Installation of Quantis drivers and libraries

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01/05/2012 (v.0.04)

1   Device drivers

Note: In the following instructions `Quantis-v11.01.12` should be replaced by the appropriate directory depending on the software package you are using.

1.1   PCI and PCI-express version

1. Install module-assistant package
   ```
   apt-get install module-assistant
   ```

2. Prepare your system for module compilation
   ```
   m-a prepare
   ```

3. Unpack the Quantis software package and go to
   `Quantis-v11.01.12/Drivers/Unix/QuantisPci.`

4. Compile the module
   ```
   make
   ```

5. Install the module
   ```
   make install
   ```
   and check if the module has been installed properly
   ```
   find /lib/modules/ -name quantis_pci.ko
   ```

6. Make sure that the driver will be loaded during the next boot
   ```
   echo "quantis_pci" >> /etc/modules
   ```

7. Follow the instructions in Section 1.3.

1.2   USB version

1. Install `libusb` and `libusb-dev` packages
   ```
   apt-get install libusb-1.0-0 libusb-1.0-0-dev
   ```

2. Check your device with `lsusb`
   ```
   lsusb -d 0aba:0102 -v
   ``` or ```
   lsusb -v | grep Quantis
   ```

3. Follow the instructions in Section 1.3.

1.3 Device permissions

1. Make sure that the `plugdev` group exists
   `cat /etc/group | grep plugdev`

2. Add the user that will be permitted to use Quantis to the `plugdev` group
   `usermod -G plugdev -a LOGIN`,
   where `LOGIN` is the login name of the user

3. Copy file `Quantis-v11.01.12/Drivers/Unix/idq-quantis.rules`,
   to `/etc/udev/rules.d/` directory and reload the UDEV rules
   `udevadm control --reload-rules`

2 Libraries

1. Unpack distribution files from `Quantis-v11.01.12/Packages/Linux` to a selected directory, *e.g* `/usr/local/IDQ/Quantis`
   `mkdir /usr/local/IDQ`
   `tar xjvf QuantisRNG-2.5.0-Linux-amd64.tar.bz2`
   `mv QuantisRNG-2.5.0-Linux-amd64 /usr/local/IDQ/Quantis`
   After this step the `EasyQuantis` application should be in
   `/usr/local/IDQ/Quantis/bin/EasyQuantis`

2. Copy Quantis.h and DllMain.h from
   `Quantis-v11.01.12/Libs-Apps/Quantis`
   to
   `/usr/local/IQD/Quantis/include`

3. Add `/usr/local/IDQ/Quantis/lib` (or `/usr/local/IDQ/Quantis/lib64`) to
   `/etc/ld.so.config` or some file which is included by this file *e.g*
   `/etc/ld.so.conf.d/quantis.conf`

4. Update the loader cache
   `ldconfig`