

Trace Continuity

Independent Assessment — **Run 2 Evidence Package**

Executed 2026-08-13, 11:40:13Z – 11:40:23Z (UTC), against the remediating build, following the same frozen workflow, evidence expectations, failure conditions and sequence used for Run 1.

This package records only what happened. No pass, fail, or indeterminate determination is made or implied. That determination belongs to the independent reviewer, against the same frozen criteria applied to Run 1.

Prepared by Trace Continuity Labs

Trace Continuity — Run 2 Evidence Package

Independent assessment, Run 2, executed 2026-08-13 11:40:13Z – 11:40:23Z (UTC) against the remediated build.

Run 2 follows the same frozen workflow, evidence expectations, failure conditions, and sequence as Run 1.

No pass, fail, or indeterminate determination is made in this package. That determination is the reviewer's.

Contents

File	What it contains
<code>RUN2-OBSERVATION-REPORT.md</code>	Narrative record of what happened, mapped to evidence items 1–8, including all unknowns and limitations
<code>RUN2-CHANGE-AND-CUSTODY-STATEMENT.md</code>	What changed between Run 1 and Run 2, what did not, Run 1 preservation, custody
<code>00-run-transcript.json</code>	Every external call in order, with request, status, and verbatim response
<code>01-baseline-authorization.json</code>	Authority, genesis chain, policies, admissibility rules and condition facts at T0
<code>02-material-condition-change.json</code>	Both condition reports, stored facts, and immutable hash-chained history
<code>03-boundary-and-determination.json</code>	Both boundary calls, responses, and the full determination stages
<code>04-audit-api-response.json</code>	Verbatim response of the public audit endpoint
<code>05-audit-trail-full.json</code>	All 62 immutable audit rows, unedited
<code>06-configuration-state.json</code>	Configuration state at run time
<code>07-code-state-attestation.json</code>	Repository head, working-tree status, SHA-256 of each governance module
<code>08-run1-integrity-verification.txt</code>	Byte-for-byte verification that the Run 1 package is unchanged
<code>MANIFEST-sha256.txt</code>	SHA-256 digest of every file in this package

Headline observations, stated without interpretation

- The authorized write, performed before the condition change, was allowed and stored with PII tokenized.
- Two condition facts (`consent_withdrawn = true`, tenant and record subjects, source `external_consent_system`) were accepted and hash-chained, each with the asserting basis recorded.
- Both consequential-boundary disclosure reads returned **HTTP 403**, denied at admissibility, reason *"consent was withdrawn before the consequential boundary"*. No payload was disclosed in any form.
- Authority remained valid and was re-verified at the boundary; the deny came from the admissibility stage, recorded separately within the same action id.
- The organisation had **zero** admissibility rules configured; the determination came from 75 code-defined baseline rules.
- The public audit endpoint returned **HTTP 200** with all 62 entries.

Trace Continuity Labs

Independent Assessment — Run 2 Observation Record

System under test: Trace Continuity (governed memory execution gate), remediated build

Run executed: 2026-08-13, 11:40:13Z – 11:40:23Z (UTC)

Environment: Trace Continuity application server, shipped public API surface (`/api/public/v1/*`), production database schema

Executed by: Trace Continuity Labs engineering, under the same frozen instructions used for Run 1

Determination: none. This document records observations only. Pass, fail, or indeterminate is reserved to the independent reviewer, against the same frozen criteria.

0. Sequence identity with Run 1

Run 2 executed the same workflow, in the same order, through the same six external API calls, with the same payload shape, the same condition key, the same subjects, and the same actor model as Run 1. Nothing in the workflow, evidence expectations, failure conditions, or test sequence was altered. The only differences are the newly provisioned organisation and record identifiers, the record key prefix (`run2/...` instead of `run1/...`), and the fact that the system under test is the remediated build.

Step	Interface used	Time (UTC)	Run 1 result	Run 2 result
Actor and organisation established (standard provisioning path)	authentication provisioning	11:40:13	provisioned	provisioned
Consuming-system credential issued (standard API key format)	<code>api_keys</code> issuance	11:40:14	issued	issued
Authorized action performed	<code>POST /api/public/v1/memory/write</code>	11:40:14.5	HTTP 201	HTTP 201
Material condition change reported (tenant scope)	<code>POST /api/public/v1/conditions/report</code>	11:40:16.198	HTTP 201	HTTP 201
Material condition change reported (record scope)	<code>POST /api/public/v1/conditions/report</code>	11:40:17.109	HTTP 201	HTTP 201
Consequential boundary: disclosure read with detokenization	<code>POST /api/public/v1/memory/read</code>	11:40:20.461	HTTP 200, disclosed	HTTP 403, denied at admissibility
Second boundary attempt, condition also asserted by the caller	<code>POST /api/public/v1/memory/read</code>	11:40:22.654	HTTP 200, disclosed	HTTP 403, denied at admissibility
Audit retrieval via public API	<code>POST /api/public/v1/audit/list</code>	11:40:22.9	HTTP 500	HTTP 200, 62 entries returned

Identifiers: organisation `b83b2991-ea3b-46b3-80c3-7282322c2906`, actor `f439fa31-7f97-47b6-9384-03a627f9a488`, root authority `d04ce9a7-d119-42b0-ac59-4247ec680f43`, record `89d6115d-d0de-4fe0-81b8-3a65418b2c2f`. Action ids: write `978b9d17...`, condition assertion (tenant) `9623c3fc...`,

condition assertion (record) 599f2341..., boundary read 1 9d999830..., boundary read 2 fd905961....

1. Baseline authorization (Evidence item 1)

At T0 the actor held one authority, `Owner root authority`, scope `memory:write, memory:read, memory:detokenize`, execution rights `write, read, detokenize`, no expiry, not revoked, no parent, no inherited authority.

Its establishment is recorded in `authority_genesis` with provisioning source `self_signup`, a SHA-256 chain hash, and no prior hash (chain root). `verify_genesis_hash()` returned `true` at capture time. One `authority_events` row records `authority_created`.

Governance configuration at T0: one policy, `Default allow (action = *, effect allow, priority 1000)`.

Admissibility rules configured by this organisation at T0: zero — identical to Run 1. Condition facts present at T0: zero.

Raw record: `01-baseline-authorization.json`.

2. Material condition change, timestamped, with source (Evidence item 2)

Two condition facts were reported through the public conditions API by a source labelled `external_consent_system`:

condition_key	subject_type	value	source	observed_at	asserting basis recorded
<code>consent_withdrawn</code>	tenant	<code>true</code>	<code>external_consent_system</code>	2026-08-13T11:40:16.198Z	<code>tenant_admin: tenant owner</code>
<code>consent_withdrawn</code>	record	<code>true</code>	<code>external_consent_system</code>	2026-08-13T11:40:17.109Z	<code>tenant_admin: tenant owner</code>

Both were accepted (HTTP 201). The organisation on each fact was taken from the presented credential, not from the request body.

Each assertion additionally produced, at the time it happened:

- Its own audit action (`condition_assertion` stage): `assertion_authority pass`, recording who asserted, on what basis, and the required scope; and `condition_changed info`, recording prior value (`null`), new value (`true`), revision, observation times, source, and the hash-chain entry.
- An immutable row in the append-only condition-change history, revision 1, `prior_hash: null`, entry hashes `62722662...` (tenant subject) and `28b68504...` (record subject).

Both condition records were written **before** either boundary call, and their `observed_at` values precede the boundary timestamps by 3.1s and 4.3s respectively.

Raw records: `02-material-condition-change.json` (API calls, stored facts, immutable history).

