



## SOLUTION BRIEF

# Powerful Encryption and Key Management for Cloud Applications and Databases with CipherCloud and Gemalto

With Gemalto and CipherCloud, organizations can encrypt sensitive data destined for SaaS, PaaS, and IaaS environments without impacting application functionality, and while retaining complete key management control securely within the enterprise boundary.

## Introduction

Cloud services are inevitably entering and changing business environments, enabling organizations to be more agile and competitive. But the explosive growth in cloud applications has outpaced the ability of cloud providers to protect data, leaving many organizations with concerns about security, privacy, data residency, and compliance.

CipherCloud addresses these concerns by allowing organizations to proactively encrypt sensitive data before it goes to the cloud and maintain exclusive control over the encryption keys. CipherCloud protects data on a field-by-field basis while preserving the formatting and functionality of encrypted data. Integrated with SafeNet Luna HSM and SafeNet KeySecure products by Gemalto, CipherCloud offers high-performance encryption with best-in-class key management tools.

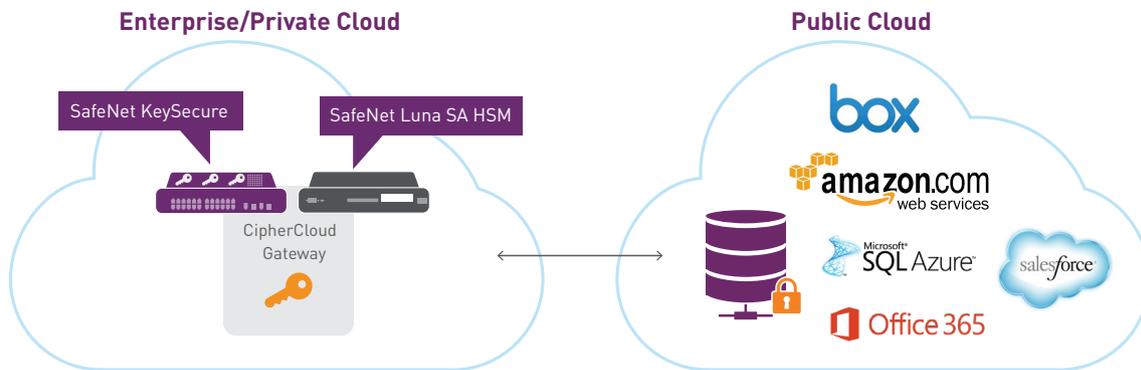
## Solution

Organizations can now migrate their most sensitive databases and applications to the cloud without compromising security or control. With CipherCloud and the SafeNet product line by Gemalto, security teams can encrypt sensitive information before it migrates to the cloud while centrally managing encryption keys that are stored in tamper-proof hardware appliances. Administrators now have a solution that delivers scalable, high-performance, and highly secure protection of cloud-based applications and databases. With this solution, it is possible to maintain an application's native functionality while sensitive data remains encrypted. The SafeNet products complement this flexibility by centralizing administrative cryptographic functions to make maintenance and security less cumbersome for IT staffs. These solutions include the following capabilities:

## Key Features

- ▶ Strong encryption that preserves functionality: CipherCloud uses standards-based AES 256-bit encryption, which is FIPS-compliant and has been extensively reviewed and tested by many independent organizations. CipherCloud integrates tightly with various cloud applications in order to preserve format, search, sort, and other key functions.
- ▶ Military-grade key management: With CipherCloud, customers retain complete control over encryption keys. Organizations can store these keys within SafeNet Luna SA HSMs, which are certified compliant with rigorous FIPS 140-2 Level 3 and Common Criteria standards. By adding SafeNet KeySecure, organizations can implement highly granular rights administration and enforce security policies from a central platform.
- ▶ High-performance architecture: The CipherCloud and Gemalto combined solution is highly scalable, supporting large-scale, high-throughput deployments with extremely low latency.

▶ **CipherCloud Platform.** The CipherCloud platform provides a practical way for organizations to protect sensitive information before it goes to any cloud application by leveraging a combination of encryption, tokenization, anti-malware, data loss prevention (DLP), and activity monitoring capabilities, delivered on a high-performance stateless architecture. CipherCloud lets administrators set security policy at the field level, while maintaining the formatting of the data and the functionality of the application, including supporting searching, sorting, and reporting.



- > **SafeNet KeySecure.** KeySecure is a key management platform that enables security teams to centrally and uniformly manage cryptographic keys across all their organization's encryption and key management platforms, including SafeNet Luna HSMs, CipherCloud, and other third-party platforms that support the OASIS Key Management Interoperability Protocol (KMIP) standard.
- > **SafeNet Luna SA HSMs.** Luna SA HSMs are robust, high-availability, and high-performance appliances that maximize the integrity and security of cryptographic operations. These tamper-resistant key storage appliances have been certified FIPS 140-2 Level 3 compliant.
- > **SafeNet ProtectApp.** ProtectApp offers encryption and granular security controls for business applications. Fully integrated with the SafeNet KeySecure appliance, ProtectApp gives administrators centralized key and policy management tools to support large numbers of applications.

### About CipherCloud

CipherCloud, the leader in cloud information protection, enables organizations to securely adopt cloud applications by overcoming data privacy, residency, security, and regulatory compliance risks. CipherCloud delivers an open platform with comprehensive security controls, including AES 256-bit encryption, tokenization, cloud data loss prevention, cloud malware detection, and activity monitoring. CipherCloud's technology protects sensitive information in real time, before it is sent to the cloud, while preserving application usability and functionality.

### Conclusion

Put the combined CipherCloud and SafeNet solutions by Gemalto to work for your organization—so you can more fully leverage the cloud without compromising security. To learn more, visit [www.ciphercloud.com](http://www.ciphercloud.com) and [www.safenet-inc.com](http://www.safenet-inc.com).

### Key Benefits

- > **Benefit from the cloud.** With CipherCloud and SafeNet, organizations can now safely adopt the cloud for mission-critical business applications while assuring security and compliance for sensitive data.
- > **Streamline key management functions.** With the combined solution's scalable, central platforms for encryption and key management, organizations can streamline administration and reduce the number of managed systems for cost savings.
- > **Strengthen security.** With these solutions, organizations can effectively control access to data stored anywhere in the cloud, enforcing corporate security policies consistently across any cloud application or database.
- > **Implements easily and flexibly.** Through support for open standards such as OASIS KMIP, organizations can deploy CipherCloud and SafeNet products in enterprise and cloud environments without coding or modifications to existing applications or databases. The solution uses these open standards to integrate with products from other vendors as well.

### About Gemalto's SafeNet Identity and Data Protection Solutions

Through its acquisition of SafeNet, Gemalto 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 newly expanded portfolio of SafeNet Identity and Data Protection solutions enables 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 ensure 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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