

# **Windows Server Installation Guide For WAMP**

## **- Windows, Apache2, Mysql5, Php5 -**

Part 1 – Install Apache 2

Part 2 – Install MySQL 5

Part 3 – Install PHP 5

**This Document is no longer updated. Please visit [WorkOrderTS.com](http://www.workordertts.com) for a recent version. [http://www.workordertts.com/Virtual\\_Brain\\_Online/article/6/](http://www.workordertts.com/Virtual_Brain_Online/article/6/)**

Thank you for your interest in Work order Processing by Network-Technologies.org. This guide will help you get your computer configured to run our Work order Processing software properly. My Work order Processing Software is not covered in this document

Don't forget, Network-Technologies.org offers remote server setup and software installation for most Windows and Linux systems, contact me for more details!

## Before You Begin

Download the latest editions of Apache 2, PHP 5 and MySQL 5.

NOTE: By the time of writing this document PHP5 Stable (5.1.6) is NOT compatible with Apache 2.2.X. Please download Apache 2.0.X for now!

### Download Locations:

Apache 2.0 (MSI Installer ) => <http://httpd.apache.org/download.cgi>

PHP 5 (zip package) => <http://php.net/Download>

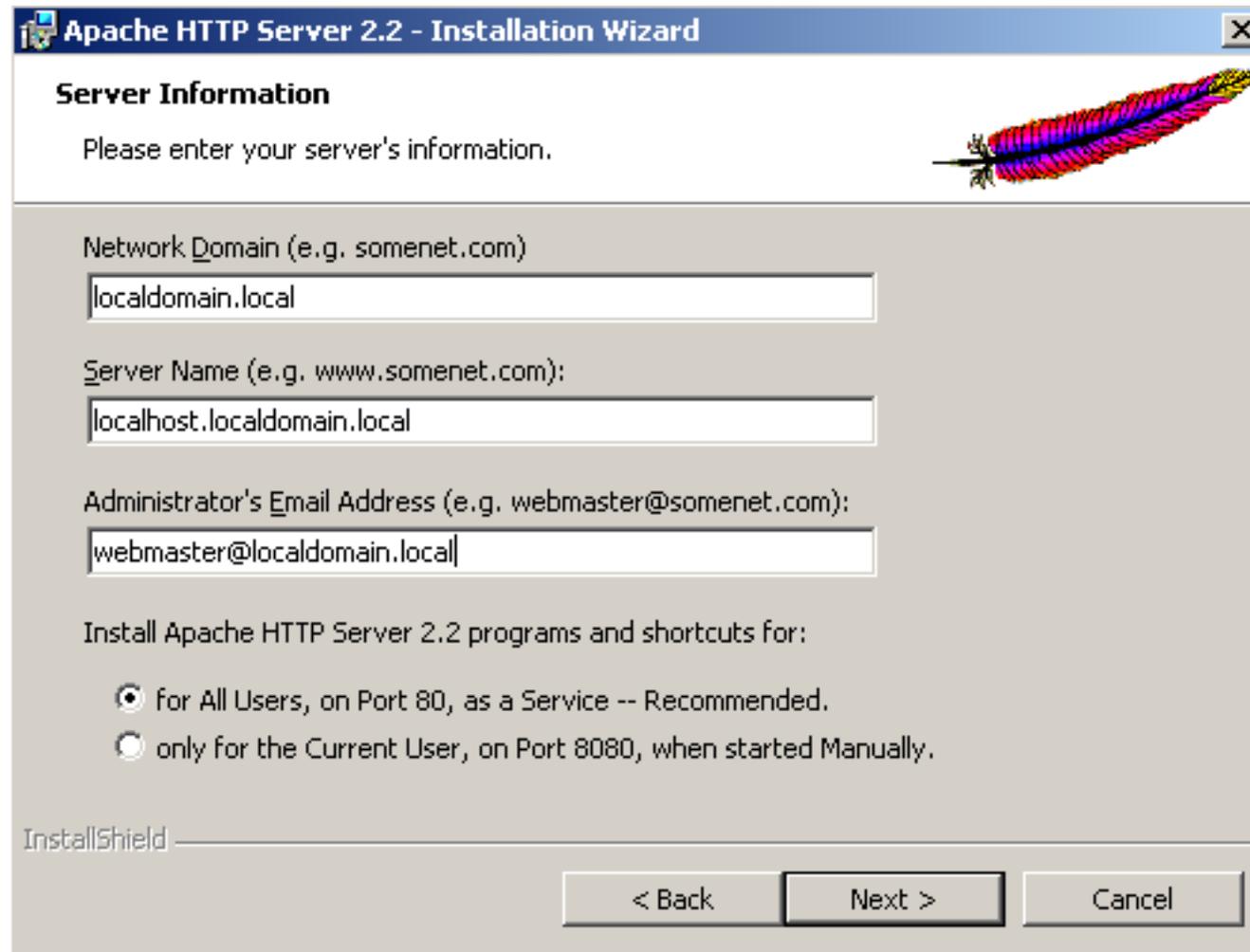
MySQL 5 (comp. installer ~40MB) => <http://mysql.org/downloads/mysql/5.0.html>

## PART 1 Install Apache

Start the Installer



If you are planning to host your own domain on the Apache 2 installation, you might want to use your real domain information. If the Apache installation will not be used for domain hosting within a short period of time you can use the values I used for this guide. This can be changed later via the config file!



The image shows a screenshot of the 'Apache HTTP Server 2.2 - Installation Wizard' window. The window title bar includes a close button (X) and a feather icon. The main content area is titled 'Server Information' and contains the instruction 'Please enter your server's information.' Below this are three text input fields: 'Network Domain (e.g. somenet.com)' with 'localhost.local', 'Server Name (e.g. www.somenet.com):' with 'localhost.localhost.local', and 'Administrator's Email Address (e.g. webmaster@somenet.com):' with 'webmaster@localhost.local'. At the bottom, there are radio button options for installation: 'for All Users, on Port 80, as a Service -- Recommended.' (selected) and 'only for the Current User, on Port 8080, when started Manually.' The window footer shows 'InstallShield' and three buttons: '< Back', 'Next >', and 'Cancel'.

**Apache HTTP Server 2.2 - Installation Wizard**

**Server Information**

Please enter your server's information.

Network Domain (e.g. somenet.com)  
localhost.local

Server Name (e.g. www.somenet.com):  
localhost.localhost.local

Administrator's Email Address (e.g. webmaster@somenet.com):  
webmaster@localhost.local

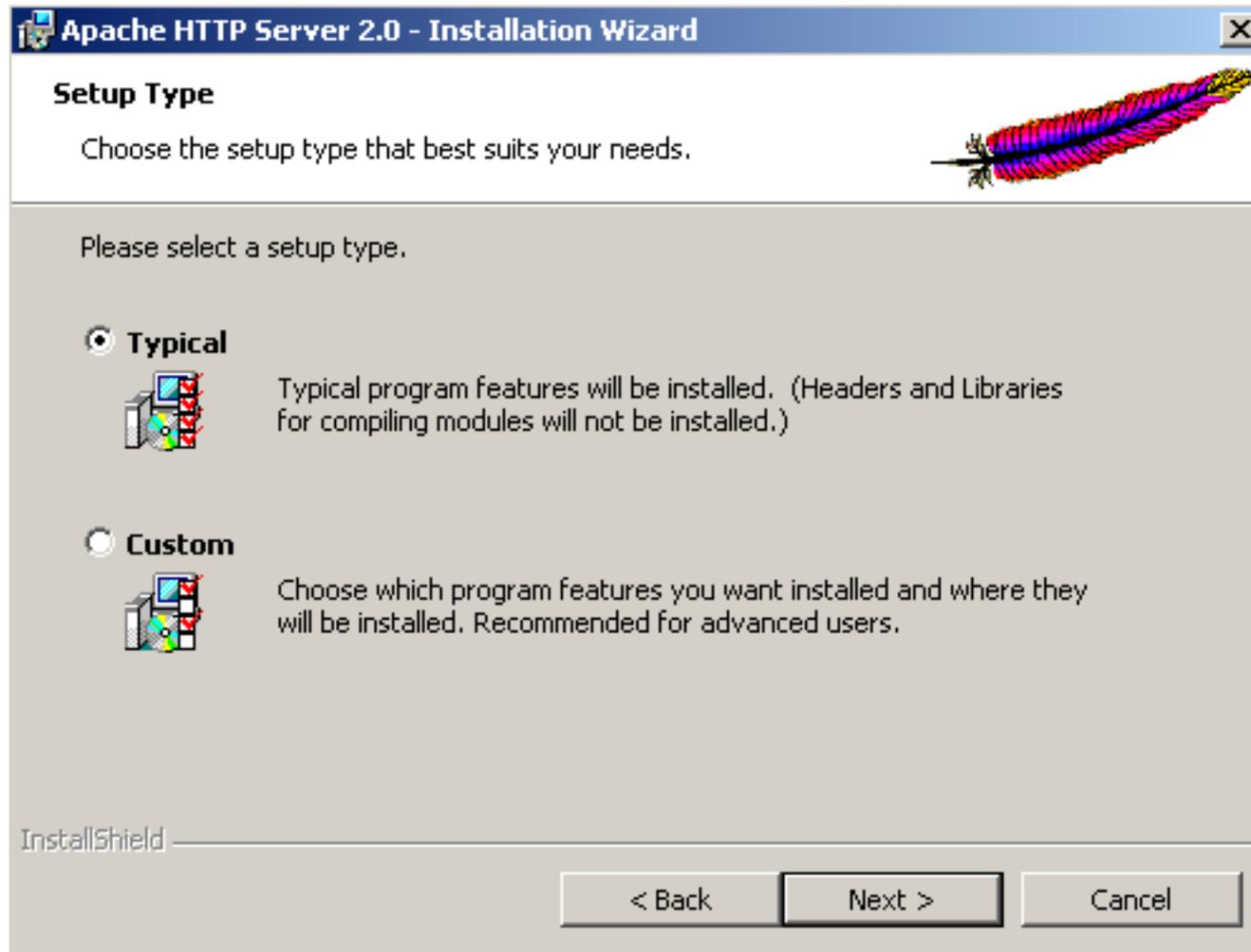
Install Apache HTTP Server 2.2 programs and shortcuts for:

- for All Users, on Port 80, as a Service -- Recommended.
- only for the Current User, on Port 8080, when started Manually.

