MTG

Enterprise Resource Security
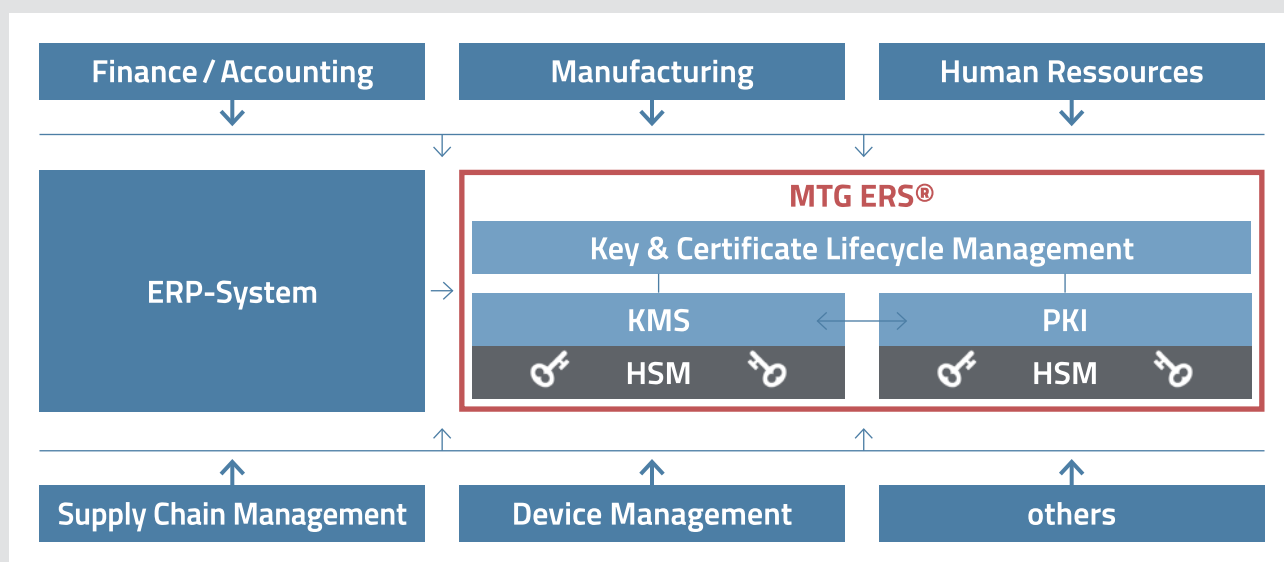Mastering Cryptographic Key Lifecycles

MTG ERS®
Enterprise Resource Security

Simplify and centralize the management of cryptographic keys and identities throughout the complete key lifecycle.

MTG ERS® unlocks the full potential of secure digitalization across industries and processes. MTG ERS® includes all necessary components to sufficiently plan, control and manage the usage of cryptographic keys and certificates:
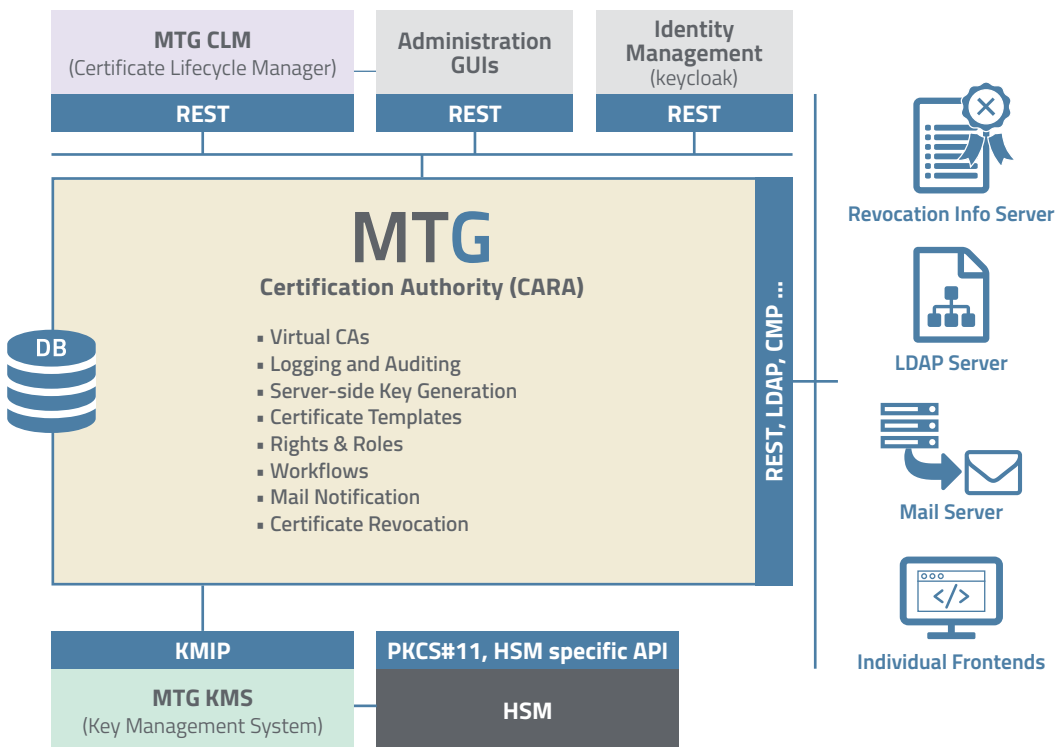
> MTG Certificate Lifecycle Manager (CLM)
> MTG PKI Platform / Certificate Authority (CARA)
> MTG Key Management System (KMS)
> Hardware Security Modules (HSM)

