



Welcome Keynote

GENIVI Virtual Technical Summit

12 May 2020



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Agenda

- WHO has GENIVI become
- WHAT has happened recently
- HOW we want you to be involved
- The road ahead

**WHO has GENIVI
become?**



How well do you know GENIVI?



- **From 2009 to 2018**

“GENIVI® is a nonprofit industry alliance committed to driving the broad adoption of open source, In-Vehicle Infotainment (IVI) software *and providing open technology for the connected car (added in 2016).*”

- **Since 2018**

“The GENIVI Alliance develops standard approaches for integrating operating systems and middleware present in the centralized and connected vehicle cockpit.”



Here are a few reminders

GENIVI is no longer just about open software ... though we continue to fully support open approaches to technology development and code

GENIVI is no longer just about Linux ... though we continue to leverage our rich and deep heritage in Linux-based solutions for the vehicle

GENIVI is no longer just about IVI ... and we recognize the IVI, safety and connectivity are consolidating and require new architectural approaches

GENIVI is no longer just about in-vehicle solutions ... because vehicle data exchange and cloud computing trends are demanding closer interaction between the vehicle & the cloud.

Reflected in our current projects



Examples of Multi-OS Integration

Android™ Automotive Special Interest Group (SIG)

- Architectural approaches and Proof of Concept code for hardware/audio abstraction

Hypervisor Project

- Automotive Virtualization Platform Specification

Examples of Car to Cloud Connectivity

Cloud and Connected Services Project

- Vehicle Signal Specification (in collaboration with W3C)
- Vehicle-to-Cloud Reference Architecture

Related Topics

**Automotive
Cybersecurity**

In-vehicle Payments

**Common Vehicle
Interface Initiative**

Reflected in our priorities



GENIVI Alliance work is...

- Funded with GENIVI member revenue
- Open to non-member participation and uses open source licensing for outputs
- Aligned with other technical bodies and standards approaches
- Informed by E/E architectural trends like domain consolidation, compute centralization, and cloud connectivity
- Delivered to the industry making community interaction at events, summits and receptions essential to success

WHAT has happened recently

GENIVI outputs 2019 - Present

- Multi-OS Integration
 - Published first version of the [Automotive Virtualization Platform Specification](#) delivered openly and with multi-OS support
 - Launched [Android Automotive SIG](#) with three active threads of work (one already complete)
 - Delivered several [tech briefs](#) describing methods of sharing graphics across vehicle software domains
 - Published [open source Ramses code](#) as a model for cross-domain graphics sharing
 - Delivered a tool for enabling [Adaptive AUTOSAR interop with non-AUTOSAR system](#) (GENIVI IVI) through IDL transformation
- Vehicle Data / Cloud & Connected Service Models
 - Completed [Vehicle Service Specification](#) (VSS) and launched github repository for its evolution
 - Supported W3C publication of Candidate Recommendation for [Vehicle Interface Service Specification](#) (VISS)
 - Published initial overview and [gap analysis](#) of various vehicle data models
 - Published initial [vehicle-to-cloud, end-to-end reference communication architecture](#)

Note: More detail on many of these will be shared in the (next) Introduction to Active Projects session

GENIVI Gatherings



AMM & Open Community Days (Munich, May 2019)

GENIVI Technical Summit (Detroit, November 2019)



GENIVI Industry Outreach



GENIVI Networking Reception @ TU-Automotive (Detroit, June 2019)

Other 2019-2020 Outreach Events

- CES 2019 & Connect2Car Panels
- CE Week
- SAE Executive Forum
- AutoMobility LA
- Automotive World Webinar on Hypervisor Standards
- Automotive World Webinar on Cloud & Connected Services
- And many more...

CES 2020 Connect2Car Panels



Panel Topics:

- Connected Services
- Electrification & Autonomy
- Automotive Cybersecurity



CES 2020 Networking Reception & Showcase Highlights



1450+ in attendance (new record)



HOW we want you involved



Attending this Summit is a great start!



