

Java Web Start Guide

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Java Web Start technology makes it possible to automatically download and start a Java application by clicking a link in a web browser. This works because the file ending “.jnlp” (MIME-type) is associated with the Java Web Start launcher program (“javaws”) which is part of your Java installation.

In some cases, this association is not in place. Please find below how you can manually set this association in your operating system. This should take less than 5 minutes.

Furthermore, this Java Web Start Guide tries to make the Java Web Start technology a bit more transparent.

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Associating Java Web Start links

In this section we'll have a look at

- how to detect whether the Java Web Start file association is correctly in place
- how to associate manually otherwise.

Windows

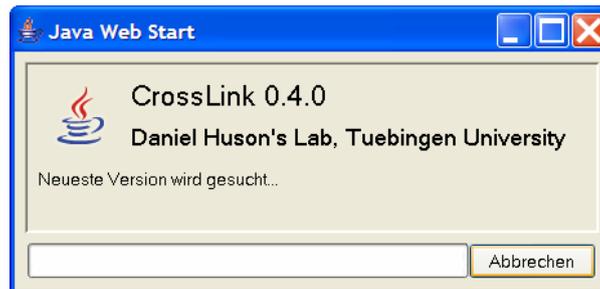


Figure 1 Download dialog – indicating that the file association is set correctly.

After clicking the Web Start link, this download dialog (above) should appear, indicating that the association is set correctly and the Java Web Start launcher is downloading the application.

In the firefox browser you can view these associations by opening the following window:

Tools -> Options

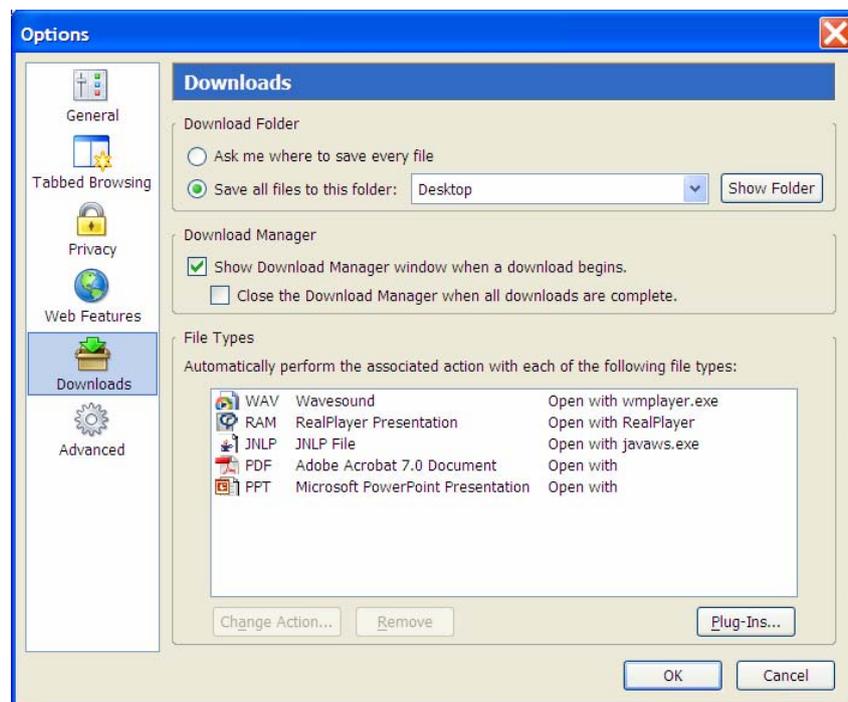


Figure 2 File associations in the firefox browser

If no association is set for the “.jnlp” file ending, your browser will ask what to do:

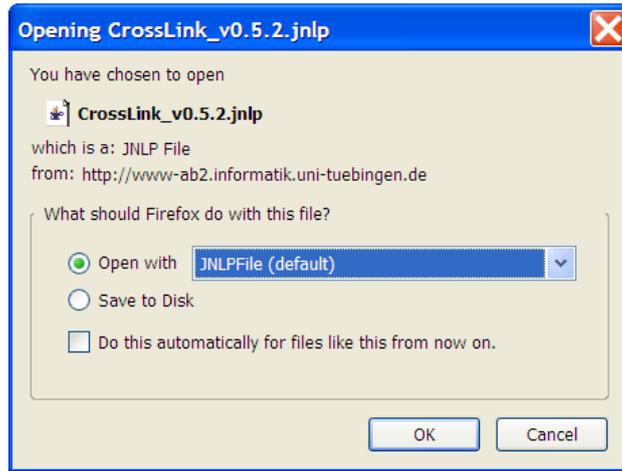


Figure 3 Browser asks what to do with this file type

In this case, associate the “.jnlp” file ending with your Java Web Start launcher program (“javaws”), which is located in the “bin” directory of your Java installation, e.g. at

