Fast, Transparent, Data Security throughout the Information Lifecycle

Explosive growth in data, accelerating trends in virtualization and multi-tenancy, increasingly sophisticated information security breaches, more stringent government regulations, and increasing data lifecycles are creating new storage challenges, while the pressure to reduce operating costs and increase administrative productivity continues. Many departments are now tasked with securing their intellectual property and digital assets without hindering data accessibility.

SafeNet’s StorageSecure is a self-contained storage encryption solution that connects ethernet networks and protects file data stored on NAS servers. StorageSecure is a highly secure, transparent, and cost-effective storage encryption solution. StorageSecure ensures the confidentiality of sensitive data that resides on NAS file servers or iSCSI LUNs, while enforcing customized security policies surrounding its access and use. SafeNet StorageSecure encrypts information based on defined business policies and securely stores the information without impacting ongoing operations or reducing availability.

Secures Regulated Data

Protecting sensitive data at rest is fundamental to protecting regulated data. StorageSecure ensures that sensitive data will be encrypted and therefore unreadable to unauthorized users. By combining SafeNet StorageSecure and SafeNet KeySecure, organizations are able to enforce more robust access and key management controls while maintaining data security mandates.

Secures Archived Data

StorageSecure ensures data isolation and granular access to protected data, rendering it unreadable to unauthorized users, even as it moves across the different storage tiers. Once data is encrypted, it remains encrypted through its lifecycle regardless of the media on which it is stored without any additional intervention.

Manages Privileged User Access and Separation of Duties

In any environment, SafeNet StorageSecure ensures isolation and granular access to protected data. Access to StorageSecure, its administration, and the encryption keys is tightly controlled with a variety of security mechanisms, including multi-factor authentication, ensuring only authorized administrators perform certain tasks. Ongoing storage management occurs as always, however administrators cannot gain access to the sensitive data being managed.

Benefits

- Granular protection of CIFS/NFS file shares and iSCSI LUNs
- Secures data from unauthorized access or theft even from super users
- Utilizes Identity and Access Management (IAM) systems for stronger authentication enforcement
- Secures storage without re-architecting the storage infrastructure
- Single, centralized policy enforcement and audit control for compliance protection
- Fully compatible with data already secured with NetApp E-Series DataFort encryption appliance
- Encrypts pre-existing CIFS/NFS data without interrupting user workflows
- In place rekeying of storage data for meeting compliance and organization policies
- Supports VLAN tagging infrastructures for increased security
- Works with authorized virus scanners to further ensure safety of systems accessing encrypted data
- Integrated with SafeNet KeySecure for centralized policy and key lifecycle management

SafeNet StorageSecure Product Brief
**SafeNet StorageSecure: Key Features**

**Options**
- S220: 1 GbE network interface
- S280: 10GbE network interface

**Supported Protocols**
- CIFS
- NFS
- iSCSI
- FTR TFTP
- HTTP

**Supported Directory Services**
- Microsoft Active Directory (AD)
- LDAP
- NIS
- RADIUS

**Size**
- 17.4" W x 19" D x 3.5" H (44.2 cm W x 48.3 cm D x 8.9 cm H)

**Weight**
- 20.0 lbs (9.1 kg)

**Rack mountable**
- Standard 19" EIA rack - 2U

**Power Supplies**
- 2 redundant/hot-swappable/universal input, 100-240VAC, ~47-63 Hz, rated at 6-3A respectively, operating at 45% (single circuit) and 22% (dual circuit)

**Power Consumption**
- 180 watts @ 40°C ambient temperature

**Security**
- FIPS Level 3 physical security (validation in process), tamper-evident labels, tamper switches, ZEROIZE button

**Fans**
- 2 (not hot-swappable)

**Network Ports**

**Client**
- s220: 1 - 1GbE interface using SFP connector (copper or optical) 1
- s280: 1 - 1GbE interface using SFP connector (copper or optical) 1; 1 -10GbE interface using SFP+ optical connector

**Storage**
- s220: 1 - 1GbE interface using SFP connector (copper or optical) 1
- s280: 1 - 1GbE interface using SFP connector (copper or optical) 1; 1 -10GbE interface using SFP+ optical connector

**Management**
- 2 RJ45 Ethernet ports for dedicated administrative management traffic 2 (alternatively, management traffic can be shared on a client or storage port)

**Serial Port**
- DB9 male serial console port

**Smart Card**
- 1 smartcard reader

**Environment**
- Operating Temperature 32°F-104°F (0°C to 40°C)
- Operating Humidity 20-80% RH @ 40°F C operating temperature
- Operating Altitude 0 to 1650m AMSL

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**Ensures Multi-Tenant Data Isolation**

Network-attached storage often contains data for multiple departments, groups, business units or customers. Data co-mingling presents a risk of unauthorized exposure to sensitive data. An all or nothing storage encryption solution is insufficient. Those allowed to access the protected storage will be able to access all of the data. By protecting data at a granular level, instead of enforcing an all or nothing protection solution, organizations are able to enforce data-specific authorization based on user privileges, job responsibilities, and data location. StorageSecure, in combination with SafeNet KeySecure, protects data with unique keys based on the informational value and internal business policies.

**StorageSecure Benefits**

- **Ease of Deployment** – SafeNet StorageSecure deploys seamlessly and non-disruptively into the network between clients and servers, linking them with a high-speed cryptographic path. There are no hosts to configure or software to install. StorageSecure encrypts storage transparently without impacting the user experience.

- **Redundancy and High Availability** – SafeNet StorageSecure appliances can be paired together in a cluster for high availability. All keys, policies, and configuration information is automatically synchronized between cluster members. If one appliance goes offline, the second appliance automatically takes over the combined workload, ensuring that vital encrypted data is always available when needed.

- **Administration and User Access Controls** – SafeNet StorageSecure provides the ability to integrate with common directory services, such as LDAP, Microsoft Active Directory (AD), NIS and RADIUS to incorporate existing user access control lists and authentication controls. An additional layer of dual authorization control can be defined within the StorageSecure administration console to further restrict access to sensitive data stored in the storage arrays and protect against rogue administrators.

- **Segregation of Data** – Whether used for virtual environments, multi-tenancy, or separation of duties, StorageSecure ensures isolation and granular access to protected data. StorageSecure encrypts data based on defined business policies and securely stores the information without impacting ongoing operations or reducing information availability.

- **Quick and Secure Data Destruction** – SafeNet StorageSecure, along with SafeNet KeySecure key management solution, ensure that stored sensitive data has been rendered unreadable in the event the storage appliance is repurposed or destruction of the data is required.

- **Seamless Migration** – Existing DataFort implementations can be easily migrated to SafeNet StorageSecure. The existing configuration is replicated onto StorageSecure allowing immediate data encryption without preventing interruptions in data access and user workflows.

- **Centralized Policy and Key Management** – SafeNet StorageSecure securely stores all encryption keys and their associated parameters within FIPS 140-2 Level 3 tamper-proof hardware. Keys are also be shared and stored on KeySecure, SafeNet’s Enterprise Key Management solution (also FIPS 140-2 Level 3), enabling secure distributed management of StorageSecure keys for other encryption solutions enabling truly centralized key management and control.