

WA2056 Building HTML5 Based Mobile Web Sites

Classroom Setup Guide

Web Age Solutions Inc.

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Part 1 - Minimum Hardware Requirements

- 1000 MHz Pentium IV
- 2GB RAM minimum, 3 GB recommended
- 8 GB in the hard disk
- Sound card
- Speakers

Part 2 - Minimum Software Requirements

- OS: Windows XP SP2 or later, Windows Vista, or Windows 7.
- Chrome.
- Safari for Windows.
- Mozilla Firefox.
- Java JDK 6 *
- Apache Web Server 2.2.14 *
- Eclipse and Android SDK *

* - indicates software provided as part of the courseware.

Part 3 - Software Provided

You will receive the following file:

- **WA2056.ZIP**

All other software listed under Minimum Software Requirements is either commercially licensed software that you must provide or software that is freely available off the Internet.

Part 4 - Instructions

__1. Make sure the account that you are using to install the software has administrative privileges and if the students won't use the same account then add privileges in the Apache folder (you will install it later), usually located under C:\Program Files. During the class the student has to access to the Apache location and do changes there.

__2. Extract the **WA2056.ZIP** file to C:\

__3. Review that the following folders were created:

- **C:\LabFiles**
- **C:\Software**
- **C:\Software\android-sdk-windows**
- **C:\Software\Apache**
- **C:\Software\eclipse**

__4. Review that the following file was created:

- **C:\Software\jdk-6u20-windows-i586.exe**

__5. Make sure you installed Chrome, Mozilla Firefox and Safari as these browsers are required during the labs.

Part 5 - Installing JDK 6 Update 20

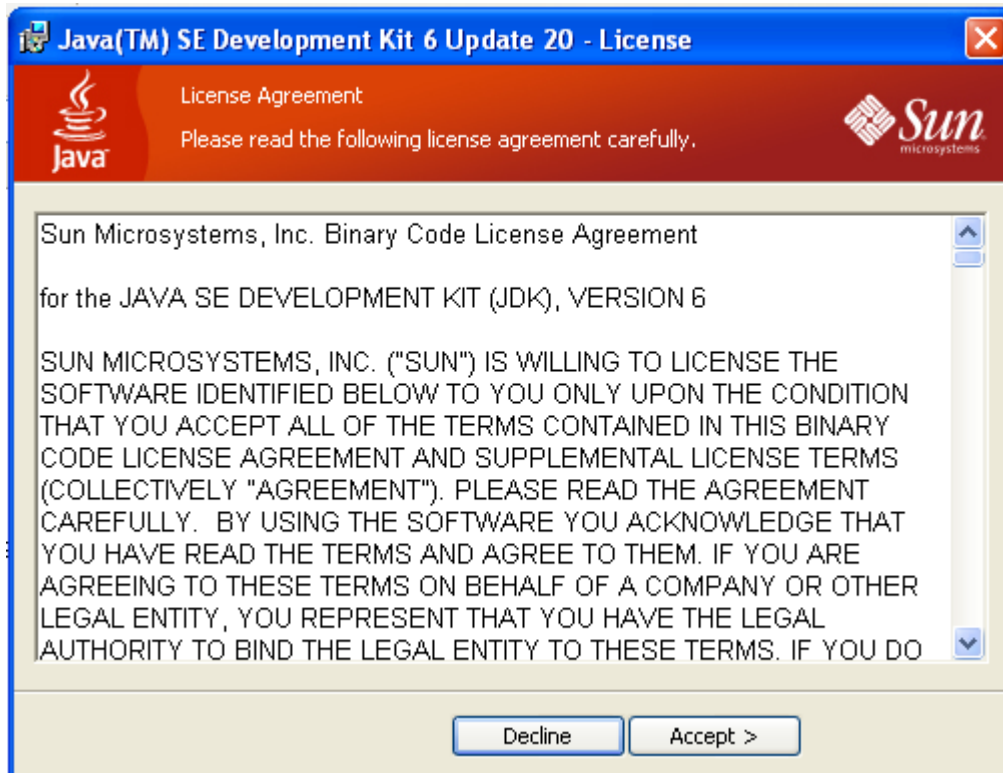
__1. Make sure there is no previous Java version already installed on the system. You can check this by using the Windows “Add/Remove Programs” utility. For the best compatibility with the labs it is suggested that all previous versions of Java be uninstalled before proceeding with these instructions. If this is an issue, please contact the setup support person for the course.

__2. From the **C:\Software** directory run the following file:

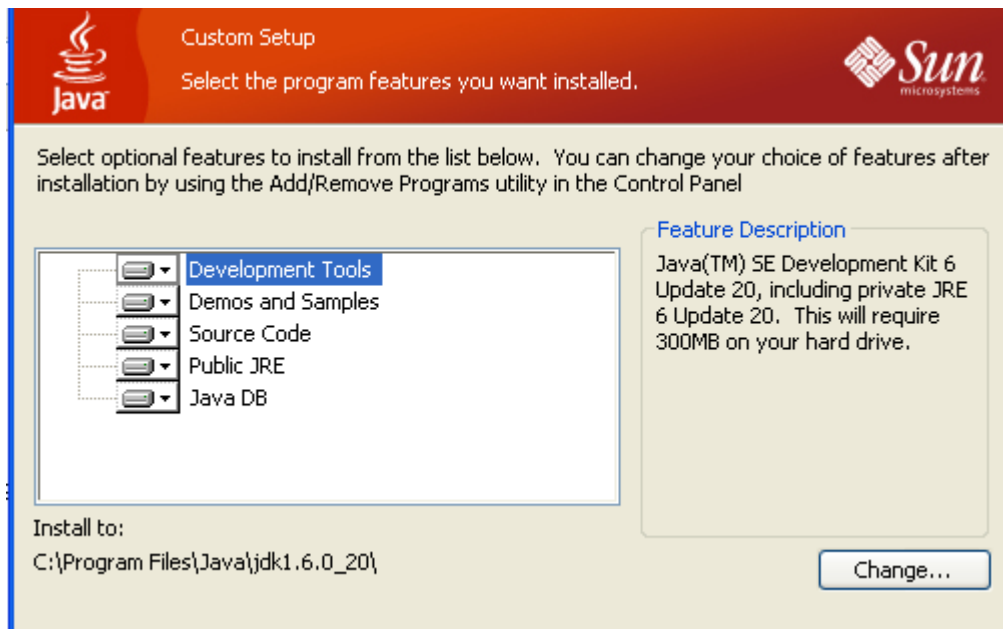
`jdk-6u20-windows-i586.exe`

Note: If using prompted by a security prompt allow the installation to continue.

