

Symmetrics Encryption Built for Modern Cloud Architecture

**INDUSTRY CHALLENGES:**

In today's multi-cloud and hybrid environments, the pace of innovation outstrips traditional security models. Data is constantly in motion across services, devices, and workloads. For cloud providers, SaaS platforms, and digital infrastructure leaders, encryption must evolve from reactive shielding to proactive protocol.

Emerging Quantum Threats

Post-quantum computing will break today's PKI and RSA-based infrastructures, exposing encrypted transactions and archived data.

No Static Credentials

Static Passwords & reused tokens can lead to open doors that contaminate a network.

Data Layer Encryption

Embed secure, non-algorithmic encryption directly on the data layer, with control to which region keys are generated.

KEY PERSONAS:

Cloud-first organizations can use Symmetrics to secure distributed workloads at scale. **Cloud architects & DevOps teams** integrate our **SDK** to protect data flows across microservices and multi-region infrastructures without re-architecting. **Network and SASE teams** deploy the Symmetrics **VPN** for end-to-end encrypted tunnels that remove reliance on vulnerable PKI. And with **AuthAM**, access owners bind privileges to cryptographically verified devices, delivering verifiable Zero Trust that's built to endure the quantum era.

RELEVANT METRICS:

68% of Teams Claim Stolen Credentials as #1 Attack Vector

Projected Cost of Cybercrime is \$23 Trillion by 2027

~238 Days to Detect Data Breaches on public/private

Only 8% of orgs encrypt over 80% of their cloud data

Protect every integration, handoff, & automation with symmetric, quantum-secure™ encryption. Built for the speed & compliance demands of today's businesses & their future

APPROACH VECTORS:

Symmetrics replaces traditional asymmetric cryptography with symmetric one-time keys, ensuring that transaction data remains secure even in a post-quantum world. business applications, without changing how your systems work today.

Critical Workflows & Integrations For Strong Encryption**SaaS Platform Integrations & Webhooks**

Event-driven comms between outside systems (billing, payments, messaging, etc.), requires secure encryption to preserve data integrity across vendors.

User Authentication & Session Encryption

Login credentials, session tokens, & privilege assertions travel across networks, secure encryption prevents credential theft and unauthorized access.

Hybrid Cloud & Cross-Tenant Connections

Traffic between on-prem systems, cloud environments, vendors, & customers must remain encrypted as it moves across shared & untrusted infrastructure.



APPROACH VECTORS: Continued

Multi-Region Data Security & Synchronization

When databases replicate or workloads shift across availability zones or continents, encryption ensures sensitive information isn't exposed during cross-region transit.

Zero-Trust Policies & Enforcement Protocols

Access standards & device telemetry are maintained across distributed architectures, secure encryption awards confidence against spoofing and inspection attacks.

API & Service-to-Service Exchanges

Microservices, containers, and function calls constantly exchange sensitive data across environments, these east-west data flows must be encrypted to prevent interception and threat risk.

Username	First Name	Last Name	# of Devices	& Last Satisfaction	Actions
DCare	Drew	Care	3	2/27/2023, 5:09:43 AM	Edit Delete
NCraig	Natal	Natal	5	2/27/2023, 5:09:43 AM	Edit Delete
KHarrison	Kate	Harrison	4	2/27/2023, 5:09:43 AM	Edit Delete
ODiggs	Orlando	Diggs	2	2/27/2023, 5:09:43 AM	Edit Delete
KHarrison	Kate	Harrison	4	2/27/2023, 5:09:43 AM	Edit Delete
NCraig	Natal	Craig	5	2/27/2023, 5:09:43 AM	Edit Delete
ODiggs	Orlando	Diggs	2	2/27/2023, 5:09:43 AM	Edit Delete
NCraig	Natal	Natal	5	2/27/2023, 5:09:43 AM	Edit Delete
KHarrison	Kate	Harrison	4	2/27/2023, 5:09:43 AM	Edit Delete
NCraig	Natal	Craig	5	2/27/2023, 5:09:43 AM	Edit Delete
ODiggs	Orlando	Diggs	2	2/27/2023, 5:09:43 AM	Edit Delete

Fig 1.1 – User Management Detail & Secure Access Status

FURTHER READING:

Discover the simplest path to post-quantum security.

Explore our Full Product Suite & Review More Technical Documentation



QUICK LINKS

[SDK Technical Documentation](#)

[Product Solution Briefs](#)

[Cloud & SaaS Website Page](#)

[Industry Data Sheets](#)

[Symmetrics FAQ & Glossary](#)



Symmetrics delivers mathematically unbreakable, quantum-secure encryption to security-conscious enterprises across high-stakes, data-driven industries. Founded by tenured intelligence scientists with deep roots in government security, we empower bold decision-makers in forward-thinking technologies by making perfect secrecy practical and accessible to organizations worldwide.



Symmetrics.com

E: sales@symmetrics.com

in [/company/symmetrics](https://www.linkedin.com/company/symmetrics)