

Production Global Reconciliation

Artifact truth determines what exists.
The named domain coordinates acceptance.



THE PRODUCTION GLOBAL RECONCILIATION RELEASE

RELEASE DATE / 2026-07-19

FIRST ADMISSION ONLY / THEN APPEND FOREVER

RELEASE DEFINITION

Production Global Reconciliation is live in code.

Receiz v113.0.0 carries independently verified offline artifact history into one explicitly named production coordination domain while preserving exact sealed bytes and verified causal history as the stronger truth.



● Exact bytes

● Verified causal history

● Named domain

● Atomic acceptance

THE RELEASE

What changed at v113

The SDK gains a provider-neutral remote-domain facade, exact reconciliation phases, monotonic accepted-head resolution, indeterminate attempt recovery, effect-status resolution, bounded verification, and first-party Receiz.com coordination mechanics.

57 constitutional laws

17 protocol maxima

Nine active MCP tools

Two new matrix operations

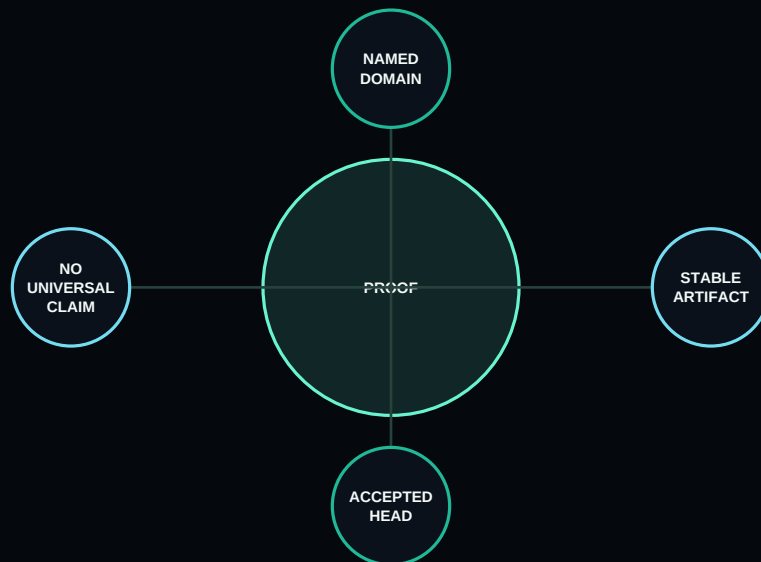
- 57 constitutional laws
- Nine active MCP tools

- 17 protocol maxima
- Two new matrix operations

GLOBAL MEANING

Global names one domain, not universal consensus.

Global means that receiz.com/global/v1 accepted one exact independently verified artifact as the next head for one stable artifact resource. It does not mean every network observed it or that a server created artifact truth.



● Named domain

● Stable artifact

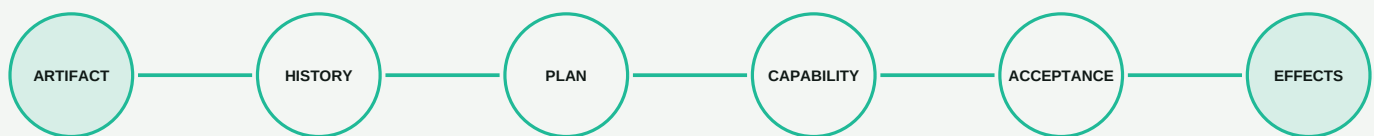
● Accepted head

● No universal claim

AUTHORITY CHAIN

The sequence stays one-directional.

Exact bytes are independently verified and admitted. Verified causal history supports a deterministic plan. An Identity Seal capability authorizes the exact plan. Private staging preserves bytes. Atomic acceptance advances the named domain. Receipts and effects remain reports.



● Artifact

● Plan

● Acceptance

● History

● Capability

● Effects

STRONGER TRUTH

Infrastructure coordinates beneath proof.

Tokens, rows, object storage, plans, capabilities, receipts, projections, timestamps, and service policy may authenticate, preserve, coordinate, report, or allocate resources. None may manufacture or replace the sealed artifact or verified history.



- Sealed artifact

- Runtime custody

- Projection

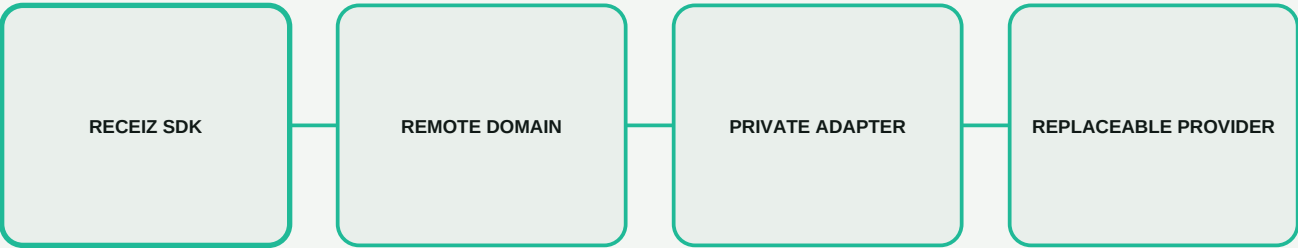
- Verified history

- Domain state

PROVIDER BOUNDARY

Public contracts speak Receiz primitives.

Supabase, Postgres, private buckets, RPCs, table names, and provider object identifiers remain private mechanics behind Receiz.com. SDK, MCP, AI skills, manifests, and results expose only provider-neutral Receiz types.



- Receiz SDK
- Private adapter

- Remote domain
- Replaceable provider

PUBLIC SDK

One remote-domain facade composes distinct phases.

`client.coordination.remoteDomain()` exposes admission and transition stores plus planning, staging, commitment, accepted-head resolution, attempt recovery, effect-status resolution, and an explicit convenience flow.



- Plan

- Commit

- Recover

- Stage

- Resolve

- Effects

STORE SEPARATION

Admission and transition stores stay distinct.

A provider-neutral facade may compose `ReceizAdmissionStore` and `ReceizArtifactTransitionStore`, but it cannot merge their meanings. Profile membership remains separate from staged transition custody and accepted-head coordination.



● Admission store

● Remote facade

● Transition store

● No semantic collapse

CONNECT BOUNDARY

Connect authenticates access, not mutation.