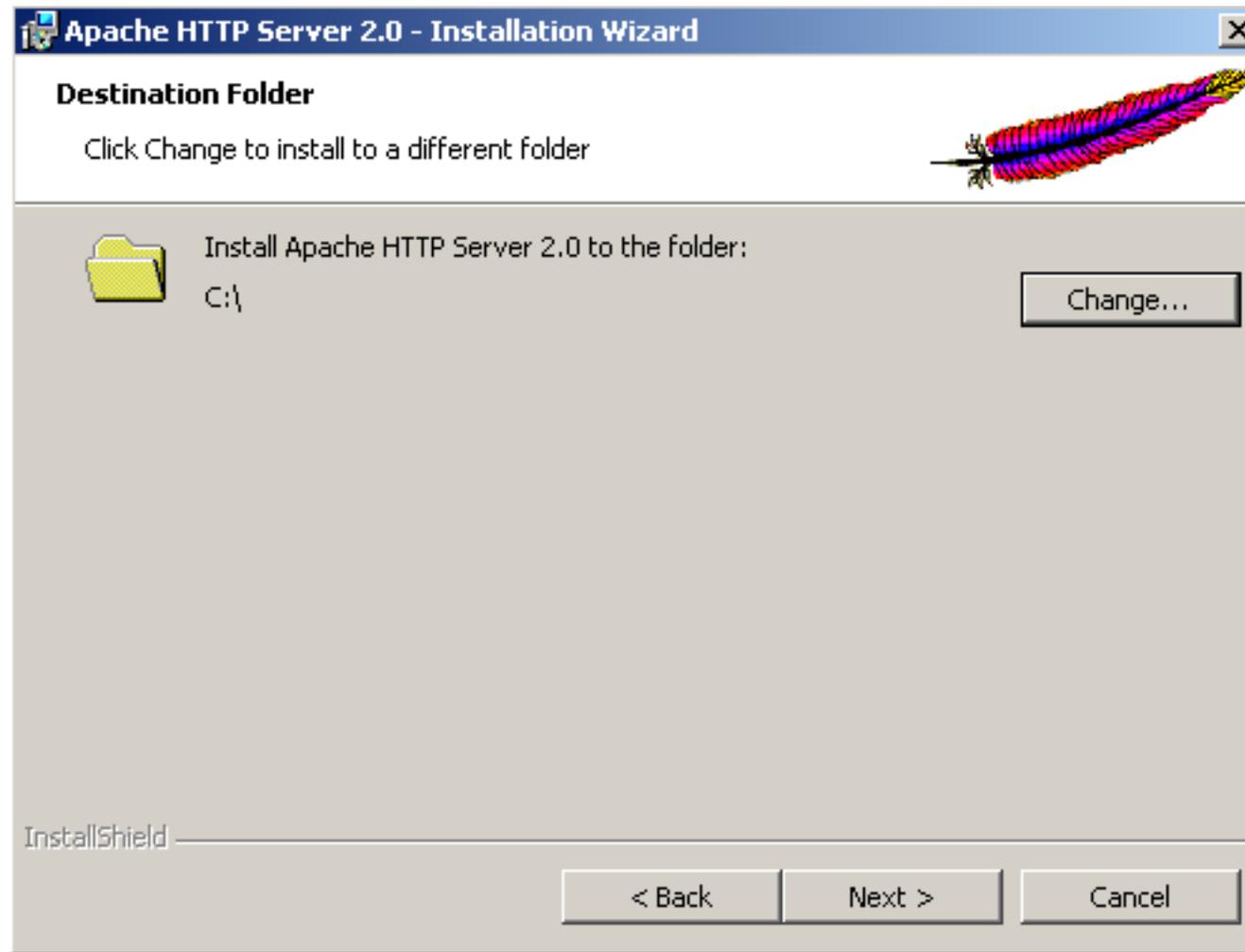
InstallShield

< Back    Next >    Cancel

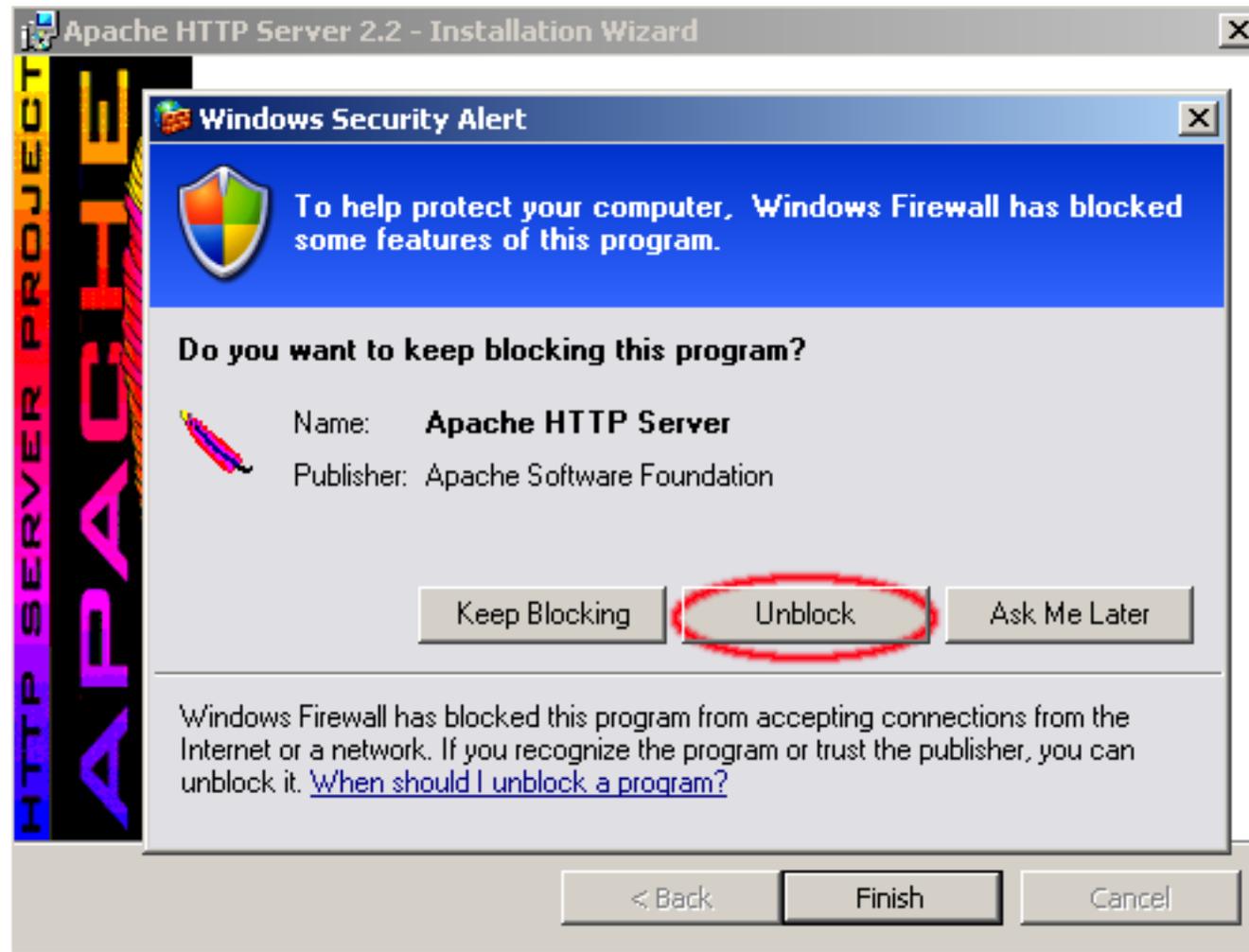
## Use Typical Installation Options



I would highly recommend that you change the installation directory to C:\ which will install Apache into C:\Apache2



## Unblock Apache 2 from your firewall



Once the installation has completed successfully, open your favorite web browser and navigate to <http://localhost/>

You should now be presented with the default apache server page.

**NOTE:** Later versions might only display “It Works”



If you can see this, it means that the installation of the [Apache web server](#) software add content to this directory and replace this page.

---

## Seeing this instead of the website y

This page is here because the site administrator has changed the configuration of th **responsible for maintaining this server with questions**. The Apache Software software this site administrator is using, has nothing to do with maintaining this site :

---

The Apache [documentation](#) has been included with this distribution.

You are free to use the image below on an Apache-powered web server. Thanks :

## **Trouble Shooting**

Windows Small Business Server – Disable Internet Information Service, it's running on Port 80

## PART 2 – Install MySQL 5

Extract the MySQL installer and start the Setup.

