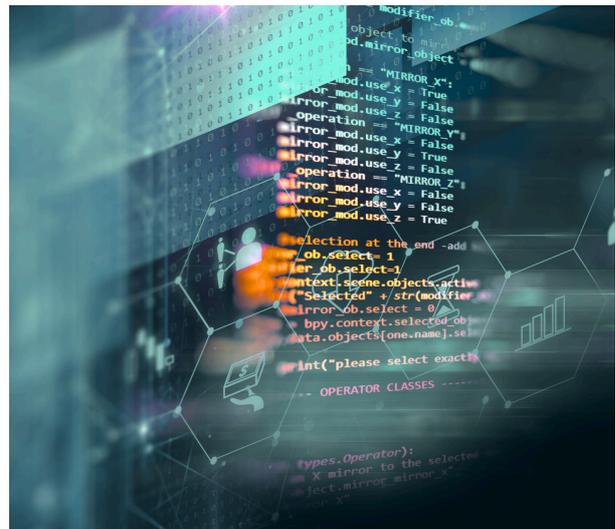


CASE STUDY

Abstract

When Blockrise set out to build a regulated, secure, and scalable Bitcoin infrastructure, they turned to Securosys for trusted key generation and encryption key management. Starting with their CloudHSM ECO offering, Blockrise leveraged API-driven access control and secure key management tailored to the unique demands of blockchain transaction governance. As the company matured, so did its infrastructure, leading a seamless migration to an On-Premises CyberVault Pro cluster with full operational control and zero downtime. This case study highlights how Securosys' flexible architecture and Swiss-grade security helped Blockrise scale from startup agility to institutional strength.



Introduction

Blockrise, a Dutch fintech startup licensed under the Markets in Crypto Assets Regulation (MiCAR), is on a mission to make investing in Bitcoin secure, transparent, and fully compliant. They have built their solution specifically for risk-aware investors who value security, regulatory compliance, and transparency. Blockrise ensures that client assets are held in the client's own name through segregated wallets, under the control of the client, resulting in traceable funds on the blockchain and hence significantly reducing third-party risk. Unlike conventional platforms, Blockrise operates under the supervision of the Dutch Authority for the Financial Markets (AFM) and combines institutional-grade infrastructure with the independence for investors to transact on their own terms.

To achieve this level of trust and security, Blockrise relies on cutting-edge hardware and partners who can meet the strict standards of the financial industry. Their commitment is summed up in the promise that "Your bitcoins [are] guarded by Swiss hardware in ultra-secure facilities," underlining the importance of robust, hardware-based protection as part of their infrastructure.

The Challenge

In 2018, Blockrise conducted a comprehensive evaluation of Hardware Security Module (HSM) providers to support its high assurance blockchain operations. As a security-first Bitcoin startup, Blockrise required a solution that combined technical rigor with flexibility: granular access controls, quorum-based transaction approvals, group-based permissions, and time-based constraints.

While there was no legacy system to replace, the objective was clear: implement a robust and scalable HSM solution that would meet evolving compliance, operational, and regulatory needs from day one.

The Solution

Blockrise selected Securosys CloudHSM ECO, enhanced with Smart Key Attributes (SKA) and crypto licenses, as its initial infrastructure. This solution provided:

- / Cost-effectiveness for the startup stage.
- / High-performance security via Swiss banking-grade HSMs.
- / Flexible integration using the SKA interface to enforce complex authorisation rules for transaction signing.
- / Unique implementation that allows mobile phones to sign securely for Bitcoin transactions using the secure element chip.

As Blockrise scaled its services and customer base, it also matured its infrastructure. Increased regulatory requirements, coupled with the need for full control and local custody, led to a strategic decision to migrate from cloud-based HSM-as-a-Service to on-premises infrastructure.

Securosys facilitated this migration by deploying a redundant CyberVault Pro cluster with Decanus Terminals, hosted across multiple secure data centers. The transition included:

- / A full dry-run test of the migration process.
- / A live migration of all HSM traffic from the CloudHSM environment to on-prem infrastructure.
- / Zero downtime, zero data loss, and uninterrupted cryptographic operations.

Additionally, Securosys provided bespoke consultancy and training for Blockrise at their HQ in Zurich, further strengthening their hands-on management of the solution.



Securosys gave us the flexibility and cryptographic control we needed from day one, without making any compromises on security. The transition from Cloud to On-Premises went seamless without any downtime, and the support of Securosys throughout this process has been top-notch. — **Jasper Hu, CTO, Blockrise**

Why Securosys?

Blockrise selected Securosys for its:

- / Swiss-engineered, certified HSMs ensuring the highest levels of trust.
- / Flexible, API-driven architecture enabling detailed transaction policies.
- / Scalability, supporting both early-stage cloud models and advanced on-prem environments.
- / Regulatory alignment with European standards and readiness for MiCAR compliance requirements.



Results & Impact

/ Enhanced Control & Compliance

Blockrise now has full ownership and operational control over its HSM infrastructure, supporting its governance framework, auditability needs, and secure custody requirements.

/ Seamless Migration

The switch from Cloud to On-Premises was executed without any business disruption, thanks to careful planning and technical validation led by both teams.

/ Strengthened Trust

Blockrise's confidence was reinforced by Securosys' detailed documentation, proactive support, and professional services throughout the engagement.

The Collaboration

The partnership between Blockrise and Securosys has been built on for years, with technical transparency, mutual trust, and responsiveness. From the earliest due diligence to the most recent training and cluster expansion planning, the collaboration has been driven by shared values around security, compliance, and control.

Blockrise appreciated Securosys' ability to deliver technically precise answers quickly, and Securosys' alignment with their blockchain-native security model laid the foundation for a lasting, trusted relationship.

Conclusion

The collaboration between Blockrise and Securosys clearly demonstrates how modern crypto platforms can future-proof their operations through flexible, secure, and scalable HSM infrastructure. From an agile cloud-based starting point to full operational control in a dedicated on-premises environment, Securosys supported Blockrise every step of the way, with technical precision, reliability, and a strong partnership ethos. With further expansion already planned, Blockrise underscores that security and compliance are not one-time achievements, but ongoing priorities, and that Securosys is the right partner to meet them.

Case Study at a Glance

- / Customer:** Blockrise (Netherlands)
- / Industry:** Regulated digital asset services
- / Securosys solutions:** CloudHSM ECO → CyberVault Pro (on-prem), SKA, Crypto Licenses, Decanus Terminal
- / Main results:** Seamless cloud-to-on-prem migration, enhanced compliance, secure key control, and future-ready scalability

About Blockrise

Blockrise Capital B.V. is a Rotterdam-based crypto asset manager specialising in Bitcoin-focused asset management and custody services. Founded in 2017, Blockrise combines a personal, private-banking-inspired approach with a strong focus on security, transparency, and regulatory compliance. Its services include secure Bitcoin custody, brokerage, reporting, and legacy planning, supported by a client-first philosophy and externally verifiable on-chain transparency.

Disclaimer

This case study is a marketing communication. Blockrise Capital B.V. holds a MiCAR license with number 41000029, issued by the Dutch Authority for the Financial Markets (AFM). Investing in bitcoin involves risk.



Visit Blockrise website

About Securosys

Securosys SA, based in Zurich, is a global leader in cyber security, encryption and digital identity protection. Their Swiss-built Hardware Security Modules (HSM) secure financial markets, serving over half of the Tier 1 banks worldwide. Certified to the highest standards, their on-premises and cloud HSM solutions offer secure key generation, encryption, digital signing, and post-quantum readiness for finance, healthcare, government, and other industries.

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Version CS-E01



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