

ENCERT v1 – Eden Native Certificate Specification

Purpose:

ENCERT is a lightweight, Eden-native PKI providing identity, authority, delegation, revocation, and auditability without X.509, WebPKI, or blockchain dependency.

Identity Model:

Identity = UUID + Ed25519 Public Key

Certificate Model:

Signed capability document issued by ROOT CA or Indexer.

Trust Chain:

ROOT CA → Indexer → Service Provider

Capabilities:

Explicit permissions such as INDEXER, ISSUE_CERT, SERVICE_PROVIDER, PRICE_QUOTE, RECEIVE_PAYMENT.

Cryptography:

Ed25519 signatures over canonical JSON payloads.

Revocation:

Event-based signed revocations distributed via Redis Streams.

Design Principles:

Minimalism, sovereignty, human readability, event-driven governance, short-lived authority.

ENCERT governs authority inside Eden only.