

When Doing Nothing Is the Answer and Nothing Records It

A partner-operations lead at a mid-size freight brokerage arrives on an ordinary Tuesday to find that one of her customs-documentation partners has been de-listed overnight by her own agent fleet, and she cannot say which missing input caused it. The absence was folded into a reliability figure days ago, and the figure cannot be run backward. What she owes the partner is a reason, and the reason is the one thing her console did not keep. U.S. Provisional Application No. 64/117,812 discloses an architecture in which an unavailable input produces a recorded abstention outcome that a consuming determination is foreclosed from converting into a magnitude, and in which the identity of the missing input remains recoverable from the lineage record.

The Tuesday the Partner Went Dark

A partner-operations lead at a mid-size freight brokerage opens her console in the second week of the quarter. One of the firm's customs-documentation partners has fallen under the counterparty floor her fleet uses to decide where filings are routed, and the automatic de-listing ran overnight without anyone touching it. Work that used to go to that partner is now going to a costlier alternate, and the partner's account manager has already called twice.

Her task this morning is small and specific. She has to tell that account manager which thing went wrong.

She opens the counterparty view and finds a reliability figure below the floor, a timestamp, and a routing change. Underneath it is a rolling window of interaction outcomes. She widens the window and reads. Several entries in it are not outcomes at all. They are the shape her fleet gives to interactions that produced no answer: dispatches sent into a quiet channel during a stretch when the partner's own agent was not executing that class of work. In her setup, each of those quiet dispatches landed in the same accumulator as a genuine bad outcome, because the accumulator she configured takes a number and a quiet channel had to become some number for the window to close.

She can see that the figure moved. She cannot see what moved it. The entries that would have named the unavailable input were consumed into the average that replaced them, and the average is the only thing her console retained. What she has to hand the account manager is a downgrade with a date on it and nothing behind the date.

What She Cannot Get Back

Her routing decision is reversible. Her team can re-list the partner by hand this afternoon, and the alternate's higher rate stops accruing the moment they do. That is not the loss.

The loss is the reason. Once each quiet interaction in her window was resolved into a contribution to a scalar, the identity of the missing thing stopped existing anywhere in her deployment. Her pipeline kept no second copy, and the averaging step she configured runs one way only: to read her figure backward she would need exactly the information her pipeline spent to compute it. She can rebuild an approximate story

from partner emails and shipment records, but what she would be handing over is a reconstruction she assembled this week, not something her fleet recorded that Tuesday, and she knows the difference will matter to her if this becomes a contract dispute.

It matters sooner than that. Her firm's agreement with that partner carries a service tier tied to measured performance, and her firm has now acted on a measurement she cannot defend. If the partner asks her to substantiate the downgrade, the honest answer in her deployment is that the number is real and its cause is gone. That answer costs her the relationship regardless of who was actually at fault, because a partner she cannot give a reason to has nothing to correct on her behalf and no ground to believe her fleet will not do it again next quarter.

There is a second thing she does not get back. Her fleet has been running this way for three quarters. Every de-listing before this one was computed the same way, and each of those reasons is gone too, on the same arithmetic. She is not looking at an incident. She is looking at the point where she found out that her deployment had never been keeping the thing she now needs.

Why an Absence Kept Becoming a Number

Nothing in her setup was built carelessly. The difficulty she is looking at has a structural shape.

Her pipeline is staged. A dispatch produces an interaction outcome, the outcome feeds a window, the window feeds a reliability figure, and the figure feeds a threshold test that decides routing. Every stage after the first was written to accept a value. When her first stage had no value to give, something had to be supplied for her next stage to run at all, and in her deployment the thing supplied was a default. The default was chosen sensibly, and it was still an assertion about the partner that no one had made.

Were her stages free to emit something other than a value, the pressure would let up. As her fleet is configured today they are not. A threshold test in her pipeline takes a number and returns a Boolean, and it will take whatever number reaches it. There is no position in her design from which a stage can say that the question it was asked has no answer and hand that fact forward as the answer. In her pipeline the absence had nowhere to sit, so it was made into the nearest available thing that could sit there.

