

International VDI Conference

## **Automotive Software Ecosystem**

Driving Innovation in the Industry March 19-20, 2024, Munich

- Software-Defined-Vehicle
- Software-Driven-Vehicle Architecture
- Over-the-Air Updates
- Exploring Software Technologies & Further Developments
- Collaborative Open Source Software
- + Interactive World Café Session
- + Fishbowl Discussion
- + Parallel Conference "Software Solutions for Commercial Vehicles"

Meet international Experts from:





Opening

Keynote

09:00 Registration & Welcome Coffee

### 10:00 Chair's Welcome and Opening Address

### I. Software-Defined-Vehicle

### 10:15 The Importance of Associations and Sponsorship

 Free and open-source software (FOSS) associations drive innovation, collaboration, and community-driven development

- Supporting FOSS associations fosters a culture of transparency, inclusivity, and shared knowledge, shaping a more robust and equitable digital landscape
- Sponsorships enhance impact, ensuring sustainable development and support critical software projects benefiting society

Markus Rettstatt, Business Unit Lead Stream CAR, Mercedes-Benz Tech Innovation GmbH. Germany

### 10:45 Successfully Navigating the Transition Towards Software Defined Vehicles

Organizations don't need to become software companies; you need to embrace software and integrate it into your processes and structures



- Innovate where you differentiate! Collaboration, Partnerships & even Co-opetition are not just buzz words
- Open Source Software is the latest cry. How much potential does it really have and will it solve all our challenges?

Damian Barnett, Automotive CTO, Luxoft, Germany

### 11:15 Elevating Mobility through SaaSification

- Profound Impact of Software-as-a-Service on the mobility landscape
- SaaS solutions for the mobility industry
- Views on how OEMs and service providers can thrive in the SaaS market Rosemary Joshy, Head of Global SW Strategy, Innovation & Business Improvements, Continental Automotive Technologies GmbH, Germany

#### II. Software-Driven Vehicle Architecture

### 11:45 Sustainable Software Architecture Development for Future Vehicles

- Reduce complexity and interdependencies among the many different ECUs
- Unite applications to unlock new software-enabled functionality
- Control the software that defines the user experience of their vehicles

**Dr. Florian Baumann**, Sr. Director Software, Advanced Vehicle Architecture, Aptiv, Germany

12:15



Lunch

#### 13:45 What is new in Software Defined Vehicle and Android Automotive OS?

- · SDV and Android Automotive OS; SDV beyond infotainment
- One single SoC to power a vehicle & Virtualization and hypervisor strategy
- Certification in vehicle of an AAOS system

Marius Mailat, CTO, P3 Group GmbH, Romania

### 14:15 Towards the Software Defined Vehicles - The AUTOSAR SW Framework and Its Future Evolution

- AUTOSAR the industrial standard for the future software framework
- Evolution of AUTOSAR
- Opening strategy and 3rd party collaboration
- Towards SDV

Dr. Günter Reichart, AUTOSAR Spokesperson Europe, Germany

### III. Over-the-Air Updates

### 14:45 Why we Need a Next-Generation OTA Software Update Technology

- What are the three alternative OTA update technologies? Pros, and cons
- What is an Additive OTA Update?
- Which 8 vehicle manufacturer departments benefit from Additive OTA Update technology?

Roger Ordman, EVP Marketing & Business Development, Aurora Labs, Israel

### 15:15 Connected and Vulnerable: Interplay Between CSMS and SUMS – What's the Right Approach?

- The challenges and opportunities associated with OTA updates in modern vehicles, and the role of UNECE Regulation No. 156
- Practical advice for establishing and managing a Software Update Security Management System (SUMS) that is both compliant and efficient.
- Learn how to leverage unified tools for CSMS and SUMS to achieve instant insights, effective vulnerability management and streamlined compliance.

Dr.-Ing. Lara Popova, Pre-Sales Engineer, Argus Cyber Security, Israel

15:45 P Networking & Coffee Break

#### 16:30 Interactive World Café Session

Join us for interactive round table discussions with industry experts. Share and address challenges within your sector, identify problems and needs, and explore solutions. Bring your own experiences and cases to the table. Don't miss out on this chance to connect with your industry colleagues.

17:30 End of Conference Day One

#### 18:00 Get-together

At the end of the first conference day, we kindly invite you to use the relaxed and informal atmosphere for in-depth conversations with other participants and speakers.

### 09:25 Chair's Welcome

### IV. Software Technologies & Further Developments

### 09:30 Scalable Software Development Addressing Different Levels of Autonomy

- Common software architecture for different autonomy levels
- How development and deployment of products at different autonomy levels benefit each other
- Examples from our deployments in Europe, U.S., and Australia Tim Daly, Chief Architect, PlusAl, USA

### 10:00 A Roadmap to Safetility: Setting the Stage for Safe and Performant Automated Driving Systems

- Addressing uncertainties with conservative safety margins leads to safety, but sacrifices utility
- "Safetility" metric to make runtime safety monitoring approaches comparable regarding safety and utility
- Roadmap for next-generation safety architectures that optimize for safetility, enhancing overall customer value

