WA2494 Introduction to Java 8 using Eclipse

Classroom Setup Guide

Web Age Solutions Inc.

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Part 1 - Minimum Hardware Requirements

- CPU to meet the minimum requirements of the operating system being used

- 3 GB RAM minimum, 4 GB recommended

- 15 GB in the hard disk

- USB port

Part 2 - Minimum Software Requirements

- One of the following Windows versions:

  o Windows Vista (Business, Enterprise, or Ultimate)

  o Windows 7 (Professional, Enterprise, or Ultimate)

  o Windows 8 or 8.1

  o Windows 10

- One of the following web browsers:

  o Internet Explorer 9 or higher

  o Latest Firefox

  o Latest Chrome

- Adobe Acrobat Reader

- Zip extraction utility

- JDK 8 Update 45 *

- Eclipse IDE for Java EE Developers – Mars *

  * - indicates software provided as part of the courseware.

Part 3 - Software Provided

You will receive the following file:

- **WA2494.ZIP**

You will receive the above file in a USB memory stick, CD, DVD or URL.

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 - Important Ghosting or Imaging Information

The software for this course can be ghosted.

Part 5 - Instructions

__1. Login to the computer with a user that has administrative access.

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

__3. Review that the following folders were created:

- **C:\LabFiles**

- **C:\Software**

- **C:\Software\eclipse**

__4. Review that the following files were created:

- **C:\Software\jdk-8u45-windows-i586.exe**
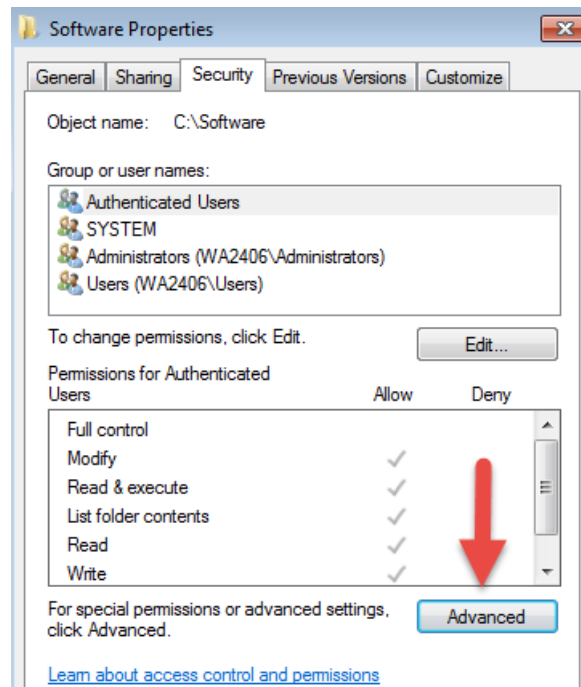
Part 6 - Privileges to Users

During the labs students will require privileges on several directories. They will need to be able to write, read, and modify files in these directories for the labs. Although the directions below are provided as an example, this may differ depending on Windows version. The important thing is to make sure students have full permissions on the folders below or they may not be able to accomplish some labs.

