Class Note 1
PHP Oracle Development

Zend Server Setup
(Updated 6/3/2015)

The "class note" is the typical material I would prepare for my face-to-face class. Since this is hybrid class, I am sharing the notes with everyone assuming you are in the class.

For the first task, our mission is to set up your PHP development environment in your computer. To make it easy for students who did not have or forget experience in Oracle database, we will delay the Oracle database installation until 5th week of the course. In the mean time, we will focus only on PHP.

1. Reading Assignments:

   You will need to read chapter 1 carefully. The content of the chapter 1 will be in the future test.

   You will need to skim through chapter 2. Since the available technology has changed since the release of the textbook. It will be more conducive for you to follow the notes here.

2. Zend Server Developers Edition.
   Chapter 1 provided you with some history of PHP including the relationship between PHP and Oracle. At the time of this writing, Zend.com has integrated all necessary components for PHP/Oracle development in its server. Those components include Apache web server, PHP engine, and OCI8. OCI8, known as Oracle Call Interface 8, is a gateway for your PHP program to interact with Oracle database. With the Zend server integration, you can have everything you need to develop your PHP programs, except the Oracle database. Oracle database can be downloaded later for this class.

   Now, you can buckle up and have fun with the installation.

You will receive a 30 day trial license for the Zend Server Developers Edition. We have reached an agreement with Zend Technology and we will provide you with license key after the 30 day trial period using D2L News.

This class note is based upon my own work with my desktop computer, as follows:

OS: Windows XP Professional Version 2003, Service Pack 3

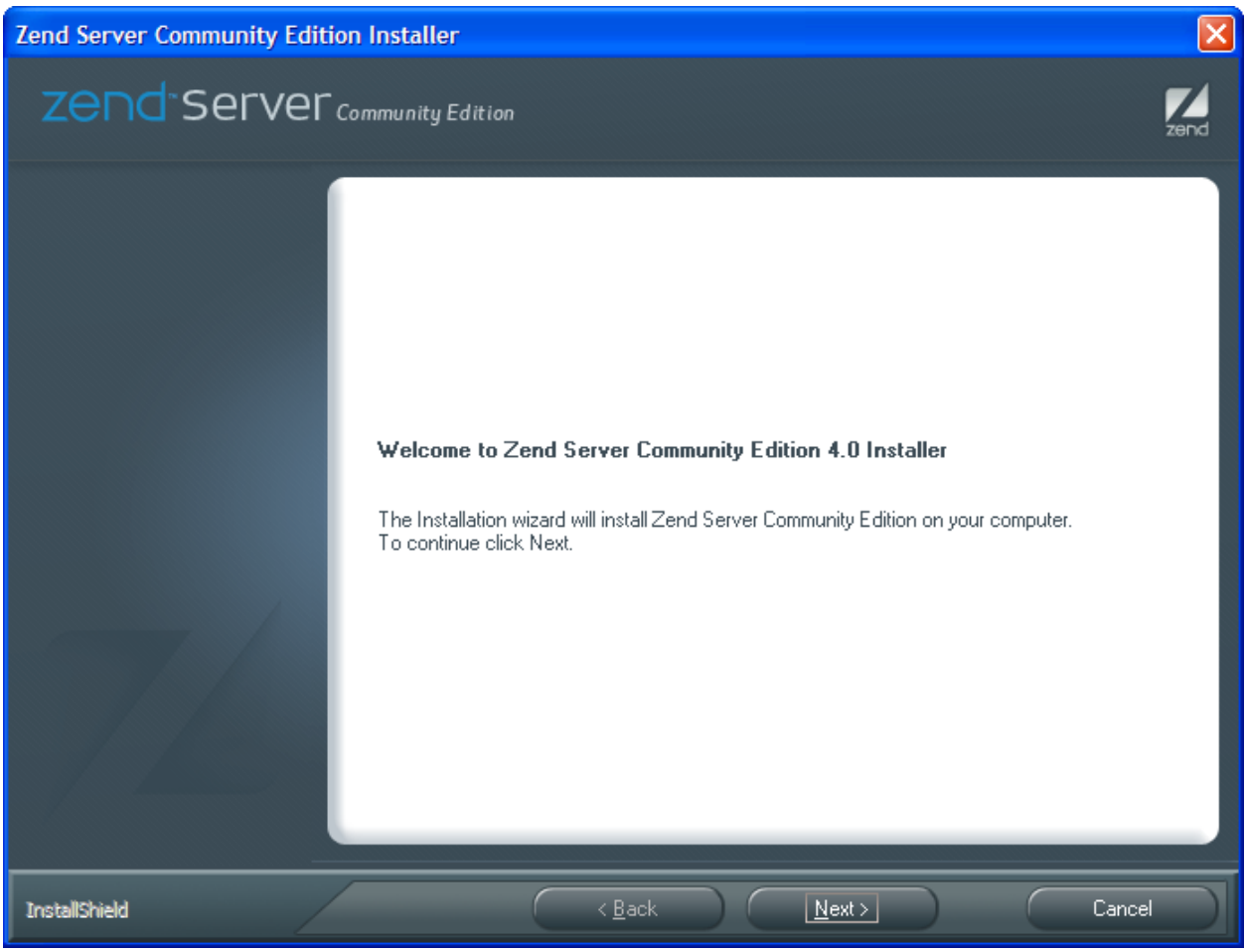
Please note the possible changes in technology. Your experience may be slightly different since you will be using Zend Server Developers Edition.

Download Zend Server:

http://www.zend.com/en/products/server-ce/downloads?hpb=server_CE_Download

If you acknowledge that you are lazy, you may hold your CTRL key and double click here to down load the file from my server. But, you are on your own risk.

