

How to Install Eclipse on Windows

To use Eclipse for Java programming, you need to first install JDK. **Follow these steps carefully** to install Eclipse in your system.

Step 0: Uninstall version of JDK older than 8

Although you can install multiple versions of JDK/JRE concurrently, it is messy.

If you have previously installed older version(s) (older than 8) of JDK/JRE, uninstall ALL of them, **otherwise proceed to step 1**. Type "Add or remove programs" in the Windows search box, this will open a Apps& features window. If your search bar isn't displaying correctly or is hidden, press and hold (or right-click) the taskbar and select **Cortana**. Select **Show search box**. If you don't have Cortana on your device, press and hold (or right-click) the taskbar and select **Search**. Select **Show search box**.

In the "Add or remove programs" window search for "Java" and uninstall all programs that show up in the search results such as "Java SE Development Kit ...", "Java SE Runtime ...", "Java X Update ...", and etc.

Step 1: Install JDK 8

1. Go to Java SE download site @ <http://www.oracle.com/technetwork/java/javase/downloads/index.html>. Under "Java Platform, Standard Edition" ⇒ "Java SE 8u{x} / Java SE 8u{x}", where {x} denotes a fast running update number ⇒ Click the JDK's "Download" button.
2. Check "Accept License Agreement".
3. Under "Java SE Development Kit 8u{u}" ⇒ Check "Accept License Agreement".
4. Choose the JDK for your operating system, i.e., "Windows x64". Download the "exe" installer (e.g., "jdk-8u{x}-windows-i586.exe" – 197.66MB).
5. Double click the downloaded installer (e.g., "jdk-8u{x}-windows-i586.exe "). Accept the defaults as you follow the screen instructions to install JDK/JRE.

By default, JDK is installed in directory "C:\Program Files\Java\jdk1.8.0_{x}", where {x} denotes the update number. Use your "File Explorer", navigate to "C:\Program Files\Java" to inspect the folder. Take note of your JDK installed directory, in particular, the varying upgrade number {x}, which you will need in the next step. We shall refer to the JDK installed directory as <JAVA_HOME>, hereafter, in this document.

Go to step 3 to verify the installation and if successful continue to step 4. If you do not see the expected output during step 3, perform step 2 and continue on with the remaining steps in order.

Step 2: Include JDK's "bin" Directory in the PATH (**ONLY IF STEP 3 FAILS**)

Windows' Shell searches the current directory and the directories listed in the PATH environment variable (system variable) for executable programs. JDK's programs (such as Java compiler javac.exe and Java runtime java.exe) reside in the *sub-directory* "bin" of the JDK installed directory. You need to include "bin" in the PATH to run the JDK programs.

To edit the PATH environment variable in Windows 7/8/10:

1. Launch "Control Panel" ⇒ (Optional) System and Security ⇒ System ⇒ Click "Advanced system settings" on the left pane.
2. Switch to "Advanced" tab ⇒ Push "Environment Variables" button.
3. Under "System variables" (the bottom pane), scroll down to select "Path" ⇒ Click "Edit...".
4. For Newer Windows 10:
 - a. You shall see a **TABLE** listing all the existing PATH entries (if not, goto next step). Click "New" ⇒ Enter the JDK's "bin" directory " C:\Program Files\Java\jdk1.8.0_{x}\bin" (**Replace {x} with your installation number!!!**) ⇒ Select "Move Up" to move this entry all the way to the TOP. **Please note we are using jdk1.8.0_{x} assuming that it is the format of the JDK installation directory name. Please use the correct name according to your system.**
5. Skip the next step.
6. **For Older Windows 10:**
(**CAUTION: Read this paragraph 3 times before doing this step! Don't push "Apply" or "OK" until you are 101% sure. There is no UNDO!!!**)
(To be SAFE, copy the content of the "Variable value" to Notepad before changing it!!!)
In "Variable value" field, APPEND "C:\Program Files\Java\jdk1.8.0_{x}\bin" (**Replace {x} with your installation number!!!**) IN FRONT of all the existing directories, followed by a semi-colon (;) to separate the JDK's bin directory from the rest of the existing directories. DO NOT DELETE any existing entries; otherwise, some existing applications may not run.
Variable name : **PATH**
Variable value : **C:\Program Files\Java\jdk1.8.0_{x}\bin;**[do not delete exiting entries...]

Step 3: Verify the JDK Installation

Launch a CMD shell via one of the following means:

1. Click the "Search box" ⇒ Enter "cmd" ⇒ Choose "Command Prompt", or
2. Right-click "Start" button ⇒ Run ⇒ enter "cmd", or
3. (Windows 10) click "Start" button ⇒ Scroll down to "Windows System" ⇒ Click "Command Prompt", or
4. (Prior to Windows 10) click "Start" button ⇒ All Programs ⇒ Accessories (or Windows System) ⇒ Command Prompt.

Issue the following commands to verify your JDK installation:

1. Issue "path" command to list the contents of the PATH environment variable. Check to make sure that your <JAVA_HOME>\bin is listed in the PATH.
DO NOT type prompt>, which denotes the command prompt!!! Only key in the highlighted command.
prompt> **path**
PATH=C:\Program Files\Java\jdk1.8.0_{x}\bin;[other entries...]
2. Issue the following commands to verify that JDK/JRE are properly installed and display their version:
prompt> **javac -version**

```
javac 11.0.{x}  
  
prompt> java -version  
java version "1.8.0_{x}"  
...
```

Step 4: Install Eclipse

To install Eclipse:

1. Go to <https://www.eclipse.org/oxygen/>. Click "Download" and "Download" again in the following webpage. You will receive a EXE file (e.g., " eclipse-inst-win64.exe").
2. Double-click the downloaded EXE file. This should launch the installer. Select **Eclipse IDE for Java Developers** and accept the defaults as you follow the screen instructions to install Eclipse. Eclipse will be installed under "C:\Users\{ComputerName}\eclipse\java-oxygen2 ". (To confirm!)