

Overview of Our Services

The secunet consulting team supports OEMs in the development of security solutions – from the specifications to the rollout. This includes the creation of initial and technical concepts, IT specifications, requirements specifications for control units and test specifications. In most cases, the new solutions not only have to be integrated within an individual control unit, but also in a complete process chain. We therefore advise our customers across all departments in the following areas:

- Research
- Development
- Purchasing
- Production
- Sales/Distribution
- Service



Our Experience Is Your Advantage

With numerous projects in the automotive arena, our experts have collected valuable experience in designing security solutions. They are therefore able to analyse and solve critical issues in a targeted way. This wealth of experience includes protection concepts for flash ware and software-based products as well as for online-enabled control units in the on-board network. Over the many years of co-operation with our customers, we have been able to accompany security solutions from the initial concept all the way to production maturity. Our know-how guarantees cost-efficient and practice-orientated solutions which achieve the required security levels.

secunet – your competent partner for IT security

secunet is Germany's leading IT security provider and has been security partner of the Federal Republic of Germany for many years. The automotive sector recognised secunet's expertise early on and integrated the company into research and development. An independent business unit is committed exclusively to the requirements of the automotive industry. In particular, the special limitations of the vehicle in terms of bandwidth, memory, secure hardware or processing capacity necessitate new approaches to the development of security methods. In addition, a car's lifecycle is very different from that of conventional IT systems. The lifecycle of a vehicle is long, up to 18 years, and this fact must be taken into account during development in order to ensure sustainability.

secunet

secunet Security Networks AG
Kronprinzenstraße 30
45128 Essen, Germany
Phone: +49-201-54 54-0
Fax: +49-201-54 54-1000
E-mail: automotive-security@secunet.com
www.secunet.com

Consulting Automotive Security





The Networked Vehicle

Mobility and communication are growing needs of the information society. Consequently, more and more web-based services are finding their way into modern vehicles. The challenges in terms of IT security in the vehicle have reached new levels. Carmakers can only offer online services successfully if the digital data channels can be reliably secured.

« IT security creates the foundation
for new business models
around the networked vehicle »

Harry Knechtel,
Head of Consulting Automotive Security, securnet

New business models require new security mechanisms

Interesting new business models are presenting themselves to car-makers as a result of the above described developments: The maintenance of control units by means of software updates, online diagnostics, telematic services and traditional Internet-based services are just some examples. In these areas, OEMs can generate unique selling propositions in a fiercely competitive environment.

However, this development means that carmakers have to also take traditional IT security issues into consideration. The vehicle's on-board network used to be sealed off, but it is now visible to the World Wide Web. Firewalls, virus protection and intrusion detection are suddenly becoming just as relevant for the vehicle as securing software by means of digital signatures or digital rights management for the personalisation of functions.

Consulting

Our consulting goes well beyond traditional IT security areas. The scope of services includes all activities for the definition, implementation and integration of new solutions:

- Creation and evaluation of software architectures
- Functional and security-technical protection of control units
- PKI concepts, creation of security policies
- Process consulting and implementation
- Project and risk management
- Requirements management and requirements analysis
- Requirements specifications, technical and IT concepts, operational concepts
- Security analyses, risk and protection requirements assessments

Subject Areas

The subjects are as varied as our customers' products. We therefore provide support in all subject areas in which IT security is critical to business success:

- Car immobilisers
- Component protection
- Digital rights management/Function enabling
- Encryption/Cryptography
- Flash ware protection
- Identity management: vehicle and driver authentication
- Manipulation detection and protection
- Securing online access to the vehicle
- Protection of the on-board network
- Virtualisation of functions