Run the downloaded file to install, you will see the following screen. Everything else will be as easy as going to six flags in the summer.



Zend Server Community Edition Installer
zend server Community Edition
zend
License Agreement
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End-User License Agreement
This End-User License Agreement (this "Agreement") is a legal contract between you, as either an individual or a single business entity, and Zend Technologies Ltd. and its affiliates ("Zend").
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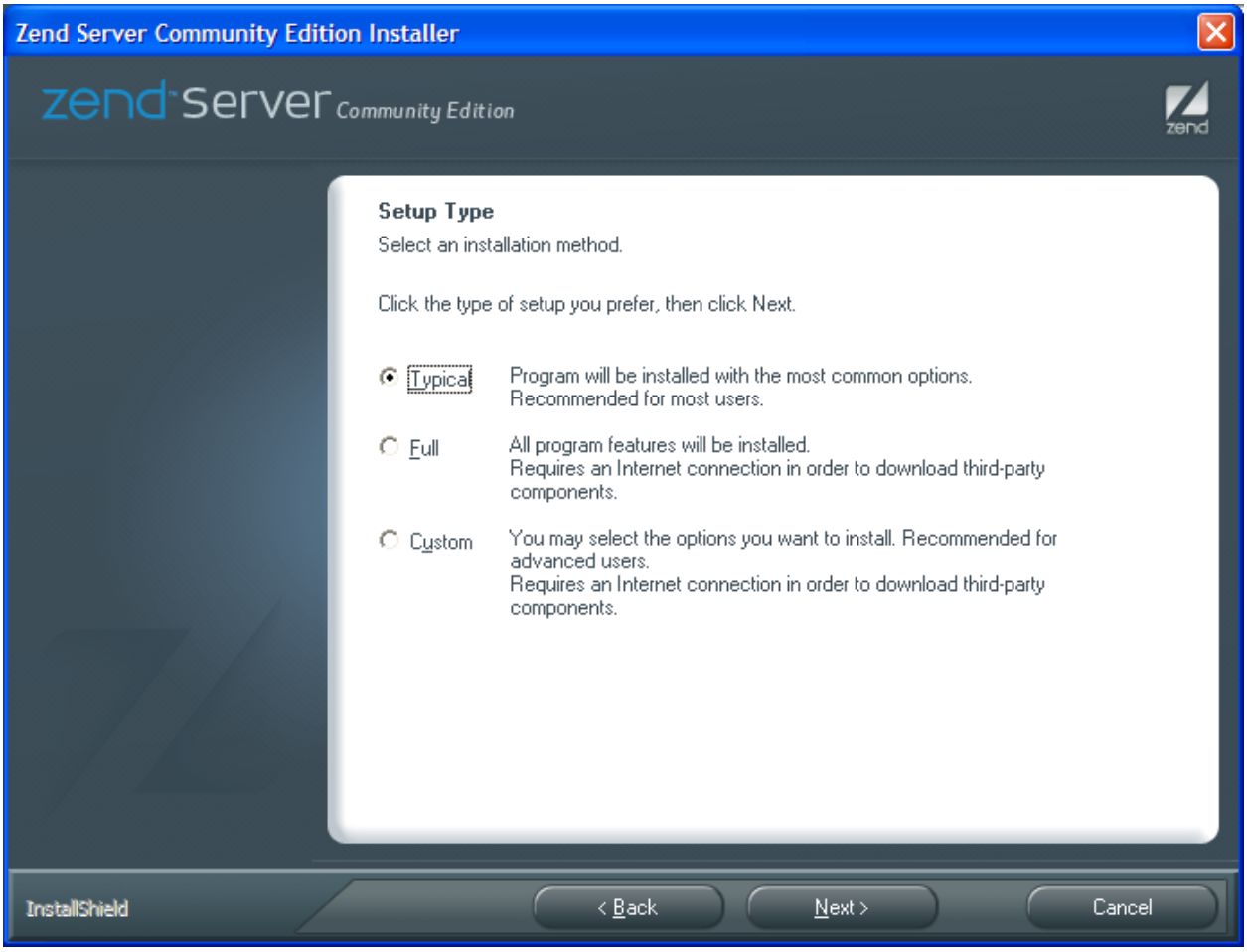
I accept the terms of the license agreement
I do not accept the terms of the license agreement
Print
InstallShield
< Back
Next >
Cancel


