Balance is a Canadian digital asset custodian which powers financial services companies such as over-the-counter trading desks, exchanges, lenders, and ATM networks. The assets are kept secure on specialized hardware, kept fully offline in geographically distributed bank grade vaults that are access controlled, monitored, and guarded 24/7.

LOCATION: TORONTO, ON

Over $10 billion worth of digital assets were stolen from exchanges and trading platforms over the past few years. As Bitcoin and similar digital assets become increasingly popular, it’s important to have an institutional grade solution available for storing them, similar to storing your money at a local bank.

SECURING YOUR CRYPTOCURRENCY FROM HARM

To help platform operators prevent these kinds of losses, Balance developed Balance Custody, a vaulted, offline storage system for securing digital assets against both internal and external threats, including hacking, theft, computer and telephone fraud, misuse of access, and more. The private key material controlling the assets is generated and managed on specialized, dedicated hardware throughout the lifecycle of the keys.

DETERMINING BALANCE CUSTODY’S OPTIMAL RPMS

Balance carried out a CENGN project to determine their platform’s maximum throughput measured in requests per minute (RPM) for performing certain operations such as refreshing wallet balances or parsing raw blockchain data for discovering transactions. Balance validated their ability to build transaction caches and computing wallet balances for potentially hundreds of custody clients with hundreds of thousands of wallets each, while also identifying a few areas for improvement. Finally, Balance successfully tested their client-facing web application under heavy backend system load, observing no noticeable degradation in performance.

“CENGN helped us identify ways to improve the wallet balance checking and transaction discovery routines, dramatically reducing execution time from seconds to tens of milliseconds.”

George Bordianu
CEO, Balance