



June 17, 2024, V8.4.55 Public Release - Update 2

2024-06-17 - EFILive Support - Comments (0) - Download

The June 17, 2024 Public Release - Update 2 software is available [here](#)

Version Numbers

- V8 Software: VV8.4.56
- V7.5 Software: V7.5.48

FlashScan/AutoCal V3:

- Firmware: V3.00.124 (June 17, 2024)
- Boot Block: V3.00.006 (Feb 26, 2021)

FlashScan/AutoCal V2:

- Firmware: V2.08.207 (June 6, 2024)
- Boot Block: V2.08.009 (Feb 26, 2021)

EFILive V8

V8.4.56 (Public Release - Update 2)

- Fixed [←] button in the speedo calculator, shift point correction tab page. The button was not setting the "New Calibration Values".
- Added checks and confirmation dialogs to the shift point correction procedure.
- Added an Edit->Properties option to allow the Tab key to be used to move the focused cell inside calibration tables.
- Added Ctrl+Alt+Arrow hotkeys to move selection area on calibration tables or scan tool maps.

V8.4.55 (Public Release - Update 1)

- Fixed file name generation when saving files with names containing multiple dots.
- Fixed CMB (CM849) flash failures that return \$0281 or \$0101 (no data received) when attempting to flash.
- Fixed LBZ/LMM flash failures that return \$0281 (no data received) when flashing some files.

- Mitigated the \$053E error which occurs when a VIN-restricted tune file is flashed into a Cummins controller that is in boot mode (usually due to a previously failed flash). When the controller is in boot mode the VIN cannot be retrieved to validate against the VIN-restricted tune file. Now the VIN is validated against the VIN license for that controller. This mitigation strategy is not available with V2 devices because the VIN is not stored on V2 devices.

V8.4.54 (Public Release)

- Added new Lua command line function: `_efiMakeDir()`. See [EFILive Command Line Reference.pdf](#) for details.
- Fixed comparisons between tables where the axis in one or both tables contain identical labels on multiple rows or on multiple columns.
- Enabled Cummins flash speed selections for Aisin TCM.
- Added engine type and transmission type information to the calibration summary for most controllers.

V8.4.53 (RC2)

- Added QR Code generator that encodes the engine and transmission identification data on the [F4: OBD]->[Details] tab page.
- Fixed Soft Max and Hard Max display values which were incorrectly showing the minimum value instead of the maximum value.
- Fixed flash recovery attempts (after a failed flash) for some controller types (such as CM2350B and LMM) that were hanging at the start of the flash recovery for up to 3 minutes before failing.
- Fixed "Allow OS Override" for E41 controller, the override allows the user to force the E41 to be full-flashed with a potentially incompatible operating system.

V8.4.52 (RC1)

- Fixed "Access Violation" error after changing the name of a calculated PID that is currently being displayed in one of the scan tool's charts, maps or gauges.
- Added option to set the keep-alive polling frequency during pass-thru data logging. See: Edit -> Properties -> Scan Tool -> Data Logging -> Advanced -> Keep Alive.

V8.4.51

- Fixed CM2100 (CMC) CSP5 custom calibrations not showing up in the editor.

V8.4.50

- Added option to prefix item labels in the [F4: OBD] window to ensure that all display labels are unique.
See: Edit->Properties->General->Settings->OBD Options.
- Updated operating system compatibility matrix.

V8.4.49

- Fixed problem where opening a *.hex file, then re-saving it as a *.ctz file, then re-opening the *.ctz file would sometimes result in the error: "Too many sectors".
- Cax8 calibration definitions longer than 32 bits were not being correctly identified as "changed" after the calibration's value was edited/changed in the editor.
- Minimum and maximum values are now displayed in hexadecimal if/when the calibration flags are set to display the calibration in hexadecimal (i.e. flag value of \$1000 - see /Documents/EFILive/V8/User Defined Cax8/template.cax8 for flag definitions).
- Hexadecimal precision is now supported. Rather than setting the number of digits after the decimal place (as is done when displaying decimal values), the precision setting for hexadecimal values sets the minimum number of hexadecimal digits to be displayed.

V8.4.48

(Build 711)

- Fixed startup hanging on EFILive_ScanAndTune.exe.

V8.4.48

- Standardized start-up processing across all applications.
- Updated memory manager dll.
- Added more detailed application trace logs.

V8.4.47

(Build 702)

- Using the hotkey Ctrl+Alt+X was only re-loading the first *.cax8 file. Additional *.cax8 files were not being re-loaded.