Zend Server Community Edition Installer
zend server Community Edition
zend
Setup Type
Select an installation method.
Click the type of setup you prefer, then click Next.
Typical
Program will be installed with the most common options.
Recommended for most users.
Full
All program features will be installed.
Requires an Internet connection in order to download third-party components.
Custom
You may select the options you want to install. Recommended for advanced users.
Requires an Internet connection in order to download third-party components.
InstallShield
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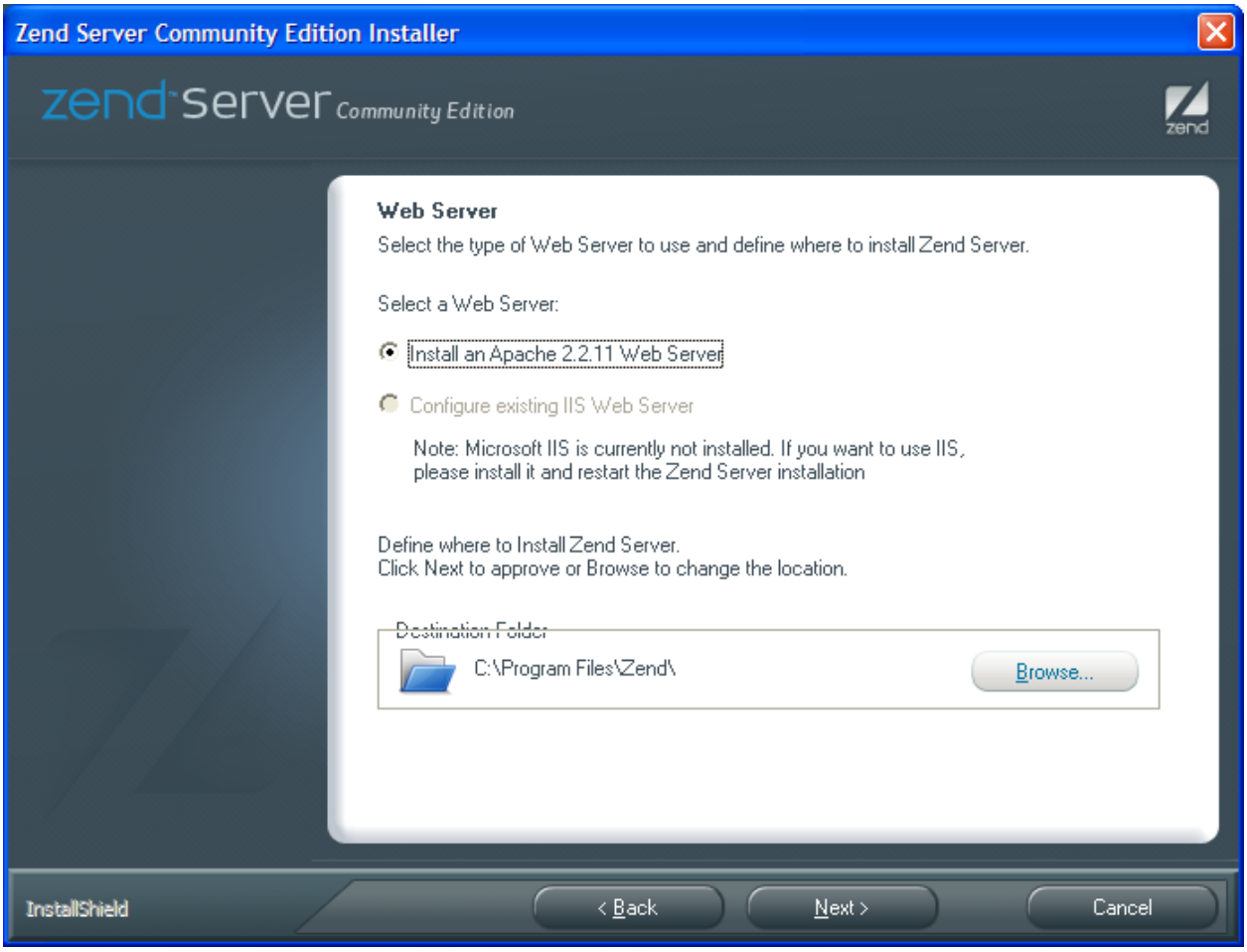
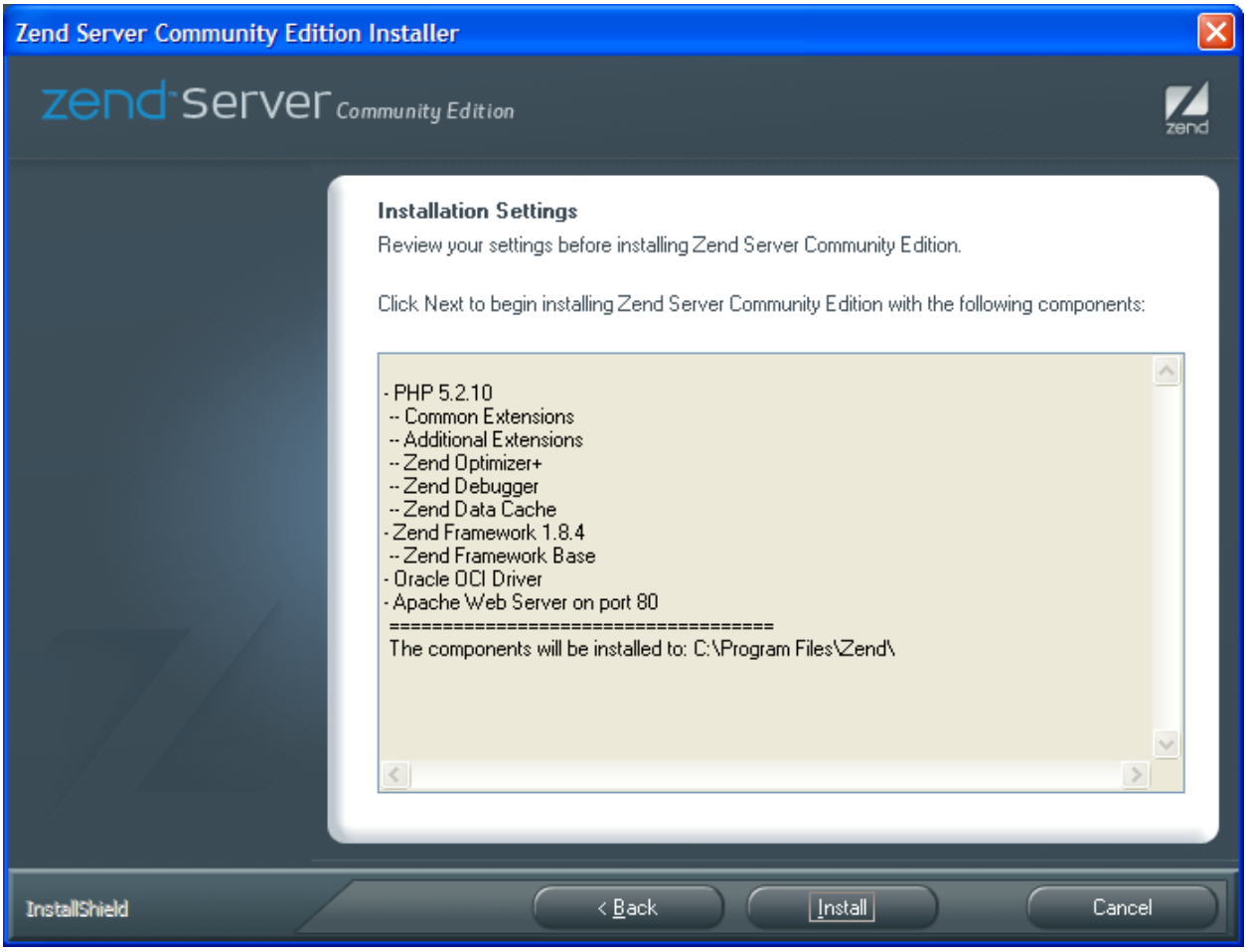
Next >
Cancel



