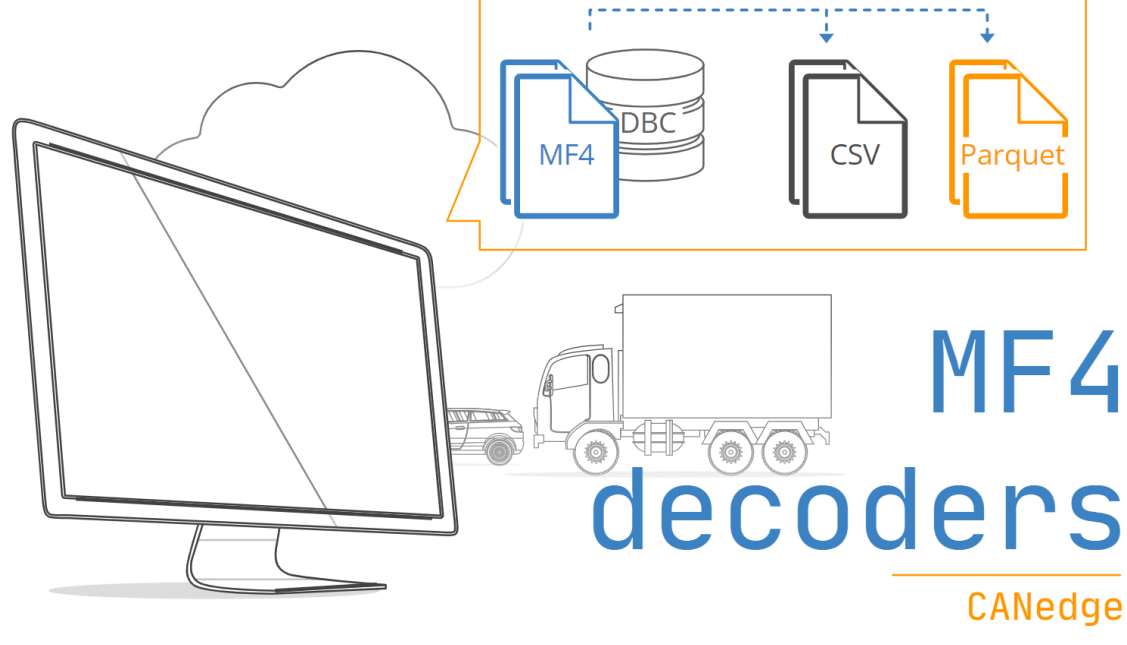


MF4 decoders, data lakes and CANedge Firmware 01.07.05

CSS Electronics newsletter - December 2023



MF4 decoders - DBC decode your CAN/LIN data to CSV/Parquet

The new [MF4 decoders](#) let you easily DBC decode your [CANedge](#) CAN/LIN log files. Your decoded data can be output as CSV files for ad hoc use - or as Parquet files for powerful, scalable and agnostic integration.

Key features

- DBC decode your MF4 files to CSV/Parquet files
- Process files via drag & drop or CLI (incl. scripted automation)
- Easily create powerful Parquet data lakes for use in 100+ tools
- Decoders can be used on both Windows/Linux
- The decoders are 100% free

Next level data scalability

The MF4 decoders are a core part of our strategy to increasingly enable end users to work with their data at scale. They can be used both at small scale (e.g. a single CANedge log file) - but also for millions of files and TB of data across thousands of CANedge units. The resulting Parquet data lakes are ideally suited for storing tons of data at low cost (locally or e.g. on S3) - while enabling extremely efficient queries across the data.

Plug & play automation of data lakes in AWS

To make your data lake deployment simple, we also provide tools for plug & play creation of AWS S3 based Parquet data lakes (via Lambda function automation). This way, every time a new MDF log file is uploaded to AWS S3, it'll be DBC decoded into a set of Parquet files that are then added to your S3 Parquet data lake - ready for visualization/analysis. This can be deployed in <5 min and a few clicks.

