

How to install Java

(last updated Aug 15 2016)

You will need to install, at most, two pieces of software: The Java Development Kit (JDK) and the jGRASP editor. The directions differ based on your operating system.

- [Windows](#)
 - [Determine which version of Windows is installed](#)
 - [Mac OS X](#)
-

Windows users:

1) Install Java Development Kit (JDK)

Go to the following Oracle Java download page.

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

Press the download button labeled "**Java Platform (JDK)**".



Java Platform (JDK) 8u101 / 8u102

- You will be taken to a new page with the heading, "Java SE Development Kit 8 Downloads." Scroll down to the section labeled "Java SE Development Kit 8." You will see a list of files to download for various operating systems. Click **Accept License Agreement**, and then click the appropriate link for your operating system to download the file. *If you aren't sure, [click here for "Determine which version of Windows is installed"](#).*



If you use 32-bit windows, you should choose **jdk-8u101-windows-i586.exe**.

Java SE Development Kit 8u101

You must accept the [Oracle Binary Code License Agreement for Java SE](#) to download this software.

Thank you for accepting the Oracle Binary Code License Agreement for Java SE; you may now download this software.

Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	77.77 MB	jdk-8u101-linux-arm32-vfp-hflt.tar.gz
Linux ARM 64 Hard Float ABI	74.72 MB	jdk-8u101-linux-arm64-vfp-hflt.tar.gz
Linux x86	160.28 MB	jdk-8u101-linux-i586.rpm
Linux x86	174.96 MB	jdk-8u101-linux-i586.tar.gz
Linux x64	158.27 MB	jdk-8u101-linux-x64.rpm
Linux x64	172.95 MB	jdk-8u101-linux-x64.tar.gz
Mac OS X	227.36 MB	jdk-8u101-macosx-x64.dmg
Solaris SPARC 64-bit	139.66 MB	jdk-8u101-solaris-sparcv9.tar.Z
Solaris SPARC 64-bit	98.96 MB	jdk-8u101-solaris-sparcv9.tar.gz
Solaris x64	140.33 MB	jdk-8u101-solaris-x64.tar.Z
Solaris x64	96.78 MB	jdk-8u101-solaris-x64.tar.gz
Windows x86	188.32 MB	jdk-8u101-windows-i586.exe
Windows x64	193.68 MB	jdk-8u101-windows-x64.exe

If you use 64-bit windows, you should choose **jdk-8u101-windows-x64.exe**.

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Linux x64	158.27 MB	jdk-8u101-linux-x64.rpm
Linux x64	172.95 MB	jdk-8u101-linux-x64.tar.gz
Mac OS X	227.36 MB	jdk-8u101-macosx-x64.dmg
Solaris SPARC 64-bit	139.66 MB	jdk-8u101-solaris-sparcv9.tar.Z
Solaris SPARC 64-bit	98.96 MB	jdk-8u101-solaris-sparcv9.tar.gz
Solaris x64	140.33 MB	jdk-8u101-solaris-x64.tar.Z
Solaris x64	96.78 MB	jdk-8u101-solaris-x64.tar.gz
Windows x86	188.32 MB	jdk-8u101-windows-i586.exe
Windows x64	193.68 MB	jdk-8u101-windows-x64.exe

Once you have finished downloading one of the files to your Desktop, you must **install JDK** on your system. Do this by double-clicking the JDK installer file you saved on the Desktop.