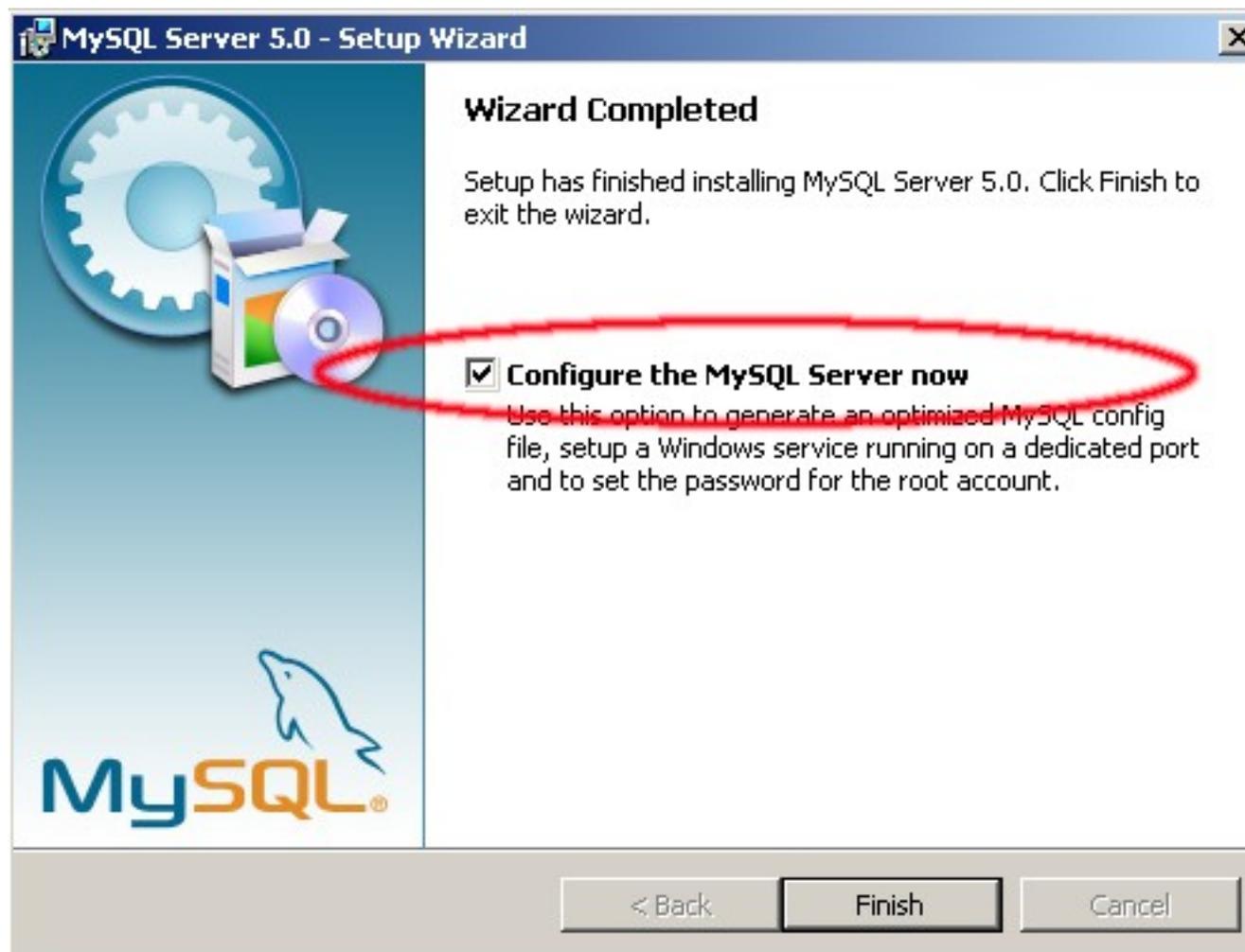
Follow the instructions given to you by the installer.

Default Settings are OK.

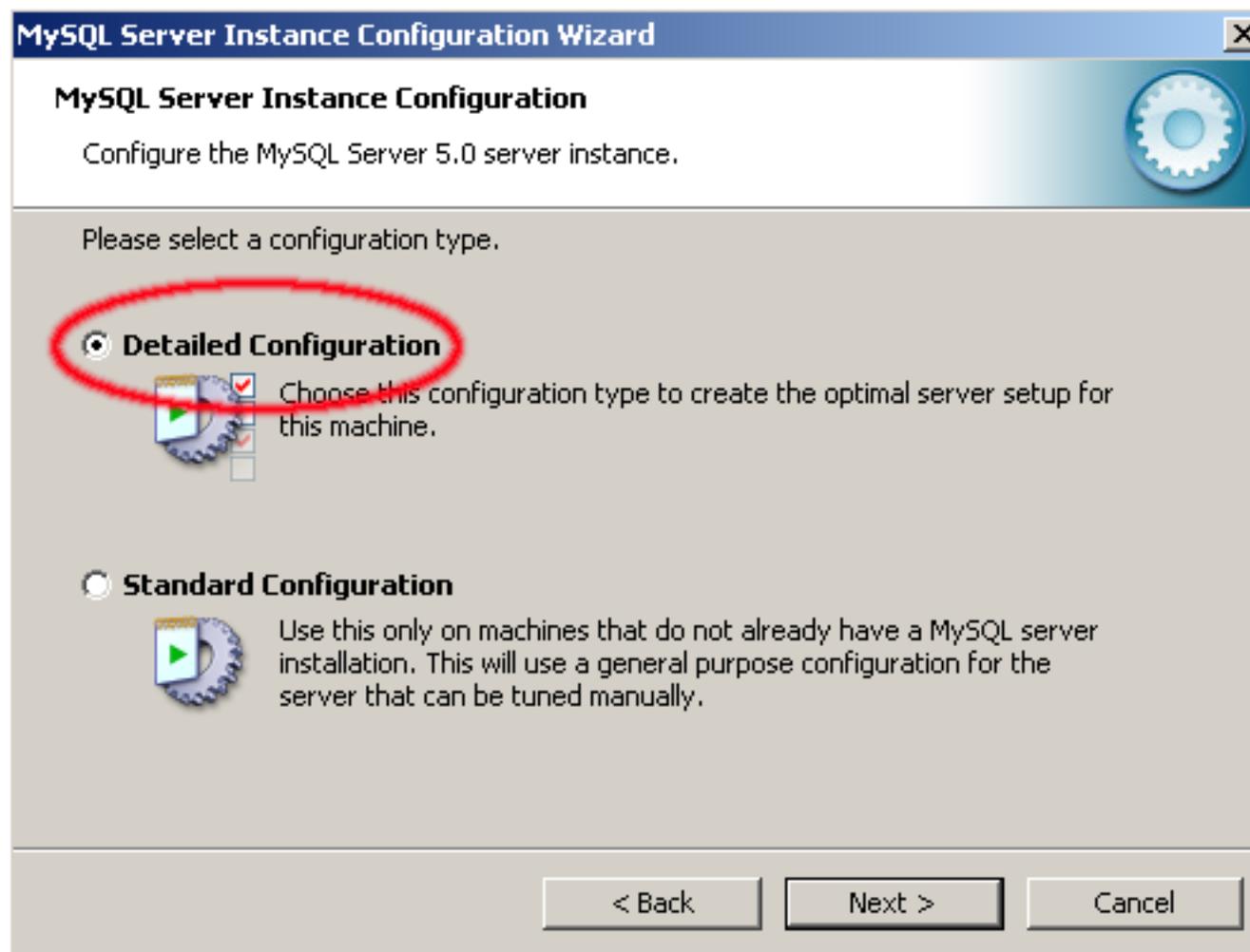
You can skip the MySQL account creation.



The MySQL installation is now complete, please make sure that the “Configure MySQL Server Now” box is checked.



At the MySQL installation type prompt, please select “Detailed Configuration”



Server Role should be Server Machine

**MySQL Server Instance Configuration Wizard** ✕

**MySQL Server Instance Configuration** 

Configure the MySQL Server 5.0 server instance.

Please select a server type. This will influence memory, disk and CPU usage.

**Developer Machine**

 This is a development machine, and many other applications will be run on it. MySQL Server should only use a minimal amount of memory.

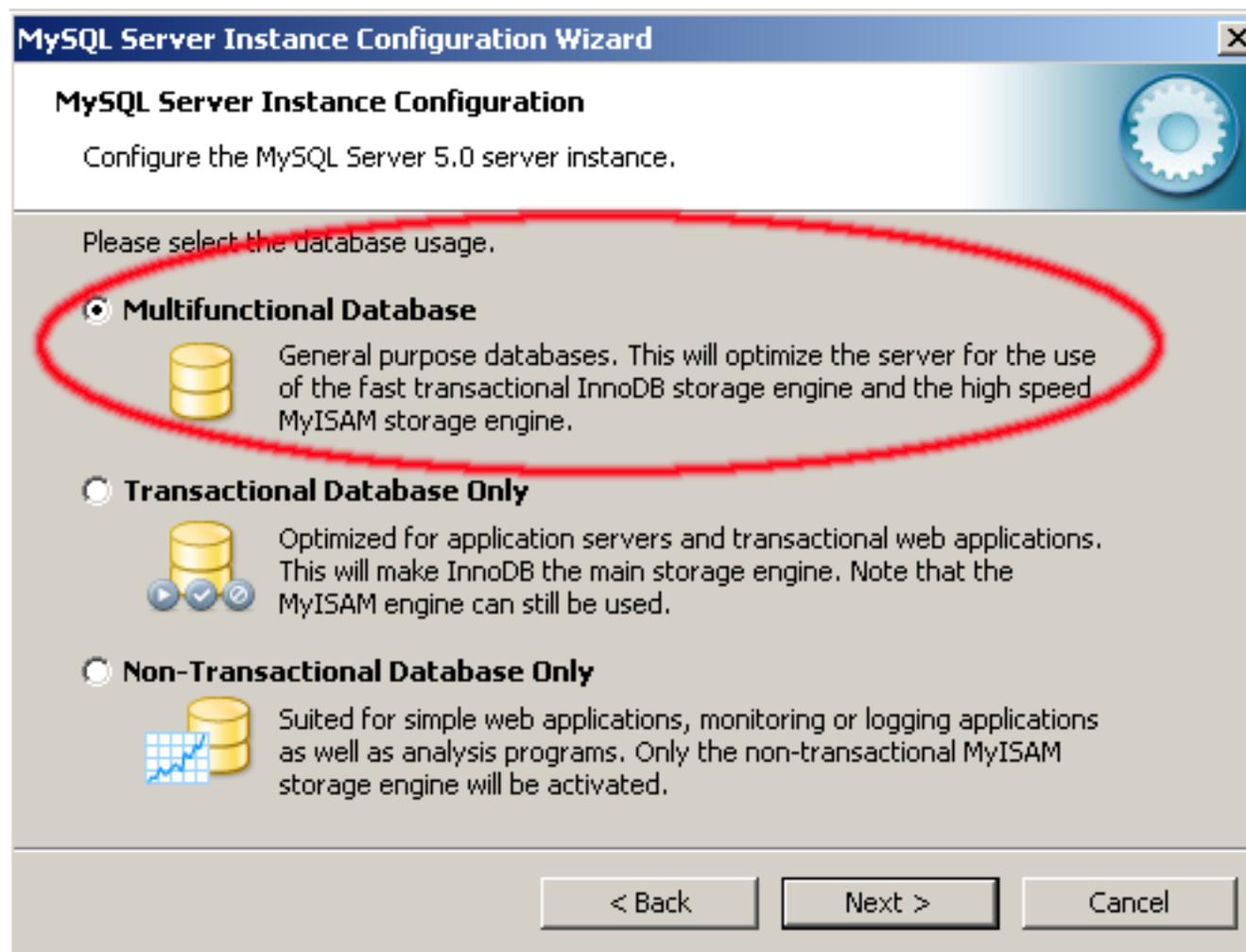
**Server Machine**

 Several server applications will be running on this machine. Choose this option for web/application servers. MySQL will have medium memory usage.

**Dedicated MySQL Server Machine**

 This machine is dedicated to run the MySQL Database Server. No other servers, such as a web or mail server, will be run. MySQL will utilize up to all available memory.

