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Release of a Contribution Encumbrance: Matched-Pair Re-Admission or a Substitution With an Empty Intersection

When an AI agent severs or quarantines a counterparty whose material trained its models, the filed architecture neither retrains nor deletes. It writes a contribution-encumbered attribute into every endpoint whose recorded contribution set carries a settled contribution identifier of that counterparty, and dispatch to those endpoints becomes inadmissible for any action whose affected-party class maps to that counterparty. Release of a Contribution Encumbrance, disclosed in U.S. Provisional Application No. 64/117,812, governs the exit from that state. The attribute is released only by one of two recorded conditions: a fresh matched pair in which the receiving agent offers and the counterparty re-admits each settled contribution identifier, or a substitution event whose successor recorded contribution set omits every identifier of that counterparty, demonstrated by an empty intersection. On either, the agent decrements the encumbrance count and removes the narrowing record, and the attribute is marked released and never deleted. No elapse of time, no successor signed policy object, and no lifting of quarantine alone releases it.

Marking a Model Without a Way Out

A counterparty contributed training material. The receiving agent (100) admitted it as the second governed observation (610) of a matched pair (600), computed a settled contribution identifier as a digest over the resulting settlement-lineage entry (606), retrained, and recorded against the retraining event the set of settled identifiers it incorporated, being that event's recorded contribution set. Later the relationship ends: the agent severs the counterparty, or writes a quarantine attribute into the counterparty identity record (114).

The filed disclosure answers that event without altering the artifact. The agent neither retrains nor deletes. It enumerates every endpoint whose recorded contribution set contains a settled contribution identifier of that counterparty and writes into each a contribution-encumbered attribute naming the counterparty, the identifiers, and the condition relied upon. It maintains per endpoint an encumbrance count of distinct encumbering counterparties, incremented per new counterparty, and narrows that counterparty's scope object by an encumbrance narrowing record. Dispatch to each encumbered endpoint is thereby inadmissible for any action whose affected-party class maps to that counterparty. The narrowing is evaluated at the dispatch-authority predicate and, when it withholds, appended as a positive abstention. Every one of those acts is performed from the agent's own state, without adjudication by any other party.

That is the state entered. Exit is governed by a separate filed paragraph, and the filing treats it as a closed question. Three routes out are foreclosed by name: elapse of time, a successor signed policy object (112), and the lifting of the quarantine attribute that occasioned the mark, standing alone. None of the three releases the attribute. Two recorded conditions remain, and the first of them turns on the counterparty's own signed observation.

Two Recorded Conditions, and No Third

A contribution-encumbered attribute is released only by one of two recorded conditions.

The first is a matched pair (600) re-admitting the contribution. The receiving agent (100) emits a fresh contribution-scope offer as the first governed observation (608), naming each settled identifier of the counterparty. The counterparty emits a re-admission as the second governed observation (610). On settlement the agent appends an encumbrance release record.

Two structural facts attach to that first observation. It originates with the receiving agent, the party holding the mark, rather than with a request the agent would receive from the counterparty. And the re-admission runs through the gate that admitted the material in the first place. Under the filed corpus-contribution paragraph, a counterparty's training-corpus contribution is admitted only as the second governed observation (610) of a matched pair whose first observation (608) is a contribution-scope offer enumerating the corpus policy version, the scope partitions in which a retrained model will be held and registered, and the action classes for which it will be dispatched. Material entered by settlement; it re-enters by settlement.

The settlement machinery is that of Section 6 of the filing. A matched pair (600) is recognized by a pairing rule within one or more of a spatial proximity window and a temporal proximity window (602), each such window declared in the governing policy object, and settlement occurs upon recognition and admission of the pair, finality attaching at that moment. The pair is bound into a settlement record (604) comprising the two signed observations, a cryptographic binding over both, and an attestation of the window within which the pair was recognized. Each party writes a settlement-lineage entry (606) into its own append-only lineage field (104), and that entry is neither removed nor modified. Two observations failing the pairing rule, or falling outside an applicable proximity window, produce a rejection recorded with the measured and required windows and the failing element. Where a first governed

observation (608) receives no matching second within the temporal proximity window (602), a timeout detector identifies it, and a timeout resolves nothing against either party.