__3. After a few moments the license agreement will appear. Press the **Accept** button to move to the next step.

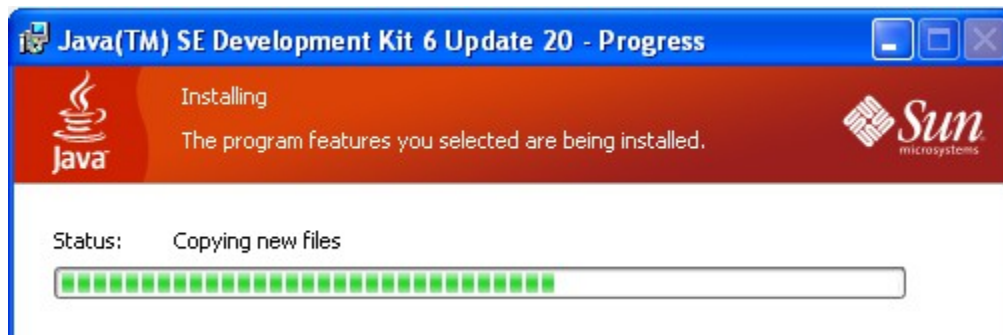


4. Leave the defaults for installation location and options, and press the **Next** button.

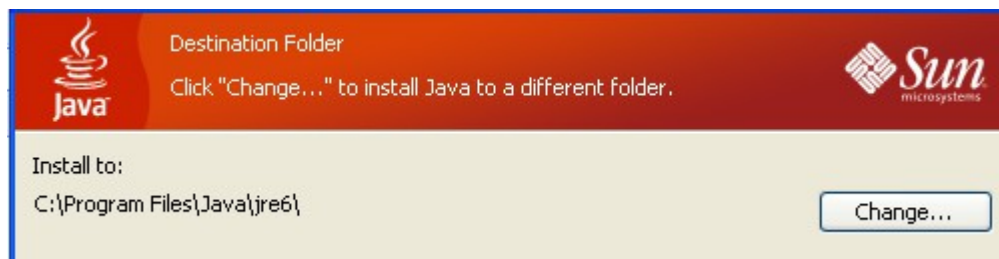


Note: The installation directory may be slightly different. The list of features may not include 'Java DB' but this is OK.

The installation will begin installing files.



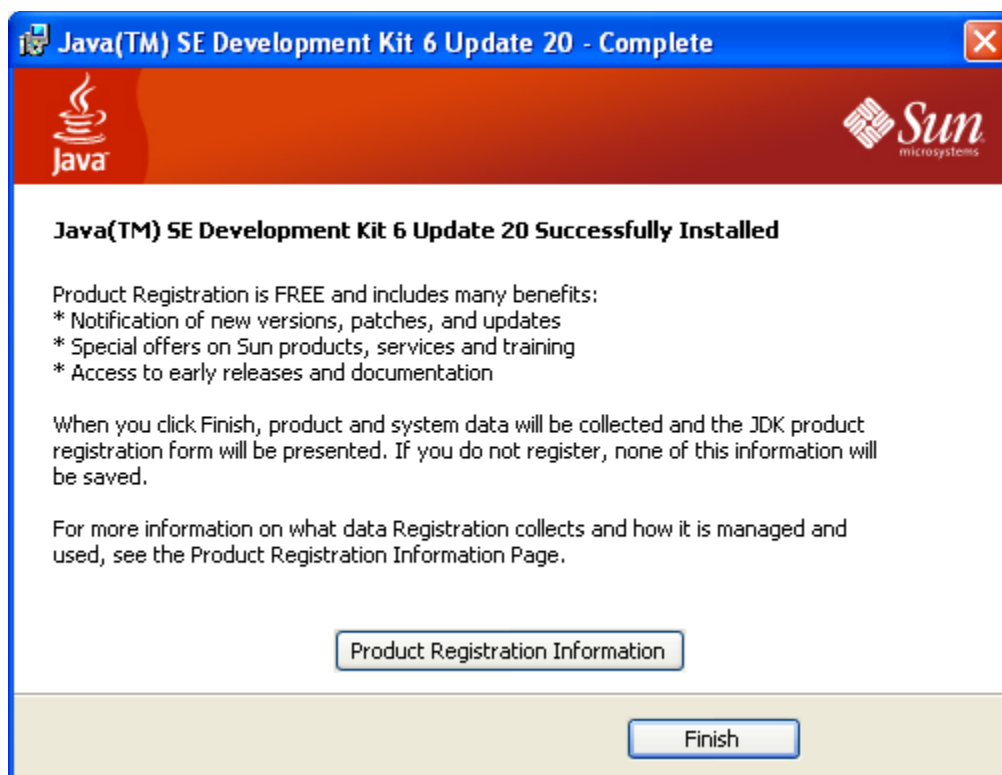
__5. The Destination Folder will appear, leave the default folder and click **Next**.



Note: The installation directory may be slightly different.

Wait until the software is completely installed.

__6. Click **Finish**.



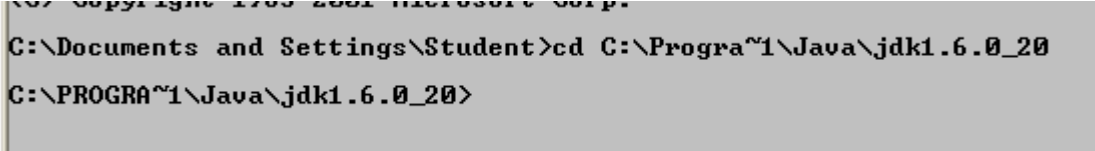
__7. Close any browser that appears asking to register the JDK software.

