



Crypto Finance: a central trading platform for cryptocurrencies

In pursuing its goal of making investment in new, digital currencies as simple, intelligent, transparent and secure as possible, Crypto Finance AG has been working closely with Ergon to rapidly develop a central trading platform for cryptocurrencies that provides professional access to the crypto asset investment universe.

Founded in 2017, Crypto Finance AG provides qualified and institutional investors with secure and transparent access to the burgeoning crypto asset market. The business is based on a central trading platform that combines intelligent cryptocurrency trading across multiple stock exchanges with client account management and secure securities storage.

Intelligent trading across multiple stock exchanges

The project was kicked off with three specification and design workshops, on the back of which a first rudimentary order management and execution platform was developed in less than six weeks. This platform, which productively initiated and settled cryptocurrency transactions using algorithmic trading, was expanded into a cryptocurrency banking system in an agile process over the next few months.

Order execution is handled by a "smart trader" component that is linked to several cryptocurrency exchanges simultaneously. Following an algorithm selected as part of the order, it breaks the trading mandate down into segments and processes them "intelligently" on the various trading floors, based on current pricing and order books; here, the customers themselves can define the exchanges on which their orders are to be settled. Once order execution is complete, a statement is prepared and logged to the customer's account; the user is then notified in the Crypto Asset Trading Portal that it is ready for download.

The platform is based on modern, scalable micro-service architecture, with secure access guaranteed by Ergon's Airlock Secure Access Hub web application firewall (WAF) and identity & access management system (IAM).

Intuitive customer portal with transparent reporting

The Crypto Asset Trading Portal is a web interface that enables customers to directly submit a "request for quote" (RFQ) for a trade or a "click & deal" trade via the web application.

With an RFQ, a trader has a limited window to offer a price to a customer who, in turn, has a deadline to accept the deal. In "click & deal" mode, the customer is constantly shown a client-specific "house" price from the in-house market data service and can carry out a trade using this price.

All completed trades are recorded on the order management and execution platform and customers have an overview of their current currency balances and the orders and fees they have chalked up in the portal.

"Working with the professional, dedicated and determined specialists at Ergon has allowed us to get something first-class and pioneering up and running."

Jan Brzezek

CEO and Founder, Crypto Finance AG

The portal also boasts REST API and websocket access, allowing major customers and banks to connect to their own banking infrastructure and conduct RFQ and "click & deal" trades from their own systems, in addition to receiving a constant feed of current "house" prices.

High levels of automation with great flexibility

The trading platform features numerous configuration options and high levels of automation, but also allows for manual intervention. The algorithmic order management system permits the trader to access the liquidity of the world's leading trading floors and offer optimised order execution, thus affording investors the combined benefit of current market performance and the trader's experience. These components are incorporated into the algorithms for order execution, and strategies are adapted flexibly.

Thanks to a live RiskView, clients can monitor their own cryptocurrency balance sheet and simply and automatically rebalance positions in line with their chosen strategy.

Top security for cryptocurrencies

The order management and execution platform has been linked to a crypto storage platform that safeguards customers' cryptocurrency assets with unparalleled security. Customer "wallets" – a collection of cryptocurrency addresses – are managed using the newly developed platform. Deposits from and payments to customers are recorded and the balances of the individual currency accounts are adjusted accordingly. The crypto assets acquired can either be securely stored or paid out directly to investors' personal wallets.

About Ergon

Ergon is a Swiss leader in leveraging digitalisation to create unique and effective client benefits, from conception to market. We combine our extensive technological, security and business experience to design "smart" solutions from complex requirements. The company, which now employs more than 300 members of staff, was founded in 1984.

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