(Build 701)

- You can now search for the Provider ID when searching for user defined cax8 calibrations.
- Cax8 files may now also be stored in "cax8_XXX" subfolders.
- Two new functions added to BBX scripting: bb.AddFilter() and bb.GetFilter() which allow you to change the CAN filters for communicating with different 11 and 29 bit CAN IDs.
- Invalid PIDs are now detected correctly when attempting to log them on Cummins Heavy Duty controllers. Previously the software attempted to log invalid PIDs resulting in junk data being logged.

V8.4.46

- Added check sum and flash support for known E46 operating systems.

- Added A50 TIS file set import option.

V8.4.46

- Added option to search VIN licenses for matching controller, serial or VIN.
- Added E86A and E86B TIS file set import option.

V8.3.45

- Added E46 TIS file set import option.
- Fixed pass-thru logging fault when logging PIDs from both an ECM and TCM when only an ECM is present that would sometimes cause the one of the ECM PIDs to display as "N/A".
- Black box logging a selection of PIDs from both an ECM and TCM when only an ECM is present is now supported. The TCM PIDs will show as "N/A" on the FlashScan/AutoCal screen and will be excluded from the data log when the file is opened in the V8 Scan Tool.
- Fixed checksum calculation that would compute the wrong checksum for a small subset of CM849 (CMB) and CM2100 (CMC) tune files, which in turn would cause the flash to fail with error \$340.
- Added -SQ (Quiet) and -SM (meta data only) command line options to provide better control over how the default tune file is opened when running Lua scripts from the command line prompt.
- The timing calculator button is now enabled correctly when editing the CSP5 injection timing tables for CM2450B (CMF).
- Added the following note to the Cummins Timing Calculator description: If {D0514} "Injection Pulse Calculation" exists and is set to "Calculated", the timing tables are not used.
- The EFILive calibration definition file name is now displayed in the [F3: Calibration] tab page of the Tune Tool window.
- The user defined calibration definition base file name is now displayed in the [F3: Calibration] tab page of the Tune Tool window.
- Updated envelope support when importing TIS file sets into EFILive, to fix error: "Invalid envelope header".
- Added a "Quiet" option to prevent error message popups when opening tune files via the Lua script function `_efiOpenFile(name,options)`.
- Fixed user defined custom menu descriptions not handling embedded new-line (\n) and embedded quotation characters correctly.
- Added option to export the current menu structure to a text file that can be used as the basis for a user defined custom menu.
See option: Setup -> F2: Tools -> F3: Export -> F1: Menu Structure.
- Fixed floating point format error when loading *.cax8 files on PC's using locales that use a comma as the decimal separator in numeric values.

- Fixed E86B bin mapping helper tool which was incorrectly computing E86A mapped addresses.
- Changed bin mapping tool to explicitly warn users when a hexadecimal value was entered without the \$ prefix.
- Added "Clear DTCs" option in scan tool so that DTCs can be cleared while data logging.
- Tune files that are flagged as "Cannot be Viewed" and/or "Cannot be modified" can now be viewed and/or modified if the master FlashScan device is connected to the PC.
- Fixed auto-generated, auto-incrementing file names which would incorrectly add multiple incrementing prefixes or suffixes to the filename being generated.

V8.3.44

- Added VIN change tracking, each VIN change is now saved into the file: Documents\EFILive\V8\Trace\VIN_Changes.ini
- Blank labels are no longer allowed in Scan Tool Map axis definitions. Blank labels prevent the maps from linking with the axis PIDs.
- Added two new buttons to the Scan Tool Maps property editor on the [Col] and [Row] tab pages. The new buttons allow you to easily clear all the labels on the column or row axis.
- To remove the selected PID from a Scan Tool Map, just re-select the current PID (the current PID is displayed with a yellow star icon).
- Fixed Firmware programming on V3 devices to correctly detect when the V3 device has rebooted successfully.
- Fixed "Access Violation" that occurs if a virtual table is defined in a cax8 file and the underlying physical tables that support the virtual table are undefined or incorrectly defined.
- Fixed problem when comparing two tune files where the alternate calibration's data will be displayed incorrectly if the calibration's axis is defined via another axis-calibration and that axis-calibration is defined as a table with a single row and multiple columns representing each axis value (i.e. row deposit). If the axis-calibration is defined as a single column with multiple rows representing each axis value (i.e. col deposit), then the alternate calibration's data will be displayed correctly.

