

Integration of PKI into industrial processes

Cybersecurity based on public key infrastructures forms the basis for the intelligent connectivity of devices and machines, whether in the industrial environment for the digitalization of processes or in future connected traffic solutions. achelos offers comprehensive services for the development of new public key infrastructures in industrial IoT.

With the digitalization of industrial processes, machine communication has gained importance in all areas of the economy, in production as well as in services. This creates the need to implement cryptographic security in machines and processes in a professional manner. Of fundamental importance here is a PKI, often internal to the company, which has been planned and implemented in a secure and future-proof manner, as it represents the foundation for the management and application of cryptographic processes to secure digital communication. In particular, requirements for an industrial production

environment must be taken into account.

Only a self-operated PKI can offer the combination of maximum trustworthiness, flexibility and capacity required for integration throughout the company. Mainly, industrial companies need to secure their machine communication for two main use cases:

- Secure Device Identity and Secure Boot using Identity Authority Manager (IdAM) and EJBCA Appliance
- Software Update Management with SignServer Appliance

Certificate management must be considered throughout the entire IoT lifecycle, starting right from production with a "birth certificate".

Our IT and security consultants are there to advise you in every phase of your project.

During the system planning:

- Capturing and managing your functional, technical, and organizational requirements
- Security objectives, threat scenarios and risk analysis, role models and certificate profiles
- Creating Certificate Profiles and Certification Practice Statements
- PrimeKey PKI solution architecture
- Planning and ensuring the project's success
- Proof of Concept

During the system delivery:

- Customer-specific integration of the IdAM and EJBCA registration and validation authorities
- Support with system installation and configuration
- Training of the operating staff on PrimeKey products

During the system commissioning:

- Quality assurance through acceptance tests
- Documentation
- Hand-over of the PKI solution into operation

Benefits

One-stop-shop

Consultancy services from planning to operations.

Experience

Long-term experience in IT security and consulting in security-relevant applications.

Focus on production

Integration of PrimeKey's IdAM into production.

Security

Technical, organizational and administrative controls for a secure and high-quality operation of PrimeKey PKI and SignServer Appliances.

Adherence to standards

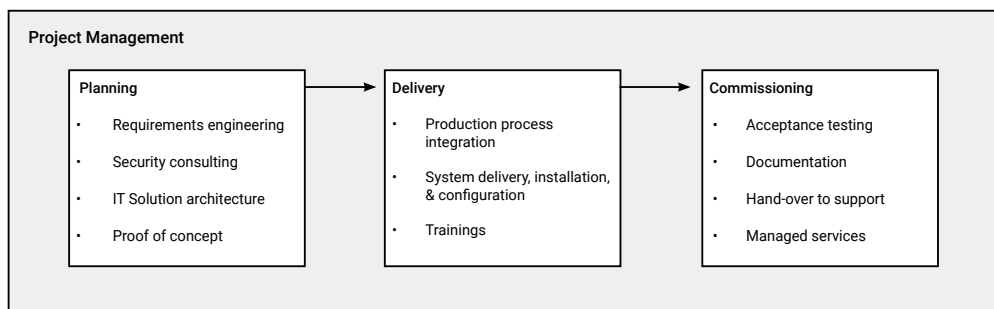
In line with industrial security standards, e.g., IEC 62443, IEC 62351 and IEEE 802.

Certified processes

achelos is ISO 9001 and ISO 27001 certified.

On-site support

Local support in DACH region, including on-site support.



About achelos

achelos is a leading specialist supplier of manufacturer-independent, high-performance products, solutions, and services in security-critical fields of application. achelos develops highly specialized solutions and services. Customers benefit from specific know-how, and expertise along the entire process chain of planning, development, testing and implementation.

About PrimeKey

PrimeKey is one of the world's leading companies for PKI and digital signing solutions. Deployed as software, appliance or cloud, our products EJBCA and SignServer deliver the capability to implement an enterprise grade PKI system ready to support solutions such as IoT, e-ID, e-Passports, authentication, digital signatures, code signing, digital identities, and validation; all solutions where digital certificates would be a main enabler.