





Managing Credentials with Blockchain Technology



Verifiable Credentials

Credentials are used to identify and describe individuals, be it qualifications like university degree certificates, assets like house deeds, records like birth certificates or capabilities like drivers license. They are traditionally issued physically.

Verifiable Credentials are digital and cryptographically verifiable and traceable to authenticate the party who issued it, to the person who it was issued to.

This provides an unprecedented amount of privacy, security and assurance for credentials that we haven't seen before.

Verifiable credentials are designed to be tamper-evident and can be easily shared with others, allowing for quick and secure verification of the claims they contain. For example, a verifiable credential could be used to prove that a person has a certain level of education or certification, or that they are over a certain age. The use of verifiable credentials can help to reduce fraud and increase trust in online interactions.



Store Information

The owner of the identity has control over the identifiers which relate to them. This is done via a wallet, which can be on their mobile device, and stored on a distributed ledger or blockchain. A wallet is a piece of software that enables users to manage their digital identity and interact with different verifiable credential systems. A wallet can be thought of as a digital container for a user's verifiable credentials and associated keys, which are used to verify the authenticity of the credentials.

Typically, a wallet allows users to store and manage their verifiable credentials, as well as to present them to other entities (such as service providers) when necessary. This enables users to prove their identity or attributes (such as their age, education, or employment history) in a secure and privacy-preserving manner.

Verifiable credentials and SSI are based on the concept of decentralized, user-controlled digital identity, and the wallet is a key component of this system. By using a wallet, users can take control of their own identity and have greater control over how their personal information is shared and used.