2019-07-29

Client: 60.0
Firmware: 60.0

Notes:
- The firmware 60.0 and 60.0-beta are exactly the same firmware.

2019-06-07

Client: 60.0 beta
Firmware: 60.0 beta

Firmware:
New features:
- Added BracketRacing lap timing mode (Configuration pane / Lap timing)
- Added triggered transmit mode for CANbusExport
- Added Speed Source for ecu.speed - CAN, GPS or custom channels such as Digital Inputs (Configuration pane / Speed source for ecu.speed).
- Added list of additional circuits
- Increased number of Tables to 20 (up from 10)

Improvements:
- ResetSession button is now resetting also the CurrentLapTime, LastLapTime, PredictiveLapTime, adu.track.lap, adu.track.gainLoss, adu.track.lapTime, adu.track.lapDistance
- PredictiveLapTime and adu.track.gainLoss is now calculated after the first crossing of the start/finish line
- Visibility Channel is now working for UIUpdateTime

Changes:
- The adu.track.lapTime channel can now be negative (in some cases in the Bracket Racing)

Client:
New features:
- GraphLog: Shift+S toggles between lines and points+lines

Improvements:
- Widths of columns are preserved: ProjectTree, TextLog, VariablesInspector

CAN streams:
- LinkECU_GenericDash.canx - divider for oil pressure changed

Ecumaster USBtoCAN:
- Internal software updated to v14.0 (automatic update offered when starting the ADU Client). This software improves compatibility with an older version of PMU/ADU Client.
2019-04-22
Client: 55.2 beta3
Firmware: 55.2 beta3

Improvements:
– Rendering the TrackRecordTable and Grid controls has been optimized.

Fixes:
– Fixed bug when best time appears multiple times on the Track Record Table.
– Rendering of empty group with SyncRendering=1 no longer causes corruptions.

2019-04-15
Client: 55.1.1 beta2.1
Firmware: 55.1 beta2

Fixes:
– The dimensions of the Shift light table is now always 9 LEDs x 7 gears. The project needs to be saved and opened from the disk or the firmware upgrade needs to be performed.
– Using the menu command Restore to default more than 50 times no longer leads to the Client software crash.

2019-04-04
Client: 55.1 beta2
Firmware: 55.1 beta2

New features:
– New Memory Report window (Tools/Memort report...)

Improvements:
– Support of Default Text and Default Color in Enumeration is finally working.
– BarGraph: Edit Gradient window - “Remove gradient” button added
– BarGraph: Color from Gradient is no longer multiplied by Bar Color.
– BarGraph: When the alarm is active, the gradient bar is displayed using a solid color (Alarm color).
– Ecumaster USBtoCAN adapter - improved firmware upgrade on Windows XP
– Peak PCAN adapter - added support for Windows XP

Fixes:
– First value of the Calibrated Analog Sensor after startup is consistent with later values.
– Analog Inputs with decimal places can be properly sent to CAN
– Duplicating element with the name containing 30 characters no longer leads to the project corruption.
– Group control: proper arrangement of controls with zero width or height (such an empty Text control)
– Bug with start/finish line introduced in version 55.0 beta1 fixed
– Bargraph gradients: proper refresh on device after change in the Client software

2019-03-22
Client: 55.0 beta1
Firmware: 55.0 beta1
New features:

- Channel Simulator offline and online (press F9 and type “simulator”)
- New page backgrounds
- Ctrl+K pressed on the Preview window, saves the current page image (800x480) to a png file
- ADU builtin accelerometer calibration - new channels adu.latG/adu.longG
- Gradients for bargraph
- Channels gps.longitude / gps.latitude can be exported to CAN (32bit values)
- Switch element can now count downwards using channel “Input channel down” / “Trigger edge down”
- Now the ADU is visible in the Light Client
- Detection of Autosport ADU version
- Active alarms are written to log. Each alarm channel has .active property
- Another log can be appended after the loaded log file.
- Compare laps - use the Compare laps icon on the Graphlog toolbar. Use cl.timeSlip channel to show the difference in seconds between two laps. The x-axis of the log can be selected between distance or time.

