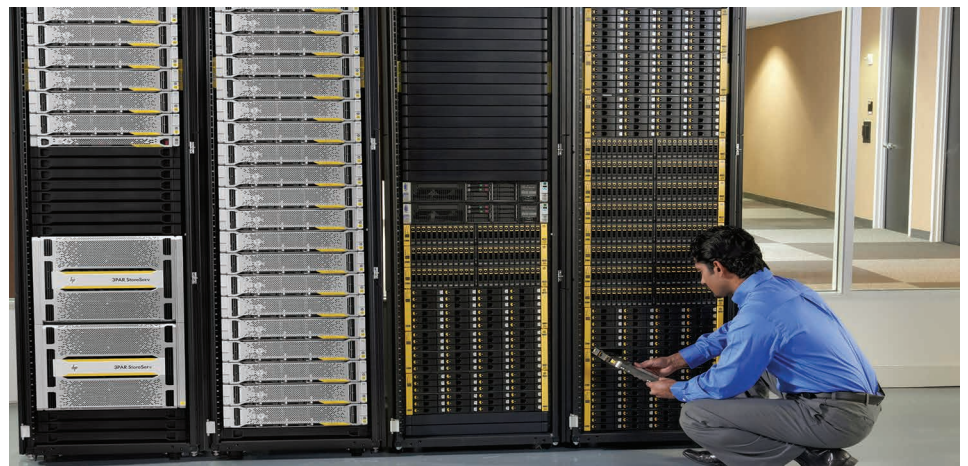




# HPE 3PAR StoreServ Data-at-Rest Encryption

Secure your storage



Secure your storage with data-at-rest encryption when regulatory mandates or the need to protect intellectual property from security breaches dictate. HPE 3PAR StoreServ Data-at-Rest Encryption protects data from both internal and external security breaches. If your application or environment requires protection from unauthorized access of the data on a drive, then consider the HPE 3PAR StoreServ Data-at-Rest Encryption solution. With this solution, HPE 3PAR StoreServ is configured with self-encrypting drives (SEDs) and optional central key management.

HPE 3PAR StoreServ Storage models securely encrypt all data as it is written to the drive. You have the comfort of knowing that all data contained on these drives is protected against unauthorized access, including hardware theft, failure of a drive, or drive retirement. HPE 3PAR StoreServ Data-at-Rest Encryption solution also supports Federal Information Processing Standard (FIPS) 140-2 Level 2 validated disk drive in compliance with the FIPS 140-2 standard. FIPS 140-2 specifies the security requirements that are satisfied by a cryptographic module utilized within a security system protecting sensitive but unclassified (SBU) information.

And whenever encryption is used to protect data at rest, a strong key management system is essential for the control and preservation of the underlying cryptographic keys over the life of the data. If keys are compromised, data is compromised. If keys are lost, data is lost and business operations are impacted. Reduce the cost and complexity of managing encryption keys across a distributed infrastructure with consistent security controls, automated key services, and a single point of management. HPE 3PAR StoreServ Storage supports HPE Enterprise Secure Key Manager (HPE ESKM) 4.0, and the OASIS KMIP Standard.

## Features and benefits

### **Secure sensitive personal information according to regulatory mandates**

- Encrypt electronic medical records for HIPAA compliance to provide patient confidentiality from unauthorized or inadvertent disclosure
- Comply with payment card industry PCI-DSS regulations that define requirements for protection of cardholder data
- Protect intellectual property or other sensitive business data by encrypting data

### **Encrypt data easily with no user intervention**

- All data on HPE 3PAR StoreServ Storage is encrypted as it is written to the drives. In the event of a drive failure, the data is protected from unauthorized access. The encryption process happens inside the drive architecture without any user intervention.
- Local Key Manager (LKM) included with the HPE 3PAR StoreServ encryption license is used to manage all drive encryption keys within the array and provides a simple management interface.
- An optional Enterprise Key Manager (EKM), a critical component to the overall data protection strategy, helps provide the flexibility and scalability to manage encryption keys across the data center environment with multiple encryption devices.

