RCAV + 3DI LEXICON

v2.0 — Foundational Standard Edition

RedFile Technologies

Executive Standard

RCAV + 3DI defines a deterministic control-plane standard for governed systems operating in regulated, high-scale, or autonomous environments.

Data SHALL be rationalized prior to classification.
Objects SHALL be classified prior to authorization.
Identity, jurisdiction, and time SHALL be attributed prior to execution.
Validation SHALL occur at the precise moment of execution authorization.

Governance that is not structurally enforced at execution time is non-deterministic and therefore non-defensible.

Core Doctrinal Terms

RCAV
A mandatory four-stage data discipline — Rationalize, Classify, Attribute, Validate — establishing the minimum structural conditions required for authorized execution in governed systems.

3DI (3 Dimensional Inference)
A structural attribution model binding WHO, WHERE, and WHEN dimensions to a classified WHAT to achieve contextual determinism.

Deterministic Governance
An architectural condition in which execution is permitted only after constraint validation succeeds.

Execution-Time Certainty
A control condition in which identity, authority, time, jurisdiction, and state are validated at the precise moment of execution authorization.

Control-Plane Architecture
The authoritative enforcement layer that evaluates governance constraints prior to system state change.

Data-Layer Enforcement
The embedding of governance controls directly within data creation, modification, and execution pathways.

Structural Proof
Execution evidence generated as a direct byproduct of validated constraint enforcement.

Dimensional Binding
The structural attachment of WHO, WHERE, and WHEN attributes to a classified object or event.

Constraint-Based Systems
Systems designed to operate strictly within predefined identity, authority, temporal, and jurisdictional limits.

Sovereign Execution Model
An execution environment in which authority, jurisdiction, and operational boundaries are deterministically enforced.

Governance Fabric
The integrated structure of identity, data, temporal, and validation controls enforcing execution integrity.

Structural Control Surface
The enforceable metadata and constraint layer through which governance rules are applied.

Rationalize (R)

Data Rationalization
The reduction of ambiguity and redundancy to produce a structurally coherent representation of information suitable for automation.

Structural Normalization
The alignment of data into consistent formats to eliminate interpretive variability.

Canonical Representation
A single standardized form of data serving as authoritative reference state.

Ambiguity Reduction
The elimination of multiple possible interpretations prior to classification.

Noise Elimination
The removal of irrelevant or duplicative information that obscures meaningful signal.

Redundancy Elimination
The consolidation of duplicate or overlapping data into one authoritative instance.

Entropy Reduction
The systematic reduction of informational disorder prior to classification and attribution.

Context Stabilization
The preservation of relevant contextual relationships necessary to prevent misinterpretation.

Signal Isolation
The separation of meaningful information from background data.

Structural Alignment
The harmonization of data elements into a consistent logical structure.

Semantic Consistency
The assurance that terms and classifications maintain stable meaning across systems and time.

Format Harmonization
The convergence of multiple representations into a unified structural model.

Input Conditioning
Preparation of data to meet structural requirements before classification.

Structural Coherence
The state in which data elements logically align without contradiction.

Data Conditioning Layer
The architectural stage responsible for rationalization prior to classification.

Classify (C)

Deterministic Classification
The unambiguous identification of an artifact, object, or event based on stable structural characteristics.

Structural Identification
Recognition of what something is based on inherent form and attributes.

Canonical Typing
Assignment of a standardized type from a controlled vocabulary.

Artifact Determination
Establishment of the precise nature and category of a document or object.

Object Typing
Assignment of an object to a predefined structural category.

Genre Identification
Recognition of functional or contextual type within a domain.

Form Resolution
Confirmation of an artifact’s exact structural template.

Pattern Anchoring
Use of stable structural elements to secure classification certainty.

Structural Anchoring
Reliance on fixed characteristics to prevent re-interpretation.

State Identification
Determination of an artifact’s current lifecycle state.

Contextual Categorization
Classification accounting for structural and environmental context without ambiguity.

Identity of Object
The definitive classification of what an artifact is.

Structural Certainty
Absence of ambiguity in classification.

Misclassification Suppression
Prevention of incorrect categorization through structural controls.

Classification Drift
Gradual degradation in classification integrity due to inconsistent criteria.

Classification Stability
Sustained classification accuracy over time despite scale and complexity.

Attribute (A)

WHO — Identity and Authority

Identity Resolution
Establishment of a unique and persistent identity for an actor.

Actor Binding
Structural linkage between an action and the responsible identity.

Authority Mapping
Alignment of identity with defined permissions and scope.

Role Attribution
Assignment of functional responsibility within a controlled environment.

Delegated Authority Scope
Defined limits within which authority may be exercised.

Organizational Association
Binding of identity to an accountable entity structure.

Responsibility Assignment
Explicit linkage between action and accountable party.

Identity Integrity
Assurance that identity attributes remain consistent and untampered.

Identity Continuity
Preservation of identity state across time and system boundaries.

Execution Ownership
Confirmation of who initiated or authorized an action.

Agent Attribution
Binding of automated or autonomous actions to accountable identity structures.

Non-Repudiation
Structural assurance that an executed action cannot be credibly denied.

Authority Integrity
Verification that authority was legitimate at the moment of action.

Identity Provenance
Traceable origin and lifecycle of an identity record.