The Connect access token authenticates the account, tenant, consent, and API scope. It is supplied programmatically and never read from a player environment variable. It cannot satisfy Identity Seal capability authority.



ACCOUNT



TENANT



CONSENT



API SCOPE



NO PROOF AUTHORITY



Account



Tenant



Consent



API scope



No proof authority

CAPABILITY FLOW

Plan, authorize, stage, and commit remain exact.

The application prepares a deterministic reconciliation plan, signs its completed capability payload with an admitted Identity Seal, neutrally stages exact bytes, and commits through a distinct digest-bound confirmation.



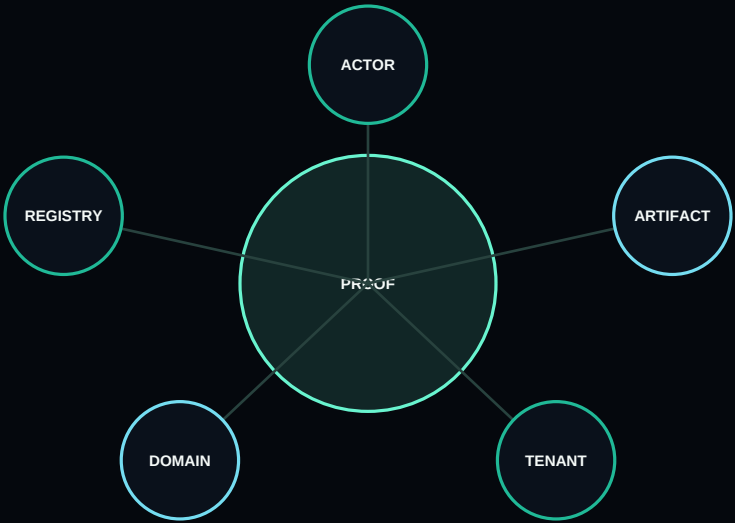
- Plan
- Stage

- Identity Seal
- Commit

CAPABILITY BINDING

One capability authorizes one completed plan.

The payload binds plan digest, actor, admitted issuer, stable artifact, artifact.reconcile, tenant, commit domain, derived effects ceiling, expected head, registry, operation matrix, Kai validity, and attempt identity.



● Actor

● Tenant

● Registry

● Artifact

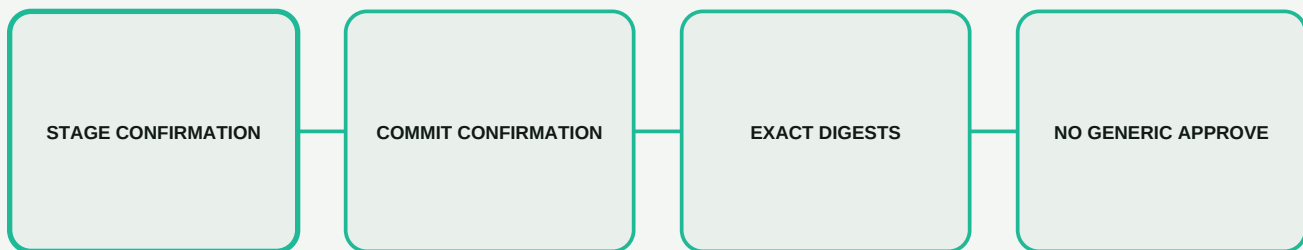
● Domain

● Attempt

CONFIRMATIONS

Confirmations are immutable digest-bound values.

Stage confirmation binds attempt, plan, candidate digest, domain, and tenant. Commit confirmation additionally binds capability, exact staged reference, expected head, command, registry, and operation-matrix identities. They are not booleans or display strings.



● Stage confirmation

● Exact digests

● Commit confirmation

● No generic approve

RECONCILIATION INPUT

The exact artifact is the strongest input.

The planner receives stable artifact identity, issuer key identifier, discriminated expected head, sealed artifact input, optional runtime-custodied verified history, warnings-only receipts, and a caller-retained idempotency key.



● Artifact ID

● Expected head

● Verified history

● Issuer key ID

● Exact bytes

● Idempotency

ISSUER RESOLUTION

A key identifier never becomes key authority.

issuerKeyId selects one admitted Identity Seal. The receiving runtime resolves the key from independently verified identity artifact truth. Chronos, database order, insertion order, or caller-supplied public key material cannot select the issuer.



- Identifier
- Runtime resolution

- Identity artifact
- Verified key

RECONCILIATION PLAN

A batch plan has its own portable identity.

The v113 plan may coordinate multiple independently authorized history additions. It binds attempt, domain, tenant, actor, artifact, candidate, expected and proposed heads, ordered additions, registry, matrix, derived effects, idempotency identity, and plan digest.



- Attempt

- Ordered additions

- Plan digest

- Expected head

- Effects

PER-HANDOFF AUTHORITY

The final capability cannot rewrite history.

Every intermediate handoff independently verifies predecessor, authorizing owner, Identity Seal issuer, successor identity, applicable law, namespace reduction, key state, revocation state, event digests, and proof/Kai order.



● Predecessor

● Successor identity

● Proof order

● Owner authority

● Key state

TEN HANDOFFS

Each owner authorizes the next owner.

For a ten-handoff descendant, A authorizes A to B, B authorizes B to C, and each later owner authorizes only its lawful successor. One invalid intermediate transition rejects the complete descendant atomically.



● A to B

● C to D

● Reject one invalid link

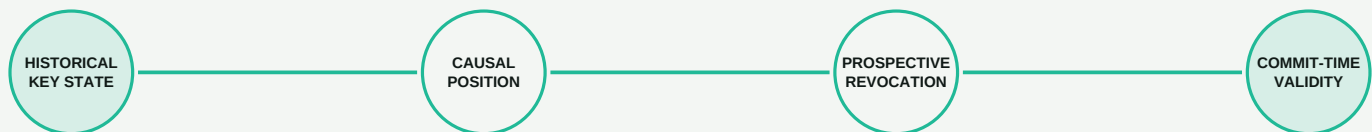
● B to C

● Continue causally

REVOCATION

Key state is evaluated at each causal position.

A later prospective revocation does not erase an earlier lawful transition. Historical key state comes from admitted identity artifacts and verified lineage. The submitter token, account binding, key, and capability must remain valid at commit time.



