

Cryto Storage AG

2020

SUCCESS STORY

Crypto Storage AG, a subsidiary of Crypto Finance AG, successfully manages blockchain-based assets and their private keys with cutting-edge security standards without single points of failure while maintaining a seamless end-user experience. Their collaboration with Securosys has proven instrumental in achieving these goals.

Starting Point

Crypto Storage aimed to create a platform for financial intermediaries to manage blockchain-based assets and private keys securely, without compromising user experience or introducing single points of failure. This vision led to a strategic partnership with Securosys, resulting in two patent applications and a highly efficient development process that enabled Crypto Storage to onboard their first client within six months. of the idea inception. Crypto Storage could put the focus on the clients' market-demand priorities, usability requirements, and operational scalability.

The partnership with Securosys enabled Crypto Storage to leverage the Primus HSM platform, already trusted to secure \$100 billion in daily transactions within the Swiss banking sector. This robust hardware security module (HSM) is on track to become the new standard for crypto asset applications.

Objectives Achieved with Securosys

- High Security and Sophisticated Control: Ensuring secure asset management.
- Physical Multi-Authorization: Requiring multiple approvals for transactions.
- Operational Scalability: Supporting various asset types and numerous accounts.
- Elimination of Single Points of Failure: Implementing a tight security architecture.
- Comprehensive Cryptographic Audit Trails: Ensuring all transactions are verifiable.
- User-Friendly Experience: Maintaining ease of use for end-users.

Key Innovation with Smart Key Attributes

Securosys' Smart Key Attributes (SKA), developed in colllaboration with Crypto Storage, provide superior asset key usage policies compared to traditional multi-signature or modern multi-party computation methods. The support for the BIP32 derivation scheme further enhances the HSM's capacity for asset keys.

Implementation with Decanus Terminal

Crypto Storage employed the tamper-protected Securosys Decanus approval terminal with custom firmware to ensure secure multi-authorization for each transaction. This integration offloaded significant security requirements to the Primus HSM platform and the Decanus Terminal.

Benefits Realized

- Universal Deployment: SKA's flexibility enables easy deployment of new types of crypto assets.
- Efficient Market Response: Rapid adaptation to market and client needs.
- Verifiable Audit Trails: When combined, the multi-authorisation capabilities and the auditable, signed and tamper-proof crypto logs from Securosys Primus HSMs provide a cryptographically verifiable audit trail for unexpected event.
- Unified User Experience: The universal applicability of the SKA combined ith the large touch screens and intuitive interfaces of the Decanus Approval Terminal enhance usability.

Trust and Transparency

A high level of trust is vital in such partnerships. Crypto Storage valued Securosys' transparency, which includes full audits of design, code, and manufacturing processes.

Conclusion

Crypto Storage continuously strives to meet and exceed the security standards of the evolving crypto asset sector. The ongoing collaboration with Securosys ensures Crypto Storage remains at the forefront of security innovation, ready to tackle new challenges and meet the financial sector's evolving needs.

About Crypto Storage AG

Crypto Storage AG provides institutional-grade infrastructure for secure storage of blockchain-based assets. They support clients with full implementation for custody business models and tailored blockchain solutions. Advisory services cover crypto asset technology, operations, and risk management, with processes and governance compliant with SOC-2 and ISAE 3000 (type 2) standards, audited by Ernst & Young. This partnership with Securosys raises market standards, introducing a new security paradigm with dedicated, redundant hardware devices and independent multi-signature frameworks, ensuring secure, tamper-proof transaction approvals.

Crypto Storage AG, supported by leading Swiss HSM provider Securosys, continues to set new benchmarks in the secure management of blockchain-based assets.

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