Nick Clark · Published July 23, 2026 · PDF

The Attestation Revocation Object

When one autonomous agent tells another that it is withholding a class of action, the second agent carries that withholding as a durable abstention and stops dispatching into the withheld class. The open question is how the first agent later says the opposite, that the class is available again, without the announcement being taken as evidence that it executed the class, as a fault of either party, or as an act of an outside authority. The attestation revocation object, disclosed in U.S. Provisional Application No. 64/117,812, is the governed message by which a disclosing agent retracts its own prior non-execution attestation. It carries the agent's authority credential, its continuity hash, a successor epoch, and a reference to the attestation revoked. On verification the receiving agent releases the carried abstention entry for each enumerated action class and records the release, incrementing no counter and producing no determination concerning either party.

1. The Gap

An agent that has published a withholding needs a way to take it back. In the portable-abstention design, when a disclosing agent writes its authorization gate (300) to the withheld state (310) for a set of action classes, it emits a non-execution attestation (504). A receiving agent verifies that attestation and writes it as a carried abstention entry, after which the receiving agent's dispatch-authority predicate fails for those

classes toward that counterparty. The abstention is durable by construction. It does not decay through the receiving agent's own retries, and no accumulation of non-responses clears it.

That durability is the point, and it creates the gap. The disclosing agent may discharge the condition that occasioned the withholding and return to executing the class, but the counterparty is still holding a live abstention entry and still declining to dispatch. The filed design already supplies several ways out. The receiving agent can release a class on a fresh unmarked execution record, on a superseding attestation that omits the class, on a settlement record returning the gate to the granting state, or on elapse of the attestation's time-to-live. Each of those conditions asks the receiving agent to observe something independent of a bare statement from the disclosing agent, and the time-to-live path is expressly no evidence that the class has been restored.

None of them lets the disclosing agent state directly that the class is available again. The attestation revocation object is that direct statement. It is authenticated to the disclosing agent and admitted only from it, ordered against the attestation it cancels through a successor epoch, and it carries the filed limitations that it is no evidence of execution, yields no determination, and increments no counter. Those are the properties a bare availability message would lack, and they are what the sections below describe.

2. Mechanism

The attestation revocation object is a governed observation emitted by the disclosing agent. It is not a determination and not a denial. Its structure mirrors the object it cancels, so that the receiving agent can verify it through the same receiver verification it already applies to a non-execution attestation (504).

The object bears four elements. The disclosing agent's authority credential binds the message to the agent's identity. Its continuity hash ties the message to the agent's hash-chained history. An attested epoch, one that is a valid successor of the epoch of the attestation revoked, orders the retraction strictly after the withholding it undoes. And a reference to the specific non-execution attestation being revoked tells the receiving agent which carried abstention entry the message addresses.

On receipt, the receiving agent runs the object through the receiver verification. It checks the authority credential and the continuity hash against the continuity history it holds for the disclosing agent. It applies the successor-continuity test, admitting the object only where the attested epoch is a valid successor of the epoch previously attested by that agent. Because that epoch is drawn from the disclosing agent's own hash chain and not from any wall clock, the ordering cannot be advanced by another party. A revocation that fails any conjunct is appended with its failing element and given no effect, exactly as a failed attestation is.

Where verification succeeds, the receiving agent releases the carried abstention entry as to each action class enumerated in the revocation object, and the failure of the dispatch-authority predicate ceases for those classes toward that counterparty. Release is per action class throughout. A revocation object that enumerates a subset of the withheld classes releases that subset alone; every class the object does not name stays withheld and continues to fail the predicate. The receiving agent appends a release record naming the revocation as the release condition relied upon, and identifying the released classes and the entry released. Consistent with the release discipline of this design, the carried abstention entry is neither removed nor modified. The record is appended rather than substituted, so the history of the withholding and of its retraction both survive in the append-only lineage field (104).

The negative limitations carry as much of the design as the positive structure does. First, the revocation object is not evidence that the disclosing agent has executed an action of any released class: it restores the agent's freedom to act without testifying that

the agent acted. Second, it produces no determination concerning either party, so neither side acquires an accepted or rejected outcome from the retraction. Third, it increments no counter of either party, so a relationship that opens, closes, and reopens leaves no counter incremented on either side. Fourth, it is admitted only when emitted by the disclosing agent itself; a revocation presented by any other party is not admitted, which is what keeps an interested third party from reopening what the disclosing agent chose to close.

Release does not rewrite prior records. The carried abstention entry is neither removed nor modified, and the release is appended rather than substituted, so the records made while the class was withheld survive unchanged in the lineage. The receiving agent recomputes its dispatch-authority predicate at each request to dispatch; after release, that predicate no longer fails for the released classes toward that counterparty. The release reaches nothing already written; it changes only what the predicate does on the next dispatch.

3. Operating Parameters

The revocation object is verification-gated rather than time-gated, and the filed disclosure states its parameters as structural constraints rather than numeric thresholds.

- **Successor ordering.** The attested epoch carried by the object must be a valid successor of the epoch of the attestation revoked. The epoch is an identifier of the disclosing agent's dynamic agent hash chain, not a value read from a clock available to any hosting execution node, so the ordering of the retraction after the withholding cannot be manufactured by another party.
- **Reference binding.** The object references the specific non-execution attestation revoked. It does not act on abstention entries generally; it acts on the entry derived from the attestation it names.

- **Per-class scope.** Release is confined to the action classes enumerated in the revocation object. Unenumerated classes of the same carried abstention entry remain withheld.
- **Emitter restriction.** A revocation is emitted only by the disclosing agent. No revocation emitted by a party other than the disclosing agent is admitted.
- **Verification conjuncts.** Admission requires the authority credential and the continuity hash to verify and the successor-continuity test to pass. A failing revocation is appended with its failing element and given no effect.
- **No counter, nothing adverse.** Admission increments no counter of either party and appends nothing adverse to either counterparty record.