3. Evidence available to Trace at the consequential boundary (Evidence item 3)

At each boundary read the system had available, within the same organisation:

- The stored `consent_withdrawn = true` fact on the tenant subject, with source and observation time.
- The stored `consent_withdrawn = true` fact on the record subject, with source and observation time.
- The immutable change history for both, showing the transition from no recorded state to `true`.

- On the second boundary call only, the caller's own untrusted assertion `{"consent_withdrawn": true}` in the request body.

The audit records that both stored facts were read and relied upon; both are listed in `conditions_relied_on` with their subject, value, source, and observation time.

4. Authority revalidation and Action Admissibility determination (Evidence item 4)

The two decisions were made separately and recorded separately inside a single action id.

Authority (re-verified at the boundary): `tenant_ownership` pass, `scope_validation` pass, `execution_rights` pass, `delegation_chain` pass, `inheritance_resolution` na, `genesis_link_verification` pass, `authority.final_decision` **allow**. Authority remained valid throughout; it was not revoked, altered, or expired at any point in Run 2.

Admissibility (separate stage, same action id):

- `admissibility.load_rules` — 75 rules evaluated: **0 authored by the organisation**, 75 supplied by the code-defined baseline dispositive set, version `baseline-2026.08.1`.
- `admissibility.condition:consent_withdrawn` — **deny**, subject `tenant`, operator `is_true`, observed value `true`, observed source `external_consent_system`, observed at 11:40:16.198Z, rule origin `baseline`.
- `admissibility.condition:consent_withdrawn` — **deny**, subject `record`, same operator and source, observed at 11:40:17.109Z, rule origin `baseline`.
- `admissibility.baseline_conditions_not_recorded` — **info**, 73 baseline conditions had no recorded state and were skipped, with the recorded policy that absence of a fact is not a condition change.
- `admissibility.decision` — **deny**, decided by `baseline:baseline-2026.08.1:consent_withdrawn:record`, reason recorded verbatim as *"consent was withdrawn before the consequential boundary"*, `unincorporated_conditions`: `[]`, and the standing note that this decision is independent of authority validity.
- `admissibility.effect_boundary_disposition` — **deny**, boundary named as *"disclosure: value leaves the governance boundary to the caller"*, boundary reached at 11:40:20.295Z, disposition authority recorded as `Owner root authority`, `still_valid`: `true`, with the note that authority validity was re-verified at this boundary and is independent of the disposition.
- `gate.final_decision` — **deny**, `denied_at`: `"admissibility"`.

On the second boundary attempt the caller's asserted condition was recorded at `admissibility.request_facts_validated` — accepted `["consent_withdrawn"]`, rejected `[]`, annotated as untrusted and never able to grant permission. The determination was reached on the stored facts; the outcome was again deny.

Raw records: `03-boundary-and-determination.json`, full stage detail in `05-audit-trail-full.json`.

5. Consuming-system determination and consequential effect (Evidence item 5)

The consuming system received, on both boundary calls:

```
HTTP 403
{"ok": false, "action_id": "<action id>", "denied_at": "admissibility",
 "reason": "consent was withdrawn before the consequential boundary"}
```

No payload was returned. No field was disclosed in clear, tokenized, or redacted form. Detokenization did not occur. The first consequential effect was refusal of the disclosure, with the reason and the action id given to the caller so the refusal can be traced to its record.

For contrast within the same run: the earlier authorized write, executed **before** the condition change, was allowed (`admissibility.decision allow`, `rules_evaluated: 50`, `conditions_relied_on: []`) and stored the record with `patient_phone` and `patient_email` tokenized at write time.

6. Immutable audit and receipt trail (Evidence item 6)

62 immutable rows were written across five action ids:

Action id	Rows	Subject
978b9d17...	19	authorized write
9623c3fc...	2	condition assertion, tenant subject
599f2341...	2	condition assertion, record subject
9d999830...	19	boundary read 1 (denied)
fd905961...	20	boundary read 2, caller assertion present (denied)

The table is append-only; UPDATE and DELETE are rejected by database trigger.

POST `/api/public/v1/audit/list` returned **HTTP 200** with `count: 62`, a flat `rows` array and an `actions` array grouping each action's full step sequence. The Run 1 failure of this endpoint (HTTP 500, `column audit_log.entries does not exist`) did not recur.

Raw records: `04-audit-api-response.json` (verbatim endpoint response), `05-audit-trail-full.json` (all 62 rows, unedited).

7. Configuration state at the time of Run 2 (Evidence item 7)

- Admissibility rules configured by the test organisation: **0**.
- Admissibility rules present platform-wide in the database at run time: **0** (the 75 rules evaluated are code-defined baseline entries, not stored configuration; they are enumerated in the audit `load_rules` entry).
- Governance policies for the organisation: **1** (`Default allow`).
- Authorities: **1** (root, unrevoked, no expiry).
- Governed memory rows: **1**. PII vault rows: **2** (AES-256-GCM, per-organisation key).
- API key: one, unrevoked, no expiry, bound to the root authority.

No rule, policy, condition definition, or configuration entry was created, edited, or enabled for the purposes of Run 2. The deny arose from code-defined baseline behaviour applied to reported state, with zero organisation configuration present.

Raw record: `06-configuration-state.json`.

8. Unknowns, limitations, errors, refusals, allows and contradictions (Evidence item 8)

Recorded as observed. Nothing was repaired, hidden, or reinterpreted during Run 2.

1. **Refusals observed:** two — both boundary disclosure reads, HTTP 403, denied at admissibility.
2. **Allows observed:** the pre-change authorized write (HTTP 201), and both condition assertions (HTTP 201). Authority verification allowed at every stage in every action, including the two denied ones.

3. **No errors were returned by the system during Run 2.** All six calls returned a status the system intended: 201, 201, 201, 403, 403, 200.
4. **Evidence-capture defect, disclosed rather than corrected silently.** The first capture query for the condition-change history sorted on a column name that does not exist in that table (`created_at`; the table uses `recorded_at`), so the first write of `02-material-condition-change.json` recorded `null` for that section. The rows were re-read from the immutable store with the correct column and are reproduced unchanged. This was a defect in the evidence-capture script, not in the system under test.
5. **Intra-action audit ordering is still not derivable from timestamps.** All rows of one action id share a statement timestamp. Stage sequence is recoverable from stage/step semantics and from the `actions` grouping returned by the audit endpoint, not from per-row time deltas. Unchanged from Run 1.
6. **`patient_name` was not classified as tokenizable PII at write time** in this configuration, as in Run 1. In Run 2 it was never disclosed, because the boundary refused before any payload was produced; the write-time `tokenization.detect` entry again lists only `phone` and `email`.
7. **No external consuming system participated.** The consuming system is the HTTP caller holding the API key. Trace has no evidence of what the caller did after receiving the 403 and produces no record of downstream effect.
8. **No revocation, expiry, or authority change occurred in Run 2.** The material change tested was a condition change only, per the frozen workflow. The deny therefore cannot be attributed to any authority defect.
9. **Actor identity at the boundary is the API key's bound authority.** Trace records `api_key_id` and the resolved actor and authority; it does not record an end-user identity separate from the credential holder. Unchanged from Run 1.
10. **The asserting actor's basis in Run 2 was `tenant_admin: tenant owner`, not a scoped `condition:assert` authority,** because the standard provisioning path makes the first actor the organisation owner. A non-owner actor without that scope would have been refused; that path was not exercised in this run and is therefore untested here.
11. **Baseline coverage is vocabulary-based.** 73 of 75 baseline conditions had no recorded state and were skipped. Whether the baseline vocabulary is sufficient for a given domain is a criteria question, not a system statement.
12. **No contradiction between stages was observed.** Authority allowed and admissibility denied within the same action id; both are recorded, and the audit states explicitly at both the decision and effect-boundary entries that the two determinations are independent.

