

TAG Cyber •
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**CYBERSECURITY
IN OUTER SPACE
UNPREPARED?**



ARTICLES / OPINIONS / INTERVIEWS



AN INTERVIEW WITH JOE SORIAL
VP PRODUCT, SHARDSECURE

REVOLUTIONARY MICROSHARDING TECHNOLOGY AND CYBERSECURITY

More organizations are moving to cloud-based storage in this digital transformation era, presenting a new frontier of data protection issues. Addressing these challenges, ShardSecure® has developed a pioneering Data Control Platform that promises enhanced security, privacy, resilience, and regulatory compliance for data in the cloud. During a recent conversation with ShardSecure, they shed light on the intricacies of their platform, discussing its key strengths in addressing the unique security challenges the cloud presents. They further illuminated how their innovative Microsharding technology not only obfuscates data but also makes it unattractive and unrewarding for potential breaches. By dispersing data across multiple clouds and rendering individual shards useless in isolation, ShardSecure has forged a game-changing path in data security, paving the way for a safer, more secure digital future.

TAG Cyber: Can you provide an overview of ShardSecure's Data Control Platform?

SHARDSECURE: At ShardSecure, we believe that all organizations can secure and protect their data wherever they want—whether on-prem, in the cloud, and in hybrid- or multi-cloud architectures. In the face of increasing cyberattacks and operational complexity, we help companies simplify data security and protection.


With strong data privacy, robust data resilience, cross-border regulatory compliance, native ransomware protection, and simple, agentless integration, the ShardSecure platform offers a multifaceted solution to complex challenges.

TAG Cyber: What specific data security challenges does ShardSecure's platform address?

SHARDSECURE: Until now, organizations had few options to secure their unstructured data and prevent third-party access in the cloud. Current solutions are resource-intensive, and new technologies like machine learning and AI require organizations to store more business-critical data in the cloud. With the challenges of complex data privacy laws and a rapidly evolving regulatory landscape, securing and protecting data in the cloud presents a major obstacle for most organizations.

Legacy solutions typically address a single aspect of data protection, privacy, or resilience, but data security needs to extend to every part of the organization. These solutions also tend to introduce significant complexity, performance drawbacks, and the need to update existing data

With a simple, agentless implementation, the ShardSecure platform simplifies data security and privacy without legacy solutions' deployment headaches and performance drawbacks. Our "set and forget" management and policy-driven approach also helps companies maintain flexibility as data storage grows and new data privacy regulations arise.



flows and applications. Companies need new solutions fast—for privacy, compliance efforts, and security teams trying to keep data safe from exfiltration and attacks. The ShardSecure platform gives organizations the freedom and flexibility to store their data anywhere while rendering it unintelligible to unauthorized users.

With a simple, agentless implementation, the ShardSecure platform simplifies data security and privacy without legacy solutions' deployment headaches and performance drawbacks. Our "set and forget" management and policy-driven approach also helps companies maintain flexibility as data storage grows and new data privacy regulations arise.

TAG Cyber: How do you ensure secure data handling/storage without compromising usability or performance?

SHARDSECURE: Traditional data sharding inspired ShardSecure's patented Microshard™ technology. Alongside tools like ElasticSearch and MySQL, sharding, i.e., fragmenting data into small pieces and then distributing those pieces to multiple storage locations for faster performance, is favored by storage and database companies like Oracle, AltiBase, and MongoDB. ShardSecure's Microsharding techniques build upon the benefits of traditional sharding by introducing numerous data security, resilience, and compliance capabilities. We achieve high throughput and low latency by reading/writing in parallel and compressing pointers. Data security almost always brings a performance cost, but ShardSecure is a notable exception.

The ShardSecure platform also ensures data security without compromising usability. Acting as an abstraction layer, our technology operates with minimal impact on operations teams. Plus, there's no need for agents or disruption to application and data flows. ShardSecure's native multi-cloud and hybrid-cloud support also provides a single interface to manage storage locations and move data—without impacting performance.

