Data Masking and Tokenization

Keep sensitive data private, portable, and compliant

Data masking and tokenization is a critical technology that enables organizations to reduce the impact of a cyber-attack, meet data privacy laws, and harness the value of their data. Yet, for many Data, Security, and Application Teams, protecting and de-identifying sensitive data remains a challenge - legacy solutions cannot scale and meet the performance and agility demands of modern distributed workloads, while the adoption of siloed point solutions often infringes corporate security mandates or data privacy regulations.

The Fortanix Solution

The Fortanix Data Security Manager, a unified data security platform, powered by Confidential Computing, allows you to keep sensitive PII and PHI data private, portable and compliant. You can now centralize administration of crypto policy, key lifecycle management, and tokens to protect sensitive data in hybrid and multicloud environments from a single UI. The vaultless, NIST-certified FF1 Format Preserving Encryption (FPE), applied at data ingestion at the application level or ETL/ELT pipeline, ensures sensitive data travels anonymized across applications and workflows and scales with your data growth. You now can get the most value of your data, while reducing cyber risks and complying with privacy and security regulations.

Benefits

- **Mitigate risk of data breach**
  Manage keys, tokens, and policies across all infrastructure in a single UI.

- **Enforce governance and compliance**
  Implement administrative safeguards and quickly create tokenization rules to accelerate compliance.

- **Increase agility**
  Automate processes with SDKs and REST APIs and seamlessly integrate with CI/CD and SIEM tools.

The Fortanix Difference

- A unified data security platform to manage Format Preserving Encryption and the lifecycle of encryption keys.

- Tokenization performed in a Trusted Execution Environment to protect data in use.

- SaaS or on-premises deployment with integrated FIPS 140-2 Level 3 HSM.
Key Features

- Unify and simplify management with single system of record for keys, tokens, and policies
- Seamlessly move de-identified data across data stores, workflows, and pipelines with vaultless, NIST-certified FF1 Format Preserving Encryption for high performance and scalability
- Choose from SaaS or On-premises deployment options, featuring integrated KMS and HSM, with keys stored in FIPS 140-2 Level 3 HSMs
- Mitigate risk with Zero Trust principles by applying Granular Role-based Access Control, Quorum Approval, and Key Custodian
- Speed creation of rules for various mandates, laws, and regulations using pre-built and customizable tokenization policies
- Accelerate Governance, Risk and Compliance processes by enforcing uniform policy across all environments
- Aid audits and forensic analysis with Immutable audit logs for snapshots of all crypto operations
- Leverage REST APIs for all crypto and management operations and SDKs to integrate with CI/CD, SIEM, and other tools to support low code development and automate workflows
- DSM Accelerator option allows you to cache keys and tokenize locally at application with specified TTL (JCE, PKCS#11, REST) and meet stringent low-latency requirements.

Outcomes

- **Reduce the cost and effort for PCI-DSS compliance**
  Easily replace the 16-digit primary credit card account number with a vaultless token and store securely to enable online transmission of this data.

- **Accelerate HIPAA compliance**
  Comply with HIPAA regulations by substituting electronically protected health information (ePHI) and non-public personal information (NPPI) with a tokenized value.

- **Compliance for PII (GDPR, CCPA)**
  Mask social security numbers and other Personally Identifiable Information data to achieve compliance with a variety of privacy regulations and increases customer trust.

- **Securely migrate to cloud**
  Fortanix includes a Hardware Security Module, Key Management, Encryption, and Tokenization for your hybrid and cloud native apps in a single integrated solution. Cloud providers do not get access to the tokens or keys allowing for a secure migration to multicloud.

Fortanix secures data, wherever it is. Our data-first approach helps businesses of all sizes to modernize their security solutions on-premises, in the cloud and everywhere in between. Enterprises worldwide, especially in privacy-sensitive industries like healthcare, fintech, financial services, government, and retail, trust Fortanix for data security, privacy, and compliance. Fortanix investors include Goldman Sachs, Foundation Capital, Intel Capital, In-Q-Tel, Neotribe Ventures and GiantLeap Capital. Fortanix is headquartered in Santa Clara, CA. For more information, visit [https://www.fortanix.com](https://www.fortanix.com).