

Installing NeatVision

- The **standard** edition of NeatVision requires the **JRE** and **JAI** only (*Recommend download*)
- Installation of the developer plug-in will require an upgrade the JRE to the JDK. As the JDK compiler is *not backward compatible and is frequently modified*, we have restricted developers interface to a specific version of the Java SDK - i.e. JDK 1.3.X

Standard Edition

For a **basic** (*recommend*) installation you will need to download the following files:

JRE:

- **JRE 1.4.X** (<http://java.sun.com/j2se/1.4.2/download.html>). This is required for the standard version of NeatVision. (e.g. *j2re-1_4_2_09-windows-i586-p.exe*)

JAI:

- **JAI 1.X** (<http://java.sun.com/products/java-media/jai/index.jsp>). Java Advanced Imaging (JAI) API. This is required for both the standard (JRE) and developers (JDK) version of NeatVision. (e.g. *jai-1_1_2_01-lib-windows-i586-jre.exe*)

Jar:

neatvision.jar

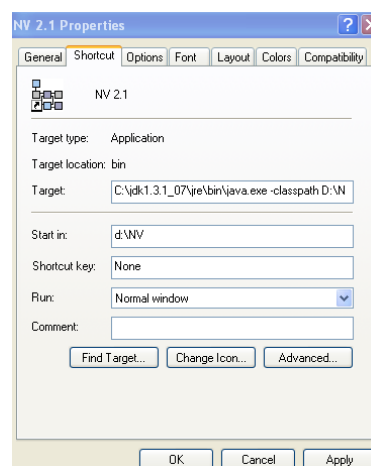
(ftp://ftp.eeng.dcu.ie/pub/neatvis/downloads/release_2_1/neatvision.jar)

1. Please ensure that the JAI is placed in the same path as the JRE. This only becomes an issue if you have multiple versions of Java on your machine (the default is that JAI will place itself in the most recent version of the Java).
2. Assuming the JRE has been installed in *C:\Program Files\Java\j2re1.4.2_09* and the NeatVision jar file is in *D:\NV*, then the following single line command will enable NeatVision to run from *D:\NV*.

```
"C:\Program Files\Java\j2re1.4.2_09\bin\java.exe" -classpath D:\NV\neatvision.jar NeatVision
```

(**note** the final NeatVision is case sensitive i.e. Cap N and cap V)

To avoid having to type this in each time set up a batch file or a desktop link such as the one shown below.



Developers Edition

For a **developers installation** download the JDK **in place of the JRE** taking note of the version number difference (you must use **JDK 1.3.X** to enable you compile your own NeatVision programs). You will also need to download the *developers.jar* in addition to *neatvision.jar*.

JDK:

- **JDK 1.3.X SDK** (<http://java.sun.com/j2se/1.3/download.html>). This is required for the developer's version of NeatVision. (e.g. *j2sdk-1_3_1_16-windows-i586.exe*)

JAI:

- **JAI 1.X** (<http://java.sun.com/products/java-media/jai/index.jsp>). Java Advanced Imaging (JAI) API. This is required for both the standard (JRE) and developers (JDK) version of NeatVision. (e.g. *jai-1_1_2-lib-windows-i586-jdk.exe*)

Jar:

neatvision.jar
(ftp://ftp.eeng.dcu.ie/pub/neatvis/downloads/release_2_1/neatvision.jar)

developers.jar
(ftp://ftp.eeng.dcu.ie/pub/neatvis/downloads/release_2_0/developer.jar)

1. Please ensure that the JAI is placed in the same path as the JDK. This only becomes an issue if you have multiple versions of Java on your machine (the default is that JAI will place itself in the most recent version of the Java).
2. Assuming the JDK has been installed in `C:\jdk1.4.x` and all the NeatVision jar files are in `D:\NV` then the following single line command will enable NeatVision to run from `D:\NV`.

```
C:\jdk1.4.x\jre\bin\java.exe -classpath C:\NV\neatvision.jar;D:\NV\developer.jar NeatVision
```

You can download a NeatVision icon for your desktop from:

ftp://ftp.eeng.dcu.ie/pub/neatvis/downloads/neatvision_2.ico

See <http://neatvision.eeng.dcu.ie/installation.html> for additional information on installing NeatVision.

Known issues:

- The CLASSPATH environment variable is still a part of Java 2, but specifying a CLASSPATH environment variable AND using *-classpath* (or *-cp*) at the command prompt could cause conflicts.

The procedure to add the Neatvision jar file to the CLASSPATH environment variable is slightly different under NT/XP and 98/Home hence I have avoided focusing on this as the main installation route. There will certainly be problems with two versions of JDK/JRE installed on the same machine unless the user is VERY careful to make sure the PATH/CLASSPATH are changed to suit the environment required. You can check you are using the correct JDK by typing `Java -version`

- If your **classpath has spaces in it** (e.g. `C:\Program Files\Java`) then you will need to place quotes around the classpath specification).

```
"C:\Program Files\Java\jdk1.4.X\jre\bin\java.exe" -classpath C:\neatvision.jar NeatVision
```

- If this does not solve the problem then you should launch the NeatVision from a MS-DOS window by typing in the command:

```
C:\j2re1.4.2_09\bin\java.exe -classpath D:\NV\neatvision.jar NeatVision
```

- NeatVision (and the developers upgrade) is distributed as ".jar" files. The contents of these files **should not be extracted**; any attempt to do this will cause NeatVision to cease functioning?
- Please insure that the JAI is placed in the same path as the JRE you are using for NV. This only becomes an issue if you have multiple versions of Java on your machine (the default is that JAI will place itself in the most recent version of the Java).
- We do not recommend Win 98 as it has difficulty dealing with large images. Depending on your setup using Win 98 you may have to call the jai components specifically.

```
set CLASSPATH=c:\NV\neatvision.jar;c:\NV\developer.jar;C:\Program
Files\JavaSoft\JRE\1.3.1_07\lib\ext\jai_codec.jar;C:\Program
Files\JavaSoft\JRE\1.3.1_07\lib\ext\jai_core.jar
C:\jdk1.3.1_07\jre\bin\java "NeatVision"
```

Don't forget to reboot 98 after making changes.

- **Stack overflow error:** To increase the stack size to 64 Mb and thus eliminate this problem please include the following additions: `-Xmx64M -Xms64M` (`-mx64M -ms64M` for Unix).

e.g.

```
..\bin\java.exe -Xmx64M -Xms64M -classpath
..\neatvision\neatvision.jar;..\neatvision\developer.jar NeatVision
```

If you need to increase the stack size further then change the size option accordingly.

- If you are using the **developers** edition – make sure you point to the JDK 1.3.X compiler. This may have to be manual set via the NeatVision properties box as illustrated below (e.g `C:\jdk1.3.1_16\bin\javac.exe`).