- **C:\Software**

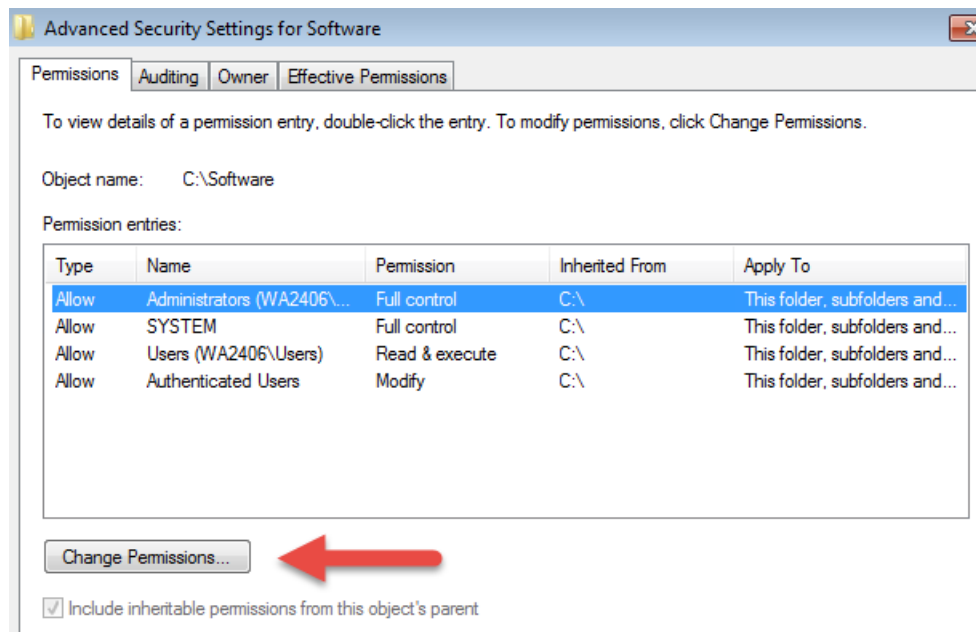- **C:\LabFiles**

- **C:\Workspace**

__1. Create the user that the students will use during the class.

__2. Give the student user account administrative rights. During the labs the student requires this to install software.

__3. Open Windows Explorer.

__4. Right click C:**Software** and select **Properties**.

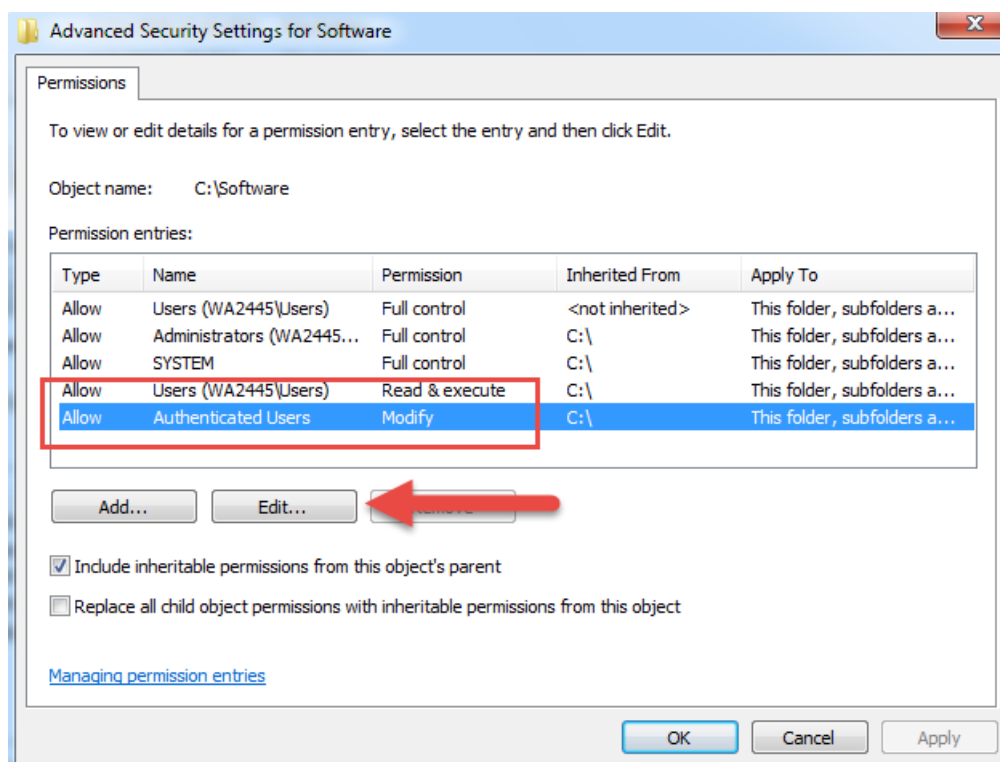__5. Click the **Security** tab.

