Introduction
Organizations of all sizes are challenged to address increasing concerns surrounding data protection. Whether data is stored as a file, a block, or an object, it is now a foregone conclusion that security must permeate every layer of the storage ecosystem for data to be safe. Encryption is integral to any security scheme designed to protect valuable information within the storage layer. However, implementing encryption technologies can also create new sets of challenges, particularly in larger enterprises:

> Processing encryption can slow performance and makes scaling storage more challenging.
> If encryption is deployed with multiple products across disparate departments, key management quickly becomes prohibitively expensive and time consuming.

Key management is inherently risky. Lost, corrupt, or stolen keys compromise encrypted data. Effective key management requires staff resources and clear protocols.

Solution
Gemalto and Hitachi Data Systems (HDS) have a solution that meets the challenges organizations face with increasing data growth and the security risks surrounding data at rest. Now, organizations can scale their data centers as their data needs grow while strengthening and streamlining their data-at-rest security implementations. The combined solution provides the following offerings.

> **SafeNet KeySecure.** SafeNet KeySecure by Gemalto is a key management platform that enables security teams to centrally and uniformly manage cryptographic keys across an organization. SafeNet KeySecure supports the OASIS Key Management Interoperability Protocol (KMIP) standard and secures keys in the Gemalto SafeNet hardware security modules (HSM) or hardened virtual security appliances for flexibility in deployment. If encryption is deployed with multiple products across disparate departments, key management quickly becomes prohibitively expensive and time consuming.

> **HDS Storage Platforms.** HDS offers the Virtual Storage Platform, Hitachi Unified Storage VM and Hitachi Unified Storage 100 family with embedded encryption. HDS’s performance-friendly encryption, coupled with its OASIS KMIP support, provides security for data at rest with no impact on performance and easy integration into complex key management environments.

Key Features

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<td><strong>Top of the line security.</strong> SafeNet KeySecure by Gemalto stores certificates and cryptographic keys in a hardware appliance, avoiding the inherent vulnerabilities of software-stored cryptographic materials. Additionally, security teams can centralize key management and institute policies at a granular level for more effective and consistent policy administration across the organization.</td>
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<td><strong>Simplified and integrated key management.</strong> HDS provides a media agnostic encryption capability to protect data at rest on internal storage media with no impact to performance. Additionally, customers can leverage standards-based key management integration for things like key generation, escrow, and recovery.</td>
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<td><strong>Separation of duties.</strong> SafeNet KeySecure and HDS support segmented key ownership and management based on individuals or group owners. This approach is perfect for protecting sensitive material against unauthorized access from staff.</td>
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Gemalto and Hitachi Data Systems help organizations meet the challenges of securing growing data centers with confidence.
Key Benefits

By implementing this Gemalto and HDS solution, organizations can:

> **Securely store and manage data.** The transparent and performance-friendly encryption capability of HDS storage platforms utilizes AES 256 XTS to provide an additional measure of protection and confidentiality for lost, stolen, or misplaced media that may contain sensitive information. Additionally, the platforms offer enhanced key management with SafeNet KeySecure by Gemalto to protect data. When using this solution, data is stored efficiently and securely while remaining highly available.

> **Grow confidently.** With HDS storage platforms, organizations can confidently:
  - Consolidate their storage infrastructure with best-in-class availability and performance.
  - Deploy storage for all data types and easily grow to meet service level objectives for critical business applications.
  - Simplify operations with easy-to-use management using a single interface for optimal efficiency.

> **Operate more efficiently.** Rack-optimized accelerated flash drives require lower power consumption and provide higher density per rack. Hitachi Command Suite enables faster and simpler management across file and block workloads. Streamlining the use of encryption and key management with SafeNet KeySecure’s central appliance saves staff resources. Across the different facets of an enterprise, this solution saves valuable time, money, and space.

Conclusion

Put the combined Gemalto and HDS solution to work for your organization, and start reducing costs and improving performance while gaining the scalability your organization needs to contend with accelerating data growth.

To learn more, visit [www.safenet-inc.com/partners/hitachi/](http://www.safenet-inc.com/partners/hitachi/).

About Hitachi Data Systems

Hitachi Data Systems (HDS) offers information technologies, services, and solutions that help enterprises innovate with information, reduce IT costs, improve agility, and make a difference in the world. HDS customers see compelling returns on investment (ROI), unmatched returns on assets (ROA), and demonstrable business impact.

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.