TAG Cyber: How does the company's technology enable organizations to strengthen data security and resilience?

SHARDSECURE: ShardSecure strengthens data security by rendering data unintelligible to unauthorized users. Our innovative approach to file-level encryption works by shredding and distributing data to multiple customer-owned storage locations. By using an API-based abstraction layer between an organization's applications and its storage infrastructure, we ensure the security of that data.

ShardSecure's platform also supports robust data resilience, including multi-cloud architectures. Our technology maintains data integrity and availability during disruptions like cloud provider outages, misconfigurations, and ransomware attacks. Other solutions typically mirror data to achieve redundancy and

resilience, which increases storage costs. Our algorithms, however, are based on a cost-effective architecture.

First, we maintain high availability. Each instance of ShardSecure is a virtual cluster that can be run on-prem or in the cloud, and customers can configure two or more virtual clusters for failover. Second, we maintain data integrity by performing multiple checks to detect unauthorized modifications and by self-healing data to transparently reconstruct it after malicious or unauthorized tampering or deletion. The result is accurate, available, and confidential data, regardless of storage location.

TAG Cyber: What is ShardSecure's approach to data privacy and compliance?

SHARDSECURE: The traditional approach to maintaining data privacy is fortifying data segmentation. ShardSecure's technology desensitizes the data, rendering PII and other sensitive material unintelligible to unauthorized users—from cloud storage admins to attackers. This approach mitigates the impact of data breaches, strengthens data privacy, and ensures compliance with cross-border regulations.

ShardSecure's platform enables organizations to address data sovereignty and residency concerns by utilizing their preferred cloud storage providers in their desired geographic locations and jurisdictions.

Organizations can distribute data across different regions of a single cloud provider, multiple cloud providers, or a hybrid mix of on-prem storage and one or more cloud providers.

ShardSecure is also validated to meet the requirements of Use Case 5 for Schrems II/European Data Protection Board (EDPB) compliance. Our split processing technology is easily deployed in a multi-party processing environment, allowing organizations to store and process data safely under Use Case 5.

With our innovative approach to data security, privacy, resilience, and compliance, ShardSecure offers a new way for companies to face modern cyber challenges and regain data control.

TAG CYBER DISTINGUISHED VENDORS

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Semperis is a pioneering cybersecurity company providing enterprise-level identity protection solutions. Their Identity Resiliency Platform offers comprehensive protection for Active Directory (AD) and Azure AD, ensuring operational resilience against cyber threats. Semperis also provides automated remediation, swift recovery tools, and dedicated incident response services, making them a trusted cybersecurity partner.



ShardSecure is a cybersecurity company that specializes in Microsharding technology. Their revolutionary solution disassembles data, distributes the shards across multiple clouds, and renders them useless in isolation. By making data breaches unattractive and unrewarding, ShardSecure provides organizations with unparalleled security. The company, founded in 2018, has its headquarters in New York, USA.



SPHERE is an award-winning, woman-owned cybersecurity business that is redefining how organizations improve security, enhance compliance and achieve identity hygiene. SPHERE puts rigorous controls in place to secure a company's most sensitive data, while creating the right governance process for systems and assets, and keeping the company compliant with relevant industry regulations.



TXOne Networks Inc. offers cybersecurity solutions that ensure the reliability and safety of industrial control systems and operational technology environments through OT zero trust methodology. TXOne works with leading manufacturers and critical infrastructure operators to develop practical, approaches to cyberdefense.



Varonis is a pioneer in data security and analytics, specializing in software for data protection, compliance, and threat detection and response. Varonis protects enterprise data by analyzing data activity, perimeter telemetry and user behavior, while preventing disaster by locking down sensitive data and efficiently sustaining a secure state with automation.



Votiro is a Zero Trust Content Security company that detects, disarms, and analyzes billions of files between organizations, their employees, and the customers that rely on them. Votiro is an open API platform that allows teams to receive safe, fully functional files without slowing down business.