Thales eSecurity Solutions for Amazon Web Services

Secure workloads across hybrid clouds including Amazon Web Services

Information technology workloads in Amazon Web Services (AWS) can offer convenience and cost savings. However, you still need to follow security, privacy and compliance rules, as well as best practices, for protecting data. Further, you need rapid data mobility across all clouds you currently use and those in your future, a need which can be compromised with cloud-vendor-specific encryption solutions.

Advanced encryption solutions with comprehensive key management

Effective, secure cloud use involves an increasing number of decisive moments, such as when you consider using sensitive data in any cloud. You can rely on Thales to secure your digital transformation. Thales advanced encryption and centralized key management solutions give you protection and control of data stored on your premises, Amazon Web Services, and other cloud providers. Thales technology enables you to:

- Avoid cloud vendor encryption lock-in and ensure the data mobility you need while you efficiently and securely spread workloads and data across multiple cloud vendors, including Amazon Web Services, with centralized, independent encryption management
- Take secure advantage of Amazon Key Management Services (AWS KMS) with a centralized key management solution that spans multiple clouds
- Identify attacks faster with data access logging to industry-leading SIEM applications
- Reduce or eliminate risks arising from compromised credentials with advanced encryption including privileged user access controls
- Architect applications for the cloud with built-in security using vaultless tokenization with dynamic data masking
Advanced encryption for Amazon Web Services and beyond

If you’re 100% Amazon Web Services-based with stringent data security controls, or if you’re running hybrid clouds with data distributed across your on-premises private cloud, multiple cloud providers, and on AWS, you need an advanced data encryption solution. Vormetric Transparent Encryption protects your files and databases on your premises and across multiple clouds including AWS, without any changes to applications, databases, infrastructure or business practices.

**Vormetric Transparent Encryption:**

- Strengthens data security with operating system-level controls against unauthorized access based on granular access policies, including user identity (including for administrators with root privileges), and process, among many others
- Accelerates breach detection and satisfies compliance mandates with detailed file access logs, directed to your security information and event management (SIEM) system
- Delivers a fast return on investment with a non-intrusive, flexible implementation. Encryption agents operate on AWS EC2 compute instances or any other server accessing storage, protect EBS, EFS and S3 storage, and are available for many Windows versions and Linux distributions, including Amazon Linux

Centralized, secure key management

The Vormetric Data Security Manager centralizes key, policy and log management for Vormetric Transparent Encryption, available as a FIPS 140-2 Level 2 or 3 appliance or a FIPS 140-2 Level 1 virtual appliance. The physical appliance is appropriate for your on-premises locations to manage encryption agents worldwide across any cloud provider. The virtual appliance is available in many virtualization formats including VMware and KVM as well as an Amazon Web Services AMI and on the Microsoft Azure Marketplace.

**Accelerated PCI-DSS compliance**

Vormetric Tokenization with Dynamic Data Masking secures and anonymize sensitive assets in the data center, big data environments or the cloud for simplified PCI-DSS compliance. Format-preserving or random tokenization protects sensitive fields while maintaining database structure, for a non-disruptive implementation. Then, it’s easy to add policy-based dynamic data masking to applications.

The Vormetric Tokenization Server is available as a shared AWS AMI.

AWS encryption key management

Organizations that cannot bring their own encryption can still follow industry best practices by managing keys externally using the CipherTrust Cloud Key Manager.

The CipherTrust Cloud Key Manager leverages cloud provider Bring Your Own Key (BYOK) API’s to reduce key management complexity and operational costs by giving customers lifecycle control of encryption keys with centralized management and visibility. The solution can be deployed rapidly using CipherTrust Cloud Key Manager as a service, is available as a shared AWS AMI, or can be deployed on premises or in any supported private cloud deployment to meet more stringent compliance requirements.

**CipherTrust Cloud Key Manager offers the following advantages:**

- Safer key management practices combined with cloud benefits of scale, cost and convenience
- Greater control over keys—you can control key generation and storage of keys used in AWS KMS, Microsoft Azure and more!
- Enhanced IT efficiency with multi-cloud key management from a single console that offers automated key rotation and comprehensive key life cycle management

**Fulfill your data protection requirements**

Thales eSecurity simplifies securing Amazon Web Services workloads and helps achieve compliance with data security regulations. Vormetric Data Security Platform products operate seamlessly on workloads in AWS and on your premises delivering centralized policy and key management, and Thales eSecurity multi-cloud key management brings you into compliance with best practices and data protection mandates.

**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 amount 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.