The second condition is a substitution event whose successor recorded contribution set omits every settled identifier of that counterparty, demonstrated by an empty intersection. It names no observation of the counterparty. A recorded contribution set is the set of settled identifiers a retraining event incorporated, matched to corpus material by digest equality alone. What the filed paragraph requires is an intersection that is empty; no threshold, proportion, or residual estimate stands in for it.

On either condition the agent decrements the encumbrance count and removes the narrowing record, whereupon dispatch ceases to be inadmissible, and the attribute is marked released and never deleted.

Interaction with the encumbrance bound is conditioned rather than automatic. The signed policy object (112) declares an encumbrance bound upon the per-endpoint encumbrance count. Where the count exceeds that bound, the receiving agent writes a designation and applies two bars: no value derived from that endpoint record is promoted to a higher persistence tier or admitted as a promotion input, and the agent does not emit that endpoint or its artifact to a peer semantic agent (100) as a tool source. A peer's request for it is withheld and appended as a positive abstention naming the count and the bound, transmitting to the peer no count, no encumbering-counterparty identity, and no quality measure. Both bars release when the count ceases to exceed the bound by operation of the two release conditions, and by no other condition. A release decrements the count; whether the bars lift depends on whether the decremented count still exceeds the bound.

Neither route calls in a third party. The acts written on severance are performed from the agent's own state without adjudication by any other party, and where release proceeds by the first condition the settlement itself requires no third-party

intermediary, no centralized consensus, and no pre-negotiated session state between the parties.

What the Policy Object Declares, and What It Leaves Open

The filed disclosure declares the parameters of this mechanism by reference to policy rather than by value. What follows states what is declared and, where no value accompanies a declaration, says so.

- **Encumbrance bound.** Declared in the signed policy object (112) as a bound upon the per-endpoint encumbrance count. The filed disclosure states no numeric value for it.
- **Proximity windows and pairing rule form.** Declared in the governing policy object, which the filing defines as a signed policy object (112) resolved for the settlement context, issued by a deploying authority and bearing a policy identifier and a successor index. No duration, radius, or window value is stated. Where the parties resolve different policy objects, each applies its own.
- **Encumbrance count.** A count of distinct encumbering counterparties, incremented per new counterparty and decremented on release.
- **Empty intersection.** A set condition. The filed paragraph declares no tolerance, fraction, or residual allowance alongside it.
- **Corpus policy version.** Enumerated in the contribution-scope offer, together with the scope partitions and the action classes. The fresh offer under the first release condition additionally names each settled identifier of the counterparty.
- **Release interval, retry count, expiry.** None is declared. Elapse of time is foreclosed as a release condition.

Placement Among the Filed Provenance Embodiments

The parent section of the filing covers tool provenance, reliance, and contested pairing, and carries two distinct attributes over the same endpoint record.

A provenance-withdrawn attribute is written when a party named in a derived-artifact provenance chain emits a provenance withdrawal that the consuming agent verifies and admits. Its reach is broad: the agent thereafter routes no request to that endpoint, appending each withheld dispatch as a positive abstention rather than a denial, and it re-marks its own already-produced determinations whose dispatch falls within a re-marking window declared in the signed policy object (112). The downstream gate it raises is cured, and only cured, by re-derivation against a registered endpoint bearing no withdrawn attribute or by a positive abstention appended in respect of the class. No elapse of time and no successor signed policy object (112) cures it.

The contribution-encumbered attribute, by contrast, is written on severance or quarantine of a contributing counterparty, and its reach is narrower: dispatch is inadmissible for actions whose affected-party class maps to that counterparty. Its exit is the pair of recorded conditions set out above. For both attributes the filing rules out elapse of time and a successor signed policy object (112); neither cures the provenance gate, and neither releases the encumbrance.

Upstream sits the admission gate. The settled contribution identifier is computed at admission as a digest over the settlement-lineage entry (606), and it is the same identifier a fresh offer must name at release.