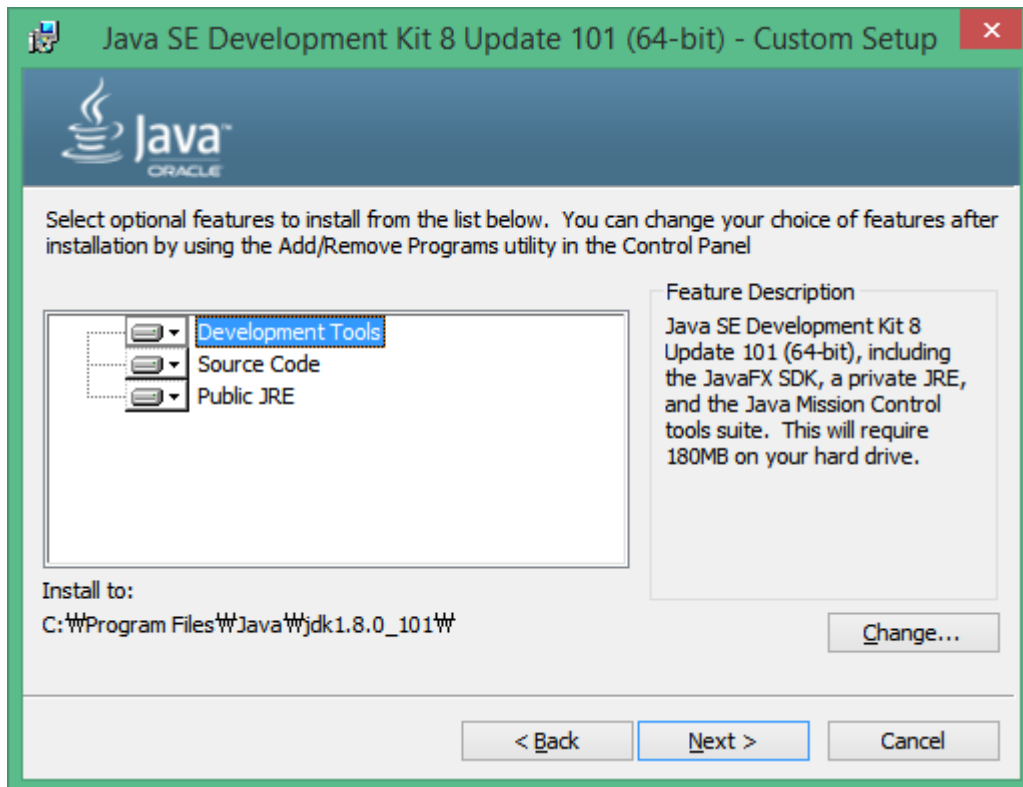


jdk-8u101-windows-x64.exe
Java Platform SE binary
Oracle Corporation

OR



jdk-8u101-windows-i586.exe
Java Platform SE binary
Oracle Corporation



You can just repeatedly click **Next** to choose all the default options during installation.

2) Download jGRASP editor

Go to the following web page to download the jGRASP editor software to work on Java programs for this course:

- <http://jgrasp.org/>

From the jGRASP web site link above, click the button at top-right labeled **Download jGRASP**.



You will be taken to a download page with some survey information. You can just scroll down and **skip the survey**. Underneath the survey is a set of buttons. We recommend that you choose the latest stable release (2.0.2_02) rather than the beta. Click the **jGRASP exe** button to download an EXE file. Save the file to your Desktop or another convenient location.

jGRASP 2.0.2_02 (July 1, 2016) - requires Java 1.6 or higher

jGRASP exe

Windows: self-extracting executable (5,775,416 bytes).

