PERIVALLON TOOL CARDS

The PERIVALLON project aims to deliver an improved intelligence picture of organised environmental crime and develop tools for **detection**, **prevention**, and **impact assessment**. It uses geospatial intelligence, remote sensing, online monitoring, and predictive analytics to enhance investigation processes and methodologies.

These cards present **13 tools**, each a result of the development and validation efforts within the PERIVALLON project.

TOOL 8 — Data management and audit trail

Exploitation Type: Scientific

Partner in Charge: CENTRIC — Centre of Excellence in Terrorism, Resilience, Intelligence and Organised Crime Research

Description

Data is stored and protected using a secure model with (SSO/RBAC). Every create/read/update/delete is captured as an immutable, hash-chained audit item; a verifier continuously checks chain consistency, making provenance and integrity visible in real time—even at multi-million-item scale.

At a glance

Secure, role-based evidence repository with tamper-evident, end-to-end audit trails and live integrity verification; integrates with ECMC and the blockchain evidence-sharing module.

Who is this tool developed for?

- Environmental Crime Monitoring Agencies
- IT & Security Administrators
- Law Enforcement Data Analysts
- Inter-agency Coordination Officers

Use Case

Centralized, secure storage and traceable record-keeping of environmental-crime data and digital evidence generated across ECMC modules—enabling court-ready chain-of-custody and collaborative investigations.

Benefits & Added Value

- Evidential integrity by design: Immutable, hash-chained audit blocks with continuous verification and exportable, reproducible audit reports.
- Operational transparency: Actor- and record-centric histories, live “traffic-light” verification status, and field-level diffs for rapid triage.
- Scales with real workloads: Proven responsiveness on buckets up to ~7M audit items with targeted indexing.
- Cross-agency exchange: Seamless hand-off to the blockchain-based SISEE module for immutable, time-stamped sharing and automated chain-of-custody across nodes.

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