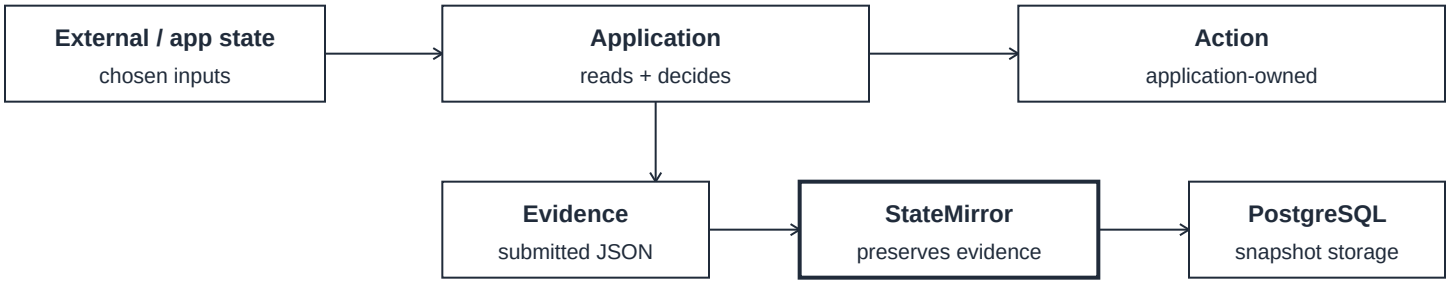
StateMirror

DECISION-TIME EVIDENCE LEDGER

DOCUMENT	IMPLEMENTATION	LICENSE
STM-01	SELF-HOSTED	APACHE-2.0 CORE

StateMirror Core is a complete, free Apache-2.0 ledger. Preserve submitted decision-time evidence, then retrieve it after operational state changes.

FIG 01 / APPLICATION OWNERSHIP & EVIDENCE STORAGE



The application reads state, decides and owns the action. The evidence branch preserves submitted JSON; it does not authorize or execute the action. Branches show responsibility, not execution order.

INTERFACE / OPERATING FOOTPRINT

RUNTIME	Node.js >=20
DATASTORE	PostgreSQL
HTTP	Submit / retrieve / verify
ACCESS	Service bearer keys
CLI	Verify / inspect / export
OPERATOR	Service, database, backups

Submit requires Idempotency-Key.

INTEGRITY / EXAMPLE RESPONSE

```
{
  "snapshot_id":
    "71be5886-a779-4c28-ae90-c389165c90a2",
  "sequence_num": 1,
  "valid": true,
  "message":
    "Preserved evidence integrity verified."
}
```

Abbreviated canonical example response. The ID is illustrative. A valid result checks preserved integrity, not decision correctness.

INTEGRITY / PRESERVED PAYLOAD & CHAIN

Core hashes canonical state_payload JSON with SHA-256 and links records by sequence and prior chain hash. Retrieve by snapshot ID or evidence_ref; verification recomputes hashes and checks continuity.

TRUST BOUNDARY / OPERATOR RESPONSIBILITY

Integrity does not establish upstream truth or decision correctness. A privileged database administrator can rewrite records and recompute hashes. Stored hashes alone cannot establish independent history or detect every chain-suffix deletion.

`Trust model: simple-states.com/state-mirror/security`

RUN / simple-states.com/state-mirror/quickstart
REFERENCE / simple-states.com/state-mirror/spec
SOURCE / github.com/simplestates/statemirror-core