



EB-PB-009 · ENTERPRISE PRODUCT BRIEF

EarthDoc Product Brief

Verifiable documents and credentials on Earth Blockchain: degrees, licenses, land records, contracts, and certificates that any counterparty can verify in under a second — without contacting the issuer and without the document ever leaving the issuer's custody.

VERIFIABLE CREDENTIALS

SUB-SECOND VERIFICATION

EBS-4671 · 5192

ISSUER-SOVEREIGN DATA

Version 1.0 · **Status** Public Release · **Date** July 2026**Canonical source** Earth Blockchain Whitepaper v2.0**Audience** registrars · universities · government programs · certification bodies · banks

EarthDoc — Verifiable Documents & Credentials

INSTANT, ISSUER-INDEPENDENT VERIFICATION FOR ANY DOCUMENT

Every institution that issues documents pays twice for trust: once to produce the record and again — forever — to answer verification requests, fight forgery, and survive audits. EarthDoc converts verification from a correspondence process into a cryptographic read: the issuer anchors a signed commitment on Earth Blockchain once, and every future verification is a stateless, sub-second check that no forger can pass and no issuer outage can block.

At a Glance	
Category	Verifiable documents & credentials (Whitepaper §12.1).
Core EBS standards	EBS-4671 (verifiable credentials), EBS-5192 (soulbound records), EBS-721 (one-of-one certificates).
Primary buyers	Universities and education boards; government registries and e-governance programs; certification and standards bodies; HR and background-check firms; banks (KYC document validation); hospitals and labs.
Commercial model	SaaS issuance subscription per issuer plus per-anchor and per-verification metering settled in EARTH; white-label deployments for governments and universities.
Canonical reference	Whitepaper v2.0 §12.1; platform interfaces in EB-API-003; contract patterns in EB-SCC-005.

1. The Problem

Document fraud is industrialized while verification remains artisanal. Degree mills, forged certificates of origin, and doctored records impose direct losses and slow every hiring, lending, admissions, and customs decision that depends on a document being real. Verification today requires contacting the issuer — slow, expensive, unavailable outside office hours, and impossible when the issuer no longer exists. Centralized verification databases invert the problem: they become honeypots of sensitive documents with availability and jurisdiction risks of their own (Whitepaper §3, §12.1).

2. Solution Architecture

EarthDoc keeps documents in issuer custody and anchors only cryptography. Issuers register a decentralized identity and signing keys; each document is hashed (SHA-256) client-side, and the hash, issuer signature, schema reference, and validity window are committed through the BaaS anchoring API with deterministic finality in seconds. Credential-type documents are additionally issued as EBS-4671 attestations to the holder's wallet — or EBS-5192 where non-transferability must be structural — with revocation registries under issuer control. Verification recomputes the hash and checks anchor, issuer identity, and revocation state directly against the chain; selective-disclosure schemas prove properties ("degree awarded, year ≥ 2020") without exposing the document (Whitepaper §12.1; interfaces in EB-API-003 §5.1).

Fig. 1 — EarthDoc: Issue → Present → Verify

Documents never leave issuer custody; commitments, issuer identity, and revocation state live on-chain — verification is a stateless read.

Fig. 1. Documents never leave issuer custody; commitments, issuer identity, and revocation state live on-chain — verification is a stateless read.

EARTH BLOCKCHAIN

3. Workflow

1. **Onboard issuer.** Register organizational identity and signing keys; define credential schemas (transcript, license, certificate) with selective-disclosure fields.
2. **Issue.** Hash and sign each document; anchor via one API call; deliver the credential to the holder's Earth Wallet or as a QR-embedded PDF. Batch anchoring supports registry-scale volumes.
3. **Present.** Holders share the document or a selective proof through any channel — email, portal, QR at a border post.
4. **Verify.** Any verifier recomputes the hash and checks anchor, issuer, and revocation on-chain in under a second — no issuer availability required.
5. **Revoke / renew.** Issuer updates the revocation registry; all subsequent verifications reflect it immediately, worldwide.