C:\Programme\Java\jre1.5.0\bin\javaws.exe

You can use the windows „file search” to find the Java Web Start launcher program.

Mac

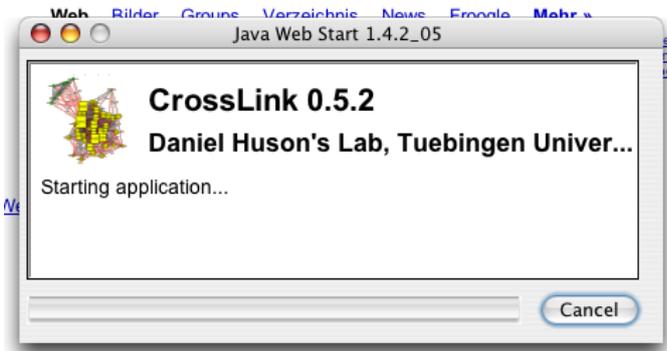


Figure 4 Download dialog – indicating that the file association is set correctly.

After clicking the Web Start link, this download dialog (above) should appear, indicating that the association is set correctly and the Java Web Start launcher is downloading the application.

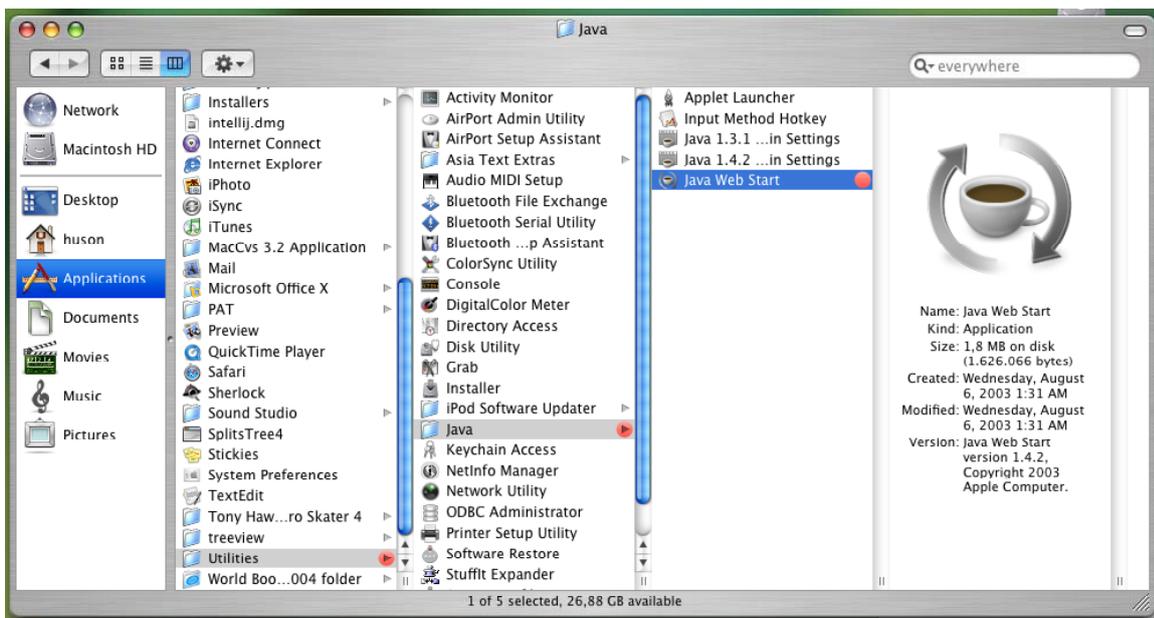


Figure 5 Location of the Java Web Start launcher program

If the file association is not in place and your browser can not handle the file correctly, you should associate the file ending (MIME-type) “.jnlp” with the Java Web Start launcher found at the location shown above.

