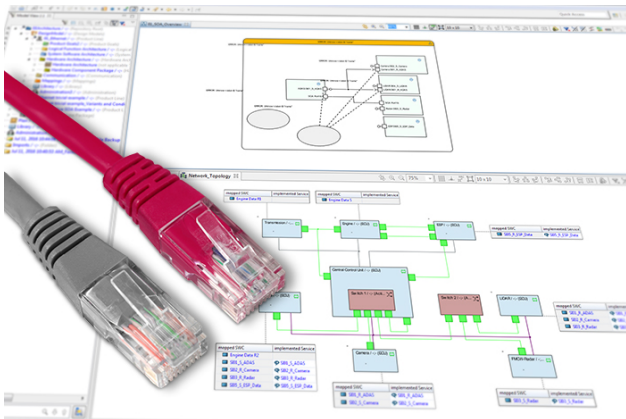


DEVELOPMENT TOOL

Electronic architectures for vehicles

With Preevision 8.0, Vector supports electric/electronic architectures for vehicles. The release can be used for model-based development of service-oriented software architectures.



Bus technologies such as CAN can be connected to one another via a gateway (Photo: Vector)

Preevision according to the Autosar method. Ethernet descriptions can be imported and exported as an Autosar file. In order to model Ethernet networks, Preevision 8.0 handles mixed topologies: different bus technologies such as CAN, LIN, and Flexray can be connected to one another via a gateway. A special cluster approach ensures a clear overview for complex architectures.

Preevision 8.0 also provides an integrated test engineering and test management, which was previously only available as a product option. The DBC-ECU extract limits the DBC export to the data for one ECU and therefore supports focused data exchange between OEM and supplier. There are also various program stability and usability improvements.

Preevision is a tool for model-based electric/electronic development from the architectural design to series production. The software supports architects, network designers, and development and test engineers throughout the development process: functions for architectural design, requirements management, design of safety-relevant systems, Autosar system architecture, and wiring harness development are available in one application without tool changeovers.

Service-oriented software architectures (SOA) have been used for years in the IT industry to describe and structure distributed systems. This procedure is also increasing in importance in the automotive industry in order to meet technical challenges associated with things like autonomous driving and Car-to-X communication. The required electric/electronic architecture in the vehicle can now be designed and managed with the Preevision development tool.

In the current version, the required services, the corresponding software components, all interfaces, and the communication nodes are modeled with SOA diagrams. They are based on the UML graphic modeling language (Unified Modeling Language).

To realize suitable bandwidths for communication in the vehicle, Ethernet technology is being used. The corresponding communication design is developed in

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