Compounding it, for her purposes, is that the conversion happened early and quietly. By the time the missing input became visible to her as a downgrade, it had passed through three stages that each treated it as ordinary. No stage in her pipeline was wrong on its own terms. Her loss came from the composition of her stages, and that composition is where she has the least visibility.

And her partner is running an agent too. The quiet channel was not a fault on either side. It was the partner's agent declining to execute a class of work, which in her deployment arrived as silence, because silence was the only channel her fleet gave that condition to travel on.

The Filed Mechanism: An Absence With a Type

U.S. Provisional Application No. 64/117,812 describes, in an embodiment, an architecture built around a different premise: that no determination stage of that architecture converts unavailability of a required input into an adverse consequence for any party.

In an embodiment, a degradation map (500) enumerates, for each determination stage, the input required, the abstention outcome produced when that input is unavailable, and the consequence foreclosed at that stage. Where an input required by a determination is unavailable, incomplete, or unresolvable, the determination emits an outcome entry of a recorded abstention class identifying the unavailable input, rather than an outcome adverse to the semantic agent (100), to an asserting party (118), or to a

counterparty. The filing recites specific paths. A lineage-unavailable path, where the append-only lineage field (104) is silent as to an asserted conduct, has the admission evaluator (120) produce the not-determinable determination (126), foreclosing the rejected determination (124). A non-response path, where no acceptance determination arrives within the window declared in the signed policy object (112), records the outcome as not-determinable and holds the authorization gate (300) in its provisional granting state, foreclosing resolution of the matter against the non-responding party. The filing describes one exception to the abstention pattern: where a reason-type cannot be resolved, an embodiment bounds the magnitude of modification to the non-zero minimum declared in the signed policy object (112), the consequence foreclosed at that path being a magnitude of zero rather than an adverse magnitude.

The disclosed conversion bar (502) is what addresses the arithmetic. In an embodiment, an abstention outcome is represented in a form disjoint from the domain of values a consuming determination can consume as a magnitude, realized by a type discipline in which an outcome entry and a magnitude are values of disjoint types and no total function maps the former to the latter. A threshold comparison (510) of such an entry emits an outcome of the recorded abstention class and does not emit a Boolean. An accumulation over a set containing such an entry emits an abstention outcome and does not emit a sum computed over the remaining members of the set. The filing describes the foreclosure as affirmative, arising from the structure of the values rather than from an absence of defined behavior, and describes an embodiment in which the type discipline is enforced statically before instructions execute, so that a consuming determination attempting the conversion is not constructible.

Propagation is described as first-class. In an embodiment, an abstention outcome is appended to the append-only lineage field (104) with the abstention class, an identifier of the stage that produced it, an identifier of the unavailable input, and a recorded time. A further determination consuming it emits an abstention outcome of its own recorded class, not replaced, resolved, or defaulted at any stage, so that the chain terminates in

an abstention outcome at the final consuming determination and the identity of the unavailable input remains recoverable by following the abstention propagation chain (508).

The silence on the wire is addressed too. In an embodiment, a disclosing agent that has written its authorization gate (300) to the withheld state (310) for an enumerated set of action classes and transitioned into the non-executing cognitive mode (302) constructs a non-execution attestation (504) carrying the withheld action-class enumeration, an attested epoch field, an abstention-class type marker whose declared type is the abstention type (506), and an express non-determination designation stating that the attestation is not a determination and is not a denial of any dispatch. A receiving agent that verifies the attestation writes a carried abstention entry as a value of the abstention type (506), adopting the type designation as received rather than re-deriving it. The filing recites four foreclosed conversions across that boundary: no scalar, default, or threshold operand; no increment of any counter of the disclosing agent, including the refusal counter (304); nothing adverse appended to the counterparty identity record (114); and subsequent non-response in a withheld class recorded as a not-determinable outcome that resolves nothing against either party, irrespective of how many such non-responses accumulate.