4. Standards and Platform Integration

Component	Role in EarthDoc
EBS-4671	Holder-bound, issuer-revocable credential objects; one-call validity resolution for verifiers.
EBS-5192	Structurally non-transferable records where binding is the guarantee (identity badges, compliance flags).
EBS-721	Unique certificate instruments with provenance where transferability is intended (e.g., bearer certificates).
BaaS Anchoring API	One-call notarization with finality receipts (EB-API-003 §5.1); legacy-archive batch mode for back-catalogues.
Earth Wallets	Holder custody of credentials; institutional issuance consoles with role-based approval (EB-ENT-006 §4).

5. Deployment and Integration Path

- **Pilot (weeks).** Anchor one credential type (e.g., final transcripts for one graduating cohort) through BaaS; publish the public verification page; measure verification turnaround against the legacy process.
- **Integration (months).** Connect the student-information or registry system to the issuance API; enable holder wallets and QR credentials; onboard the first external verifiers (employers, embassies, licensing boards) via the free verification endpoint.
- **Production (quarters).** Batch-anchor the historical archive; enforce issuance through the registry of record; expand schemas (licenses, permits, lab reports); optional white-label national or institutional portal.

6. Business Model and Value

Dimension	EarthDoc
Target customers	Universities and boards of education; government registries and e-governance programs; certification and standards bodies; HR/background-check firms; banks (KYC document validation); hospitals and labs.
Business model	SaaS issuance subscription per issuer + per-anchor and per-verification metering settled in EARTH; white-label deployments for governments and universities.
Revenue opportunities	Issuance volume fees, verification API metering, integration/onboarding services, archival anchoring of legacy records at scale.
Competitive advantage	Deterministic sub-second verification on a green network; standards-based credentials portable across the whole Earth ecosystem; issuer-sovereign data custody — no honeypot of documents.

7. Enterprise Use Cases

Degree and transcript verification for admissions and hiring; tamper-evident land and property records; export/import certificates of origin bound to shipments (with EarthSCM); pharmaceutical batch certificates; audit-firm work-product attestation; instantly verifiable government licenses and permits.

8. Measuring Success

- **Verification turnaround.** From days of correspondence to sub-second self-service; track verifier adoption of the public endpoint.
- **Fraud interdiction.** Forged-document detection rate at point of use; declines in downstream fraud losses.
- **Issuer workload.** Verification-request tickets eliminated; audit preparation hours for records custody.
- **Coverage.** Share of active records anchored; legacy archive completion percentage.

9. Security and Compliance Notes

- **Data protection.** Only salted hashes go on-chain; content and personal data remain in issuer custody and jurisdiction (EB-ENT-006 §5). Deleting off-chain content renders anchors meaningless to third parties.
- **Key governance.** Issuer signing keys under MPC/HSM with role-based issuance approval; every issuance and revocation is an auditable on-chain event.
- **Availability independence.** Verification does not depend on issuer uptime — or existence; the certificate chain is the permanent evidence layer.
- **Child-record and sensitive schemas.** Selective disclosure by default for minors' records and health documents; publish only property proofs, never linkable identifiers.

Getting started. Request a BaaS project key at earth.ooo, anchor a test credential on testnet in an afternoon (EB-DEV-002 §3; EB-API-003 §5.1), and contact the enterprise team for issuer onboarding and white-label options.

EB-PB-009 v1.0 (July 2026). This brief expands Whitepaper v2.0 §12.1 with deployment and operational guidance; the Whitepaper governs in any discrepancy. References to reporting or regulatory frameworks describe structural alignment of tooling, not certification or approval. Nothing herein constitutes financial, investment, tax, or legal advice. © 2026 Earth Blockchain Corp. (Wyoming, USA) · Alpha Blockchain Private Limited (India). All rights reserved.