

Supporting the audit of crypto assets



Leading the way in providing assurance services to clients engaging in crypto asset activities

The world around us is changing – advances in the digital landscape, including Blockchain, have revolutionized how we exchange value between multiple parties. Today, to exchange value digitally (such as currency, property or commodities), we rely on trusted intermediaries such as banks to establish trust between the transacting parties.

Without blockchain, a trusted intermediary is necessary to prevent fraud, because when value is represented digitally, it can be duplicated or manipulated. Blockchain uses a decentralized mechanism to establish trust, without the need for a trusted intermediary. Crypto assets are just one type of digital asset exchanged on the blockchain.

Rapid growth in **cryptocurrencies** has been accompanied by key trust issues and presents challenges in providing audit comfort over ownership and transactions. These challenges have been the subject of ongoing discussions between audit and securities regulators in the search for solutions.

At PwC, we have developed an audit methodology and supporting tool specifically to provide assurance services for entities engaging in crypto asset transactions. We are currently the first provider with a tool that complements our audit methodology by independently verifying an entity's access to a specific blockchain address and independently summarizing cryptocurrency transactions and balances recorded on that address.



Our ability to audit an entity engaged in crypto asset activities is dependent on, among other items, the nature of an entity's business, the strength and auditability of an entity's internal controls, including key and wallet security controls as well as systems and controls to address cybersecurity and fraud risks.

These considerations along with our standard client and engagement acceptance conditions will be key when determining whether we are able to accept an audit or assurance engagement involving crypto assets. Our tool currently supports 10+ crypto tokens which influences which transactions and balances we can address.

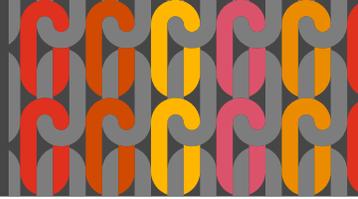
What does PwC's tool do?

Provides independent, substantive audit evidence of the private key and public address "pairing" which is an important element needed to establish ownership of crypto assets.

Securely interrogates the blockchain to independently and reliably gather corroborating information about blockchain transactions and balances.

Provides assurance. Using this tool and our methodology surrounding the audit of cryptocurrency, we are unique in our ability to employ a proprietary tool to complement our assurance methodology for entities whose operations are materially impacted by cryptocurrencies.

Keeps your keys safely under your control - they are not shared in any way during this process.



Key features

The two major components of the solution are the back-end data extraction and storage, and the front-end user interface.

They enable the following core business processes:



PwC's tool supports clients transacting in many of the most common cryptocurrencies, such as Bitcoin, Bitcoin Cash, Bitcoin Gold, Litecoin, Ethereum, Filecoin, Ripple, Tezos, Smart contracts on Tezos blockchain, and many of the ERC20 tokens. Additional cryptocurrencies are continuing to be added as we see our clients expanding their usage.

Benefits to your organisation



Extraction: Extracts details of transactions and balances for your crypto asset holdings, essentially like a bank statement, for review and testing by the audit team.

Security: Ownership of crypto asset holdings are validated through the testing of messages signed with your private keys. Your private keys are not shared in any way during this process. Your keys remain safely within your existing control environment.

Resilience: PwC's solution can help organisations effectively address the opportunities and challenges of crypto assets, and help your teams implement the processes and controls required to obtain assurance reports from your auditors.



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