

# **WA1719 Programming Advanced JAX-WS Web Services on JBoss 5.1**

## **Classroom Setup Guide**

**Web Age Solutions Inc.**

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## Part 1 - Minimum Hardware Requirements

- 2 GHz Pentium IV
- 1.5 GB RAM minimum, 2 GB recommended
- 8 GB in the hard disk
- USB port

## Part 2 - Minimum Software Requirements

- Adobe Acrobat Reader
- Zip extraction utility
- One of the following web browsers:
  - Internet Explorer 7 or 8
  - Firefox 3.0 or 3.5
- JDK 6.0 Update 20\*
- Eclipse JEE Helios SR2 \*
- JBoss Tools Eclipse Plugins 3.2.0 \*
- JBoss Application Server 5.1 \*
- Derby 10.7.1.1 \*
- JBoss Web Services CXF 3.3.1 \*

\* - indicates software provided as part of the courseware.

### **Part 3 - Software Provided**

You will receive in a USB memory stick, or in DVD or in an email a link to download the following file:

- **WA1719.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 - Important Ghosting or Imaging Information**

The software for this course can be ghosted.

### **Part 5 - Installation Instructions**

\_\_1. Extract directly to **C:\** the **WA1719.ZIP** file that you received in part 3.

\_\_2. Review that the following folders were created:

- **C:\LabFiles**
- **C:\Software\db-derby-10.7.1.1-bin**
- **C:\Software\eclipse**
- **C:\Software\jboss-5.1.0.GA**
- **C:\Software\JBoss Tools**
- **C:\Software\jbossws-cxf-bin-dist**

\_\_3. Review that the following file was created:

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

## Part 6 - Installing JDK 6 Update 20

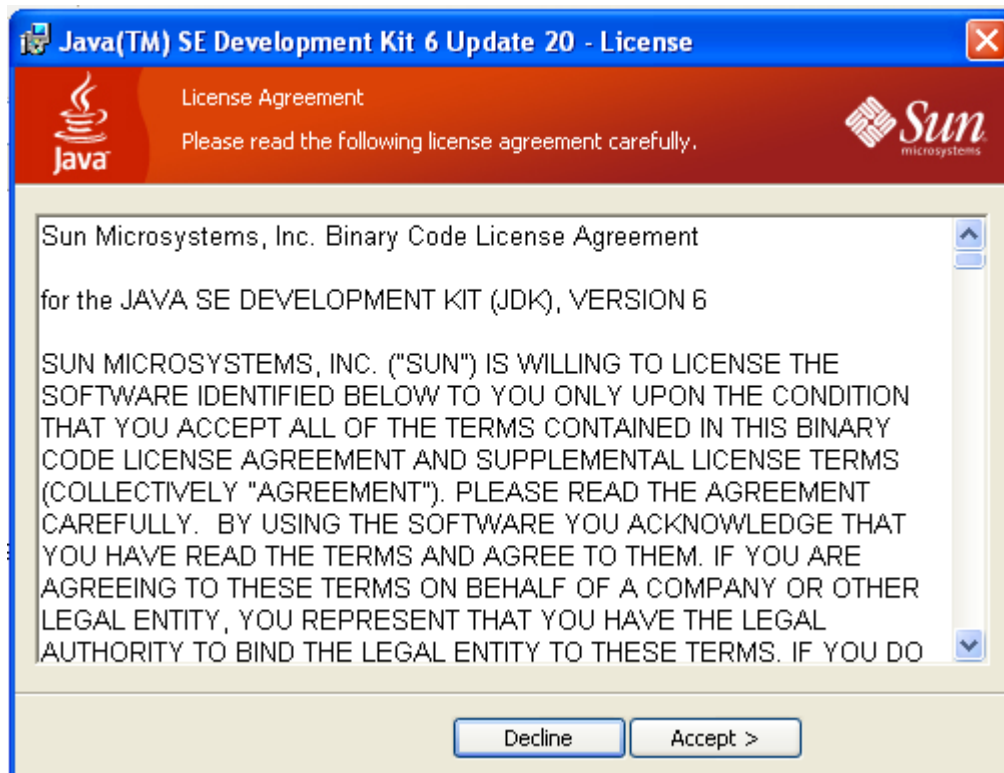
\_\_1. Make sure there is no previous Java version already installed on the system. You can check this by using the Windows “Add/Remove Programs” utility. For the best compatibility with the labs it is suggested that all previous versions of Java be uninstalled before proceeding with these instructions. If this is an issue, please contact the setup support person for the course.

