



CRYPTOMATHiC

KEY MANAGEMENT SYSTEM

**A BUYERS GUIDE WITH SUPPLIER
AND SYSTEM CHECK LIST**



THE PRINCIPLES

A Key Management Platform is the backbone function of a mature security and compliance setup.

However, the scope of such a platform can vary a lot. This can add a costly, and potentially disruptive nature to the decision of implementing or replacing a key management system. Therefore, you want to ask the right questions to any potential suppliers!

In this guide, you will find a list of fitting questions to ask. One list is designed to vet the supplier, and another to qualify the product.

All questions are defined as yes/no questions, and you are looking for 'Yes's'!

This is a list of general questions and may vary slightly depending on the use case, however, keep in mind that a vendor who ticks all these boxes will have the tools to help future proof your operations and help your business scale in the long run. Some potential use cases for this list could include:

- Code signing
- Data protection and privacy
- Data masking and tokenization
- Consolidation through HSM as a service
- Future Proofing through Crypto Agility
- Streamline integration through Crypto as a service
- Or other...

SO HERE IT GOES...

KEY MANAGEMENT SYSTEM

SUPPLIER

 **PEDIGREE OF THE VENDOR**

Do they have a strong reputation and long track record within the cryptographic security industry?

 **SECURITY ARCHITECTURE**

Can the vendor provide a detailed security architecture that shows how various threats are mitigated?

 **FUTURE-PROOFING**

Is the product being actively maintained and updated in line with market trends, e.g., cloud computing, regulation, post-quantum algorithms?

 **SUPPORT**

Can the vendor provide professional services to help with design and implementation, and a high quality of ongoing maintenance and support (on a 24/7 basis if required)?

 **COMPLIANCE**

Can the vendor prove how they address compliance with relevant regulations?

 **CREDIBILITY**

Is the product proven? and is it backed up by high-profile references or case studies?



KEY MANAGEMENT SYSTEM

CAPABILITY CRITERIA



USER AUTHENTICATION

Does the solution provide strong user authentication?



POLICY CONTROL

Does the solution enforce user-defined policy, including user-defined roles and privileges and two-person operations?



AUDIT

Does the solution provide an integrity-protected audit log?



RESILIENCE

Does the solution provide for high-availability, backup and disaster-recovery?



INTEGRATION

Does the solution provide an 'out-of-the-box' integration with your applications?



CUSTOMIZATION

If required, can the vendor offer custom integrations?



EASE-OF-USE

Does the product make life easier for operations staff, e.g., context-sensitive GUI, asynchronous workflow and task automation?

CAPABILITY CRITERIA



APPLICATION AGNOSTICISM

Can the solution manage keys for alternative applications (other than the vendor's own applications)?



HSM VENDOR INDEPENDENCE

Does the solution support multiple HSM brands for vendor independence?



SECURITY MODULE OPTIMIZATION

Does the solution support Hardware Security Modules, Cloud Enclave Security Modules and Software Security Modules to optimize cost and security requirements for different use cases?



SUPPORTED KEY TYPES

Does the solution support a wide range of symmetric and asymmetric key types, lengths and formats (including any specific to your applications or industry)?



KEY IMPORT/EXPORT

Does the solution allow key import and export (wrapped under suitable key encryption keys)?



PHYSICAL PROTECTION

Are keys secured to the FIPS 140-2 standard (ideally Level 3)?



CRYPTOMATHiC

CONTACT US

Website

www.cryptomathic.com

Email

enquiry@cryptomathic.com

LinkedIn

www.linkedin.com/company/cryptomathic