New CAN, serial streams
- AEM serial stream,
- GEMS serial stream,
- ABIT M1 CAN stream,

Improvements:

- Support for Kvaser CAN adapter was improved
- New Ecumaster USB2CAN firmware (0.12)
- Added SaveAs prompt when connecting the ADU with different firmware to prevent project loss in the Client.
- Larger Preview window
- Widths of columns in the Project Tree are properly restored
- New image blend mode (Multiply)
- Bar graph:
  - New Bar type - Horizontal bi-directional and Vertical bi-directional
  - New Bar style - Simple without decoration
- RPM Bar:
  - Nonlinear scale
  - Different tick configuration
  - Numbers describing RPMs can be centered under tick marks
  - RPM Bar can use texture as a gradient

Fixes:

- Channels gps.longitude / gps.latitude are properly displayed by Text control.
- Text cropping issues fixed in Texture Selector (high DPI).
- Graphical glitches for RPM round gauge fixed
- Changing the speed of the CAN2 no longer causes Bit Stuffing Errors.
- Enumeration of type Bitfield used inside the Grid control: when the textual representation of such Enumeration exceeds 64 characters the ADU device no longer freezes. **Firmware upgrade is recommended.**

Changes:
– Tire temperature cameras base address changed to 0x420
– Tire temperature cameras range increased to 255C
– There are 30 icons or textures available for the user

Important:
– ADU project created with this ADU client version cannot be loaded to the older version of the software

Client: 52.6 (MASTER)
Firmware: 52.6 (MASTER)

New features:
– Detection of an Autosport ADU version in the Client software

Improvements:
– Support of Default Text and Default Color in Enumeration is finally working.

Fixes:
– Text cropping issues fixed in Texture Selector (high DPI).
– Size of Texture Selector window fits properly small screens.
– Size of Load Page Template window fits properly small screens.
– Duplicating element with the name containing 30 characters no longer leads to the project corruption.
– Changing the speed of the CAN2 no longer causes Bit Stuffing Errors.
– Enumeration of type Bitfield used inside the Grid control: when the textual representation of such
  Enumeration exceeds 64 characters the ADU device no longer freezes. Firmware upgrade is recommended.

Client: 52.5 (MASTER)
Firmware: 52.1 (MASTER)

MASTER RELEASE (please see MASTER RELEASE note in version 50.0).

Fixes:
– BaseID of the PMU1/PMU2/PMU3 Mob is now properly validated.

Client: 52.4 (MASTER)
Firmware: 52.1 (MASTER)

MASTER RELEASE (please see MASTER RELEASE note in version 50.0).

New CAN streams:
– Holley_HEFI.canx (Base ID need to be changed according to serial number of the Holley HEFI ecu).

Fixes:
– Switching access to the CAN between ADU / PMU / LightClient works in all cases.
– Enumeration dialog has now proper size on high DPI monitors.
– Display Size in the Specification page of the Help file has now proper values.

**Client: 52.2 (MASTER)  
Firmware: 52.1 (MASTER)  
2018-11-26**

**MASTER RELEASE (please see MASTER RELEASE note in version 50.0).**

Changes in default project (Documents\ADU\pg_page1.adu):
- GPS CANbus changed to CAN2.
- Tire temperatures camera CANbus changed to CAN2.
- CAN2 speed changed to 500 kbps.
- Tire temperature camera range changed to 40-100 °C.
- X axis of the “Auto brightness” table changed to “adu.lightSensor”.

**Fixes:**
- Client now properly resaves the log file loaded from the USB stick.
- Missing channels have been fixed in “pg_rallyRoad” and “pg_racingTrack” templates.

**Client: 52.1 (MASTER)  
Firmware: 52.1 (MASTER)  
2018-10-11**

**MASTER RELEASE (please see MASTER RELEASE note in version 50.0).**

**New features:**
- Scatter Plots. (press F9 and type “scatter”)
- New Report Channels window.

**Fixes:**
- Proper use of channel gear in the Parametric mode of the Shift light.
- Classic gauge alarm condition bugfix.
- Fuel level filter is working correctly for value 100%. The precision of the filter was also improved.