It is very important that you install MySQL 5 as a “Multifunctional Database” since Work order Processing is currently using MyISAM but might switch to InnoDB in the future.



Set the MySQL5 connection limit to 20-50. Expect one connection for each active user, database connection time per user request is less than 1 second on most high-speed connections.

**MySQL Server Instance Configuration Wizard** [X]

**MySQL Server Instance Configuration**

Configure the MySQL Server 5.0 server instance.

Please set the approximate number of concurrent connections to the server.

**Decision Support (DSS)/OLAP**

 Select this option for database applications that will not require a high number of concurrent connections. A number of 20 connections will be assumed.

**Online Transaction Processing (OLTP)**

 Choose this option for highly concurrent applications that may have at any one time up to 500 active connections such as heavily loaded web servers.

**Manual Setting**

 Please enter the approximate number of concurrent connections.

Concurrent connections:

< Back    Next >    Cancel

The MySQL 5 options below should be selected by default. Please ensure they are.

**MySQL Server Instance Configuration Wizard** ✕

**MySQL Server Instance Configuration** 

Configure the MySQL Server 5.0 server instance.

Please set the networking options.

**Enable TCP/IP Networking**

 Enable this to allow TCP/IP connections. When disabled, only local connections through named pipes are allowed.

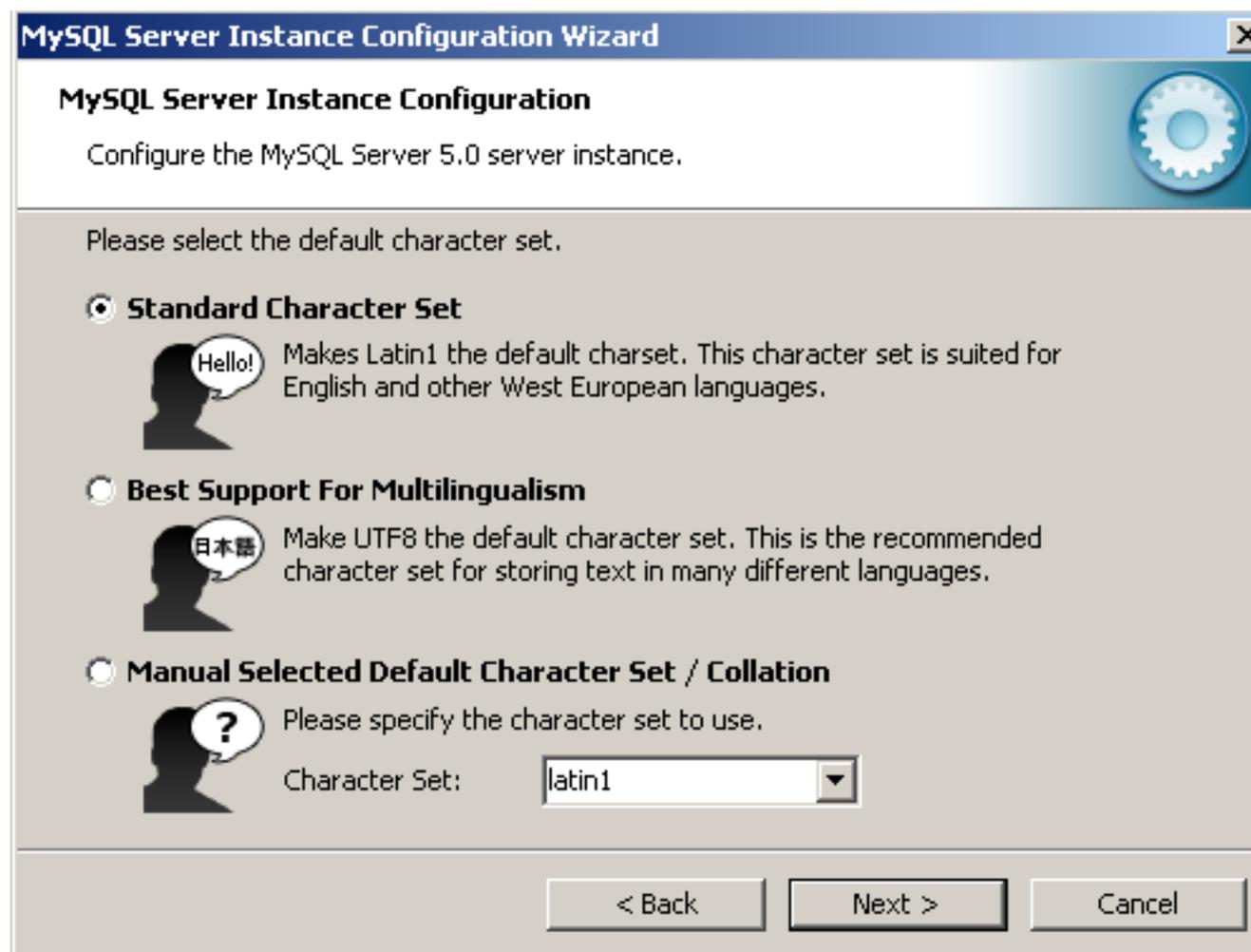
Port Number:

Please set the server SQL mode.

**Enable Strict Mode**

This option forces the server to behave more like a traditional database server. It is recommended to enable this option.

Keep the Standard Character Set, Latin1.



Please check the box “Include Bin Directory in Windows Path”.

**MySQL Server Instance Configuration Wizard**

**MySQL Server Instance Configuration**  
Configure the MySQL Server 5.0 server instance.

Please set the Windows options.

**Install As Windows Service**

 This is the recommended way to run the MySQL server on Windows.

Service Name:

Launch the MySQL Server automatically

**Include Bin Directory in Windows PATH**

 Check this option to include the directory containing the server / client executables in the Windows PATH variable so they can be called from the command line.

< Back    Next >    Cancel

Please enter a secure root password, you can find a random password generator at <http://www.Network-Technoloiges.org/>

**MySQL Server Instance Configuration Wizard** [X]

**MySQL Server Instance Configuration**  
Configure the MySQL Server 5.0 server instance.

Please set the security options.

**Modify Security Settings**

 New root password:  Enter the root password.

 Confirm:  Retype the password.

