Exploring Creds: A portable, reusable, private, and secure way to build a reputation through Verifiable Credentials.

How cheqd used verifiable credentials to boost web3 community engagement and reduce scams through interoperable reputation credentials #creds

About cheqd

cheqd is building the privacy-preserving payment infrastructure that will enable global adoption of Trusted Data economies. These include new credit markets in web3, preference data markets, and further data markets where the user is at the center. Its public, permissionless network is powered by Self-Sovereign Identity and Blockchain technologies and provides first-of-its-kind payment rails for decentralized identities that can be proven with Verifiable Credentials VCs. With its technology, cheqd is creating a new data paradigm that empowers consumers and businesses with full ownership, portability, privacy and control of their data and identities.

The Challenge

One of the challenges that cheqd wanted to address with Creds was the issue of low-quality engagement within web3 communities. In a bear market, it has become increasingly difficult for web3 projects to attract new active users and keep them engaged. After recognizing the importance of managing and helping communities to be more involved in projects, it was also noted that the web3 space was plagued by scams, frauds and bots (especially during events such as Airdrops). As an example, Twitter suspended 249,572 accounts for impersonation just between 1 January to 30 June 2022. Source: Twitter Transparency Report, H1 2022.

cheqd investigated how to protect users in a better way, particularly on Telegram and Discord. Social reputation is a concept that has not yet been fully explored by web3 projects, as well as a need to offer a gamified experience to incentivize community members to engage and build their reputations. The initial concept came from trying to make Self-Sovereign Identity (SSI) fun like NFTs. In the meantime, the concept of decentralized reputation has become a hot topic, but there are still aspects of it that need to be addressed. Indeed, a centralized reputation can be easily manipulated or controlled by third parties. In addition, those models tend to have limited interoperability features with other ecosystems and platforms while facing data privacy issues. cheqd aims to provide a solution that would address these challenges and bring healthy

engagement back to web3 communities while protecting its members from scams. Creds allow the following points:

- **Ownership:** Own and control your reputation.
- **Portability:** Keep your reputation with you and take it wherever you want.
- **Interoperability:** Take your reputation to different ecosystems and platforms.
- **Privacy**: Be able to keep your reputation private or share it with the right audience.