Your data, your way

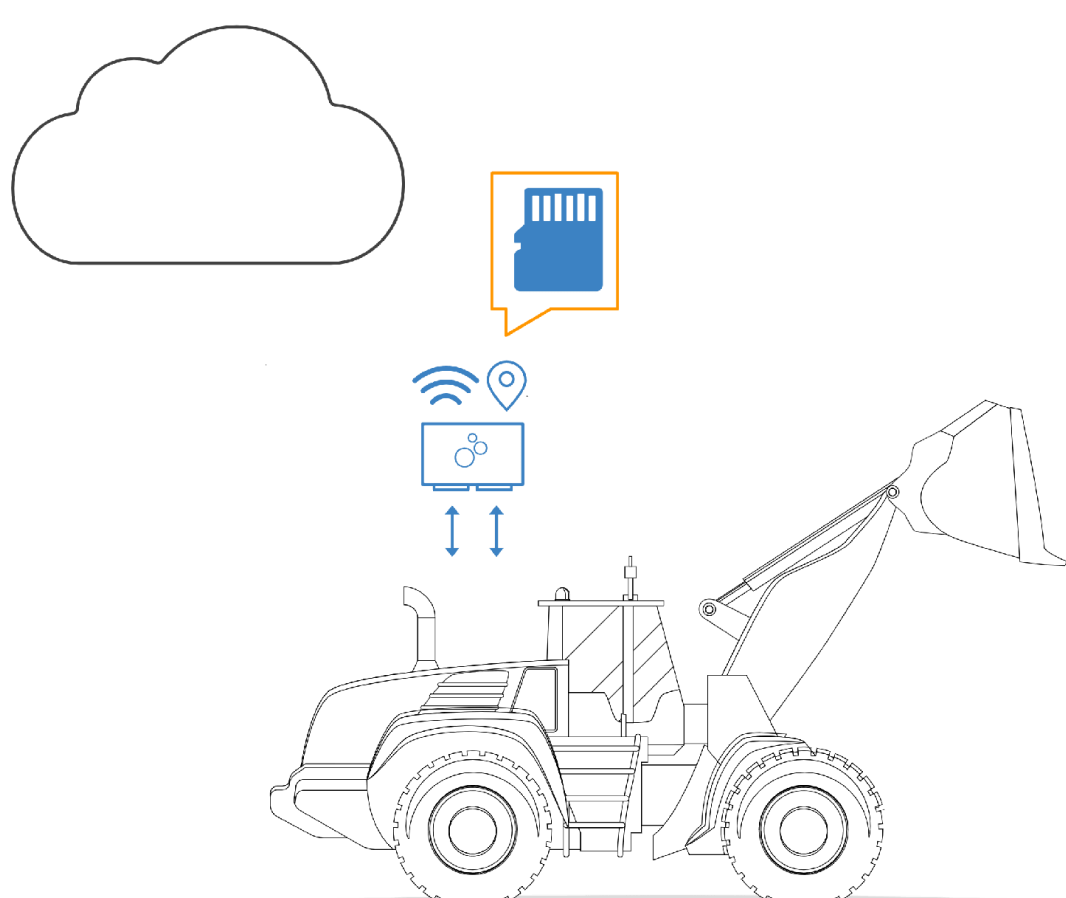
The decoders also play a key role in boosting the integration options available for your CANedge data. We estimate that Parquet data lakes are supported by 100x more software/API tools compared to the ASAM MDF format - implying that the decoders will make the CANedge data truly simple to integrate with, well, anything.

You will hear much more about the MF4 decoders in upcoming posts and articles. We believe this will be a game changer for the scalability of the CANedge - and we're looking forward to hearing your feedback!

Learn more in our article below - or via the [MF4 decoder intro](#).

[Learn more](#)

FW 01.07.05 adds multiple fixes and improvements



CANedge firmware 01.07.05

The CANedge FW 01.07.05 is now available!

The new firmware adds a number of fixes & improvements, including below:

SD repair: The device now automatically detects if an SD card has been unsafely ejected. If corrupt *.TMP files arise as a result of such unsafe ejections, the device will now rename these to *.ERR files and upload them to S3 (to avoid blocking file uploads).

Internal session counter: The device now uses an internalized session counter. As a result, you will no longer encounter session folder naming issues if you e.g. swap SD cards or accidentally delete the entire SD contents.

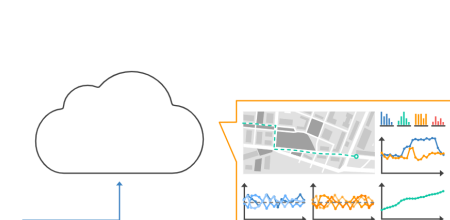
Log file splits: Log files based on time splits are now closed upon timeout instead of upon first message in next log file. This helps ensure residual files are closed and available for upload after e.g. a trigger stop event.

S3: Improved handling of device real-time clock (RTC) vs. server time, ensuring disconnects do not arise in cases of RTC drift.

In addition, the update adds multiple smaller fixes and improvements. You can update via the device SD card or over-the-air for the CANedge2/CANedge3.

[Get it now](#)

Other highlights

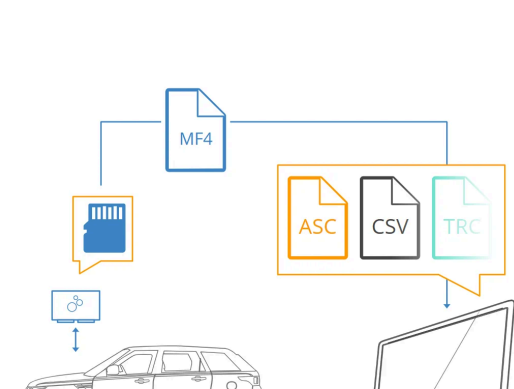


Remote automotive blackbox

Learn how Koenigsegg uses the CANedge2 as a 'blackbox' to collect data from their iconic prototype mega cars during field testing.

"The CANedge is very simple to use - and since it's permanently installed we can rely on the CANedge if there is a problem during testing as it records everything, all the time"

[Learn more](#)



MF4 converters updated

The MF4 converters let you convert CANedge MDF log files with raw CAN frames to CSV, Vector ASC or PEAK TRC. Note that the MF4 converters differ from the new MF4 decoders, as the converters do not perform any DBC decoding of the data. When updating to FW 01.07.05, make sure to also update to the latest MF4 converters for compatibility.

[MF4 converter docs](#)