Set the Environment variables.

__1. Open a Command Prompt. You can do this with '**Start → Programs → Accessories → Command Prompt**'.

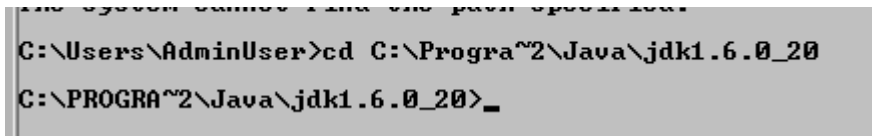
__2. Use the 'cd' command to attempt to switch to the following directory. This will verify the presence of a directory used later so make sure you do not get any errors about not being able to “find the path specified”.

```
cd C:\Progra~1\Java\jdk1.6.0_20
```



Note: On a Windows Vista/7 setup the installation directory may be slightly different. You may need to use the following directory instead of the one listed above:

```
C:\Progra~2\Java\jdk1.6.0_20
```



Some of the remaining steps will use the slightly different directory.

__3. From **Start > Control Panel**, double click on **System**.

Note: If the "Classic" control panel is not displayed you might need to click the "System and Maintenance" link.

__4. If using Windows Vista click the link for "Advanced System Settings".

__5. Select the **Advanced** tab.

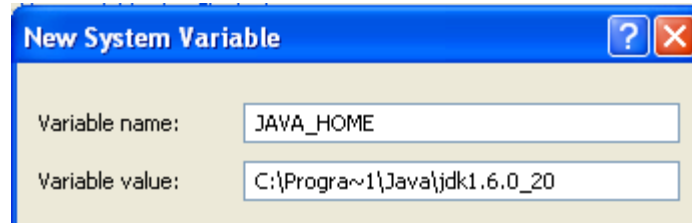
__6. Click the **Environment Variables** button.

__7. Under the System Variables list, click the **New** button.

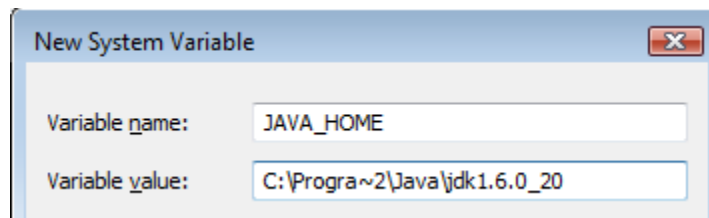
__8. Enter **JAVA_HOME** as Variable name.

__9. As Variable value enter the following. This should be the value you verified in earlier steps.

`C:\Progra~1\Java\jdk1.6.0_20`



Note: If you are using a 64-bit OS use '`C:\Progra~2\Java\jdk1.6.0_20`' instead.

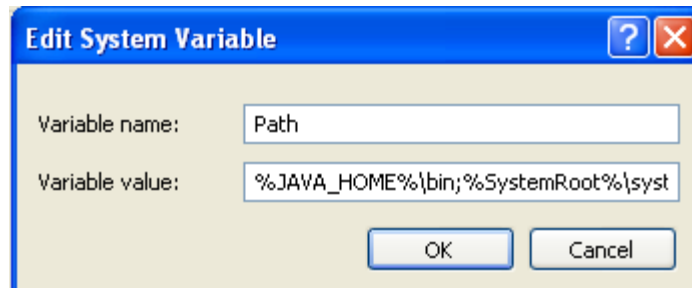


__10. Click **OK** to create the variable.

__11. From the *System Variables* list, select **Path** and click **Edit**.

__12. At the beginning of the line enter the following. Make sure to include the semi-colon on the end:

`%JAVA_HOME%\bin;`



__13. Click **OK**.

__14. Click **OK** to close the *Environment Variables* window.

__15. Click **OK** to close the *System Properties* window.

Part 6 - Verification of JDK 6 Update 20

__1. Open a Windows command prompt. You can do this by selecting '**Start -> Run**', entering '**cmd**', and then pressing the **OK** button. Make sure it is a new command prompt and not one open previously.

__2. Enter the following command:

```
echo %PATH%
```

Make sure you see the Java 'bin' directory listed at the beginning as shown below.

```
C:\Documents and Settings\Student>echo %PATH%
C:\Program Files\Java\jdk1.6.0_20\bin;C:\WINDOWS\system32;
C:\WINDOWS\system32\cmd;C:\WINDOWS\system32\WindowsPowerShell\v1.0\;C:\Program Files\ESTsoft\ALZin\;C:\Program Files\ESTsoft\ALZin\bin\
```

__3. Enter the following command:

```
java -version
```

Make sure you see the response shown below.

```
C:\Documents and Settings\Student>java -version
java version "1.6.0_20"
Java(TM) SE Runtime Environment (build 1.6.0_20-b02)
Java HotSpot(TM) Client VM (build 16.3-b01, mixed mode, sharing)
C:\Documents and Settings\Student>
```

__4. Enter the following command:

```
javac
```

Verify that you get the options to run the Java compiler:

```
C:\Documents and Settings\Student>javac
Usage: javac <options> <source files>
where possible options include:
-g                Generate all debugging info
-g:none          Generate no debugging info
-g:<lines,vars,source> Generate only some debugging info
-nowarn          Generate no warnings
-verbose         Output messages about what the compiler is doing
```

