

# SafeNet StorageSecure for the AWS Storage Gateway

## SOLUTION BRIEF

### Customer Scenario: Large Consumer Bank

#### The Challenge

A national financial services institution had large volumes of data, including terabytes of historical data that was critical to retain but was not actively used. Although this data was subject to stringent regulatory mandates like Sarbanes-Oxley and industry standards like PCI DSS, users did not need routine access to it. The institution was spending a great deal of time, effort, and money maintaining this secured data inside their data centers.

#### The Solution

By deploying AWS Storage Gateway appliances in each primary data center, the bank was able to offload data storage to Amazon S3, saving significantly over on-premise storage. By deploying StorageSecure and AWS Storage Gateway, and encrypting data, the security team was able to meet regulatory mandates. Finally, configuring the StorageSecure and KeySecure appliances in clustered pairs ensured high availability for encryption and key management operations.

#### The Benefits

With AWS Storage Gateway connected to StorageSecure, the bank was able to realize several crucial benefits. By leveraging the Amazon S3 cloud service for storage, the organization significantly reduced the costs that had previously been allocated to the procurement and support of its internal storage infrastructure. In addition, since deploying the AWS Storage Gateway and SafeNet solutions, the financial institution has been audited, and its handling of regulated data has been approved as compliant with data protection regulations and security standards.

The AWS Storage Gateway is a service that connects an on-premise software appliance with Amazon's cloud-based Simple Storage Service (Amazon S3), enabling organizations to establish a seamless and secure integration between their on-premise storage environment and Amazon S3. The AWS Storage Gateway empowers organizations to harness the cost savings and agility of cloud storage, and is ideal for applications that don't require frequent access to data, such as backup, disaster recovery, large-scale corporate file sharing, and archival. SafeNet solutions enhance this AWS offering by encrypting sensitive and regulated data before committing it to cloud storage and providing for centralized key management of encrypted storage on premise and in the cloud.

### Introduction: The Opportunity

Low-cost, cloud-based storage services are leading many executives to fundamentally rethink the way they approach data. The AWS Storage Gateway is a leading option for organizations looking to securely and cost-effectively leverage cloud-based storage. By supporting the iSCSI protocol, the AWS Storage Gateway can move data between local storage arrays and Amazon S3 cloud-based storage without requiring any application changes. With the AWS Storage Gateway, organizations can easily begin to use Amazon S3 for many storage applications, reducing capital and operational costs, and improving business agility.

### Amazon S3 Cloud Storage Enhanced by SafeNet StorageSecure

Through its integration with SafeNet StorageSecure, the AWS Storage Gateway enables organizations to meet a range of security and compliance mandates. SafeNet offerings include these two solutions:

- **SafeNet StorageSecure.** StorageSecure is a network encryption appliance that offers optimal protection of data at rest in physical, virtual, and cloud-based storage environments. StorageSecure is a transparent solution that can encrypt sensitive assets before they are saved to Amazon S3 environments. In addition to its iSCSI support, StorageSecure can also be integrated using CIFS, NFS, FTP, TFTP, and HTTP protocols.
- **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 platforms. KeySecure works in conjunction with StorageSecure. As a result, StorageSecure can copy encryption keys to KeySecure, providing centralized encryption key management with rich security policies, separation of duties, and audit logging.

When deployed, the AWS Storage Gateway appliance is installed on the customer premise and is connected to StorageSecure through the iSCSI protocol. StorageSecure connects to the KeySecure appliance, which is used to store cryptographic keys. With StorageSecure connected to the AWS Storage Gateway, security teams can ensure that data is always encrypted before it leaves the organization's facilities for secure storage on Amazon S3. In addition, control of encryption keys never leaves the organization, allowing complete visibility and control over privileged access to the keys and to encrypted data.

## Customer Scenario: Energy and Petrochemical Company

### The Challenge

As part of its ongoing exploration for potential drilling opportunities, a global energy and petrochemical company continued to amass terabytes of geological survey images and data. While this data was of critical importance—especially given it would be of immense value to competitors—it was also growing increasingly expensive to store within the organization's internal data centers.