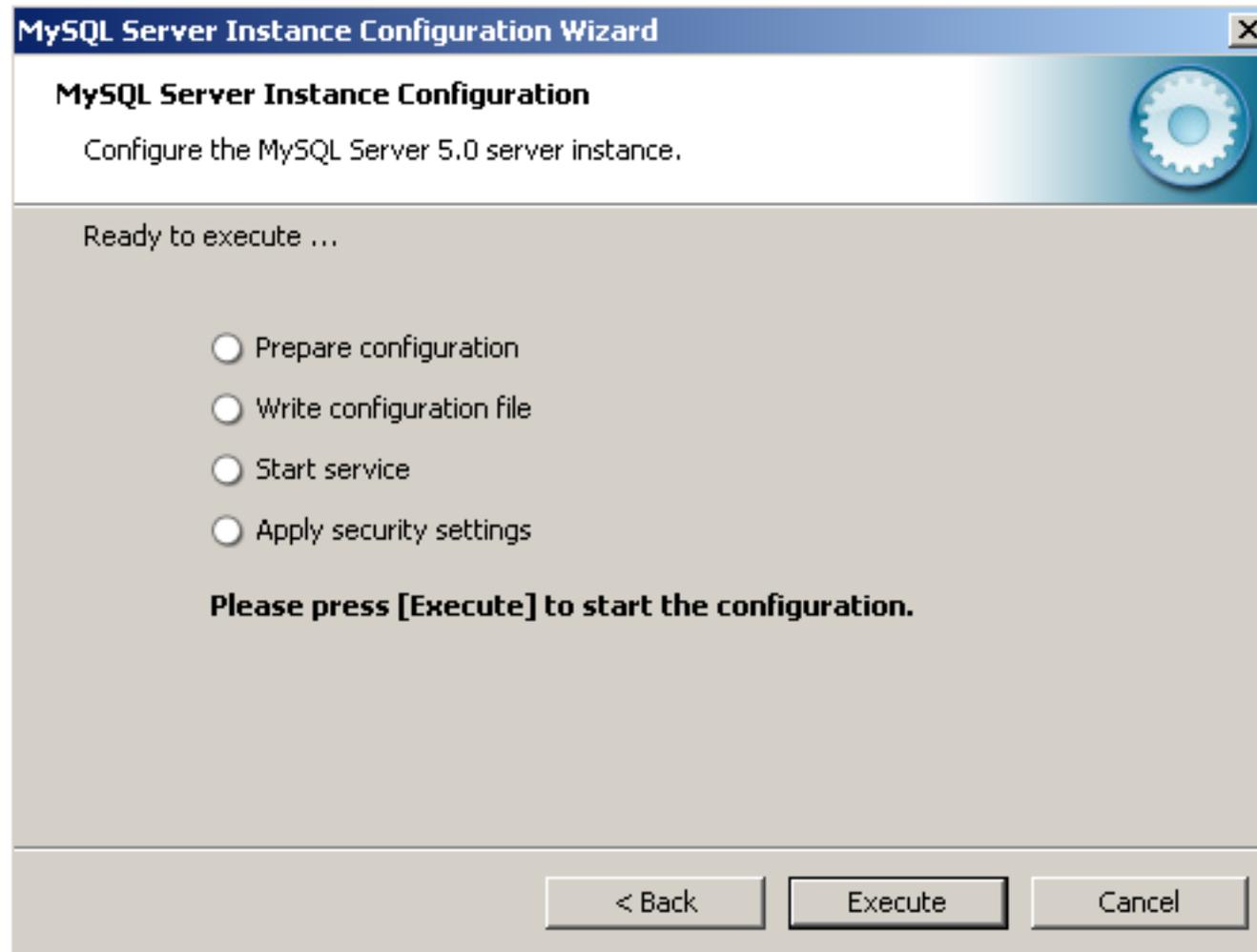
Enable root access from remote machines

Create An Anonymous Account

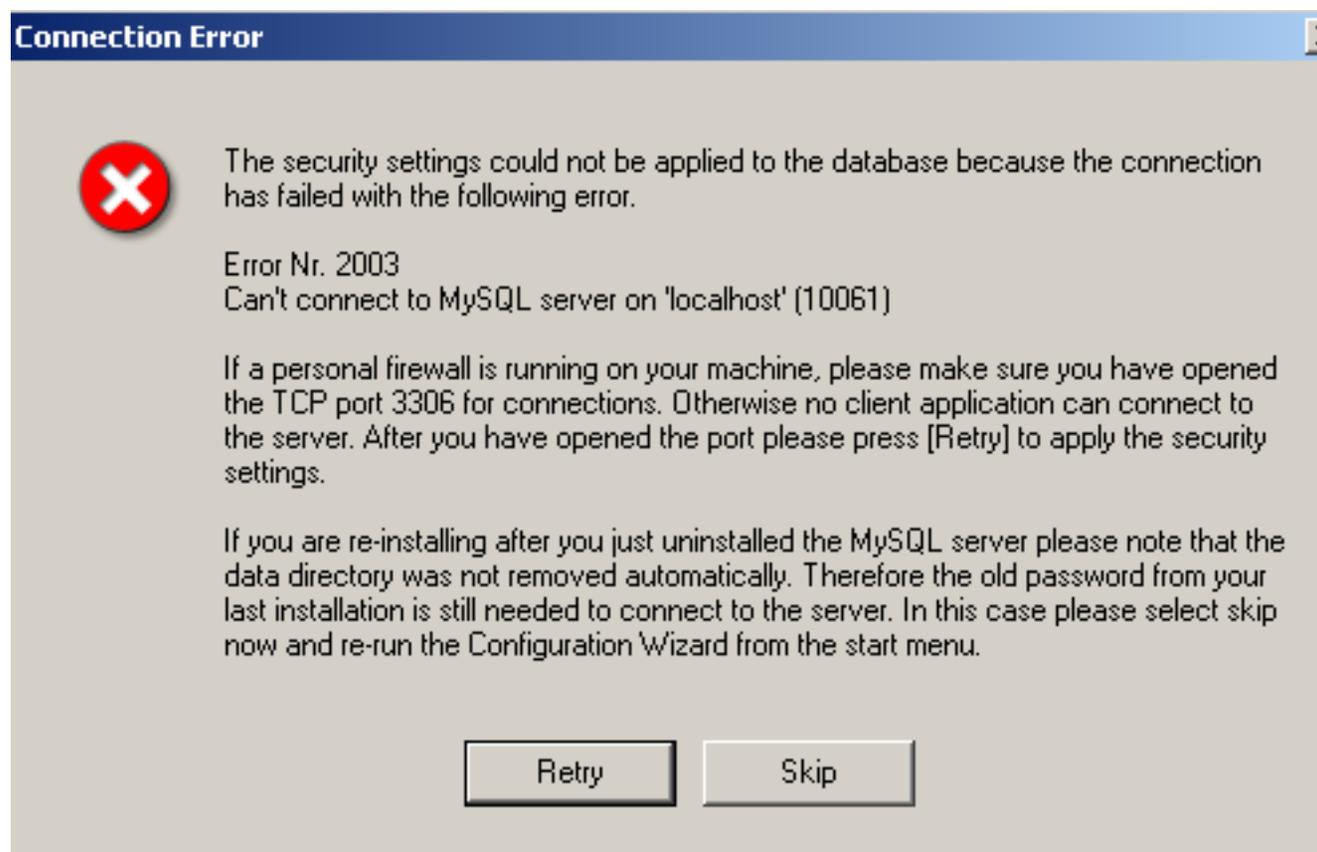
 This option will create an anonymous account on this server. Please note that this can lead to an insecure system.

< Back    Next >    Cancel

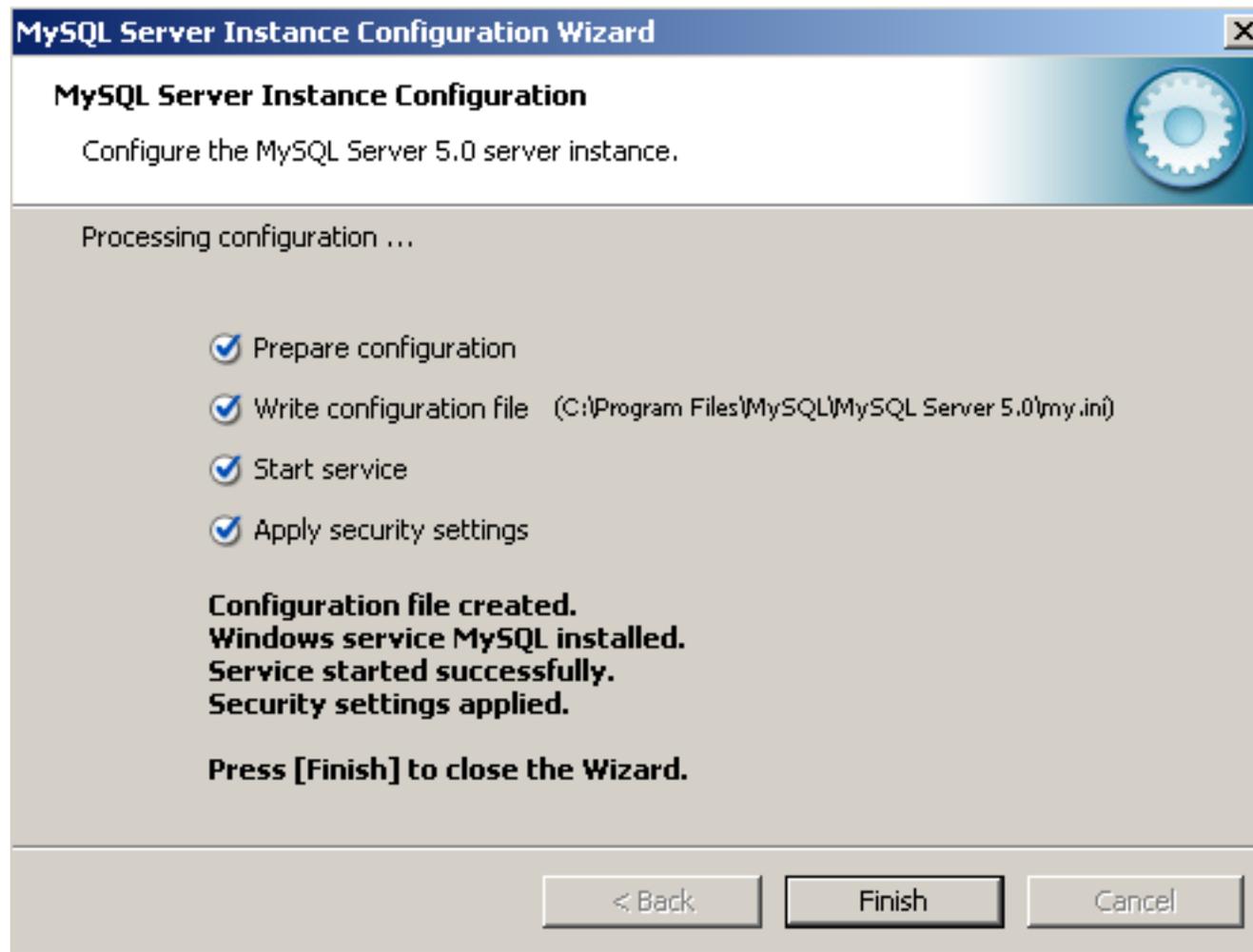
Almost Done, time to execute the configuration. Please click on “Execute”



I received this Firewall error on Windows XP Home SP2 (no updates) without receiving the Windows Firewall notice I received during the Apache installation. A simple “Retry” took care of this error.

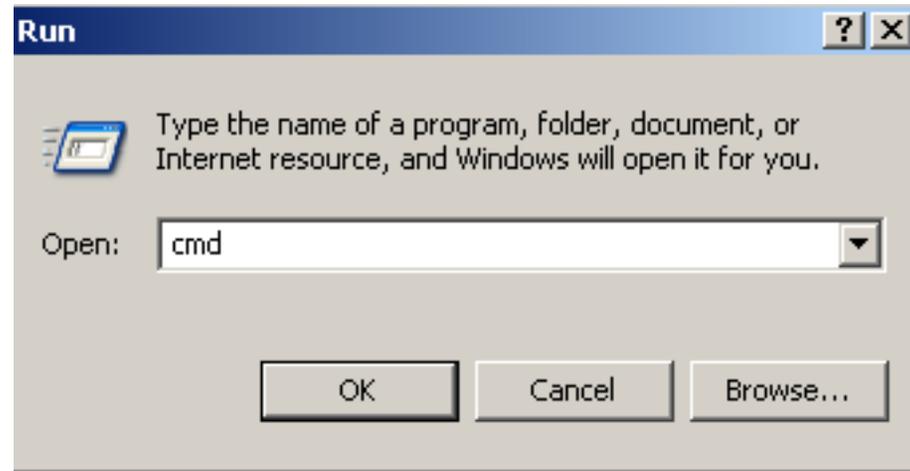


MySQL 5 installation complete without errors.



MySQL 5 is now installed and running, but how do we know?

Click on Start => Run and enter **cmd** into the box, **command** for Windows 98 and ME and Click on OK



Once the black window, Command Prompt, is open, type “**netstat -an**”  
Make sure that you can find port **80** and **3306** on the list.

