

TRUSTED & PRIVATE IDENTITY CREDENTIALS

DECENTRALIZED IDENT

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, determine 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age of 18 or being a legally valid driver, was issued by an appropriate authority, hasn't been compromised, nor has it been revoked.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



MILLION COMPROMISED EVERY DAY

RECORDS COMPROMISED **EACH SECOND**

AVERAGE GLOBAL COST OF A DATA BREACH

OUR CAPABILITIES

The Hedera Consensus Service (HCS) provides a highly distributed, secure, and standardsbased mechanism to record the lifecycle of digital identity credentials and facilitate trusted and secure interactions. HCS can enable 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



Tamper-proof,

cryptographically secure record of identity credential lifecycle events



Each lifecycle

event is ordered with an indisputable consensus timestamp



Credential metadata

and history verifiable by public or authorized parties

credential is presented,

authentication fails

HOW IT WORKS

THE SOLUTION

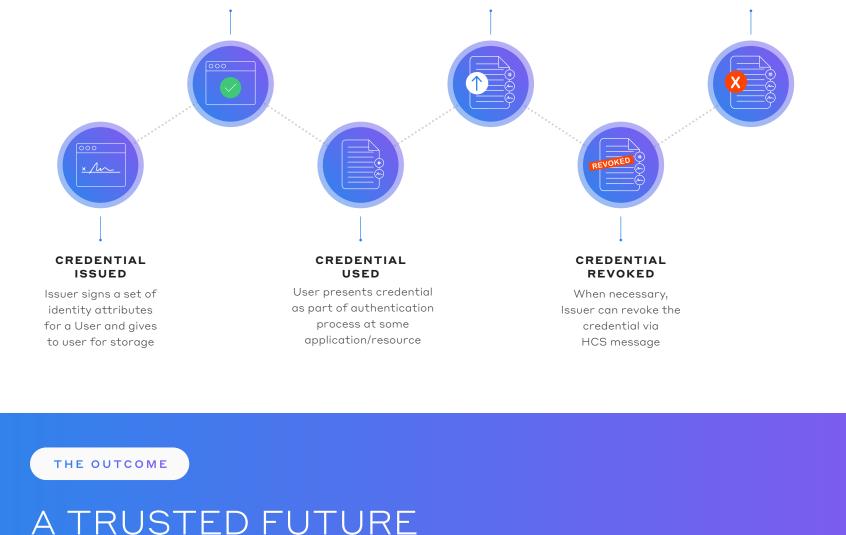
When a party issues a credential to an individual, the fact of that issuance is recorded using Hedera Consensus Service. Similarly, each event in the credential's lifecycle can also be recorded. When the user presents the credential to an application or business, supporting

recorded via an HCS

message

information can be retrieved to support validation or lookup of related identity information. **ISSUANCE RECORDED METADATA RETRIEVED CREDENTIAL USED** Metadata for credential The next time the Relying party retrieves

> timestamped metadata in order to validate credential

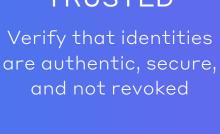


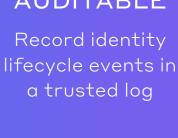
log of those events. Each particular lifecycle event is provided a consensus timestamp and order by the Hedera network, giving all parties certainty and confidence in that history.

PRIVATE TRUSTED **AUDITABLE**

A credential's issuance is recorded via HCS and that metadata persisted onto the computers of a business network. Subsequent events are also recorded, providing a trusted and immutable







ABOUT HEDERA

A GLOBAL PUBLIC NETWORK



Thousands of transactions/second with 3 second finality



Transparent access

and strong fair

ordering guarantees

Hedera Hashgraph is owned, operated, and governed by leading organizations globally

distributed and diversified across industries.



tolerance, resilience to common attacks

SECURE

Best-in-class fault

























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