9. Chain of custody

All artifacts were written directly from the run process and from read-only queries against the immutable store. No file was edited after capture except the disclosed history re-read described in item 8.4. SHA-256 digests for every artifact are listed in `MANIFEST-sha256.txt`.

Trace Continuity Labs — Run 2 evidence, frozen as observed.

Run 2 — Change Record and Custody Statement

A. What changed between Run 1 and Run 2

Run 1 was executed against repository state `38a291ba48457c6640c71a4889c4a4b5ed953ede`.

Run 2 was executed against repository state `d55c4e6a564c2c0b6bfe6ddbdeffee12ac0e6cc3`, working tree clean at capture.

All changes between those two states were remediation of the gap Run 1 exposed, plus the supporting issues already identified before Run 1. They were made after Run 1 closed and before Run 2 opened. No change was made during Run 2. The changes are documented in full, per item, in the separate remediation record ([TRACE-REMEDATION-RECORD-R1](#)), summarised here:

Item	Change	Effect visible in Run 2
R1	Code-defined baseline set of dispositive conditions, evaluated even when an organisation has authored zero rules	75 baseline rules evaluated at each boundary; deny decided by <code>baseline:baseline-2026.08.1:consent_withdrawn:record</code>
R2	Detection of recorded facts that no rule incorporates; dispositive-shaped facts fail closed	<code>unincorporated_conditions: []</code> recorded at each determination
R3	Condition assertion requires <code>condition:assert</code> scope or organisation-admin role; basis recorded	<code>condition_assertion.assertion_authority</code> pass, basis <code>tenant_admin: tenant owner</code>
R4	Append-only, hash-chained condition-change history	Two revision-1 entries with entry hashes and <code>prior_hash: null</code>
R5	Explicit effect-boundary disposition entry naming the boundary and the authority basis	<code>admissibility.effect_boundary_disposition</code> deny, with disposition authority block
R6	Repair of the audit list endpoint and addition of a condition-history endpoint	Audit endpoint returned HTTP 200 with 62 entries (Run 1: HTTP 500)

Automated suite at Run 2 attestation time: **99 of 99 tests passing** across 5 suites, including 13 tests written specifically against the Run 1 finding.

B. What did not change

The workflow, evidence expectations, failure conditions, test sequence, payload shape, condition key, subject types, source label, actor model, and interface surface are identical to Run 1. No admissibility rule, policy, or configuration entry was created for the test organisation in either run; both ran with zero organisation-authored admissibility rules.

C. Run 1 preservation

The Run 1 evidence package was verified byte-for-byte at the time Run 2 was documented. All eleven manifest entries verified **OK** against their recorded SHA-256 digests; file timestamps remain 2026-08-13T02:15–02:17Z. Run 1 data in the store — its organisation, authority, record, condition facts, and audit rows — was not deleted or modified; Run 2 provisioned an entirely separate organisation. Verification output is preserved at [08-run1-integrity-verification.txt](#).

D. Custody

Every artifact in this package was produced by the run process itself or by read-only queries against the append-only store. The only post-capture edit is the disclosed re-read described in the observation report, item 8.4. Digests for all artifacts appear in [MANIFEST-sha256.txt](#).

No determination of pass or failure is made or implied by this document.

Appendix A — Raw Evidence Artifacts

Reproduced verbatim from the capture files. Long files are truncated in print; the complete files ship with the digital package and are digest-listed in the manifest.

A1 — Run transcript (00-run-transcript.json)

```
{
  "run_started_at": "2026-08-13T11:40:11.480Z",
  "run_completed_at": "2026-08-13T11:40:22.909Z",
  "base_url": "http://localhost:8080",
  "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "memory_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f",
  "calls": [
    {
      "step": "1_authorized_write",
      "request": {
        "path": "/api/public/v1/memory/write",
        "body": {
          "key": "run2/patient-transfer/1786621211480",
          "payload": {
            "subject": "Patient consent record for downstream disclosure",
            "patient_name": "Dana R. Whitfield",
            "patient_phone": "312-555-0142",
            "patient_email": "dana.whitfield@example.com",
            "consent_state_at_write": "granted",
            "disclosure_target": "Downstream analytics processor"
          }
        }
      },
      "sent_at": "2026-08-13T11:40:13.536Z"
    },
    {
      "response": {
        "http_status": 201,
        "received_at": "2026-08-13T11:40:15.981Z",
        "body": {
          "ok": true,
          "action_id": "978b9d17-ae9b-46e4-b058-22d1751f651a",
          "memory_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f"
        }
      }
    },
    {
      "step": "2_material_condition_change",
      "request": {
        "path": "/api/public/v1/conditions/report",
        "body": {
          "condition_key": "consent_withdrawn",
          "subject_type": "tenant",
          "subject_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
          "value": true,
          "source": "external_consent_system"
        }
      },
      "sent_at": "2026-08-13T11:40:15.982Z"
    },
    {
      "response": {
        "http_status": 201,
        "received_at": "2026-08-13T11:40:17.002Z",
        "body": {
          "ok": true,
          "condition": {
            "id": "da289ebd-3e48-4eb1-81ce-9266ac20436e",
            "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
            "condition_key": "consent_withdrawn",
            "subject_type": "tenant",
            "subject_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
            "value": true,
            "source": "external_consent_system",

```

```

        "observed_at": "2026-08-13T11:40:16.198+00:00",
        "expires_at": null,
        "recorded_by": "f439fa31-7f97-47b6-9384-03a627f9a488",
        "created_at": "2026-08-13T11:40:16.595482+00:00",
        "asserted_authority_id": null,
        "asserted_authority_basis": "tenant_admin:tenant owner",
        "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
        "revision": 1,
        "updated_at": "2026-08-13T11:40:16.535+00:00",
        "assertion_action_id": "9623c3fc-8a51-4121-a809-ab24ae21929e",
        "entry_hash": "62722662547e16094bca220e979371c67706e97f696168533e64d74a45db37cd"
    }
}
},
{
    "step": "2b_material_condition_change_record_scope",
    "request": {
        "path": "/api/public/v1/conditions/report",
        "body": {
            "condition_key": "consent_withdrawn",
            "subject_type": "record",
            "subject_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f",
            "value": true,
            "source": "external_consent_system"
        },
        "sent_at": "2026-08-13T11:40:17.002Z"
    },
    "response": {
        "http_status": 201,
        "received_at": "2026-08-13T11:40:18.067Z",
        "body": {
            "ok": true,
            "condition": {
                "id": "24493814-2134-4c6c-b5c5-389c83a1c998",
                "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
                "condition_key": "consent_withdrawn",
                "subject_type": "record",
                "subject_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f",
                "value": true,
                "source": "external_consent_system",
                "observed_at": "2026-08-13T11:40:17.109+00:00",
                "expires_at": null,
                "recorded_by": "f439fa31-7f97-47b6-9384-03a627f9a488",
                "created_at": "2026-08-13T11:40:17.48846+00:00",
                "asserted_authority_id": null,
                "asserted_authority_basis": "tenant_admin:tenant owner",
                "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
                "revision": 1,
                "updated_at": "2026-08-13T11:40:17.43+00:00",
                "assertion_action_id": "599f2341-b1cf-49cd-a8ab-6efaa085c9e4",
                "entry_hash": "28b68504effc8f953088ae93efd740fa1f9e88a8e89696ef052e10a682423be1"
            }
        }
    },
    "step": "3_boundary_disclosure_read",
    "request": {
        "path": "/api/public/v1/memory/read",
        "body": {
            "memory_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f",
            "detokenize": true
        },
        "sent_at": "2026-08-13T11:40:18.067Z"
    },
    "response": {
        "http_status": 403,
        "received_at": "2026-08-13T11:40:20.461Z",
        "body": {

