



ARTICLE

Getting Under the Hood with Crypto: Handling digital assets in a regulated environment - Why Key Custody Matters

In just over ten years the original white paper concept of a peer-to-peer electronic cash system has become a crypto economy that is evolving at an accelerating speed. We have progressed from a single decentralized virtual currency in 2009, to smart contract-based blockchains supporting thousands of different crypto assets today. Ethereum emerged in 2013 with a promising range of possible decentralized applications or dApps but at the requirement of privacy.

The same short period has also seen risk management take centre stage from settlement and security risks to the custody of assets with headline-grabbing stories about hacking, phishing and cybercriminals targeting cryptocurrency exchanges and causing millions of bitcoin and other altcoins to suddenly 'vanish' and accounts being completely lost.

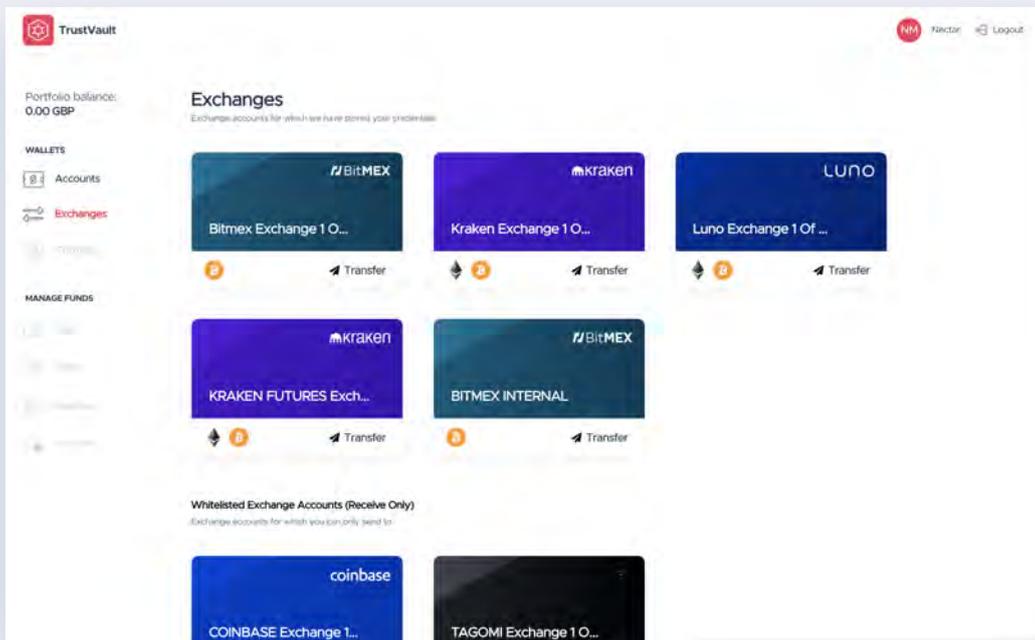
Fast forward to 2020 and we have a rapidly evolving and maturing market with greater demand for regulatory clarity and more reliable security and custody options, allowing for more institutional participation. Enter Trustology and LAB577.

BUILDING THE MOST ROBUST AND CREDIBLE WAY FORWARD FOR TRADING AND PAYMENTS

LAB577 is a software company at the nexus of financial services and emerging technology. Their latest development is the Digital Asset Shared Ledger (or DASL for short), which provides institutions with the ability to re-imagine how value is moved and managed and is built on the Corda network.

Trustology has crafted an insured custodial wallet solution that addresses both investor demand for security of the highest order, and





Operate your own custodial wallet service with dedicated wallet nodes for your clients. TrustVault Platform is everything you need to deploy, scale and manage private keys and wallet accounts securely.

ease of use. It also responds to institutional needs around account segregation for ease of transactional activity reporting and monitoring as well as the need for mitigating holding and fiduciary risks on-chain and on-exchange via its advanced access and authorisation controls. The solution was designed and engineered to easily scale whilst providing for fast response times (subsecond to transfer funds), high security, and access flexibility. This gives institutional investors the right support needed for arbitrage plays, high-frequency trading, and hedging/speculating with leverage.

As the first cryptoasset custody wallet provider on the Corda network, Trustology will be working on delivering a host of new benefits to clients. These include extending wallet compatibility to Corda-based tokens, providing reliable key management and secure custody services to holders of Corda assets.

