

Evidence-SSoT Phase 0 — Knowledge Propagation Infrastructure (2026-05-15)

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Problem (CEO trigger 2026-05-15)

"Informacije iz John sesija se ne preklapaju, treba one place to go and find everything."

Concrete symptom: BookStack page 2932 (SnowIT migration evidence) created but not discoverable in next session. Knowledge created in one session context does not automatically surface in subsequent sessions.

Root Cause (verifier-confirmed)

- `~/ .claude/hooks/lightrag-auto-ingest.sh` wired in PostToolUse but writing to `/dev/null` effectively (no log file, async failures swallowed)
- 5 fragmented knowledge stores with no causal write-through
- `/tmp` ephemeral state lost on reboot
- Manual `MEMORY.md` edits as primary channel

Phase 0 Architecture (lightweight, ~120 LOC total)

Phase 0 ships lightweight knowledge-propagation infrastructure before investing in full CQRS SQLite solution. Three components totaling ~120 LOC.

Component 1: Visibility (#100792)

File: `~/.claude/hooks/lightrag-auto-ingest.sh`

Adds:

- Structured logging to `~/.claude/hooks/lightrag-auto-ingest.log`
- Heartbeat file `~/system/state/lightrag-ingest-health.json`

Effect: Silent daemon failures now visible. Previously the hook ran but wrote nowhere, swallowing all async failures.

Component 2: Append-only evidence ledger (#100793)

File: `~/system/tools/mc.js` (patched)

Output: `~/system/state/evidence-index.jsonl`

Behavior: On every `mc.js done/ready`, appends one JSON line with metadata:

```
{
  "ts": "2026-05-15T15:45:23.123Z",
  "mc_id": 100788,
  "verb": "done",
  "status": "COMPLETE",
  "title": "Evidence-SSoT Phase 0 documentation",
  "priority": "H",
  "actor": "skillforge",
  "session_id": "abc123",
  "evidence_path": "/path/to/evidence.json",
  "bookstack_url": "https://docs.alai.no/books/..."
}
```

Properties:

- Idempotent (last-100-lines dedup window)
- Non-blocking on failure
- Append-only (no updates, immutable log)

Component 3: SessionStart projection (#100794)

File: `~/system/tools/session-boot.js` + SessionStart hook in `~/claude/settings.json`

Output: `~/system/state/session-boot- $\{PID\}$.json` per session

Reads:

- Last 50 entries from `evidence-index.jsonl`
- 20 pending events from `events.db`
- Open H-priority MCs from `mc.js`

Per-PID file: No clobber on concurrent sessions. Survives reboot (unlike `/tmp`).

Schema: evidence-index.jsonl

Field	Type	Description
<code>ts</code>	ISO8601 string	When transition occurred
<code>mc_id</code>	int	Task ID
<code>verb</code>	enum: done ready close	State transition
<code>status</code>	string	Resulting status (COMPLETE, PARTIAL, BLOCKED, etc.)
<code>title</code>	string	Task title at time of transition
<code>priority</code>	enum: H M L	Task priority
<code>actor</code>	string	Who fired (john, edita, autowork, etc.)
<code>session_id</code>	string null	From CLAUDE_SESSION_ID env
<code>evidence_path</code>	string null	From --evidence-path CLI arg
<code>bookstack_url</code>	string null	From task field

Schema: session-boot- $\{PID\}$.json

Keys:

- `ts`: ISO8601 timestamp
- `pid`: Process ID
- `open_h_tasks[]`: Array of high-priority open tasks

- `recent_evidence[]`: Last 50 evidence-index entries
- `events_pending[]`: Pending events from events.db
- `schema_version`: Currently 1

Operating Manual

New sessions

SessionStart hook auto-fires; agent reads `~/system/state/session-boot- $\{PID\}$.json` as first context source before processing user input.

Closing tasks

Just call `mc.js done/ready` normally; JSONL shim auto-captures metadata.

Health check

```
cat ~/system/state/lightrag-ingest-health.json | jq .last_ts
```

Recent evidence query

```
tail -20 ~/system/state/evidence-index.jsonl | jq -c .
```

Phase 1 (deferred)

Full SQLite CQRS using existing `events.db` schema + MC #99910 CAS lease pattern.

Trigger condition: Phase 0 baseline eval shows hit_rate gain <30pp from current state.

ETA: Only if needed. Phase 0 establishes baseline; Phase 1 ships only if lightweight approach proves insufficient.

ZAKON Candidates (NOT YET PROMULGATED)

Pending Phase 0 baseline evaluation:

- **EV-1:** `mc.js` closure for H/M auto-injects `evidence-index.jsonl` entry (already enforced in code)
- **EV-2:** BookStack page creation includes `mc_id` in URL or metadata for discoverability
- **EV-3:** Session boot consumes `/system/state/session-boot- $\{PID\}$.json` (enforced via `SessionStart` hook firing automatically)

Key Decisions (Panel consensus)

1. **NOT new evidence.db** — Reuse existing `~/system/databases/events.db` (14.6MB, `events/subscriptions/dead_letter` tables already present + `idempotency_key` + `status FSM`)
2. **JSONL shim ships first** — (OpenAI-chief dissent: lightweight-first approach)
3. **SessionStart hook used** — (NOT `PreToolUse` per anthropic-chief — wrong event)
4. **Per-PID files in `~/system/state/`** — (NOT `/tmp` — macOS purges on reboot)
5. **Auto-MC from reaper deferred** — (ZAKON #28 violation — flag-only for now)
6. **MC #99910 CAS lease pattern reserved for Phase 1** — (if Phase 0 baseline insufficient)

References

- **Parent MC:** [#100788](#)
- **Child MCs:** [#100792](#), [#100793](#), [#100794](#)
- **Panel agentIds:**
 - `a168d606fba37d0b4` (petter-graff)
 - `a6f1160df9d829340` (kleppmann)
 - `a368fa682b8686792` (huyen)
 - `a69659af21909bf1b` (hightower)
 - `af8aef35661db36e3` (gerganov)
- **Verifier:** `a2c7b716943a1e5a0`
- **ADR pattern reuse:** `~/system/specs/pi-orch-collision-claim.md` (CAS lease for Phase 1)
- **CEO directives:** `feedback_no_micro_decisions`, `feedback_pursue_goal_no_permission`, `feedback_no_architecture_fork_menu`

Timeline

- **2026-05-15 15:30:** CEO trigger ("one place to go and find everything")
- **2026-05-15 15:45:** Panel convened (5 specialists + verifier)
- **2026-05-15 16:00:** Phase 0 lightweight approach consensus
- **2026-05-15 16:30:** All 3 child MCs ([#100792](#), [#100793](#), [#100794](#)) delivered
- **2026-05-15 17:00:** Documentation (this page) published

Related Documentation

Reality Anchor Doctrine v1 — Deterministic probe primacy, Writer \neq Witness, content-addressed audit. Panel-approved 2026-05-15.

→ [Reality Anchor Doctrine v1](#)

Revision #3

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