Linux

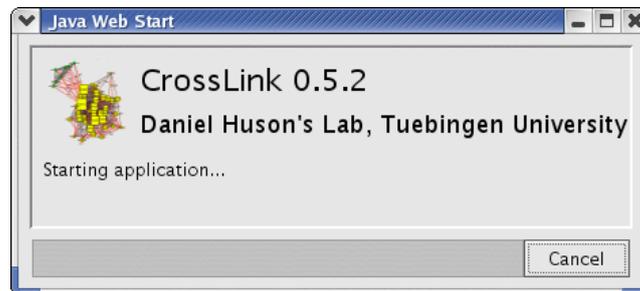


Figure 6 Download dialog – indicating that the file association is set correctly.

After clicking the Web Start link, this download dialog (above) should appear, indicating that the association is set correctly and the Java Web Start launcher is downloading the application.

If the association is not set correctly yet, the browser will ask what to do with the “.jnlp” file:

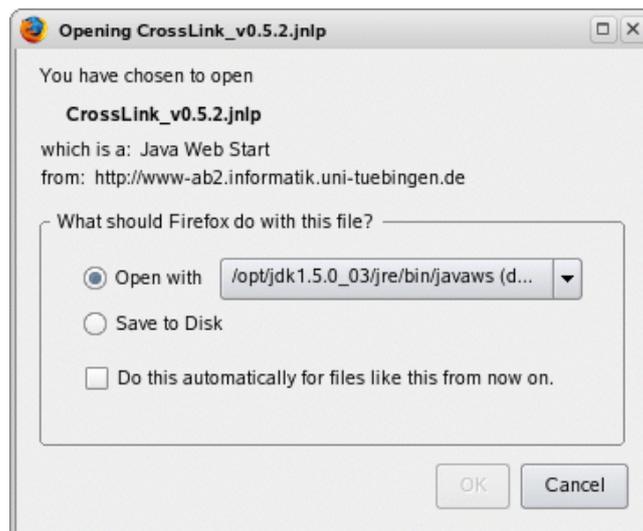
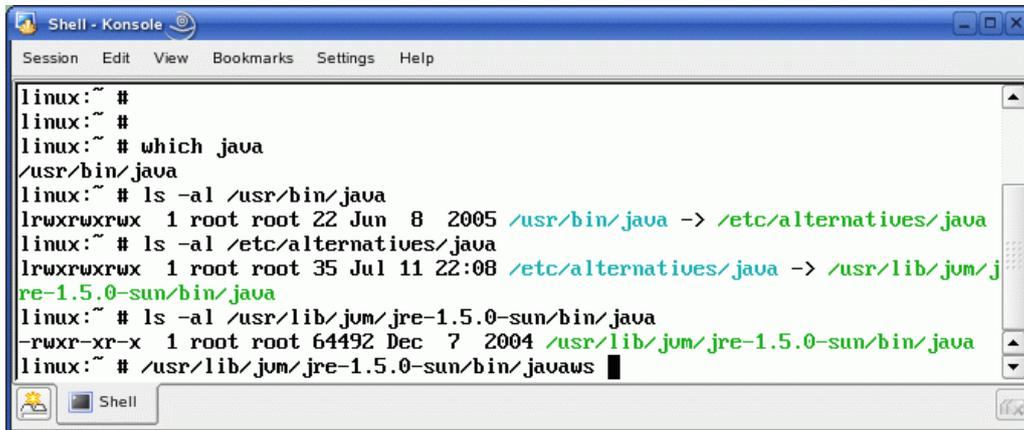


Figure 7 Browser asks for an association with the .jnlp file type

You will need to associate the “.jnlp” file ending with the Java Web Start launcher program (“javaws”) located in the “bin” directory of your java installation next to the “java” virtual machine.