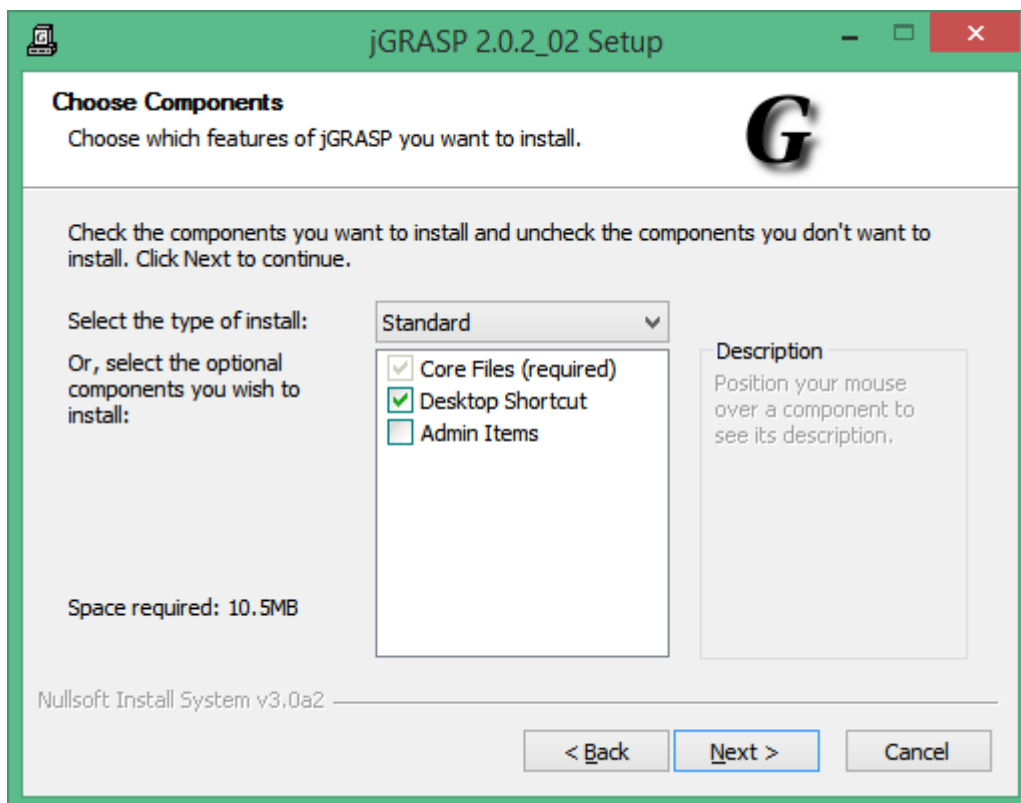
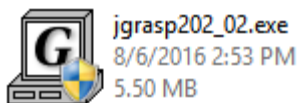
jGRASP pkg

Mac OS X: pkg install file (requires admin access to install) (6,622,428 bytes).

jGRASP zip

Linux, UNIX, and other systems: zip file (6,930,682 bytes).

Once you have finished downloading this file to your Desktop, you must install jGRASP on your system. Do this by double-clicking the jGRASP installer file you saved on the Desktop. Once you are done installing jGRASP, you should now have icons on your Desktop and in your Start Menu for running jGRASP.



You can just click Next button to choose all the default options during installation.

Determine which version of Windows is installed

Use the following methods to determine which version of Windows is installed, as appropriate for the operating system that you are running.

Windows 8

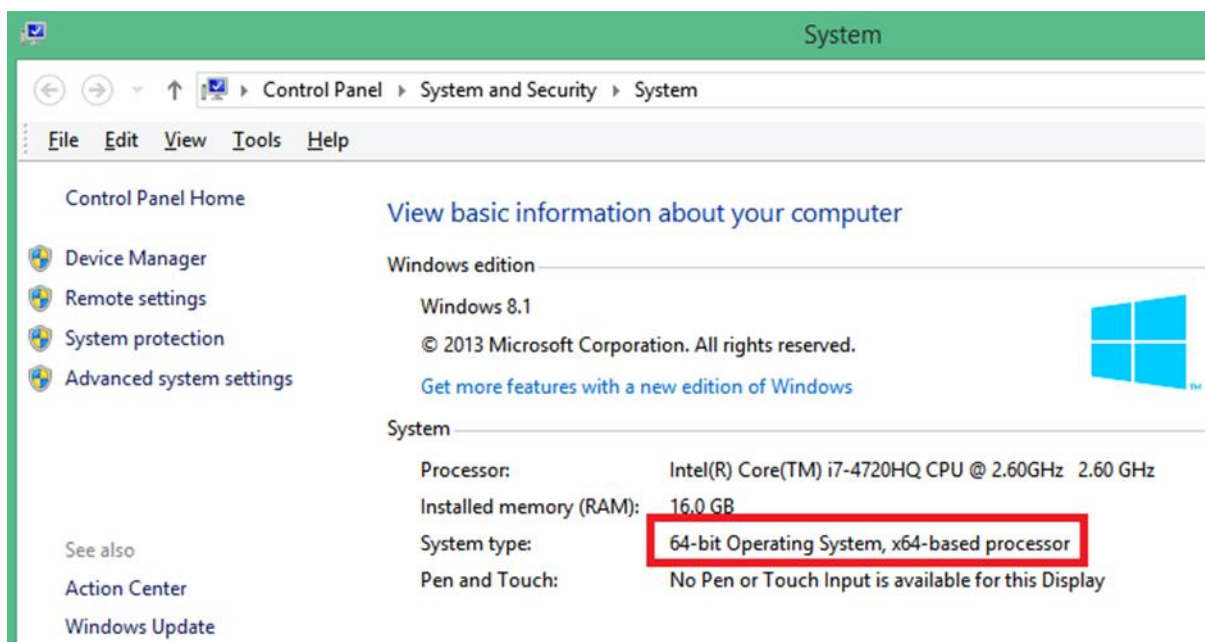
There are two methods that you can use to determine whether you are running a 32-bit or 64-bit version of Windows 8. If one method does not work, try the other method.

