



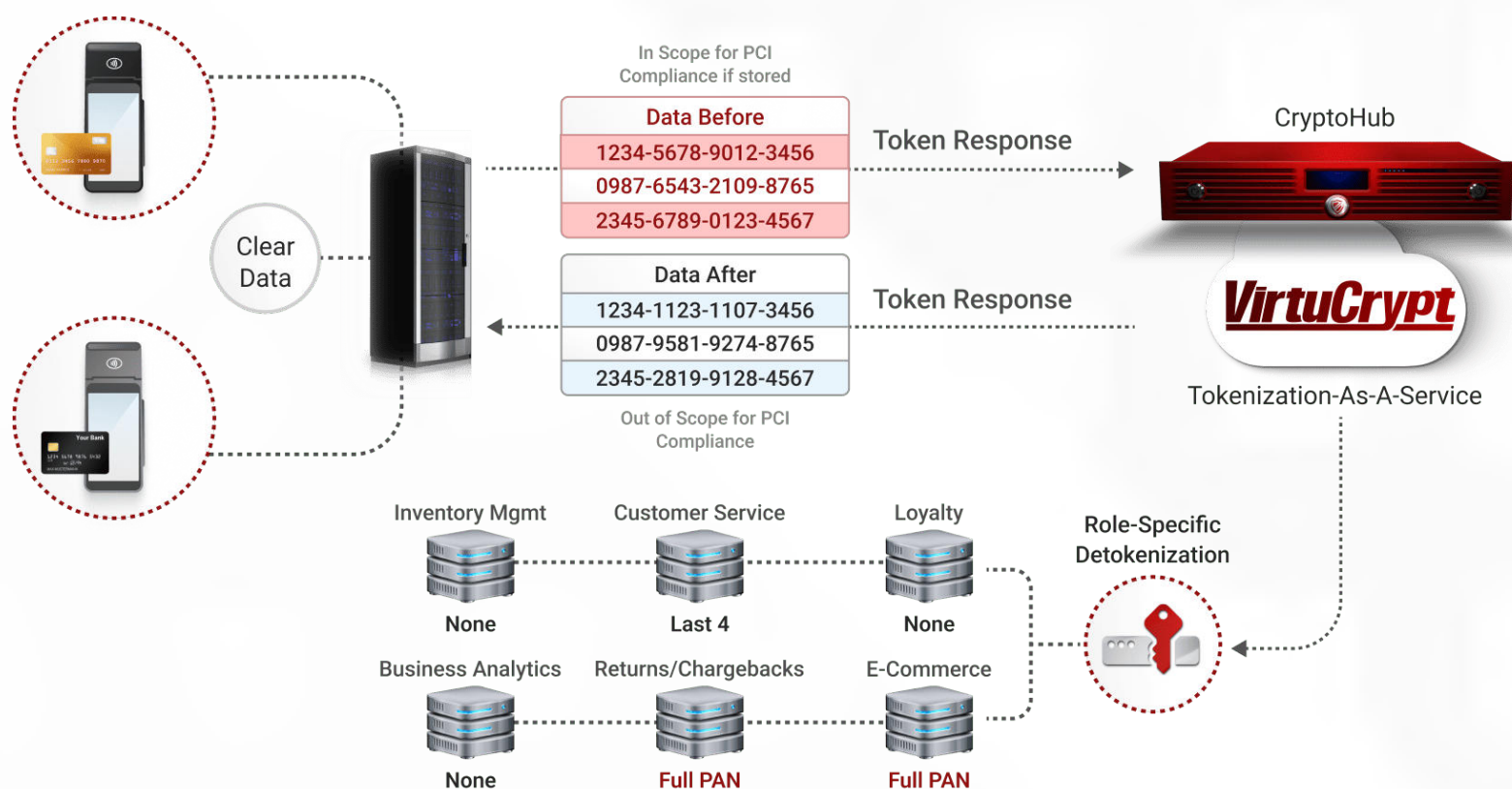
# VAULTLESS TOKENIZATION: INCREASE SECURITY, SIMPLIFY COMPLIANCE

## Protect Your Sensitive Data With **Vaultless Tokenization** From Futurex



Futurex's CryptoHub utilizes vaultless tokenization, eliminating the need for traditional databases or "vaults" to store tokens securely. This architecture defines the exact data structure through advanced tokenization profiles, ensuring precise and secure data representation. With role-based access controls, administrators can specify who can access tokens and what actions they can perform, significantly reducing compliance scope and minimizing unnecessary data exposure. CryptoHub's HSM-backed security further strengthens this environment by securing all tokenization keys.

In today's stringent regulatory environment, financial institutions must securely store sensitive account data to comply with PCI DSS regulations. CryptoHub's vaultless tokenization architecture offers a robust solution by replacing sensitive data with randomly generated tokens with no intrinsic value. This method reduces compliance burdens and significantly minimizes the need for extensive audit requirements, providing a streamlined approach to data security.