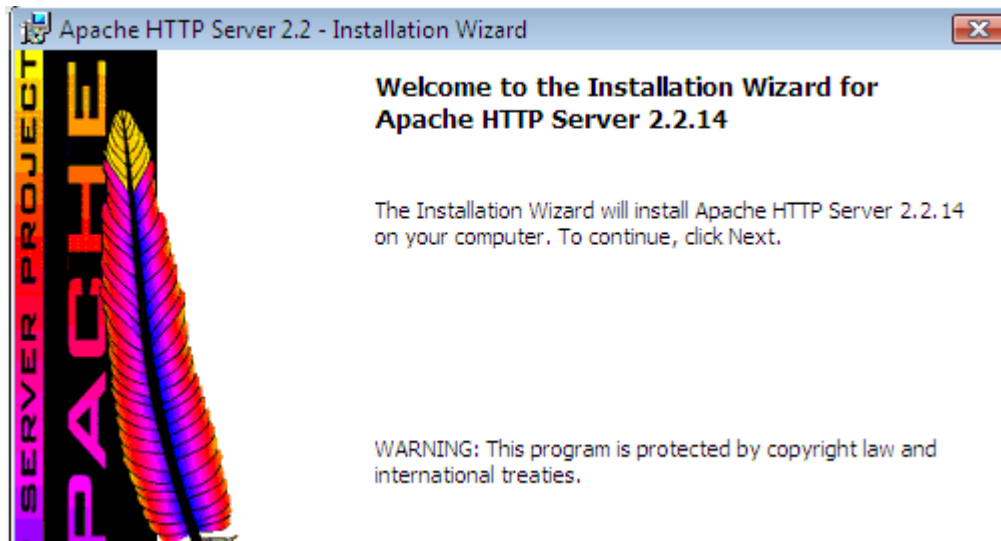
__5. Close the command prompt window and any extra windows that are open.

__6. Restart the computer.

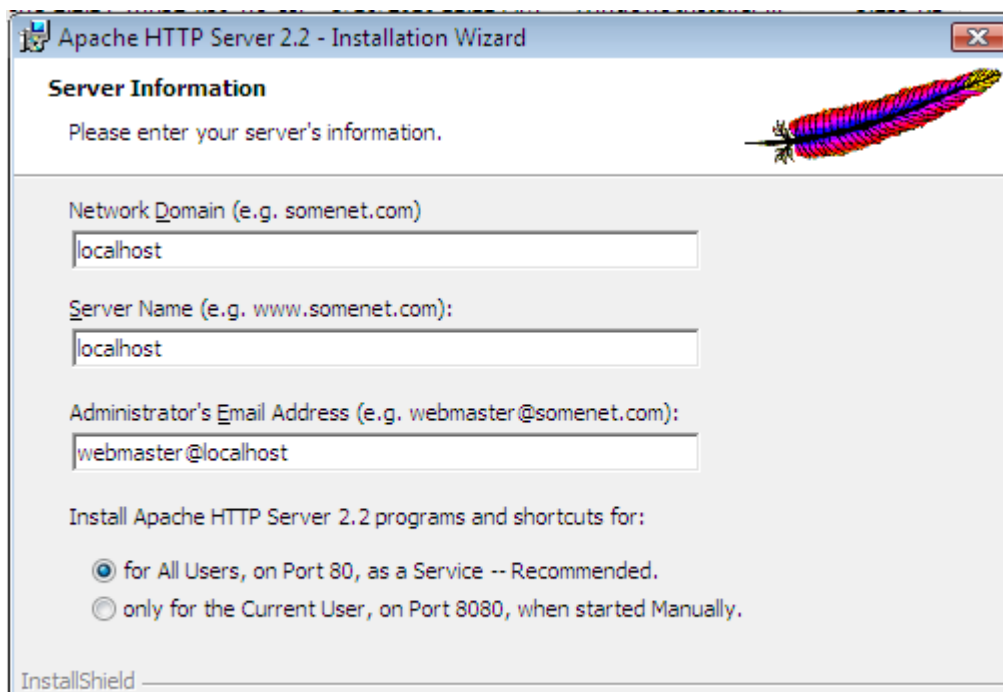
JDK 6 Update 20 is now installed!

Part 7 - Installing Apache HTTP Server 2.2.14

- __1. Login as the administrative ID created for the class.
- __2. Run **apache_2.2.14-win32-x86-no_ssl.msi** from the **C:\Software\Apache** folder.
- __3. In the Welcome screen, click **Next**.

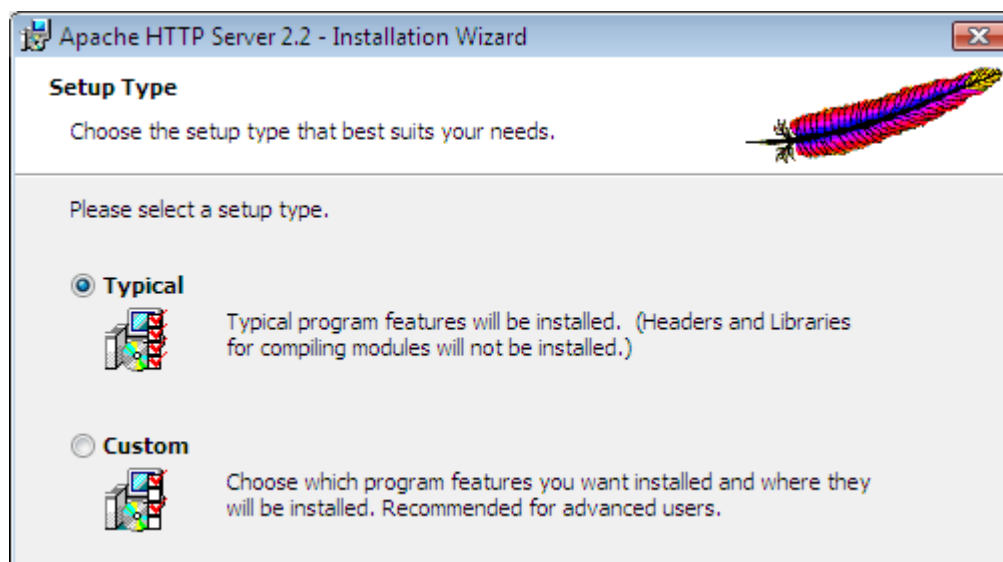


- __4. Accept the License Agreement and click **Next**.
- __5. In the *Read This First* page, click **Next**.
- __6. Enter **localhost** for **Network Domain** and **Server Name**. Enter **webmaster@localhost** for **Administrator's E-mail Address** as shown below.