MTG ERS® can be flexibly configured, extended and customized to meet industry- and customer-specific requirements.

Finance / Accounting	Manufacturing	Human Ressources

ERP-System	MTG ERS®
	Key & Certificate Lifecycle Management
	KMS ←→ PKI
	🔑 HSM 🔑 / 🔑 HSM 🔑

Supply Chain Management	Device Management	others

Architecture

MTG Corporate PKI consists of two aligned product components of the MTG ERS® system:
MTG Certificate Lifecycle Manager and MTG Certificate Authority.

MTG Corporate PKI

MTG Corporate PKI implements and supports a Certificate Management Operation Policy by strict access control mechanisms that enforce the principle of least privilege in certificate management.
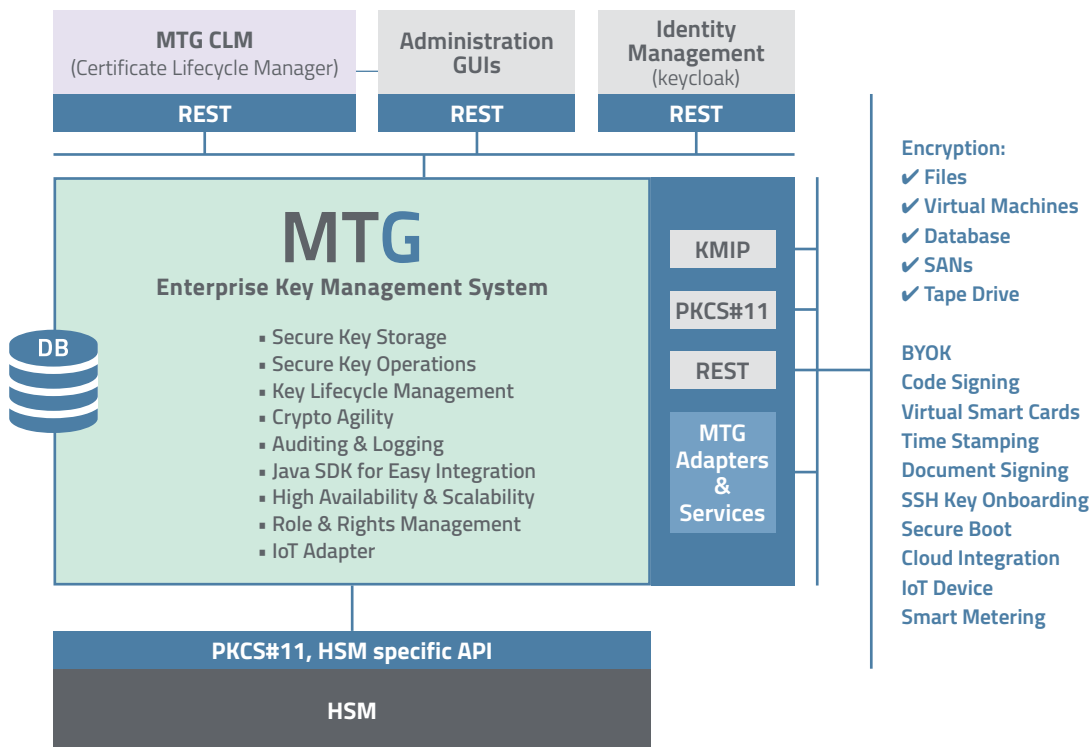
Certificate Lifecycle Management considerably simplifies the introduction, monitoring and smooth operation of one or more PKIs in companies. Expensive downtimes due to accidentally expired certificates are prevented. The quality of certificate-related processes is improved through automation.