When you combine the collaboration of these two innovative fintech providers who are dedicated to enabling the adoption of cryptoassets through deployable, scalable institutional-grade, enterprise-ready and regulatory friendly solutions to safely handle digital assets, you get the future of finance neatly packaged and market-ready. Both companies clearly understand the challenges associated with handling digital assets in a regulated environment and uphold similar values when it comes to innovating to solve for security, scalability, transparency and mitigating regulatory risks such as AML/CFT. They are both leading the charge and joining forces on strategy, standards and conventions for digital assets leveraging the Corda network as their base play. Innovators like Trustology and LAB577 are the linchpin between cryptoassets, DeFi and traditional finance.



WHY CORDA?

The crypto and finance domains are converging, and Corda stands well-positioned in the intersection between these two worlds.

Corda has a publicly-available internet of Corda nodes that mitigates the AML/CFT risk by disallowing anonymity - an issue that Ripple and Ethereum could not easily solve for, as privacy was a requirement. Corda on the other hand, provides us with a peer-to-peer architecture, solving the privacy and scalability challenges. Corda does not force the use of a volatile crypto-currency. It's

essentially an underlying universal network which enables interoperability between nodes across separate business networks, applications and processes. Additionally, token and account functionality has been ported from Ethereum onto the network allowing ETH and ERC-20 tokens to be traded on Corda Network.

Creating new markets for previously illiquid assets and reducing risk and cost using digital assets. DASL builds on top of Cordite, Settler and Tokens SDK to provide a deployable finance grade, enterprise-ready and regulatory friendly solution to safely handle digital assets.



WHO'S GOOD AT KEEPING SECRETS IN A GAME OF TRUST WORTH TRILLIONS?

Securing and managing crypto funds is one of the most important challenges for both institutions and investors today. To reduce the risks of private keys and wallet access being lost or hacked, some investors are looking for the assurance of security that is similar to the regulated security of the financial industry - leveraging an insured, independent custodian.

A crypto custodian also eliminates the need for an investor to have technical knowledge. The custodian takes responsibility for developing

and maintaining the technical elements of the service. Institutions that do not have the infrastructure to secure crypto assets can partner with a specialized custodian to serve their customers who have crypto holdings. High value creates high stakes and in the rapidly growing and evolving crypto sector, investors want assured security. Outsourcing crypto-asset custody to an insured third party that maintains control of, but not "ownership" of, the keys can give assurance that their assets are secure.

As more institutions enter the crypto space or start scaling into crypto, it's reasonable to demand a custody service role in institutional business practices that will support the new



crypto market.

Institutional investors are required to conform to regulatory standards and registration in traditional currency and security trading, requiring regular audits by independent parties. The custody solutions they choose must, therefore, have capabilities in place for meeting those requirements in the crypto asset realm.

An increasing number of competing custodial models is available to institutional fund managers and investors alike, but securing digital assets is challenging and complex. Convenience and security can be inversely proportional. Fast, flexible, and easy transaction capability can compromise security and add exposure to security sinkholes. Secure solutions are often slower, more rigid in their protocols, and more complex to use safely. Solutions that offer both easy transactions and security are rare, and generally expensive to implement making frequent transactions costly. Additionally, ensuring the safe custody of private keys across multiple chains will be more than a headache—especially if you do your own.

Trustology's solution allows for easy coordination with developer APIs to provide convenience and flexibility while enabling access to new tools delivered by decentralised finance (DeFi) technology – DeFi tools that are providing new solutions for borrowing, lending, and stabilizing of capital through smart contracts. For

example, Trustology's recent integration with the Ethereum web-browser plugin MetaMask, enables users to run decentralised applications through a browser without having to run a full Ethereum node.

The most interesting developments launched by the company to date are its programmable custody rules, such as multi-signatory "walled gardens," or whitelists, where clients can create their own rules, but lets Trustology execute those rules, so they don't have to wait on the company to enforce the rules for them.

In essence, Trustology is working hard to build an ecosystem that is safer, faster and easier for both individual and institutional crypto adoption. Partnering to support infrastructure designs such as the Corda Network and its token issuance is a step in that direction because we remove barriers to purchase and offer a frictionless, secure experience to foster trust."

CONCLUDING THOUGHTS

The combining of these two innovations will not only provide customers with a more secure wallet alternative for assets, financial products or applications but a regulatory compliant blockchain that ensures risk mitigation, builds trust and provides a scalable framework for the much more sophisticated financial instruments which lie ahead.

LAB577

ABOUT LAB577

LAB577 is a software company.

Co-creating applications at the nexus of financial services and emerging technology.

Visit lab577.io



Trustology

ABOUT TRUSTOLOGY

Trustology's vision is to create the most compelling cryptoassets company of the 21st century. Our first focus has been securing and managing cryptoassets for private, corporate and institutional investors with our TrustVault platform technology and insured custodial services.

Visit trustology.io

