About
These are the release notes for the EtherCAN/2 Firmware and Host Driver.

- **Host Driver**: Software on the PC that connects to the EtherCAN/2 device and offers the API etc
  (Under Windows this is installed with the setup.exe)
  Note: The Host Driver is also compatible with old EtherCAN device
- **EtherCAN/2 Firmware**: Software on the EtherCAN/2 device itself
  (Update is done via a special file that is uploaded on devices web page)

Revision history
Listed below are the improvements, changes and fixes between different releases of the EtherCAN/2 Firmware and Host Driver in reverse chronological order.

**Host Driver V3.1.0**
2010-05-18
- Manuals updated
  EtherCAN/2 manual V1.3
  EtherCAN/2 manual V1.3 (German)
  ELLSI manual V1.5
- Host Driver also as .zip
  Without ntcan driver, e.g. for none-Windows users
- Updated ntcaneth.dll to V2.1.0.30
  Improved TX Performance for EtherCAN/2 when using canWrite()/canSend() with cmsg count greater than 1
- ELLSI updates
  Reformatted examples
  Included Wireshark plugin for ELLSI protocol
- Improved support for UPnP (Windows Vista and above)
  Individual icon and context menu for EtherCAN/2 as UPnP device in Other Devices of Windows network browser
- Updated cancpl.cpl to V1.5.0
  Replaced CPL version of CAN Control Panel with Windows Vista/7 UAC aware executable which requires elevated rights for configuration
  Fixed bug with phantom devices exist after the change of the logical net number
- Updated esdcp to V0.1.6
- Updated ntcan.dll to V4.3.1.0
- Updated calcan32.dll to V 2.5.3.0
Host Driver V3.0.0  
2009-09-21  
Common setup for EtherCAN/2 and EtherCAN interface  
EtherCAN/2 manual V1.0 (German)  
Installs optionally SNMP MIB file  
- Changed installer from InstallShield to InnoSetup  
- Update ntcaneth.dll to V2.1.0.25  
  Fixed bug detecting lost frames (V2.1.0.25)  
  Increase maximum allowed size of Tx/Rx handle queue size from 2047 to 16384 (V2.1.024)  
  Increased maximum number of supported interfaces for 20 to 100 (V2.1.023)  
  Fixed IDs of CAN events always set to 0 (V2.1.0.22)  
  Fixed canClose() even returns on success with NTCAN_INVALID_HANDLE (V2.1.0.21)  
  Added dummy support for canGetOverlappedResult() and canGetOverlappedResultT() (V2.1.0.20)  
  Improved performance of canOpen() (V2.1.0.20)  
  Fixed rare canClose() cleanup issue (V2.1.0.20)  
  Internal optimizations (V2.1.0.20 - V2.1.0.25)  
- Updated libpsys.dll to V1.7.3.0  
- Updated ntcan.dll to V4.2.7.0  
- Updated calcan32.dll to V2.4.4.0  
- Updated cancpl.cpl to V1.4.3.0  
- Updated QT ESDCP front end to V0.1.5  
Display truncated device name instead of Unknown if device name is too long  
Support for ESDCP extended options  

Host Driver V2.2.0  
2008-05-14  
- Update ntcaneth.dll to V 2.1.0.19  
  Support for the IOCTLs NTCAN_IOCTL_GET_RX_MSG_COUNT and NTCAN_IOCTL_FLUSH_RX_FIFO (V2.1.19)  
  Calls for unsupported functionality now returns NTCAN_NOT_IMPLEMENTED (V2.1.18)  
  A call of canioctl() with an unsupported IOCTL command return NTCAN_INVALID_PARAMETER (V2.1.18)  
  Fixed canWrite() returning NTCAN_TX_TIMEOUT, even if all CAN messages are sent (V2.1.17)  
  Minor internal changes (V2.1.10 - V2.1.16)  
- Updated libpsys.dll to V1.7.0.0  
- Updated ntcan.dll to V4.1.1.0  
- Updated calcan32.dll to V2.4.2.0  