```

```

      "ok": false,
      "action_id": "9d999830-47b7-49c3-bfe7-5c4b75c7d25d",
      "denied_at": "admissibility",
      "reason": "consent was withdrawn before the consequential boundary"
    }
  },
  {
    "step": "3b_boundary_read_with_caller_asserted_condition",
    "request": {
      "path": "/api/public/v1/memory/read",
      "body": {
        "memory_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f",
        "detokenize": true,
        "conditions": {
          "consent_withdrawn": true
        }
      }
    },
    "sent_at": "2026-08-13T11:40:20.461Z"
  },
  {
    "response": {
      "http_status": 403,
      "received_at": "2026-08-13T11:40:22.654Z",
      "body": {
        "ok": false,
        "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
        "denied_at": "admissibility",
        "reason": "consent was withdrawn before the consequential boundary"
      }
    }
  },
  {
    "step": "6_audit_api",
    "request": {
      "path": "/api/public/v1/audit/list",
      "body": {
        "limit": 200
      }
    },
    "sent_at": "2026-08-13T11:40:22.654Z"
  },
  {
    "response": {
      "http_status": 200,
      "received_at": "2026-08-13T11:40:22.908Z",
      "body": {
        "ok": true,
        "count": 62,
        "rows": [
          {
            "id": "665aac25-fed4-47b8-9276-1cc84e365e01",
            "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
            "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
            "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
            "stage": "authority",
            "step": "tenant_ownership",
            "status": "pass",
            "detail": {
              "role": "owner",
              "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
              "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
              "checked_at": "2026-08-13T11:40:20.673Z"
            }
          },
          {
            "created_at": "2026-08-13T11:40:22.573933+00:00"
          }
        ]
      }
    }
  },
  {
    "id": "522901db-5f53-4527-989d-231f55f40a58",
    "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
    "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
    "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
    "stage": "authority",
    "step": "scope_validation",

```

```

"status": "pass",
"detail": {
  "matches": [
    "d04ce9a7-d119-42b0-ac59-4247ec680f43"
  ],
  "required_scope": "memory:read",
  "candidate_authorities": [
    {
      "id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
      "label": "Owner root authority",
      "scope": [
        "memory:write",
        "memory:read",
        "memory:detokenize"
      ]
    }
  ],
  "blocked_would_have_matched": []
},
"created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "7f3bf345-d20d-4c6d-9436-ff0c64b8773a",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "authority",
  "step": "delegation_chain",
  "status": "pass",
  "detail": {
    "chain": [
      {
        "id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
        "label": "Owner root authority",
        "expired": false,
        "revoked": false
      }
    ]
  },
  "broken_at": null
},
"created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "87d94627-40aa-4260-9c36-236fbb8a6069",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "authority",
  "step": "inheritance_resolution",
  "status": "na",
  "detail": {
    "reason": "authority has no inherited parent"
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "59caa285-ea46-41ae-98f7-63f024fdf571",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "authority",
  "step": "execution_rights",
  "status": "pass",
  "detail": {
    "held": [
      "write",
      "read",
      "detokenize"
    ]
  },
  "required": "read",

```

```

    "authority_id": "d04ce9a7-d119-42b0-ac59-4247ec680f43"
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "b223db13-6e4f-419a-9519-7a8ea4e9c04d",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "authority",
  "step": "genesis_link_verification",
  "status": "pass",
  "detail": {
    "lineage": [
      {
        "id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
        "parent": null
      }
    ],
    "backfilled": false,
    "genesis_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
    "hash_verified": true,
    "root_authority_id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
    "provisioning_source": "self_signup",
    "original_holder_user_id": "f439fa31-7f97-47b6-9384-03a627f9a488"
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "0cbe2d0d-1ac6-4a88-be60-f8677043ef73",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "authority",
  "step": "final_decision",
  "status": "allow",
  "detail": {
    "label": "Owner root authority",
    "genesis_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
    "root_authority_id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
    "granted_via_authority": "d04ce9a7-d119-42b0-ac59-4247ec680f43"
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "8287af3d-5ebc-40b0-8dbb-1c4b8295550b",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "governance",
  "step": "policy_evaluation",
  "status": "info",
  "detail": {
    "action": "memory:read",
    "matched_policies": [
      {
        "id": "906c88e9-48fc-4e6e-b81e-1feaf2481a27",
        "name": "Default allow",
        "effect": "allow",
        "priority": 1000
      }
    ]
  },
  "candidate_policies": [
    {
      "id": "906c88e9-48fc-4e6e-b81e-1feaf2481a27",
      "name": "Default allow",
      "effect": "allow",
      "priority": 1000
    }
  ]
}

```

```

    },
    "created_at": "2026-08-13T11:40:22.573933+00:00"
  },
  {
    "id": "a1b472eb-0f38-4ce7-bff2-a795bd88615f",
    "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
    "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
    "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
    "stage": "governance",
    "step": "decision",
    "status": "allow",
    "detail": {
      "reason": "policy matched",
      "decision": "allow"
    }
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "8c9988de-8268-489b-bcd6-5884c0dea49b",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "retrieval",
  "step": "query",
  "status": "pass",
  "detail": {
    "rls": "tenant-scoped",
    "memory_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f",
    "via_api_key": true
  }
},
"created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "d84dab34-bc1c-4cb7-975c-50290c6d7acf",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "retrieval",
  "step": "authority_recheck",
  "status": "pass",
  "detail": {
    "reason": null,
    "allowed": true,
    "rechecked_at": "2026-08-13T11:40:22.063Z"
  }
},
"created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "a09e779a-fe2a-456d-95c1-ae75609543d7",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "retrieval",
  "step": "policy_comparison",
  "status": "pass",
  "detail": {
    "drift": false,
    "added_since_write": [],
    "read_time_policies": [
      {
        "id": "906c88e9-48fc-4e6e-b81e-1feaf2481a27",
        "name": "Default allow",
        "effect": "allow",
        "priority": 1000
      }
    ]
  },
  "removed_since_write": [],
  "write_time_policies": [
    {
      "id": "906c88e9-48fc-4e6e-b81e-1feaf2481a27",

```

```

      "name": "Default allow",
      "effect": "allow",
      "priority": 1000
    }
  ],
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "5aed36ca-0358-4506-a2f4-ec2f7abfd9b4",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "admissibility",
  "step": "request_facts_validated",
  "status": "pass",
  "detail": {
    "note": "caller-supplied state is untrusted; usable only by rules with trusted_only=false and never to grant p",
    "accepted": [
      "consent_withdrawn"
    ],
    "rejected": []
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "ba747bc6-481d-4e4c-a5bc-ef7ed1bb4f26",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "admissibility",
  "step": "load_rules",
  "status": "info",
  "detail": {
    "rules": [
      {
        "id": "baseline:baseline-2026.08.1:consent_withdrawn:record",
        "name": "Baseline dispositive condition \u2014 consent_withdrawn",
        "effect": "deny",
        "origin": "baseline",
        "operator": "is_true",
        "priority": 10,
        "subject_type": "record",
        "condition_key": "consent_withdrawn"
      },
      {
        "id": "baseline:baseline-2026.08.1:consent_withdrawn:actor",
        "name": "Baseline dispositive condition \u2014 consent_withdrawn",
        "effect": "deny",
        "origin": "baseline",
        "operator": "is_true",
        "priority": 10,
        "subject_type": "actor",
        "condition_key": "consent_withdrawn"
      },
      {
        "id": "baseline:baseline-2026.08.1:consent_withdrawn:tenant",
        "name": "Baseline dispositive condition \u2014 consent_withdrawn",
        "effect": "deny",
        "origin": "baseline",
        "operator": "is_true",
        "priority": 10,
        "subject_type": "tenant",
        "condition_key": "consent_withdrawn"
      },
      {
        "id": "baseline:baseline-2026.08.1:consent_revoked:record",
        "name": "Baseline dispositive condition \u2014 consent_revoked",
        "effect": "deny",
        "origin": "baseline",

