Quantis Change Log

This is a non-exhaustive (but near complete) changelog for the Quantis Software Package.

|   +   | Add          |
|   -   | Remove       |
|   ^   | Change       |
|   #   | Bug Fix      |
|   !   | Note         |

08/March/2018

Versions of software/documents included in this package:

^ EasyQuantis: 2.2
^ Quantis libraries: 2.13
^ Microsoft Windows PCI Driver: 5.2
* Microsoft Windows USB Driver: 2.1
^ Unix PCI Driver: 2.9
^ Documentation: 3.1

Documentation v3.1

+Add references to the extractor algorithm

21/July/2017

Versions of software/documents included in this package:

^ EasyQuantis: 2.2
^ Quantis libraries: 2.13
^ Microsoft Windows PCI Driver: 5.2
* Microsoft Windows USB Driver: 2.1
^ Unix PCI Driver: 2.9
^ Documentation: 3.0

Quantis-PCI Unix 2.9

^ Fix compilation issue with Linux kernel > 4
Tested with Linux kernel 4.10

Documentation v3.0

^ new layout
+ Windows 10 and Windows Server 2016 support
- Windows XP support

8/November/2013

Versions of software/documents included in this package:

* EasyQuantis:                     2.1
* Quantis libraries:              2.12
^ Microsoft Windows PCI Driver:   5.1
* Microsoft Windows USB Driver:   2.1
^ Unix PCI Driver:                2.7
* Documentation:                   2.10

Quantis-PCI Windows 5.1

+ Driver tested with Windows 8.1
   # Fix throughput issue with Quantis-PCIe-16Mbit/s

Quantis-PCI Unix 2.7

# Fix throughput issue with Quantis-PCIe-16Mbit/s
# Fix compilation errors with linux kernel >= 3.10.0

29/April/2013

EasyQuantis v2.1

# Acquisition in console line mode fixed
+ Extraction capability in console line mode
+ Tested with Windows 8
^ Elementary matrix creation: bytes to skip max set to 200
^ Estimation of acquisition speed rate in Mbits/sec instead of kBytes/sec

Quantis Library v2.12

# QuantisUsbGetModulesDataRate bug fixed
+ GetBusDeviceld() function

Quantis-USB Windows 2.1

+ Update driver certificate due to expiration
+ Driver tested with Windows8
   ! Driver is unchanged

Quantis-PCI Windows 5.0

+ Update driver certificate due to expiration
+ Driver tested with Windows8
   ! Driver is unchanged

Quantis-PCI Unix 2.6

+ Add IOCTL GET_PCI_BUS_DEVICE_ID for IDQ internal purpose
# Fix compilation errors with Linux kernel >= 3.8.0

Documentation v2.10

+ Quantis Windows8 USB and PCI Drivers documentation
+ EasyQuantis Windows installation improvement
+ Update EasyQuantis with Windows8 pictures
+ Minor fixes

Versions of software/documents included in this package:

^ EasyQuantis: 2.1
^ Quantis libraries: 2.12
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
^ Unix PCI Driver: 2.6
^ Documentation: 2.10

12/September/2012

EasyQuantis v2.0

+ Randomness extraction capabilities (Windows and Linux only)

Quantis Library v2.10

+ QuantisExtensions library with randomness extraction capability (only available for Windows and Linux OS with C and C++ languages)
+ Quantis library new Open and Close functions
# Quantis-USB Linux: Fix 'segmentation fault' issue when using libUsb >= 1.0.9

Unix PCI Driver v2.5

# Fix compilation issue with kernel > 2.6.37
+ Update makefile to support 3.x kernel serie

Documentation v2.9

+ QuantisExtensions library documentation
+ Quantis library new Open/Close functions
+ Quantis 2.0 documentation (extraction)
+ How to recompile libraries
+ Improve FAQ entries

Versions of software/documents included in this package:

^ EasyQuantis: 2.0
^ Quantis libraries: 2.10
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
^ Unix PCI Driver: 2.5
^ Documentation: 2.9

9/December/2011

Quantis Library v2.9

+ Implemented the C++11 random_device interface to use Quantis
+ Quantis can now be used on Solaris and FreeBSD
+ The VB and C# Samples are supported under Visual Studio 2010/.NET 4.0

Documentation v2.8

- Improved sections concerning Sample compilation
- Added documentation concerning installation on Solaris and FreeBSD
- Added documentation for C++11

Versions of software/documents included in this package:

* Documentation: 2.8
* EasyQuantis: 1.4
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.9
* Unix PCI Driver: 2.4

12/July/2011

EasyQuantis 1.4

# Fix missing dll in the EasyQuantis Setup installation

Quantis Library v2.8

# Fix error control with Quantis-USB devices

Versions of software/documents included in this package:

* Documentation: 2.7
* EasyQuantis: 1.4
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.8
* Unix PCI Driver: 2.4

20/May/2011

Documentation v2.7

+ Added information for Mac OSX.

Quantis Library v2.7

+ Added support for Quantis USB on Mac OSX.

Versions of software/documents included in this package:

* Documentation: 2.7
* EasyQuantis: 1.4
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.7
* Unix PCI Driver: 2.4
19/Apr/2011

Documentation v2.6

^ Corrected minor mistakes and rephrased a few sentences for ease of understanding.

