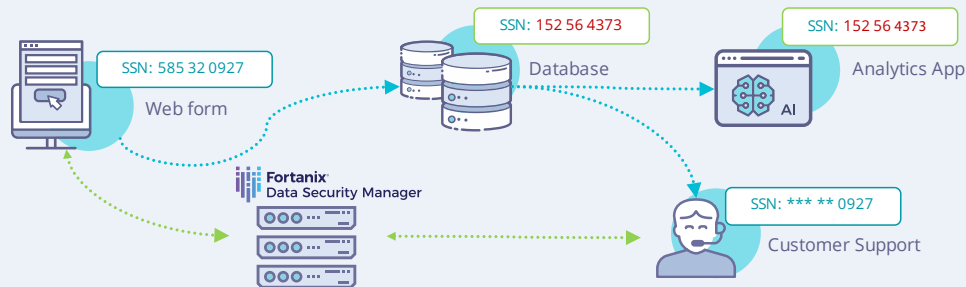
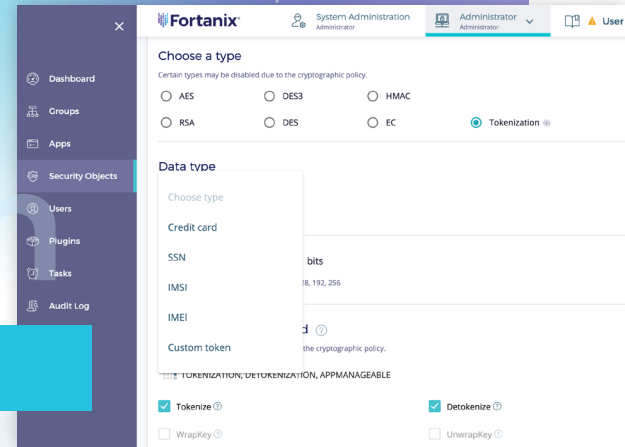


# Tokenization

Achieve privacy and data security with tokenization



Loss of sensitive data can lead to costly regulatory penalties affecting your company's bottom line and reputation. Tokenization can avoid regulatory penalties and protect sensitive data by replacing personally identifiable information (PII) such as credit card account numbers with non-sensitive and random strings of characters, known as a 'Token', that preserves the format for the data and the ability to extract the real information. With Fortanix, you can substitute tokens for sensitive data using REST APIs to achieve privacy compliance. This helps eliminate the link to sensitive data and avoid exposing sensitive information if a data breach occurs.



Reduce the cost and effort for PCI-DSS compliance

In the payments world, the customer's 16-digit primary credit card account number is replaced with a custom, randomly generated alphanumeric number and stored securely to enable online transmission of this data.



Achieve HIPAA compliance

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



Privacy Compliance for Personally Identifiable Information (GDPR, CCPA)

Sensitive data such as credit card numbers and social security numbers can be masked to achieve compliance with a variety of privacy regulations. This increases customer trust as tokenization offers additional security and confidentiality of consumer information.



Integrated data security platform

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

## Key Features

### TOKENIZE ON THE FLY

The combination of Format Preserving Tokenization and role-based access control (RBAC) for applications helps in protecting sensitive data. With Fortanix, authorized users can get authenticated through RBAC, query the data, and tokenize data on the fly.

### ADVANCED DATA MASKING

A user can choose to dynamically mask an entire field of tokenized data or part of the field based on user or group. Integrated with the LDAP or Active Directory, masking can be applied to any combination of digits that are tokenized data.

### ADD ENCRYPTION TO SECURE DATA

Tokenization can also be combined with data encryption at rest to provide an additional layer of security that protects against insiders having access to decrypted sensitive data.

### TOKENIZE ANY CUSTOM OBJECT OR DATA TYPE

User can tokenize any custom objects to protect any kind of data other than a credit card or SSN. Depending on the type of data the users want to protect, they can create security objects belonging to the tokenized data types.

## Fortanix Tokenization – Dynamic Data Protection

Here is a lifecycle diagram that explains how Tokenization works within a Hadoop Data lake. The diagram shows how a combination of Format Preserving Tokenization (FPE) and role-based access control (RBAC) for an application provided by Fortanix Self-Defending Key Management Service helps in protecting sensitive data. With Fortanix, relevant users can also get authenticated through RBAC, query the data, and tokenize on the fly. Token information is stored in FIPS 140 level 3 certified appliance.