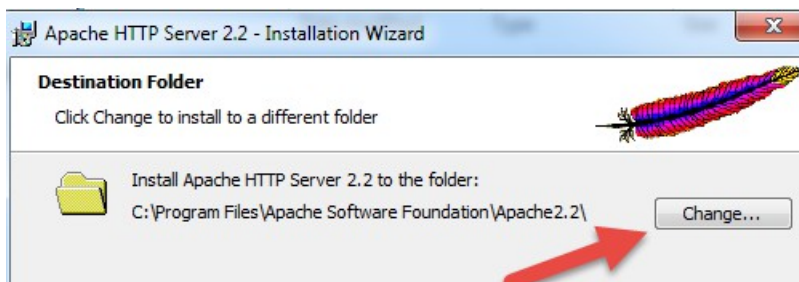


__7. Click the **Next** button.

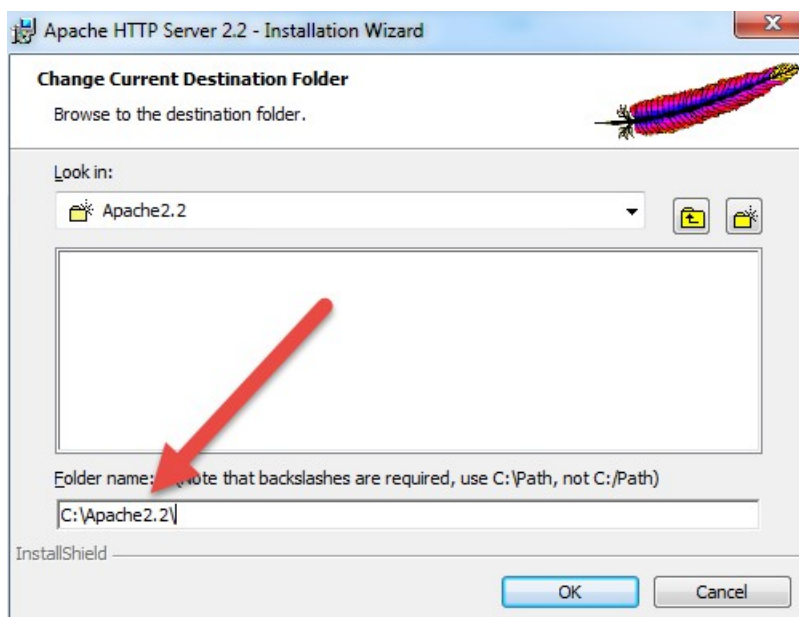
__8. Select **Typical** installation and click **Next**.



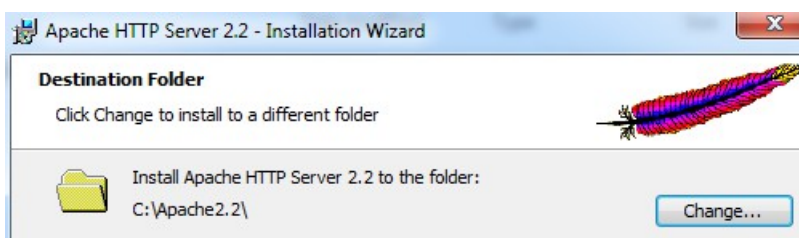
__9. Click the **Change** button to change the destination folder.



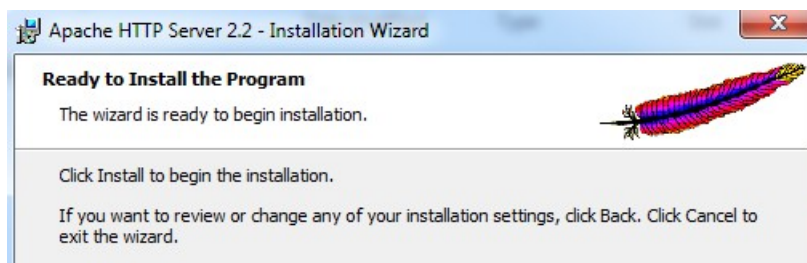
__10. Then change the **Folder name** to **C:\Apache2.2** and click **OK**.



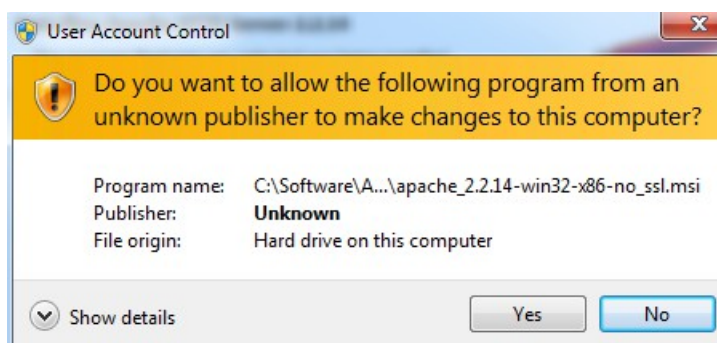
__11. Back in the *Destination Folder* page, confirm the new folder name (**C:\Apache2.2**) and click **Next**.



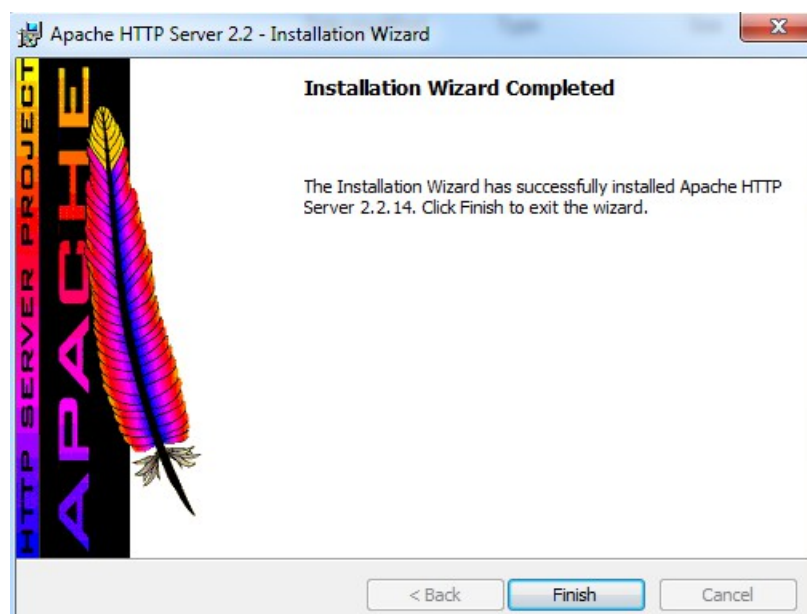
__12. Click **Install** to start the installation.