Host Driver V2.1.0  
2007-04-16  
- Installer and shared libraries/executables are now digitally signed  
- Update ntcaneth.dll to V2.1.0.9
Once again improved reconnect time (V2.1.0.9)
Fixed possible endless loop returning in rare situations after connect/reconnect (V2.1.0.8)
Overall performance improvement (V2.1.0.6)
Implemented canClose() immediately kills active reconnect instead returning after next reconnect timeout (V2.1.0.6)
Keep alive mechanism completely revised and improved (V2.1.0.6)
NTCAN API calls return NTCAN_WRONG_DEVICE_STATE during reconnect phase (V2.1.0.6)
Increased maximum number of handles from 127 to 511 (V2.1.0.6)
Fixed opening more than the maximum number of possible CAN handles caused all other handles to be closed (V2.1.0.6)
Support for aborting blocked read/write requests via canIoctl() and performing forced close on handle (V2.1.0.5)
Fixed bug in validation of queue size parameter in canOpen() (V2.1.0.4)
Fixed bug that DLL crashed on unload in case of timeout during reconnect
Receiver thread priority changed from Realtime to High (V2.1.0.4)
Decreased time for reconnect (V2.1.0.3)
Fixed unnecessary reconnects to EtherCAN modules no longer existent after canClose() (V2.1.0.2)
Internal maximum number of supported EtherCAN interface increased from 5 to 20 (V2.1.0.2)
Fixed possible race condition in DLL unload (V2.1.0.1)
Reduced CPU time consumed by keep-alive thread (V2.1.0.0)
Improved handling of socket errors (V2.1.0.0)
Improved reconnect behavior (V2.1.0.0)
  • Updated QT ESDCP front end to V0.1.2
    Supporting empty password to configure remote device
  • Updated libpsys.dll to V1.5.0.3
  • Updated ntcan.dll to V4.1.0.0
  • Updated cancpl.cpl to V1.4.0.1
  • Updated calcan32.dll to V2.3.2.0

Host Driver V2.0.0
2005-11-10
  • Support for Extreme Simple Device Configuration
    Protocol (ESDCP) to remotely configure network enabled ESD devices without knowledge of the IP address with Qt based
    ESDCP front end
  • Win32 example files to use new EtherCAN Low Level Socket Interface (ELLSI)
    CAN I/O with UDP messages instead of using NTCAN
  • Update ntcaneth.dll to V2.0.0.18
    Support to configure EtherCAN server timeout
    Fixed returning error code for canClose() even if successful

Host Driver V1.1.0
2005-05-03
  • Added missing support for Windows 9x/ME
  • Changed setup to allow minimal install without documentation
• Update libpsys.dll to V1.5.0.0
• Update ntcan.dll to V3.2.0.0
• Update cancpl.cpl to V1.4.0.0
  Added support to use more than 5 remote CAN gateways
  Added support to configure individual connection/command and keep alive timeout for each remote gateway
  Added support to choose different port

Host Driver V1.0.0002
2004-11-13
• Update libpsys.dll to V1.4.0.2
• Update ntcaneth.dll to V2.0.0.15
  Additional configuration parameter stored in registry
  Fixed bug handling CAN 2.0B frames and events
  Fixed bug opening/closing handles only possible 256 times

Host Driver V1.0.0001
2003-11-13
• Update ntcan.dll to V2.0.0.3
  Fixed bugs handle remote CAN bus errors
  Added support to get serial number of remote gateway
• Include hardware manual V1.2

Host Driver V1.0.0000
2003-10-09
• Initial release for Windows NT/2K/XP
cancpl.cpl V1.3.0.1
ntcan.dll V3.1.0.0
ntcaneth.dll V2.0.0.2
libpsys.dll V1.2.0.0
calcan32.dll V2.0.0.4
Hardware Manual V1.1

Firmware V4.2.0.7
2010-05-06
• Added UPnP client
  (Host Driver V3.1.0 or newer recommended)
• Serial number, hardware version and firmware version now also readable by NTCAN-API
  (See canStatus() and NTCAN_IOCTL_GET_SERIAL)

Firmware V4.2.0.6
2010-04-15 (internal release)
• Now also showing connected ELLSI clients and their statistics
• Improvements for DHCP
  (e.g. Hostname now configurable and NTP-server also taken by DHCP)
• Webpage Network Configuration” now shows actual active configuration instead of just last saved settings

Firmware V4.2.0.5
2010-02-16
• Minor changes for ELLSI

Firmware V4.2.0.3/4.2.0.4
2010-02-10
• Fixed esdcp finding the device when auto-ip was set
• Decreased time for dhcp configuration from 5 minutes to 1 minute
  (So 2 minutes until auto-ip is set)

Firmware V4.2.0.2
2009-11-20
• Added 20k baud mode to allow baudrates < 50 kBit/s

Firmware V4.2.0.1
2009-10-14
• Improved esdcp finding the device when there was no gateway set

Firmware V4.2.0.0
2009-10-01
• Initial release