● Historical key state

● Causal position

● Prospective revocation

● Commit-time validity

ORDERING LAW

Chronos cannot select authority.

Accepted-head lineage, verified predecessor relationships, registry-authorized reducers, and Kai/proof ordering determine authority. Database time, HTTP arrival, storage version time, and Date.parse() remain display or operational mechanics only.



VERIFIED LINEAGE



KAI / PROOF ORDER



NO LATEST TIMESTAMP



NO ARRIVAL WINNER



Verified lineage



Kai / proof order



No latest timestamp

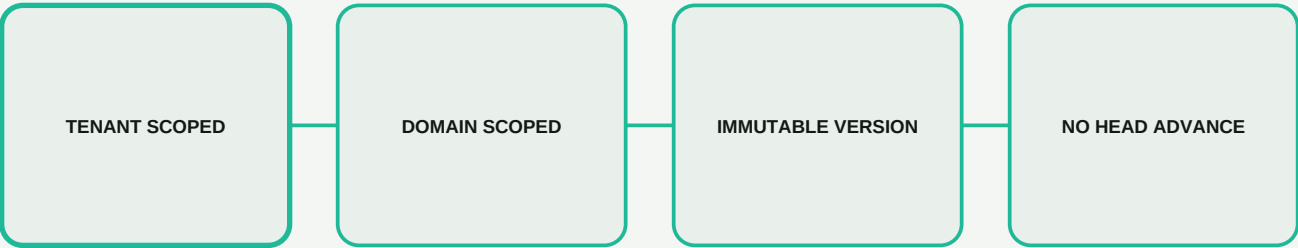


No arrival winner

NEUTRAL STAGING

Private immutable staging accepts no head.

The v113 staged reconciliation reference binds domain, tenant, artifact, artifact digest, plan digest, proposed head, byte length, immutable object version, storage integrity, and storage-key digest. Staging changes no ownership or accepted state.



- Tenant scoped
- Immutable version

- Domain scoped
- No head advance

OBJECT VERSION

Commit resolves the exact immutable version.

The committer rechecks byte length, storage-integrity digest, artifact digest, plan identity, proposed head, tenant, and domain against the exact object version. It cannot accept whatever bytes happen to exist at a logical path.



● Resolve version

● Check digests

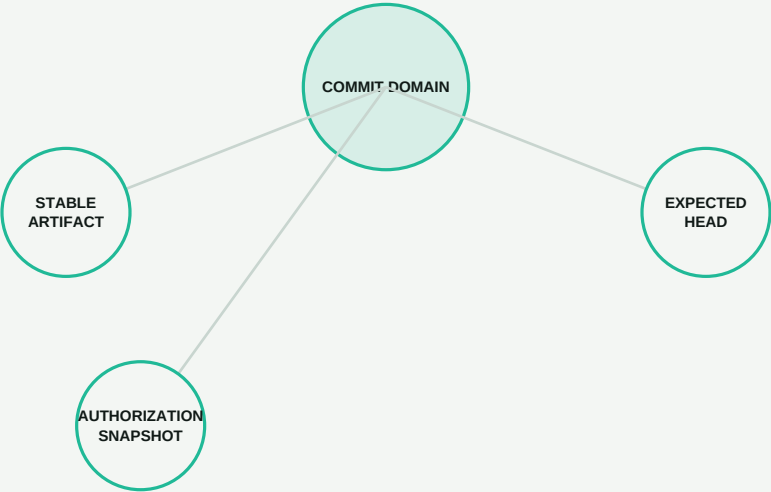
● Check length

● Check scope

ATOMIC LOCK

One domain-resource pair is serialized.

The production transaction locks the pair (commitDomain, stableArtifactId). Expected head, authorization epoch, capability, token, account, tenant, key state, idempotency, and command identity are compared from one consistent commit snapshot.



- Commit domain
- Expected head
- Stable artifact
- Authorization snapshot

COMMIT VERIFICATION

The server independently verifies again.

Immediately before acceptance, the committer streams or safely spools exact staged bytes, recomputes the artifact digest, verifies the complete artifact and every handoff, reconstructs the plan, resolves the admitted issuer, and verifies capability binding.



● Resolve

● Stream

● Reverify

● Reconstruct

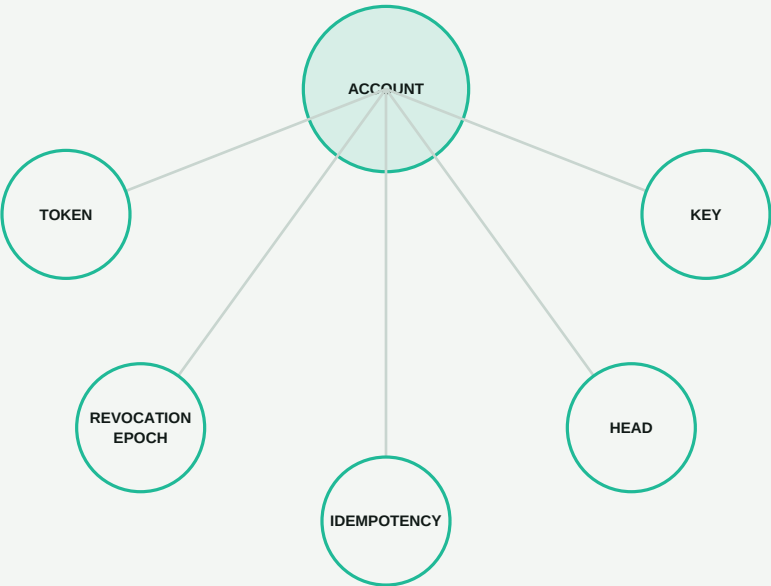
● Authorize

● Accept

AUTHORIZATION SNAPSHOT

Mutable authority is checked at commitment.

The atomic boundary compares account, tenant, token, Identity Seal key, capability, revocation epoch, expected head, and idempotency state. A change returns `AUTHORIZATION_STATE_CHANGED` or a specific conflict with zero authority-bearing writes.



