

Installing a Java JDK (Java Development Kit)

Java was originally a product of Sun Microsystems. Sun was bought out by Oracle. To download a JDK go to the Oracle site www.oracle.com and click on the Downloads item in the top menu. Find your way through the menus to the Java SE (Standard Edition) page (since the menus may change this article does not give exact directions to get to Java SE Downloads). Note that you do not want the JRE since it does not have all of the Java Tools such as the compiler (javac).

Step 1:

Download the Java SE JDK. At the time this article was written, Java SE Development Kit 8u20 is the most up to date JDK. Note that you want to download the version for your computer. If you are working on a Windows computer then you may have a 32 bit or a 64 bit computer. A 32 bit computer cannot use the 64 bit JDK. A 64 bit computer can use either. Note that you may have criteria imposed upon the Java JDK type (32 or 64 bit) by your organization or by commercial packages that are in use in your organization. Keep track of the download location on your computer.

The download page presently looks like the following.

The screenshot shows the Oracle Java SE Development Kit 8 Downloads page. The main content area features a table of download links for various operating systems. Below the table, there is a section for 'Java SE Development Kit 8u20 Demos and Samples Downloads'. The right sidebar contains a 'Java SDKs and Tools' section, a 'Java Resources' section, and a 'Java magazine' subscription offer.

Product / File Description	File Size	Download
Linux x86	135.24 MB	jdk-8u20-linux-i586.rpm
Linux x86	154.87 MB	jdk-8u20-linux-i586.tar.gz
Linux x64	135.6 MB	jdk-8u20-linux-x64.rpm
Linux x64	153.42 MB	jdk-8u20-linux-x64.tar.gz
Mac OS X x64	209.11 MB	jdk-8u20-macosx-x64.dmg
Solaris SPARC 64-bit (SVR4 package)	137.02 MB	jdk-8u20-solaris-sparcv9.tar.Z
Solaris SPARC 64-bit	97.09 MB	jdk-8u20-solaris-sparcv9.tar.gz
Solaris x64 (SVR4 package)	137.16 MB	jdk-8u20-solaris-x64.tar.gz
Solaris x64	94.22 MB	jdk-8u20-solaris-x64.tar.Z
Windows x86	161.08 MB	jdk-8u20-windows-i586.exe
Windows x64	173.08 MB	jdk-8u20-windows-x64.exe

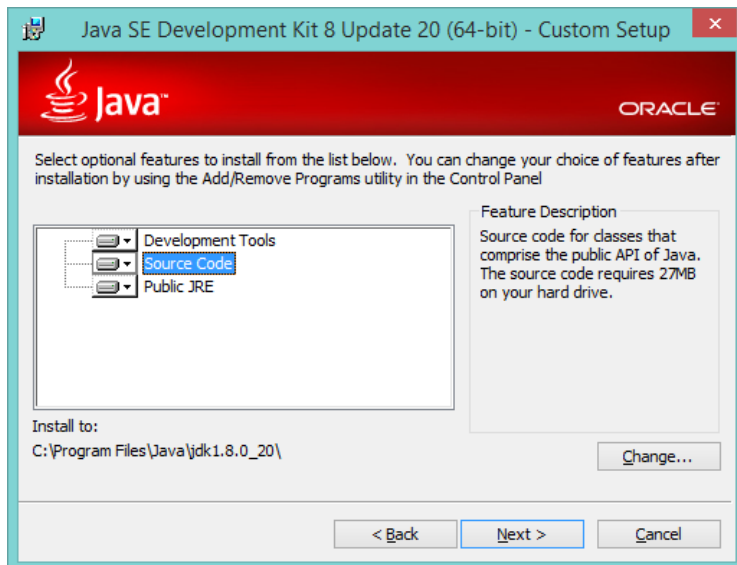
Step 2:

Once you have downloaded Java, double click on the exe file to open it and start the installation of the Java JDK. Note that the downloaded file should have an executable (i.e. exe) extension.