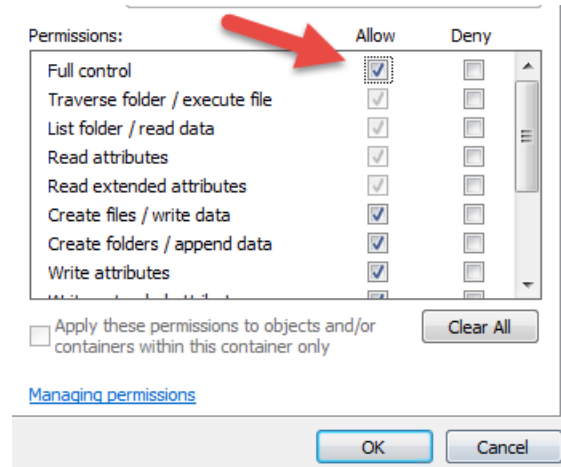__6. Click **Advanced**.

__7. Click **Change Permissions**.

__8. Select the **Authenticated Users** entry and click **Edit…**

Note. If you don't have a domain in your environment the select **Users** instead Authenticated Users.

__9. Check the **Allow** checkbox to the right of **Full Control** and click **OK**.

__10. Select the checkbox for **Replace all child permissions with inheritable permissions from this objects** and then click **OK**.

__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 *Properties* dialog, click **OK**.

__15. Do the same steps to the **C:\LabFiles** folder.

__16. Create a folder called **C:\Workspace** if its not already created.

__17. Do the same steps to the **C:\Workspace** folder.
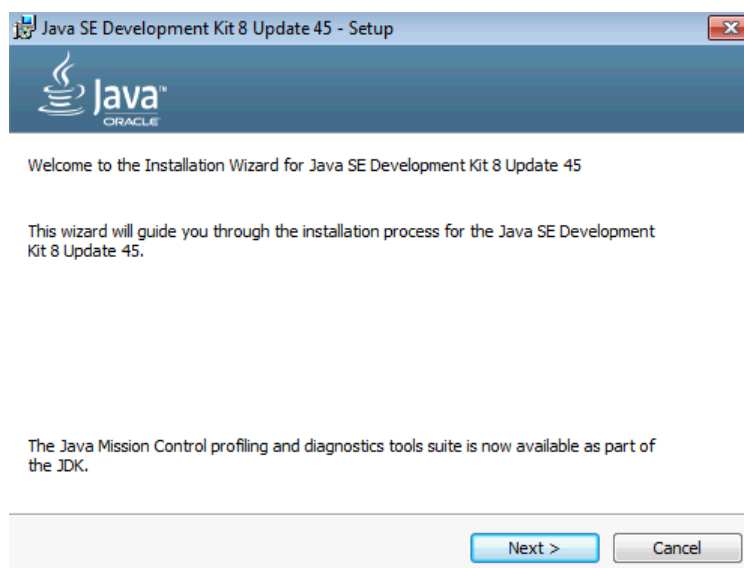
Part 7 - Installing JDK 8 Update 45

__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.

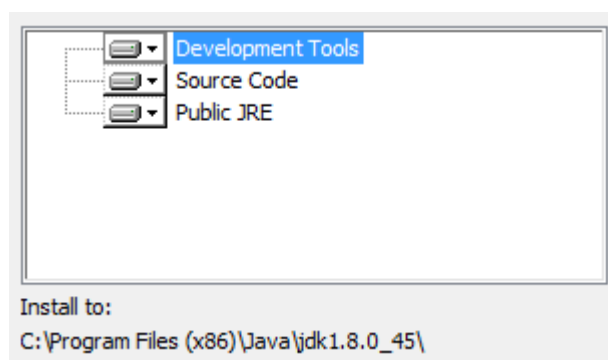__2. From the **C:\Software** directory run the following file:

jdk-8u45-windows-i586

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

__3. When the initial step of the setup appears, press the **Next** button.

__4. Leave the defaults for installation location and options, and press the **Next** button.

Note: The installation directory may be slightly different.