You can find it using a disk search command (e.g. “locate”) or, if the java virtual machine (“java”) is in your path (check with the command “which”), by following the symbolic links, see below:



```
linux:~ #  
linux:~ #  
linux:~ # which java  
/usr/bin/java  
linux:~ # ls -al /usr/bin/java  
lrwxrwxrwx 1 root root 22 Jun 8 2005 /usr/bin/java -> /etc/alternatives/java  
linux:~ # ls -al /etc/alternatives/java  
lrwxrwxrwx 1 root root 35 Jul 11 22:08 /etc/alternatives/java -> /usr/lib/jvm/j  
re-1.5.0-sun/bin/java  
linux:~ # ls -al /usr/lib/jvm/jre-1.5.0-sun/bin/java  
-rwxr-xr-x 1 root root 64492 Dec 7 2004 /usr/lib/jvm/jre-1.5.0-sun/bin/java  
linux:~ # /usr/lib/jvm/jre-1.5.0-sun/bin/javaws
```

Figure 8 Following symbolic links to the „bin“ directory of the Java installation

Launching the Java Control Panel

The Java Control Panel is a graphical tool that allows you to set preferences for your Java programs – including the ones started via Java Web Start. The Java Control Panel is included in every Java installation.

In this section, we'll have a look at

- how to start the Java Control Panel in each operating system.