\_\_2. From the **C:\Software** directory run the following file:

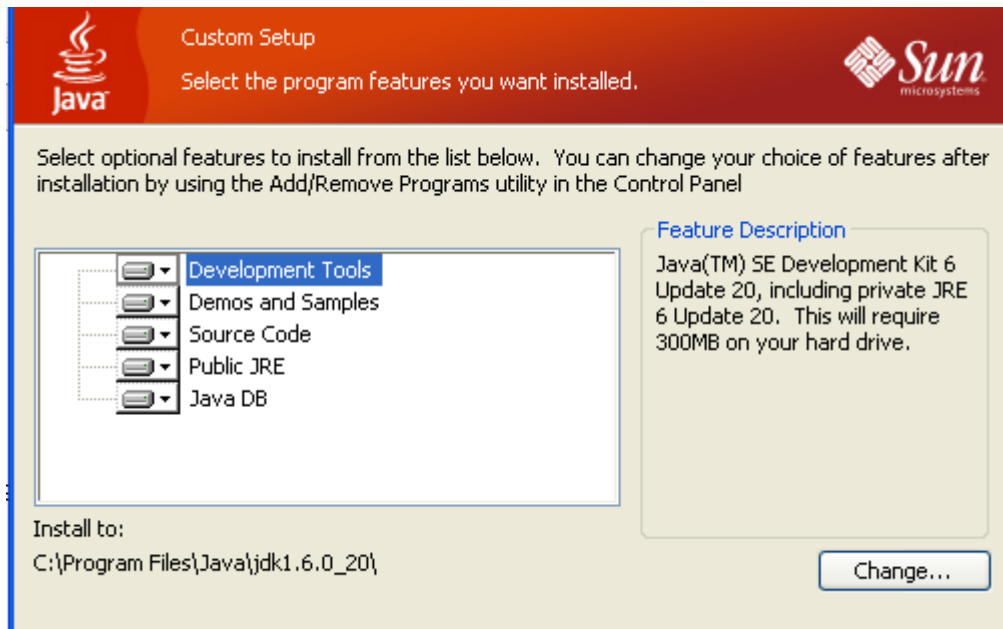
**jdk-6u20-windows-i586.exe**

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

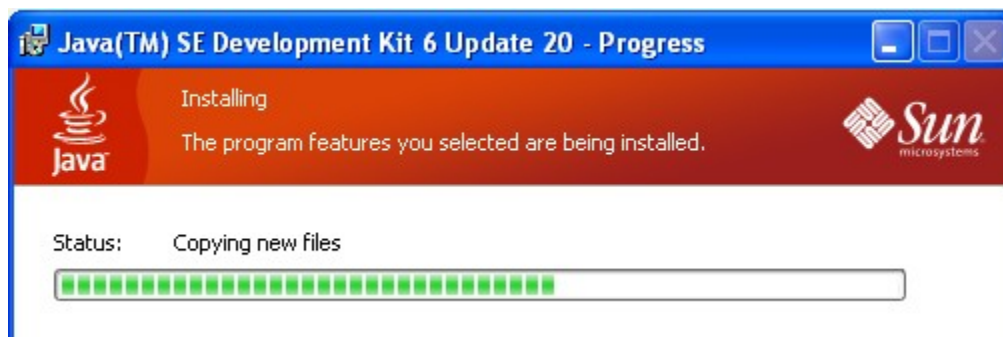
\_\_3. After a few moments the license agreement will appear. Press the **Accept** button to move to the next step.



