

# DECENTRALIZED IDENTITY

## TRUSTED & PRIVATE IDENTITY CREDENTIALS

Identity is fundamental to how we interact, both with each other and with the applications we use each day. The identity attributes we present to others, and their trustworthiness, determines how we are treated. Relying parties must be confident that a credential attesting to some attribute, whether it is being over the age of 18 or being a legally valid driver, was issued by an appropriate authority, hasn't been compromised, nor has it been revoked. The W3C is standardizing a model for identity and credentials that can leverage distributed ledgers like Hedera Hashgraph to provide trusted discovery and lookup services.

THE PROBLEM

### CHALLENGES



7 MILLION DATA RECORDS COMPROMISED EVERY DAY

56 RECORDS COMPROMISED EACH SECOND

\$3.26 MILLION AVERAGE GLOBAL COST OF A DATA BREACH

OUR CAPABILITIES

The Hedera Consensus Service (HCS) provides a highly distributed, secure, and standards-based mechanism to record the lifecycle of digital identity credentials and facilitate trusted and secure interactions. HCS can leverage multiple fault tolerant, trusted, and confidential registries of identity credential metadata amongst a set of business partners - while keeping private information off the public ledger.

### THREE UNIQUE ELEMENTS

Provided by Hedera Consensus Service



**SECURE**

Tamper-proof, cryptographically secure record of identity credential lifecycle events



**INDISPUTABLE**

Each lifecycle event is ordered with an indisputable consensus timestamp



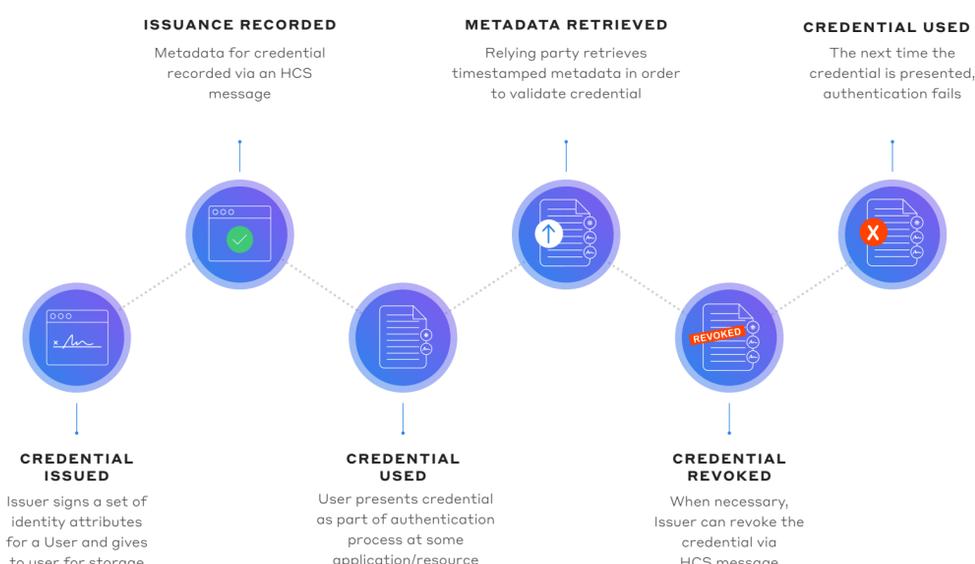
**VERIFIABLE**

Credential metadata and history verifiable by public or authorized parties

THE SOLUTION

### HOW IT WORKS

When a party issues a credential to an individual, the fact of that issuance is recorded using Hedera Consensus Service. Similarly, each event in the credential's lifecycle can also be recorded. When the user presents the credential to an application or business, supporting information can be retrieved to support validation or lookup of related identity information.



THE OUTCOME

### A TRUSTED FUTURE

A credential's issuance is recorded via HCS and persisted onto the computers of a business network. Subsequent events are also recorded, providing a trusted and immutable log of those events. Each particular lifecycle event is provided a consensus timestamp and order by the Hedera network, giving all parties certainty and confidence in that history.



**PRIVATE**

Users control when and where they use their Credentials



**TRUSTED**

Verify that identities are authentic, secure, and not revoked



**AUDITABLE**

Record identity lifecycle events in a trusted log

ABOUT HEDERA

### A GLOBAL PUBLIC NETWORK

Hedera Hashgraph is owned, operated, and governed by leading organizations globally distributed and diversified across industries.



**FAST**

Thousands of transactions/second with 3 second finality



**FAIR**

Transparent access and strong fair ordering guarantees



**SECURE**

Best-in-class fault tolerance, resilience to common attacks

