FORNETIX

Securing Sensitive Data in the Cloud For Banking & Finance Organizations

FORNETIX VAULTCORE

» HIGHLIGHT

Currently, 30% of insurance firms and 40% of banks have deployed workloads into both public and private cloud — and soon more financial institutions will be using cloud than those that are not. But many banks and financial institutions have concerns about risks associated with moving sensitive data into cloud environments.

Fornetix VaultCore allows financial organizations utilizing cloud systems to retain control over sensitive data by facilitating **"Bring Your Own Key"** (BYOK) methods.

» ABOUT FORNETIX

Fornetix®, a pioneer in encryption key management, understands that securing data in today's complex environment can seem like an impossible task. VaultCore™ by Fornetix is a patented solution designed to simplify the encryption key management process across the entire enterprise. VaultCore provides a centralized system to automate the full key lifecycle and enable compliance policy enforcement. Scalable to over one hundred million keys for data storage environments including multi-cloud and hyper-converged infrastructures, VaultCore allows you to leverage existing technology investments and take complete ownership of your keys ensuring that critical data is safeguarded no matter where it resides.

» THE CHALLENGE

Though concerns such as information security, compliance, resilience, and third-party management continue to make it difficult for CIOs to commit to full migration of legacy systems to cloud environments, cloud implementations have become more common, and their inclusion in investment and digital strategies has increased — putting pressure on CIOs to act.

Encryption is regarded as a security best-practice and, in some cases, a mandated method for protecting sensitive data. Many cloud providers like AWS, Microsoft, Google, and VMware provide strong encryption within their offerings. A good encryption strategy also includes the ability to create, manage, and safeguard encryption keys across multi-cloud environments, as any security strategy that does not include a centralized encryption key management solution is putting sensitive data at risk. Though most providers utilize encryption key management, many organizations are opting to bring their own encryption keys (BYOK) when using third-party cloud environments to manage data.

$3.86 MILLION

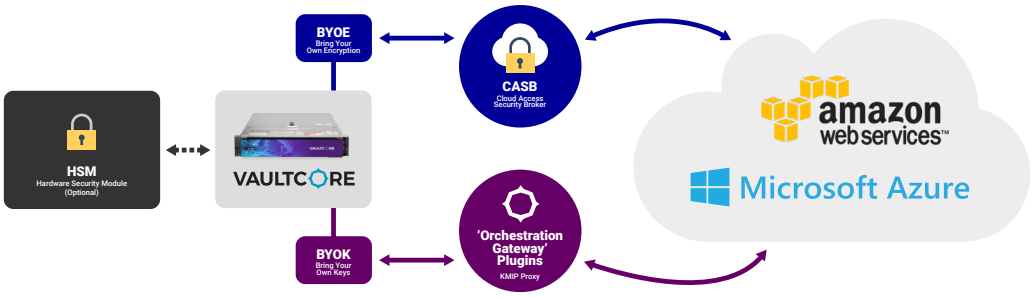
Global Average Cost of Data Breach
+ Customer PII Data Has Highest Cost Per Record at $150 [1]

» THE SOLUTION

Bring Your Own Key (BYOK) allows enterprises to encrypt their data and retain control and management of their encryption keys. Some cloud infrastructures, such as AWS, have implemented a "Bring Your Own Key" (BYOK) tool that allows organizations to encrypt data in the cloud without the cloud provider gaining access to it. Leveraging the BYOK in AWS or Azure means admins can import an AES-256 key to encrypt and decrypt the data. All of the imported encryption keys are then backed by a master key provided by a third-party administrator, such as Fornetix. This is made available through the Fornetix BYOK plugins via APIs that allow the Fornetix VaultCore appliance to speak to cloud service providers in their preferred protocol.

The BYOK plugin is compatible with both the virtual and physical versions of the VaultCore key management system (KMS). A 5-minute integration supports bulk encryption key uploads to the cloud's local key store and full key lifecycle management for the data residing in the cloud. The benefits of implementing VaultCore include:

1. **Unify encryption keys used in AWS and Azure with rest of the organization's keys for better reporting and management.**
2. **Easily upload all necessary keys simultaneously with the click of a button from user-friendly VaultCore web application.**
3. **Utilize keys in the cloud that have been wrapped with a third-party Master Encryption Key.**
4. **Revoke encryption keys so AWS accounts are unable to access data using these keys should the need arise.**



» SUMMARY

Securing data has become exponentially complex as companies continue to migrate all or part of their data into virtual data centers or cloud environments. As a result, security and risk management leaders struggle to support secure access to encrypted data while also meeting data residency, privacy, crypto-agility, compliance, and business needs. Fornetix VaultCore provides a simple solution that works with an organization's existing investments — and through a simple API connection utilizing BYOK, can provide enterprise level key management to fully protect sensitive data.

[1] **SOURCE:** *https://www.ibm.com/security/digital-assets/cost-data-breach-report*

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