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

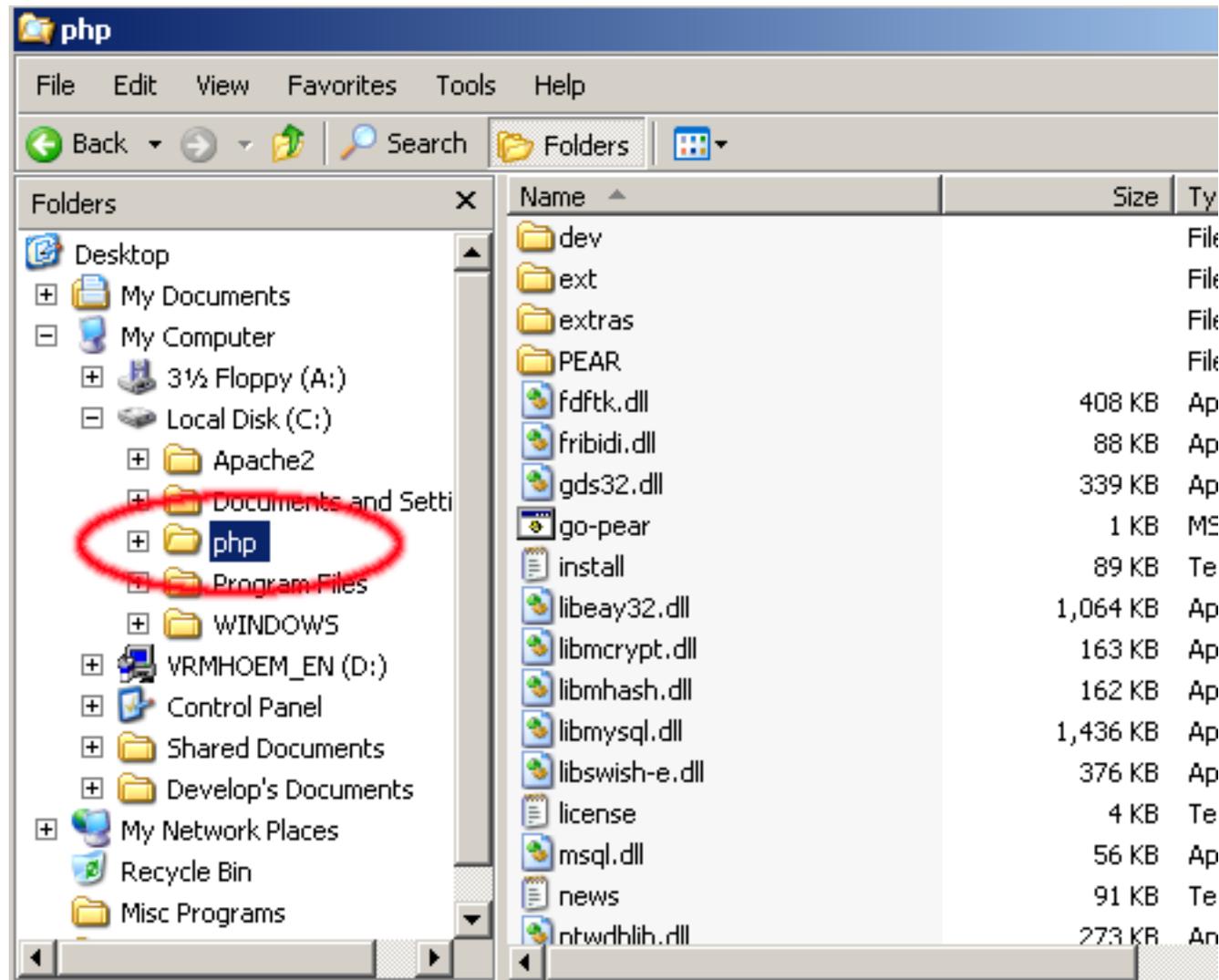
C:\Documents and Settings\Develop>netstat -an

Active Connections

Proto Local Address Foreign Address State
TCP 0.0.0.0:80 0.0.0.0:0 LISTENI
TCP 0.0.0.0:135 0.0.0.0:0 LISTENI
TCP 0.0.0.0:445 0.0.0.0:0 LISTENI
TCP 0.0.0.0:3306 0.0.0.0:0 LISTENI
TCP 127.0.0.1:1028 0.0.0.0:0 LISTENI
TCP 192.168.1.104:139 0.0.0.0:0 LISTENI
UDP 0.0.0.0:445 *: *
UDP 0.0.0.0:500 *: *
UDP 0.0.0.0:1035 *: *
UDP 0.0.0.0:4500 *: *
UDP 127.0.0.1:123 *: *
UDP 127.0.0.1:1900 *: *
UDP 192.168.1.104:123 *: *
UDP 192.168.1.104:137 *: *
UDP 192.168.1.104:138 *: *
UDP 192.168.1.104:1900 *: *
```

## PART 3 – Install PHP 5

Extract the downloaded zip file containing PHP, rename it to php and move it to C:\



Now we need to add C:\php to the Windows Path. This is the **recommended** way, DO NOT follow other instructions!

#### **14. How do I add my PHP directory to the PATH on Windows?**

(Source <http://www.php.net/manual/en/faq.installation.php#faq.installation.addtopath> )

On Windows NT, 2000, XP and 2003:

-Go to Control Panel and open the System icon (Start -> Settings -> Control Panel -> System, or just Start -> Control Panel -> System for Windows XP/2003). You might have to click on “Switch to Classic View” on the top left corner to see “System”!

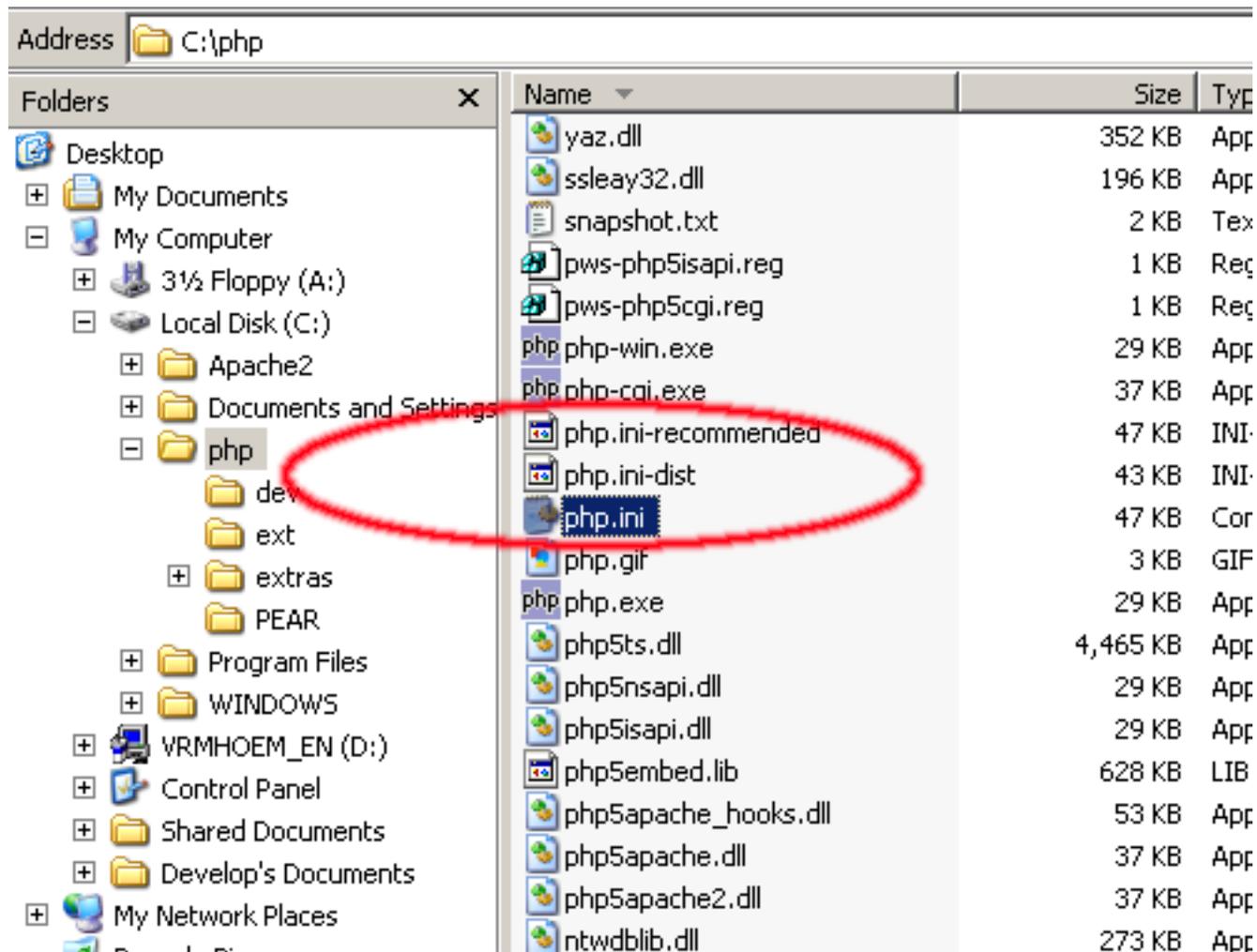
- Go to the Advanced tab
- Click on the 'Environment Variables' button
- Look into the 'System Variables' pane
- Find the Path entry (you may need to scroll to find it)
- Double click on the Path entry
- Enter your PHP directory ant the end, including ';' before (e.g. ;C:\php)
- Press OK and restart your computer

**Note:** Be sure to reboot after following the steps above to ensure that the PATH changes are applied.

Now it is time to configure PHP.

You will find two sample configuration files inside the PHP 5 directory, C:\php.

Delete the file **php.ini-dist** and rename or copy the file **php.ini-recommended** to **php.ini**



Open php.ini with Notepad and search for “**extension\_dir**“, change the line to **extension\_dir = “./ext/”**

```
; The directory under which PHP opens the script using /~usern.
; if nonempty.
user_dir =

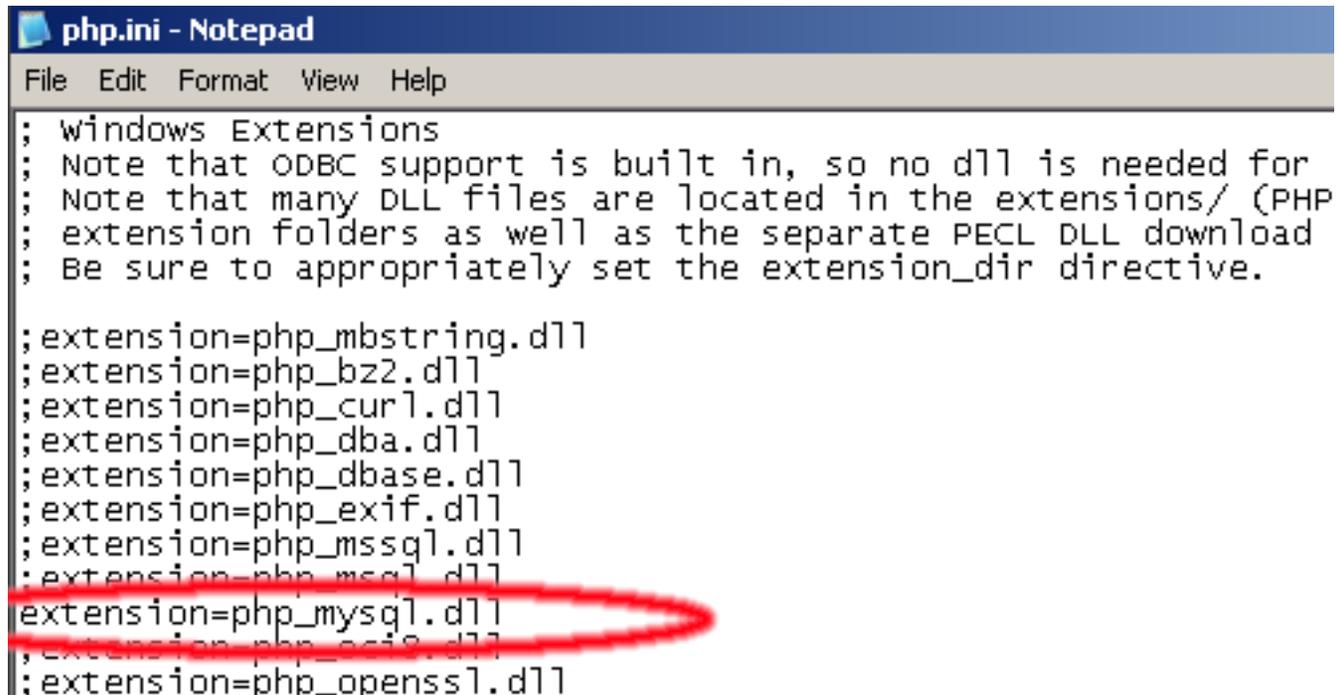
; Directory in which the loadable extensions (modules) reside.
extension_dir = “./ext/”

