

Naming Convention

Path layout and naming are load-bearing: tooling, evaluation gates, and cross-cluster references resolve artifacts by path alone. Deviations break the registry. This spec is binding for every file under /grow/.

Path Pattern

/grow/<cluster>/<course-id>/<artifact-slug>.md

- <cluster> — one of systems, execution, trust, coordination, substrate. Lowercase. Matches the cluster frontmatter field.
- <course-id> — for cluster artifacts, the kebab-case course identifier carrying the leading cluster-letter + course-number prefix: s1-agent-reliability, s2-evaluation-auditability, s3-data-provenance (systems); e4-workflow-modeling, e5-sensor-fusion-data-ops, e6-compute-economics (execution); t7-govtech-compliance, t8-security-zero-trust (trust); c9-dao-governance, c10-commercialization-architecture (coordination). The prefix tracks the course number, not the module ID — Compute Economics is e6- even though its module is S7. For substrate, the segment is omitted (substrate files live at /grow/substrate/<slug>.md).
- <artifact-slug> — kebab-case, identical to the id field in frontmatter. No date stamps, no version suffixes, no author initials.

Slug Rules

1. Lowercase ASCII letters, digits, hyphens only. No underscores, spaces, dots (except the .md extension), or capitals.
2. Hyphens separate words; no doubled hyphens.
3. Slug starts with a letter, ends with a letter or digit.
4. Length: 3–60 characters.
5. Slug equals filename equals frontmatter id. All three must match exactly.

One Artifact Per File

Every .md file contains exactly one artifact. Registers with many rows are still a single artifact. Bundles, indices, or "appendix" files are forbidden — split into separate artifacts and wire them via `upstream_deps` / `downstream_consumers`.

Forbidden Patterns

- Capitalized or CamelCase slugs (FailureModeRegister.md).
- Underscores or spaces (failure_mode_register.md, failure mode register.md).
- Version, date, or author suffixes (failure-mode-register-v2.md, failure-mode-register-2026-05.md, failure-mode-register-dl.md).

- Numeric prefixes for ordering (01-failure-mode-register.md). Ordering is established by `upstream_deps`, not by lexical sort.
- Nested directories below `<course-id>` (/grow/systems/s1-agent-reliability/registers/failure-mode-register.md). The course directory is flat.
- Plural directory names (/grow/systems/courses/...).
- Markdown filenames without the .md extension, or with .markdown.
- Multiple artifacts in one file separated by ---.
- Files that live outside /grow/ and claim membership via frontmatter alone.

Worked Examples

Example 1 — Systems / S1 / register.

Artifact: failure mode register for Agent Reliability.

Path: /grow/systems/s1-agent-reliability/s1-failure-mode-register.md

Frontmatter id: s1-failure-mode-register. Module S1, cluster systems.

Example 2 — Systems / S2 / matrix.

Artifact: evaluation test seed matrix that derives from S1's failure modes.

Path: /grow/systems/s2-evaluation-auditability/s2-eval-test-seed-matrix.md

Frontmatter id: s2-eval-test-seed-matrix. `upstream_deps` includes s1-failure-mode-register. Module S2, cluster systems.

Example 3 — Substrate / schema.

Artifact: the shared frontmatter schema itself.

Path: /grow/substrate/shared-artifact-schema.md

Frontmatter id: shared-artifact-schema. Module and course both substrate, cluster substrate.

Example 4 — Execution / Course 6 / policy (module $\neq$ course).

Artifact: the routing policy for Compute Economics.

Path: /grow/execution/e6-compute-economics/e6-routing-policy.md

Frontmatter id: e6-routing-policy. course: 6, cluster: execution, module: S7. The e6 prefix encodes the course number (6), and the cluster directory (execution) is determined by the course number, not by the module ID. This is the canonical example of why the prefix tracks course, not module.

Example 5 — Coordination / Course 10.

Artifact: the commercialization package templates.

Path: /grow/coordination/c10-commercialization-architecture/c10-commercialization-package.md

Frontmatter id: c10-commercialization-package. course: 10, cluster: coordination, module: S10. Two-digit course numbers keep the prefix (c10).

Enforcement

The builders evaluation gate (a) walks /grow/, (b) asserts every file matches the pattern and slug rules, (c) opens each file and confirms filename == id == slug-segment, (d) confirms cluster directory matches the cluster field. Any mismatch fails Existence and Versioning checks and blocks ship.