**Client: 51.2 (MASTER)  
Firmware: 51.0 (MASTER)  
2018-10-11**

**MASTER RELEASE (please see MASTER RELEASE note in version 50.0).**

**Fixes:**
- Client program can work with Firmware 45.0 or earlier without any problems.
- Colors of the classic RPM bar can be customized.

**Client: 51.1 (MASTER)  
Firmware: 51.0 (MASTER)  
2018-09-25**

**MASTER RELEASE (please see MASTER RELEASE note in version 50.0).**

**Fixes:**
- Application no longer crashes when editing a page with a lot of details.
Client:       51.0 (MASTER)
Firmware: 51.0 (MASTER)

MASTER RELEASE (please see MASTER RELEASE note in version 50.0).

New features:
- New "Vertical" style added to RPMBar.
- New background theme “Theme 3” added to page.

Fixes:
- Bitfields such as ecu.errorFlags can be used to control color again.
- Loading page from template no longer moves this page to random group in the ProjectTree.

Client:       50.1 (MASTER)
Firmware: 50.0 (MASTER)

MASTER RELEASE (please see MASTER RELEASE note in version 50.0).

New features:
- Switching CAN adapter between ADU and PMU. You can work with two clients at the same time and switch adapter between them. PMU Client .42.8 or newer is required.

Fixes:
- When switching to TRACK desktop client program no longer crashes.

Client:       50.1 (MASTER)
Firmware: 50.0 (MASTER)

MASTER RELEASE.
- Some graphical elements like Gear Indicator or RPM classic indicator has been changed. Please check your pages after upgrade

New features:
- Redesigned page layout
- New Gear Indicator font
- New RPM round indicator
- New style for bar graphs
- Themes for page background
- Enumerations - channel to text functionality. Use it by choosing Quantity=Enumeration.
- Builtin support for PMU1 (0x668) / PMU2 (0x670) / PMU3 (0x678). Every PMU has its own 87 channels and does not consume any CANbus inputs.
- Analog output
- USB status and USB buffer usage is displayed on the Status bar.
- Odometer/Distance meter can use gps.speed as the speed source.
- Fuel level 2nd sensor support added + ecu.fuelLevel2 channel added
- Grid page element added

New/updated CAN streams:
- Syvecs / LifeRacing
- Emtron
- Megasquirt (temperatures and pressures bug fixed)
- EMU BLACK ecu.errorFlags.FPR added
- Autronic user channels support added

Improvements:
- Simplified definition for tables such as rotary switch calibration and analog gear sensor. Mathematical rounding is performed. No need to move the axis value by half of the period. Old tables will be upgraded.
- Increased element count:
  - Numbers up to 40.
  - Functions up to 40.
  - CANbus inputs up to 150.
- Page templates moved to TEMPLATES folder and user templates to TEMPLATES/USER
- .CANX files moved to CANX folder and user .CANX files to CANX/USER
- Added Guard time to alarms. Alarm will appear after condition is satisfied for this time.
- Fixed bug with LCD screen reset when voltage drops under 5V
- Shift light table - swapped axis
- Serial receiving status (adu.diag.serial.state channel)
- adu.lap.time and adu.lap.distance channels added
- Button can be assigned to reset min/max data of the ecu.* channels.
- Displayed text and value (text object) can be divided into two lines

Fixes:
- (Client) Proper precision for exporting gps.longitude/gps.latitude to .CSV
- Fixed ADU freeze when changing CAN2 speed when CAN bus line has different speed.
- Value offsets are properly saved when exporting CANX files.
- Diagnostics channels adu.diag.can1/2.rxErrors/txErrors work as expected

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2018-08-22

**Client:** 0.049.4 (RC1.4)  
**Firmware:** 0.049.4 (RC1.4)

Fixes:
- (Client) Exporting log data to .cvs no longer causes a crash.
- (Client) Using Temperature Wizard in Analog input no longer causes a crash.
- (Client) Closing the last panel on a desktop no longer causes a crash.
- (Firmware/Client) Image tiling (Tile X, Tile Y) now works as expected.

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2018-08-01

**Client:** 0.049.3 (RC1.3)  
**Firmware:** 0.049 (RC1)

Fixes:
- Encoding issue no longer causes a crash when working with some non-English version of Windows.
- Panels from inactive tabs are properly refreshed after editing an element.
- Setting Decimal places to 0 in Alarm dialog no longer causes a crash.