```

```

    "operator": "is_true",
    "priority": 10,
    "subject_type": "record",
    "condition_key": "consent_revoked"
  },
  {
    "id": "baseline:baseline-2026.08.1:consent_revoked:actor",
    "name": "Baseline dispositive condition \u2014 consent_revoked",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_true",
    "priority": 10,
    "subject_type": "actor",
    "condition_key": "consent_revoked"
  },
  {
    "id": "baseline:baseline-2026.08.1:consent_revoked:tenant",
    "name": "Baseline dispositive condition \u2014 consent_revoked",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_true",
    "priority": 10,
    "subject_type": "tenant",
    "condition_key": "consent_revoked"
  },
  {
    "id": "baseline:baseline-2026.08.1:consent_status:record",
    "name": "Baseline dispositive condition \u2014 consent_status",
    "effect": "deny",
    "origin": "baseline",
    "operator": "in",
    "priority": 10,
    "subject_type": "record",
    "condition_key": "consent_status"
  },
  {
    "id": "baseline:baseline-2026.08.1:consent_status:actor",
    "name": "Baseline dispositive condition \u2014 consent_status",
    "effect": "deny",
    "origin": "baseline",
    "operator": "in",
    "priority": 10,
    "subject_type": "actor",
    "condition_key": "consent_status"
  },
  {
    "id": "baseline:baseline-2026.08.1:consent_status:tenant",
    "name": "Baseline dispositive condition \u2014 consent_status",
    "effect": "deny",
    "origin": "baseline",
    "operator": "in",
    "priority": 10,
    "subject_type": "tenant",
    "condition_key": "consent_status"
  },
  {
    "id": "baseline:baseline-2026.08.1:consent:record",
    "name": "Baseline dispositive condition \u2014 consent",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_false",
    "priority": 10,
    "subject_type": "record",
    "condition_key": "consent"
  },
  {
    "id": "baseline:baseline-2026.08.1:consent:actor",
    "name": "Baseline dispositive condition \u2014 consent",
    "effect": "deny",
    "origin": "baseline",

```

```

    "operator": "is_false",
    "priority": 10,
    "subject_type": "actor",
    "condition_key": "consent"
  },
  {
    "id": "baseline:baseline-2026.08.1:consent:tenant",
    "name": "Baseline dispositive condition \u2014 consent",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_false",
    "priority": 10,
    "subject_type": "tenant",
    "condition_key": "consent"
  },
  {
    "id": "baseline:baseline-2026.08.1:authorization_revoked:record",
    "name": "Baseline dispositive condition \u2014 authorization_revoked",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_true",
    "priority": 10,
    "subject_type": "record",
    "condition_key": "authorization_revoked"
  },
  {
    "id": "baseline:baseline-2026.08.1:authorization_revoked:actor",
    "name": "Baseline dispositive condition \u2014 authorization_revoked",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_true",
    "priority": 10,
    "subject_type": "actor",
    "condition_key": "authorization_revoked"
  },
  {
    "id": "baseline:baseline-2026.08.1:authorization_revoked:tenant",
    "name": "Baseline dispositive condition \u2014 authorization_revoked",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_true",
    "priority": 10,
    "subject_type": "tenant",
    "condition_key": "authorization_revoked"
  },
  {
    "id": "baseline:baseline-2026.08.1:authority_revoked:record",
    "name": "Baseline dispositive condition \u2014 authority_revoked",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_true",
    "priority": 10,
    "subject_type": "record",
    "condition_key": "authority_revoked"
  },
  {
    "id": "baseline:baseline-2026.08.1:authority_revoked:actor",
    "name": "Baseline dispositive condition \u2014 authority_revoked",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_true",
    "priority": 10,
    "subject_type": "actor",
    "condition_key": "authority_revoked"
  },
  {
    "id": "baseline:baseline-2026.08.1:authority_revoked:tenant",
    "name": "Baseline dispositive condition \u2014 authority_revoked",
    "effect": "deny",
    "origin": "baseline",

```

```

    "operator": "is_true",
    "priority": 10,
    "subject_type": "tenant",
    "condition_key": "authority_revoked"
  },
  {
    "id": "baseline:baseline-2026.08.1:mandate_status:record",
    "name": "Baseline dispositive condition \u2014 mandate_status",
    "effect": "deny",
    "origin": "baseline",
    "operator": "in",
    "priority": 10,
    "subject_type": "record",
    "condition_key": "mandate_status"
  },
  {
    "id": "baseline:baseline-2026.08.1:mandate_status:actor",
    "name": "Baseline dispositive condition \u2014 mandate_status",
    "effect": "deny",
    "origin": "baseline",
    "operator": "in",
    "priority": 10,
    "subject_type": "actor",
    "condition_key": "mandate_status"
  },
  {
    "id": "baseline:baseline-2026.08.1:mandate_status:tenant",
    "name": "Baseline dispositive condition \u2014 mandate_status",
    "effect": "deny",
    "origin": "baseline",
    "operator": "in",
    "priority": 10,
    "subject_type": "tenant",
    "condition_key": "mandate_status"
  },
  {
    "id": "baseline:baseline-2026.08.1:cancelled:record",
    "name": "Baseline dispositive condition \u2014 cancelled",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_true",
    "priority": 10,
    "subject_type": "record",
    "condition_key": "cancelled"
  },
  {
    "id": "baseline:baseline-2026.08.1:cancelled:actor",
    "name": "Baseline dispositive condition \u2014 cancelled",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_true",
    "priority": 10,
    "subject_type": "actor",
    "condition_key": "cancelled"
  },
  {
    "id": "baseline:baseline-2026.08.1:cancelled:tenant",
    "name": "Baseline dispositive condition \u2014 cancelled",
    "effect": "deny",
    "origin": "baseline",
    "operator": "is_true",
    "priority": 10,
    "subject_type": "tenant",
    "condition_key": "cancelled"
  },
  {
    "id": "baseline:baseline-2026.08.1:transaction_cancelled:record",
    "name": "Baseline dispositive condition \u2014 transaction_cancelled",
    "effect": "deny",
    "origin": "baseline",

```

```

      "operator": "is_true",
      "priority": 10,
      "subject_type": "record",
      "condition_key": "transaction_cancelled"
    },
    {
      "id": "baseline:baseline-2026.08.1:transaction_cancelled:actor",
      "name": "Baseline dispositive condition \u2014 transaction_cancelled",
      "effect": "deny",
      "origin": "baseline",
      "operator": "is_true",
      "priority": 10,
      "subject_type": "actor",
      "condition_key": "transaction_cancelled"
    },
    {
      "id": "baseline:baseline-2026.08.1:transaction_cancelled:tenant",
      "name": "Baseline dispositive condition \u2014 transaction_cancelled",
      "effect": "deny",
      "origin": "baseline",
      "operator": "is_true",
      "priority": 10,
      "subject_type": "tenant",
      "condition_key": "transaction_cancelled"
    },
    {
      "id": "baseline:baseline-2026.08.1:order_cancelled:record",
      "name": "Baseline dispositive condition \u2014 order_cancelled",
      "effect": "deny",
      "origin": "baseline",
      "operator": "is_true",
      "priority": 10,
      "subject_type": "record",
      "condition_key": "order_cancelled"
    },
    {
      "id": "baseline:baseline-2026.08.1:order_cancelled:actor",
      "name": "Baseline dispositive condition \u2014 order_cancelled",
      "effect": "deny",
      "origin": "baseline",
      "operator": "is_true",
      "priority": 10,
      "subject_type": "actor",
      "condition_key": "order_cancelled"
    },
    {
      "id": "baseline:baseline-2026.08.1:order_cancelled:tenant",
      "name": "Baseline dispositive condition \u2014 order_cancelled",
      "effect": "deny",
      "origin": "baseline",
      "operator": "is_true",
      "priority": 10,
      "subject_type": "tenant",
      "condition_key": "order_cancelled"
    },
    {
      "id": "baseline:baseline-2026.08.1:status:record",
      "name": "Baseline dispositive condition \u2014 status",
      "effect": "deny",
      "origin": "baseline",
      "operator": "in",
      "priority": 10,
      "subject_type": "record",
      "condition_key": "status"
    },
    {
      "id": "ba
... [truncated in print rendering; complete file included in the digital package]

