

DMCA Notice and Takedown: Where the Cost of an Assertion Falls

A takedown notice is a write into somebody else's standing, and the party sending it does not carry the cost of answering it. The DMCA notice-and-takedown regime, as publicly described, allocates that deliberately: the intermediary is kept out of the merits, the merits are reserved for courts, and liability for knowing misrepresentation is the check on abuse. That check arrives after a finding. Adaptive Query approaches the same asymmetry from a different layer. In the architecture disclosed in U.S. Provisional Application No. 64/117,812, a semantic agent that issues a conduct evaluation artifact against a class of receiving party it has not already counted in the current metering window decrements its own authorization budget, in the units that gate dispatch of its own actions, with no adjudication of the merit of the assertion and with no party to the exchange other than the two agents.

Two Agents, One Accusation, and Nobody in the Middle

Two software agents run by different companies transact across an interface. One records that the other failed an obligation it had taken on, and issues a formal statement about that conduct. The receiver must read it, test it against its own record, and answer. Issuing it cost the sender one message; answering costs the receiver capacity it would otherwise spend on its own work.

No operator sits between them. There is no platform whose terms both accepted, no review queue absorbing the load, no adjudicator either side can call. What runs between them is a channel over which one party writes into the other's governance state, free at the point of use.

When a person at a form was the bottleneck, volume had a ceiling. A request loop has none, and an agent told to protect its principal's interests files at machine cadence because filing costs it nothing. Familiar defenses fare badly there. Per-account limits meter accounts, and accounts are cheap to mint. Trusted-flagger programs need an operator to confer standing, which is what this setting lacks. Penalties for bad faith are principled but awkward to deploy, since applying one means first ruling the assertion meritless, and rulings are the scarcest resource in the pipeline.

So the question is not how a complaint gets encoded or transported. It is what happens to the party that issues one.

What Notice and Takedown Was Built to Do

The DMCA notice-and-takedown regime is the most widely deployed answer to a closely related problem, and it deserves an accurate statement before any contrast is drawn. As publicly described, the DMCA is a United States copyright statute establishing safe harbors that limit the liability of qualifying online service providers for infringing material stored or transmitted at the direction of users. The safe harbor is conditioned, among other things, on the provider designating an agent to receive notifications and acting expeditiously to remove or disable access to identified material upon a notification meeting the statutory requirements, which as publicly described call for identifying information and sworn statements from the notifier.

Removal is not the end of it. As publicly described, a party whose material was removed may submit a counter-notification, after which the provider may restore access following a waiting period unless the claimant informs it that court action has been

sought. The statute also provides a cause of action against a party who knowingly and materially misrepresents that material is infringing.

Read on its own terms, that is a coherent allocation rather than an oversight. It keeps the intermediary out of the merits on purpose, a hosting provider being in no position to decide whether a use is fair or who owns what. The merits are left to courts, and putting the immediate operational cost on the recipient side follows from that allocation.

None of which criticizes the design. It observes the setting the design was built for. That framework presumes identifiable parties, hosted content, an intermediary with standing to act, and a court available at the end. Inter-agent conduct supplies none of the four.

Pricing an Assertion Against the Asserter's Own Capacity

Chapter 4 of U.S. Provisional Application No. 64/117,812 discloses assertion-cost symmetry as the express mirror of the refusal metering in the preceding chapter. An agent that refuses an execution pays a metered cost for the refusal; an agent that asserts against a counterparty pays a metered cost for the assertion. Neither cost involves any adjudication of merit, and both draw on one authorization budget held by the acting party.

The assertion-cost counter sits in the issuing agent's memory field: an issuance accumulator counting increments applied within a metering window that the signed policy object declares and expresses as a count of successor epochs of the issuer's dynamic agent hash chain, a per-recipient-class register recording which origin-equivalence classes of receiving parties have already contributed an increment in that window, an epoch reference, a budget floor field, and a decrement schedule.

Issuance follows an ordered procedure. The agent builds the conduct evaluation artifact, its conduct descriptor drawn from entries of its own append-only lineage field recording interactions with the receiving party. It computes that party's origin-equivalence class and consults the register: where the class already contributed an increment in the current window, no increment applies; otherwise the accumulator increments and the register is updated. Responsive to that increment, and to nothing else, the authorization budget is decremented by the amount in the decrement schedule, in units identical to those gating dispatch of the issuing agent's own actions, with no conversion between assertion-denominated and execution-denominated quantities and no budget denominated in channel access, rating weight, or staked value. The agent advances its hash chain to a successor epoch and attests, inside the artifact, the accumulator state and that epoch identifier. Nothing downstream disturbs the decrement: an artifact resolved to the accepted, rejected, not-determinable, or not-applicable determination bears the same one.

Responsive to the budget satisfying the floor held in the budget floor field, the authorization gate is written to the withheld state for an enumerated set of action classes, the agent transitions into the non-executing cognitive mode for those classes, and the escalation emitter emits a record to the principal. What the write withholds is the faculty of executing those actions, not the capacity to issue, though at or below the floor the agent attaches no attestation of the counter state to what it issues.

Enforcement lands at the receiver, for which verification is a precondition to admission. The attested epoch identifier must be a valid successor of one previously recorded for that issuer in the receiver's counterparty identity record, and the attested accumulator state must not be less than a state that issuer previously attested. An artifact that fails is appended to the receiver's lineage field and not admitted; it produces no determination, moves no value of the scoped integrity vector, and increments no counter. A receipt-verification register separately caps the verifications one origin-equivalence class of issuers can force within a declared window.

