



Application Partitioning



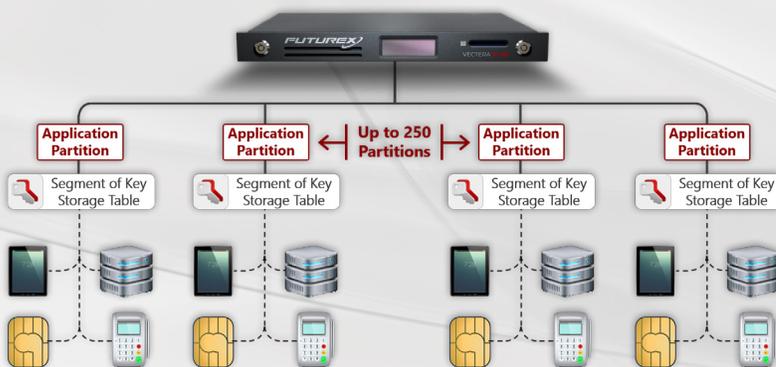
Application Partitioning for Futurex HSMs

Increasing the Return on Investment of Your HSM Infrastructure

Application partitioning divides the key storage table of Futurex HSMs so multiple applications can use the same HSM for cryptographic processing while maintaining their own, access-restricted space for cryptographic keys. This allows organizations to expand the use of their existing HSMs without allowing any one application to access another's keys.

Futurex's Vectera Plus and Excrypt SSP Enterprise v.2 HSMs support up to 250 application partitions application partition has its own unique identities, permissions, and function blocking settings to restrict access to API commands.

How Does it Work?



Features of Application Partitioning

- ✓ Prevents one application from accessing another application's cryptographic keys
- ✓ Up to 250 application partitions are supported with a single Futurex HSM
- ✓ Each virtual HSM, up to 20 per physical HSM, supports up to 250 application partitions
- ✓ Each partition has its own unique identity, key storage, and API function blocking



User Story: Local Community Bank



A small community bank has an opportunity to grow beyond PIN transaction acquiring to include Point-to-Point Encryption for their merchant customers.

Resources are limited for this small bank and they cannot justify a second HSM environment. By using application partitioning on their existing HSMs, they can expand their service portfolio without significant capital expenditure.

Cryptographic Ecosystem:

- One test Excrypt Series HSM with two application partitions
- Two production Excrypt Series HSMs with two application partitions each, split between two data centers for failover

User Story: Mid-Sized Financial Institution



A mid-sized financial institution with strong compliance requirements must enforce key segregation between applications that use HSM resources. With application partitioning, each of their payment applications has access only to necessary keys and API commands.

Virtual HSMs are also used in support of applications requiring functionality only available in specific HSM firmware versions.

Cryptographic Ecosystem:

- Five test Excrypt Series HSMs with five virtual HSMs, each virtual HSM containing 50 application partitions
- 50 production Excrypt Series HSMs with five virtual HSMs each and 50 application partitions per virtual HSM
- Three Guardian Series 3 devices at each of their five data centers for centralized management and failover
- Two Excrypt Touch tablets at headquarters for remote configuration and secure key loading

User Story: Global Corporate Enterprise



A large multinational corporation with a forward-looking information security posture has instituted an organizational mandate to use strong, HSM-based cryptography in all possible business applications. In addition to a scalable production environment, they seek a test ecosystem that replicates their production environment through HSM virtualization for cost efficiency.

Cryptographic Ecosystem:

- Five test Vectera Plus HSMs with five virtual HSMs, each virtual HSM containing 250 application partitions
- 25 production Vectera Plus HSMs, each with 250 application partitions

Additional Benefits of Application Partitions

- ✓ Complementary solution to HSM virtualization
- ✓ Allows HSMs to operate in a more flexible and efficient manner
- ✓ Multiple applications can connect simultaneously with no overlap
- ✓ Allows organizations to cost-effectively expand the use of HSM-based data protection in their IT ecosystem

Hardened Enterprise Security Platform Integration



Application partitions can also be managed on client Futurex HSMs using Futurex's cryptographic management devices such as the Guardian Series 3 and the Excrypt Touch.

Configuration and Management

Application partitioning is currently available for the Vectera Plus & Excrypt SSP Enterprise v.2. Both are capable of creating an industry-leading 250 application partitions per HSM or virtual HSM instance.

Configuration of application partitions take place through either the Excrypt Manager application or the HSM's web configuration panel.



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