

How Cloak HSM-as-a-Service protects engineering firms' operations and assets

WHAT ENGINEERS ARE SAYING

"With increase cyber threats, we have to rely on advanced security infrastructure to secure our tech products. These solutions usually require HSM protected keys, where are difficult to use and expensive. Fortunately, I can use Cloak HSM-as-a-Service for our development and build systems."

CUSTOMER CHALLENGE

Engineering companies have to secure their tech products against cyber attacks. Most product protection would require secure code signing, secure boot and authentication, encryption and secure communications, blockchain security and CA and PKCS11 operations. These operations requires the use of HSM protected keys.

SOLUTION

Security experts agree that they need HSM protected keys to secure important IT infrastructure and assets. But, without the troublesome HSM administration and deployment. Cloak HSM-as-a-Service offers a simple, ready-to-use service to provide essential cryptographic capabilities in a secure, scalable, and cost-effective manner, enabling organizations to safeguard critical assets and ensure the integrity and confidentiality of data.

RESULTS

Peace of mind is hard to price, but Cloak Apps does it simply and cost-effectively. Along with an easier way to share files, engineering firms can now assure their customers and partners that important intellectual

See for yourself how Cloak Apps can improve the security and productivity of your organization with a free trial. Visit site.cloakapps.com, or email sales@cloakapps.com

Industry:

R&D, Engineering, Manufacturing

Location:

USA, Asia

Products used:

About us

Cloak Apps brings true enterprise-grade security to the cloud. Founded by a team of software security research scientists and professionals, we start with the belief that cloud computing is here to stay, but data loss can and must be prevented.

Our solution allows the sharing of confidential documents on public cloud infrastructure. We specifically target cross-location projects requiring the compliant and auditable exchange of sensitive information for finance, legal, corporate development, R&D and engineering teams.



Enterprise grade security does not have to be difficult to use and administer.

-- Marcus Tan,
CEO, Cloak

ENGINEERING PROBLEMS THAT REQUIRES HSM KEYS

Secure Code Signing: Engineers often need to sign production firmware, software, or code to ensure its authenticity and integrity. HSM-as-a-Service can provide secure key management and signing capabilities, allowing engineers to digitally sign their code with confidence.

Secure Boot and Device Authentication: In embedded systems and IoT (Internet of Things) devices, secure boot processes and device authentication are crucial for ensuring the trustworthiness of the system. HSM-as-a-Service can help engineers establish and manage cryptographic keys used in secure boot processes and device authentication mechanisms.

Encryption and Secure Communication: Engineers may need to implement encryption and secure communication protocols in their applications or systems to protect sensitive data in transit. HSM-as-a-Service can provide encryption keys and cryptographic services for securing communications channels, such as TLS/SSL connections.

Blockchain and Cryptocurrency: For engineering firms working with blockchain technology or cryptocurrency systems, HSM-as-a-Service can support key generation, storage, and transaction signing operations, ensuring the security and integrity of blockchain networks and digital assets.

Digital Signatures and Document Authentication: Engineers may need to implement digital signature solutions for document authentication, electronic contracts, or legal agreements. HSM-as-a-

OUR SOLUTION: CLOAK HSM-AS-A-SERVICE KEY FEATURES

The key features of Cloak HSM-as-a-Service include:

Secure Key Management: HSM-as-a-Service offers secure generation, storage, and management of cryptographic keys. Keys are protected within tamper-resistant hardware, ensuring their confidentiality and integrity.

Compliance Support: HSM-as-a-Service helps organizations meet regulatory compliance requirements, such as GDPR, PCI-DSS, HIPAA, and more. It offers features and controls to facilitate compliance audits and reporting.

Scalability and Flexibility: HSM-as-a-Service offers scalability to accommodate changing cryptographic workloads and business needs. Users can easily scale their cryptographic operations up or down based on demand.

Cost Efficiency: By eliminating the need for on-premises hardware and maintenance, HSM-as-a-Service offers a cost-effective solution for cryptographic key management. Organizations can reduce capital expenditure and operational costs associated with traditional HSM deployments.

High Availability and Disaster Recovery: HSM-as-a-Service ensures continuous availability of cryptographic services through redundancy and failover mechanisms. It offers built-in disaster recovery capabilities to protect against data loss and ensure business continuity.

Integration: The service easily integrates with existing applications, systems, and cloud platforms through APIs and SDKs. This allows organizations to incorporate cryptographic services seamlessly into their workflows.

FAST DEPLOYMENT:

A major benefit to small companies with few IT resources is our fast and easy deployment. Unlike traditional HSM products which is difficult to install and administer, our user can simply sign up for an account and use the HSM keys immediately via our RESTful API.

Advanced users who require to host their own HSM tokens can do so via our Cloak Gateway integration. Cloak gateway deployment typically take less than an hour using docker containers.

HSM-AS-A-SERVICE SPECIFICATIONS

SPECIFICATION	DETAILS
Key Type	AES (256 bit) RSA (1024, 2048, 4096 bit) ECC (SECP192R1) ECC (SECP256R1)
Key Management	HSM key creation, deletion
Key Operation	Encryption, Signing
Integration	Easily integrates with existing applications and systems through APIs and SDKs.
Performance	Scalable, according to service level subscribed
Auditing and Logging	Audit trace for HSM key usage, user activities and administration tasks
Platform Compatibility	RESTful API Kafka Queue Integration
Enterprise Tools	Full featured web-based administration console

See for yourself how Cloak HSM-as-a-Service can improve the security and productivity of your organization with a **free trial**. Simply sign up for an account at <https://kmsconsole.cloakapps.com>.