Supplement I.B: Installing and Configuring JDK 1.6

For Introduction to Java Programming Y. Daniel Liang

This supplement covers the following topics:

- Downloading JDK 1.6 (§1.2)
- Installing JDK 1.6 (§1.3)
- Configuring JDK (§1.3)
- Verifying Configurations (§1.4)

1.1 Downloading JDK 1.6

You can download the latest JDK 1.6 from http://java.sun.com/javase/downloads/index.jsp. Consult with your instructor to download an appropriate version and update.

1.2 Installing JDK 1.6 on Windows

Assume that you have downloaded the file named jdk-6windows-i586.exe. (Since Java is frequently updated, the file you have downloaded may be named slightly differently. For example, you may get a different name such as jdk-6u7windows-i586.exe.) Follow the steps below to install JDK 1.6:

- 1. Double click jdk-6-windows-i586.exe to run the installation program. You will see the JDK License dialog displayed, as shown in Figure 1.
- 2. Click Accept 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.
- You may install JRE in a custom directory. For simplicity, don't change the directory. Click Next to install JRE.
- 5. After installation completed, the Complete dialog is displayed in Figure 4. Click *Finish* to close the dialog.



Figure 1

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

🎼 Java(TM) SE Development Kit 6 - Cu	istom Setup		×			
Custom Setup Select the program features you want insta	alled.		Sun.			
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						
	Feature Description					
Development Tools Demos and Samples Source Code Public JRE		Java(TM) SE Dev including private require 168MB of	velopment Kit 6, JRE 6. This will n your hard drive.			
Install to:						
C:\Program Files\Java\jdk1.6.0\			<u>C</u> hange			
InstallShield						
	< <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.

🞼 Java(TM) SE Runtime Environment 6 - Custom Set	up 🔀
Custom Setup Select the program features you want installed.	Sun.
The Java(TM) SE Runtime Environment with support for Europe optional features to install from the list below.	ean languages will be installed. Select Feature Description The Java(TM) SE Runtime Environment with European languages. This requires 84MB on your hard drive.
Install to:	
C:\Program Files\Java\jre1.6.0\ InstallShield	<u>C</u> hange
	Next > Cancel

Figure 3

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

🞼 Java(TM) SE Development Kit 6 - Complete			
Java	Wizard Completed		
	The Install Wizard has successfully installed Java(TM) SE Development Kit 6. Click Finish to exit the wizard.		
	Show the readme file		
	@ <u>Sun</u>		
	<u>Einish</u>		

Figure 4

The Complete dialog indicates a successful installation.

1.3 Configuring JDK 1.6 on Windows

To configure 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 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 5. (This screen shot is taken from Windows XP. For Windows 2000, NT, 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 6.

System Restore Automatic Updates Rem General Computer Name Hardware Adva You must be logged on as an Administrator to make most of these changes Performance Performance Visual effects, processor scheduling, memory usage, and virtual memory Visual effects, processor scheduling, memory usage, and virtual memory Settings User Profiles	?				5	em Propertie
General Computer Name Hardware Adva You must be logged on as an Administrator to make most of these changes Performance Performance Visual effects, processor scheduling, memory usage, and virtual memory Settings User Profiles Desktop settings related to your logon Startup and Recovery System startup, system failure, and debugging information Settings Environment Variables Error Reporting	ote	Remote	tic Updates	Automa	store	System Res
You must be logged on as an Administrator to make most of these changes Performance Visual effects, processor scheduling, memory usage, and virtual memory Settings User Profiles Desktop settings related to your logon Settings Startup and Recovery System startup, system failure, and debugging information Settings Environment Variables Error Reporting	inced	Advanced	Hardware	uter Name	Compi	General
Visual effects, processor scheduling, memory usage, and virtual memory Settings User Profiles Desktop settings related to your logon Startup and Recovery System startup, system failure, and debugging information Settings Environment Variables Error Reporting	¢.	se changes.	to make most of the	an Administrato	gged on as a	You must be loo Performance—
Settings User Profiles Desktop settings related to your logon Settings Startup and Recovery System startup, system failure, and debugging information Settings Environment Variables Error Reporting	Visual effects, processor scheduling, memory usage, and virtual memory					
User Profiles Desktop settings related to your logon Settings Startup and Recovery System startup, system failure, and debugging information Settings Environment Variables Error Reporting		<u>S</u> ettings				
Desktop settings related to your logon Sgttings -Startup and Recovery System startup, system failure, and debugging information Settings						Lloor Drofiloo
Startup and Recovery System startup, system failure, and debugging information Settings Environment Variables Error Reporting	User Profiles					
Settings Startup and Recovery System startup, system failure, and debugging information Settings Environment Variables Error Reporting				your logon	igs related to	Desktop settin
Startup and Recovery System startup, system failure, and debugging information Settings Environment Variables Error Reporting		S <u>e</u> ttings				
System startup, system failure, and debugging information Settings Environment Variables					covery	Startup and Re
Sețtings Enviro <u>n</u> ment Variables E <u>r</u> ror Reporting			ging information	lure, and debug	o, system fai	System startur
Sețtings Environment Variables Error Reporting						
Environment Variables Error Reporting		Settings				
Environment Variables Error Reporting						
		r Reporting	ables E <u>r</u> ro	viro <u>n</u> ment Varia	En	
OK Cancel	VlaaA	Annly	Cancel	ОК		