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2018-07-27

**Client:** 0.049 (RC1)  
**Firmware:** 0.049 (RC1)
Please backup your project before upgrading.

This Client is fully functional only with Firmware 49. An automatic upgrade will be proposed when connecting. Projects from the older version will be automatically converted to the new firmware when loaded to the Client.

New features:
- Startup screen with custom texture. Import your texture, click Startup Screen / Enable and that's it.
- New element 'Timers' - count up / down, up to 200 hours, 0.01s precision. Can be displayed with Text control (use h:mm:ss unit to format).
- New operation 'Changed' - detecting the change of the target channel (e.g. displaying overlay when calpot changes)
- Image control: Mirroring textures added
- Text control: *Italic* font style added

Improvements:
- All textures can be scaled, even non power of two (e.g. 99x99)
- Alarms improved - displaying value, unit, qualifier, custom height
- Multiple alarms mode - cycle and only highest priority
- BarGraph: Text is displayed rotated vertically when Vertical type selected
- Ecumaster USBtoCAN: improved device detection
- ShiftLight: 3D table option

Updated CAN streams:
- Motec_M1.canx updated

Fixes:
- adu.acccX/Y/Z is now of type “Acceleration”
- Two graphical corruption has been fixed - white text bug and displaying only the upper half of the text.

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**2018-07-18**

**Client:** 0.048.1 (Beta8.1)
**Firmware:** 0.048  (Beta8)

Fixes:
- (Client) Analog input: Typing the values in the Linear sensor possible again.
- (Client) Preview window: Fixed unit conversion and unit display for Analog inputs.

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**2018-07-16**

**Client:** 0.048 (Beta8)
**Firmware:** 0.048 (Beta8)

Please backup your project before upgrading.

This Client is fully functional only with Firmware 48. An automatic upgrade will be proposed when connecting. Projects from the older version will be automatically converted to the new firmware when loaded to Client.

New CAN/serials streams:
- Autronic serial protocol SM4 V1.01-1.07, SM4 v1.08, SM4 v1.09
- DTA S Series
- Maxx ECU
- LinkECU G4 (Generic Dash)
- Ecumaster PMU2/PMU3 for easier multi-pmu integration
Updated CAN streams:
- EMU_BLACK.canx - flags1-flags5 mapped correctly
- Motec_M1.canx updated
- PMU.canx changed to match PMU2/PMU3.canx

New features:
- Units support (miles, psi, °F, etc)
- Duplicate elements in Project tree (Ctrl+D)
- Support for CAN compound streams (4, 8, 16 bits)
- Setting odometer, distanceMeter, engineHours and hoursAtLaod (menu Tools/Set meters...)
- Support for Calibrated analog sensors (with Wizard for predefined sensors like in EMU software)
- Decimal places support in Analog inputs, Tables and Numbers.
- “Reset min/max mode” can be set to “Every power off” (like firmware 0.46 and earlier)
- gps.latitude/gps.longitude can be displayed by Text control (6 decimal places possible)
- Overlays: “Overlay” and “Overlay with background” page type

Improvements:
- Tires temperature monitoring - new display type (4 bars)
- adu.engineHours and adu.hoursAtLaod can be displayed as hh:mm or hh:mm:ss (use Unit to change)
- Ecumaster USBtoCAN device: reliability and performance improvements (USBtoCAN software update to v0.10 is offered automatically when starting ADU Client).
- Faster Delete in Project tree

Client: 0.047.3 (Beta7.3)
Firmware: 0.047 (Beta7)

2018-06-22

Improvements:
- Ecumaster USBtoCAN device: reliability and performance improvements (USBtoCAN software update to v0.9 is offered automatically when starting ADU Client).

Fixes:
- Kvaser CAN interface is working again (regression from version Beta6)

Client: 0.047.1 (Beta7.1)
Firmware: 0.047 (Beta7)

2018-06-14

Fixes:
- CANbus Input channels are now visible in Logged Channels window after connecting to a device / loading the project.
- ECU channels properly sorted in Log window (ecu.errorFlags vs ecu.flags1)
- Fixed rare crash when clicking on Page from Project Tree window.

