

Media Update

Car.Software Organisation: Volkswagen Group teams up with Microsoft to develop automated driving

- Volkswagen Group's Car.Software Organisation and Microsoft will build an Automated Driving Platform for the agile development of automated driving functions
- With the cloud-based platform, Car.Software Organisation will simplify its development processes on Microsoft Azure to bring automated driving solutions to the Group's cars even faster

Wolfsburg / Ingolstadt, 11. February 2021 – "As we transform Volkswagen Group into a digital mobility provider, we are looking to continuously increase the efficiency of our software development. We are building the Automated Driving Platform with Microsoft to simplify our developers' work through one scalable and data-based engineering environment. By combining our comprehensive expertise in the development of connected driving solutions with Microsoft's cloud and software engineering know-how, we will accelerate the delivery of safe and comfortable mobility services," said Dirk Hilgenberg, CEO of the Car.Software Organisation.

"This is the next evolution of our foundational work with the Volkswagen Group to enhance their transformation as a software-driven mobility provider," said Scott Guthrie, executive vice president, Cloud + AI at Microsoft. "The power of Microsoft Azure and its compute, data and AI capabilities will enable Volkswagen to deliver secure and reliable automated driving solutions to their customers faster."

Build AD and ADAS solutions faster with one development platform

ADAS and automated driving vehicles can help improve passenger safety while reducing congestion and making mobility even more comfortable. Building these solutions requires large-scale computational capabilities. Petabytes of data from road and weather conditions to obstacle detection and driver behavior need to be managed every day for the training, simulation and validation of AD functions. Machine learning algorithms that learn from billions of real and simulated miles driven are key to connected driving experiences.

Car.Software Organisation will address these challenges together with Microsoft by simplifying the developer experience and leveraging the "learnings from miles driven" through one database comprising real traffic data from the Group's vehicles as well as simulation data. Microsoft Azure compute, data and machine learning services as well as Microsoft's know-how in agile software development will enable one development environment for Car.Software Organisation's developers globally. ADP will help reduce the development cycles from months to weeks and efficiently manage the huge amount of data. The companies will start working on ADP immediately and are looking to continuously expand the functional scope of the development platform.

Both companies intend to enable technology partners to build tools and services that integrate with the platform to enhance the creation of AD and ADAS solutions.



Volkswagen Group increases in-house development of software in the car

The Volkswagen Group is driving forward the digitalization of the car rapidly. By 2025, the Group will invest around EUR 27 billion in digitalization and increase the proportion of in-house development of software in the car to 60 percent from 10 percent today. Founded last year, the Car.Software Organisation plays a key role in the transformation of the Volkswagen Group towards a software-driven mobility provider. It bundles and continuously expands the Group's software competencies, including the development of high-performance driving functions for passenger cars that will be integrated into future models of Volkswagen Group's brands.

Deploy and operate ADAS and AD solutions with Volkswagen Automotive Cloud

Since 2018, Volkswagen and Microsoft have been collaborating on the Volkswagen Automotive Cloud (VW.AC), which is focused on integrating all the digital services and mobility offerings across the Group brands and models in the future. VW.AC's engineering team, based in Seattle, has enabled data to be exchanged between the vehicles and the cloud through Azure edge services. The cloud connectivity is also enabling Volkswagen to deliver vehicle updates and new features independently of the vehicle hardware to continuously improve the customer experience.

The first VW.AC connected test fleets are expected to hit the road in 2021. Production rollout is planned for 2022. Car.Software Organisation will integrate ADP and VW.AC as the company moves toward further integrating their software solutions, tools and methods to empower its engineering teams, customers, and partners globally. With VW.AC, the AD and ADAS functions developed on top of ADP can be tested, deployed and operated across the Group's vehicle fleet.



About Car.Software Organisation

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Car.Software Organisation is an automotive software company in the Volkswagen Group that bundles and further expands the Group's software competencies to transform automotive mobility. Founded in 2020, it develops the leading tech stack for the automotive industry with the mission to make the automotive experience safer, more sustainable and more comfortable in a new way – for everyone, everywhere. Around 4,000 engineers and developers around the world are building a uniform software platform for all brands of Volkswagen Group, which includes a unified architecture, a operating system and automotive cloud. The new software platform will first come to play at the end of 2024. In addition, it works on outstanding digital automotive features, including ADAS solutions, a standardized infotainment platform, software functions for linking powertrains, chassis and charging technology as well as new ecosystems and digital business models in and around the vehicle. Car.Software Organisation operates in software competence centers in Wolfsburg, Ingolstadt, the area of Stuttgart, Berlin and Munich, and is closely cooperating with development teams in Seattle.

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