Gemalto secures a leading banking group’s IBM Bluemix cloud infrastructure

Essential to their migration to IBM Bluemix was the mission-critical requirement that the banking group would maintain exclusive control of the keys to its data. A leading technology company partnered with Gemalto to provide SafeNet ProtectV, SafeNet KeySecure, and SafeNet Luna Network HSM (Hardware Security Module) solutions. Gemalto’s high-assurance Data Protection solution ensured that the banking group always has the utmost control over their data, security policies, and cryptographic keys that protect that data—regardless of whether that data was hosted in the cloud or on-premises.

A leading UK-based banking group recently selected Gemalto’s partner, a multinational technology company, to provide private cloud services, hosted in UK data centers of both companies. The banking group’s main requirement was that sensitive and internal data remain secure, regardless of where it resides. To achieve this, the decision was made to move to an IBM Bluemix cloud by outsourcing this service to speed up the deployment of new applications. It would also provide access to current internal and external applications from the technology provider’s extensive suite, and other providers as well.

It was a key requirement that all internal enterprise data supporting the banking group’s infrastructure—including financials, and personally identifiable information—remain secure, and that only they would have control over the data and its keys. With this mandate, the technology provider turned to Gemalto, its partner for over a decade, to deliver complementary solutions to safeguard data and ensure compliance for many different organizations. The field-proven range of SafeNet Data Protection solutions—including SafeNet ProtectV, SafeNet Virtual KeySecure and SafeNet Luna Network HSM—enabled its partner to assure the banking group that its data would be secure regardless of where it resided, in the cloud or on-premises, and that they had complete control over their security policies and cryptographic functions. This would enable the banking group to ensure compliance with the most stringent regulations, including GDPR.

About the Banking Group

The banking group is a leading UK-based financial services group that provides a wide range of banking and financial services, focused on private and commercial customers. The company’s main business activities are retail, commercial and corporate banking, general insurance, and life, pensions, and investment provision.

The Business Need

The banking group was interested in moving its infrastructure to an IBM Bluemix cloud. A key requirement was that all data hosted in the cloud infrastructure was to be secured according to high-assurance standards, and that no third party should have access to the company’s data. The banking group already had an extensive VMware-based environment that needed to be migrated from its on-premises data centers to the IBM Bluemix cloud data centers, and all of these virtual machines needed to be encrypted. Although the data was being stored in the IBM Bluemix cloud, the banking group insisted that the master keys be stored on-premises at their own data centers. Alternative solutions that proposed storing keys in software or in the IBM Bluemix cloud were not acceptable.
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The Benefits

Pricing: Gemalto offered much more attractive pricing than the competitors. The reason for the significant pricing difference was the inability of the other solutions to scale, and their lack of out-of-the-box integrations with a large number of applications used by the banking group. In comparison, the SafeNet Data Protection solutions already integrated with many applications used by the company.

Security portfolio: Gemalto’s SafeNet ProtectV and SafeNet Virtual KeySecure are integrated with SafeNet Luna Network HSMs to provide high-assurance key protection in a FIPS 140-2 Level 3.

The Solution

Gemalto’s technology partner sought a solution that would provide robust encryption and key management in a hybrid model, with seamless integration in their IBM Bluemix cloud environment and secure data protection regardless of whether the client’s data was on-premises or in the cloud. After an assessment of the alternatives, the partner found that the Gemalto solutions SafeNet ProtectV, SafeNet KeySecure, and SafeNet Luna Network HSM were effectively able to address all of the banking group’s critical requirements in a very cost-effective offering.

Gemalto worked with its’ partner to scope a full-disk encryption solution across virtual machines, IBM Bluemix cloud instances, and physical servers, which allowed the banking group to control key’ encryption. The solution was comprised of:

- SafeNet ProtectV to encrypt thousands of VMware virtual machines and SafeNet Virtual KeySecure to manage the encryption keys throughout their lifecycle, both hosted in IBM Bluemix.
- SafeNet HSMs to be the root of trust and vault the master keys, hosted on-premises at the banking group’s data centers.

Partner integrations: Gemalto offers more third-party integrations than competitors, and their solutions are integrated into all leading clouds, and support an expansive list of use cases. Gemalto was able to offer effective protection of the master keys on-premises in a FIPS 140-2 Level 3-certified HSM, while alternate solutions solved limited encryption use cases, offered less scalability, supported a weaker ecosystem of integrations, and were less cost-effective than Gemalto’s solution.

Breadth of offering: Gemalto offers additional SafeNet Data Protection Portfolio solutions, ensuring the best fit for the banking group’s data protection use cases:

- SafeNet ProtectFile for file encryption
- SafeNet ProtectApp for application encryption
- SafeNet ProtectDB for database encryption
- SafeNet Tokenization to enable transparent tokenization
- SafeNet High Speed Encryptors for high-assurance Ethernet network encryption

About Gemalto’s SafeNet Identity and Data Protection Solutions

Gemalto’s portfolio of Identity and Data Protection solutions offers one of the most complete portfolios of enterprise security solutions in the world, enabling its customers to enjoy industry-leading protection of data, digital identities, payments, and transactions—from the edge to the core. Gemalto’s SafeNet Identity and Data Protection solutions enable enterprises across many verticals, including major financial institutions and governments, to take a data-centric approach to security by utilizing innovative encryption methods, best-in-class crypto management techniques, and strong authentication and identity management solutions to protect what matters, where it matters. Through these solutions, Gemalto helps organizations achieve compliance with stringent data privacy regulations and ensures that sensitive corporate assets, customer information, and digital transactions are safe from exposure and manipulation in order to protect customer trust in an increasingly digital world.

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