Downstream sit the bound and the peer-facing commitment. Under the filed encumbrance-commitment embodiment, an emitted endpoint may carry, for each settled contribution identifier in its recorded contribution set, a blinded identifier computed as a digest over that identifier under a blinding value declared in the corpus policy and emitted with the commitment, the blinded values ordered by magnitude rather than by contribution order. A peer holding a settled identifier of a counterparty

it has itself severed computes that identifier's blinded value under the emitted blinding value, tests membership in the commitment, and on a hit writes its own contribution-encumbered attribute and narrows its own counterparty scope object. That peer learns no contributor identity it does not already hold and no quality or standing measure of any party.

Release also composes with the recomputation discipline of the filing. The agent recomputes its dispatch-authority predicate at each request to dispatch an action, from state then carried in its memory field (102), and the encumbrance narrowing is evaluated at that predicate. Under the conversion bar (502), a withholding that stood while the encumbrance was live is a positive abstention, foreclosed from conversion into a scalar value, a default value, an operand of a threshold comparison, or a consequence adverse to any party.

Adjacent Categories and Where They Stop

Several established categories address neighboring problems, each a legitimate solution to what it was built for. The distinctions below are structural.

Machine unlearning and influence-removal techniques operate on model parameters, seeking to remove or approximate the removal of a contribution's effect. The filed mechanism operates elsewhere: on severance the agent neither retrains nor deletes, and what changes is the admissibility of dispatch. A parameter-level procedure has no bilateral release record to append and no counterparty to re-admit.

Access-control revocation and entitlement systems, capability revocation and license termination among them, clear an entitlement by an act of a controlling authority or by a policy push. That path is foreclosed here by name: a successor signed policy object (112) does not release the attribute.

Data-deletion and retention pipelines, tombstones and time-to-live expiry included, clear state by deletion or by the passage of time. Under the filed paragraph the attribute is never deleted, and elapse of time releases nothing.

Certificate revocation lists and status-checking protocols distribute revocation entries from an issuing authority, with validity intervals and refresh schedules. Release as filed is computed by the agent from its own state, and its first condition turns on the counterparty's own signed observation.

Provenance and lineage catalogs record where training material came from and describe it for a reader. In the filed structure the record establishing provenance, the settled contribution identifier, is itself the operand of the gate, and release removes the gate.

Consent-management platforms capture withdrawal and later re-grant of consent, the re-grant typically recorded by the controller alone. The first release condition here is a matched pair (600) in which both parties emit signed governed observations bearing authority credentials, each party writing a settlement-lineage entry (606) into its own append-only lineage field (104).

None of the foregoing asserts that any product or implementation practices, or fails to practice, the disclosed mechanism.

Disclosure Scope

The mechanism described here is disclosed in U.S. Provisional Application No. 64/117,812, at Section 10.5, Tool provenance, reliance, and contested pairing, paragraph [0405], Release of a contribution encumbrance. Its antecedents are paragraph [0403], matched-pair-gated corpus contribution and the settled contribution identifier, and paragraph [0404], contribution encumbrance on severance or quarantine. Its consequents are paragraph [0406], the encumbrance bound barring

promotion and onward emission, and paragraph [0407], the encumbrance commitment that travels with an emitted endpoint. The settlement machinery it relies upon is disclosed in Section 6, Matched-Pair Settlement, and the abstention and conversion-bar discipline it operates under in Section 5, Adverse-to-No-Party Abstention and the Conversion Bar.

This article is a technical description published for disclosure purposes and establishes public, timestamped prior art as of its publication date. It is not a claim construction and does not define claim scope. Where the filed application declares a parameter without a value, this article says so rather than supplying one.

Governed Matched-Pair Settlement

All 49 steps → (/inventive-steps)

(/governed-settlement)

Two agents settle on matched signed observations, by continuity, with no clearer.