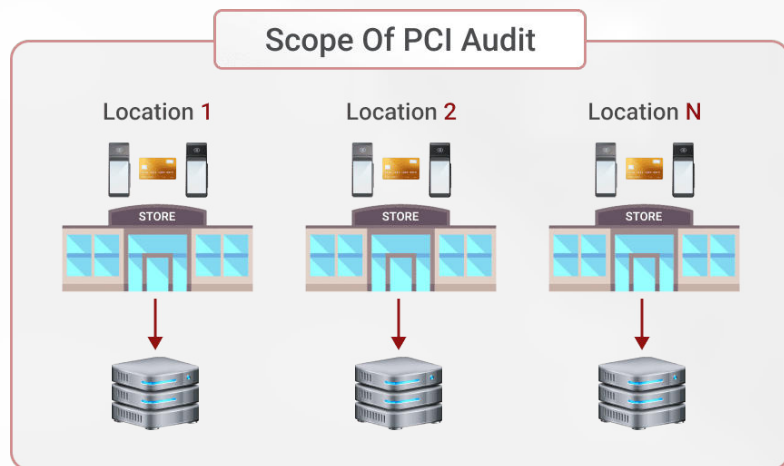


### Primary Benefits

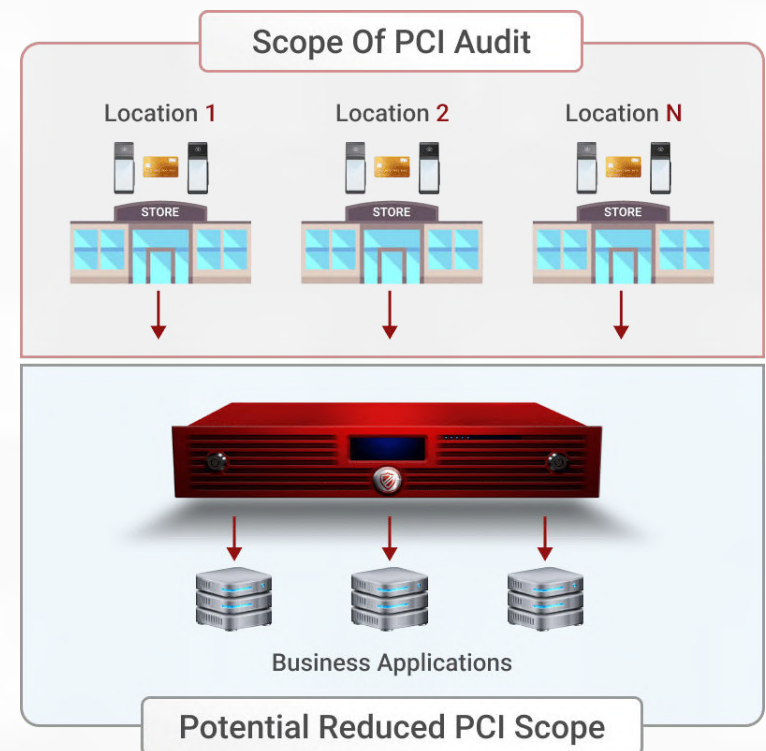
- Reduced PCI DSS compliance scope and simplified auditing
- Increased security
- Easy implementation
- Vastly smaller storage footprint of sensitive data
- Format preserving encryption
- Customized, role-specific data output to minimize exposure

## Vaultless Tokenization Audit Scope

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.



Using vaultless tokenization, no clear cardholder data is stored, which allows organizations to consolidate their compliance scope into a much smaller footprint.



## Format Preserving Encryption (FPE)

Futurex prioritizes adaptability and ease of integration in all its solutions, like CryptoHub, employing vaultless tokenization with Format Preserving Encryption (FPE). FPE maintains the original cleartext data format, enabling precise role-specific detokenization. By implementing trusted, NIST-standard FPE algorithms, Futurex ensures data security while minimizing unnecessary exposure.

## Zero Database Schema Changes

Our tokenization solution integrates with your existing database without requiring any structural changes. By using Format-Preserving Encryption (FPE), we maintain the original format of your data, allowing it to fit effortlessly into your current systems. This method simplifies implementation, enhances security, and avoids the costs and disruptions associated with modifying your database schema.

## Enforce Zero-Trust

Implementing the principle of least privilege, Futurex's role-based detokenization enforces zero trust principles by ensuring minimal access rights and centralizing detokenization management. This streamlines operations, enhances security, and simplifies auditing, offering a unique and powerful solution for modern data protection needs.

### Additional Benefits

**Tokenization Profiles:** Outlining the exact structure of data using advanced algorithms

**Access Controls:** Detailed control over who can access tokens and perform various actions

**HSM-Backed Security:** All keys are secured and utilized in a tokenization environment, powered by CryptoHub and more...



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For over 40 years, Futurex has been an award-winning leader and innovator in the encryption market, delivering uncompromising enterprise-grade data security solutions. Over 15,000 organizations worldwide trust Futurex to provide groundbreaking hardware security modules, key management servers, and cloud HSM solutions.

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Futurex is headquartered outside of San Antonio, Texas, with regional offices worldwide and over a dozen data centers across five continents, Futurex delivers unmatched support for its clients' mission-critical data encryption and key management requirements.

