CRYPTOMAThiC

CRYSTALKEY360

FOR CODE SIGNING

Code signing uses cryptographic methods to ensure code authenticity and integrity, assuring that the code is legitimate and unaltered.

Signing code can be done in several ways, but as the size of your business grows, the need for automation and integration to simplify and protect the signing process will increase.

A ROBUST CODE SIGNING PLATFORM

CrystalKey 360 is a powerful platform designed to deliver comprehensive security and centralized management for cryptographic keys and certificates across a wide range of code signing tools.

CrystalKey allows you to configure and secure your code signing processes, safeguarding against threats such as private key compromises, certificate misuse, counterfeit certificates, man-in-the-middle attacks, timestamping vulnerabilities, and weak hash functions.
After all, insecure code signing can be more harmful than not signing at all, as it may falsely validate compromised code as legitimate.

FEATURES AND BENEFITS

ROLE-BASED ACCESS CONTROL (RBAC)

Ensures proper authorization and separation of duties among users, applications, and groups

OPERATIONAL CONTINUITY AND SCALABLE OPERATIONS

Enable failover and load balancing for signature requests through robust deployment models to make the system highly available for critical operations.

CONTROLLED KEY MANAGEMENT

Assign specific keys and certificates for different development stages, each with unique authorization requirements.

API-BASED SIGNING

Seamless integration with existing DevOps tools ensures access to keys and certificates without delays. CrystalKey 360 integrates with CI/CD tools, document workflow engines, and identity platforms via modern APIs.

ENDORSED SIGNING

Adds an extra security layer by requiring the consent of one or more supervisors to approve the signature generation, preventing single-user vulnerabilities.

ADVANCED SECURITY MODULE SETUPS

Tailor the setup to meet your requirements and select the security model that fits your needs. CrystalKey 360 supports the usage of Hardware Security Modules (HSMs), Enclave Security Modules (ESMs) operated within confidential computing or basic Software Security Modules (SSMs).

CENTRALIZED KEY MANAGEMENT

Manage signing keys, automation, and permissions centrally.

CLOUD, MULTICLOUD, ON-PREMISES OR HYBRID DEPLOYMENTS

Deploy in the public clouds, on-premises, private clouds or hybrid deployments to match your requirements.

BRING YOUR OWN CA, CLM AND TSA

If you have already mastered the processes around Certificate Authorities (CA), Certificate Lifecycle Management (CLM) and/or Time Stamping Authorities (TSA) and wish to extend these to your code signing, this is possible.

CENTRALIZED AUDIT LOGS

Maintain detailed, tamper-proof logs for all signing activities and key management events.

FUTURE PROOF YOUR CODE SIGNING SETUP AND UNLOCK MORE USE CASES

GROW INTO THE PLATFORM AS YOU NEED IT

CrystalKey 360 is a flexible key management and data security platform, and code signing is just one of the use cases we support. Adopt the platform as you go with additional use cases like multicloud key management, data sealing, tokenization and HSM modernization. One platform for all cryptographic security decisions.

CRYPTO AGILE OPERATIONS

Adopt a platform that enables you to be agile with your cryptographic operations. CrystalKey 360 supports the current algorithms and standards for code signing, but given its agile design, it will easily allow for addition of quantum resistant signing algorithms.

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www.cryptomathic.com