; Whether or not to enable the dl() function. The dl() function
; properly in multithreaded servers, such as IIS or Zeus, and
; disabled on them.
enable_dl = on

; cgi.force_redirect is necessary to provide security running I
; most web servers. Left undefined, PHP turns this on by defai
; turn it off here AT YOUR OWN RISK
; **You CAN safely turn this off for IIS, in fact, you MUST.**
; cgi.force_redirect = 1

; if cgi.nph is enabled it will force cgi to always sent statu:
```

Keep php.ini open and look for **extension=php\_mysql.dll**  
Remove the ; in front of the line, save and close the file.



```
php.ini - Notepad
File Edit Format View Help
; windows Extensions
; Note that ODBC support is built in, so no dll is needed for
; Note that many DLL files are located in the extensions/ (PHP
; extension folders as well as the separate PECL DLL download
; Be sure to appropriately set the extension_dir directive.

;extension=php_mbstring.dll
;extension=php_bz2.dll
;extension=php_curl.dll
;extension=php_dba.dll
;extension=php_dbase.dll
;extension=php_exif.dll
;extension=php_mssql.dll
;extension=php_mysql.dll
extension=php_mysql.dll
;extension=php_oci8.dll
;extension=php_openssl.dll
```

Now it's time to configure Apache to work with PHP. Use Notepad to open the file **C:\Apache2\conf\httpd.conf**

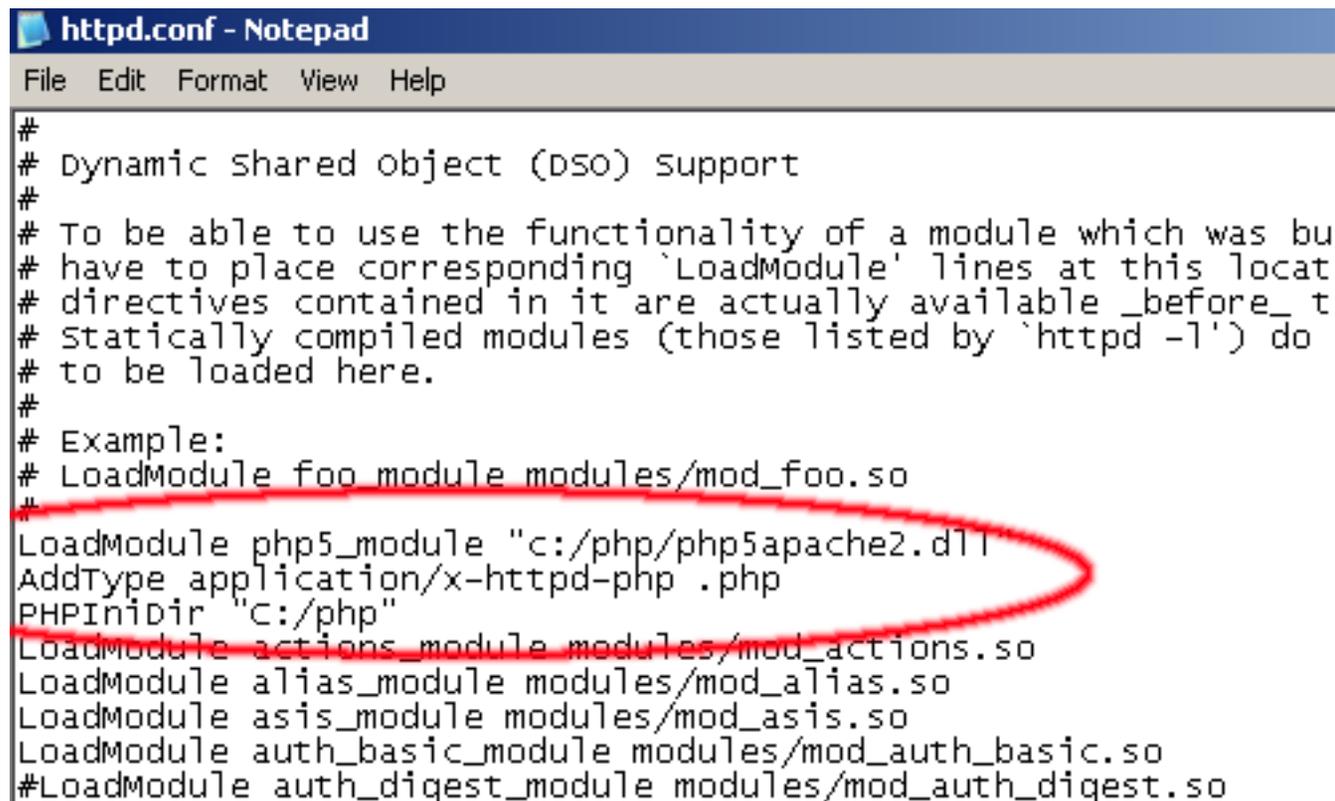
**WARNING:** Ensure you follow the instructions below. Apache expects forward slashes instead of backslashes!

Search the file for the string "LoadModule" and add these lines:

**LoadModule php5\_module "c:/php/php5apache2.dll"**

**AddType application/x-httpd-php .php**

**PHPIniDir "C:/php"**

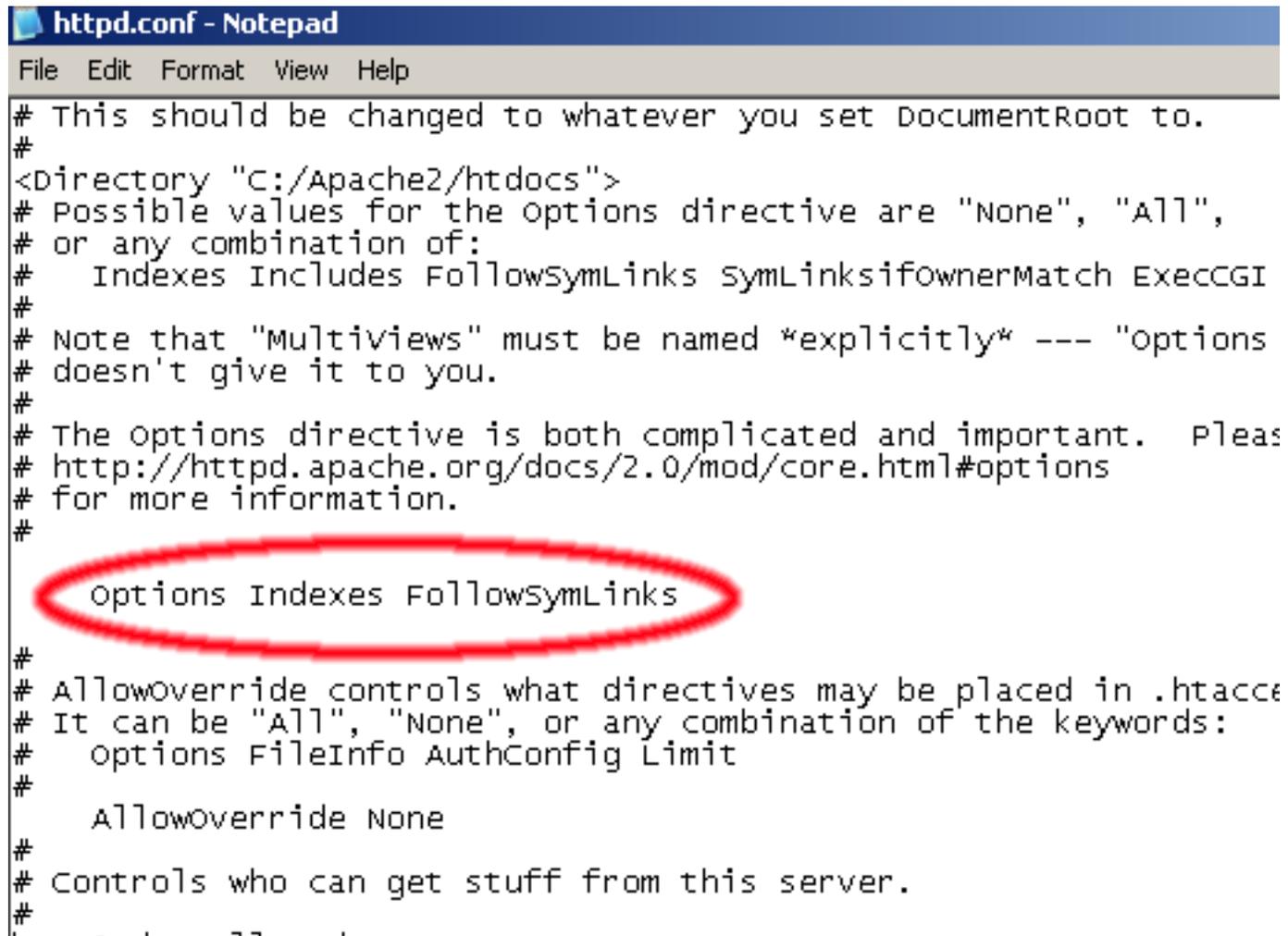