● Account

● Key

● Head

● Token

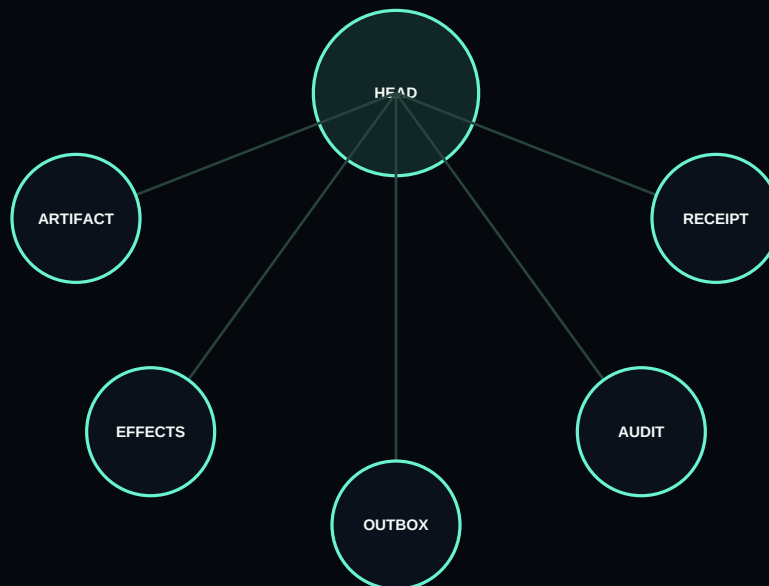
● Revocation epoch

● Idempotency

ATOMIC WRITES

Acceptance is one transaction or none.

Accepted head, artifact digest, immutable reference, command identity, ordered additions, scoped idempotency, reporting receipt, effects state, audit reference, and outbox intents are recorded atomically. External effects are not delivered inside the transaction.



● Head

● Receipt

● Audit

● Artifact

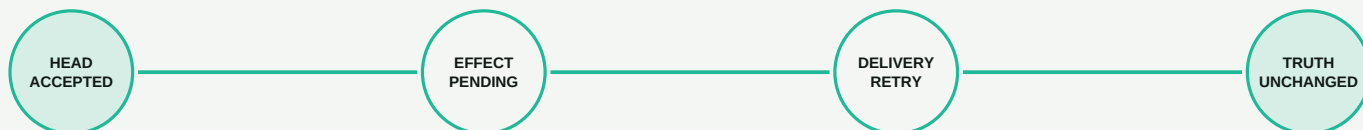
● Effects

● Outbox

ACCEPTANCE VERSUS EFFECTS

Accepted does not mean delivered.

Accepted means the named domain advanced its artifact head. Payment, notification, public indexing, game projection, and other external effects remain independently delivered, observable, retryable, and unable to reverse accepted artifact truth.



● Head accepted

● Delivery retry

● Effect pending

● Truth unchanged

RECONCILIATION RECEIPT

The receipt reports the acceptance basis.

The v113 receipt names artifact.reconcile, domain, reported actor, artifact, prior and accepted heads, plan, capability, command, scoped idempotency identity, and effect report. It explicitly records that it is not proof authority.



● Artifact

● Heads

● Effects

● Reported actor

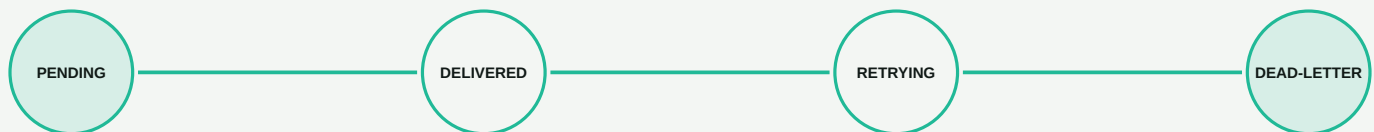
● Plan

● No authority

EFFECT LIFECYCLE

Effects have their own observable state.

The effect resolver reports none, pending, delivered, retrying, or dead-letter. At-least-once delivery, duplicate suppression, bounded retries, and dead-letter handling coordinate consequences without changing the accepted artifact.



● Pending

● Delivered

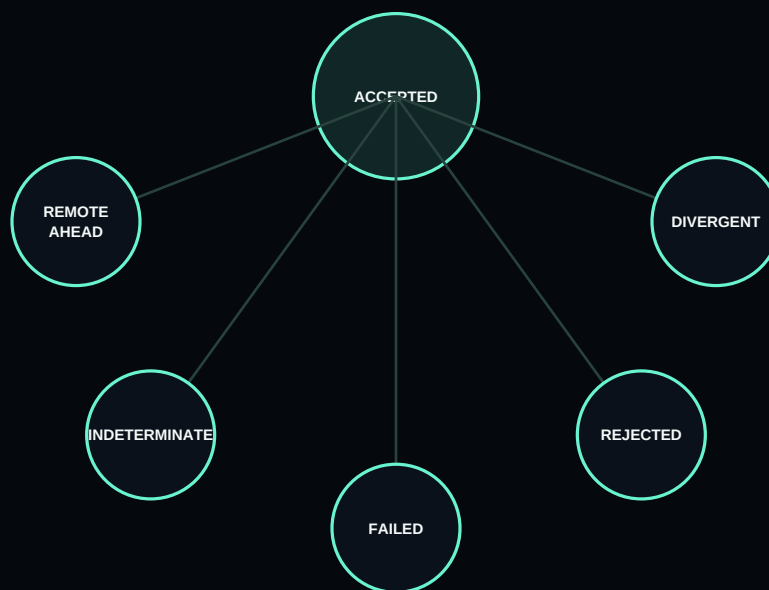
● Retrying

● Dead-letter

RESULT LANGUAGE

Every reconciliation outcome is explicit.

The closed result language distinguishes idempotent, already-accepted, accepted, remote-ahead, divergent, rejected, indeterminate, and failed. Raw idempotency keys never appear in returned values.



