

# KILT Protocol Info Sheet

## BOTLabs

BOTLabs GmbH is the company behind KILT Protocol. It was founded by Ingo Rube (former Burda CTO) and the German publishing house Hubert Burda Media in Berlin, January 2018.

In October 2018 the Swiss publisher Ringier AG joined as an additional shareholder.

## KILT Protocol

KILT is an open-source internet protocol based on blockchain technology. It enables user data sovereignty for applications built on top of it. In KILT Protocol, these user data have the shape of certificates (credentials) that attest to a certain attribute, e.g. "I am a fair-trade chocolate" or "I am a member of SuperFit gym".

To make use of applications built on KILT, three different roles (entities) are required: Claimer, Attester, and Verifier. The **Claimer** is the entity that wishes to receive a credential about a certain attribute of hers. The **Attester** is the trusted entity that has the ability to check whether the claim is legitimate and to issue the corresponding credential in return for a fee paid by the Claimer. The **Verifier** is the entity that the Claimer wants to prove herself to by showing the credential. The Verifier will approve if he trusts the Attester who issued the credential.

## The KILT USP

**Data Sovereignty:** Once it is issued, the credential exclusively belongs to the Claimer. Companies neither have to store data in their databases nor worry about fulfilling privacy regulations.

**Security:** For the verification process, the credential must be stored on the KILT Blockchain – but only in the shape of a hash value. The hash value is not readable and thus useless to hackers et al.

**Revocation:** If the attribute in the credential is no longer valid, the Attester can withdraw his attestation by storing the same hashed credential on the KILT Blockchain but marking it as "revoked".

**Privacy:** If one piece of data in the credential is sensitive and not necessary for the verification, e.g. age, the Claimer can hide it.

**Entities can be anyone or anything:** a person, organisation, object or artificial intelligence.

**CTYPES:** Claim Types define the structure of a credential. If a certain CTYPE can be used for different verification processes, it becomes popular amongst Claimers, because they need to pay only once.

**Trust Market:** If an Attester enjoys a lot of trust and issues popular CTYPES, he attracts Claimers. As he gets paid by the Claimer, he can make a business model out of his attestations.

**KILT Coin:** The Protocol has an inherent currency that could be used, for example, to pay for attestations or for writing the hashed credential on the KILT Blockchain. The more that KILT Coins would be used, the more valuable the currency would become.

**SDK:** An easy-to-use Java Script software development kit enables any developer to develop apps on top of KILT – experiences in blockchain development are not required.

## KILT Use Cases

KILT Protocol is **industry-agnostic**. It can be used for any kind of applications in different markets, e.g. Industry 4.0, Publishers, Food Industry, Finance, Energy, etc.

A possible use case in the food industry could be credentials about allergene-free groceries. A suitable authority (Attester) could issue the corresponding credential for a product (Claimer) represented by the producer. If the allergic consumer (Verifier) finds the hashed credential on the KILT Blockchain and trusts the authority, he will buy the product. Other authorities or trusted entities could issue credentials about certain products being vegan or about their carbon footprint.