

Curing Counterparty Absence by Introduction Protocol

When a persistent semantic agent reaches a determination that its policy conditions on a counterparty of a required class, and no member of that class is on record, the agent produces neither the action nor a denial. It abstains, and its capability within that scope partition contracts until the gap is filled. The cure of counterparty absence by introduction protocol, disclosed in U.S. Provisional Application No. 64/117,812, closes that gap without a registry: the agent asks a second agent, for which it already holds a counterparty identity record, to introduce a party the second agent holds as a member of the required class. The second agent returns a signed introduction record, the first agent admits it by verifying the signature and testing the attested membership against its own policy object, and it then instantiates a counterparty identity record for the introduced party and treats the absence as cured.

1. The Gap

A governed agent can be stopped by an absence it did nothing to cause. Section 5.5 of the filing describes a determination that the signed policy object (112) conditions on participation, review, acceptance, or receipt by a counterparty of an enumerated class, as where an acceptance determination requires the harmed origin-equivalence class (200). Where such a determination is reached and the counterparty identity records

(114) held for the scope partition concerned contain no admissible member of the required class, the persistent semantic agent (100) produces a third outcome: neither the execution of the action, being a first outcome, nor a denial of it, being a second outcome. The agent transitions into the non-executing cognitive mode (302), emits a structured inquiry to its principal, appends the absence to the per-partition lineage record, and contracts the partition capability envelope so that the action classes conditioned on the absent class fall out of what it may do there.

That contraction is adverse to no party: it moves no value of the scoped integrity vector (106), increments no counter, and records no fault against any party. But it is a standstill, and Section 5.5 states that it persists until the absence is cured by instantiation of a counterparty identity record (114) of an admissible member. One cure is to wait for the missing class of party to arrive and transact. The harder question is what the agent may do to acquire an admissible counterparty on its own, before such a party ever dispatches to it: without a central registry to look one up in, without letting an unvetted party into a policy-scoped class, and without letting a run of introductions manufacture apparent independence among parties that are anything but. The cure of counterparty absence by introduction protocol answers that question.

2. Mechanism

The cure is performed by a signed introduction protocol, disclosed at paragraph [0463] within Section 10.8, the section of the filing that treats chained cross-agent withholding, anti-amplification, and introduction protocols. It has three parts: a request, a returned record, and an admission test, followed by the instantiation that ends the standstill.

The request. The persistent semantic agent (100) dispatches an introduction request that identifies the required counterparty class and the scope partition concerned. It dispatches this request not at large but to a second agent for which it already holds a

counterparty identity record (114), so the introduction is sought from a party it can already name and verify rather than from an anonymous responder.

The returned record. The second agent returns an introduction record. That record comprises three elements. First, an identity primitive of a party the second agent holds as a member of the required class. Second, an attestation, signed by the second agent, that the party is a member of that class. Third, an identifier of the encounter history of the second agent with that party. The signed attestation carries the weight of the record: a statement of class membership under the introducing agent's own signature.

The admission test. The requesting agent does not accept the record on its face. It admits the introduction record by two conjoined verifications. It verifies the signature of the second agent against the identity primitive recorded in the counterparty identity record (114) it already holds for that second agent, so that the introduction is provably from the party it thinks it is dealing with and not a forgery in that party's name. And it tests the attested class membership against the class enumerated in the signed policy object (112), so that the introduced party is admitted into a class the requesting agent's own declared policy recognizes, rather than into a class asserted by the introducer alone. Both must hold. The requesting agent's policy object is the authority on what class the introduced party enters, not the introducer's say-so.

Instantiation and cure. Upon admission, the agent instantiates a counterparty identity record (114) for the introduced party within the scope partition concerned. It records the second agent as the introducing party of that record, a durable attribution that names who brought this party in. It appends the introduction record and the admission performed to the lineage, so that the cure is reconstructible from the record like any other determination. And it treats the absence as cured: because a counterparty identity record (114) of an admissible member now exists in the scope partition, the condition Section 5.5 fixed for restoration is met, and the partition capability envelope

is restored through the same coupled fields that contracted it. The action classes that fell out come back, and only because a genuine, verified member of the required class is now on record.

The failure branch. An introduction record that fails a verification of the protocol produces the not-determinable determination (126), the same third-class outcome the architecture names when a verification cannot be resolved. It instantiates no counterparty identity record (114). And it appends nothing adverse to the second agent or to the introduced party. A failed introduction leaves the requesting agent exactly where it was, still in the standstill, with no party marked at fault for having tried and missed. The introduction protocol can only cure an absence or leave it standing; it cannot manufacture a consequence against anyone.

3. Operating Parameters

The filing states the protocol in terms of declared inputs and typed outcomes rather than numeric thresholds, and the article states only what the filing declares.

- **The required counterparty class** is enumerated in the signed policy object (112). It is the class the standstill determination was conditioned on, and it is the class the attested membership is tested against. The policy object, not the introducer, defines it.
- **The scope partition concerned** is carried in the introduction request and is the partition within which the new counterparty identity record (114) is instantiated. A cure in one partition does not silently populate another.
- **The two admission predicates** are the signature verification against the identity primitive recorded in the counterparty identity record (114) held for the second agent, and the class-membership test against the class enumerated in the signed policy object (112). Admission requires both.
- **The failure outcome** is fixed as the not-determinable determination (126), with no record instantiated and nothing adverse appended.