V8.3.43

- Added right-click option to display long descriptions in the [F2: Scan]->[F3: Data] tab page for PIDs that return State Encoded Data (SED), such as OBDSUP.

V8.3.42

- Added additional controller seed/key options for unlocking controllers locked using

non-standard command.

V8.3.41

- Fixed A40 check sum updates to include updating the OS segment check sum.
- Fixed VIN updating via Lua scripting not working for some controller types.

V8.3.40

- Updated the Transpose option so that when data is displayed using a 2D chart, the 2D chart is also transposed to match the transposed table data.
- Fixed "Range Error" when loading corrupted or damaged "out of range" values from ..\Config\EFILiveScanAndTuneLayout.ini
- Fixed fault when using a Pro-License enabled FlashScan to add the Override OS compatibility option. The OS to be overridden was not being saved into the tune file if the Override OS compatibility was the only active security option.

V8.3.39

- A40 operating system checksum now displays an appropriate description, based on whether or not the operating system is included in the tune file.
- Updated the Cummins unlock algorithm to handle some odd-ball controllers that were incorrectly reporting "locked with a custom key".
- The controller's standard seed/key values are now displayed on the [F3: Tune] -> [F2: Read] -> [Lock/Unlock] tab page.
- If any line in a *.cax8 file contained just spaces the *.cax8 file would fail to load with error "List index out of bounds".
- Added AutoCal/FlashScan connection selection icons to the bottom right of the Tune window to make it easier to swap between AutoCal and FlashScan devices prior to reading/flashing a controller.
- Added AutoCal/FlashScan connection selection icons to the bottom right of the Licenses window to make it easier to swap between AutoCal and FlashScan devices when managing licenses.
- When opening the tune window, the connected device is no longer automatically changed to FlashScan. If an AutoCal was connected prior to opening the tune window, then the AutoCal remains connected once the tune window is open.

V8.3.38

- Fixed fault when reading E35 (LBZ/LMM) controllers that would result in an "Index Out of Range" error.

FlashScan/AutoCal V3 Firmware

V3.00.124

- Fixed fault where the controller's serial number and/or VIN might have an extra "0"

appended to it.

V3.00.123

- Fixed CMB (CM849) flash failures that return \$0281 or \$0101 (no data received) when attempting to flash.

V3.00.122

- Fixed "Allow OS Override" for E41 controller, the override allows the user to force the E41 to be full-flashed with a potentially incompatible operating system.

V3.00.121

- Fixed timing issues with keep-alive poll frequency when data logging VPW based controllers.

V3.00.120

- Updated operating system compatibility matrix.

V3.00.119

- Updated operating system compatibility matrix.

V3.00.118

- Fixed encrypted *.cax8 files not loading with error "Invalid cryptographic operation" when using FlashScan V3 as the hardware decoder.

V3.00.117

- Fixed data logging corruption when logging PIDs from both ECM and TCM when one or more controllers are not present or one or more PIDs are invalid.

V3.00.116

- Version synchronization.

V3.00.115

- Fixed Global-B serial number formatting issues.

V3.00.114

- Version synchronization.

V3.00.113

- Fixed CMB/CMC flash erase failure.

V3.00.112

- Fixed the file delete option which would not actually delete the selected file.

- Added simple Lua data logger script example that shows how to data log E38 PIDs.
See the following files:

1. \Documents\EFILive\V8\User Defined Menus\SampleCustomMenu.txt
2. \Documents\EFILive\V8\User Defined Menus\Lua\E38_DataLog.Lua

iii. \Documents\EFILive\V8\User Defined Menus\Lua\PLD_io.Lua

- Added new black box scripting functions: bb.KeyPress(), bb.Log(), bb.TimeStamp().
- Cummins SGM (Security Gateway Module) detection has been enhanced to make SGM detection more reliable.

V3.00.111

- Added additional controller seed/key options for unlocking controllers locked using non-standard command.

V3.00.110

- Updated CVN display option to show all available CVN values even when no matching part numbers are available.

V3.00.109

- Fixed OS number showing up incorrectly on some controllers that use ASCII data to transmit the part numbers.
- Added Cal ID to the Display VIN/Info diagnostic display screen.

V3.00.108

- Version synchronization.

V3.00.107(2)

- Fixed CAN bus capture option which could fail if/when an unknown CAN module transmitted unexpectedly on the CAN bus.
- Re-designed USB retry algorithm to mitigate old/buggy Windows USB drivers on some laptops. The buggy Windows USB drivers could cause USB messages to be lost which in turn could cause errors \$0101 and \$0322 to be reported. Updating Windows USB drivers can also help to minimize \$0101 and \$0322 errors.