I highly recommend selecting Apache Server, which is open source and widely accepted web server.



Components to be installed:

- PHP 5.2.10

-- Common Extensions

-- Additional Extensions

-- Zend Optimizer+

-- Zend Debugger

-- Zend Data Cache

- Zend Framework 1.8.4

-- Zend Framework Base

- Oracle OCI Driver

- Apache Web Server on port 80

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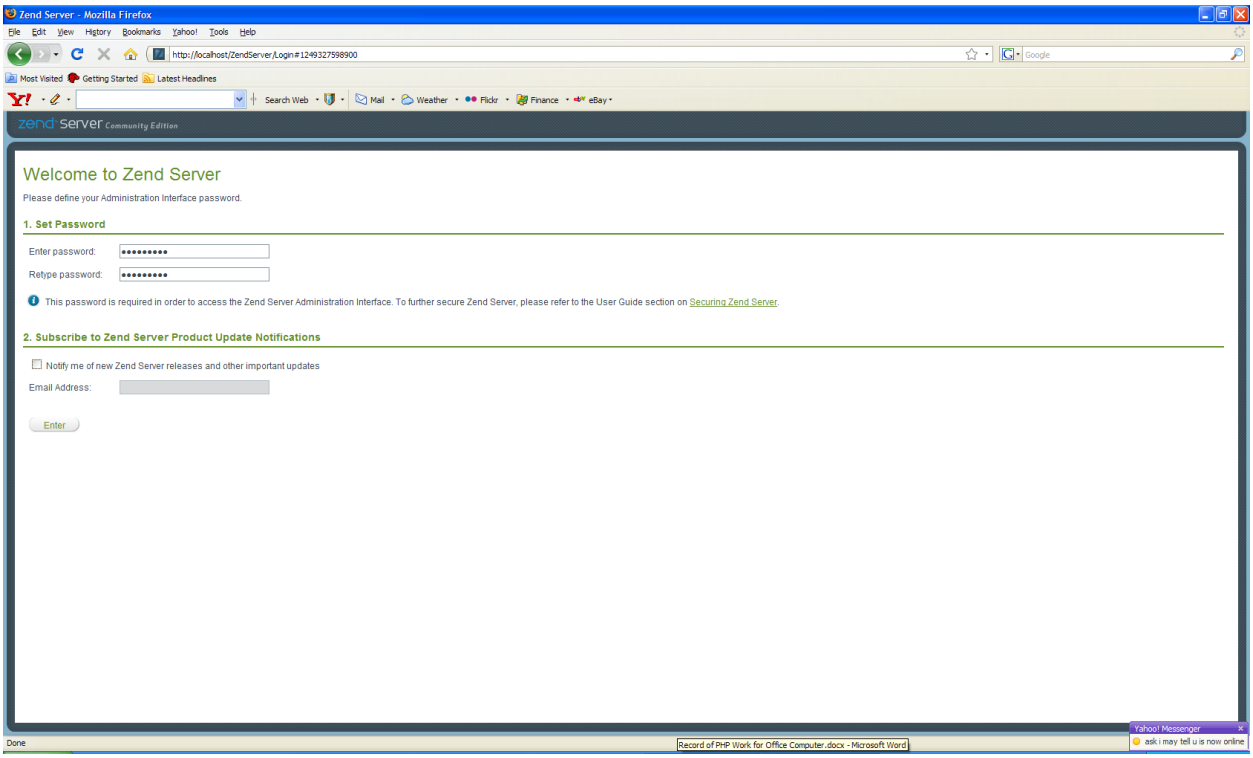
The components will be installed to: C:\Program Files\Zend\



Password: You may enter your dog's name or anything you like. But, please make a note. When you get to my age, you will find out it is necessary to take note.

After the installation, you may access the Zend server using the following link.

Zend Server:

http://localhost/ZendServer/Index/Index#1249327664029

I hope you still remember the password you entered at the installation.