● Accepted

● Divergent

● Rejected

● Remote ahead

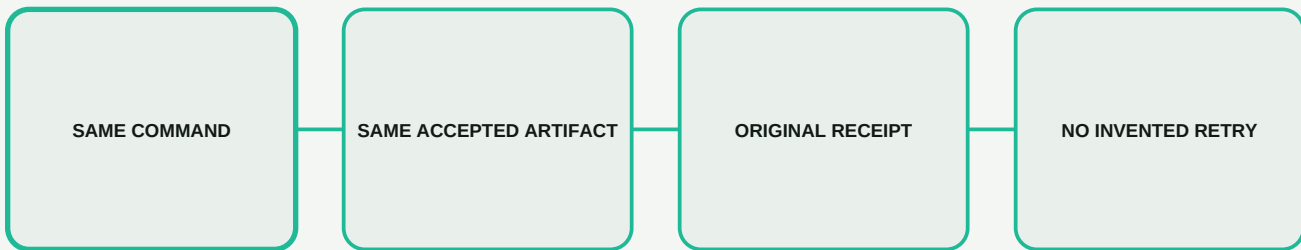
● Indeterminate

● Failed

IDEMPOTENCY

Idempotent and already accepted are different facts.

Idempotent returns the original result for the same scoped command. Already accepted reports that the same artifact head arrived through another command and creates no caller-specific receipt, idempotency success, outbox intent, or new effects.



● Same command

● Original receipt

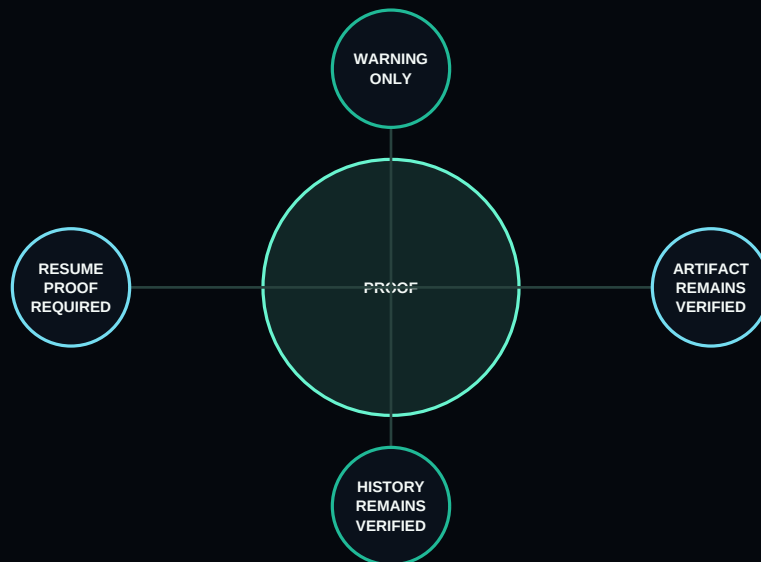
● Same accepted artifact

● No invented retry

LOCAL RECEIPTS

Receipt inconsistency warns; it does not rewrite proof.

Local receipts are optional reporting-consistency evidence. A mismatch yields `LOCAL_RECEIPT_INCONSISTENT` and cannot invalidate a verified artifact or history. Only a claimed prior-attempt resumption may be rejected for mismatched attempt evidence.



● Warning only

● Artifact remains verified

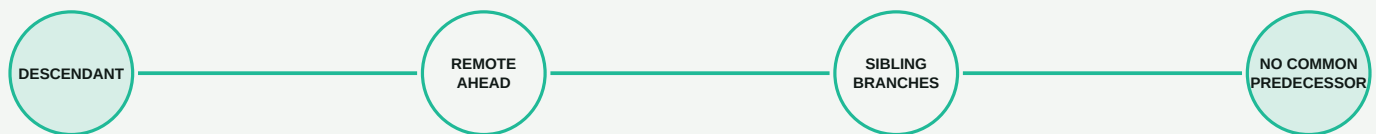
● History remains verified

● Resume proof required

DIVERGENCE

Verified sibling branches stay divergent.

A local verified descendant may be accepted. A verified remote descendant returns remote-ahead. Valid siblings return SIBLING_BRANCHES or TARGET_NAMESPACE_CONFLICT. No common predecessor rejects. Every non-acceptance path performs zero authority-bearing writes.



● Descendant

● Sibling branches

● Remote ahead

● No common predecessor

NO SILENT MERGE

No clock or server chooses a winner.

V113 performs no automatic merge, CRDT reconciliation, rebase, last-write-wins, latest-revision selection, timestamp winner, server-selected winner, or silent conflict resolution. Deterministic rebasing is outside this release.



NO LWW



NO AUTO-MERGE



NO TIMESTAMP WINNER



NO SILENT REBASE



No LWW



No auto-merge



No timestamp winner



No silent rebase

INDETERMINATE RECOVERY

A lost response is not a failed commit.

COMMIT_OUTCOME_UNKNOWN preserves the original attempt and scoped idempotency identity. The lawful next action is an identical retry with the original key or read-only attempt resolution. A new attempt identity cannot erase uncertainty.



- Original attempt
- Original key
- Resolve
- Recover exact result

MONOTONIC RESOLUTION

Verified knowledge cannot roll backward.

Accepted-head resolution verifies the authenticated handshake, retrieves exact bytes without exposing storage URLs, independently verifies them, and proves the returned head equals or descends from knownHead. An ancestor response returns REMOTE_HEAD_ROLLBACK_DETECTED.



● Known head

● Authenticated response

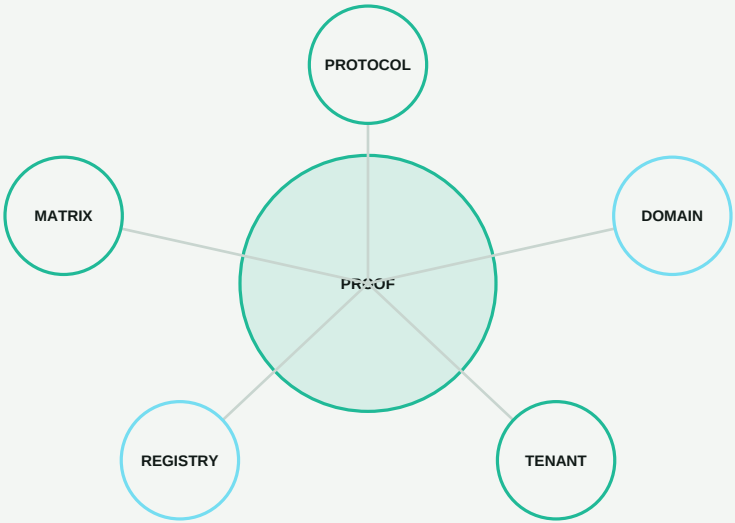
● Exact bytes

● Equal or descendant

RESPONSE HANDSHAKE

Remote results bind protocol and scope.