What the Disclosed Architecture Does Not Reach

Read honestly against her situation, the disclosure leaves real work on her side of the line.

It does not restore what her pipeline already spent. The described lineage behavior is prospective in character, and were she to adopt an architecture of this kind tomorrow, the three quarters of de-listings behind her would remain exactly as unexplainable as they are this morning.

It does not decide her commercial policy. The filing describes outcomes conditioned on what a signed policy object (112) declares, including windows, minimums, closed enumerations of abstention classes, and time-to-live values. Which of those her firm should declare, and what her contract with a partner should say about a class held in abstention for a long stretch, is her judgment and not something the disclosed structure supplies.

It does not promise her a routing answer. The filing describes a counterparty-absence path producing a third outcome, being neither execution of the action nor a denial of it, in which the agent emits a structured inquiry naming the absent class and enumerating delegation alternatives, and contracts the partition capability envelope until the absence is cured. That path tells her what is missing and what would satisfy the requirement. It does not tell her that a suitable partner exists.

And it does not reach beyond her agent boundary. Elsewhere in this filing, separate sections govern admission of determinations, origin-equivalence, gate behavior, and budgeting; the mechanisms described above concern how an absence is recorded, typed, and carried, not how a counterparty outside her fleet chooses to run.

Disclosure Scope

This article is a technical description of subject matter disclosed in U.S. Provisional Application No. 64/117,812. Mechanism names, outcome words, and reference numerals used above are drawn from that filing and describe embodiments disclosed there.

Nothing here characterizes the scope of any claim, present or future, or should be read as limiting any claim to the embodiments described. Nothing here is an admission as to the state of the art, and no statement about the difficulties faced by the party described above is a statement about what any other system does. No company, product, or service is identified, and nothing here asserts that any party requires a license.

Positive Abstention and the Conversion Bar (</positive-abstention>)

[All 49 steps → \(/inventive-steps\)](#)

Refusing to act is a first-class, recorded outcome — and can't be laundered into acting.

Provisional application

PRIMARY TECHNICAL DISCLOSURE

- [Positive Abstention: Withholding as a First-Class, Non-Convertible Outcome \(/articles/positive-abstention/withholding-as-a-first-class-outcome\)](/articles/positive-abstention/withholding-as-a-first-class-outcome).

SECONDARY TECHNICAL

- [Relay Non-Execution Attestation With Depth and Cycle Bounds \(/articles/positive-abstention/relay-non-execution-attestation\)](/articles/positive-abstention/relay-non-execution-attestation).
- [The Anti-Amplification Bound on Propagated Determinations \(/articles/positive-abstention/anti-amplification-magnitude-bound\)](/articles/positive-abstention/anti-amplification-magnitude-bound)
- [The Attestation Revocation Object \(/articles/positive-abstention/attestation-revocation-object\)](/articles/positive-abstention/attestation-revocation-object)
- [Empty-Intersection Mutual Positive Abstention \(/articles/positive-abstention/empty-intersection-mutual-abstention\)](/articles/positive-abstention/empty-intersection-mutual-abstention).
- [Curing Counterparty Absence by Introduction Protocol \(/articles/positive-abstention/introduction-protocol-cure\)](/articles/positive-abstention/introduction-protocol-cure)
- [Recorded Counterfactual Coupling Test: Detecting When a Counterparty's Silence Moves an Agent's Own Authorization Gate \(/articles/positive-abstention/recorded-counterfactual-coupling-test\)](/articles/positive-abstention/recorded-counterfactual-coupling-test).
- [Self-Execution Intersection Conjunct: Gating Cross-Agent Determination Propagation on the Admitting Agent's Own Per-Partition Execution Record \(/articles/positive-abstention/propagation-admissibility-gate-self-execution-intersection\)](/articles/positive-abstention/propagation-admissibility-gate-self-execution-intersection).
- [Attack-Conditional Cross-Boundary Suspension of Determination Propagation Between Persistent Semantic Agents \(/articles/positive-abstention/propagation-admissibility-gate-attack-conditional-cross\)](/articles/positive-abstention/propagation-admissibility-gate-attack-conditional-cross).
- [Propagation Depth Ceilings for Cross-Agent Determination Records: A Monotonic Anti-Restore-Depth Gate Against Hop-Count Replenishment \(/articles/positive-abstention/propagation-depth-ceiling-anti-restore-depth\)](/articles/positive-abstention/propagation-depth-ceiling-anti-restore-depth).
- [Attestation Staleness Outcome and the Attestation Window Parameter: Bounding the Age of a Carried Withholding Without Recording a Rejection \(/articles/positive-abstention/attestation-staleness-outcome-attestation-window-parameter\)](/articles/positive-abstention/attestation-staleness-outcome-attestation-window-parameter).