__13. If prompted by Windows security, click **Yes** to allow the installation to proceed.



__14. When the *Installation Wizard Completed* message appears, click **Finish**.



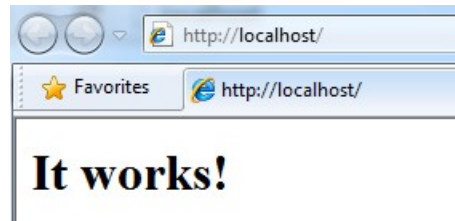
__15. Verify that the Apache Server is running on the task bar of Windows.



__16. Open a browser and type:

http://localhost

__17. Verify you see the message: **It works!**

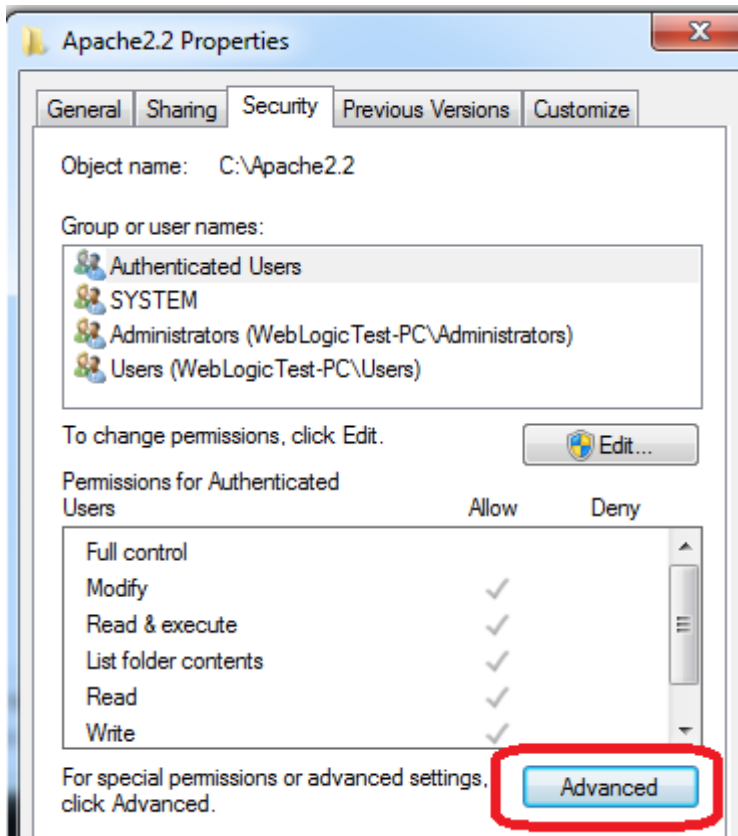


Apache HTTP Server 2.2.14 is installed.

Part 8 - Modify File Permissions (Windows Vista, Windows 7, Windows Server 2008, or Windows 8)

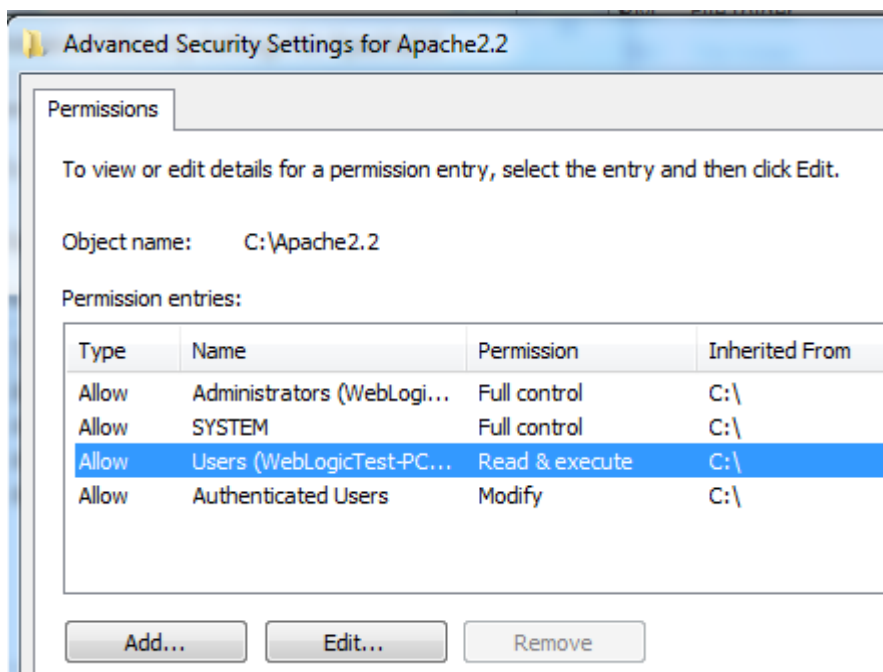
Note: If installing on Windows Vista, Windows 7, Windows Server 2008, or Windows 8 perform this section. Failure to follow these additional steps will lead to an unusable installation. These steps allow full access to the directories used by the Apache Web Server install. This is required so that students can write to the document root.

- __1. Open Windows Explorer.
- __2. Right click C:\Apache2.2 and select **Properties**.
- __3. Click the **Security** tab.
- __4. Click **Advanced**.