MTG Managed Corporate PKI

With a Managed PKI, companies are able to focus more quickly on securing their business processes and to use the ready-built PKI immediately. In cooperation with the long-term partner and infrastructure provider DARZ GmbH, a new managed service offering for a corporate PKI was created. Processes for issuing, renewing and revoking certificates can be centrally automated, managed and controlled for various use cases.

Architecture

The MTG Enterprise Key Management System offers state-of-the-art secure storage, operations and lifecycle management for all cryptographic keys within an organization.

MTG CLM (Certificate Lifecycle Manager)	Administration GUIs	Identity Management (keycloak)
REST	REST	REST

MTG
Enterprise Key Management System

- Secure Key Storage
- Secure Key Operations
- Key Lifecycle Management
- Crypto Agility
- Auditing & Logging
- Java SDK for Easy Integration
- High Availability & Scalability
- Role & Rights Management
- IoT Adapter

DB

KMIP

PKCS#11

REST

MTG Adapters & Services

Encryption:
✔ Files
✔ Virtual Machines
✔ Database
✔ SANs
✔ Tape Drive

BYOK
Code Signing
Virtual Smart Cards
Time Stamping
Document Signing
SSH Key Onboarding
Secure Boot
Cloud Integration
IoT Device
Smart Metering

PKCS#11, HSM specific API

HSM

MTG Enterprise KMS
The MTG KMS architecture is part of the overall MTG ERS® system. This means that the system can be expanded with further important security components whenever required. This includes the MTG Certificate Lifecycle Manager, MTG Certificate Authority and the appropriate Hardware Security Modules.

KMIP Standard
MTG KMS already supports all cryptographic functions from the KMIP standard.

Various KMS based Use Cases
The targeted solutions which are based on KMS (e.g. BYOK, Code & Document Signing, Time Stamping, etc.) can be optimally accessed and managed via standard APIs (KMIP, PKCS#11, REST). The MTG KMS includes a specific Java SDK that provides a simple, user-friendly Java interface for easy client integrations. MTG-specific services and adapters are available for specific use cases, like for example IoT, Secure Boot or Smart Metering.

MTG HSM Consulting, Supply & Integration

We provide professional support in the Hardware Security Module (HSM) selection and its integration in your infrastructures.

HSM Consulting & Service-Portfolio

The conception and design of highly trusted architectures and infrastructures, as well as the selection of the appropriate hardware equipment and HSM, requires highly specialized security experts. Additionally, the development of individual software and HSM integrations into existing systems for such specialized environments is also challenging. MTG provides you with comprehensive consulting services on all HSM-related matters and develops the specialized HSM software according to your requirements.

> Analysis, conception and specification of requirements
> Definition of scalability and failover / backup strategies
> Selection of suitable HSM models
> Development of special software (e.g., plug-ins)
> Development of individual software
> Integration of HSM into existing IT infrastructures
> Support, training and operational support
> Advice on the implementation of security lifecycle management

Vendor-independent HSM integration

The Hardware Security Modules recommended by MTG can be deployed in a plethora of industries such as smart metering, finance, payment, automotive, cloud services and the public sector. These HSMs are optimally aligned with the MTG ERS® Software. We support a wide range of HSM Vendors like Utimaco, Entrust nShield, Thales Luna and more.
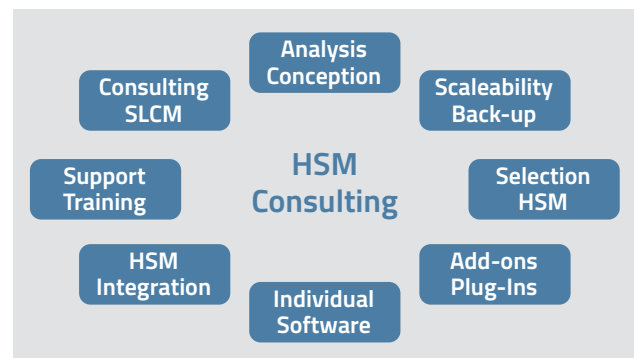
MTG ERS® supports all the standard HSM interfaces such as PKCS#11, JCA and CNG as well as some custom Vendor APIs.

Partnerships:

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