The System Properties window contains system information.

User variables for Liar Variable CVSROOT INCLUDE LIB PATH	Value c:\temp\cvs C:\Program Files\Microsoft Visual Studi C:\Program Files\Microsoft Visual Studi C:\Documents and Settings\Liang\My D C:\Documents and Settings\Liang\Local	•
Variable CVSROOT INCLUDE LIB PATH	Value c:\temp\cvs C:\Program Files\Microsoft Visual Studi C:\Program Files\Microsoft Visual Studi C:\Documents and Settings\Liang\My D C:\Documents and Settings\Liang\Local	
CVSROOT INCLUDE LIB PATH	C:\temp\cvs C:\Program Files\Microsoft Visual Studi C:\Program Files\Microsoft Visual Studi C:\Documents and Settings\Liang\My D C:\Documents and Settings\Liang\Local	
INCLUDE LIB PATH	C:\Program Files\Microsoft Visual Studi C:\Program Files\Microsoft Visual Studi C:\Documents and Settings\Liang\My D C:\Documents and Settings\Liang\Local	
LIB	C:\Program Files\Microsoft Visual Studi C:\Documents and Settings\Liang\My D C:\Documents and Settings\Liang\Local	
PATH	C:\Documents and Settings\Liang\My D C:\Documents and Settings\Liang\Local	
TEMP	C:\Documents and Settings\Liang\Local	
TEMP		-
THE		
	New Edit Delete	
_		
System variables	Value	▲
COLLECTIONID	COL8143 -	
ComSpec	C:\WINDOWS\system32\cmd.exe	
CVSROOT	c:\temp\cvs	
HMSERVER	NO	
THELLIDE	C.) Des and City Minute A Minute Court	•
	Ne <u>w</u> Ed <u>i</u> t De <u>l</u> ete	
		. 1
	OK Cance	3I

Figure 6

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

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 7.

New User Variable	e <u>? ×</u>
Variable <u>n</u> ame:	path
Variable <u>v</u> alue:	k:\Program Files\java\jdk1.6.0\bin;%path%
	OK Cancel

Figure 7

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\jdk1.6.0\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 **jdk1.6.0** may be slightly different. For example, the directory name is **jdk1.6.0_02** for JDK 1.6 Update 2.

1.3.2 Configuring JDK on Windows Vista

Follow the steps below to configure JDK on Windows Vista:

1. Left-click on the Start button and choose Control Panel > System and Maintenance > System > Advanced system settings. At User Account Control, type an administrator password and then click OK to display the System Properties window.

2. Same as Steps 2-4 in Section 1.3.1.

1.3.3 Configuring JDK on Windows 7

Follow the steps below to configure JDK on Windows 7:

1. Left-click on the Start button and choose Control Panel > System and Secutrity > System > Advanced system settings to display the System Properties dialog box.

2. Same as Steps 2-4 in Section 1.3.1.

1.4 Verifying Configurations

To verify whether JDK 1.6 is configured correctly, type **javac -version** from the command prompt, as shown in Figure 8.

Command Prompt	
C:\>javac -version javac 1.6.0	
C:\>	▼ ▶

Figure 8

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

[©] Copyright Y. Daniel Liang, 2005