Securing DeFi operations with custodied keys and custom transaction rules for easier compliance and secure smart contract administration.

Radix needed a custom solution for their smart contract administration to support their token DeFi launch and meet a complex set of security and legal requirements for their token buyers.

Overview

Radix DLT, a London-based DeFi startup is building a decentralised finance protocol intended for release as a public network in Q2 2021. The Radix public network, over a sequence of releases, will provide frictionless access, programmability, and liquidity to any asset in the world. Last year, the company reached a major tech milestone by overcoming the issue of DeFi scalability by reaching over 1 million transactions every second with their technology. Radix features two core innovations— Cerberus and the Radix Engine. Cerberus, the scalable consensus protocol, is capable of processing massive numbers of transactions in parallel due to its highly sharded data structure and unique application layer. The Radix Engine, meantime, is the Radix network's developer interface that allows for quick development and deployment of secure, powerful DeFi applications.

Radix DLT successfully completed its latest funding round, a token sale of its e-Radix tokens (eXRD) in October 2020 which raised USD$12.7M and saw 325 million tokens purchased by 652 global buyers. This is significant in that it both validates the demand for a new way of banking and finance and secures Radix's stance in the market.

The public network being developed by Radix will be managed and operated by the community that uses it, with the network's token acting as a crucial security mechanism. This is the reason that token ownership is important to create a decentralised and transparent system which can democratize access to financial services and create a network of assets for a streamlined and secure flow of data and capital. The sale of the eXRD token, which will be swappable for the native XRD token on the Radix public network, was the first step to achieving this decentralization of the network.

Purchased eXRD tokens are progressively unlocked for buyers via a specialized smart contract built by Radix. With the imminent launch of the eXRD token in late 2020, Radix needed both an independent intermediary and automation to manage the process of unlocking eXRD tokens via smart contract control. This function needed to meet a variety of security and legal requirements. This put them in a position of operational risk for smart contract administration.

Trustology has been a pleasure to work with, bringing a level of maturity that is rare in the crypto space to their technology platform, their operational support, and their business dealings. Their willingness to work with us on a custom solution for our smart contract administration allowed us to meet a complex set of security and legal requirements, and in the end deliver a crucial piece of our token launch to a decentralized Radix community.

Matthew Hine, Head of Product, Radix

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Delivering the Solution

Trustology in its capacity as an independent, DeFi-enabled and insured custodian worked with Radix DLT to simultaneously automate the necessary multi-factor authorisation controls and limits to transaction calls on smart contracts needed. They also worked with them to implement a completely randomised time delay over a 24-hour time interval for smart contract "unlocks", making them fair for all buyers.

By providing Radix with a bespoke API driven scalable, co-signing authorisation service and by implementing the randomised time delay through its flexible rules engine, Trustology delivered on a fully automated, independent service that minimised both human and operational risk, drove process efficiencies and made for easier compliance.

Benefits to Radix

Overall operational efficiency and flexibility

Reduced operating risks as liability now outsourced with an insured, independent custodian. Fully automated process that reduces human error and removes any manual process inefficiencies.

Minimised risk

Mitigated operating risks with fully customisable and enforced transactional rules and other security controls on tokens and contracts as well as maintained audit logs for easy compliance.

Outcome

Since leading with Trustology as its custodial wallet provider in November 2020, Radix has enjoyed a solution that has been purposely built and designed to be easy to use, fast, scalable, highly secure and resilient. In supporting Radix with its initial request for automation in DeFi, Trustology is now partnering with them on other API-driven initiatives that will save them additional time, cost and effort.