Supplement I.B: Installing and Configuring JDK 1.5

For Introduction to Java Programming By Y. Daniel Liang

This supplement covers the following topics:

- Downloading JDK 1.5
- Installing JDK 1.5
- Configuring JDK
- Verifying Configurations

1.1 Downloading JDK 1.5

You can download JDK 1.5 from http://java.sun.com/j2se/1.5.0/download.jsp. The Windows version of JDK download file is named jdk-1_5_0-windowsi586.exe. (Note: new versions or updates may be available. If you download a new version or an update version, the file name may be slightly different from jdk-1_5_0-windowsi586.exe.)

1.2 Installing JDK 1.5 on Windows

Follow the steps below to install JDK 1.5:

- 1. Double click jdk-1_5_0-windows-i586.exe to run the installation program. You will see the JDK License dialog displayed, as shown in Figure 1.
- 2. Check the radio button to accept the license agreement and click Next to display the JDK Custom Setup dialog, as shown in Figure 2.
- 3. You may install JDK in a custom directory. For simplicity, don't change the directory. Click Next to install JDK. After a while, the JRE Custom Setup dialog is displayed in Figure 3.
- 4. You may install JRE in a custom directory. For simplicity, don't change the directory. Click Next to display the Browser Registration dialog is displayed in Figure 4. Make sure the browser(s) are selected. This will enable your browser to run Java applets. Click Next to continue.
- 5. After installation completed, the Complete dialog is displayed in Figure 5. Click Finish to close the dialog.



You have to accept the license in order to install JDK 1.5.

🙀 J2SE Development Kit 5.0 - Custom	Setup		×		
Custom Setup Select the program features you want in:	stalled.		SULL.		
Select optional features to install from the list below. You can change your choice of features after installation by using the Add/Remove Programs utility in the Control Panel					
Development Tools		-Feature Descrip	tion		
		J2SE Developme	ent Kit 5.0, PIRE 5.0. This		
		will require 1321 drive.	MB on your hard		
Install to:					
C:\Program Files\Java\jdk1.5.0\ InstallShield			<u>C</u> hange		
	< <u>B</u> ack	<u>N</u> ext >	Cancel		

Figure 2

The JDK Custom Setup dialog enables you to choose a custom directory for JDK files.

🙀 J25E Runtime Environment 5.0 - Custom Setup	X
Custom Setup Select the program features you want installed.	Sun.
The J2SE Runtime Environment with support for European la optional features to install from the list below.	nguages will be installed. Select Feature Description The J2SE Runtime Environment with European languages. This requires 72 MB on your hard drive.
Install to: C:\Program Files\ Java\ ire1, 5,0)	
	<u>C</u> hange
	Next > Cancel

The JRE Custom Setup dialog enables you to choose a custom directory for JRE files.

🖁 J25E Runtime Environment 5.0 - Browser Registration 🛛 🛛 🗙					
Browser Registration Select the browsers you want to register with Java(TM) Plug-In.	Sun.				
Microsoft Internet Explorer					
You may change the settings later in the Java(TM) Control Panel.					
InstallShield	Cancel				

Figure 4

The Browser Registration dialog registers browsers with the JRE.

```
© Copyright Y. Daniel Liang, 2005
```



The Complete dialog indicates a successful installation.

1.3 Configuring JDK 1.5 on Windows

To figure JDK is to make it available in the operating system so that Windows can find your JDK commands such as **javac**.

1.3.1 Configuring JDK on Windows NT, 2000, XP, and ME

To configure JDK on Windows NT, 2000, ME, and XP, set the environment variables as follows:

- Right click on the My Computer icon on your desktop to display a context menu. Choose Properties from the context menu to open the System Properties window, as shown in Figure 6. (This screen shot is taken from Windows 2000. For Windows NT, XP, and ME users, the System properties window may look slightly different.)
- 2. In the System properties window, click *Environment Variables* in the Advanced tab to display the Environment Variables window, as shown in Figure 7.