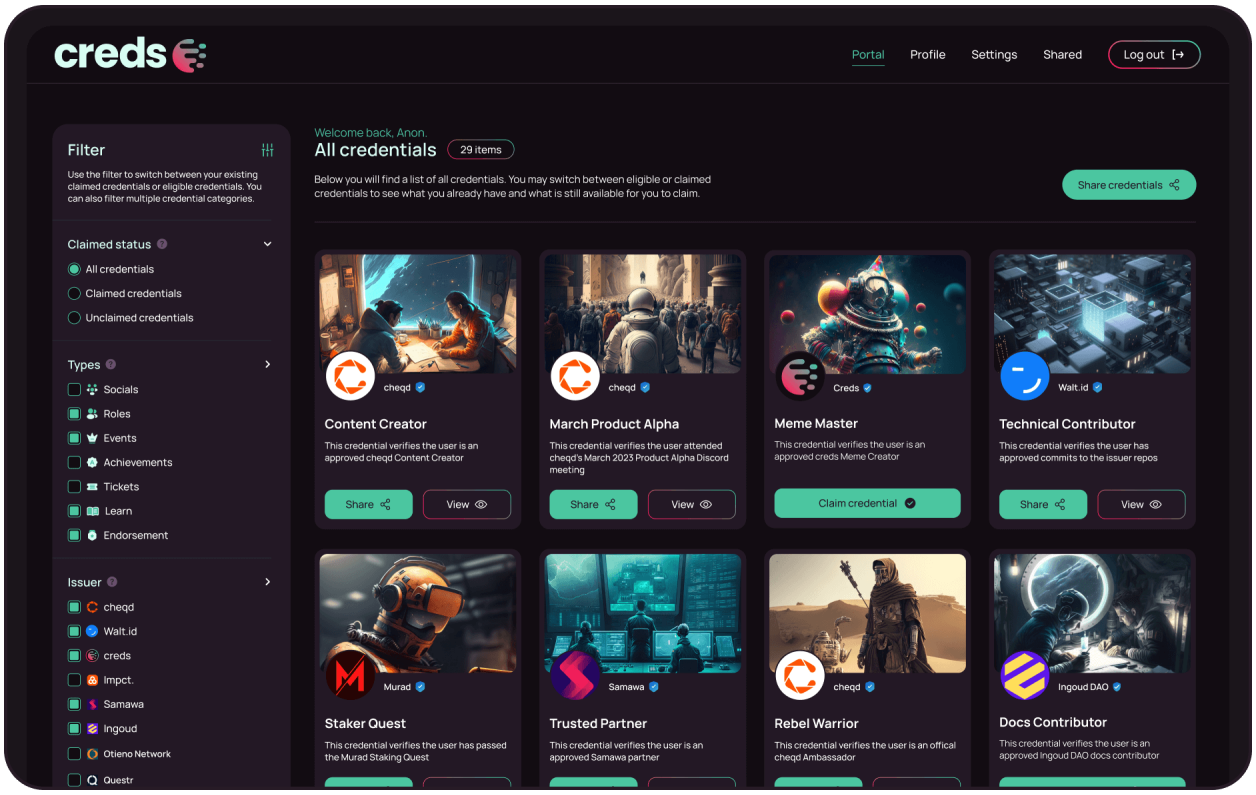
The Solution

Verifiable Credentials (VCs), thanks to their reusable, private, customisable, low-cost, interoperable, and verifiable attributes, were the ideal solution to tackle those challenges. Indeed, Non-Fungible Tokens (NFTs) and SoulBound Tokens (SBTs) do not share all of those attributes and are, therefore, not part of the solution. After considering various options, cheqd opted for walt.id's SSI Kit as the main identity infrastructure behind this project. This decision was based on several factors such as:

- OpenID connect compatibility
- eIDAS compliant
- Customer support response time
- Ability to build a long-term partnership
- Open Source under permissive license
- Low integration work needed

The SSI Kit checked all of those criteria, and was hence perfectly suited for that project. Ensuring a high level of security and trust in the identity verification and credential management process is also essential when dealing with sensitive data such as reputational data. Moreover, cheqd and walt.id's vision of decentralized identity has proven to be efficient during the development of this project.

The Results



This partnership resulted in the creation of [Creds.xyz](). Creds are verifiable credentials, a portable, reusable, private, and secure way to build a reputation and prove that you're real (and not AI). Differently from NFTs and SBTs, Creds are private, revocable, and can be taken to different platforms and ecosystems. Currently, there are seven types of credentials available:

1. **Roles:** prove that an individual genuinely has a role that they claim they have.
2. **Socials:** prove that an individual is the real owner of social media profiles.
3. **Learn:** allows individuals to receive a proof (certificate or badge-like) that they learned something specific and achieved a certain level of expertise in a field. For which individuals can be awarded some benefits, such as being granted the access to an event or product.
4. **Endorsements:** mainly designed to differentiate trusted partners from other actors.
5. **Achievements:** individuals would be able to claim an achievement once they have completed a task/quest, etc., which also will be portable.

6. **Events:** allows a user to prove that they attended an event (for which they can receive certain benefits).
7. **Tickets:** tickets can be issued and used as proof to attend events.

These credential types also make sense altogether as each type makes the other more valuable by adding a layer of depth to a user's social reputation. Users can build their reputation in a very diverse set of manners, such as by participating in campaigns and competitions, helping community members, and providing feedback on existing projects. On top of that, users can "hop from one community to another" without losing the reputation that they worked hard for, and instead proudly share their credentials to further develop their rankings. Web3 projects can create fun experiences to reward their users with collectible Creds, or simply whitelisting a certain type of community members (e.g. early adopters) for airdrops. Creds are also designed to be able to act as status or public profiles, in addition to serving as identity verification to verify if the people you are engaging are really who they say they are before trading, joining groups or asking for community support, for example. Finally, all information is secure and can be shared privately thanks to the on-chain trusted identifiers signatures and off-chain storage of Cred's data. Which means that no personally identifiable information is stored on-chain. All of those benefits aim at increasing web3 community engagement through gamified user experiences while protecting active members from scams and frauds.

Start building your reputation with Creds, visit creds.xyz for more information!

> *"The walt.id team embraced the inventiveness of what we're trying to achieve with Creds and have helped us build something really unique to build trust."*

Fraser Edwards
CEO
cheqd

Ready to get started?

Contact us or simply book a meeting.

We are happy to help.

... or get in touch with cheqd

walt.id develops Self-Sovereign Identity (SSI) solutions for businesses and governments across industries.

Developers and organizations rely on our open source products as an easy and fast way to use Self-Sovereign Identity - including Europe's new digital identity ecosystem based on the EU Blockchain and the EU SSI Framework (ESSIF).

To ensure client's success, our industry-leading experts provide holistic services including from conception over the implementation of pilots and production system to enterprise support and managed cloud services.

For more information visit www.walt.id or get in touch via mail.

cheqd (cheqd.io) is a privacy-preserving payment and credential network that allows users and organisations to gain control and portability of their data. cheqd builds upon Decentralised Identity, Self-Sovereign Identity (SSI), and Digital or Verifiable Credentials (VCs) with payment infrastructure to create Trusted Data markets as an entirely new industry category. Put simply, you can now issue credentials and get paid to do so.

With its technology, cheqd is creating a new paradigm around Trusted Data economies such as lending markets in Web3, preference data markets, and others where the user is at the center. It empowers consumers and businesses with full ownership, portability, and control over their data and identities. In addition, this data can be transacted within a cutting-edge payment network that prioritises individual privacy and market-first principles. The scale of distribution is unmatched as cheqd engages with organisations across Lending, Supply Chain, eCommerce, Education, Manufacturing, Gaming and other sectors.