Quantis Library v2.6

# Configuration descriptor obtained from libusb_get_config_descriptor() is now correctly freed using
libusb_free_config_descriptor(), fixing a memory leak on Unix systems when using Quantis USB devices.
# Fixed freeing order on QuantisUsbClose method in QuantisUsb_Windows.cpp, fixing a memory leak on
Microsoft Windows when using Quantis USB devices.
^ Better memory freeing on errors.

Wrapper/Samples

# Fixed C# and VB.NET Quantis classes which crash when handling unmanaged Quantis C DLL char* data on
64-bit systems (when application is compiled in 64-bit).

Versions of software/documents included in this package:

* Documentation: 2.6
* EasyQuantis: 1.4
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.6
* Unix PCI Driver: 2.4

12/Jan/2011

Documentation v2.5

+ Added details on the QuantisGetManufacturer method.

EasyQuantis v1.4

+ Display Manufacturer's name when displaying Quantis USB devices info.

Quantis Library v2.5

+ Added QuantisGetManufacturer method (wrappers and samples have been updated accordingly).

Versions of software/documents included in this package:

* Documentation: 2.5
* EasyQuantis: 1.4
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.5
* Unix PCI Driver: 2.4

08/Oct/2010
Unix PCI Driver v2.4

# Fixed 'kobject_add failed for Quantis PCI/PCIe RNG driver (-13)' module crash on module load.
+ Improved cleanup and resources freeing on module crash.

Versions of software/documents included in this package:

* Documentation: 2.4
* EasyQuantis: 1.3
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.4
* Unix PCI Driver: 2.4

20/Sep/2010

Documentation v2.4

+ Added instruction to install Quantis on Red Had Enterprise Linux and CentOS distributions.

Unix PCI Driver v2.3

# Fixed "__you_cannot_kmalloc_that_much" compilation error on RedHat/CentOS distributions.
+ Added idq-quantis-rhel.rules with UDEV rules for RedHat/CentOS distributions.

Microsoft Windows USB Driver 2.1

+ Added missing signature certificate.
  ! Driver version was not changed.

Versions of software/documents included in this package:

* Documentation: 2.4
* EasyQuantis: 1.3
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.4
* Unix PCI Driver: 2.3

29/Jun/2010

Quantis Library v2.4

+ Added paths for FreeBSD in FindJNI.cmake.
  ! Library version was not changed.

Samples

+ Added QuantisProvider class which extends base Provider class.
+ Added QuantisSecureRandom class which extends base SecureRandomSpi class.

Versions of software/documents included in this package:

* Documentation: 2.3
28/Jun/2010

Documentation v2.3

+ Added scaling algorithms details.
^ Improved EasyQuantis installation description on Linux.
+ Added Troubleshooting appendix.

EasyQuantis v1.3

# Fixed wrong text message during number generation.

Quantis Library v2.4

# Scaling of integral values updated with unbiased algorithm.
^ Reading floating point values now returns values between 0.0 (inclusive) and 1.0 (exclusive) as done by majority of (P)RNGs.

Versions of software/documents included in this package:

* Documentation: 2.3
* EasyQuantis: 1.3
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.4
* Unix PCI Driver: 2.2

27/May/2010

Unix PCI Driver v2.2

# Fixed FreeBSD check in main Makefile.
# Fixed wrong #define added in driver v2.1 affecting Quantis PCI-4 devices.

Versions of software/documents included in this package:

* Documentation: 2.2
* EasyQuantis: 1.2
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.3
* Unix PCI Driver: 2.2

25/May/2010

EasyQuantis v1.2
# Fixed compilation on FreeBSD.
# Fixed compilation on Solaris.

Quantis Library v2.3

# Fixed compilation on FreeBSD.
# Fixed compilation on Solaris.

Unix PCI Driver v2.1

+ Added FreeBSD support.
+ Added Solaris support.

Versions of software/documents included in this package:

- Documentation: 2.2
- EasyQuantis: 1.2
- Microsoft Windows PCI Driver: 5.0
- Microsoft Windows USB Driver: 2.1
- Quantis library: 2.3
- Unix PCI Driver: 2.1

30/Apr/2010

Documentation v2.2

# In Quantis PCI Linux driver installation section: fixed a wrong path.
+ In Quantis PCI Linux driver installation section: and added two sub-sections.
^ Updated EasyQuantis installation procedure under Linux.

Quantis Library v2.2

+ Added compiled version for 64-bit Linux systems.

Versions of software/documents included in this package:

- Documentation: 2.2
- EasyQuantis: 1.1
- Microsoft Windows PCI Driver: 5.0
- Microsoft Windows USB Driver: 2.1
- Quantis library: 2.2
- Unix PCI Driver: 2.0

26/Apr/2010

Documentation v2.1

+ Added EasyQuantis command line section.
+ Added answers in the FAQ.

EasyQuantis v1.1

+ Added command line interface.
# Correctly displaying paths in Microsoft Windows.
^ Code change: moved GenerateFile from EasyQuantisGuiMain.cpp to Quantis2File.cpp
Quantis Library v2.2

# On Windows: using explicit linking to WinUSB.dll (part of Quantis USB driver) to allow to use the Quantis library even if WinUSB.dll is not installed on the system.

Versions of software/documents included in this package:

* Documentation: 2.1
* EasyQuantis: 1.1
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.2
* Unix PCI Driver: 2.0

09/Apr/2010

Baseline for this Change Log.

Versions of software/documents included in this package:

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* EasyQuantis: 1.0
* Microsoft Windows PCI Driver: 5.0
* Microsoft Windows USB Driver: 2.1
* Quantis library: 2.1
* Unix PCI Driver: 2.0