Thales Helps One Of India's Largest Private Banks Streamline Key Management Across Multiple Cloud Services

The Organisation

The organization is one of India's leading private banks providing an array of diverse financial products and services to over 43 million customers.

With a pervasive banking network of over 5,430 branches and 15,292 Automated Teller Machines (ATMs) spread across 2,848 cities and towns in India, the bank fulfills the financial aspirations of individuals and businesses through its wide gamut of retail banking, corporate banking and treasury products and services.

The Business Challenge

As is the case with most¹ Asia-Pacific organisations that manage large volumes of business data, the bank had stored its data in diverse banking applications spread across multiple cloud environments.

While the bank's cloud service providers (CSPs) like Microsoft Azure and Amazon Web Services (AWS) offered native encryption of the data stored by its cloud applications, the bank wanted to completely own the responsibility of data protection as mandated by India's banking regulator Reserve Bank of India (RBI).



To ensure optimal data protection, the bank was keen to adopt the 'Bring Your Own Key (BYOK)' model and take end-to-end responsibility of securely storing and managing the encryption keys used by its CSPs during the encryption process.

To facilitate this, the bank wanted to implement a centralised key management solution that would not only securely store and generate the keys on-premises and separate from the CSP-provided key management service but also manage the keys efficiently throughout their entire lifecycle.

The Solution

Thales' <u>CipherTrust Cloud Key Manager</u> perfectly fit the bank's requirement. Specially designed for streamlining key management in multi-cloud environments, CipherTrust Cloud Key Manager reduces the various complexities associated with managing keys in the cloud, enables centralised key management, and gives users complete control of the encryption keys generated by their CSPs.

Deployment Architecture:



1 Thales 2020 Data Threat Report - Asia-Pacific Edition

Offering seamless support for the BYOK APIs provided by cloud providers, CipherTrust Cloud Key Manager automates key lifecycle management, enables key generation, usage logging and reporting, and facilitates 'keys decoupling' by securely storing the keys separately from the encrypted data, thereby providing stronger controls over encryption key lifecycles for the data encrypted by the CSPs.

With on-premise hosting of CipherTrust Cloud Key Manager, the bank gained full ownership of their encryption keys resulting in complete visibility on how their encryption keys were created, used, and managed in the cloud.

The Results

1. Full Control and Security of Encryption Keys

CipherTrust Cloud Key Manager seamlessly enabled the bank to separate key management from their CSP-controlled encryption processes thereby facilitating a pivotal layer of separation of duties and full control of the encryption keys.

Additionally, leveraging CipherTrust Manager as a key source, CipherTrust Cloud Key Manager facilitated secure key generation and storage helping the bank adhere to the highest standards of data protection.

2. Centralised Key Management

With its inherent centralised key management feature, CipherTrust Cloud Key Manager helped the bank control access to individual banking applications spread across multiple clouds from a single browser window resulting in enhanced IT efficiency and optimised operational experience.

3. Complete Automation

Since encryption keys evolve through multiple phases during their lifetime – like generation, registration, distribution, rotation, archival, backup, revocation, and destruction, secure and efficient key management at each lifecycle phase becomes fundamental to data protection.

CipherTrust Cloud Key Manager offered the bank automated key rotation including support for expiring keys that helped it save precious man hours managing the keys at each stage of their lifecycle.

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.