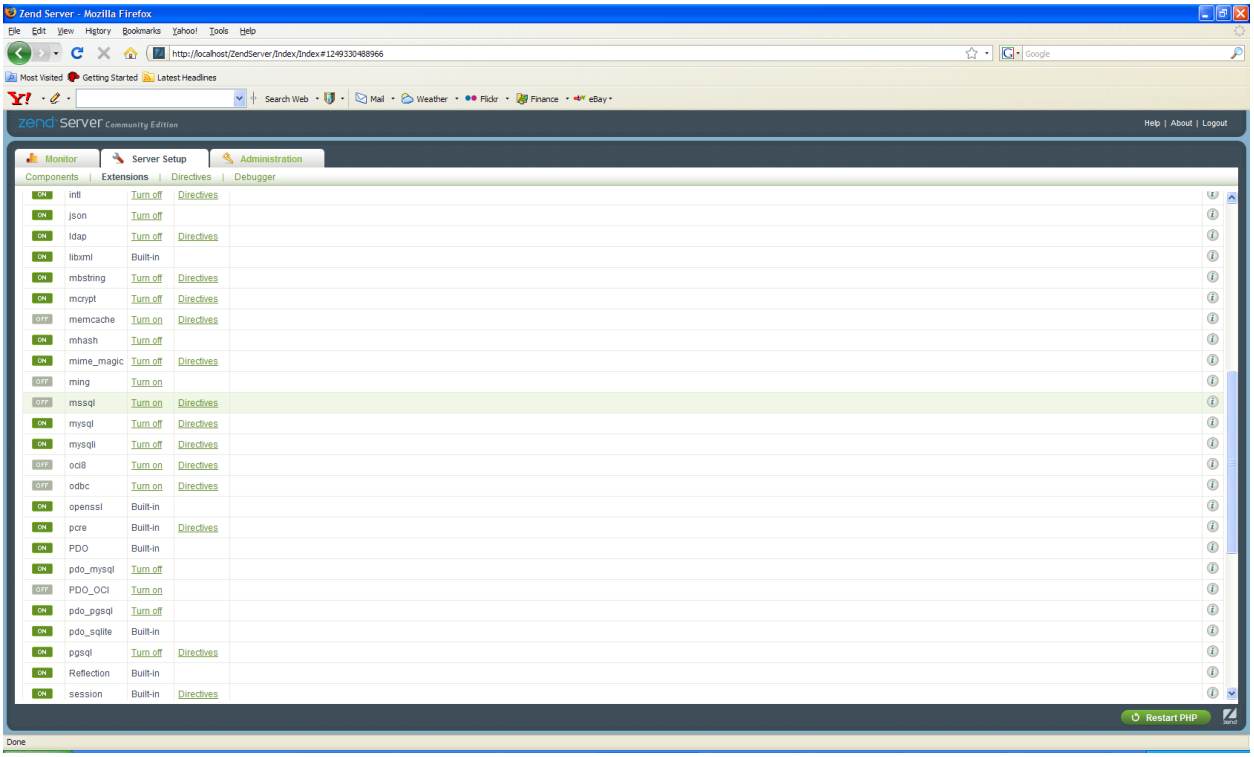
You may experiment with the server settings. It is normal that you do not know everything on the server setting at this time. With some basic logic and some common sense, you will be able to figure out what they are, sooner or later. The fun part of working with computers is that you can change

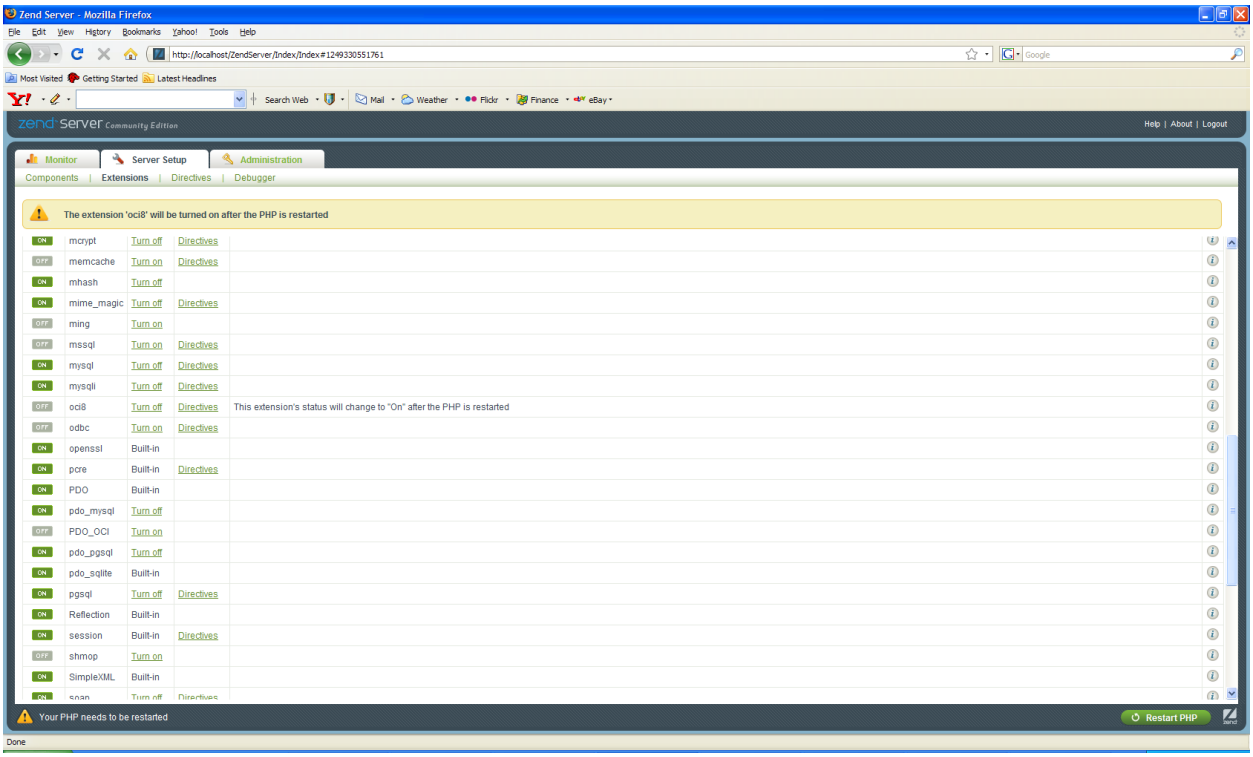
something and see what will be the result. It is totally different from Budweiser, which I do not want to try.