```

A2 — Baseline authorization (01-baseline-authorization.json)

```
{
  "captured_at": "2026-08-13T11:40:13.532Z",
  "actor": {
    "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
    "email": "run2.assessment.1786621211480@tracecontinuity.test",
    "created_at": "2026-08-13T11:40:12.033487Z"
  },
  "tenant": {
    "id": "b83b2991-ea3b-46b3-80c3-7282322c2906"
  },
  "authorities": [
    {
      "id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
      "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
      "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
      "parent_authority_id": null,
      "inherits_from": null,
      "scope": [
        "memory:write",
        "memory:read",
        "memory:detokenize"
      ],
      "execution_rights": [
        "write",
        "read",
        "detokenize"
      ],
      "label": "Owner root authority",
      "expires_at": null,
      "created_at": "2026-08-13T11:40:12.033142+00:00",
      "revoked_at": null,
      "revoked_by": null,
      "revoke_reason": null,
      "is_revoked": false
    }
  ],
  "authority_genesis": [
    {
      "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
      "root_authority_id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
      "original_holder_user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
      "provisioning_source": "self_signup",
      "previous_hash": null,
      "hash": "d55bebfe4f75c9f76b3a6f9c0aed201964e9e604f51f2c72489523a334e31f2c",
      "created_at": "2026-08-13T11:40:12.06165+00:00",
      "backfilled_at": null,
      "notes": {}
    }
  ],
  "verify_genesis_hash": true,
  "authority_events": [
    {
      "id": "a3c2cf72-6017-4998-9046-c9efc52b230c",
      "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
      "authority_id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
      "event_type": "authority_created",
      "actor_user_id": null,
      "system_actor": null,
      "previous_values": {},
      "new_values": {
        "id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
        "label": "Owner root authority",
        "scope": [
          "memory:write",
          "memory:read",
          "memory:detokenize"
        ],
        "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",

```

```

    "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
    "created_at": "2026-08-13T11:40:12.033142+00:00",
    "expires_at": null,
    "is_revoked": false,
    "revoked_at": null,
    "revoked_by": null,
    "inherits_from": null,
    "revoke_reason": null,
    "execution_rights": [
      "write",
      "read",
      "detokenize"
    ],
    "parent_authority_id": null
  },
  "previous_hash": null,
  "hash": "e875230817fd32a4cd289242b68da872f895fadbd5174ef6f3262ee9488ae34",
  "created_at": "2026-08-13T11:40:12.08316+00:00"
}
],
"governance_policies": [
  {
    "id": "906c88e9-48fc-4e6e-b81e-1feaf2481a27",
    "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
    "name": "Default allow",
    "action": "**",
    "effect": "allow",
    "match": {},
    "priority": 1000,
    "created_at": "2026-08-13T11:40:12.033142+00:00"
  }
],
"admissibility_rules_configured": [],
"condition_facts_present": []
}

```

A3 — Material condition change and immutable history (02-material-condition-change.json)

```
{
  "captured_at": "2026-08-13T11:40:23.401Z",
  "api_calls": [
    {
      "http_status": 201,
      "received_at": "2026-08-13T11:40:17.002Z",
      "body": {
        "ok": true,
        "condition": {
          "id": "da289ebd-3e48-4eb1-81ce-9266ac20436e",
          "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
          "condition_key": "consent_withdrawn",
          "subject_type": "tenant",
          "subject_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
          "value": true,
          "source": "external_consent_system",
          "observed_at": "2026-08-13T11:40:16.198+00:00",
          "expires_at": null,
          "recorded_by": "f439fa31-7f97-47b6-9384-03a627f9a488",
          "created_at": "2026-08-13T11:40:16.595482+00:00",
          "asserted_authority_id": null,
          "asserted_authority_basis": "tenant_admin:tenant owner",
          "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
          "revision": 1,
          "updated_at": "2026-08-13T11:40:16.535+00:00",
          "assertion_action_id": "9623c3fc-8a51-4121-a809-ab24ae21929e",
          "entry_hash": "62722662547e16094bca220e979371c67706e97f696168533e64d74a45db37cd"
        }
      }
    },
    {
      "http_status": 201,
      "received_at": "2026-08-13T11:40:18.067Z",
      "body": {
        "ok": true,
        "condition": {
          "id": "24493814-2134-4c6c-b5c5-389c83a1c998",
          "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
          "condition_key": "consent_withdrawn",
          "subject_type": "record",
          "subject_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f",
          "value": true,
          "source": "external_consent_system",
          "observed_at": "2026-08-13T11:40:17.109+00:00",
          "expires_at": null,
          "recorded_by": "f439fa31-7f97-47b6-9384-03a627f9a488",
          "created_at": "2026-08-13T11:40:17.48846+00:00",
          "asserted_authority_id": null,
          "asserted_authority_basis": "tenant_admin:tenant owner",
          "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
          "revision": 1,
          "updated_at": "2026-08-13T11:40:17.43+00:00",
          "assertion_action_id": "599f2341-b1cf-49cd-a8ab-6efaa085c9e4",
          "entry_hash": "28b68504effc8f953088ae93efd740fa1f9e88a8e89696ef052e10a682423be1"
        }
      }
    }
  ],
  "stored_condition_facts": [
    {
      "id": "da289ebd-3e48-4eb1-81ce-9266ac20436e",
      "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
      "condition_key": "consent_withdrawn",
      "subject_type": "tenant",
      "subject_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
      "value": true,
    }
  ]
}
```

```

"source": "external_consent_system",
"observed_at": "2026-08-13T11:40:16.198+00:00",
"expires_at": null,
"recorded_by": "f439fa31-7f97-47b6-9384-03a627f9a488",
"created_at": "2026-08-13T11:40:16.595482+00:00",
"asserted_authority_id": null,
"asserted_authority_basis": "tenant_admin:tenant owner",
"api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
"revision": 1,
"updated_at": "2026-08-13T11:40:16.535+00:00"
},
{
  "id": "24493814-2134-4c6c-b5c5-389c83a1c998",
  "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
  "condition_key": "consent_withdrawn",
  "subject_type": "record",
  "subject_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f",
  "value": true,
  "source": "external_consent_system",
  "observed_at": "2026-08-13T11:40:17.109+00:00",
  "expires_at": null,
  "recorded_by": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "created_at": "2026-08-13T11:40:17.48846+00:00",
  "asserted_authority_id": null,
  "asserted_authority_basis": "tenant_admin:tenant owner",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "revision": 1,
  "updated_at": "2026-08-13T11:40:17.43+00:00"
}
],
"condition_fact_history": [
  {
    "id": "3c49d856-02cf-4399-a1ac-7675e1e78bfa",
    "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
    "fact_id": "da289ebd-3e48-4eb1-81ce-9266ac20436e",
    "condition_key": "consent_withdrawn",
    "subject_type": "tenant",
    "subject_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
    "revision": 1,
    "prior_value": null,
    "new_value": true,
    "prior_observed_at": null,
    "observed_at": "2026-08-13T11:40:16.198+00:00",
    "source": "external_consent_system",
    "expires_at": null,
    "asserted_by": "f439fa31-7f97-47b6-9384-03a627f9a488",
    "asserted_authority_id": null,
    "asserted_authority_basis": "tenant_admin:tenant owner",
    "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
    "action_id": "9623c3fc-8a51-4121-a809-ab24ae21929e",
    "prior_hash": null,
    "entry_hash": "62722662547e16094bca220e979371c67706e97f696168533e64d74a45db37cd",
    "recorded_at": "2026-08-13T11:40:16.834506+00:00"
  },
  {
    "id": "1cd9bdfc-34eb-4d31-8999-f088882a8cba",
    "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
    "fact_id": "24493814-2134-4c6c-b5c5-389c83a1c998",
    "condition_key": "consent_withdrawn",
    "subject_type": "record",
    "subject_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f",
    "revision": 1,
    "prior_value": null,
    "new_value": true,
    "prior_observed_at": null,
    "observed_at": "2026-08-13T11:40:17.109+00:00",
    "source": "external_consent_system",
    "expires_at": null,
    "asserted_by": "f439fa31-7f97-47b6-9384-03a627f9a488",
    "asserted_authority_id": null,

