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VOLKSWAGEN TRANSFORMATION

From automobile manufacturer to mobility provider

Volkswagen joins Automotive Grade Linux and the Linux Foundation to accelerate open source innovation and shared software development.

(Source: Adobe Stock)

Automotive Grade Linux is a collaborative cross-industry effort developing an open source platform for connected car technologies. They have announced that Volkswagen has joined Automotive Grade Linux (AGL) and the Linux Foundation, the nonprofit organization enabling mass innovation through open source.

AGL is an open source project at the Linux Foundation that is changing the way automotive manufacturers build software. More than 130 members are working together to develop a common platform that can serve as the de facto industry standard for infotainment, telematics, and instrument cluster applications. Adopting an open platform across the industry enables automakers and suppliers to share and reuse the same code base, which reduces development costs, decreases time-to-market for new products and reduces fragmentation across the industry.

"The automotive industry is undergoing a digital transformation, and automakers and their suppliers are increasingly adopting open source solutions, like the AGL platform, to drive rapid innovation and enable them to bring products to market faster," said Dan Cauchy, Executive Director of Automotive Grade Linux at the Linux Foundation. "We are very excited to welcome Volkswagen to the AGL community, and we look forward to leveraging the technological expertise of their developers and engineers as we continue to enhance the AGL platform and develop new functionalities."

In 2008, Volkswagen contributed the CAN networking subsystem to the Linux Kernel 2.6.25, which paved the way for a standardized socket API for developers and a common CAN network driver model for SoCs and PC-style CAN hardware. Within this contribution process, Volkswagen and non-automotive CAN users learned a lot from each other's use-cases so that the Linux CAN support is now widely used in industrial, automotive and academic setups (e.g. Cern), said Automotive Grade Linux.

"The Open Source approach provides excellent software solutions that are suitable to enable a long-term support of software over the vehicle life cycle," said Oliver Hartkopp, Open Source specialist at Volkswagen. "To ensure robust and secure solutions for our customers we want to be in close connection with the community to be able to directly interact with developers and maintainers." Volkswagen is joining AGL to become a member of the development community for the common automotive Linux platform.

Developed through a joint effort by dozens of member companies, the AGL Unified Code Base (UCB) platform is an open source software platform for infotainment, telematics, and instrument cluster applications. It provides 70 % of the starting point for a production project and includes an operating system, middleware, and application framework. Automakers and suppliers can customize the platform with features, services, and branding to meet their unique product and customer needs.

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