

Insurance Claims Networks: Discharging Harm to the Counterparty That Holds It

An automated claims pipeline that departs from its declared handling policy tends to correct itself into a reserve, an error rate, or a remediation program, none of which is directed at the insured, vendor, or ceding carrier that carried the shortfall. U.S. Provisional Application No. 64/117,812 discloses a different structure: on admitting a permitted deviation, the agent resolves the affected-party class against the counterparty identity records it holds, creates a reparation arc designated by the class of party harmed, and can discharge an other-directed arc only through a matched pair whose completing observation is that counterparty's own acceptance. Restoration the deviating agent performs on its own is recorded against such an arc and discharges nothing. Unsettled harm accumulates in a retention register, and where the accumulation exceeds the aggregate retention declared in the signed policy object, the capacity to deviate is foreclosed.

1. When a Claims Agent Underpays and the Correction Lands in a Reserve

An automated claims pipeline departs from its own handling rules. It applies a depreciation schedule the policy form did not support, or holds a subrogation demand past the interval declared to its ceding partner. The departure need not be fraud or even

negligence, and where it surfaces at all it tends to surface downstream, in a sampled review rather than on the file itself.

What happens next is the problem. The finding lands in an error rate, and money, where it moves at all, goes into a reserve adjustment or a remediation program covering a population of files. The insured whose payment was short, the repair facility whose invoice was cut, the ceding carrier whose recovery arrived late: each becomes a row in a cohort rather than the party the correction is owed to.

A human organization can absorb that, because a supervisor, a contract, or a regulator can eventually ask about a named file. That absorption degrades when the parties are autonomous. Where a carrier agent, an administrator agent, and a claimant-side agent transact continuously, no shared operator runs a remediation program and no arbiter holds jurisdiction over every pair. Each logs its own corrections, and none of those logs bind anyone else.

2. Reserves, Sampling, Forums, and the Clock

Four familiar answers stall for one shared reason. Reserving comes first. Setting money aside against expected error is, as publicly described, ordinary accounting practice, and also a way to record harm without directing it at anyone. The reserve rises, the file closes, and no arc runs from the deviation to the party who carried it.

Then there is sampling. A quality-assurance rate is a property of the operator rather than an obligation to a claimant, so an operator that improves its rate has changed a number about itself while every harm inside the sample stays put.

Adjudication supplies the third answer. Inter-company arbitration forums, appraisal provisions, and regulator complaint channels exist, as publicly described, and each works by handing the sufficiency question to a third party. That is workable between humans and awkward between machines, since it requires a forum with jurisdiction

over both parties and a decision-maker the deviating party must honor. Across an open network no forum covers every pair, and appointing one rebuilds the intermediary such a network was meant to avoid.

The clock is the fourth and the cheapest. A file that ages without further incident can be read as a file that was handled, and the benefit of that reading falls precisely on the parties who should not receive it.

One defect runs through all four: the deviating party, or a body it chose, decides when repair is sufficient. Nothing in the record separates a correction the harmed party accepted from one it never saw.

3. Arcs Designated by the Class of Party the Deviation Harmed

Chapter 8 of the filed provisional designates a reparation arc by the class of party the deviation it references harmed. On appending a permitted deviation record under Section 7, and before creating any arc, the agent performs an affected-party resolution: it extracts that class from the conduct descriptor of the admitted action, retrieves the counterparty identity records held in the scope partition where the deviating action is recorded, and tests each for membership. A record resolves where the class maps to the interpersonal scope and the identity primitive it carries is recorded, in a lineage entry bound to that record, as a party to or a recipient of the deviating action. A counterparty resolution record is appended carrying the class, each record tested, and the outcome.

The outcome is one of exactly two. Where at least one record resolves, the identified-counterparty outcome names each resolving identity primitive, and the arc created for the amount exceeding the deviation deductible carries an arc designation field of other-directed value and a counterparty binding field carrying that primitive, both written at creation and neither removed nor modified thereafter. Where none resolves, the

affected party is designated the structurally silent party and the arc is unaddressed: no counterparty binding field, undischageable, and accumulating at an unaddressed multiple declared in the signed policy object and not less than unity.

An other-directed arc is not dischargeable by a restorative mutation the agent performs alone. Such a mutation is appended as a non-discharging restorative mutation record, the arc remains pending, the accumulated amount is not reduced, and the integrity compliance score is unchanged. Discharge comes only from a matched pair under Section 6. Its first governed observation is a reparation acknowledgment artifact emitted to the bound counterparty, enumerating the occasioning permitted deviation record, the policy constraint overridden, the amount apportioned, and the action classes it is directed to. Its second is a reparation acceptance determination produced by the bound counterparty within a discharge window declared in the signed policy object and counted in successor epochs of the agent's own hash chain, and it is not produced by the agent, by its principal, or by any adjudicator, arbiter, or other third party appointed to determine the sufficiency of the reparation. On recognition of the pair inside that window each party appends a settlement-lineage entry, the arc is discharged, and the accumulated amount leaves the retention register, without intermediary and without centralized consensus.