The handshake binds protocol, commit domain, tenant, account, registry, operation matrix, accepted artifact digest, and accepted history head. Domain, protocol, registry, matrix, or scope mismatch fails closed before runtime-custodied artifact truth is exposed.



● Protocol

● Tenant

● Matrix

● Domain

● Registry

● Head

TENANT PRIVACY

Private resolution is non-enumerable.

Authenticated tenant/account scope is required unless registry law explicitly allows public resolution. Missing and unauthorized are intentionally opaque. Public digest enumeration, cross-tenant deduplication signals, direct storage URLs, and provider IDs are forbidden.



● Authenticated scope

● Opaque not found

● No enumeration

● No direct URL

PROTOCOL LIMITS

Artifact and archive limits are signed law.

The registry freezes 500 MiB exact artifacts, 5,000 archive entries, 1 GiB per decompressed entry, 2 GiB total decompression, one root container, zero nested archives, and bounded compression ratios and paths.

500 MiB artifact

5,000 entries

1 GiB entry

2 GiB total

- 500 MiB artifact

1 GiB entry

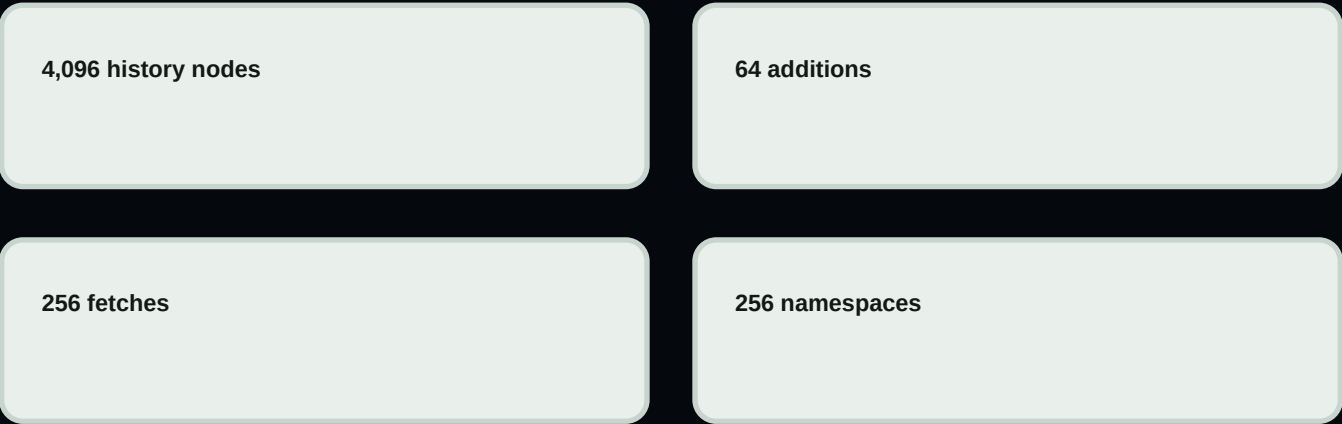
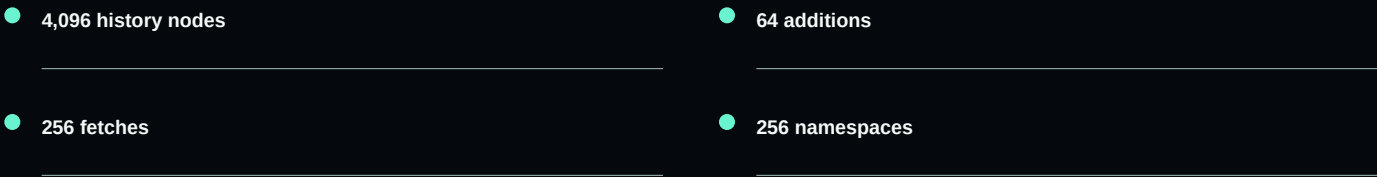
No nesting
- 5,000 entries

2 GiB total

HISTORY LIMITS

Causal verification remains deterministically bounded.

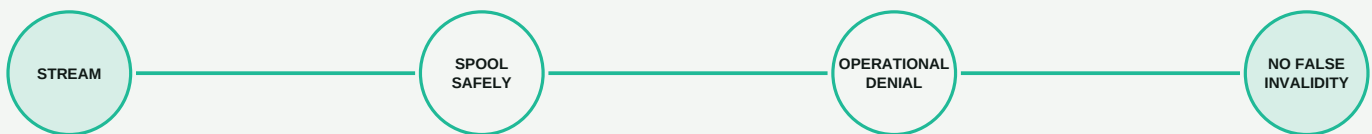
The registry permits 4,096 verified history nodes, 64 additions per reconciliation, 256 predecessor fetches, 256 namespaces, 4,096 reducer operations, and 4,096 law-expression operations.



RESOURCE OUTCOMES

Resource exhaustion is not cryptographic invalidity.

Verification streams or safely spools exact and decompressed bytes.
Budget or resource exhaustion returns
VERIFICATION_BUDGET_EXCEEDED or
VERIFICATION_RESOURCE_UNAVAILABLE. It does not claim that an
unprocessed artifact is invalid.



● Stream

● Operational denial

● Spool safely

● No false invalidity

SERVICE POLICY

Quotas protect the rail, not artifact truth.

Authenticated service policy limits staging, active attempts, request rates, and processing budgets. It may tighten under load but cannot exceed protocol maxima, enter proof digests, authorize mutations, or mislabel a lawful artifact as invalid.

2 GiB account staging

4 active attempts

20 mutations/min

300 second wall budget

● 2 GiB account staging

● 4 active attempts

● 20 mutations/min

● 300 second wall budget

STORAGE LIFECYCLE

Accepted bytes remain exactly resolvable.

Accepted artifact bytes and bytes referenced by idempotent results remain retained. Unreferenced neutral staging becomes cleanup-eligible after seven Chronos days only after reference checks. Chronos may schedule neutral cleanup because it does not order history.



● Retain accepted bytes

● Check neutral orphan

● Protect references

● Cleanup mechanics only

ZERO-WRITE FAILURE

Every failed authority boundary writes no authority.

Verification, history, capability, account, tenant, revocation, expected-head, idempotency, concurrency, staging-integrity, and divergence failures create no head, ownership, effect, outbox, authoritative audit, projection, success record, or committed receipt.