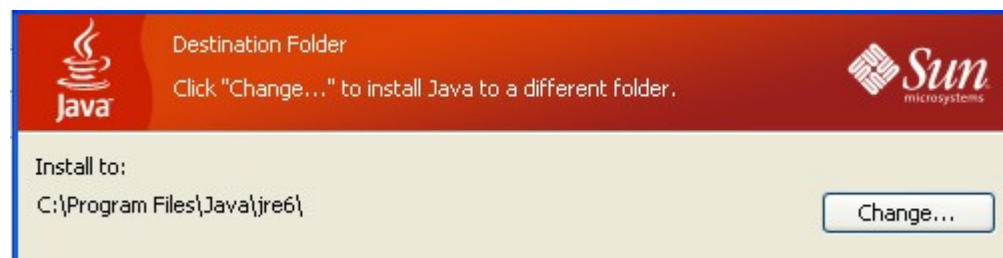
\_\_4. Leave the defaults for installation location and options, and press the **Next** button.



The installation will begin installing files.

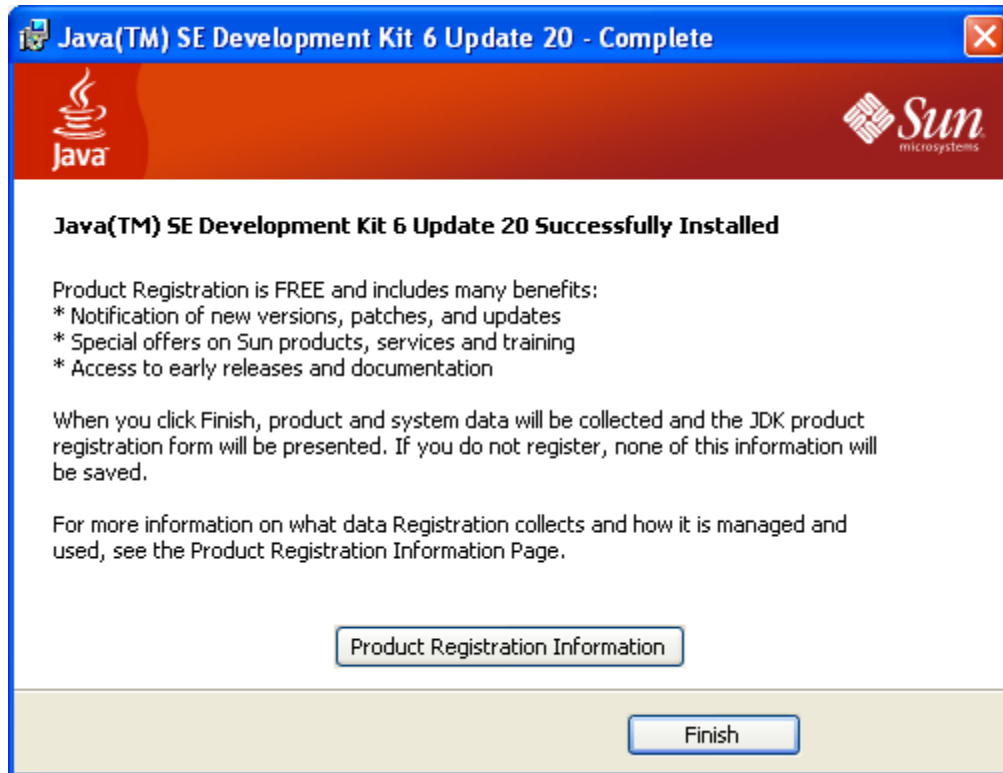


\_\_5. The Destination Folder will appear, leave the default folder and click **Next**.



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. 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.

\_\_2. If using Windows Vista click the link for "Advanced System Settings".

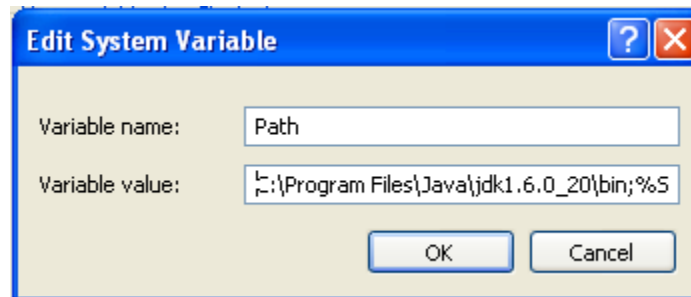
\_\_3. Select the **Advanced** tab.