```

```
"asserted_authority_basis": "tenant_admin:tenant owner",
"api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
"action_id": "599f2341-b1cf-49cd-a8ab-6efaa085c9e4",
"prior_hash": null,
"entry_hash": "28b68504effc8f953088ae93efd740fa1f9e88a8e89696ef052e10a682423be1",
"recorded_at": "2026-08-13T11:40:17.702871+00:00"
},
],
"capture_note": "The initial capture query for condition_fact_history sorted on a column name that does not exist in
}
```

A4 — Boundary calls and determination (03-boundary-and-determination.json)

```
{
  "captured_at": "2026-08-13T11:40:23.541Z",
  "authorized_write": {
    "http_status": 201,
    "received_at": "2026-08-13T11:40:15.981Z",
    "body": {
      "ok": true,
      "action_id": "978b9d17-ae9b-46e4-b058-22d1751f651a",
      "memory_id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f"
    }
  },
  "boundary_read_1": {
    "http_status": 403,
    "received_at": "2026-08-13T11:40:20.461Z",
    "body": {
      "ok": false,
      "action_id": "9d999830-47b7-49c3-bfe7-5c4b75c7d25d",
      "denied_at": "admissibility",
      "reason": "consent was withdrawn before the consequential boundary"
    }
  },
  "boundary_read_2": {
    "http_status": 403,
    "received_at": "2026-08-13T11:40:22.654Z",
    "body": {
      "ok": false,
      "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
      "denied_at": "admissibility",
      "reason": "consent was withdrawn before the consequential boundary"
    }
  }
}
```

A5 — Audit endpoint response (04-audit-api-response.json)

```
{
  "captured_at": "2026-08-13T11:40:23.665Z",
  "endpoint": "POST /api/public/v1/audit/list",
  "response": {
    "http_status": 200,
    "received_at": "2026-08-13T11:40:22.908Z",
    "body": {
      "ok": true,
      "count": 62,
      "rows": [
        {
          "id": "665aac25-fed4-47b8-9276-1cc84e365e01",
          "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
          "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
          "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
          "stage": "authority",
          "step": "tenant_ownership",
          "status": "pass",
          "detail": {
            "role": "owner",
            "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
            "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
            "checked_at": "2026-08-13T11:40:20.673Z"
          },
          "created_at": "2026-08-13T11:40:22.573933+00:00"
        },
        {
          "id": "522901db-5f53-4527-989d-231f55f40a58",
          "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
          "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
          "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
          "stage": "authority",
          "step": "scope_validation",
          "status": "pass",
          "detail": {
            "matches": [
              "d04ce9a7-d119-42b0-ac59-4247ec680f43"
            ],
            "required_scope": "memory:read",
            "candidate_authorities": [
              {
                "id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
                "label": "Owner root authority",
                "scope": [
                  "memory:write",
                  "memory:read",
                  "memory:detokenize"
                ]
              }
            ],
            "blocked_would_have_matched": []
          },
          "created_at": "2026-08-13T11:40:22.573933+00:00"
        },
        {
          "id": "7f3bf345-d20d-4c6d-9436-ff0c64b8773a",
          "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
          "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
          "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
          "stage": "authority",
          "step": "delegation_chain",
          "status": "pass",
          "detail": {
            "chain": [
              {
                "id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
                "label": "Owner root authority",
                "expired": false,

```

```

      "revoked": false
    }
  ],
  "broken_at": null
},
"created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "87d94627-40aa-4260-9c36-236fbb8a6069",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "authority",
  "step": "inheritance_resolution",
  "status": "na",
  "detail": {
    "reason": "authority has no inherited parent"
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "59caa285-ea46-41ae-98f7-63f024fdf571",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "authority",
  "step": "execution_rights",
  "status": "pass",
  "detail": {
    "held": [
      "write",
      "read",
      "detokenize"
    ],
    "required": "read",
    "authority_id": "d04ce9a7-d119-42b0-ac59-4247ec680f43"
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "b223db13-6e4f-419a-9519-7a8ea4e9c04d",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "authority",
  "step": "genesis_link_verification",
  "status": "pass",
  "detail": {
    "lineage": [
      {
        "id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
        "parent": null
      }
    ],
    "backfilled": false,
    "genesis_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
    "hash_verified": true,
    "root_authority_id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
    "provisioning_source": "self_signup",
    "original_holder_user_id": "f439fa31-7f97-47b6-9384-03a627f9a488"
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "0cbe2d0d-1ac6-4a88-be60-f8677043ef73",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "authority",
  "step": "final_decision",

```

```

    "status": "allow",
    "detail": {
      "label": "Owner root authority",
      "genesis_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
      "root_authority_id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
      "granted_via_authority": "d04ce9a7-d119-42b0-ac59-4247ec680f43"
    },
    "created_at": "2026-08-13T11:40:22.573933+00:00"
  },
  {
    "id": "8287af3d-5ebc-40b0-8dbb-1c4b8295550b",
    "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
    "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
    "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
    "stage": "governance",
    "step": "policy_evaluation",
    "status": "info",
    "detail": {
      "action": "memory:read",
      "matched_policies": [
        {
          "id": "906c88e9-48fc-4e6e-b81e-1feaf2481a27",
          "name": "Default allow",
          "effect": "allow",
          "priority": 1000
        }
      ]
    },
    "candidate_policies": [
      {
        "id": "906c88e9-48fc-4e6e-b81e-1feaf2481a27",
        "name": "Default allow",
        "effect": "allow",
        "priority": 1000
      }
    ]
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},
{
  "id": "a1b472eb-0f38-4ce7-bff2-a795bd88615f",
  "action_id": "fd905961-0eb9-4e56-80a5-3e71b53e11fb",
  "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
  "api_key_id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
  "stage": "governance",
  "step": "decision",
  "status": "allow",
  "detail": {
    "reason": "policy matched",
    "decision": "allow"
  },
  "created_at": "2026-08-13T11:40:22.573933+00:00"
},

```

... [truncated in print rendering; complete file included in the digital package]

