Enterprise key management solutions

Challenges

Keeping keys organized and secure is essential to the integrity of any enterprise encryption system. Many organizations operate multiple, independent encryption systems resulting in silos, which complicates key management and erodes security. Managing keys for these silos consumes time and budget. It also risks compromising data, if keys are kept local to the encryption systems they protect.

Solution: Thales key management solutions

Thales key management products centralize key management for your home-grown encryption, as well as your third-party applications using native encryption such as full-disk encryption and databases. This gives you greater command over your keys while increasing your data security. Thales key management products connect with your applications through standard interfaces and deliver access to robust key management functions.

Highly secure and efficient centralized key management

- Streamlined operations through centralized key management
- Stronger security by separating keys from applications
- Comprehensive key services delivered by dedicated, FIPS-certified hardware and software solutions
The foundation for Thales key management solutions: Vormetric Data Security Manager

The Vormetric Data Security Manager (DSM) is a high-availability appliance that centralizes encryption key management for Vormetric and third-party encryption solutions. The DSM manages key lifecycle tasks including generation, rotation, destruction, import and export.

The DSM additionally enhances key management by providing convenient back-up services and delivering strong separation of duties for increased security. The DSM can be separated into logical entities, or domains, dedicated to unique key management environments, providing additional security and ultimate separation of duties, where no single administrator has access to all domains.

The Vormetric DSM is available as either a hardware or a virtual appliance. The V6000 DSM hardware appliance is certified to FIPS 140-2 Level 2 and the V6100 DSM hardware appliance, equipped with a hardware security module (HSM), is certified to FIPS 140-2 Level 3. The virtual appliance is certified to FIPS 140-2 Level 1. A full listing of certifications is available on thalesesecurity.com.

Thales key management solutions

Thales key management solutions support a variety of applications, including:

Key Management Interoperability Protocol (KMIP)
KMIP is an industry-standard protocol for encryption key exchange between clients (key users) and a server (key store). Standardization facilitates external key management for storage solutions including SAN and NAS storage arrays, self-encrypting drives and hyper-converged infrastructure solutions.

The Vormetric KMIP solution provides a simple interface to the key management functions of the Vormetric DSM, delivering powerful, centralized key management capabilities for your KMIP-compliant applications.

Key Management for Transparent Database Encryption (TDE)
Thales key management solutions centralize and simplify key management across multiple Oracle or Microsoft SQL Server TDE native encryption instances. Vormetric Key Management for TDE, based on the Vormetric DSM, securely manages keys and keeps them separate from your database and database server.

Cloud Key Management using CipherTrust Cloud Key Manager
CipherTrust Cloud Key Manager delivers efficient, secure control over the full lifecycle of software as a service (SaaS) and infrastructure as a service (IaaS) encryption keys, including key creation, uploading, updating, storing, revocation and reporting. It is available as a service in the cloud and as an on-premises deployment using the Vormetric DSM to securely manage keys.

CipherTrust Cloud Key Manager is currently available for Salesforce Shield Platform Encryption, Microsoft Azure and Amazon Web Services.

Vormetric Application Encryption for Key Management
Vormetric Application Encryption from Thales offers PKCS#11-based APIs, providing full access to the Vormetric DSM’s key management services for customized applications. Vormetric Application Encryption services are available as a server-based deployment or via RESTful APIs.

Vault Storage
The Vormetric Key Vault provides high-availability key, certificate, and blob storage and also tracks expiration dates of your stored cryptographic material.

About Thales
The people you rely on to protect your privacy rely on Thales to protect their data. When it comes to data security, organizations are faced with an increasing number of decisive moments. Whether the moment is building an encryption strategy, moving to the cloud, or meeting compliance mandates, you can rely on Thales to secure your digital transformation.

Decisive technology for decisive moments.