Jan Reich, Department Head "Safety Engineering", Fraunhofer Institute for Experimental Software Engineering (IESE), Germany

### 10:30 Hacks for Cybersecurity Implementation: What to Do When Security Concepts Encounter Real-World Constraints

- Securing communication on a legacy CAN-bus without compromising throughput and latency
- Key exchange and ECU authentication with minimal resources
- Pitfall: Authenticated Boot & Pitfall: Rolling your own Cryptography
- Pitfalls for Production Logistics three examples

**Jan-Peter von Hunnius**, Associate Partner and Head of CYRES Consulting Austria, CYRES Consulting, Austria

11:00 Networking & Coffee Break

### 11:45 Interactive Fishbowl Discussion

Join our interactive fishbowl discussion, a unique program point designed to spark engaging conversations. Feel free to seamlessly join the discussion and ensure a diversity of voices contribute to the dynamic exchange of ideas

### V. Open Source Software

### 12:15 The Beauty of Collaboration: How Open Source Can Help to Build a Sustainable Automotive Software Ecosystem

- Collaboration between companies
- · Reducing complexity
- Open source for series development

Michael Plagge, VP Ecosystem, Eclipse Foundation, Germany

### 12:45 Lunc

### 13:45 The Transformational Power of Open Source – New Strategies for Automotive Software Development

- Open Source the new ingredient in the mix of automotive software development
- Best practices of large scale Open Source projects from other industries
- Beyond the software defined vehicle building data based ecosystems

**Philipp Merlitz**, Senior Sales Manager Automotive & Open Source Ambassador, T-Systems, Germany

### 14:15 Embedded Service Management Evolution for Linux: From Scripts to Hardened Solutions

- Misconception: Assuming Linux easily integrates into cars without alterations
- Challenges: Linux service management caveats in embedded and automotive systems
- Solutions: Introduce solutions for efficient, real-time capable, secure service management in cars

**Prof. Dr. Joachim Schlosser**, Senior Manager, Strategic Consulting, Elektrobit Automotive, Germany & **Thomas Brinker**, Senior System Engineer, emlix, Germany

### 14:45 Beyond SBOMs in Open Source Software: Mitigating Risks in the SDV Supply Chain

- Threat landscape and emerging new threats in the automotive industry
- Unseen risks in development lifecycle and the software supply chain
- A practical example from the automotive industry
- Proposal how to apply security beyond the SBOM

Gregor Knappik, Solution Architect Cybersecurity, VicOne, Germany

15:15 Closing Remarks

15:30 End of Conference

### About us



The Association of German Engineers (VDI) is one of the largest technical-scientific associations in Europe. Throughout the years, the VDI has successfully expanded its activities nationally and internationally to foster and impart knowledge about technology-related issues. As a financially independent, politically unaffiliated and non-profit organization the VDI is recognized as the key representative of engineers both within the profession and in public.

### **Supporting Experts**

- Rainer Holve, Elektrobit Automotive GmbH
- Markus Rettstatt, Mercedes-Benz Tech Innovation
- Roger Ordman, Aurora Labs
- · Michael Plagge, Eclipse Foundation
- Martin Schleicher, Continental Automotive Technologies GmbH

### Reasons to attend

**Meet** the whole automotive software ecosystem

**Learn** where the industry is headed & how to stay ahead of the curve

**Network with** technical experts & key decision-makers from leading OEMs

& suppliers

**Prepare for** for two days full of insights, contacts & new ideas

**Discuss** technical challenges, current developments & newest solutions

### International VDI Conference

# Software Solutions for Commercial Vehicles

### Date and venue:

March 19-20, 2024 Munich, Germany

### Renowned speakers will present their results on the following topics:

- Autonomous Driving Solutions
- Software Architecture for Commercial Vehicles
- Software Solutions for OEMs and Fleet Operators
- Data Management
- Cyber Security of Software Driven Commercial Vehicles

www.vdiconference.com/01K010

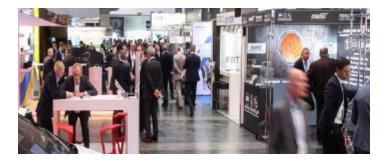


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#### Jasmin Habel

Project Consultant Exhibitions & Sponsoring Phone: + 49 211 6214-213 Email: jasmin.habel@vdi.de



#### Become a speaker

Become a speaker at our international VDI Automotive Conferences. Make yourself known in the industry and discuss best practice examples with other international experts. We are looking for speakers on: Software Defined Vehicle, Cyber Security, Automated Driving and Connected Off-Highway Machines.

Please submit your topic to: Annick Cathrin Pauwels Product Manager International Business

Phone: +49 211 6214-8646 Email: Pauwels@vdi.de

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#### Conference venue

Dorint Hotel München/Garching Parkring 51-53 85748 Garching, Germany

Phone: +49 89/360380-0 Email: info.garching@dorint.com



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### International VDI Conference

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VDI Wissensforum GmbH | VDI-Platz 1 | 40468 Düsseldorf | Germany



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VDI Wissensforum GmbH P.O. Box 10 11 39 40002 Düsseldorf, Germany Phone: +49 211 6214-201

Fax: +49 211 6214-154 Email: wissensforum@vdi.de

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