A6 — Configuration state (06-configuration-state.json)

```

{
  "captured_at": "2026-08-13T11:40:24.383Z",
  "admissibility_rules_for_tenant": [],
  "admissibility_rules_platform_wide_count": "0",
  "governance_policies": [
    {
      "id": "906c88e9-48fc-4e6e-b81e-1feaf2481a27",
      "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
      "name": "Default allow",
      "action": "*",
      "effect": "allow",
      "match": {},
      "priority": 1000,

```

```

    "created_at": "2026-08-13T11:40:12.033142+00:00"
  },
  "authorities": [
    {
      "id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
      "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
      "user_id": "f439fa31-7f97-47b6-9384-03a627f9a488",
      "parent_authority_id": null,
      "inherits_from": null,
      "scope": [
        "memory:write",
        "memory:read",
        "memory:detokenize"
      ],
      "execution_rights": [
        "write",
        "read",
        "detokenize"
      ],
      "label": "Owner root authority",
      "expires_at": null,
      "created_at": "2026-08-13T11:40:12.033142+00:00",
      "revoked_at": null,
      "revoked_by": null,
      "revoke_reason": null,
      "is_revoked": false
    }
  ],
  "api_key": {
    "id": "fd2fa9ec-4a92-4ecd-8ca0-bf2e13d0a29e",
    "tenant_id": "b83b2991-ea3b-46b3-80c3-7282322c2906",
    "authority_id": "d04ce9a7-d119-42b0-ac59-4247ec680f43",
    "created_by": "f439fa31-7f97-47b6-9384-03a627f9a488",
    "name": "Run 2 assessment key",
    "key_prefix": "495b7fb9",
    "key_hash": "6c9d964d67a301c0d9e965ae56b494f03c5e2d51dbf9605b82c53ffa579041ca",
    "last_used_at": null,
    "expires_at": null,
    "revoked_at": null,
    "created_at": "2026-08-13T11:40:13.111337+00:00"
  },
  "governed_memory_rows": [
    {
      "id": "89d6115d-d0de-4fe0-81b8-3a65418b2c2f",
      "key": "run2/patient-transfer/1786621211480",
      "required_scope_to_read": [
        "memory:read"
      ],
      "matter_id": null,
      "created_at": "2026-08-13T11:40:15.713128+00:00",
      "tokenized_payload": {
        "subject": "Patient consent record for downstream disclosure",
        "patient_name": "Dana R. Whitfield",
        "patient_email": "tok_bd2a0a1c5a1b180b",
        "patient_phone": "tok_c8c36ab0b46c96bf",
        "disclosure_target": "Downstream analytics processor",
        "consent_state_at_write": "granted"
      }
    }
  ],
  "pii_vault_row_count": "2"
}

```

A7 — Code state attestation (07-code-state-attestation.json)

```
{
  "captured_at_utc": "2026-08-13T11:41:17.371440Z",
  "repository_head": "d55c4e6a564c2c0b6bfe6dddbdefee12ac0e6cc3|2026-08-13T11:37:49Z|Fixed admissibility gap",
  "working_tree_status": "clean",
  "run1_head_commit_for_comparison": "38a291ba48457c6640c71a4889c4a4b5ed953ede",
  "governance_module_sha256": {
    "src/lib/execution-gate.server.ts": "2a6cc109cfd6d894431cf8bcc37f1cbf5f2694f2faca5a964c62305a909e5a03",
    "src/lib/admissibility.server.ts": "9b987a90c7803417a33a810b1a0bcb3f921d1f7c69e1ca33e5bd16f032f1ad3a",
    "src/lib/admissibility-baseline.ts": "cdd0e2509f620e8b0210659a6fa2c23fcd44091cdd8b5075c4dc896aaebd7d22",
    "src/lib/authority.server.ts": "a6fb4146901cb350086f06ef538dc6d2c080cac9bab4f9ea10d2d7e3fb85a969",
    "src/lib/governance.server.ts": "d0a05878fdb54bb8bf37203dfd023ca5f270c99607c7062ae690fd0a76607fb",
    "src/lib/tokenization.server.ts": "1ab7b2dc8f106a688817dac9434e9689b22499dff9d8bfd60c4b8e4e645cce35",
    "src/lib/predicate.ts": "2a034e1779bcb12063260d10ffc8259685dab8b2f3b09a22bc1ad98475c83430",
    "src/lib/audit.server.ts": "989fd02d623edef34ed79b326bf5dc43ec6b46a047d38002d5e73cdbc9d5df16",
    "src/lib/conditions.server.ts": "773ea8b9bcdbe1a44268d2340a341b7d5bab01714b61c720a499f62c5a9343f",
    "src/lib/matter-boundary.server.ts": "0e511d8e0b0a17a691827adff4abe9eba985d5213ecb1e02eee9b8d472c1c08a",
    "src/routes/api/public/v1/audit/list.ts": "367c93c1658d49e766a2433cc00877bb7f1f6bfc7ecd5ae800b370805137e3",
    "src/routes/api/public/v1/conditions/report.ts": "7c1ea89989c0e1e1e91138cf27fa48ae0a622eadb2fd9b595ffd3e09a1060384",
    "src/routes/api/public/v1/conditions/history.ts": "bec1f7a60d8d924701bae3208169a5b5c00111fec47cdc38bab703bdd227e47b"
  }
}
```

A8 — Run 1 package integrity verification

```
00-run-transcript.json: OK
01-baseline-authorization.json: OK
02-material-condition-change.json: OK
03-boundary-and-determination.json: OK
04-audit-api-response.json: OK
05-audit-trail-full.json: OK
06-configuration-state.json: OK
07-code-state-attestation.json: OK
RUN1-INDEX.md: OK
RUN1-NON-MODIFICATION-BASELINE.md: OK
RUN1-OBSERVATION-REPORT.md: OK
```

verified_at_utc: 2026-08-13T11:43:27Z

note: all entries above must read OK for the Run 1 package to be considered unchanged.

A9 — Manifest (SHA-256)

ce3b52042ee541fe16a0f06b154ae0764e1cbd2b574ced88d4aa78dd8f369912	00-run-transcript.json
fa2d4986bdc2de6cda85441d975c83828f19f0bf78c1dda6300e17db58dfb72b	01-baseline-authorization.json
b98068b9dd2563765995dbdc928de39df860348d02faaad7f4e089e21eec7fac	02-material-condition-change.json
ae5f995b7700d503a72edc4ac2b57169e715e3719cee73e7c5887c86cb606d0a	03-boundary-and-determination.json
c7a3e19a305a736fdd4b7a3fb41302fdec0bb446c4242a2581c2d039784978	04-audit-api-response.json
f8e564c4959c47b7472ec20bff48ee828ce12262eea2a0d8c364465a3e644690	05-audit-trail-full.json
053e09ca506e313ff5d0be7f731c6eff00e3c65ae118bdd4e7b61420a832fd73	06-configuration-state.json
960b0241f4046844c4ba85f4279fbfa8ff82d1dae75b2412e200eabed19e40a1	07-code-state-attestation.json
9a65b9fbd7bb6e688611c57e44e370f30e626e5c001bd229d3d0455a042cb15b	08-run1-integrity-verification.txt
22b3d45fe42d9fe6b72a4b7175cde9c297b1e5384c09fe2a95d416ae6cfe5332	RUN2-CHANGE-AND-CUSTODY-STATEMENT.md
584bb6e01335c5a14754908830b7e05f2966dbe2c071b7c4dad36b176a40503b	RUN2-INDEX.md
ffea11692543427bf23b3cac6ebc09af3919fa6344fdc27667ba84501e09e3e3	RUN2-OBSERVATION-REPORT.md

The complete 62-row audit trail is provided as the file 05-audit-trail-full.json in the digital package; it is not reproduced in print.