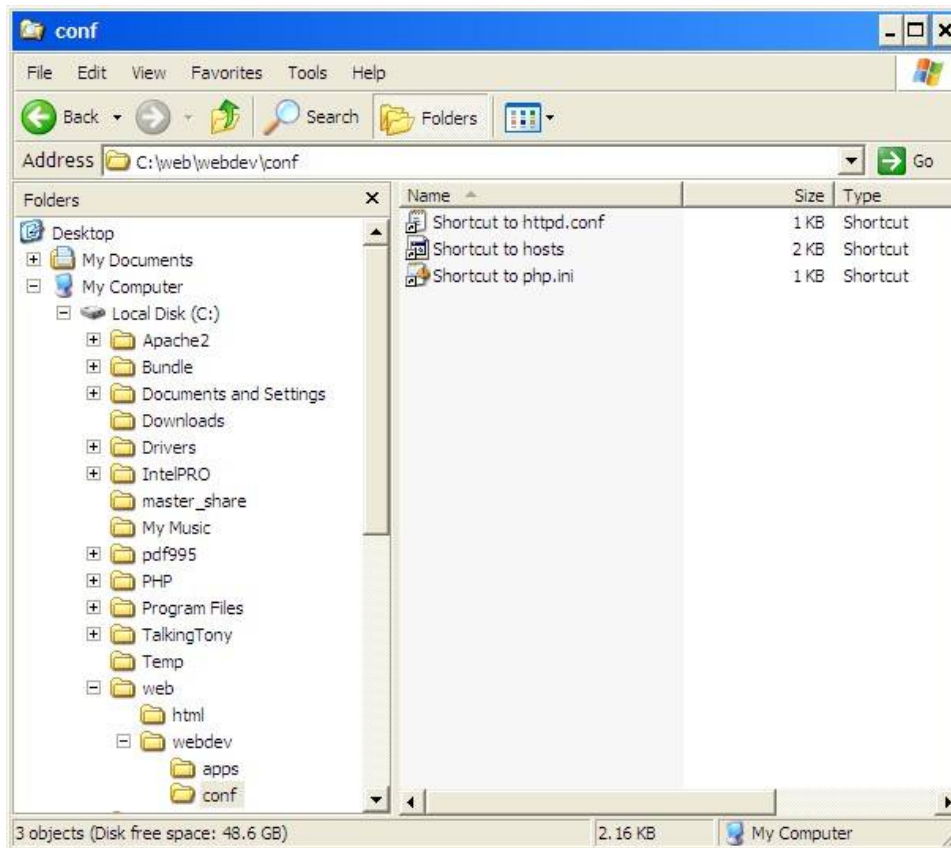
<http://us3.php.net/manual/en/install.windows.apache2.php>

Notice how the index.php file was pulled up by Apache instead of the index.html page. This occurred because of the DirectoryIndex order we set in a prior step.

Have fun learning to program PHP 5!

Let's move a shortcut to the PHP initialization file, php.ini, into our webdev taskbar -> conf directory. Do a search for php.ini in the c:\windows directory. Highlight php.ini -> right click -> copy. Navigate to the c:\web\webdev\conf directory and right click -> Paste Shortcut.

You should end up with something like this:



Let's move on to install PostgreSQL...