

Solution Brief

Cloud Optimization and Cost Savings in AWS

Learn how organizations can gain the freedom to store their data in the storage tier they want, with the resilience and protection they need. Our plug-and-play technology allows companies to achieve stronger security and higher cost savings in AWS without rewriting their legacy systems.



The state of cloud resource optimization

Unstructured data is growing rapidly, driving higher monthly cloud subscription costs and massive resource consumption with 55% to 65% annual growth. These high costs — plus a desire to strengthen security and reduce risk — are leading many companies to cloud resource optimization.

Companies looking to optimize their storage in AWS have many options. For high-performance block storage, there's EBS; for elastic, scalable set-and-forget storage, there's EFS; and for highly affordable object storage, there's S3.

The price differences among these different storage types are significant: while S3 Infrequent Access costs \$0.013 per GB per month (less than \$39,000 per 250 TB per year), EFS Standard costs \$0.3 per GB per month (\$921,600 per 250 TB per year). But if you're looking to switch to S3 for cost savings, it may not be so simple. Legacy applications often need to be rewritten to support object storage like S3.

Added to these challenges is the issue of AWS misconfigurations, including public access to S3 buckets, outdated IAM policies, key rotation problems, and unsecured backup storage. Recently, several high profile breaches from misconfigurations in 2021 and 2022 left the data of millions of people exposed.

Fortunately, strong data protection software can provide storage flexibility and mitigate the impact of misconfigurations, outages, and ransomware in the cloud — without any need to rewrite legacy applications.

Costs by Storage Type in AWS

Storage	Per GB per Month	250 TB per Year
S3 Infrequent Access	\$ 0.013	\$ 38,400
S3 Standard	\$ 0.021	\$ 64,512
EFS IA	\$ 0.025	\$ 76,800
EBS gp3	\$ 0.080	\$ 245,760
EBS gp2	\$ 0.125	\$ 384,000
EFS One Zone	\$ 0.160	\$ 491,520
EFS Standard	\$ 0.300	\$ 921,600



AWS cost savings with ShardSecure

ShardSecure allows organizations to optimize their cloud storage without ever rewriting applications, redesigning data flows, or changing the user experience. Our transparent plug-and-play technology helps companies easily leverage object storage like AWS S3 and enjoy vastly improved data security and resilience.

With very similar performance to EFS, the ShardSecure solution is ideal for enterprises with 250TB or more of EFS storage.

Advanced data security

ShardSecure's solution protects unstructured data and metadata in specific files, folders, and storage locations. By splitting data into very small pieces (microshards) and then distributing those containers to multiple customer-owned storage locations, we ensure that data is unintelligible to unauthorized users. Data cannot be reconstructed by cloud providers, cyberattackers, or any other third party.

Our technology works with multiple AWS buckets, a mix of AWS and other storage providers, or even AWS and on-prem data centers. Regardless of the configuration you choose, your data will remain secure from internal and external threats.

Strong data resilience

In addition to ensuring data privacy, ShardSecure offers protection in the face of ransomware attacks (including double extortion), cloud provider outages, and more. Our self-healing data feature is able to detect when data is lost, deleted, tampered with, or otherwise compromised. Data is then returned to its original state automatically and transparently, without costly downtime or disruption to users.

Our self-healing data feature also serves as an early detection method, with automatic alerts to security teams for fast incident response. Even in the all-too-common event of cloud misconfigurations, ShardSecure's strong data resilience prevents the loss of business continuity.

Easy integration, migration, and access

ShardSecure is easy to manage and has a low impact on operations teams. A plug-and-play approach, it provides an easy and transparent implementation with no need to change user behaviors or data flows. Our solution works in the background as a transparent, zero-downtime event, and data confidentiality is achieved without expending significant resources on running and maintaining complex systems.

To integrate our technology, only one line of code change is needed. Instant data access and fast data migration both happen with just a few clicks.

Learn more

ShardSecure integrates seamlessly with your existing security controls and cloud storage providers for ease of deployment. In addition to enabling cost savings in AWS, we support secure cold storage migration, neutralize cloud-based ransomware, and help companies meet compliance with cross-border data protection laws.


To learn more about our technology, follow us on [social media](#) or [visit us online](#).



 @ShardSecure

 @ShardSecure

 @ShardSecure

 101 Avenue of the Americas
9th Floor, New York, NY 10013
United States of America

 info@shardsecure.com

**SHARD
SECURE**