Tokenization is a method of concealing sensitive data by using random characters as placeholder data. Futurex offers vaultless tokenization, which securely generates reversible tokens without requiring a cumbersome token database or “vault.” Vaultless tokenization offers organizations an easy way to secure data, while at the same time minimizing their scope of compliance. Additionally, Futurex's dynamic REST API provides easy integration along with customization options such as role-specific detokenization, allowing administrators to limit unnecessary data exposure.

Tokenization is useful for compliance-focused organizations like financial institutions who are responsible for storing sensitive account data in accordance with PCI DSS regulations. Tokenizing this data allows these organizations to ease their compliance burdens. Tokenized data is randomly generated and contains no intrinsic value, thus it is generally not subject to as strict audit requirements.
Vaultless Tokenization

Organizations not using tokenization who store cardholder data are within the full scope of a PCI audit. All applications and databases storing cardholder data will be scrutinized.

Primary Benefits

- Reduced PCI DSS compliance scope and simplified auditing
- Increased security
- Easy implementation
- Vastly smaller storage footprint of sensitive data
- Format preserving encryption
- Customized, role-specific data output to minimize exposure

Devices and Platforms

KMES Series 3

The Key Management Enterprise Server (KMES) Series 3 is Futurex’s most robust tokenization platform. It is equipped with a variety of features for customized output and detokenization.

Tokenization-as-a-Service

The VirtuCrypt Hardened Enterprise Security Cloud offers vaultless tokenization functionality via a cloud service powered by Futurex hardware. This model offers tokenization-as-a-service for organizations not interested in on-premises hardware, with functionality managed through the VirtuCrypt Intelligence Portal (VIP) Dashboard.

Format Preserving Encryption (FPE)

Adaptability and ease of integration are key considerations for all Futurex services. This is why Futurex uses vaultless tokenization with format preserving encryption, which retains the format of the original cleartext data. For example, a sixteen digit PAN will be tokenized as sixteen numeric tokens. This allows for support of almost any data format, and minimal integration efforts into legacy systems and applications. Futurex implements trusted, NIST-standard FPE algorithms.