You may first get a dialog that asks whether you want to allow changes to your computer if you are installing on a Windows computer. You will eventually get a dialog similar to the following:



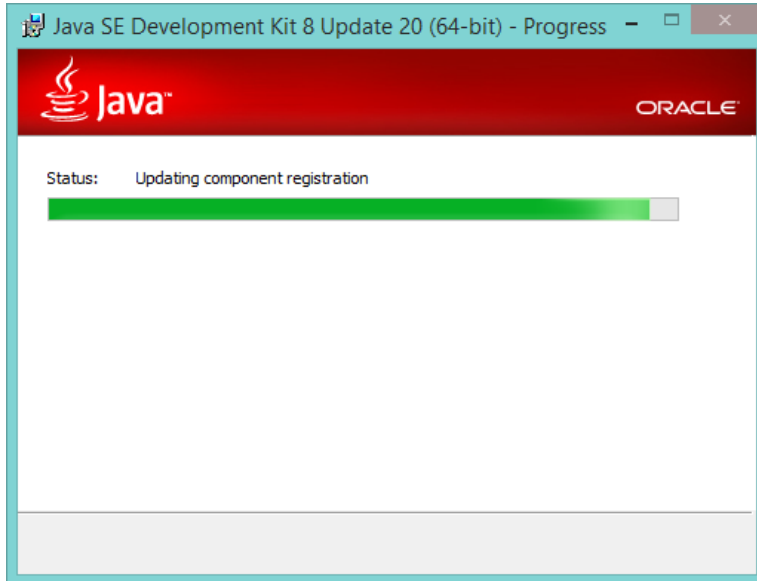
Click on Next and start the installation of the Java JDK. You will next get the following dialog:



Generally it is good to leave the "Install To" location with the default (you can find Java easier in the file system) and to leave the "Features" with the defaults (since they take very little disk space) and install all of them.

Note that the installation directory for a 64 bit Java is “C:\Program Files\Java\...”. For a 32 bit Java it would be “Program Files (x86)\Java\...”. The x86 refers to a hardware architecture from many years ago that was based on a 32 bit set of instructions, registers, and memory.

The Java JDK will now install as shown in the following snapshot of part of the process:



You may get a dialog to confirm the install folder:



The install occurs:



The install success is confirmed:



If you click on Next Steps it will take you to the Oracle Java Documentation site which you can bookmark so you can find it again. A snapshot of the site is shown on the next page.

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Java Platform Standard Edi... x +

docs.oracle.com/javase/8/docs/ Startuppage HTTP

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Java Platform Standard Edition 8 Documentation

Oracle has two products that implement Java Platform Standard Edition (Java SE) 8: Java SE Development Kit (JDK) 8 and Java SE Runtime Environment (JRE) 8.

JDK 8 is a superset of JRE 8, and contains everything that is in JRE 8, plus tools such as the compilers and debuggers necessary for developing applets and applications. JRE 8 provides the libraries, the Java Virtual Machine (JVM), and other components to run applets and applications written in the Java programming language. Note that the JRE includes components not required by the Java SE specification, including both standard and non-standard Java components.

The following conceptual diagram illustrates the components of Oracle's Java SE products:

Description of Java Conceptual Diagram

	Java Language						
	java	javac	javadoc	jar	javap	jdeps	Scripting
	Security	Monitoring	JConsole	VisualVM	JMC	JFR	
	JPDA	JVM TI	IDL	RMI	Java DB	Deployment	
	Internationalization			Web Services		Troubleshooting	
Deployment	Java Web Start			Applet / Java Plug-in			
	JavaFX						
User Interface Toolkits	Swing		Java 2D	AWT	Accessibility		
	Drag and Drop	Input Methods	Image I/O	Print Service	Sound		
Integration Libraries	IDL	JDBC	JNDI	RMI	RMI-IIOP	Scripting	
	Beans	Security	Serialization	Extension Mechanism			
Other Base Libraries	JMX	XML JAXP	Networking	Override Mechanism			
	JNI	Date and Time	Input/Output	Internationalization			
	lang and util						
lang and util Base Libraries	Math	Collections	Ref Objects	Regular Expressions			
	Logging	Management	Instrumentation	Concurrency Utilities			
	Reflection	Versioning	Preferences API	JAR	Zip		
	Java Virtual Machine						
	Java HotSpot Client and Server VM						

JDK

JRE

Java SE API

Compact Profiles

You can now close the final dialog. The Java JDK is now installed. You will find it in your file system. If on a Windows computer it will be in C:\Program Files\Java or in C:\Program Files (x86)\Java depending on whether you installed the 64 bit or 32 bit version of the JDK.