NO HEAD



NO OWNERSHIP



NO EFFECTS



NO RECEIPT



NEUTRAL STAGE ONLY



No head



No ownership



No effects



No receipt

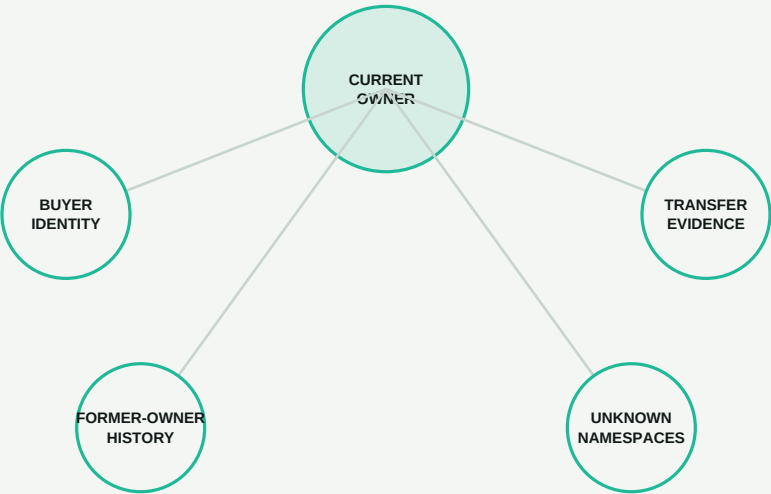


Neutral stage only

OWNERSHIP TRANSITION

One current owner; every former owner retained.

ownership.transition requires current-owner authority, admitted buyer identity, required transfer or settlement evidence, and the exact prior ownership head. The reducer preserves every former owner and unknown namespace while denying stale prior-owner action.



- Current owner
- Buyer identity
- Transfer evidence
- Former-owner history
- Unknown namespaces

TIMESTAMP LAW

Causal proof determines what happened.

Verified predecessor relationships, accepted-head lineage, registry reducers, and Kai/proof ordering select authority. recordedAt, created_at, insertion order, HTTP arrival, object-version time, and Date.parse() remain non-authoritative display and operations data.



LINEAGE



KAI



REDUCERS



NO CHRONOS AUTHORITY



Lineage



Kai



Reducers

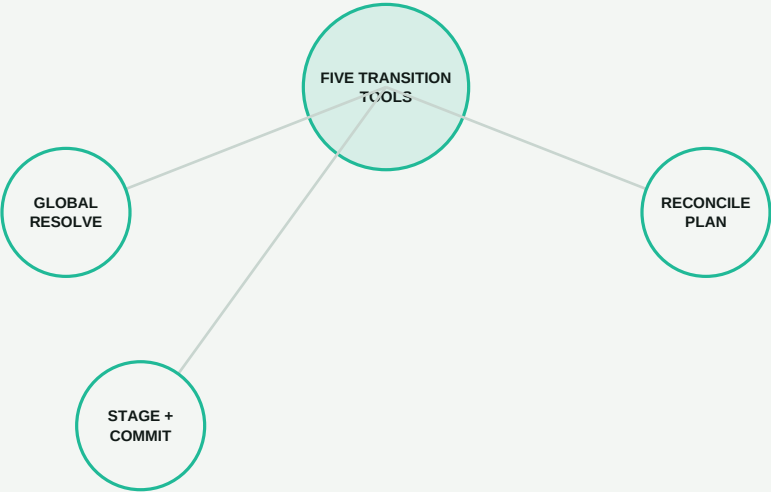


No Chronos authority

MCP CONTRACT

Five frozen tools plus four reconciliation tools.

The five v112 artifact transition tools remain exact. V113 adds global resolve, reconcile plan, reconcile stage, and reconcile commit. Resolve and plan are read-only, stage writes neutral bytes only, and commit requires distinct confirmation.



- Five transition tools
- Global resolve
- Reconcile plan
- Stage + commit

APPLICATION MATRIX

Two operations extend the frozen v112 matrix.

The recursively frozen current v113 matrix adds artifact.global.resolve and artifact.offline.reconcile while retaining the v112 matrix for historical targets. Its digest is 091ab9e6...e783b.



● Historical v112 matrix

● Global resolve

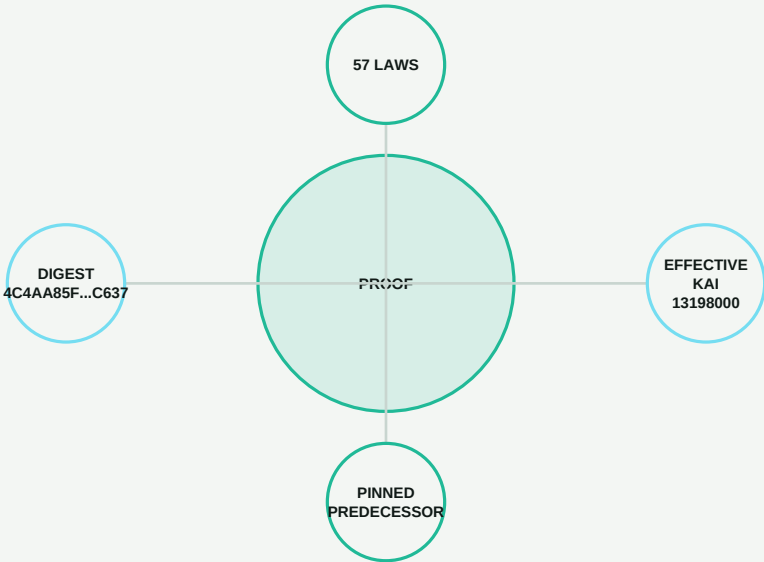
● Offline reconcile

● Current v113 alias

REGISTRY LOCK

The current registry is pinned to v112.

The deterministic unsigned v113 registry contains 57 laws, effective Kai 13198000, predecessor digest 1356f812...146ee, and exact current digest 4c4aa85f...c637. Its payload records that sealed Receiz proof objects remain stronger truth.