- [Evidentiary-Basis Omission for the Receiving Counterparty: Attesting a Withholding Without Naming the Recipient as Its Occasion \(/articles/positive-abstention/evidentiary-basis-omission-receiving-counterparty\)](/articles/positive-abstention/evidentiary-basis-omission-receiving-counterparty).
- [Persistence-Tier Emission Targeting for Non-Execution Attestations: Bounding the Audience of an Agent's Recorded Withholding \(/articles/positive-abstention/non-execution-attestation-emission-targeting-persistence\)](/articles/positive-abstention/non-execution-attestation-emission-targeting-persistence).
- [Restoration Settlement Reference: Releasing a Carried Abstention Entry on a Matched-Pair Settlement Record of Gate Restoration \(/articles/positive-abstention/restoration-settlement-reference-distinct-release-condition\)](/articles/positive-abstention/restoration-settlement-reference-distinct-release-condition).

APPLICATIONS · GENERAL

- [Safety-Critical Autonomy: Recording a Refusal to Act as a First-Class Outcome \(/articles/positive-abstention/safety-critical-autonomy-abstention\)](/articles/positive-abstention/safety-critical-autonomy-abstention).
- [Clinical Decision Support: When the Correct Output Is No Output \(/articles/positive-abstention/clinical-decision-support-abstention\)](/articles/positive-abstention/clinical-decision-support-abstention).
- [When Doing Nothing Is the Answer and Nothing Records It \(/articles/positive-abstention/positive-abstention-stakes\)](/articles/positive-abstention/positive-abstention-stakes).

APPLICATIONS · SPECIFIC

- [NIST AI Risk Management Framework: Where Abstention Fits in Agent-to-Agent Conduct \(/articles/positive-abstention/nist-ai-rmf-abstention\)](/articles/positive-abstention/nist-ai-rmf-abstention).
- [ServiceNow AI Agents: When the Correct Outcome Is No Action \(/articles/positive-abstention/service-now-ai-agents\)](/articles/positive-abstention/service-now-ai-agents).
- [Copilot Studio: Recording a Withholding as a Real Outcome \(/articles/positive-abstention/copilot-studio-abstention\)](/articles/positive-abstention/copilot-studio-abstention).
- [Bedrock AgentCore: Session Isolation and Governed Abstention \(/articles/positive-abstention/bedrock-agentcore-abstention\)](/articles/positive-abstention/bedrock-agentcore-abstention).
- [Inngest: Durable Waits and Withholding as an Outcome \(/articles/positive-abstention/inngest\)](/articles/positive-abstention/inngest).

TERMINOLOGY

- [abstention outcome \(/glossary#abstention-outcome\)](/glossary#abstention-outcome).
- [conversion bar \(/glossary#conversion-bar\)](/glossary#conversion-bar).
- [non-execution attestation \(/glossary#non-execution-attestation\)](/glossary#non-execution-attestation).
- [positive abstention \(/glossary#positive-abstention\)](/glossary#positive-abstention).

Positive Abstention and the Conversion Bar overview → (/positive-abstention).