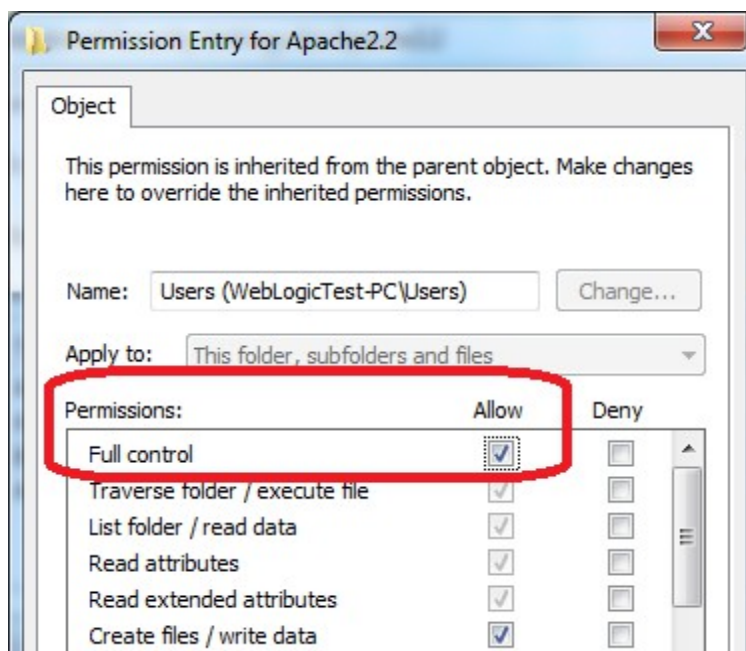
__5. Click **Change Permissions**.

__6. Select the **Users** entry (**add one if not present**).

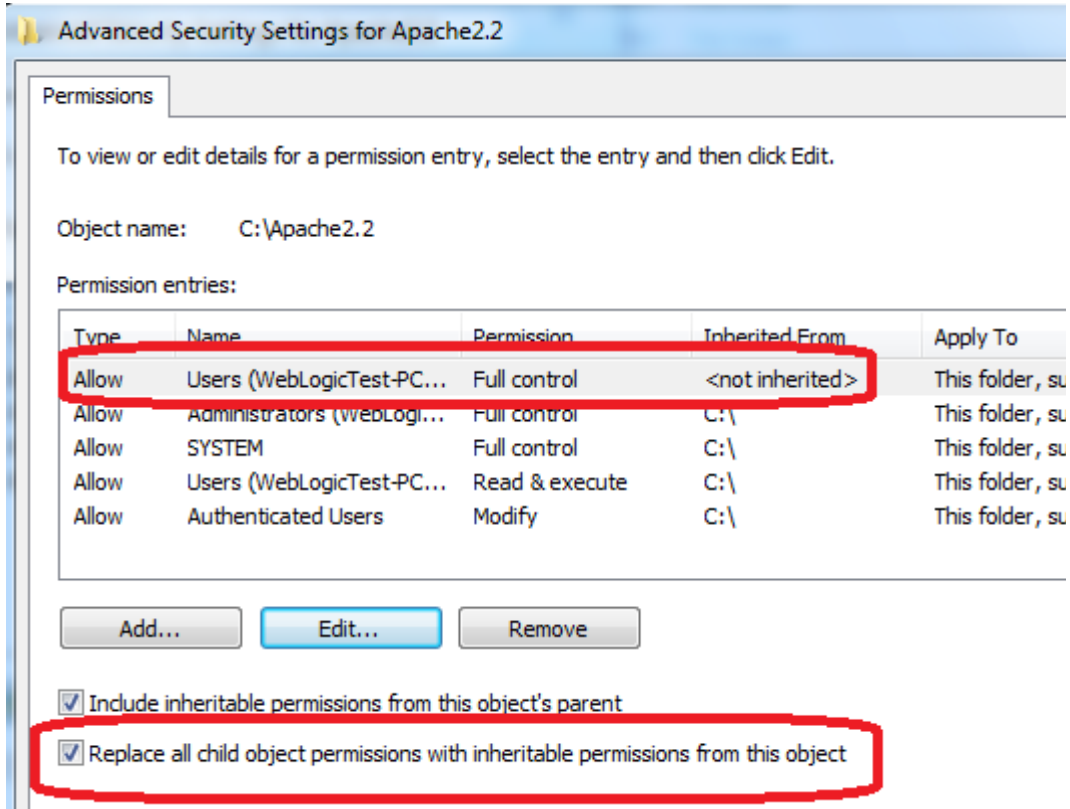


__7. Click **Edit...**

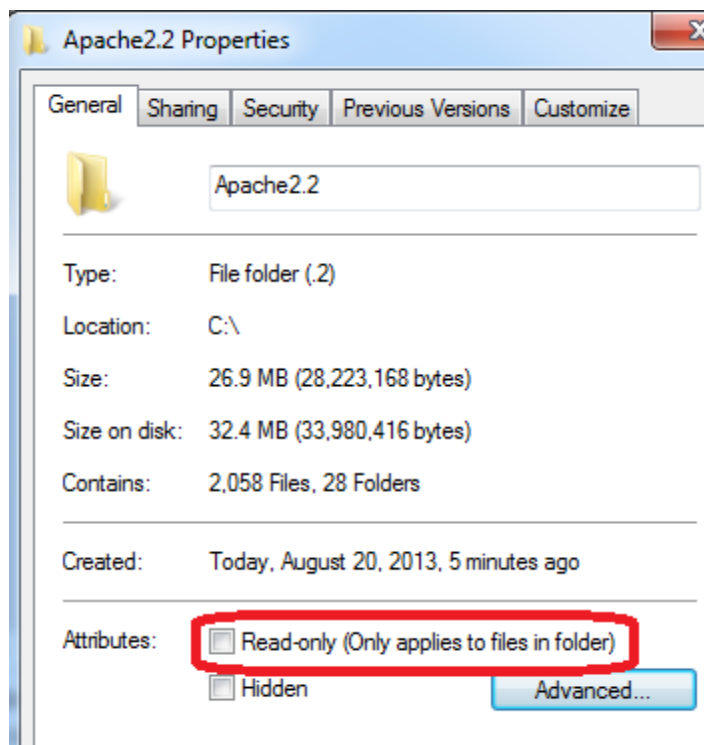
__8. Check the **Allow** checkbox to the right of **Full Control** and click **OK**.