Method 1: View the System window in Control Panel

1. Swipe in from the right edge of the screen, and then tap **Search**. Or, if you are using a mouse, point to the lower-right corner of the screen, and then click **Search**.
2. Type **system** in the search box, and then tap or click **Settings**.
3. Tap or click **System**.
4. If you are running a 64-bit version of Windows 8, **64-bit Operating System** is displayed in the **System type** field under the **System** heading. If you are running a 32-bit version of Windows 8, **32-bit Operating System** is displayed in the **System type** field under the **System** heading.

Method 2: View the System Information window


1. Swipe in from the right edge of the screen, and then tap **Search**. Or, if you are using a mouse, point to the lower-right corner of the screen, and then click **Search**.
2. In the search box, type **system information**.
3. Tap or click **System**, tap or click **System Information**, and then click **System Summary**.
4. If you are running a 64-bit version of Windows 8, **x64-based PC** is displayed in the **System type** field under the **Item** heading.
If you are running a 32-bit version of Windows 8, **x86-based PC** is displayed in the **System type** field under the **Item** heading.




Windows Vista or Windows 7

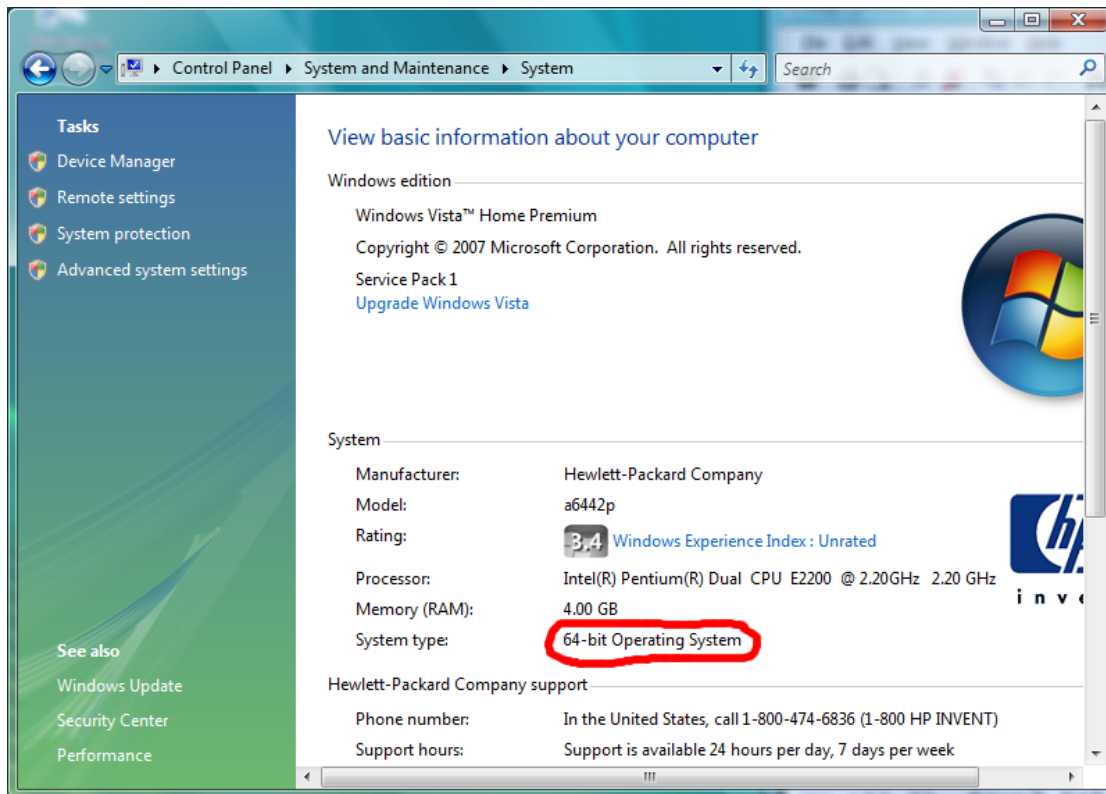
If you have Windows Vista or Windows 7, there are two methods to determine whether you are running a 32-bit version or a 64-bit version. If one method does not work, try the other method.