Client: 0.047 (Beta7)
Firmware: 0.047 (Beta7)

2018-06-13

Please backup your project before upgrading.

This Client is fully functional only with Firmware 47. An automatic upgrade will be proposed when connecting. Projects from the older version will be automatically converted to the new firmware when loaded to Client.
New features:
- Permanent meters added: odometer, distance meter, engine hours, hours at load
- Ecu channels min / max don't reset at power off. It is reset when firmware is upgraded.
- Fuel level sensor filter module
- Tires temperature cameras support added (separate channels, visualization)
- Export to canx icon added to CANbus Message Object dialog
- AEM v2 canx file added
- Megasquirt 2 & 3 canx file added
- Hondatata K Pro serial protocol support added (needs an signal inverter!)
- Track data (records) for give track can be reset with the button
- Auto-refresh of page preview (all channel data on PC is the same as on device)

Improvements:
- GPS data real time processing improved (accuracy)
- Tires temperature monitoring indicator improved

Client: 0.046 (Beta6)
Firmware: 0.046 (Beta6)

Please backup your project before upgrading.

This Client is fully functional only with Firmware 46. An automatic upgrade will be proposed when connecting. Projects from the older version will be automatically converted to the new firmware when loaded to Client.

New features:
- User defined tracks
- OBD2 support
- Lap section times window
- Track Preview: Reference Lap Wizard and Editor, single lap support
- Tracking GPS position of cursor in GraphLog on Track Preview window.
- Browse Log Window (Shift+F4) - counting ecu.errorFlags errors
- Channel "ecu.boost [bar]" added (calculated from ecu.map if not available in CAN stream)
- Texts update frequency added (BarGraph/Gauge/ClassicGauge/Text controls)

Improvements:
- Password protection is fully functional
- GearIndicator and ecu.gear works as expected (-1 – Reverse, 0 – neutral, 1 - 1st gear, etc).
- Added 3rd LED color for User LEDs.
- GearIndicator font has been improved

Fixes:
- Autoscale works properly for gps.latitude / gps.longitude channels

Auto detection track list:

BE: Zolder, Circuit de Spa
CZ: Automotodrom Brno
LV: Bikernieki
Client: 0.043.2 (Beta4.2)  
Firmware: 0.043.1 (Beta4.1)

Fixes:
- Changing “Decimal places” of the Bar Graph is working properly.

Improvements:
- Improvements of UI for high DPI displays.

Client: 0.043.1 (Beta4.1)  
Firmware: 0.043.1 (Beta4.1)

Fixes:
- Image control is now working properly when alpha=255 is used
- Alarm icon has been fixed.
- Fixed reconnection bug in Ecumaster USBtoCAN.

Client: 0.043 (Beta4)  
Firmware: 0.043 (Beta4)

Please backup your project before upgrading.

This Client is fully functional only with Firmware 43. An automatic upgrade will be proposed when connecting. Projects from the older version will be automatically converted to the new firmware when loaded to Client.

Changes:
- CAN2 terminator work correctly (in previous versions it worked backward)

New features:
- Custom textures and icons
- Motec M800 Set1 stream
- Reporting CANbus status on status bar (requires firmware upgrade of USBtoCAN adapter)

Improvements:
- GPS lap timing improved
- RPM Bar improved
- ecu.errorFlags added (supported by EMU/BLACK/M800)
- New operations added to Page Editor (also in popup menu):
  - Attach to group (Alt+Left)
  - Detach from group (Alt+Right)
  - Rename group (Alt+R)

Fixes:
- Channel ecu.tps fixed in EMU / BLACK serial stream
- Fixed page switch on startup when analog input was used as Next page switch
- Fixed CLT Max / IAT Max / CAN status on Download Log Window (Shift+F4)

Known issues:
- Password protection is not working in any ADU firmware

Client: 0.042.3 (Beta3.3)
Firmware: 0.042.0 (Beta3)

Improvements:
- Page Editor: icons added
- Page Editor: texture selector added

Fixes:
- Fixed crash when adding Dashboard Preview window to empty desktop.