\_\_4. Click the **Environment Variables** button.

\_\_5. From the *System Variables* list, select **Path** and click **Edit**.

\_\_6. At the beginning of the line enter the following:

```
C:\Program Files\Java\jdk1.6.0_20\bin;
```



**Note:** If you are using a 64-bit OS use 'C:\Program Files (x86)\Java\jdk1.6.0\_20\bin' instead. You might want to check the folder already exists on your system.

\_\_7. Click **OK**.

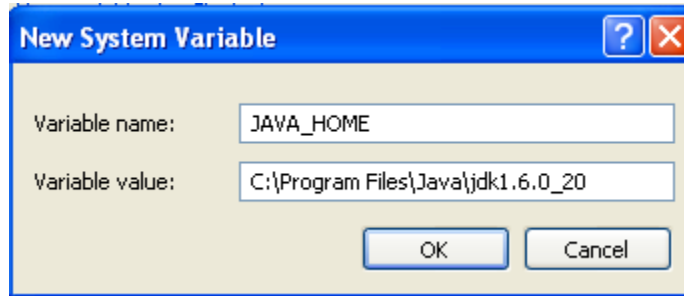
\_\_8. Under the System Variables list, click the **New** button.

\_\_9. Enter **JAVA\_HOME** as Variable name.

\_\_10. As Variable value enter the following. This is similar to the previous variable but without the 'bin' directory.

```
C:\Program Files\Java\jdk1.6.0_20
```





**Note:** If you are using a 64-bit OS use 'C:\Program Files (x86)\Java\jdk1.6.0\_20' instead. You might want to check the folder already exists on your system.

- \_\_ 11. Click **OK** to create the variable.
- \_\_ 12. Click **OK** to close the *Environment Variables* window.
- \_\_ 13. Click **OK** to close the *System Properties* window.
- \_\_ 14. Restart the computer.

## Part 7 - 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.

\_\_2. 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>_
```

\_\_3. 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
  -deprecation      Output source locations where deprecated APIs are found
  -classpath <path> Specify where to find user class files and annotation processors
  -cp <path>        Specify where to find user class files and annotation processors
```

\_\_4. Close the command prompt window and any extra windows that are open.

JDK 6 Update 20 is now installed!

## Part 8 - Verification of Eclipse JEE Helios

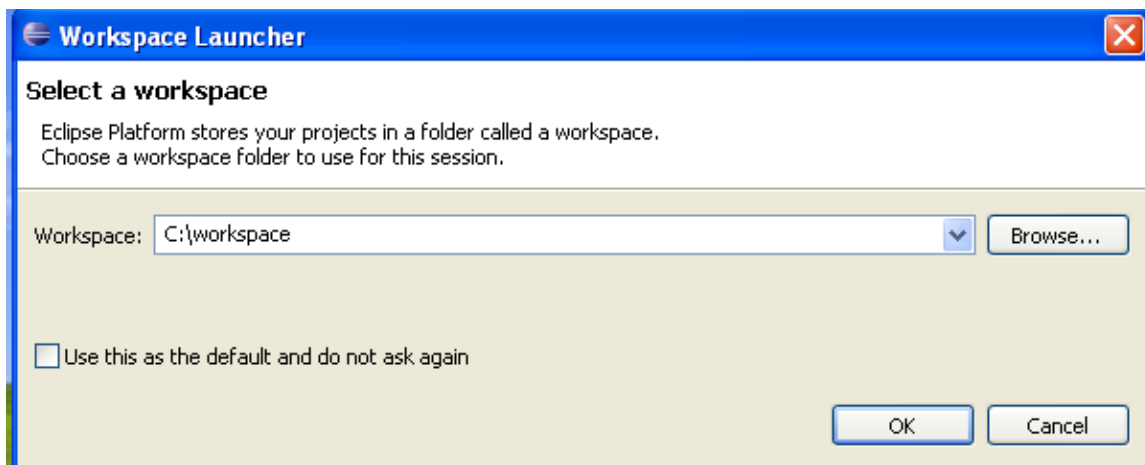
\_\_1. Run C:\Software\eclipse\eclipse.exe

Eclipse Helios will start.