Method 1: View the System window in Control Panel

1. Click **Start** , type system in the **Start Search** box, and then click **system** in the **Programs** list.
2. The operating system is displayed as follows:
3. For a 64-bit version operating system, **64-bit Operating System** appears for the **System type** under **System**.
4. For a 32-bit version operating system, **32-bit Operating System** appears for the **System type** under **System**.

Method 2: View the System Information window

1. Click **Start** , type system in the **Start Search** box, and then click **System Information** in the **Programs** list.
2. When **System Summary** is selected in the navigation pane, the operating system is displayed as follows:
3. For a 64-bit version operating system, **x64-based PC** appears for the **System type** under **Item**.
4. For a 32-bit version operating system, **x86-based PC** appears for the **System type** under **Item**.



Mac OS X:

1) Install Java Development Kit (JDK)

Macs with the OS X operating system will have the Java compiler available automatically or will download and install it automatically, so you should be able to skip this step. But many Macs have an out-of-date version of JDK, so you may need to install the latest Mac version of JDK. Some newer Macs (purchased within the last 3 years or so) may already have this software, but older ones do not. If you have a fairly new Mac, try to skip to Step 2 and see if jGRASP works, and if not, come back to this step. You might also want to run your Mac's built-in Software Update feature to see if it updates your Java for you.

You can test whether your Mac has Java installed (and if so, what version) using the Terminal application. To run the terminal, use your Spotlight icon at the upper-right of your screen to search for Terminal. It will find and suggest the Terminal application. Click it to run the terminal. A white window will appear with black text and a blinking cursor for you to type commands. Type the following command and press Enter, to see your version of Java:

```
java -version
```

If your Mac doesn't have Java installed already (or has an obsolete version installed), you can go to the web page below to download it. Once you've downloaded the file, double-click it on your desktop to install it.

- Find jdk-8u101-macosx-x64.dmg on [this page](#). Be sure to "Accept License Agreement."