Windows

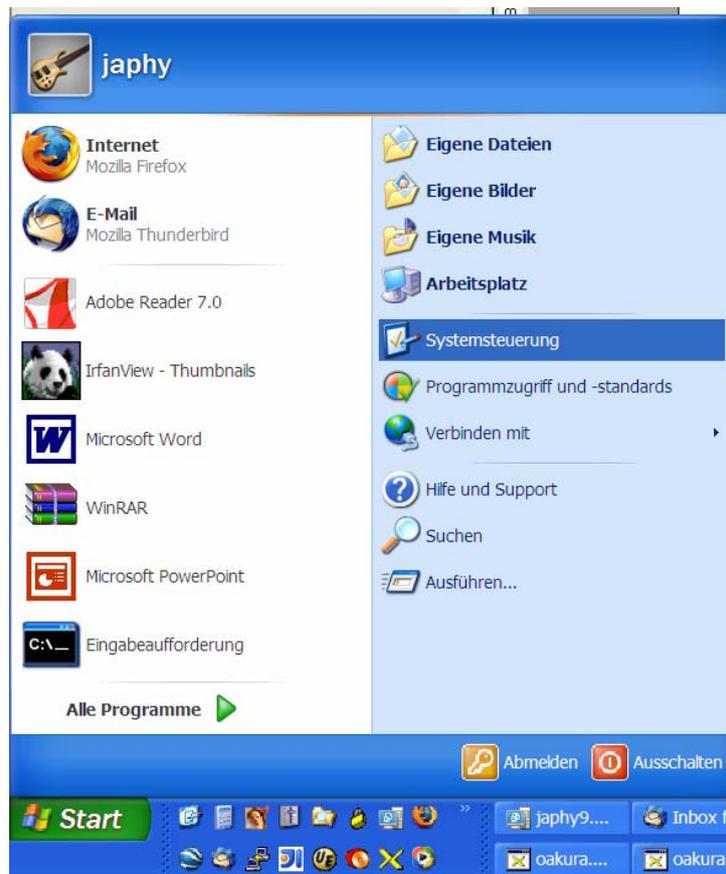


Figure 9 -- Step 1: Open the Windows control panel

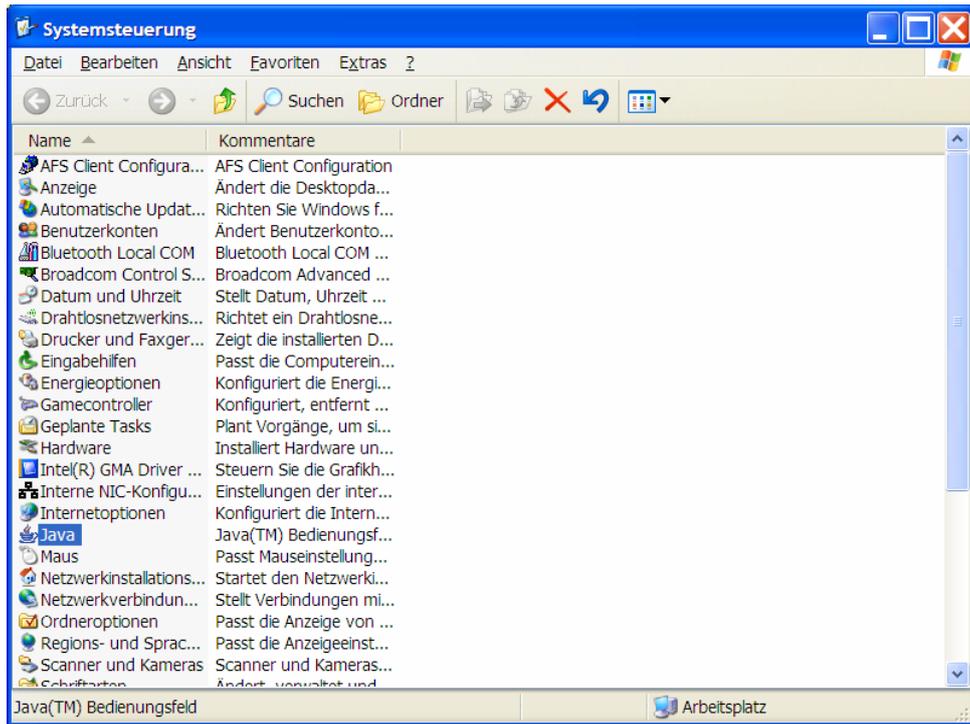


Figure 10 – Step 2: Click on the Java icon

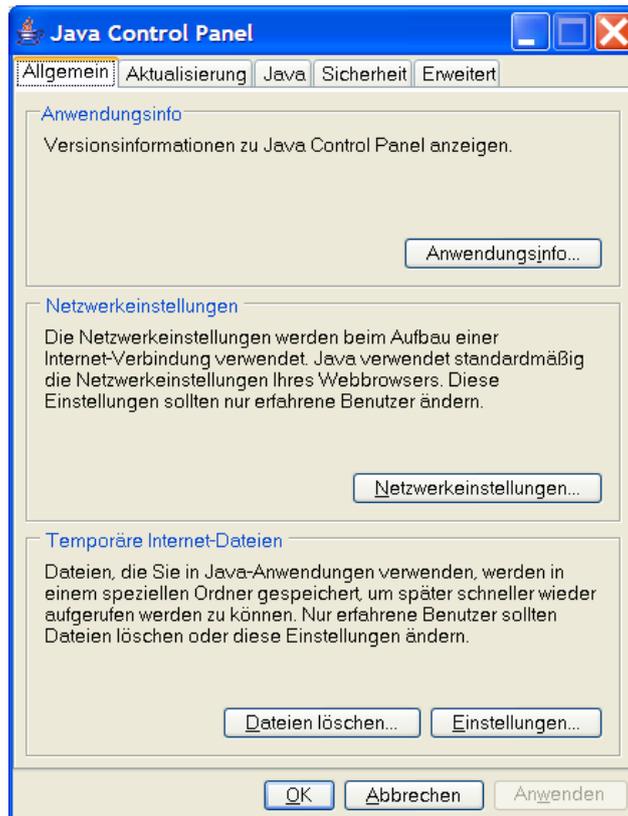


Figure 11 – Voilà: the Java Control Panel

Mac

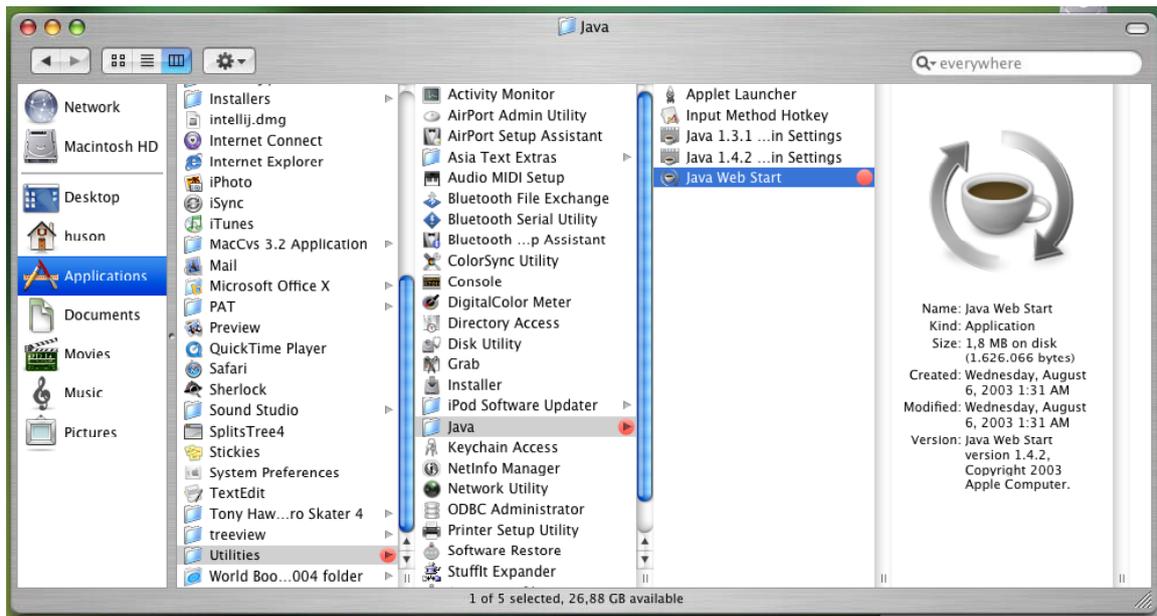


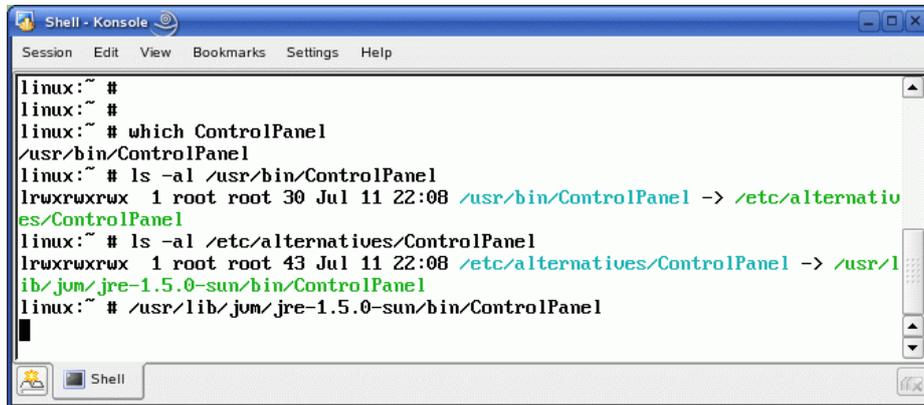
Figure 12 – Find the Java Control Panel here



Figure 13 – The Java Control Panel

Linux

You may need to search for the Java Control Panel in a similar manner as for the “javaws” application. Both should reside in the same directory.



```
linux:~ #  
linux:~ #  
linux:~ # which ControlPanel  
/usr/bin/ControlPanel  
linux:~ # ls -al /usr/bin/ControlPanel  
lrwxrwxrwx 1 root root 30 Jul 11 22:08 /usr/bin/ControlPanel -> /etc/alternativ  
es/ControlPanel  
linux:~ # ls -al /etc/alternatives/ControlPanel  
lrwxrwxrwx 1 root root 43 Jul 11 22:08 /etc/alternatives/ControlPanel -> /usr/l  
ib/jum/jre-1.5.0-sun/bin/ControlPanel  
linux:~ # /usr/lib/jum/jre-1.5.0-sun/bin/ControlPanel
```

Figure 14 – Searching for the Java Control Panel (“ControlPanel”) application



Figure 15 – The Java Control Panel

Launching the Java Console

The Java Console is a program that displays detailed output of a Java application that is normally not visible. In case of trouble with e.g. a Java Web Start application it may be useful to have a glimpse at the Java Console.

In this section, we'll have a look at

- ways to start the Java Console.