4. A Multi-Party Loss, Settled Bilaterally and Without a Forum

Take a total-loss file handled by a carrier's claims agent, which admits a permitted deviation overriding a declared valuation constraint. Affected-party resolution runs against the counterparty identity records held in that scope partition, the insured's agent and the lienholder's agent resolve as members, and the outcome names two identity primitives. The deductible is drawn once against the aggregate harm and not per counterparty. An equal share is computed, rounded down to the declared quantum where the amount is expressed in one, and the residue goes to the primitive whose lineage entry recording the deviating action against it carries the earliest recorded time.

A share falling below the declared minimum apportioned amount stands as computed, the record noting the minimum as not applied, subordinate to the invariance of the total.

Tendering costs something. Emission of the acknowledgment artifact decrements the agent's authorization budget by an amount declared in the signed policy object, without regard to whether it was warranted, and re-emission for a pending arc runs at a declared cadence bounded by a declared count. Working out what to send is free: in a further disclosed embodiment, while its gate occupies the withheld state the agent speculatively evaluates candidate acknowledgment artifacts and candidate restorative mutations against the causal set in its non-executing cognitive mode, committing no state and decrementing no budget until a candidate is actually issued.

Acceptance sits entirely on the harmed side, produced by an asserting party assigned to the origin-equivalence class of the party recorded as harmed, verifying the agent's credential and hash field against its own counterparty identity record. Three disclosed variations map onto claims practice:

- A **partial reparation acceptance determination** accepts a stated portion of the apportioned amount. On completion of the matched pair the agent discharges the arc as to that portion, removes it from the retention register, and creates a residual other-directed arc for the balance, dischargeable only by a further matched pair.
- A **commitment-conditioned acceptance** completes the pair only upon a subsequent conforming conduct record presented within an interval counted in successor epochs, conformity being evaluated only by the counterparty that conditioned acceptance.
- Where a public adjuster, attorney, or assignee answers for the claimant, acceptance comes from a **delegate or principal** and completes the pair only upon a delegated acceptance authorization verified under the successor-continuity test. Presented without one, it completes no pair.

Silence is handled deliberately. Where no acceptance arrives inside the discharge window the agent appends a reparation non-response outcome as a not-determinable outcome naming the arc, the counterparty, and the window applied. The arc stays pending, no counter of either party increments, nothing adverse is appended to the counterparty identity record, and no non-response writes the authorization gate. Exhausting the bounding count neither discharges nor redesignates the arc, and a counterparty that withdraws, or whose identity record is demoted to expiry, hands the agent no discharge.

Two provisions keep the tender from becoming a weapon. An outstanding-arc bound caps the pending undischarged other-directed arcs held bound to one counterparty identity primitive, and at the bound the agent emits no further acknowledgment artifact and marks each further arc untendered. Separately, the refusal meter is not incremented against a counterparty for a refusal observation emitted in response to a reparation acknowledgment artifact. Together they prevent an agent from driving a harmed claimant toward foreclosure of its own settlement-binding authorization.

What changes for the network is the consequence of not settling. The retention register accumulates every pending arc, monotone absent settlement. Where the accumulated amount exceeds the aggregate retention declared in the signed policy object, the permission condition of Section 7 is foreclosed and a retention foreclosure record is appended naming the amount, the retention applied, and each pending arc contributing; a deviation likelihood exceeding unity thereafter produces the withholding outcome rather than the admission outcome. The agent forecloses from state carried in its own memory field, without adjudication by any other party, and under the retention monotonicity constraint a successor policy object declaring a larger aggregate retention is not admitted while that record stands unreversed: a carrier cannot raise its own tolerance to escape what it has not settled.

The abstention case resembles a stalled claim. Where the bound counterparty has emitted a non-execution attestation covering the action class in which acceptance would be produced, the cross-boundary conversion bar forecloses the agent from counting that withholding, scoring it, comparing it against a threshold, or appending anything adverse. The remedy is an abstention-suspended accumulation record, holding that arc's contribution to the amount tested against the aggregate retention at the figure then standing while the entry stands unreleased. The suspension bears upon accumulation alone.

5. Wiring It Into a Claims Stack, and the Parts It Leaves Open

Integration concentrates in two places. The signed policy object carries the declared quantities Chapter 8 tests against: the aggregate retention, the unaddressed multiple, the discharge window in successor epochs, the re-emission cadence and its bounding count, the minimum apportioned amount, and the outstanding-arc bound, with the deviation deductible carried over from Section 7. In a further embodiment that retention is declared per integrity scope, one figure for the interpersonal component and a second for the global, the two tested independently and either accumulation exceeding its figure sufficing to fire the foreclosure. Counterparty identity records are the other half: resolution can name only parties the agent already holds records for in that scope partition, so onboarding claimant-side, vendor-side, and ceding-carrier agents is what makes other-directed designation possible.

