

## 7 User Installation

This section describes the installation of the Java USB API for Windows for end users.

### 7.1 Resources

#### JavaUSB.ZIP

The Java USB API includes the binaries of the jUSB DLL and the jUSB driver. JavaUSB.ZIP can be downloaded from <http://www.steelbrothers.ch/jusb/>. Be sure to download the Java USB resources for end users which is called JavaUSB.ZIP

#### Netbeans IDE

Is a full-featured integrated environment for Java Developers [21]. We used Netbeans to develop the Java side of the Java USB API. Netbeans is freely available on <http://www.netbeans.org>. Of course any other environment with a Java compiler can be used to extend or run the Java USB API.

### 7.2 Installation of the jUSB Driver and jUSB DLL

#### jUSB DLL

Copy the jusb.dll from the folder `\InstallationFiles\JusbDl\` to the `\system32` folder of your Windows directory.

Compile the `usb.windows` package in Netbeans. Attach a USB device to the USB and run `RunUSBControllerTest`.

#### jUSB Driver

First, we have to register the JUSB driver in the Windows registry. Therefore, we need to double click on the jusb.reg file which is located in the `\InstallationFiles\JusbDriver` folder. A window will pop up asking if we are sure to add the information of jusb.reg to the registry. After clicking on yes, a confirmation will be displayed and the information will be added to the registry. This process of registering the jUSB driver has to be executed only once.

After the jUSB driver has been registered, we have to copy the jusb.sys file (the driver) to the `\system32\drivers` folder of the Windows directory.

#### jUSB driver test

The following procedure can be used to test the driver:

1. Connect an USB mouse to the USB port.
2. Run `RunUSBControllerTest` and note down the VID and PID which is displayed out, next to the uniqueID.
3. Download Debug View v4.21 from <http://www.sysinternals.com/ntw2k-utilities.shtml> and start the debugger. This is only for controlling purposes.
4. Change the registry entries as described in Appendix D.
5. Disconnect the USB mouse and connect it again.
6. The debugger should display some information. This information are generated by the jUSB driver