Two further parameters govern how the recorded introducing party is later consumed, not the admission itself, and both are declared in the signed policy object (112). An **introduction-path depth**, declared to be at least one, bounds how far a chain of introducing parties is traversed when the architecture tests whether the introduction paths of a set of parties converge on a common ancestor entry. A **cost multiplier**, declared to be greater than zero and less than unity, is applied to the contribution of an untested class whose introduction paths so converge. These are the levers by which a cluster of parties sharing an introducer contributes less than a single unrelated party rather than more, and they are treated in the composition below.

4. Composition

The introduction protocol is the terminating branch of a larger structure, and the field it writes is read far outside it.

Its parent is the counterparty-absence path of Section 5.5, the third outcome. That path defines the standstill and, critically, defines the exact condition for lifting it: instantiation of a counterparty identity record (114) of an admissible member within the scope partition concerned. The introduction protocol is a disciplined way to reach that condition on the agent's own initiative. It slots into the restoration clause without changing it. Whether the missing class of party arrives and transacts, or is introduced by a second agent, the same coupled fields restore the same partition capability envelope in the same way. The cure does not invent a new privileged state; it satisfies an existing one.

The introducing party the protocol records is not a bookkeeping footnote. It is the same field the origin-equivalence machinery of Section 2 reads. A common introduction path (206) is one of the declared relation types by which two asserting parties (118) are assigned to a common origin-equivalence class (200): it is evidenced where the counterparty identity record (114) of each records an introducing party and those introducing parties are identical. The filing goes further. For a class designated an

untested class, the agent computes whether the recorded introduction paths of its members converge on a common ancestor entry within the declared introduction-path depth, and where they do, it applies the cost multiplier, reducing that class's contribution below what a single class not so discounted would contribute. The consequence is structural: a set of parties introduced through a common source cannot masquerade as independent voices and cannot, by their number, weigh in the metered rate as heavily as unrelated parties would. The introduction protocol writes the very field that makes this discounting possible. Curing an absence and resisting manufactured consensus are the same record read twice.

That field also travels between agents. In the deference machinery, an origin-equivalence class is named across agents not by a local identifier but by a class-defining reference, and for a common introduction path (206) that reference is the identity primitive of the recorded introducing party. What one agent recorded when it cured an absence becomes a term two agents can both evaluate against their own lineage. The protocol shares the disposition of the surrounding Section 10.8 disclosures: like the non-execution attestation (504) and its relayed forms, it is a cross-agent, disclosure-based construct, and a failed verification resolves into the not-determinable determination (126) rather than into an adverse magnitude against any party.

5. Prior-Art Distinction

The protocol resembles several established families of introduction and identity systems, and it is worth stating fairly where the structural line falls. None of the following asserts that any named system or party practices, infringes, or overlaps the filing.

Public-key introduction schemes, including certificate hierarchies and web-of-trust models in which one party signs an introduction of another, bind an identity to a key so that a verifier will trust a signature. The introduction protocol here is not in the business of trust. Its admission test verifies the introducer's signature and tests

membership against the requesting agent's own signed policy object (112); the introduced party is thereby made addressable within a policy-scoped class and a scope partition, and its introducer is recorded, but no standing, weight, or endorsement is conferred. Membership is decided by the receiving agent's declared policy, not asserted by a global authority.

Federated identity protocols resolve a subject against a central identity provider and return claims the relying party accepts. The filing computes its cross-agent records from each agent's own records, without reference to a centralized registry, without query to a directory, and without coordination with a further execution node. The introduction is peer to peer: the requesting agent already holds a counterparty identity record (114) for the introducer, and the cure produces a record local to its own scope partition, not a claim issued by an intermediary.

Reputation, vouching, and endorsement systems typically let a voucher raise a subject's score or standing, so that accumulated vouches lift a party. The introduction protocol confers no such quantity. It moves no value of the scoped integrity vector (106) and increments no counter, and the composition described above discounts rather than boosts a cluster of parties who share an introducer, opposite in structure to a vouch that inflates influence.

Sybil-resistance mechanisms that rely on proof of work, staking, or a trusted list to bound fake identities take a different route from the recorded introducing party and its convergence test, which detect shared provenance from the agent's own lineage and apply a declared cost multiplier, without any external resource cost or gatekeeper. The discipline lives in the receiving agent's own records and policy.

6. Disclosure Scope

This article describes subject matter disclosed in U.S. Provisional Application No. 64/117,812. The cure of counterparty absence by introduction protocol is disclosed at Section 10.8, paragraph [0463], and its motivating third-outcome context, the counterparty-absence path and the partition capability envelope it contracts and restores, is disclosed at Section 5.5, paragraphs [0162] through [0167]. The composition points draw on the origin-equivalence and untested-class disclosures of Section 2, including the common introduction path (206) at paragraph [0060] and the introduction-path convergence and cost multiplier at paragraphs [0075] through [0078], and on the cross-agent class-defining reference at paragraph [0317]. What is disclosed is the signed introduction request and record, the two-part admission test of signature verification and policy-object class-membership testing, the instantiation of a counterparty identity record (114) that treats the absence as cured, and the not-determinable determination (126) produced on a failed verification.

What is disclosed here is limited to the provisional as filed. Any sub-mechanism, parameter value, deployment illustration, or embodiment variant not present in that provisional is neither disclosed nor asserted by this article, and no numeric threshold beyond the declared constraints stated above is represented as part of the filing. Nothing here is a claim, a claim construction, or an admission, and the operative disclosure is the filed provisional 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 \(/articles/positive-abstention/withholding-as-a-first-class-outcome\)](/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)

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 → \(/positive-abstention\)](/positive-abstention)