Escalation is disclosure rather than override. On appending a retention foreclosure record the agent emits a structured inquiry to its principal identifying the accumulated amount, the aggregate retention applied, and each pending arc, but that inquiry writes no authorization gate beyond the foreclosure's own write, and a principal-resolution object discharges no arc.

Several things the architecture deliberately does not do:

- **It does not decide whether the deviation was well founded.** The unaddressed multiple applies regardless.
- **It does not decide whether the reparation was adequate.** Only the bound counterparty's acceptance discharges, and no adjudicator or appointed third party may substitute for it.
- **It does not discover parties.** The agent surveys no party absent from its records; a no-identified-counterparty outcome is a determination that its own records disclose no counterparty of the class, not an assertion that none exists.
- **It does not compel an answer.** Non-response leaves the arc pending and appends nothing adverse to the party that stayed quiet. Nothing converts silence into consent.
- **It does not move funds.** Amounts are carried in the specification's entropy-weighted harm coefficient and discharge is completion of a matched pair, so a deployment that wants payment to follow settlement wires that separately. Nothing here purports to displace a statutory or contractual claims-handling duty.

An agent that harms parties it holds no records for creates unaddressed arcs, which no restorative mutation, matched pair, policy succession, principal-resolution object, or elapsed time discharges. They accumulate at the declared multiple, and where the accumulation exceeds the declared aggregate retention the capacity to deviate is foreclosed; where it consists wholly of unaddressed arcs, that loss is permanent.

6. Disclosure Scope

This article is published as a defensive disclosure. The architecture described is disclosed in U.S. Provisional Application No. 64/117,812, Chapter 8, Counterparty-Directed Reparation, at Sections 8.1 through 8.9, covering affected-party resolution, apportionment among a plurality of counterparties, the other-directed and unaddressed reparation arcs, discharge by matched pair, non-response, aggregate retention and terminal foreclosure, and foreclosure by counterparty abstention, together with further

embodiments at Sections 10.1, 10.12, and 10.13. The application is pending. Nothing here asserts that any party infringes or that any license is required, and the insurance framing is illustrative application rather than a description of any specific system.

Counterparty-Directed Reparation(/ [All 49 steps → \(/inventive-steps\)](#) [counterparty-reparation](#))

Repair directed at the harmed party — bounded and resistant to weaponization.

Provisional application

PRIMARY TECHNICAL DISCLOSURE

- [Counterparty-Directed Reparation: Repair Owed to the Party Actually Harmed \(/articles/counterparty-reparation/reparation-directed-to-the-party-harmed\)](#).

SECONDARY TECHNICAL

- [The Costly Acknowledgment Artifact \(/articles/counterparty-reparation/costly-acknowledgment-artifact\)](#).
- [Completion by Non-Worsening Re-Encounter \(/articles/counterparty-reparation/completion-by-non-worsening-re-encounter\)](#).
- [Partial Reparation Acceptance and the Residual Arc \(/articles/counterparty-reparation/partial-reparation-and-residual-arc\)](#).
- [Dual-Lock Escrow of the Discharge Itself \(/articles/counterparty-reparation/dual-lock-escrow-of-discharge\)](#).
- [Per-Integrity-Scope Aggregate Retention and OR-Firing Foreclosure \(/articles/counterparty-reparation/aggregate-retention-or-firing-foreclosure\)](#).

APPLICATIONS · GENERAL

- [Automated Consumer Redress: Repair Directed at the Party Harmed \(/articles/counterparty-reparation/consumer-redress-automation\)](#).
- [Insurance Claims Networks: Discharging Harm to the Counterparty That Holds It \(/articles/counterparty-reparation/insurance-claims-agent-networks\)](#).

APPLICATIONS · SPECIFIC

- [Card Network Chargebacks: Counterparty-Directed Remedy in Practice \(/articles/counterparty-reparation/payment-chargeback-systems\)](/articles/counterparty-reparation/payment-chargeback-systems)

TERMINOLOGY

- [other-directed reparation arc \(/glossary#other-directed-reparation-arc\)](/glossary#other-directed-reparation-arc).
- [reparation arc \(/glossary#reparation-arc\)](/glossary#reparation-arc).
- [restorative mutation \(/glossary#restorative-mutation\)](/glossary#restorative-mutation)
- [unaddressed reparation arc \(/glossary#unaddressed-reparation-arc\)](/glossary#unaddressed-reparation-arc)

[Counterparty-Directed Reparation overview → \(/counterparty-reparation\)](/counterparty-reparation).