- | | |
|--|--|
| <ul style="list-style-type: none">57 laws | <ul style="list-style-type: none">Effective Kai 13198000 |
| <hr/> | <hr/> |
| <ul style="list-style-type: none">Pinned predecessor | <ul style="list-style-type: none">Digest 4c4aa85f...c637 |
| <hr/> | <hr/> |

EXECUTABLE DOCUMENTATION

Packed examples are release evidence.

Canonical README, compiler, SDK, MCP, and AI skill examples execute against clean packed tarballs. The Node validator uses only declared dependencies. One active nine-tool inventory prevents parallel mutation languages.



- Pack
- Run examples

- Install cleanly
- Validate inventory

PRIVATE MIGRATION

The migration is additive and coordination-only.

Private tenant/domain-scoped tables, immutable staging, accepted-head state, scoped idempotency, receipts, authorization epochs, effect outbox, and attempt recovery support the named rail. No row becomes artifact, identity, ownership, or history truth.

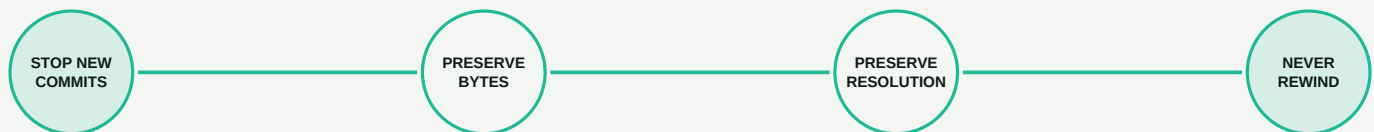


- Private RLS
- Tenant scoped
- Coordination only
- Not applied

ROLLBACK LAW

Disable writes without erasing accepted truth.

Rollback may stop new planning, staging, and commitment while preserving accepted immutable bytes, head records, idempotency and attempt resolution, read-only retrieval, ownership history, and effect observability. It cannot rewind a head.



● Stop new commits

● Preserve resolution

● Preserve bytes

● Never rewind

RELEASE EVIDENCE

The exact tree passes the v113 gates.

The release lock, reconciliation suite, packed-package qualification, production build, governance controls, and umbrella release freeze cover ownership succession, two-device contention, causal handoffs, monotonic resolution, first paint, bounded verification, and zero-write failures.

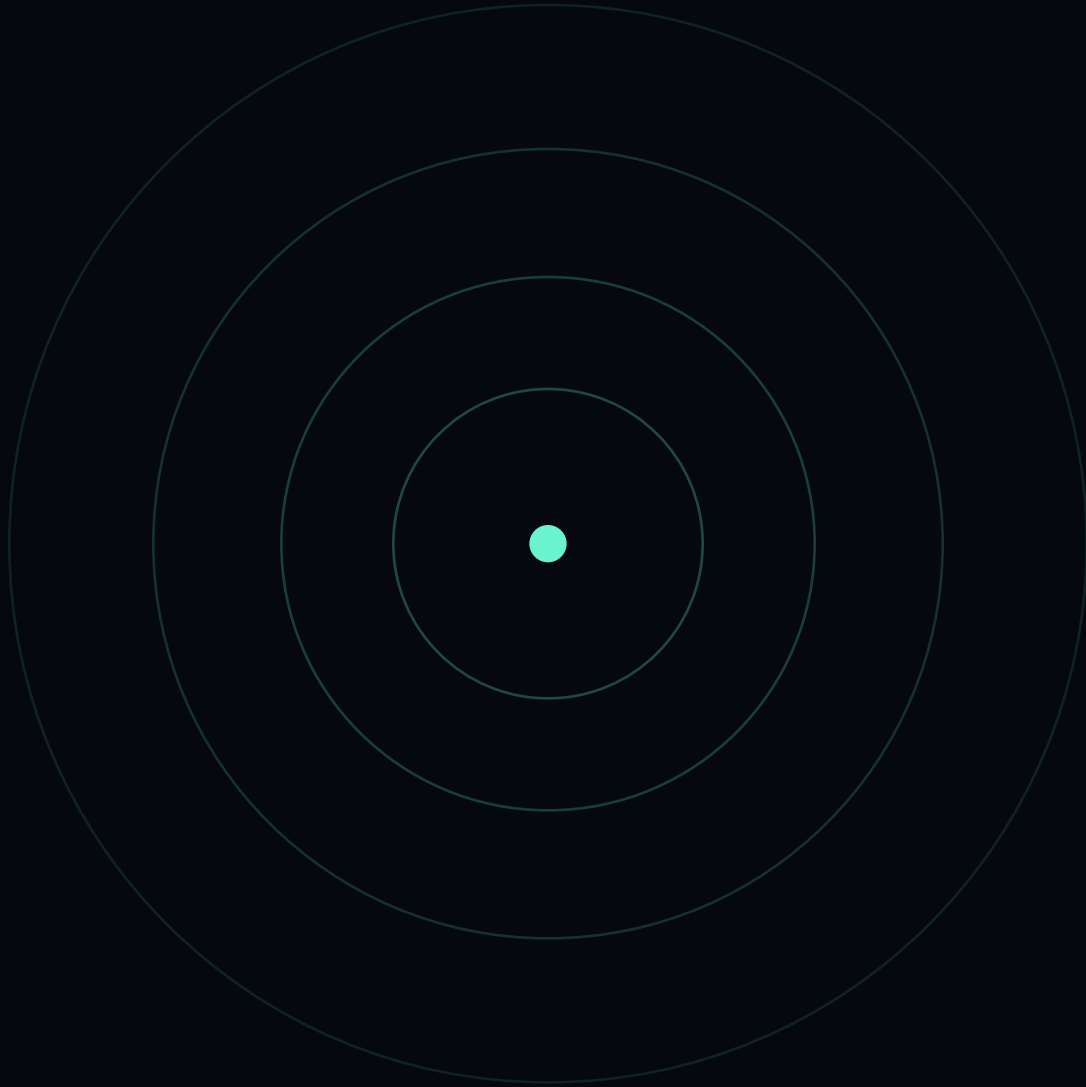


● v113 release lock

● Reconciliation suite

● Packed packages

● Release freeze



Artifact truth determines what exists.
The named domain coordinates acceptance.

Verified history determines what lawfully happened. Effects arrive later.

RECEIZ / v113.0.0 / PRODUCTION GLOBAL RECONCILIATION

EXACT BYTES / CAUSAL HISTORY / IDENTITY SEAL / NAMED DOMAIN