Provisional application

PRIMARY TECHNICAL DISCLOSURE

- Matched-Pair Settlement Between Agents: Bilateral Closure Without a Clearer (/articles/governed-settlement/matched-pair-settlement-without-a-clearer)

SECONDARY TECHNICAL

- The Derived-Artifact Provenance Chain and Chain-Head Identifier (/articles/governed-settlement/derived-artifact-provenance-chain)
- Provenance Withdrawal and the Provenance-Withdrawn Attribute (/articles/governed-settlement/provenance-withdrawal)
- Matched-Pair-Gated Corpus Contribution (/articles/governed-settlement/matched-pair-gated-corpus-contribution)
- Partition-Scoped Escrow Release Gated on Intersection Non-Emptiness (/articles/governed-settlement/partition-scoped-escrow-release)

- The First-Encounter Settled Pair and Promotion to the Persistent Tier (/articles/governed-settlement/first-encounter-settled-pair)
- Contribution Encumbrance on Severance or Quarantine: Governing Dispatch to Models Trained on a Severed Counterparty's Corpus Without Retraining or Deletion (/articles/governed-settlement/contribution-encumbrance-severance-quarantine)
- Encumbrance Bounds That Bar Persistence Promotion and Onward Tool-Source Emission Once the Per-Endpoint Count Exceeds the Bound (/articles/governed-settlement/encumbrance-bound-barring-promotion-onward-emission)
- Blinded Encumbrance Commitments: Carrying a Severed Contributor's Encumbrance Along With an Inference Endpoint Emitted to a Peer Agent (/articles/governed-settlement/encumbrance-commitment-travelling-emitted-endpoint)
- **Release of a Contribution Encumbrance: Matched-Pair Re-Admission or a Substitution With an Empty Intersection (/articles/governed-settlement/release-contribution-encumbrance)**
- Registering Third-Party Reliance on a Settled Matched Pair: The Reliance Record and the Settled-Party Reliance Register (/articles/governed-settlement/reliance-record-registered-settled-parties)
- Conditioning a Settlement Reversal on a Reliance-Completeness Predicate Evaluated Over the Reverting Party's Own Reliance Register (/articles/governed-settlement/reliance-completeness-predicate-conditioning-reversal)
- The Relying Party's Reversal Mark: Barring a Reversed Settlement as a Determination Input and Re-Resolving the Determination That Consumed It (/articles/governed-settlement/relying-party-reversal-mark-and-re-resolution)
- Transitive Reliance Records and the Reliance Chain: Registering Second-Order Dependency on a Settlement Without Any Party Enumerating the Whole Chain (/articles/governed-settlement/transitive-reliance-record-reliance-chain)
- Transitive Reversal Notices That Carry a Settlement Reversal One Hop at a Time Along a Reliance Chain No Party Enumerates (/articles/governed-settlement/one-hop-propagation-reversal-along-reliance)
- Contested Pairing in Matched-Pair Settlement: Withheld Recognition, a Distinct-Identity Claimant Count, and the Not-Determinable Resolution (/articles/governed-settlement/contested-pairing-not-determinable-resolution)
- Attributable Contest Resolution: Settling a Contested Offer by Re-Emitting a First Governed Observation That Names Exactly One Claimant (/articles/governed-settlement/attributable-contest-resolution-named-re-emission)
- Local Outcome-Quality Records and Smoothed Endpoint Selection Preference for Governed Inference Dispatch (/articles/governed-settlement/outcome-quality-record-endpoint-selection-preference)

APPLICATIONS · GENERAL

- B2B Agent Commerce: Bilateral Settlement Without a Clearing House (/articles/governed-settlement/b2b-agent-commerce-settlement)
- Supply Chain Handoffs: Settling a Transfer on Matched Observations (/articles/governed-settlement/supply-chain-agent-handoffs)

APPLICATIONS · SPECIFIC

- ISO 20022 and Settlement Messaging: Matched Pairs in Financial Infrastructure (/articles/governed-settlement/iso-20022-settlement-messaging)

TERMINOLOGY

- governed observation (/glossary#governed-observation)
- matched pair (/glossary#matched-pair)
- scope partition (/glossary#scope-partition)

Governed Matched-Pair Settlement overview → (/governed-settlement)