



More security for critical infrastructures achelos provides tools against cyber attacks

Massive increase in cyber attacks

The growing number of cyber attacks is forcing all players involved to implement protection and security mechanisms which are constantly being updated to the latest technology. The focus is on attacks on critical infrastructures and corporations.

The methods of the attackers have become very professional: they have evolved from random approaches to precision cyber attacks on individual targets. Hackers have adapted a highly strategic approach. For many years the German government has been a pioneer in digital security. Data protection has top priority and forms the basis for the trust of citizens in a secure public administration and in critical infrastructures.

More than 800 million malware variants are in circulation and 380,000 new variants are added daily, according to the report 'The State of IT Security in Germany 2018'.

(Source: Federal Office for Information Security - BSI)

More security in a connected world

achelos offers an innovative product and solution portfolio based on the latest technologies and encryption methods. For more than ten years we have been acting on the market as a manufacturer-independent software developing company. On a national and European scale achelos is working on large projects that involve the security of personal, confidential data that requires a high level of protection.

Our technical solutions range from design and specification to the development, integration and testing in security-critical application fields.

You can find achelos' reference projects among the following sectors:

- Electronic identity systems (new personal ID card)
- German electronic health card (telematics infrastructure)
- Digital tachographs and driving licenses
- Bank cards with chip
- Security in electronic communications
- Public key infrastructures
- Digital signatures

Threat to all infrastructures:

- Technical attacks on components, devices and networks
- Identity theft (persons or objects)
- Data corruption
- Attacks on privacy (data protection, profiling)

cyber
security

achelos portfolio:

- Developing security measures and protection profiles
- Defining security targets including required documentation
- Evaluating processes, components and devices
- Preparing and technically accompanying the certification of business processes, components and devices according to international standards.

Core skills: security and prevention

Our core skills focus on the security and prevention segments. achelos' services cover the design of test concepts for compliance testing with technical specifications and federal directives and the preparation of evaluations and certifications according to security standards, such as Common Criteria, PCI-DSS or FIPS.



With Qumate.Testcenter achelos has created a powerful test management system which provides verifiable quality of end-to-end security. This mature and proven toolkit enables, for example, testing of TLS and IKE/IPsec network connections. All achelos test suites and simulations are highly automated and can be configured individually.

Secure IT infrastructures for successful digitisation

achelos' solutions support e.g. public administration in the implementation of IT security and e-government goals to create a uniform level of security. Successful digitisation is only possible through secure IT infrastructures.

achelos' offer for critical infrastructures:

- Innovative technical solutions for security-critical fields of application: e.g. new ID card, electronic health card, security in electronic communication (TLS and IKE/IPsec), public key infrastructures and digital signatures
- Expert knowledge in the field of security and prevention: Conception, specification, development, integration and testing of security-relevant software
- IT security consulting (GDPR, ISMS, B3S)
- Development of test concepts for conformity testing with technical specifications and BSI guidelines
- Preparation of evaluations and certifications according to security standards such as Common Criteria, PCI-DSS or FIPS
- Qumate.test center: powerful test management tool suite for automating test procedures



Expert knowledge for a secure future

We help our customers to implement legal and individual security requirements to form stable, user-friendly and sustainable solutions. This process begins with consulting, where we draw from a large pool of expertise, continues with „Security by Design“ through our development and ends at the customer with flexible and powerful solutions whose test results are verifiably documented.

The achelos team is made up of recognised experts in security technology who have implemented projects worldwide. We would be pleased to be your professional partner for cyber security in critical infrastructures.

eIDAS: expertise in development, testing and certification

For the new EU eIDAS Regulation achelos uses its experience in development, testing and certification. In a project from the banking world, for example, support was provided to secure certification to the stipulations of the Common Criteria (CC) protection profile in the context of eIDAS for a remote signature module.