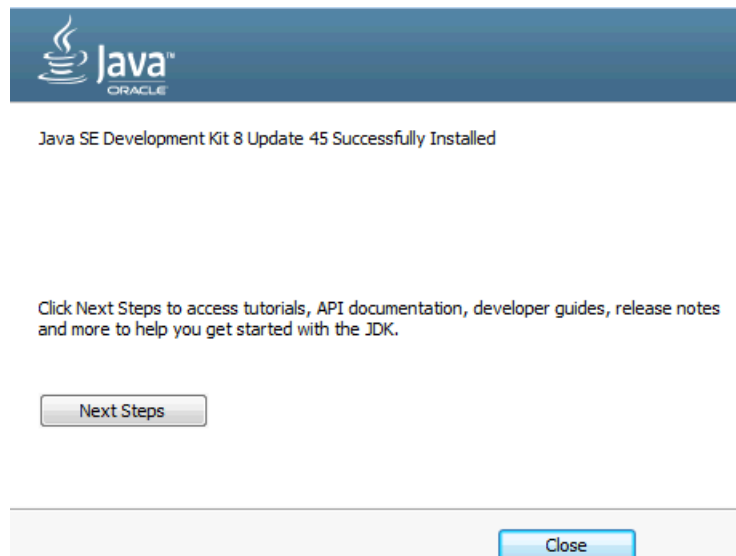The installation will begin installing files.

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

Note: The installation directory may be slightly different.

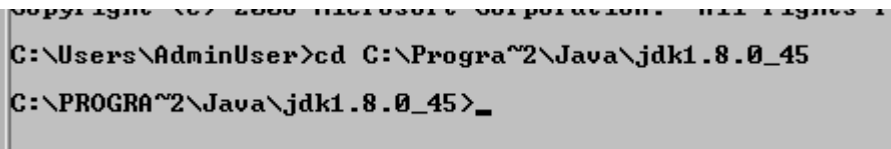Wait until the software is completely installed.

__6. Click **Close**.

__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~2\Java\jdk1.8.0_45
```

```
Copyright (c) 2008 Microsoft Corporation.  All rights re

C:\Users\AdminUser>cd C:\Progra~2\Java\jdk1.8.0_45

C:\PROGRA~2\Java\jdk1.8.0_45>_
```

> **Note:** The installation directory may be slightly different depending your operating system. You may need to use the following directory instead of the one listed above:
>
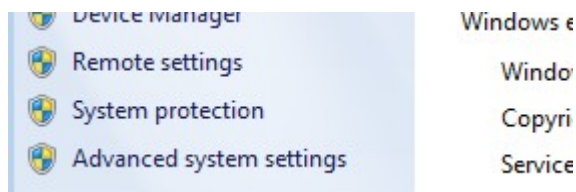> **C:\Progra~1\Java\jdk1.8.0_45**
>
> Some of the remaining steps will use the slightly different directory.

__3. Make sure you can reach the java folder and remember the value entered because you will use this value in the following steps.
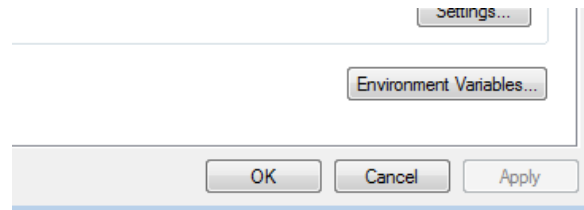
__4. Close the command prompt window.

__5. In the Windows Start Menu, right-click on the **Computer** link in the right-hand side of the Start panel, and then select **Properties**.

__6. Click on **Advanced system settings**.

```
   Device Manager              Windows e

   Remote settings             Windo

   System protection           Copyri

   Advanced system settings    Service
```

__7. The system will display the **System Properties** dialog. Select the **Advanced** tab and click **Environment Variables**.
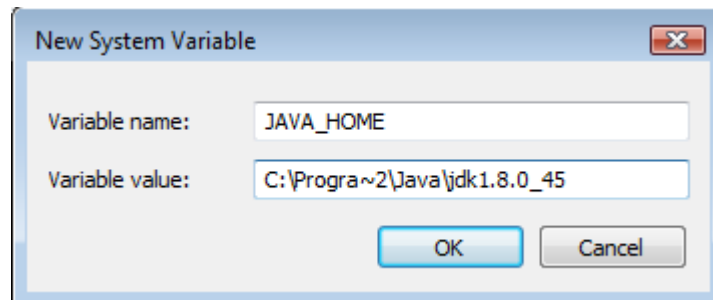
__8. Under the **System Variables** list, click the **New** button.

__9. Enter **JAVA_HOME** as Variable name.

__10. As Variable value enter the following. This should be the value you verified in the *Set the Environment variables section - step 2*.

