Structural Survivability Audit (SSA)

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Overview

Structural Survivability Audit (SSA) is a constraint-first audit framework for evaluating the survivability of complex systems.

SSA synthesizes established resilience and failure-analysis approaches into a structured, boundary-driven checklist. It is not a replacement for FMEA, FTA, or resilience engineering methods, but a complementary audit lens focused on structural integrity under constraint.

Core Focus Areas

SSA evaluates systems through the following lenses:

- Boundary definition
- Dependency mapping
- Redundancy classification
- Slack analysis
- Single-point failure exposure

These dimensions are examined without assuming intent, correctness, or purpose — only structural persistence.

Scope

SSA applies to engineered systems operating within defined constraints.

This includes, but is not limited to:

- Software systems
- Digital infrastructure
- Complex engineered environments
- AI systems
- Organizational structures (with caution)

Non-Scope

SSA does not address:

- Metaphysical claims
- Ontology
- Universal theory
- Meaning, purpose, or truth claims
- General philosophy

SSA is a practical audit tool, not a theory of reality.

Intended Use

SSA is designed to be used as a diagnostic instrument to:

- Expose hidden fragility
- Identify unnecessary complexity

- Reveal false redundancy
- Highlight constraint violations
- Surface survivability risks

SSA makes no claims about optimization, morality, or desirability — only structural viability.

Failure Clause

If SSA fails to expose structural weaknesses in a system that later collapses under foreseeable stress, SSA itself should be revised or discarded.

SSA claims no immunity from failure.

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