### **Secure your data with FIPS 140-2 Validated SEDs and Key Management**

- All SEDs and EKM are certified by the U.S. National Institute of Standards and Technology (NIST) and Canadian Communications Security Establishment (CSE) as meeting Level 2 or higher security requirements for cryptographic modules as defined in the Federal Information Processing Standards (FIPS) 140-2 Publication.

## Maximum data security

HPE 3PAR StoreServ Data-at-Rest Encryption supports full disk encryption (FDE) based on the Advanced Encryption Standard (AES) 256 industry standard. AES is a specification for the encryption level of electronic data established by the U.S. National Institute of Standards and Technology (NIST) in 2001. AES is a symmetric key algorithm that uses the same key for encrypting/decrypting the data on the hard disk drive or solid-state drive.

For added security, HPE 3PAR StoreServ Data-at-Rest Encryption offers the option to choose FIPS 140-2 Security Level 2 validated SED and Enterprise Key Management (EKM) drives in support of FIPS 140-2 standards. FIPS 140-2 validated SEDs and EKM's have been certified by the U.S. National Institute of Standards and Technology (NIST) and Canadian Communications Security Establishment (CSE). This ensures that these select HPE 3PAR StoreServ FIPS 140-2 validated SEDs and EKM's use sound security practices and enforce strong security standards. Level 2 certification ensures that no physical tampering may be done to HPE 3PAR StoreServ SEDs without showing evidence of tampering.

## Access authentication with flexible key management

HPE 3PAR StoreServ provide users with the flexibility to meet their key management requirements. Customers have the option of using an integrated Local Key Manager (LKM) or an Enterprise Key Manager (EKM).

Enterprise Key Managers, including HPE's Enterprise Secure Key Manager (ESKM) is a complete solution for generating, storing, serving, controlling and auditing access to data encryption keys. It enables customers to protect and ensure continuous access to business-critical, sensitive, data-at-rest encryption keys, both locally and remotely. ESKM 4.0 KMIP meets the highest standards for all KMIP versions and supports all your HPE Storage KMIP enabled solutions, including HPE 3PAR StoreServ storage.

## HPE Technology Services

Expert HPE storage consultants and service professionals sit down with you and your team to map your storage needs. Not only can we help you accelerate implementation and reduce deployment risk, but we can also help you realize the full value of your storage purchases as you transform storage for the New Style of IT.

### **Advise, transform, and integrate**

Navigate through the complexities of storage, backup, archive, disaster recovery, and Big Data with advisory, transformation, and integration consulting.

### **Deployment and implement**

Access expertise to support deployment, operations, relocation, sanitization, and disposal, plus improvement-focused education.

## Data sheet

Customize your IT lifecycle management, from acquisition of new IT, management of existing assets, and removal of unneeded equipment. [hp.com/go/hpfinancialservices](http://hp.com/go/hpfinancialservices)

Gain the skills you need with ExpertOne training and certification from HP. With HPE Converged Storage training, you will accelerate your technology transition, improve operational performance, and get the most return on your HPE investment. Our training is available when and where you need it, through flexible delivery options and a global training capability. [hp.com/learn/storage](http://hp.com/learn/storage)

Take five minutes to calculate the potential 3-year cost savings and ROI you can expect by migrating from your current storage to an HPE 3PAR StoreServ solution. [Click here](#) to go to the HPE Storage Quick ROI Calculator.

## Operate and support

Find the level of personalized, proactive, and simplified support right for your business.

**Note:** Specific service availability varies by product

- **Foundation Care**—System-level IT hardware and software support delivers flexible coverage window and response time for more choice and simplicity.
- **Proactive Care**—Combined reactive and proactive services provide easy-to-purchase, cost-efficient system-level support coupled with personalized expert advice and products connected to HPE to help prevent problems and reduce downtime.
- **Datacenter Care**—Get the support you need to deploy, operate, and evolve your data center environment to be hybrid-cloud ready with single-point-of-accountability for HPE and others' product.

Get connected and get back to business—HPE Storage Technology Services provide the path to get your HPE Storage solutions and your business connected to HPE. Once connected, our experts are able to scan your system and run health checks, then use that data to create personalized reports and recommendations for actions to take to prevent problems and downtime.

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4AA4-6979ENW, November 2015, Rev. 4