Articles

GENIVI Alliance

https://www.genivi.org/

Founded in 2009, GENIVI Alliance has successfully completed its initial mission of delivering an open, Linux-based in-vehicle infotainment (IVI) platform and has expanded its scope to help automakers and their suppliers develop standard approaches to:

- integrate multiple operating systems in the central and connected vehicle cockpit

- enhance vehicle connectivity to the cloud

- promote a common vehicle data model and standard service catalog.

The GENIVI community is committed to addressing real-life challenges of the increasingly complex and connected vehicle. Several trends drive GENIVI to pursue the integration of multiple in-vehicle operating systems including ECU consolidation, centralization, domain fusion and centralized vehicle computing. A further driver is the relative disparity of how OEMs and their suppliers define, manage and process vehicle data, suggesting an opportunity for the industry to consolidate around common approaches.

Active GENIVI Projects

- Common Vehicle Interface Initiative addresses the need for an industry-standard for more efficient vehicle data collection and management

- Android™ Automotive Special Interest Group (SIG) focuses on software integration and supports automakers and their suppliers who are adopting Android to identify

  and close gaps with code for future Android releases

- Cloud and Connected Services facilitates alignment between automakers and data-focused vendors resulting in combined standard approaches for vehicle data

  definition and an end-to-end reference architecture for vehicle data movement to and from the back-end cloud

- In-vehicle commerce explores standard approaches for in-vehicle retailing and payments

- Advanced Hypervisor APIs has developed a standard for deploying virtualization in a vehicle context known as the Automotive Virtualization Platform Specification

- Security Team that addresses a growing number of standards and topics that seek to enhance cybersecurity in the vehicle.

- In-vehicle commerce explores standard approaches for in-vehicle retailing and payments

GENIVI welcomes collaboration on all projects addressing the increasingly complex and connected vehicle. Organizations interested in joining the Alliance as active members can visit GENIVI.org/join and information about technical participation in GENIVI activities can be found at projects.GENIVI.org.