



Installing Eclipse

In some exercises of the Computer Networks (Vernetzte Systeme) course, you will need to write or extend applications written in *Java*. There are numerous Java editors available and you can even write your code in standard editors like *emacs* or *Notepad*. However, we recommend using *Eclipse*, a very powerful and free *Java IDE* (integrated development environment).

This short tutorial guides you through the installation of *Eclipse 3.1.2*. In the first week, we will give you an introduction on how to use *Eclipse* and how to create *Java* applications. We strongly suggest that you install *Eclipse* before the first lecture because it weights up to 160 MB. Concurrent download by multiple students would probably overstrain the wireless network in the first lecture...

Note: This tutorial applies to *Windows* only. The steps to install *Eclipse* under *Linux* are quite similar, but not identical.

Step 1: Installing Java

Since *Eclipse* itself is written in *Java*, you need to install *Java* first. If you already have *Java* (1.4.x or 1.5.x) installed (the compiler, not just the runtime environment!), you can skip this step.

Go to <u>http://java.sun.com</u> and download the *Java SE*. You find it under Download \rightarrow Java SE. The file you need is called *JDK 5.0 Update 6* (jdk-1_5_0_06-windows-i586-p.exe, 60 MB). You can take the online version of the file, too, if bandwidth is a problem.

After downloading, execute the file and install *Java SE*. The wizard is pretty self-explanatory and you don't need to make any changes to the default settings.

Step 2: Installing Eclipse

Note: If you have an older version of Eclipse installed (like 3.0), you can update it with exactly the same procedure as described below. Eclipse does not support easy updates between major releases (like 3.0 to 3.1), so you need to reinstall the whole application.

Go to <u>http://www.eclipse.org</u> and download *Eclipse 3.1.2* (Eclipse SDK 3.1.2, 103 MB). After downloading, extract the zip archive to your favored destination (typically in the *Program Files* directory). You don't need to run an installer, simply extracting the files from the zip archive suffices.

Now you are ready to start *Eclipse* by double-clicking *eclipse.exe*. If everything works as expected, you should be asked to specify your workspace directory. You can leave this on the default value or choose any other location. After this dialog, you should see the *Welcome to Eclipse* screen. If you reach this point, you are ready for the first lecture :)

Eclipse X
A Java Runtime Environment (JRE) or Java Development Kit (JDK) must be available in order to run Eclipse. No Java virtual machine was found after searching the following locations: C:\Program Files\eclipse\tracking\avaw.exe 'javaw.exe' in your current PATH

If you see this message on startup, *Eclipse* cannot find your *Java* installation. In that case, you have to manually add the location of *Java* to your PATH variable. This is done by right-clicking *My Computer* and clicking on the *Environment Variables* button in the *Advanced* tab. Create a new System variable, call it JAVA_HOME and assign it the value C:\Program Files\Java\jdk1.5.0_06 (or wherever you installed Java).

If *Eclipse* still cannot find *Java*, try to add C:\Program Files\Java\jdk1.5.0_06\bin to your Path variable (separated by a semicolon). If this does not help, too, try uninstalling and reinstalling *Java*.