__9. Select the checkbox for **Replace all child permissions with inheritable permissions from this objects** and then click **OK**.

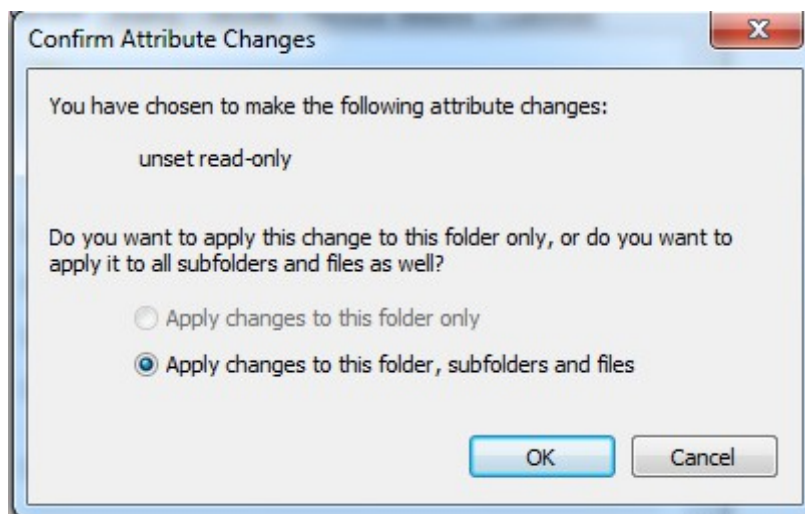


- __10. Click **OK** to continue.
- __11. A *Windows Security* dialog will open. Click **Yes**.
- __12. Wait until Windows finishes updating security.
- __13. Back in the *Advanced Security Settings* dialog, click **OK**.
- __14. Back in the *Apache2.2 Properties* dialog, click **OK**.
- __15. Right click C:**Apache2.2** and select **Properties**.
- __16. Uncheck the **Read-only** checkbox so files can be written to the directory.



__17. Click **OK**.

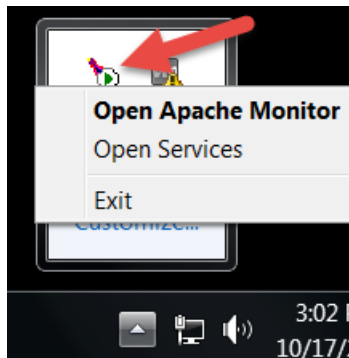
__18. In the *Confirm Attribute Changes* dialog, click **OK**, so the change will be applied to this folder, subfolder, and any files.



__19. Restart the computer and log in with the user that the student will use to do the labs.

__20. Make sure the user has full access to the **C:\Apache2.2\conf** and **C:\Apache2.2\htdocs** folders.

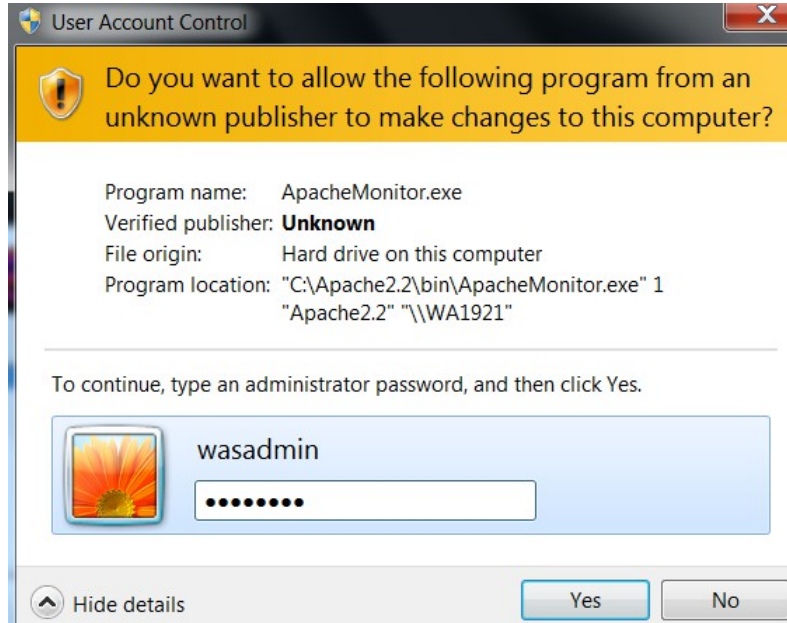
__21. Right click the task bar and select **Open Apache Monitor**.



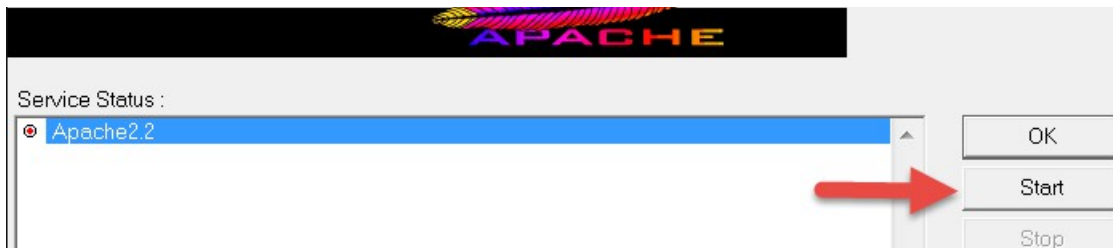
__22. The **Open Apache Monitor** window will open then click **Stop**.



__23. Enter the admin password if it is required and click **Yes**.



__24. The server will stop, click **Start**.



The server will be started again.



Note. If you were asking for password to stop the server means that you need to configure the user to allow the student starting the server without asking permissions or you need to provide the admin password to the student to be able to stop and restart the server because this is required during the labs.

Part 9 - Summary

You have successfully installed the software for this course!

If you have any question please contact us by email at support@webagesolutions.com

From US and Canada call: 1-877-812-8887 ext. 26

International call: 416-406-3994 ext. 26

You have successfully installed the software for this course.