

SUCCESS STORY

Creating a secure, full life-cycle digital asset management solution

Inspired by Switzerland's exemplary financial sector, KORE Technologies set out to develop a comprehensive digital asset management platform that meets the highest security, availability, and regulatory standards. The platform needed to cover the entire asset life cycle, including:

- Issuance of assets as tokens on a public blockchain
- Custody of asset keys
- Enabling transactions with the assets
- Auditable verification of asset safekeeping
- Trading of assets

Meeting the security challenge

For each of these functions, security was paramount. Many digital assets lack recourse in cases of fraud or theft, necessitating a robust technological foundation. This is where Securosys' Primus hardware security modules (HSM) became crucial. Their native support for blockchain algorithms alleviated much of the security burden, allowing KORE Technologies to concentrate on integration, performance, and user experience.

Capabilities provided by Securosys

- **True Entropy Generation:** Securosys' HSMs generate true entropy generation combined with support for in-hardware address exports, eliminating vulnerabilities associated with randomization or quantum weaknesses during asset issuance phase. This ensures that asset keys are fraud-proof, even in a quantum-computing future.
- **Tamper and Side Channel Protection:** The HSMs provide robust protection against tampering and side-channel attacks, preventing unauthorized extraction of asset keys.

- **Smart Key Attributes:** This feature provides the highest level of security for transactions beyond those available with Multisig or MPC solutions. The procedures are developed to meet the most stringent policies demanded by modern financial institutions.
- **Key Attestation:** Currently, verifying control over a key typically requires signing a transaction, which introduces operational risks and potential blockchain fees. Primus HSMs' Key Attestation feature allows the origin and attributes of private keys generated on the modules to be cryptographically verified using a public certificate, a capability that KORE Technologies plans to implement.
- **Multi-Authorization Capabilities:** These capabilities facilitate the authorization of large trades and cryptographic verification of key control, eliminating counterparty risk in brokerage scenarios. This capability to enable full auditability of their users' depot holdings.

Conclusion

KORE Technologies prioritizes uncompromising security, scalability, availability, and user experience. The platform they developed, powered by Securosys' advanced solutions, enables them to deliver maximum value across all these aspects. Securosys HSMs are central to KORE Technologies' success, ensuring their platform meets the rigorous demands of digital asset management.

About KORE Technologies

KORE Technologies provides a banking-grade platform for comprehensive digital asset management, including asset issuance, custody solutions, and node services. Leveraging a strategic partnership with IBM, their platform operates on cutting-edge LinuxONE infrastructure, ensuring exceptional performance and availability.

Additionally, their collaboration with Securosys equips them with a robust hardware stack that safeguards over \$100 billion in transactions for Tier 1 financial institutions, specifically tailored for digital asset applications.

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