Client: 0.042.2 (Beta3.2)
Firmware: 0.042.0 (Beta3)

Improvements:
- Updated Preview DLL for Windows Client. The client will start properly every time and Preview window is always properly displayed.

Client: 0.042.1 (Beta3.1)
Firmware: 0.042.0 (Beta3)

Fixes:
- Fixed crash when using Load template button of the Page Editor on empty project.

Changes:
- ECUMASTER serial protocol is set as default in the example project

Client: 0.042.0 (Beta3)
Firmware: 0.042.0 (Beta3)
Please backup your project before upgrading.

This Client is fully functional only with Firmware 42. An automatic upgrade will be proposed when connecting. Projects from the older version will be automatically converted to the new firmware when loaded to Client.

New features:
- **ECUMASTER serial protocol** (exposed by ecu.* channels)
- **AIM serial protocol** (exposed by ecu.* channels)
- EMU/BLACK/Pectel/Link/Vi-Pec CAN streams now always overrides the same "ecu.*" channels. It's now possible to easily change the ECU streams (CAN and serial). CAN stream has priority over serial.
- **New user interface** - press F9 to add new window
- **ECUMASTER GPS support**
- **Automatic brightness control**
- **Support for Aux1/Aux2 low side outputs**
- **ecu.* channels** now have Min value/Max value (available in Text control).
- Delays in IsTrue/IsFalse/comparision operations (e.g. channel is 1, when ecu.rpm > 2000 for 5s)
- Pulse operation - retrigger (retriggering pulse in the middle of active pulse)

Improvements:
- Dashboard Preview window is now resizable

Fixes:
- Fixed crash when grouping elements inside existing group.
- Page background color is working as expected

Changes:
- Channel adu.batteryVoltage changed to adu.battery
- Flex Fuel channels changed from ff.* to adu.ff.*

Known issues:
- Password protection is not working in any ADU firmware
- Sometimes Client is unable to start and the following message appears "FT8XXEMU.DLL not responding". Please press OK button and try to re-launch the Client program.
- Sometimes Dashboard Preview window is blank. Please Exit and try to re-launch the Client program.

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2018-02-26

Client: 0.041.1 (Beta2.1)
Firmware: 0.041.0 (Beta2)

Please backup your project before upgrading from version 40.

This Client is fully functional only with Firmware 41. An automatic upgrade will be proposed when connecting. Projects from the older version will be automatically converted to the new firmware when loaded to Client.

Fixes:
- Fixed crash when “Min” equals “Max” in BarGraph
- Fixed positioning issues, when setting X/Y directly from property grid

Client: 0.041.0 (Beta2)
Firmware: 0.041.0 (Beta2)

Please backup your project before upgrading.

This Client is fully functional only with Firmware 41. An automatic upgrade will be proposed when connecting. Projects from the older version will be automatically converted to the new firmware when loaded to Client.

New features:
- Support for Motec M1 CAN stream (Use Import CANX from Project Tree)
- Support for Ecumaster EGTtoCAN CAN streams (Use Import CANX from Project Tree)
- Added “Alternating fill color” for Group control. (Also: Arrangement=Vertical and Filled=[x] need to be set)

Improvements:
- RPM channel can be used with Gauge, BarGraph, and ClassicGauge.
- LED1 can be used to show the status of data logging to USB memory (like in firmware 40.0, but is off by default). Use “User lights” to activate this option.
- Removed ten 500 Hz test channels from “Debug2” log section. These channels have consumed half of the log bandwidth.

Fixes:
- Several crash bugs have been fixed.
- Fixed some precision issues in BarGraph (-1.00 was incorrectly displayed as -0.99).
- Replaced EMU / BLACK CAN Stream in example project to the recent CANX (some channels such as c_ecu_lambda was incorrect)

Changes:
- You will not be able to downgrade project saved with firmware 41 to an older version.

Firmware: 0.040.1 (Beta1.1)

This is firmware only update. Please download and unpack provided ZIP file. Next please use “File/Ugrade firmware” menu command.

Fixes:
- Small LED below 3 user LEDs on left side is no longer blink.
- LED1 is no longer showing status of data logging to USB memory.