

# Solution Brief

## Data Security for Application Engineering

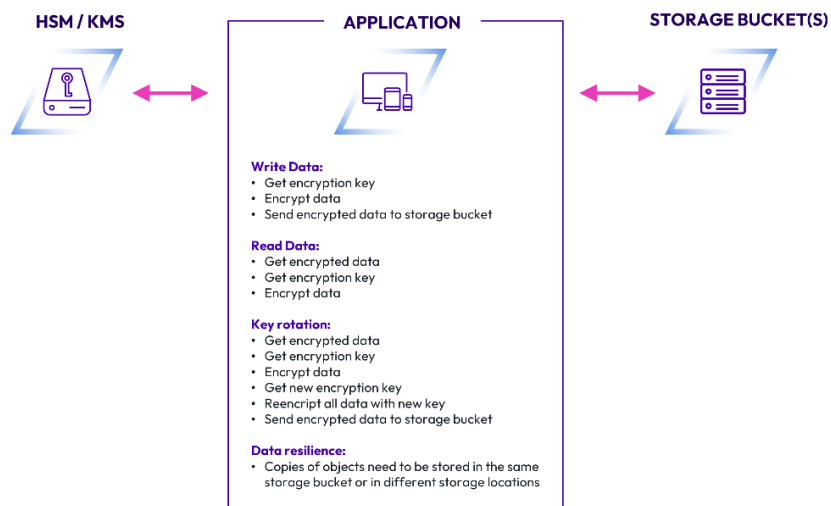
Explore how data security can be introduced to your applications while freeing up development resources, improving application performance, and neutralizing outages and attacks.



### Key benefits of easy-to-implement data security

Data privacy, confidentiality, and resilience processes are crucial for maintaining your application continuity — but these processes often require significant resources to implement, run and maintain. Encrypting and decrypting data, not to mention designing processes for HSMs and every read and write operation, can create substantial drag on your already-busy application or storage solution. Good data resilience brings even more challenges as you try to ensure that your applications can read and write data during outages and other disruptions.

Data privacy and confidentiality are also critical for meeting compliance with data regulations, including cross-border regulations like the [GDPR](#) and [others](#). As these regulations change and evolve, companies may find themselves needing additional cryptographic operations and methods in order to stay up to date with the current data privacy landscape.



To address these problems, many teams now offload data security processes to a software solution. Developers can remove the intense implementation and management of encryption from the application itself and instead introduce data security processes when data is read or written. This also allows companies to free up significant time and resources during development while staying agile around data security trends.

The right data security solution can allow teams to achieve robust data privacy and resilience without slowing down their application's performance, workflows, or development cycle. ShardSecure's plug-and-play technology does just this, performing advanced data security and resilience processes with minimal performance impact. Its policy-based data security approach also allows application engineers to switch between different policies to achieve the desired level of data security.



## Easy data security for applications with ShardSecure

ShardSecure’s unique data security capabilities mean that development teams no longer need to worry about slowing down their application design or operations with data protection processes. Our solution uses high performance mechanisms to process data with easy “set and forget” management and without a performance hit. Applications only need to read and write data; no additional processes need to be built to provide data security to your application.



### Strong data privacy and confidentiality

With ShardSecure, you can control exactly how your data is protected and who has access to it in hybrid- and multi-cloud environments — without ever having to implement encryption within your application.

As a policy-driven solution, ShardSecure allows you to define how your data is protected without having to make any changes to your application. You can choose how you consume it via common storage protocols like S3 API, SMB, NFS, or iSCSI as well as via API.

### Reduced burden on your application and operations teams

Our technology only requires your application to perform read/write operations to process data; no additional steps are necessary. All necessary security processes are built into our data security offloading solution.

ShardSecure was also designed to be extremely easy for teams to manage. A plug-and-play approach, it provides an easy and transparent implementation with no need to change user behaviors or data flows. Vendor-agnostic and appearing to other applications as a storage location, our solution works in the background as a transparent, zero-downtime event. All of this translates to strong security with a low impact on operations teams.

### Improved data resilience

Unlike traditional solutions, which often focus on confidentiality alone, ShardSecure ensures strong resilience as well. With features like data fragmentation, data integrity checks, and self-healing data, we keep your material available, accessible, and accurate while avoiding any significant performance hit.

We also detect when data is lost, deleted, tampered with, or compromised, and we reconstruct that data automatically and in real-time. As a result, applications can maintain their critical operations and avoid downtime and data loss during ransomware attacks, cloud provider outages, and more.

### Learn more

Data security through ShardSecure alleviates the workload for busy development teams and provides greater security and resilience. Our plug-and-play technology integrates seamlessly with your existing security controls and cloud storage providers for ease of deployment.

In addition to data security for application engineering, our software also supports secure cold storage migration, neutralizes cloud-based ransomware, and helps meet compliance with cross-border data protection laws. To learn more, follow us on [social media](#) or [visit us online](#).

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