\_\_2. A Workspace Launcher dialog will appear. Change the workspace directory to:

**c:\workspace**



\_\_3. Click **OK**.

Eclipse will open showing the Welcome page.



\_\_4. From the menu, select **File** > **Exit** to close Eclipse.

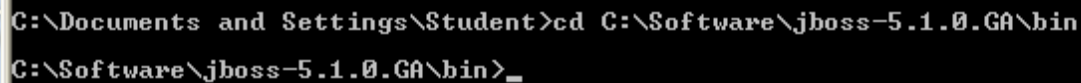
Eclipse Java EE Helios is working fine.

## Part 9 - Verification of JBoss Application Server 5.1.0 GA JDK6

\_\_1. Open a command prompt window.

\_\_2. Change to the following folder:

`C:\Software\jboss-5.1.0.GA\bin`



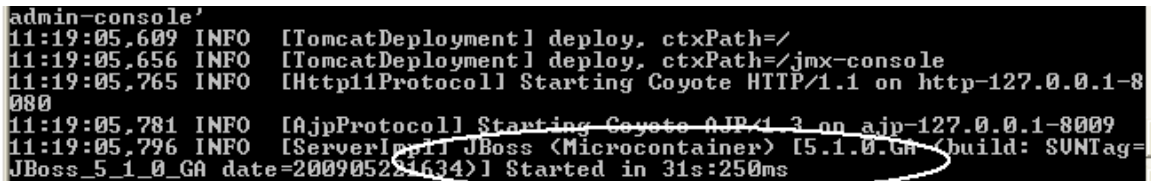
```
C:\Documents and Settings\Student>cd C:\Software\jboss-5.1.0.GA\bin
C:\Software\jboss-5.1.0.GA\bin>_
```

\_\_3. Enter the command:

`run.bat`

\_\_4. If you are prompted for security unblock the Java process.

\_\_5. JBoss will start in about 60 seconds and the Started message will appear.



```
admin-console'
11:19:05.609 INFO [TomcatDeployment] deploy, ctxPath=/
11:19:05.656 INFO [TomcatDeployment] deploy, ctxPath=/jmx-console
11:19:05.765 INFO [Http11Protocol] Starting Coyote HTTP/1.1 on http-127.0.0.1-8080
11:19:05.781 INFO [AjpProtocol] Starting Coyote AJP/1.3 on ajp-127.0.0.1-8009
11:19:05.796 INFO [ServerImpl] JBoss (Microcontainer) [5.1.0.GA (build: SUNTag=
JBoss_5_1_0_GA date=20090522_1634)] Started in 31s:250ms
```

\_\_6. Open another command prompt window.

\_\_7. Change to the following folder:

`C:\Software\jboss-5.1.0.GA\bin`

\_\_8. Enter the command:

`shutdown.bat -S`

JBoss will stop

```
C:\Software\jboss-5.1.0.GA\bin>shutdown -S
Shutdown message has been posted to the server.
Server shutdown may take a while - check logfiles for completion
Press any key to continue . . .
```

\_\_9. Press any key in the command prompt window.

\_\_10. Switch to the first command prompt window. JBoss will shutdown. Click any key there too.

```
11:20:17,375 INFO [TransactionManagerService] Destroying TransactionManagerService
11:20:17,781 INFO [HypersonicDatabase] Database standalone closed cleanly
11:20:20,218 INFO [ServerImpl] Shutdown complete
Shutdown complete
Halting VM
Press any key to continue . . .
```

\_\_11. Close all the commands prompts open.

JBoss Application Server 5.1.0.GA JDK6 is working fine.

Congratulations. The installation of WA1719 Programming Advanced JAX-WS Web Services on JBoss 5.1 has been completed.