



Fortanix Self-Defending Key Management Service

Next generation HSM and Key Management



As you shift your applications to new infrastructures, you need a solution that can protect all your data on-premises as well as in the cloud. Fortanix Self-Defending KMSTM delivers HSM, Key Management, Encryption, and Tokenization for your hybrid and cloud-native applications, all from the same integrated solution. Fortanix introduces a radical new technology — Runtime Encryption, and a new product architecture.

With Fortanix Self-Defending KMS, you can securely generate, store, and use cryptographic keys and certificates, as well as secrets, such as passwords, API keys, tokens, or any blob of data¹.



INSTANT VALUE

Quick time to value with rapid deployment, simplified operations and centralized management



SCALE ON-DEMAND

Scale as you need to support millions of clients and billions of transactions with automated load-balancing and high availability



LOWER TCO

Transparent, simple, and predictable pricing. No additional costs for clients, connectors, features or algorithms

Key Features and Benefits

- UNIFIED DATA PROTECTION: Integrated HSM, KMS, Encryption and Tokenization functionality. Support for full NSA Suite B algorithms: RSA, AES, Elliptical Curve². Perform broad cryptographic operations and key management operations, including key generation, key import, key rotation, key derivation, encryption, decryption, signing, verification, tokenization, and masking
- COMPLETE PRIVACY: End-to-end security for keys and data (at-rest, in-transit, and in-use) protected with layers of defense including Fortanix Runtime Encryption®, Intel® SGX and FIPS-validated hardware; Only authorized users can access keys
- CENTRALIZED VISIBILITY AND CONTROL: Centralized intuitive web-based user interface for management. Role-based access control (RBAC) for users, applications and groups with segregation of duties. Comprehensive tamper-proof audit logs to track all activity, including administration, authentication, access, and key operations
- APPLICATION FRIENDLY INTERFACES: Support for RESTful APIs, PKCS#11, KMIP, JCE, Microsoft CAPI, and Microsoft CNG. Easily support all existing and new applications, whether operating in public, private, or hybrid cloud. Out of the box connectors with no additional license costs

^{1.} Tokenization and secrets management are offered at an additional charge.

² See algorithms supported here



- ADVANCED ADMINISTRATION: Single Sign-on support (SAML, OAuth, and Active Directory/LDAP). Auditing integration with SIEM tools (Syslog, Splunk, and CSP logging). Quorum approval policy (M of N) for enhanced protection
- RUNTIME ENCRYPTION PLUGINS: Securely run sensitive business logic inside trusted boundary with Runtime Encryption plugins. Easily create or customize cryptography logic for your unique business or security requirements
- CLOUD-SCALE PROTECTION: Distributed scale-out architecture provides scalable performance on demand. Simplified operations with built-in synchronization, high availability and disaster recovery
- er FLEXIBLE CONSUMPTION: Designed to run in and support all environments: on-premises environment, private cloud, edge cloud, public cloud, managed environments. Flexible consumption options: either a FIPS validated appliance, software on SGX-enabled servers/laaS or SaaS providing you a ubiquitous solution for your multi-cloud applications

Deployment Architecture

Fortanix Self-Defending KMS delivers quick time to value — new nodes can be deployed and provisioned without requiring any initial configuration in a centralized place. Once deployed, a Fortanix Self-Defending KMS cluster can be managed and monitored remotely and without need for physical access.