Windows

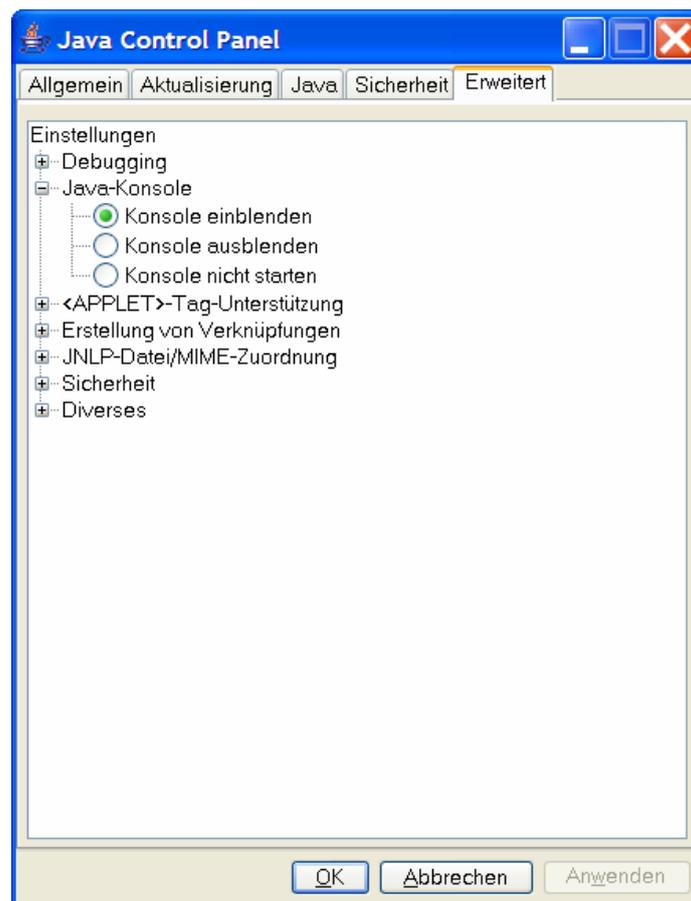


Figure 16 – In the Java Control Panel, set the Java Console on “always visible”

And it will appear when a Java Web Start application is started the next time:

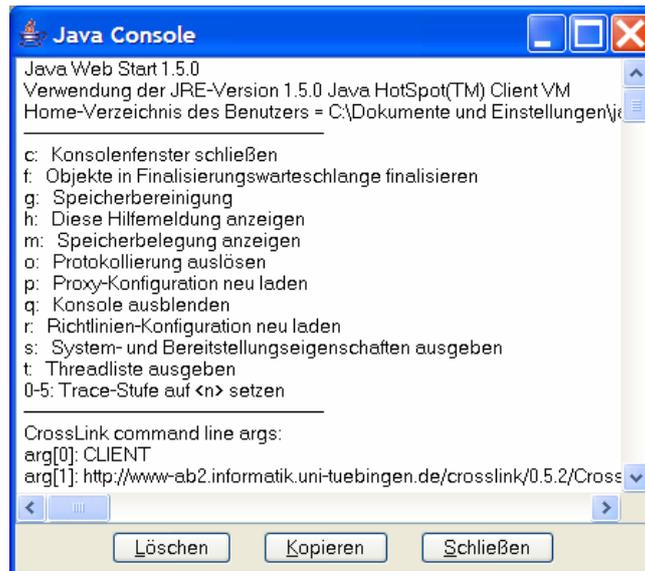


Figure 17 – The Java Console

Mac

You can enable display of the Java Console in the Java Control Panel settings:



Figure 18 – Enabling the Java Console

Linux

You can enable display of the Java Console in the Java Control Panel settings:

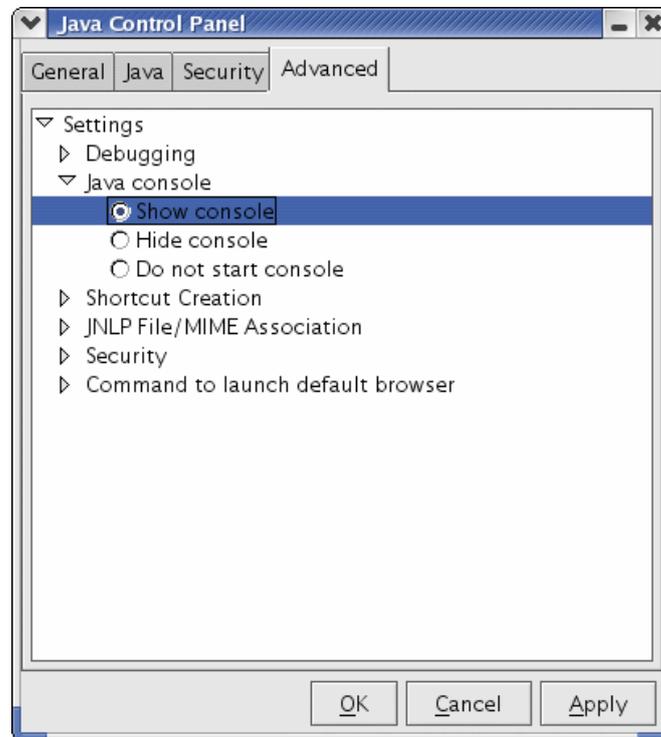


Figure 19 – Enabling the Java Console

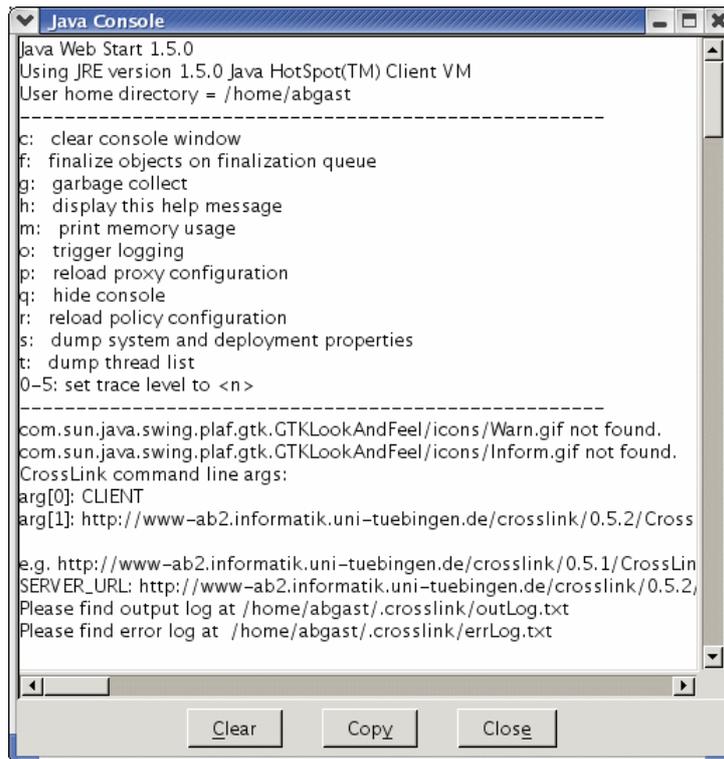


Figure 20 – The Java Console

About Java Web Start technology

In short, Java Web Start is an application distribution technology that allows semi-automatic on-demand download of Java applications to client computers using a local cache. The first time a Java Web Start application link is clicked, the application is downloaded and executed. Every next time, one of these actions are performed:

- if there is no internet connection, the application is started from the local cache
- if there is an internet connection, the version number of the application copy on the net and in the cache are compared and the most recent one is started

You can have a look into this local cache by opening the Java Web Start application. Click on the Java Web Start icon or type “javaws” on the command line (all operating systems).



Figure 21 – Peeking into the local Java Web Start cache

Please find more information here:

All about Java Web Start technology

<http://java.sun.com/products/javawebstart/>

Java Web Start FAQ

<http://java.sun.com/products/javawebstart/faq.html>

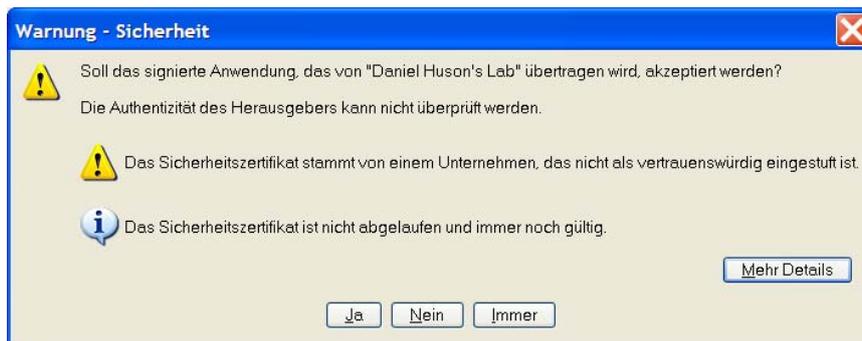
The unofficial Java Web Start FAQs (great!)

<http://webstartfaq.com/>

Security issues

Java Web Start will ask you whether you trust the downloaded application that is about to start. This is needed to allow the application to reach out of its “sandbox” and e.g. access files on your local hard disk. The potential for harm of such an application is identical to any executable file. Java Web Start assures that the application will not run if you do not trust it.

Windows



Mac



Linux