Do experiment with some settings. You will not break it. If you do break it, it is your computer anyway.

My only suggestion is to take note on what changes you made, so that you can revert back to the same old setting.

To prepare the Zend Server to connect to Oracle database, OCI8 in Zend Server should be turned on. Go to “Server Setup” tab, choose “Extension,” find OCI8 and turn it on.

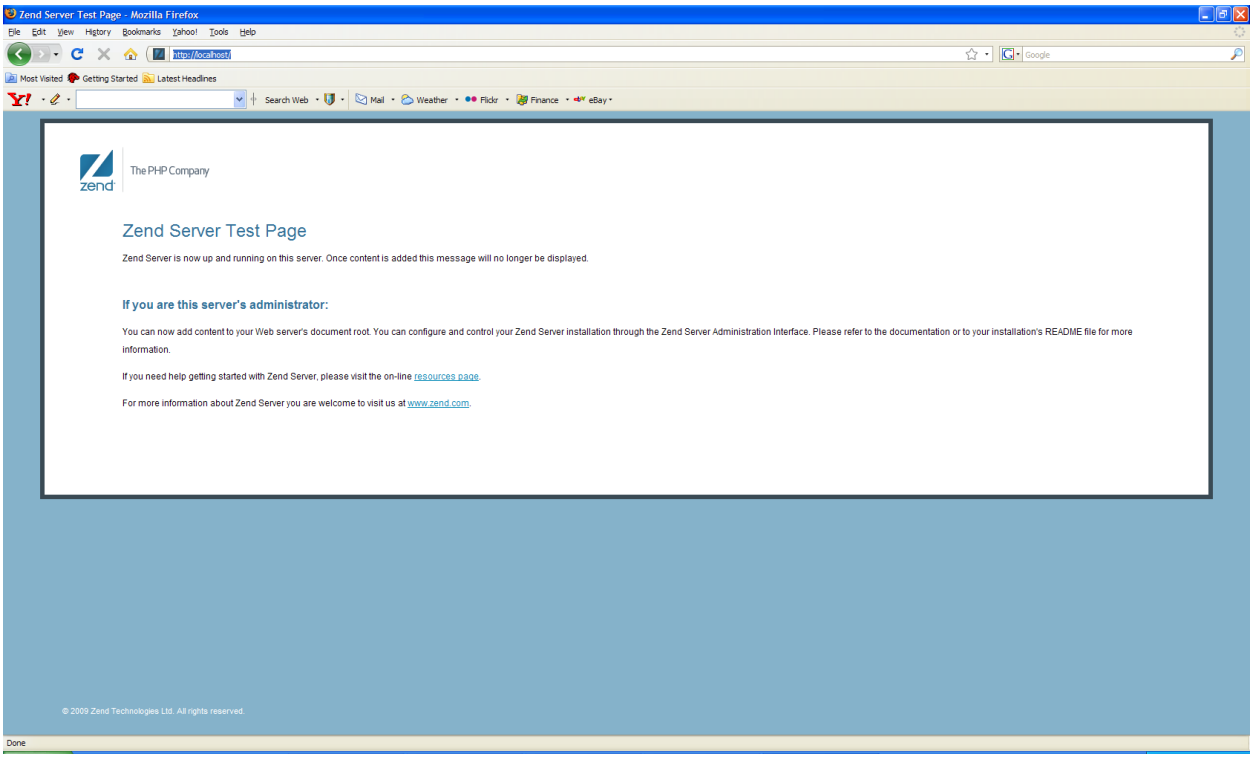




Restart PHP (at the lower right corner).

Now, you may test to see if the Apache Web server works or not.