2) Download jGRASP editor

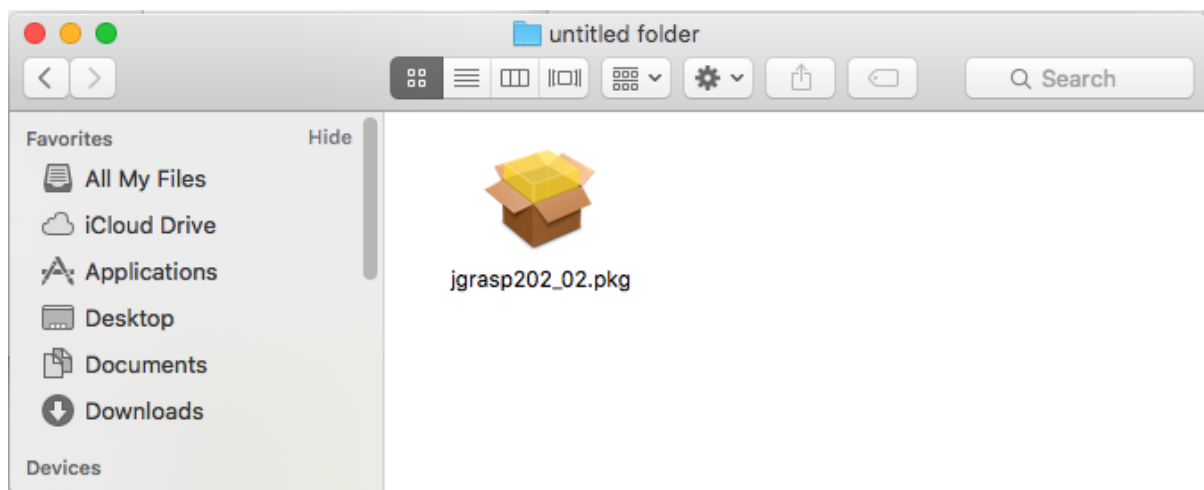
<http://jgrasp.org/>

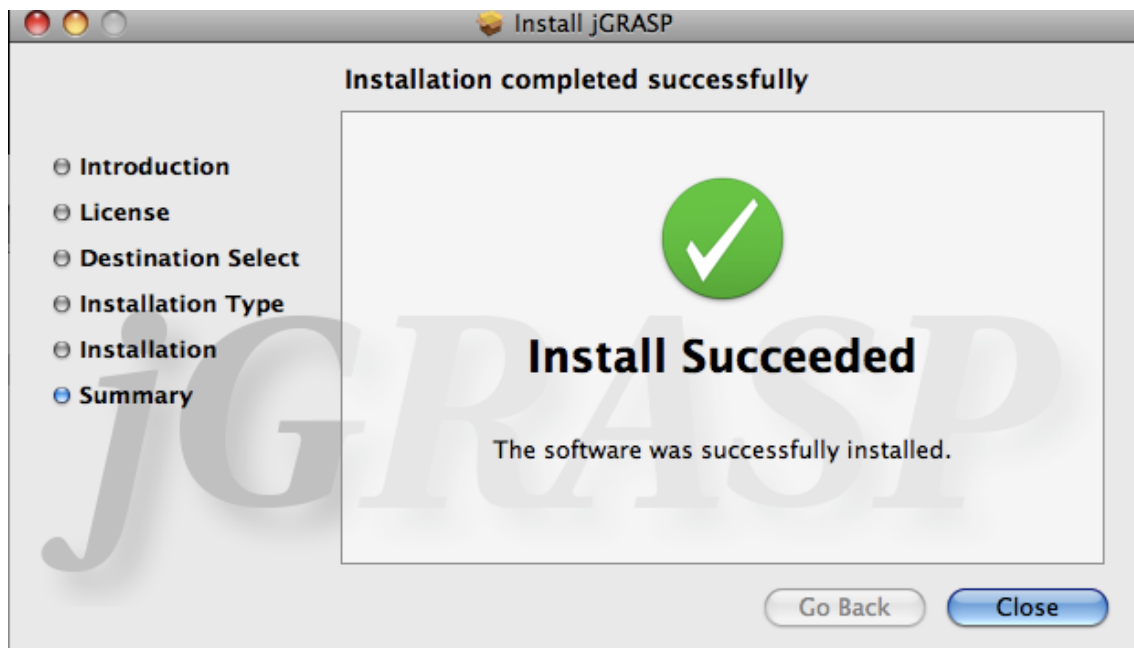
There is a Mac version of jGRASP, available from the same jGRASP web site by clicking the button labeled **jGRASP pkg**

jGRASP 2.0.2_02 (July 1, 2016) - requires Java 1.6 or higher

jGRASP exe	Windows: self-extracting executable (5,775,416 bytes).
jGRASP pkg	Mac OS X: pkg install file (requires admin access to install) (6,622,428 bytes).
jGRASP zip	Linux, UNIX, and other systems: zip file (6,930,682 bytes).

Once you have downloaded the jGRASP application PKG file, double-click it to install jGRASP. At each screen, you can choose the default options and click "Continue" or "Install" to move forward. If you've done it correctly, you will see an "Install Succeeded" message and a green checkbox.





Once jGRASP is installed, you can run it from your Applications folder, Dock, or by typing "jgrasp" into your Spotlight search at the top-right of your screen.