V3.00.106

- Added option to allow firmware to be rolled back to an earlier version. The minimum firmware version to which the device can be rolled back is: V3.00.105. As new firmware versions are released you will be able to roll back to a carefully selected and compatible range of previous versions. The option to allow the firmware to be rolled back is Options -> Self Tests -> File System Tests -> Reset -> Roll Back Firmware.

FlashScan/AutoCal V2 Firmware

V2.08.207

- Fixed CMB (CM849) flash failures that return \$0281 or \$0101 (no data received) when attempting to flash.

V2.08.206

- Fixed "Allow OS Override" for E41 controller, the override allows the user to force the E41 to be full-flashed with a potentially incompatible operating system.

V2.08.205

- Version synchronization.

V2.08.204

- Updated operating system compatibility matrix.

V2.08.203

- Updated operating system compatibility matrix.

V2.08.202

- Fixed issue that caused some Cummins controllers to fail to unlock at the start of the flash process.

V2.08.201

- Fixed issue that caused flashing some CM2350B (CME) and CM2450B (CMF) controllers to fail midway through the flash.

V2.08.200

- Fixed controller detection problems when target controller is in dead-poll mode after a failed flash.

V2.08.199

- Fixed Global-B serial number formatting issues.

V2.08.198

- Version synchronization.

V2.08.197

- Fixed CMB/CMC flash erase failure.

V2.08.196

- Updated V2 firmware to remain compatible with the latest FlashScan/AutoCal V3

firmware and the latest EFILive V8 software.

V2.08.195

- Added additional controller seed/key options for unlocking controllers locked using non-standard command.

V2.08.194

- Added Pro Tuning option to bypass flash restrictions on ECMs that cannot be identified, for the following ECM types: E01, E41, E88, E90, E93, E99 and T87A.

Calibration Updates

V8.4.56 (Public Release - Update 2)

- Added editing support for CM2450A operating system 10601903, 10601904, 10702004, 11701902 and 11802007.
- Added editing support for numerous CME (CM2350B) operating systems.

V8.3.55 (Public Release - Update 1)

- Added editing support for CM2450A operating system 25702325 .
- Added editing support for CMF (CM2450B) operating system 54190500.

V8.3.54 (RC3)

- Added editing support for multiple CM2450B (CMF) operating systems.
- Added editing support for E82 operating system 12706722.

V8.3.53 (RC2)

- Added editing support for CM2350A operating system 22701863.

V8.3.52 (RC1)

- None.

V8.3.51

- Added editing support for CM2350A operating system 22702070.

V8.3.50

- Added editing support for CM2350B (CME) operating system 32150900.

V8.3.49

- Added editing support for E92 operating system 12711160.

V8.3.48

- None.

V8.3.47

- Added editing support for CM2450A operating system 64702343.
- Added B1861-B1863 to assorted E80 & E82 operating systems.
- Added editing support for E82 operating system 12702183.
- Added editing support for CM2250 operating system 05300152.

V8.3.46

- Added editing support for CM2350A operating system 32101600.
- Added editing support for CM2450B (CMF) operating system 51210501 and 52200902.
- Added editing support for CM2150 operating system 08030201.
- Fixed various transmission table display issues for CM2200 (CMD) operating systems.

V8.3.45

- Added editing support for CM2880 operating system 08010015.
- Added editing support for CM2250 operating system 05300141 and 05300164.
- Added E3207 "CAC sensor scaling" to all CM2450B (CMF) operating systems.
- Added editing support for E98 operating system 12718258.
- Added 68RFE transmission calibrations for various CM2200 (CMD) operating systems.
- Added editing support for multiple 2022+ Cummins CM245B (CMF) controllers. Even though editing support is now available, modified files cannot be flashed into ECMS protected with Cummins' digital signature, only stock files can be flashed.
- Added additional fan control parameters to E80 operating system 12673855.
- Added B1846 to E38 operating system 12612381.
- Added editing support for E92 operating system: 12711168.
- Added editing support for CM2350A operating systems: 07702102, 09401582, 20718013, 31420202 and 65602063.
- Added B1861 and B1862 to E78 OS 12646746.
- Updated calibrations for multiple E41 (L5P) operating systems.
- Fixed errors with the scaling, units and labelling of the "Injection Quantity" tables for all E86 operating systems. Please check and update any scripts that operate on those tables to ensure compatibility with the updated scaling, units and labelling.

