



Are Cars Becoming PCs on Wheels?

Security for connected and automated vehicles

At Frankfurt IAA 2015, the automotive industry reveals its latest innovations to the general public for the 66th time. The trend towards more electronics in vehicles continues unabated, but who will manage the extra complexity? And what about security? At this year's exhibition, the experts at ESCRYPYT discussed these topics with customers.

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Semiautomated vehicles, connectivity, and new powertrain systems were among the key topics at IAA 2015. These trends provide a number of benefits to road users. Our automobiles are becoming safer, cleaner, and more economical while offering a host of new features. It will soon be possible, for instance, to download and install the latest vehicle system service updates over-the-air via the internet. So are our cars becoming PCs on wheels? Absolutely not! But we will be seeing a lot more information technology in our cars and along with this trend there is much to consider, particularly when talking about information systems security. With automotive information systems,

the requirements are far more extensive than those considered sufficient for other IT applications. The braking systems, lane assistants, and distance warning systems in our vehicles are just a few examples. They must always work properly in all situations, even if a sensor fails, a cable snaps, or when the latest in a long line of updates is installed. But what is needed to achieve this? Our experts discussed these issues with customers at the Bosch booth during the IAA exhibition. They all agreed that there is no single measure which by itself is sufficient – a holistic solution is needed. Intelligent tools, a well-designed E/E architecture, secure basic software, seamless processes, and of course

technical expertise are all required to ensure that our cars are truly safe and secure.

ETAS and ESCRYPYT have a lot to contribute in these discussions. Our expert consulting services, early development phase virtualization tools, and secure software development are playing an ever greater role. When it comes to protecting against unauthorized access to automotive computer systems, ESCRYPYT offers solutions to provide multiple levels of security for vehicle electronic systems.

Personally, I believe in our abilities and I prove it every day when I get in my car, trusting my life to the skills and expertise of my colleagues and customers.