THALES

SafeNet Tokenization



As the volume and value of your organization's data continues to grow, you can no longer rely solely on perimeter-based security to protect it from the lasting impact of a breach. Tokenization replaces sensitive data with a unique token that is stored, processed, or transmitted in place of the clear data. A popular choice with the payment card industry to secure primary account numbers (PAN), tokenization can be used to protect other types of high-value data.

Tokenize and secure sensitive data

SafeNet Tokenization uses Format Preserving Tokenization (FPT) to preserve sensitive data's length and format in order to minimize the need to modify applications, databases, and legacy systems that will store, process, or transmit the associated token. The solution offers unlimited data type support, including numeric data with spaces or dashes (e.g. credit card numbers, social security numbers), alphanumeric data (e.g. passport, account, email addresses, dates), and original data retrieval formats, such as full clear value or masked. Data can be tokenized in a variety of formats, such as last four, first six, custom formats, and regular expression.

SafeNet Tokenization is easily deployed across on-premises, virtual, and public cloud environments, and works with SafeNet KeySecure, a FIPS 140-2 up to Level 3 validated enterprise key manager that provides centralized key and policy management. The solution protects products such as SAP, and is compliant with PCI Tokenization Guidelines and VISA Tokenization Best Practices. It is ideal for organizations looking to significantly reduce regulatory scope, facilitate the annual audit process, and reduce total cost of ownership.

Vaultless tokenization functionality gives customers an option to deploy easily across multiple sites (e.g. data centers, public and private clouds). Compared to the vaulted approach, vaultless tokenization can offer higher performance and scalability that makes it well suited to secure big data solutions such as Hadoop distributions.

Safenet tokenization highlights

Transparent and Secure Tokenization

- Replace sensitive data with a token that can be securely stored, processed, and transmitted
- Apply granular access controls to ensure only authorized users or applications can view tokenized data
- Centralize key management across multiple sites with an industry-leading enterprise key manager
- Leverage bulk tokenization utilities and batch APIs

Unlimited Data Type and Broad Token Format Support

- Tokenize primary account numbers (PAN), as well as other data types (PCI, PII, PHI, etc.) in any environment, including payment systems and big data implementations
- Support a wide variety of token formats, including regular expressions and customized formats

Safenet vaultless tokenization deployment



Support Cloud Initiatives

- Deploy in on-premises, virtual, and public cloud environments
- Set up tokenization in the cloud more quickly with readily available Chef recipes for easy automation

Ensure Easy Deployment and Management

- No changes required to applications, databases, and legacy systems with Format Preserving Tokenization (FPT)
- Web services (SOAP and REST APIs) provide fast, cost-effective deployment
- Built-in, automated key rotation and data re-keying

Achieve Compliance

- Reduce audit scope and related operational costs
- Track access to tokens and protected data with comprehensive auditing and logging capabilities

Technical specifications

Format Preserving Tokenization

- Complies with PCI Tokenization Guidelines for token identification via token masking and Luhn algorithm pass/fail checks
- Supports multiple tokens vaults
- Highly scalable can generate and retrieve millions of tokens/per day for best performance

Supported Token Vault Databases

- Microsoft SQL Server
- Oracle
- MySQL
- Cassandra

Note: all tokenization forms are supported on all databases as long as the vault itself is on Microsoft SQL Server, Oracle, MySQL or Cassandra

Supported APIs

- Web services: SOAP, REST/JSON
- Java
- .NET

Enhanced event logging and monitoring functionality

- Complies with PCI tokenization manager event monitoring specifications
- Supports SNMP for online monitoring and alerting

Token Formats

- Random or Sequential token generation
- Masked: Last four, First six, First two, etc.
- Fixed length and width masking
- Customer defined custom formats
- Cryptographic hash functions, including SHA2-256, SHA2-284, SHA2-512, and Base 16/Base64
- Regular expressions (Java style)

About Thales Cloud Protection & Licensing

Today's enterprises depend on the cloud, data and software in order to make decisive decisions. That's why the most respected brands and largest organizations in the world rely on Thales to help them protect and secure access to their most sensitive information and software wherever it is created, shared or stored – from the cloud and data centers to devices and across networks. Our solutions enable organizations to move to the cloud securely, achieve compliance with confidence, and create more value from their software in devices and services used by millions of consumers every day.

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