V8.3.44

- Added check sum support for flashing E47 OS 12681104.
- Fixed flickering on some tab page handles when using the EFILive software via remote desktop.
- E92: fixed soft limit in A9063, fixed B5156 not displaying correctly in some operating systems.
- Updated calibrations for multiple E41 (L5P) operating systems.

- Added editing support for CM2450A operating systems: 25702316 and 23702036.

V8.3.43

- Updated E92 calibration B2115 to use editable values for EQ Ratio axis.

V8.3.42

- Updated calibrations for multiple E41 (L5P) operating systems.
- Updated check sum calculations for most 2022/2023 CMF (CM2450B) operating systems.

V8.3.41

- Added editing support for CM2350A operating systems: 09401772 and 09401673.
- Updated editing support for multiple E41 (L5P) operating systems.

V8.3.40

- Added editing support for multiple E41 (L5P) operating systems.
- Fixed calibration C2201 in E98 operating systems: 55499814 and 24000081.
- Added editing support for E80 operating system: 12696870.
- Added editing support for CM2350A operating system: 22701770.
- Added editing support for CM2450A operating system: 64702333.
- Added editing support for E78 operating system: 12692710.
- Added G1219 Starter Diagnostic for E92 operating system: 12677878.
- Added B1225 Injection Timing Limit for E37/E38/E67 controllers.
- Added editing support for CMF (CM2450B) operating systems: 54220100 and 55220005.

V8.3.39

- Added flashing support for updated E41 controllers.
- Added support for A40 operating system level 7A7.
- Added editing support for CM2350A operating system 09401385, 65402042 and 20717006.
- Added B0730 and B0733 to E86 for managing boost DTC P2263.
- Added B1208 to E86 for VGT.
- Added editable row axis (Hz) for E35B MAF table B0205.
- Added MAF frequency limits for E35B.
- Fixed calibration B0184 in E80 operating systems: 12673258, 12676181, 12678940, 12677562, 12679812, 12681388 and 12681319.
- Added E41 torque check sum corrections for operating system 12730512.
- Added editing support for CMD operating system: 22100539.

Note: There is no EFILive CSP5 custom operating system upgrade for 22100539. If you need CSP5 functionality you will need to stay with the previous operating system version 22100538 and its CSP5 upgrade 52100538.

V8.3.38

- Added editing support for CM2350A operating system: 23701862.
- Added editing support for E80 operating system: 12707638.

Documentation Updates

V8.3.54

- EFILive Command Line Reference.pdf.

V8.3.45

- EFILive V8 Reference.pdf
- EFILive Command Line Reference.pdf.
- EFILive BBX Scripting Reference.pdf.
- EFILive Error Codes.pdf.

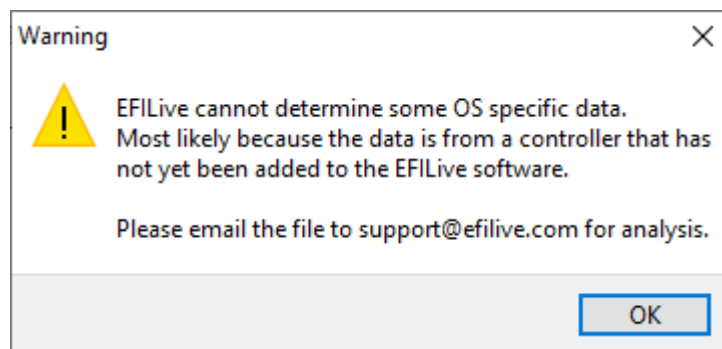
V8.3.31

- None.

Limitations

- **Limitation #1:** When logging DMA PIDs (i.e., PIDs whose names end with \"_M\" or \"_DMA\"), if the ignition is switched off for an extended period while data logging but data logging is not terminated, then when the ignition is switched on again the data log automatically continues. However, the DMA PIDs may no longer return valid data.
- **Workaround:** EFILive recommends stopping the data log and restarting the data log when switching off the ignition for extended periods

- **Limitation #2:** When opening CMF (CM2450B) Cummins 2022 tune files, the EFILive software will complain with the following message:



That is expected and the message may be ignored. We have only added the option to open CMF 2022 stock files so that EFILive can flash stock files. EFILive cannot be used to update the check sums of modified files. Modified files cannot be flashed. Ignore the message if you are opening and flashing a 100% stock tune

file. Do not attempt to flash a modified file, it will fail at the end of the flash and the vehicle will be left in a no-start condition until a stock file is flashed in.

- **Workaround:** None.

Known Issues

- None