Tuesday Schedule

3:00 PM - 3:30 PM CEST

[Welcome Keynote & GENIVI State of the Union](#)

3:35 PM - 4:50 PM CEST

[Introduction to Active GENIVI Projects](#)

4:50 PM - 5:00 PM CEST

[Break](#)

5:00 PM - 6:00 PM CEST

[Looking forward #1: Common Vehicle Interface Initiative](#)

6:10 PM - 7:00 PM CEST

[Looking forward #2: Cockpit Domain Fusion](#)

Wednesday Schedule

10:45 AM - 12:00 PM CEST

[Connected Vehicle Software Development](#)

3:00 PM - 6:00 PM CEST

[Android Automotive SIG #1 - Vehicle Data APIs / Vehicle Hardware Abstraction Layer \(HAL\)](#)

6:00 PM - 6:15 PM CEST

[Break](#)

6:15 PM - 7:30 PM CEST

[Cybersecurity #1- ISO-21434 in practice](#)

Thursday Schedule

9:00 AM - 12:00 PM CEST

[Android Automotive SIG #2 - Audio Hardware Abstraction Layer \(AHAL\)](#)

10:45 AM - 12:00 PM CEST

[Cybersecurity #1- ISO-21434 in practice \(replay\)](#)

3:00 PM - 6:00 PM CEST

[Cloud & Connected Services](#)

Consider one of these active roles

- **Technical Contributor** ... attend next session on Active GENIVI Projects
- **Reviewer of Outputs** ... watch for draft project deliverables (genivi.org)
- **Adopter of Outputs** ... engage in full tech development lifecycle
- **Community Participant** ... connect with like-minded stakeholders during events (next GENIVI Member Event on 27-29 October 2020 in Leipzig)
- **Member of GENIVI** ... fund the work and receive member benefits

Action for members: Visit often the GENIVI Blog (and set “Watch this Blog” flag on that page)

(<https://at.projects.genivi.org/wiki/pages/viewrecentblogposts.action?key=WIK4>)

Action for non-members: Sign-up for GENIVI Updates

(<https://forms.gle/GGgLYwRF6oKcy21E9> or visit genivi.org and click link at bottom of page)

The Road Ahead



2020 Board of Directors



Jochen Böhm*

Area-Lead Development LINUX-/GENIVI-Platform
at BMW CarIT



Dr. Andree Zahir

*Senior Vice President at
Robert Bosch Car Multimedia GmbH*



Hyungjin Jeon

*Research Fellow, Advanced Research & Product
Planning / Vehicle component Solution
Company at LG Electronics*



Matt Jones

Chief Systems Architect at Wind River Systems



Michael Ziganek*

*General Manager, Automotive Business Unit
at Mentor a Siemens Business*



Gerald Spreitz*

*OSS Strategy Officer at
Robert Bosch Car Multimedia GmbH*



Tero Salminen

Director Virtualization at OpenSynergy



Ari Aalto

*Vice President
Automotive and Smart Devices Business
Unit at TietoEVRY*

* - 2019 Board Officers / 2020 Officer elections on 20 May

President's Comments



The Automotive Industry is changing...

- ...and GENIVI has started already and continues to adapt!
- Moving away from Linux IVI into multi domain and multi OS opens a new field of challenges and required solutions for the Industry
- The complexity of integration and development of the domain fusion is constantly increasing and we need standards more then ever in order solve the current und upcoming problems
- Our success is depending on the contribution of the community and constant interaction with the industry leaders in this domains
- Let's work together in the spirit of GENIVI when we have started over 10 years ago and provide valuable solutions to these problems!

Next All Member Meeting

- 27-29 October 2020
- Marriott Hotel, Leipzig, Germany
- Program elements
 - Keynote & GENIVI Project Updates
 - Panels on Trends and Market Futures
 - Technical Breakouts
 - Workshops
 - Panels
 - Demonstrations
- Reception and Members Showcase
- Great networking!
- Stay tuned to: <https://at.projects.genivi.org/wiki/display/WIK4/GENIVI+20th+All+Member+Meeting+~+Leipzig>



Wrap-up

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Thank you!

Visit GENIVI:

<http://www.genivi.org>

<http://projects.genivi.org>

Contact us:

help@genivi.org

