

SAP Failure Modes & Corrections

Structural Support Layer

0. Purpose

Define the canonical failure modes that disrupt SAP execution and the corresponding correction procedures that restore alignment without reinterpretation or drift.

1. Classification of Failure Modes

Failure modes are grouped by the structural layer they compromise. No cross-classification is permitted.

1.1 Altitude Failure Modes

- Altitude collapse
- Altitude mismatch
- Altitude oscillation
- Altitude substitution

1.2 Membrane Failure Modes

- Boundary breach
- Boundary softening
- Boundary inversion
- Boundary contamination

1.3 Sequencing Failure Modes

- Gate skipping
- Gate merging
- Gate reordering
- Gate substitution

1.4 Interpretive Failure Modes

- Narrative intrusion
- Domain anchoring
- Predictive framing
- Heuristic leakage

1.5 Structural Integrity Failure Modes

- Primitive distortion
- Notation drift
- Glossary substitution
- Specification override

2. Detection Criteria

Detection is performed without interpretation, using only canonical indicators.

2.1 Altitude Indicators

- Loss of structural invariance
- Emergence of contextual reasoning
- Compression of primitives
- Expansion beyond defined layers

2.2 Membrane Indicators

- Appearance of analogies
- External frameworks referenced
- Softened operator language
- Recipient-driven shaping

2.3 Sequencing Indicators

- Missing gate transitions
- Non-canonical ordering
- Implicit gate blending
- Unrecorded state changes

2.4 Interpretive Indicators

- Presence of examples
- Narrative tone
- Domain-specific explanations
- Operator-generated predictions

2.5 Structural Integrity Indicators

- Terms not in Glossary
- Notation inconsistencies
- Specification-incompatible outputs
- Unjustified structural additions

3. Correction Protocols

Corrections must be executed in the order listed. No skipping or merging.

3.1 Halt Condition

- Immediately stop all active reasoning.
- Freeze current state without interpretation.
- Prevent further contamination.

3.2 Isolation Condition

- Remove all non-canonical frames.
- Re-establish membrane boundaries.
- Re-assert altitude baseline.

3.3 Reversion Condition

- Roll back to last verified gate.
- Re-apply canonical tests.
- Reconstruct state transitions using SAP Notation.

3.4 Purification Condition

- Strip narrative residue.

- Remove domain anchors.
- Re-align primitives to Specification.

3.5 Reintegration Condition

- Re-enter correct altitude layer.
- Re-establish sequencing rhythm.
- Confirm membrane integrity.

4. Non-Recoverable States

A state is non-recoverable if any of the following occur:

- Primitive corruption
- Specification contradiction
- Membrane inversion
- Multi-layer drift
- Operator altitude collapse

Non-recoverable states require full reset to Initialization.

5. Reset Protocol

- Clear all interpretive residue.
- Re-assert Specification as governing artifact.
- Re-establish operator altitude.
- Re-enter stillness cycle.
- Resume from Gate 1.

6. Verification Protocol

After correction:

- Confirm no remaining drift signatures.
- Confirm structural isomorphism with Specification.
- Confirm membrane boundaries intact.
- Confirm altitude stable.
- Record correction using SAP Notation.