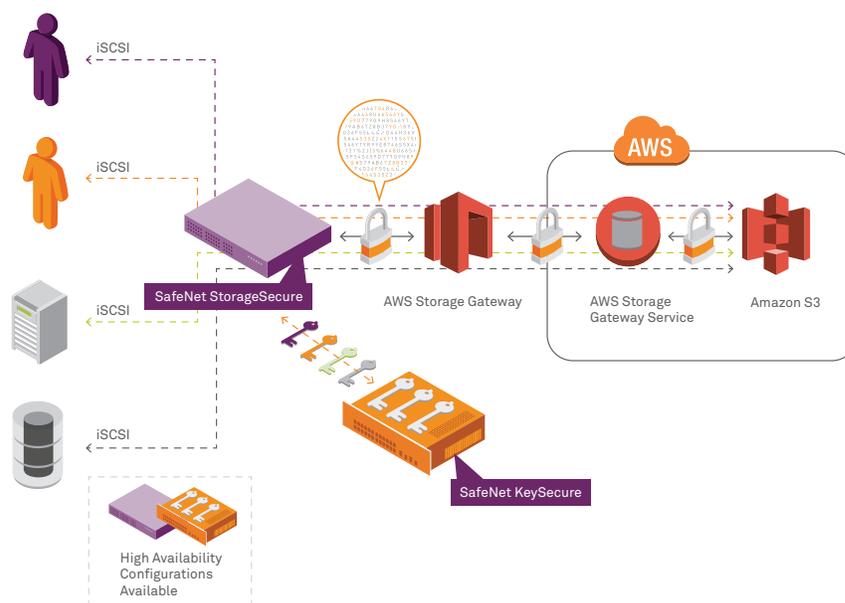
### The Solution

The company's leadership team ultimately chose to deploy AWS Storage Gateway, StorageSecure, and KeySecure. The organization deployed clustered pairs of StorageSecure in its primary data center connected to the AWS Storage Gateway. In addition, they deployed one KeySecure appliance in the primary data center and, for disaster recovery purposes, they clustered it with a second KeySecure appliance running in a remote location.

### The Benefits

By deploying the AWS Storage Gateway and SafeNet solutions, this energy and petrochemical company realized significant benefits. The organization substantially reduced the amount of data it needed to store internally, which led to immediate cost savings. In addition, the company's IT team has reduced the time and effort that staff needs to dedicate to supporting the internal storage infrastructure.

## Amazon Storage Gateway with SafeNet StorageSecure



### SafeNet Solution leveraging AWS Storage Gateway

#### Environment Support

StorageSecure can support any application that uses the iSCSI protocol to connect to shared network storage. For example, the solution can be integrated with databases running on application servers that are connected to iSCSI storage. In this scenario, each database table has a separate LUN on the iSCSI server, allowing organizations to perform both block-based and NAS file-based access, giving them maximum flexibility.

#### Conclusion

Today, cloud-based storage services like Amazon S3 present organizations with a compelling opportunity, a way to offload the expense and effort associated with managing storage infrastructure internally while enhancing flexibility and agility. Together with StorageSecure and KeySecure, AWS Storage Gateway enables organizations that manage sensitive data to fully leverage the benefits of Amazon S3 while retaining strict controls over data access.

#### About SafeNet

Founded in 1983, SafeNet, Inc. is one of the largest information security companies in the world, and is trusted to protect the most sensitive data for market-leading organizations around the globe. SafeNet's data-centric approach focuses on the protection of high-value information throughout its lifecycle, from the data center to the cloud. More than 25,000 customers across commercial enterprises and government agencies trust SafeNet to protect and control access to sensitive data, manage risk, ensure compliance, and secure virtual and cloud environments.

"Amazon Web Services", "AWS", "Amazon EC2", "EC2", "Amazon Elastic Compute Cloud", "Amazon S3", "Amazon Simple Storage Service", and other AWS graphics, logos, page headers, button icons, scripts, and service names are trademarks, registered trademarks or trade dress of AWS in the U.S. and/or other countries. No endorsement from AWS of StorageSecure, KeySecure, or any other non-AWS product is implied.

**Contact Us:** For all office locations and contact information, please visit [www.safenet-inc.com](http://www.safenet-inc.com)

**Follow Us:** [www.safenet-inc.com/connected](http://www.safenet-inc.com/connected)

©2013 SafeNet, Inc. All rights reserved. SafeNet and SafeNet logo are registered trademarks of SafeNet. All other product names are trademarks of their respective owners. SB (EN)-07.24.13