



# CipherTrust Cloud Key Management Solutions for Amazon Web Services

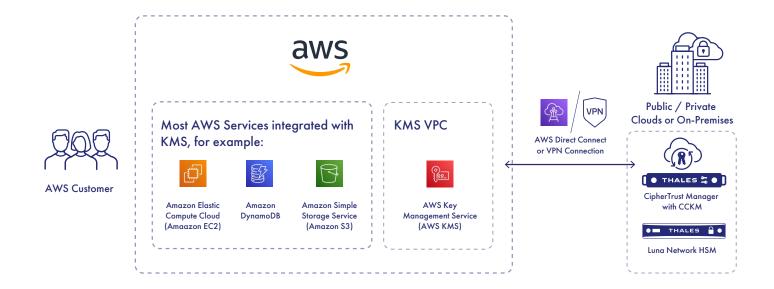


AWS Key Management Service (AWS KMS) External Key Store (XKS), the new Hold Your Own Key (HYOK) service from Amazon Web Services (AWS), allows customers to protect their data residing in AWS using encryption keys stored outside AWS.

Thales is collaborating with AWS to accelerate the ability of organizations to migrate sensitive data and workloads to the cloud. AWS customers can block and unblock access to encrypted data with keys stored and managed outside of AWS.

## CipherTrust Cloud Key Manager

Thales and AWS innovated to create a versatile, feature-rich implementation, providing customers with choices in managing their keys. The collaboration extends the existing key management ownership model of Bring Your Own Key (BYOK) with a Hold Your Own Key (HYOK) offer. With external key store and Thales CipherTrust Cloud Key Manager (CCKM), customers can now choose to have data protected with keys physically located outside of AWS Cloud. The externally stored keys are only accessible via explicit customer authorization. External key store supports most AWS services already integrated with AWS KMS.



#### **Benefits**

- Enhance compliance with GDPR in the post Schrems II ruling world by aligning with guidelines from European Data Protection Board (EDPB)
- · Improve data sovereignty by providing explicit control over encryption keys outside of the AWS cloud
- Maximize choice from a single console, manage Native, BYOK, HYOK keys across clouds
- Reduce threat surface by centralizing control of keys outside of cloud providers
- Reduce costs by simplifying key management
- Faster time to value by speeding up migration to the cloud

## Gain Strong Key Control and Security

External key store enables customers to separate key management from AWS controlled encryption, offering a crucial layer of separation of duty and control. Thales CCKM delivers key generation, reporting, and key lifecycle management that help fulfill internal and industry data protection mandates, with optional FIPS 140-2-certified hardware.

# Meet Organizational Needs with Flexible Deployment Options

Thales CCKM is available in virtual and physical form factors: Virtual CCKM is an all-software offering easily deployed and can be run in the cloud or on premises and may be found in several cloud provider marketplaces for fast instantiation. Deployment environments include: public cloud, private cloud, hybrid cloud, and physical appliances. Physical appliances are available for customers who prefer an on-prem solution. Regardless of how and where CCKM is deployed, CCKM can manage keys, and access to the keys, in any reachable, supported cloud.

## Increased Efficiency

Thales CCKM centralizes encryption key management from multiple environments, presenting all supported clouds, and even multiple cloud accounts, in a single pane of glass. Advanced cloud key management services and capabilities include automated key rotation, key expiration handling, and cloud key vault synchronization — dramatically reducing the time required for cloud key life cycle management.

In addition to HYOK and BYOK, CCKM supports full key lifecycle management of native cloud keys, including keys stored in AWS CloudHSM.

#### Align with Best Practices

Deliver compliance, best security practices and control of your data by separating encryption key control from data encryption and decryption operations. Gain operational insights on encryption key usage with reports and logs provided by Thales CCKM.

## Integrates With Your Automation Initiatives

CCKM capabilities are available programmatically using RESTful APIs, enabling DevOps and IT teams the power of centralized cloud encryption management to work with the organization's automation and self-service initiatives.

#### How it \Morks

External key store is an option within AWS KMS. Once an externally managed key is linked to a KMS key ID using XKS, the externally managed key can be used to protect data in any of the AWS services that integrate with AWS KMS.

External key stores let you control data sovereignty. Data Encryption Keys (DEK) encrypted under KMS keys in the External key store can be decrypted only in the Thales CCKM under your control. When you revoke access to CCKM, by blocking the key or disconnecting the external key store, workloads running in AWS lose all access to your encryption keys, and data encrypted under your keys cannot be decrypted; it is crypto-shredded.

#### Thales is Here to Help

Contact Thales or try CCKM for free today to help you assess and define the data protection strategy that best suits your organizational requirements, and for integration guides to help accelerate your deployment.

## About Amazon Web Services

Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud offering, with more than 200 fully featured services available from data centers globally. Millions of customers — including the fastest-growing startups, largest enterprises, and leading government agencies — are using AWS to lower costs, increase security, become more agile, and innovate faster.

#### **About Thales**

As the global leader in data security, Thales helps the most trusted brands and organizations around the world protect their most sensitive data and software, secure the cloud, provide seamless digital experiences, and achieve compliance through our industryleading data encryption, identity and access management, and software licensing solutions.





