

How to Set Classpath for Java on Windows and Linux? Steps and Example

What is CLASSPATH in Java? Classpath in

Java is the path to the directory or list of the directory which is used by `ClassLoaders` to find and load classes in the Java program.

Classpath can be specified

using `CLASSPATH` environment variable which is case insensitive, `-cp` or `-`

`classpath` command-line option or `Class-`

`Path` attribute in `manifest.mf` file inside the

JAR file in Java. In this Java tutorial, we will

learn What is Classpath in Java, how Java

resolves classpath and how Classpath works in

Java alongside How to set the classpath for Java in Windows and UNIX environment.

I have experience in the finance and insurance domain and Java is heavily used in this domain for writing sophisticated Equity, Fixed income trading applications. Most of these investment banks have written tests as part of their [core Java interview questions](#) and I always find at least one question related to `CLASSPATH` in Java on those interviews.

Java `CLASSPATH` is one of the most important concepts in Java, but, I must say mostly overlooked. This should be the first thing you should learn while writing Java programs because without the correct understanding of **Classpath in Java** you can't understand how Java locates your class files.

Also don't confuse Classpath with [PATH in Java](#), which is another environment variable used to find java binaries located in the JDK installation directory, also known as `JAVA_HOME`.

Unfortunately, Java Programming books like Head First Java don't teach you much about the subtleties of `PATH` and `CLASSPATH`. If you really want to test your Java skill, the one book I would suggest reading is Java Puzzlers, whose puzzles and explanations will help more to understand this kind of not so easy concept.

Difference between PATH and Classpath in Java

The main [difference between PATH and CLASSPATH](#) is that the former is used to locate Java commands while the latter is used to locate Java class files. So let's start with basics and then we will see some examples and improvisation of Classpath in Java.

In fact, CLASSPATH is an environment variable that is used by Java Virtual Machine to locate user-defined classes.

As I said In this tutorial we will see How to set up the classpath for java in windows and Linux, **java -classpath example** in different scenarios, and the use of `java -classpath` or `java -cp`.

By the way, If you have just started learning Java, then I also suggest you follow a structured online course to learn Java like these [Java Programming courses for beginners](#). That will help you to grasp most of the fundamental concepts in Java in a systematic manner.

Error-Prone Class Path Concept

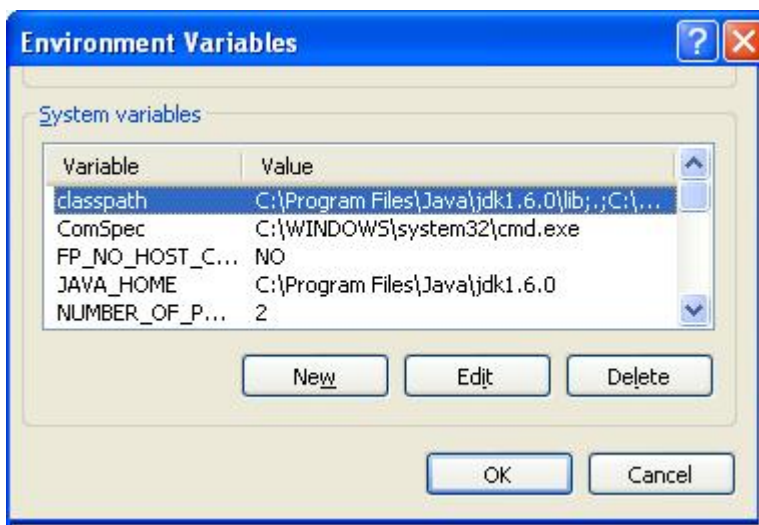
- Class path pays NO ATTENTION to code versions – finds the first version on the class path
- No way to explicitly specify dependencies
- Class path approach lacks any form of consistency checking.

How to Set ClassPath for Java in Windows? Example

In order to set Classpath for Java in Windows (any version either Windows XP, Windows 2000, or Windows 10) you need to specify the value of the environment variable **CLASSPATH**, the name of this variable is not case sensitive and it doesn't matter if the name of your *environment variable* is *Classpath*, *CLASSPATH* or *classpath* in Java.

Here is *Step by Step* guide for setting Java Classpath in Windows:

1. Go to Environment variable window in Windows by pressing "Windows + Pause "--> Advanced --> Environment variable " or you can go from right click on my computer than choosing properties and then Advanced and then Environment variable this will open the Environment variable window in windows.



2. Now specify your environment variable `CLASSPATH` and put the value of your `JAVA_HOME\lib` and also include [current directory](#) by including (dot or period sign).
3. Now to check the value of Java classpath in windows type "**echo %CLASSPATH**" in your DOS command prompt and it will show you the value of the directory which is included in `CLASSPATH`.
4. You can also set classpath in windows by using DOS commands like:

```
$ set CLASSPATH=%CLASSPATH%;JAVA_HOME\lib;
```

This way you can set the classpath in Windows XP, Windows 2000, or Windows 7 and 8, 10 as they all come with a command prompt.

Setting Java Classpath in UNIX or Linux

To set Classpath for Java In Linux, you can simply **export** `CLASSPATH="your classpath"` from either your `.bash_profile` or `.bashrc` script which will run whenever you login into your Linux or Unix Machine.

Now to check the value of Java `CLASSPATH` in Linux type "**echo \${CLASSPATH}**" this will print the value of [Classpath in the command prompt](#).

By using the export command, you can set the classpath for Java in Unix, Linux, Solaris, IBM AIX, or any other UNIX operating system. I hope this example for setting classpath in Java will enable to set classpath by yourself let me know if you face any problem while setting up classpath in Java