

Volkswagen joins AGL and Linux Foundation

Automotive Grade Linux (AGL), a collaborative cross-industry effort developing an open source platform for connected car technologies, has announced that Volkswagen has joined the Linux Foundation project.

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The AGL project is not limited to telematics and instrument clusters (Photo: AGL)

AGL is an open source project at the Linux Foundation. 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.

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).

"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 AGL 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."

"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 Dr. Oliver Hartkopp, Open Source specialist at VW. "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."

Working with communities and providing knowledge, ideas and source code requires a new mindset in the automotive industry. VW 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 percent 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.

With Linux at its core, AGL is developing an open platform from the ground up that can enable rapid development of additional features and technologies. Although initially focused on In-Vehicle-Infotainment (IVI), AGL is planning to address all software in the vehicle, including instrument cluster, heads up display, telematics, advanced driver assistance systems (ADAS), and autonomous driving. The AGL platform is available to all, and anyone can participate in its development.

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