Apache HTTPD server: http://localhost/



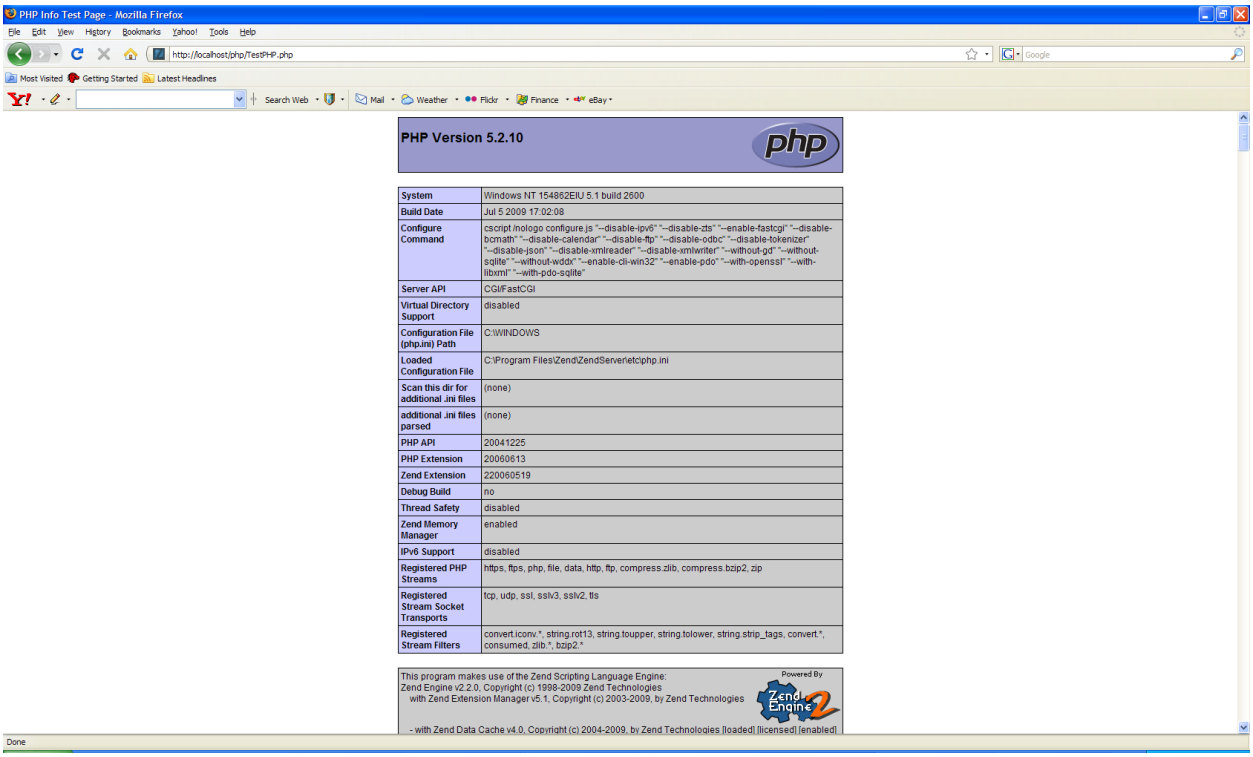
Virtual File Folder at Apache:

C:\Program Files\Zend\Apache2\htdocs

Write a simple php program (TestPHP.php) and placed it under the above directory, using Word Pad, NotePad or Notepad ++.

If you paid attention to what I said above, I used the word “write.” I did not use “copy.” It is because you are in a PHP class. PHP is a language, which you will learn by writing it. Over the past, I found it is the most effective for me to write or retype the code, instead of copying and pasting.

http://localhost/php/TestPHP.php

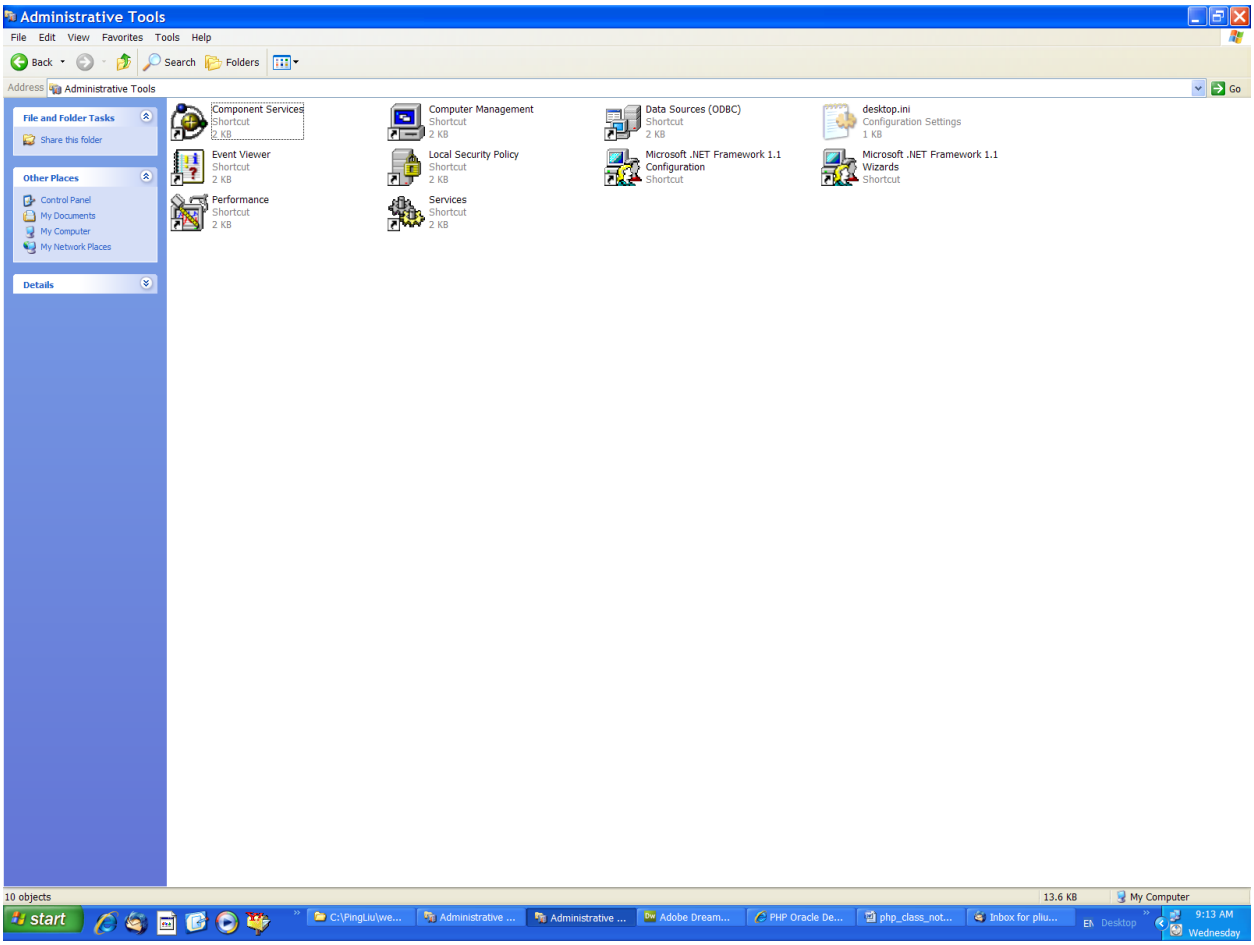


Congratulations!!

