Hardened Enterprise Security Platform

Enterprise-level Hardware Security

The Hardened Enterprise Security Platform is a suite of complementary FIPS 140-2 Level 3-compliant devices that, together, form an all-purpose cryptographic solution. The platform’s strength lies in its future-proof design, its flexibility, and the interoperability of the individual devices that make up a custom solution. Enterprise-level organizations can build a Hardened Enterprise Security Platform solution that will scale alongside their business, especially if used in conjunction with the cloud-based encryption platform offered by VirtuCrypt.

Industries Served

The Hardened Enterprise Security Platform serves virtually any industry, including:
- Retail
- Manufacturing
- Government
- Healthcare
- Automotive
- Aerospace
- Telecommunications
- Petroleum
- Casino
- Financial services
- Cloud service providers
- Information technology

Secure, Scalable, and Extensible

Each component of the Hardened Enterprise Security Platform adds features and functionality that combine to form a complete solution, eliminating fragmentation and reliance on multi-vendor integration.

The platform is designed to be comprehensive, securing every aspect and endpoint of organizations’ core cryptographic infrastructures, from key management to data encryption to secure storage, and much more.

The Base Architecture Model

- The Base Architecture Model (BAM) provides a common code base that makes the platform interoperable and reliable.
- Each Hardened Enterprise Security Platform device is developed using the BAM.

Cloud Integration

- Enterprise-grade standalone services or additional functionality for on-premises deployments
- Compliant, scalable, cloud-based interface
- Uses Hardened Enterprise Security Platform devices
**Features at-a-Glance**

**General Purpose Processing**
- 15,000+ signatures per second in a single device
- PKCS #11, Java, CNG, RESTful, and Encrypt API support
- Custom application execution via the Secure Code Environment
- Turnkey integration to easily secure 3rd-party products and applications

**Financial Processing**
- 20,000+ transactions per second in a single device
- Up to 20 virtual HSMs in one unit
- Support for custom commands and extensions
- Support for current and future financial cryptographic algorithms

**Key, PKI, and Certificate Management**
- Support for billions of objects such as keys and certificates
- KMIP, Excrypt, and RESTful support
- Key and certificate workflow management with built-in certificate and registration authority
- Integration with standard key and certificate distribution platforms

**Crypto Management**
- Transaction load balancing for all devices in the infrastructure
- Ability to perform security operations remotely and centrally
- Automatic fail over between network devices
- Notification and alerting (SNMP, SMTP, or SMS)

**Identity Management**
- LDAP and single sign-on support
- Multi-factor authentication including physical access control
- Application authentication
- User group and object-level permissions
- Full smart token and PIV lifecycle management

**Introducing CryptoCube**
The CryptoCube racks Hardened Enterprise Security Platform devices such as the Vectera Series, the Excrypt SSP Enterprise v.2, and AuthentiCrypt in a physically reinforced, access controlled unit. Administrate them all remotely with the Excrypt Touch, a secure tablet.

**Feature Spotlight**

**HSM Virtualization**
- Deploy one HSM as if it were many using HSM virtualization, a process that creates independent virtual instances of an HSM.
- All virtual HSMs have independent: Firmware, Key Space, Network Stack, and Security Space.

**Virtual HSM: 192.168.0.1**
Firmware version 6.1.2.0
Uses a 3DES Master File Key (MFK) for financial processing and executes a custom application

**Virtual HSM: 192.168.0.2**
Firmware version 5.0.0.3
Uses an AES 256-bit Platform Master Key (PMK) as its master key for general purpose processing

**By the Numbers**

- **15,000+**
  Futurex customers worldwide

- **35+**
  Years in business

- **20+**
  Enterprise-class data security solutions currently being offered by Futurex as part of the Hardened Enterprise Security Platform

**VirtuCrypt.com**
Take the platform off-premises with the VirtuCrypt Hardened Enterprise Security Cloud, based on the same hardware as the Futurex platform.
Alternatively, the following are available as standalone services or for existing on-premises deployments:
- Enterprise cryptographic processing
- Key management, certificate management, and PKI
- Trusted identity
- And much more