The filed disclosure declares no independent time-to-live, latency bound, or numeric rate for the revocation object. It is deliberately distinct from the time-to-live release condition, under which elapse of the attestation's declared lifetime clears the entry without any statement from the disclosing agent. The revocation object is the disclosing agent's affirmative statement, and it takes effect on verification, not on the passage of time.

4. Composition

The revocation object is one member of a family of release conditions for a carried abstention entry, and it composes with the rest of the portable-abstention machinery rather than standing apart from it.

Within that family, the receiving agent may release a class on presentation of an unmarked execution record verified for the disclosing agent, on a superseding non-execution attestation (504) that omits the class and carries a successor epoch, on a restoration settlement reference recording the gate's return to the granting state through a matched pair (600), or on elapse of the time-to-live. The revocation object is the release condition that requires no independent evidence of restored capability and no waiting. Where the other conditions ask the receiving agent to observe that the

disclosing agent has acted, settled, or timed out, the revocation object lets the disclosing agent retract the abstention directly, under authentication that ties the retraction to the same identity and the same chain as the original withholding.

It shares the release record discipline with every sibling condition. The entry is preserved, the release is appended rather than substituted, and no record written while the class was withheld is reopened in place. It reuses the receiver verification and the successor-continuity test that govern the non-execution attestation (504), so admitting a retraction introduces no new trust machinery.

It sits under the same conversion bar (502) that governs the abstention type (506) throughout this design. A carried abstention entry can never be turned into a scalar, a default, a threshold operand, or an increment to any counter, and the revocation that releases it inherits the same discipline: it moves no standing quantity and writes no adverse attribute. The object is distinct from the widening supersession, which adds a previously unwithheld class to what the counterparty carries, and from the omission-based release, in which a superseding attestation drops a class. Where a single superseding attestation both omits one class and adds another, those are recorded as separate operations; the revocation object is a further, express instrument for retracting classes the disclosing agent already withheld.

5. Prior-Art Distinction

The nearest genuine category is external revocation infrastructure for autonomous agents. Credential and certificate revocation systems, revocation lists, and online status-check protocols issue and withdraw an agent's credentials from an identity provider or control plane, terminating the agent's ability to act by an act of the controlling authority. Those systems point the other way from the object described here. They withdraw authority from outside the agent; the revocation object is emitted by the very agent whose earlier statement it retracts, and it is admitted only from that agent. They terminate the ability to act; the revocation object reopens a class the agent

had itself declared closed. They mark an identity as no longer trusted, which is an adverse signal a relying party consumes; the revocation object appends nothing adverse, produces no determination, and advances no counter.

A second category is presence and availability signaling in distributed systems, where a service publishes an "available again" status that consumers read as a flag or fold into a health score. The distinction is type discipline. Under the conversion bar (502), a carried abstention entry and its release cannot become a scalar a consumer thresholds, so the release does not degrade into an availability magnitude that constrains the disclosing agent as it moves.

A third category is bilateral settlement and escrow release, where a trusted third party or an on-ledger timelock releases a held asset on a release condition. The revocation object transfers nothing and holds nothing. It carries no value and interposes no intermediary; it verifies a self-emitted governed observation against the disclosing agent's own chain and clears a self-declared withholding.

These distinctions are structural and describe how the disclosed mechanism differs in kind from each category. Nothing here asserts or implies that any product, protocol, or party infringes.

6. Disclosure Scope

The attestation revocation object is disclosed in U.S. Provisional Application No. 64/117,812, at Section 10.8, paragraph [0456], and rests on the portable-abstention foundation of Section 5, including the non-execution attestation (504), the carried abstention entry, the receiver verification, the release record, the conversion bar (502), and the abstention type (506).

What the filing discloses is the object and its operation: a governed observation emitted by the disclosing agent bearing its authority credential, its continuity hash, an attested epoch that is a valid successor of the epoch of the attestation revoked, and a reference to the non-execution attestation revoked; the release of the carried abstention entry as to each enumerated action class on verification under the receiver verification; the appended release record naming the revocation as the condition relied upon; and the limitations that the object is no evidence of execution, produces no determination concerning either party, increments no counter of either party, and is admitted only when emitted by the disclosing agent itself.

What is disclaimed is as important. The disclosure states no numeric threshold, latency bound, or independent time-to-live for the revocation object; readers should not infer one. The object claims no external revocation infrastructure, no identity-provider or control-plane credential withdrawal, and no transfer or settlement of value. It is the disclosing agent's own authenticated retraction of its own prior abstention, ordered against the attestation it cancels, and adverse to no party. This article is a technical description for search and defensive-publication purposes and is not a claim construction; the operative disclosure is the filed provisional application itself.

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)

SECONDARY TECHNICAL

- Relay Non-Execution Attestation With Depth and Cycle Bounds (/articles/positive-abstention/relay-non-execution-attestation)
- The Anti-Amplification Bound on Propagated Determinations (/articles/positive-abstention/anti-amplification-magnitude-bound)
- **The Attestation Revocation Object (/articles/positive-abstention/attestation-revocation-object)**
- Empty-Intersection Mutual Positive Abstention (/articles/positive-abstention/empty-intersection-mutual-abstention)
- Curing Counterparty Absence by Introduction Protocol (/articles/positive-abstention/introduction-protocol-cure)

TERMINOLOGY

- abstention outcome (/glossary#abstention-outcome)
- conversion bar (/glossary#conversion-bar)
- non-execution attestation (/glossary#non-execution-attestation)
- positive abstention (/glossary#positive-abstention)

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