L4Re: Conquering the Roads Worldwide

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Elektrobit and Kernkonzept, the spin-off of TU Dresden's OS group, are collaborating on defining the architecture and building the next-generation central automotive controllers that will steer upcoming vehicles. There is a general trend in automotive to consolidate functionality onto more powerful high-performance systems that use contemporary multi-core SoCs. The OS running on this platform needs to adhere to highest safety, security and real-time requirements, and of course needs to support virtualization to run a wide variety of new and existing software components. The talk will provide insights how the L4Re microkernel system is being used within EB's corbos solution to cover automotive requirements including running Linux, Classic and Adaptive Autosar as well as providing networking and connectivity within the car and up to the cloud.