```
httpd.conf - Notepad
File Edit Format View Help
#
# Dynamic shared object (DSO) support
#
# To be able to use the functionality of a module which was bu
# have to place corresponding 'LoadModule' lines at this locat
# directives contained in it are actually available _before_ t
# statically compiled modules (those listed by 'httpd -l') do
# to be loaded here.
#
# Example:
# LoadModule foo module modules/mod_foo.so
#
LoadModule php5_module "c:/php/php5apache2.dll"
AddType application/x-httpd-php .php
PHPIniDir "C:/php"
LoadModule actions_module modules/mod_actions.so
LoadModule alias_module modules/mod_alias.so
LoadModule asis_module modules/mod_asis.so
LoadModule auth_basic_module modules/mod_auth_basic.so
#LoadModule auth_digest_module modules/mod_auth_digest.so
```

## Optional

The default Apache configuration allows directory indexes which I do not recommend for production servers. Locate the <Directory> section handling your htdocs directory and remove the command **Indexes**

The configuration line should now read **Options FollowSymLinks**



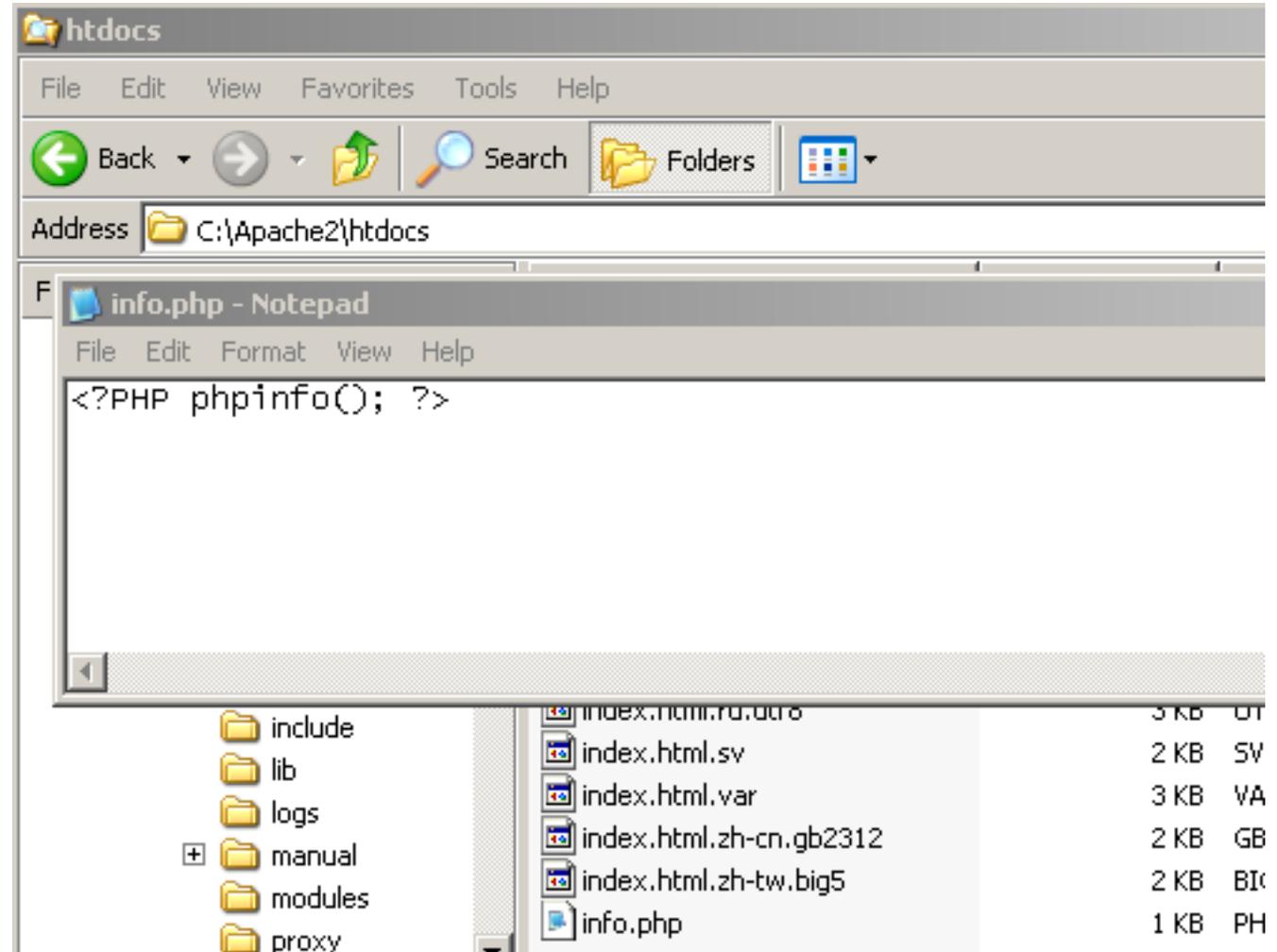
```
httpd.conf - Notepad
File Edit Format View Help
# This should be changed to whatever you set DocumentRoot to.
#
<Directory "C:/Apache2/htdocs">
# Possible values for the options directive are "None", "All",
# or any combination of:
#   Indexes Includes FollowSymLinks SymLinksifOwnerMatch ExecCGI
#
# Note that "Multiviews" must be named *explicitly* --- "Options
# doesn't give it to you.
#
# The options directive is both complicated and important.  Please
# http://httpd.apache.org/docs/2.0/mod/core.html#options
# for more information.
#
options Indexes FollowSymLinks
#
# AllowOverride controls what directives may be placed in .htaccess
# It can be "All", "None", or any combination of the keywords:
#   options FileInfo AuthConfig Limit
#
    AllowOverride None
#
# Controls who can get stuff from this server.
#
```

Save the configuration file and restart Apache 2.

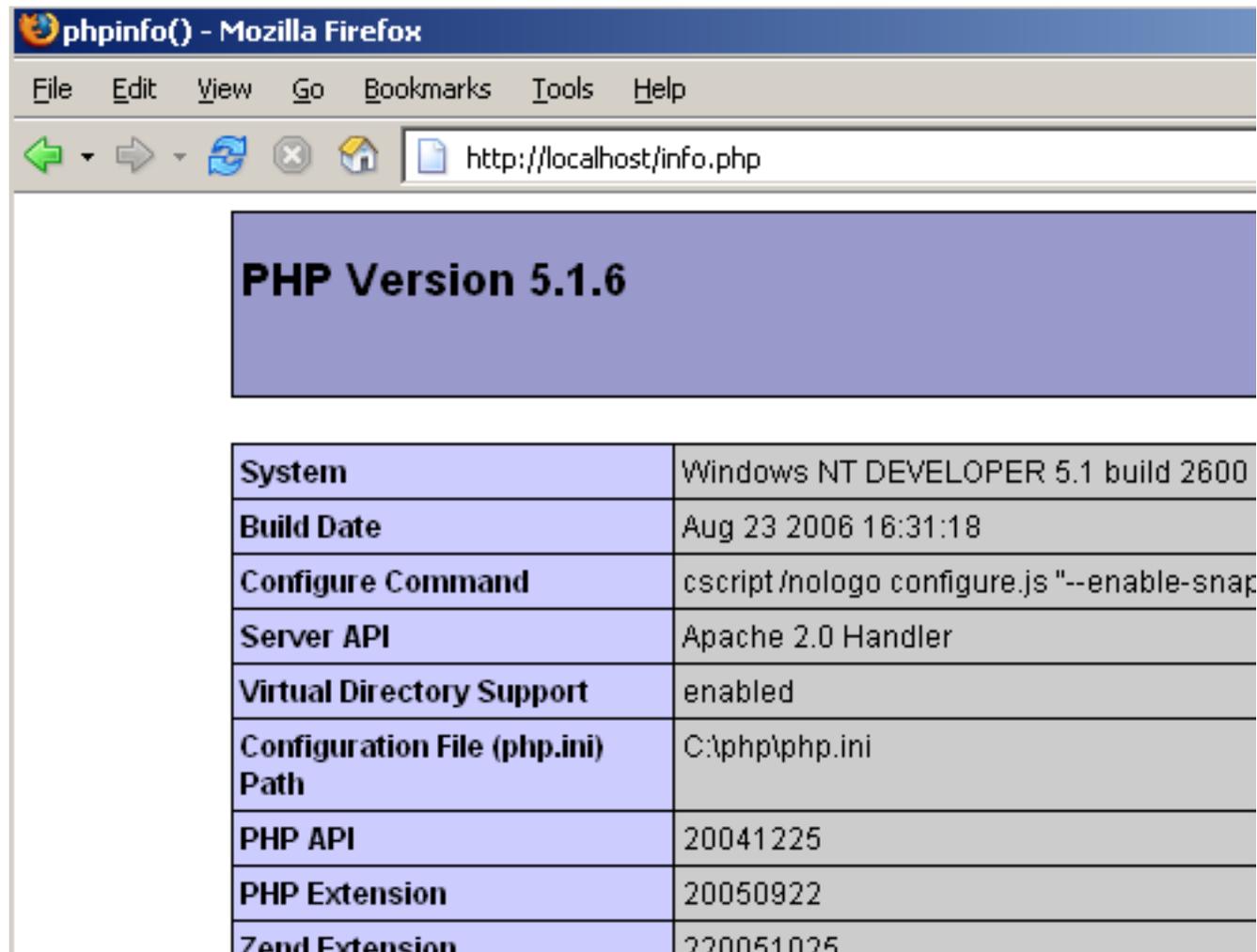


Create the file info.php in your htdocs directory. Edit info.php and enter the command below.

**<?PHP phpinfo(); ?>**



Now it's time to test the php installation. Open your web browser and navigate to <http://localhost/info.php> if you did everything as shown above you should see the screen below and should now be ready to install Work order Processing by Network-Technologies.org.



<b>System</b>	Windows NT DEVELOPER 5.1 build 2600
<b>Build Date</b>	Aug 23 2006 16:31:18
<b>Configure Command</b>	cscript /nologo configure.js "--enable-snap
<b>Server API</b>	Apache 2.0 Handler
<b>Virtual Directory Support</b>	enabled
<b>Configuration File (php.ini) Path</b>	C:\php\php.ini
<b>PHP API</b>	20041225
<b>PHP Extension</b>	20050922
<b>Zend Extension</b>	220051025

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