System Properties			
General Network Identification Hardware User Profiles Advanced			
Performance Performance options control how applications use memory, which affects the speed of your computer.			
Performance Options			
Environment Variables			
Environment variables tell your computer where to find certain types of information.			
Environment Variables			
Startup and Recovery			
Startup and recovery options tell your computer how to start and what to do if an error causes your computer to stop.			
<u>Startup and Recovery</u>			
OK Cancel Apply			

The System Properties window contains system information.

Variable	Value
:lasspath	.;c:\jakarta-tomcat-4.1.27\common\lib\
	New <u>E</u> dit <u>D</u> elete
ystem variables	Value
vstem variables Variable ComSpec JSERV NUMBER_OF_PR OLAP_HOME OS	Value C:\WINNT\system32\cmd.exe C:\oracle\ora90/Apache/Jserv/conf 1 C:\oracle\ora90\olap Windows_NT

Figure 7

The Environment Variables window enables you to set user and system variables.

```
© Copyright Y. Daniel Liang, 2005
```

3. You can set or modify user variables or systems variables. User variables affect the individual users and system variables affect all the users in the system. In the User variables section, select PATH and click Edit if PATH is already a user variable. Otherwise, click New to display the New User Variable window as shown in Figure 8.

New User Variable	<u>?</u> ×
Variable <u>N</u> ame:	path
Variable <u>V</u> alue:	L:\Program Files\Java\jdk1.5.0\bin;%path ^c
	OK Cancel

Figure 8

The New User Variable enables you to set a new user variable and its value.

4. Type PATH in the Variable field and <u>c:\Program</u> <u>Files\Java\jdk1.5.0\bin;%path%</u> in the Variable Value field, as shown in Figure 4. Click OK.

NOTE: You don't have to reboot the computer, but you have to open a new command window to use JDK commands.

NOTE: If you download a new version or an update version, the directory name **jdk1.5.0** may be slightly different. For example, the directory name is **jdk1.5.0_04** for JDK 1.5 Update 4.

1.3.2 Configuring JDK on Windows 95 and 98

To configure JDK on Windows 95 and 98, update the autoexec.bat file as follows:

- Open a Windows command prompt window and type notepad autoexec.bat from the C:\ prompt to display the Notepad window.
- Type the following line in the Notepad window, as shown in Figure 9.

set path=c:\Program Files\Java\jdk1.5.0\bin;%path%

<u>a</u> 1	UTOE	XEC - No	tepad	<u> </u>	
Eile	<u>E</u> dit	F <u>o</u> rmat	Help		
set	pat	:h=c:∖F	program	Files\Java\jdk1.5.0\bin;%path%	*

The **javac** command is not found if JDK is not properly configured.

- 3. Choose *File*, *Save* in the Notepad window to save the file and close the Notepad window.
- 4. autoexec.bat file is executed every time you start your computer. Reboot your system to have the new configurations to take effect.

1.3.3 The classpath Environment Variable

You don't need to set classpath unless you need to add new packages. Packages are introduced in Chapter 4 in Introduction to Java Programming, 5E.

A package corresponds to a directory in Java. To add a package to classpath is to add its corresponding directory to the path. The command to add a directory is

set classpath=.;%classpath%;new-directory

The . symbol indicates the current directory. The current directory is not a specific directory. It is the directory in which you are current located. %classpath% represents the existing classpath. The current directory, the existing classpath, and the new-directory are all set in the new classpath. You don't set a classpath explicitly; the current directory is in the classpath.

1.4 Verifying Configurations

To verify whether JDK 1.5 is configured correctly, type **java** -version from the command prompt, as shown in Figure 10.

Command Prompt	
C:\>java -version java version "1.5.0" Java(IM) 2 Runtime Environment, Standard Edition (build 1.5.0-b64) Java HotSpot(IM) Client VM (build 1.5.0-b64, mixed mode, sharing)	•
C:\>	-
1	▶⊘

Figure 10

The **javac** command is not found if JDK is not properly configured.