Something Extra for the Professionals (Useful in Troubleshooting):

After installing Zend server, you will see Apache service:

Go to Control Panel—Performance and Maintenance—Administrative Tools—Services


Administrative Tools
File Edit View Favorites Tools Help
Back Search Folders
Address Administrative Tools
Go
File and Folder Tasks
Share this folder
Other Places
Control Panel
My Documents
My Computer
My Network Places
Details
Component Services
Shortcut
2 KB
Computer Management
Shortcut
2 KB
Data Sources (ODBC)
Shortcut
2 KB
desktop.ini
Configuration Settings
1 KB
Event Viewer
Shortcut
2 KB
Local Security Policy
Shortcut
2 KB
Microsoft .NET Framework 1.1
Configuration
Shortcut
Microsoft .NET Framework 1.1
Wizards
Shortcut
Performance
Shortcut
2 KB
Services
Shortcut
2 KB
10 objects
13.6 KB
My Computer
start
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Adobe Dream...
PHP Oracle De...
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Inbox for pliu...
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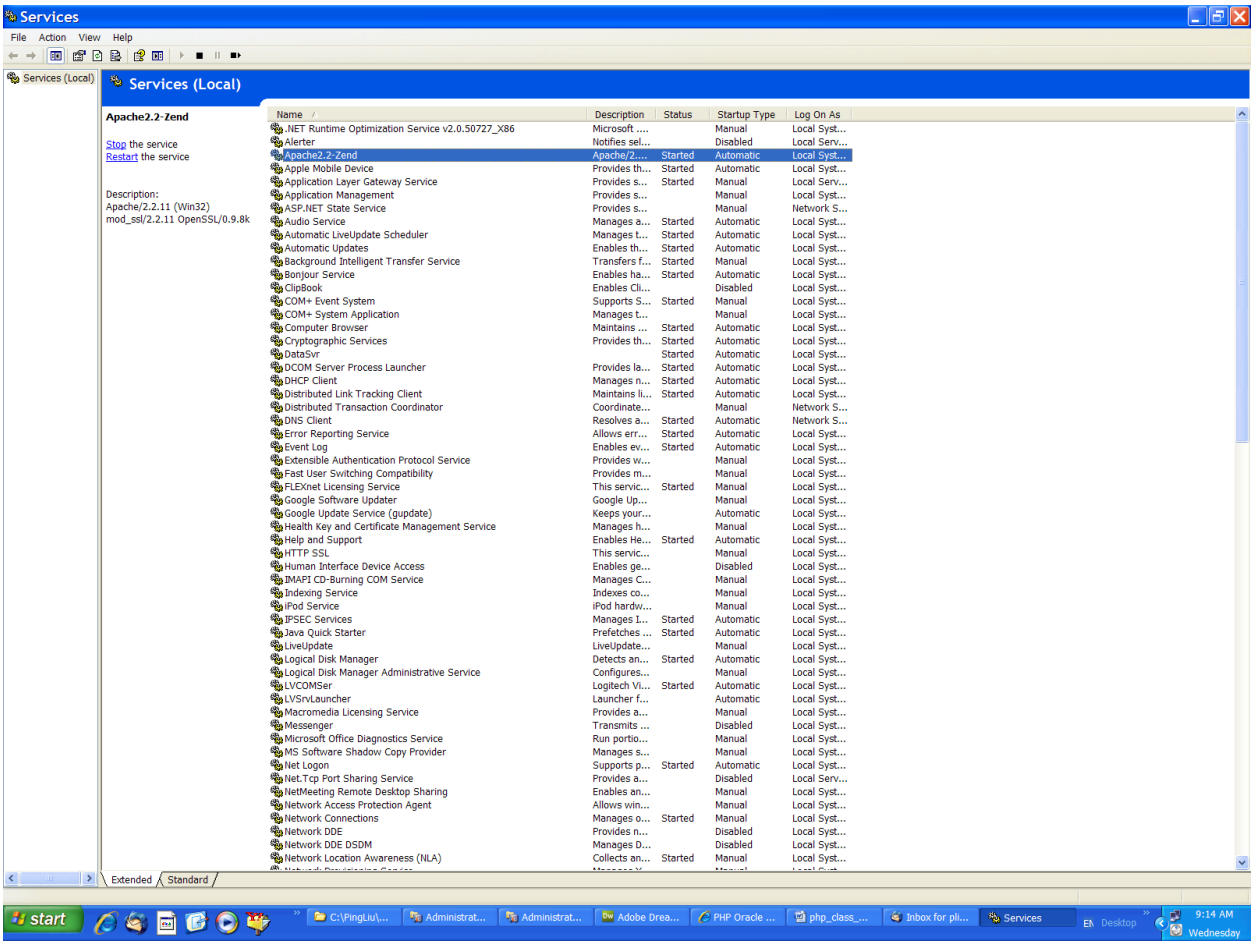

You should be able to see Apache 2.2-Zend service. That is your web server.

If you use Task Manager (CTRL+ALT+Delete), under Processes, you should see httpd.exe. That is the process for the Apache.

In the Task Manager, you will also see the process named as php-cgi.exe. That is your PHP engine.

When you test your PHP server, those two above will give you clues if the web/php server is working or not.