```
C:\Progra~2\Java\jdk1.8.0_45
```
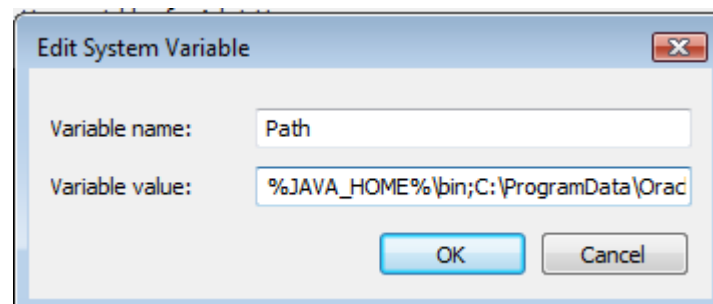
Note: If you are using a 32-bit OS you may have to use **C:\Progra~1\Java\jdk1.8.0_45**

__11. Click **OK** to create the variable.

__12. From the *System Variables* list, select **Path** and click **Edit**.

__13. At the beginning of the line enter the following. Make sure to include the semi-colon on the end:

```
%JAVA_HOME%\bin;
```

__14. Click **OK**.

__15. Click **OK** to close the *Environment Variables* window.

__16. Click **OK** to close the *System Properties* window.

Part 8 - Verification of JDK 8 Update 45

__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.

> Note: You may see **C:\Progra~1\Java\jdk1.8.0_45** or **C:\Progra~2\Java\jdk1.8.0_45**

__3. Enter the following command:

java -version

Make sure you see the response shown below.

```
C:\Users\AdminUser>java -version
java version "1.8.0_45"
Java(TM) SE Runtime Environment (build 1.8.0_45-b15)
Java HotSpot(TM) Client VM (build 25.45-b02, mixed mode)

C:\Users\AdminUser>_
```

> Troubleshooting: If you get an error message means that your Environment variable was incorrectly entered, go back and fix the values.

__4. Enter the following command:

javac

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

```
C:\Users\AdminUser>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
```

__5. Close the command prompt window and any extra windows that are open.
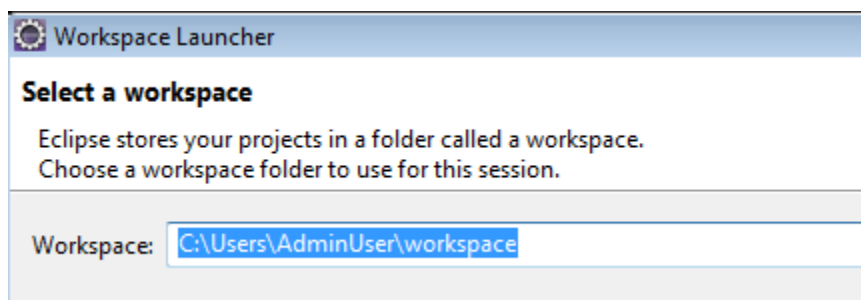
Java has been installed.

Part 9 - Verification of Eclipse Mars

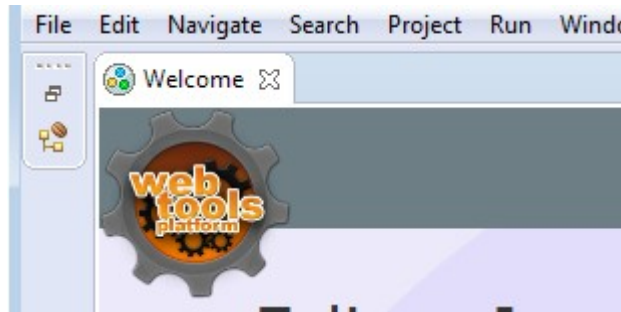__1. Run C**:\Software\eclipse\eclipse.exe**

Eclipse Mars will start.

__2. A Workspace Launcher dialog will appear. Leave the default workspace directory and click **OK**.

Eclipse will open showing the Welcome page. (The Welcome screen may vary between versions).

__3. From the menu, select **File > Exit** to close Eclipse. Confirm you want to exit Eclipse if prompted.

Eclipse Mars is working fine.

Part 10 - Summary

You have successfully installed the software for this course!

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

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

International call: 416-406-3994 ext. 26

Congratulations. The installation for this course has been completed.