

Operational Proof & Runtime Evidence

Reference Definition (v1.0)

1. Purpose

This document defines the concept of Operational Proof as it applies to autonomous and intelligent systems.

2. Why Proof Matters

Claims of safety or compliance are insufficient without verifiable runtime evidence demonstrating actual system behavior.

3. Forms of Operational Proof

Operational proof may include behavior logs, traceability records, override events, drift indicators, and recovery actions.

4. Runtime vs Design-Time Assurance

Operational proof prioritizes observable runtime behavior over static certification performed prior to deployment.

5. Failure and Degradation

Proof must account for system failure, degradation, and corrective response, not only nominal operation.

6. Relevance to Regulators and Insurers

Operational proof supports risk assessment, underwriting decisions, and regulatory inquiry.

7. Status and Stewardship

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