

C9.8 ZeroTrust Audit Execution Protocol v3.1

Runtime Audit Compliance + External Exposure Layer

Date: 03 August 2025

Inventor: Dr. Fernando Telles

Affiliations:

CDA AI (Cardiovascular Diagnostic Audit & AI Pty Ltd, ACN 638 019 431)

Telles Investments Pty Ltd (ACN 638 017 384)

Contact:

Dr.Telles@aihumansynergy.org

<https://aihumansynergy.org>

IP Rights:

US Provisional: #63/826,381

AU Provisional: #2025902482

AU Trade Mark: AI-Human Synergy™ #2535745 & AI-Human Synergy Sentinel Protocol™
#2549093

IP Priority Date: 17 June 2025 (Global Anchor)

Sentinel Protocol Ordinal Bitcoin Wallet:


<https://ordinals.com/address/>

[bc1pa3695d7x3cl3k4xut599s6e8yfjl5876uwpq82fqy4tsazxn77sss53mht](https://ordinals.com/address/bc1pa3695d7x3cl3k4xut599s6e8yfjl5876uwpq82fqy4tsazxn77sss53mht)

This document has been cryptographically hashed and immutably anchored under Sentinel Protocol v3.1 on **03 August 2025**. First public verification anchor: **Ordinal #5**, inscribed **30 July 2025**.

Current hash and payload available via `AMPLIFY_LEDGER_<meta_id>.json`.

C9.8_ZeroTrust_AuditExecutionProtocol_v3.1.md

Title: Zero Trust Audit Execution Protocol\ **Protocol:** Sentinel Protocol v3.1\ **Version:** v3.1\
Commander: Dr. Fernando Telles\ **System:** AI-Human Synergy™\ **Classification:** Runtime
 Audit Compliance + External Exposure Layer\ **Status:**  Canonical – Live Tier\ **Date Finalized:**
 3 August 2025\ **Linked Modules:** [C5.2, C5.3, C5.7, C8.3, C9.5, C9.6, C9.7]\ **meta_id Route:**
 AI-HUMANSYN , METAEXT , METAVAL \ **Anchoring Stack:** .2ha + .ots + OP_RETURN (Bitcoin)\
Access Model: Zero Custody, Zero Trust, Proof-Based Only



Core Principle: "Certify without custody"

The Sentinel Protocol shall verify, log, and anchor audit integrity — without **ever** holding user content or internal data.

1. Protocol Objective

To enable decentralized, content-agnostic, proof-based reproducibility verification of audits, outputs, and evidence bundles — anchored cryptographically to Bitcoin, validated by AI-human governance nodes, and compliant with C5.2 ethics firewalls.

Zero Trust means:

- No assumption of trust in user inputs, node outputs, or LLM-generated data
 - All logs must pass compliance, ethics, and reproducibility validation **before** anchoring
 - All artifacts must be cryptographically anchored and self-verifiable
-

2. Reproducibility Flow (Zero Custody + Zero Trust)

```
graph TD
  A[User Execution Directory (e.g., MVP_files/)] --> B[batch_dualhasher_multi_v2.py]
  B --> C[.hash + .2ha + .ots Generated]
  C --> D[valis_batchauditlogger_template.py]
  D --> E[Validated .json log (AI_used: true, human_verified: true)]
  E --> F[session_logger.py + meta_id assigned]
  F --> G[opreturnanchor.py executed]
  G --> H[Session Anchored to Bitcoin]
```

3. 📁 Files Received by CDA AI (Optional External Validator Node)

File	Description
.hash	SHA256 only
.2ha	RIPEMD160 of SHA256
.ots	OpenTimestamps Merkle proof
.json	Session metadata (no file contents or .csv)
.anchor_log.json	OP_RETURN payload + block metadata

No .pdf , .csv , .txt , or original data accepted or stored. Zero custody preserved.

4. ♦ Hash Chain Enforcement

All logs must:

- Contain LLM_used , AI_used , human_verified , VALIS_template_enforced
- Be dual-hashed (.hash and .2ha) before any finalization
- Be timestamped using OTS and anchored via Bitcoin

Verification = cryptographic proof, not content

5. 🗝 Access Control and Tiering

Tier	Access Mode	Human Role	Monetization
Freemium	Self-audit	Optional	\\$0
SIASE_Tier1	AI-AI-Human	Commander review	\\$150/session
Expert Tier	AI+Expert	Domain validation	\\$300/session
Regulatory-Grade	Full AI+VAL	Validator audit	\\$500/session

6. ⚠ Rejection Conditions (Ethics + CME Enforcement)

Trigger	Rule Breach	System Response
Placeholder not replaced	C1.3	Log rejected
No timestamp or .ots	C5.7, C5.3 Rule 1	Audit blocked
Missing .2ha	C9.5	OP_RETURN blocked

Trigger	Rule Breach	System Response
AI_used: false but log from LLM	C5.2 Ethics	Ethics firewall trigger
OP_RETURN not matching hash	C5.3 Rule 4	Blockchain anchoring halted

7. Public Ledger Integration

All verified sessions under this protocol feed into:

- AMPLIFY_LEDGER_<meta_id>.json
- Public GitHub repository (canonical hash and OP_RETURN)
- Optional: Ordinal inscription

8. Future Extensions

- Integration with LightNode CLI (v4.1)
- Cross-node meta_id relay network for multi-validator redundancy
- Real-time GitHub sync with hash validator badge on public entries
- Ledger Explorer at auditlog.ai/verify

Status: Canonical Zero-Trust Runtime Protocol Live

"No trust. No storage. Just proof." — Sentinel Protocol v3.1 — AI-Human Synergy™