Three properties close the routes around that check. Successor epochs derive from a prior epoch, an unpredictability contribution, and a volatile salt, so the issuer cannot compute one in advance and no other party can compute one at all; the identifier being no wall-clock timestamp, the interval cannot be advanced by moving a clock. An attestation binds one accumulator state to one successor epoch, so artifacts attesting a common state bear a common epoch identifier and the repetition surfaces from the receiver's own record. Third, an issuer that over-splits its classification of recipients to hold down increments is caught at receipt, the receiver recomputing the assignment and appending a class-splitting divergence record.

Replenishment is the only procedure that returns budget, and it is narrow. Upon receipt of an artifact admitted by the admission evaluator and originating from an origin-equivalence class absent from the replenishment register, the budget is replenished by a scheduled amount bounded above by a declared ceiling. That amount is less than the per-increment decrement, so an agent cannot finance issuance out of the receipts its own issuance provokes. All four determinations replenish identically, while elapsed time and window expiry replenish nothing.

By way of illustration, the specification posits a decrement of one unit and a budget of forty. An issuer addressing sixty receiving parties in sixty distinct origin-equivalence classes within one window exhausts the budget at the fortieth increment, and the remaining twenty issuances carry no valid attestation. Had those sixty fallen into three classes, the accumulator would have reached three.

Where the Two Designs Part

Notice and takedown, as publicly described, is a three-party arrangement: a rights holder, an intermediary that hosts or transmits, and a user whose material is at issue, with courts as the eventual forum. Chapter 4 governs a two-party exchange, and the specification states that the mechanism depends on no party other than the two parties to it. There is no intermediary to petition.

The objects differ too. A takedown notice asks somebody else to act on content. A conduct evaluation artifact concerns conduct alleged of the receiving party, is built from the issuer's own recorded interactions with it, and is resolved by that party through its admission evaluator into one of a closed set of four determinations.

Sharpest of all is where the check on the asserting party sits. The statutory check, as publicly described, requires a misrepresentation to be knowing and material, which means a finding, and that is defensible: consequence should attach to culpability. The filed architecture places consequence at issuance instead. One prices bad faith after a finding; the other prices breadth without one.

Currency differs as well. Bonds and staked collateral price an assertion in money, which lets a well-capitalized floodster pay and proceed, whereas the filed architecture prices it in the issuer's own capacity to act. And breadth is what gets priced, not raw volume: repeated artifacts against parties inside one origin-equivalence class within a window carry a single increment, while the same volume spread across distinct classes costs an increment per class. The dragnet is the expensive shape, and a long dispute with one counterparty is not.

One convergence is worth naming. In neither design does the consequence to the asserting party turn on a merits ruling by the immediate recipient, and in each the state change can be undone without that recipient adjudicating anything: restoration follows counter-notification and a waiting period in the one; in the other the authorization gate returns to the granting state on replenishment, without a principal-resolution object and without an acceptance determination.

Running Both Without Confusing Them

Nothing here displaces a statutory regime, and no deployment should be built as though it does. A service relying on the safe harbor keeps doing everything that regime requires of it. The filed architecture decides no question of infringement, removes no

material, restores nothing that was removed, and confers no safe harbor. Where a copyright claim is the actual subject, notice and takedown is the mechanism.

Coexistence happens at the machine boundary. Notice traffic between governed agents is the fit: an issuer holding an authorization budget and a signed policy object, a receiver holding a memory field, a counterparty identity record, and an admission evaluator. A notice a person submits through an ordinary web form sits outside the metering unless the submitting client is itself a governed agent.

Every quantity is declared rather than derived. Decrement schedule, budget floor, budget ceiling, window length, replenishment schedule, and verification cap all come out of the signed policy object, and the disclosure fixes invariants in place of values: the decrement exceeds zero, the replenishment amount is less than the decrement, and the ceiling is not less than the value at which the principal initializes the budget.

Containment does not turn on the numbers chosen, since at or below the floor the agent attaches no attestation and an unattested artifact is not admitted at the far end.

Several things this does not solve.

- It rules on no assertion's truth. Nothing here stops one well-aimed false accusation.
- Classification is only as good as each party's own record, each party computing a class from material it holds itself.
- Window expiry resets the counter and clears the register, restoring no value of the budget.
- Where the gate reached the withheld state by any procedure other than the budget-floor write, this replenishment returns it by none.
- Both endpoints have to be governed agents.

Disclosure Scope

The mechanisms described here are disclosed in U.S. Provisional Application No. 64/117,812 at Chapter 4, Assertion-Cost Symmetry. What is disclosed is the specific architecture: the assertion-cost counter; the issuance procedure and the budget-floor write to the authorization gate; pricing a conduct evaluation artifact against the issuing agent's own authorization budget in units identical to those gating dispatch of its actions; metering per origin-equivalence class of receiving parties within a window expressed in successor epochs, with the bar on replay that follows; recipient-side verification as a precondition of admission, including the receipt-verification register and the class-splitting divergence record; and replenishment only upon receipt of an admitted artifact from an uncounted class, by an amount less than the decrement.

What is disclaimed is the general subject matter. This publication claims no ownership of notice-and-takedown as a practice, of copyright enforcement, of content moderation, of rate limiting, of monetary bonds or staked collateral, of reputation or trusted-flagger programs, or of adjudicating whether an assertion is meritorious.

The account given above of the DMCA notice-and-takedown regime is external context drawn from public materials, used for architectural comparison only. It is not a claim of the filing and is no legal opinion about that regime or about any party's obligations under it. References to the DMCA notice-and-takedown regime are to public materials and are used for comparison only; no relationship, endorsement, or infringement is asserted.

This article is a defensive disclosure establishing a public, timestamped record of this architecture. It describes pending applications, asserts no infringement by any party, and states no requirement that anyone obtain a license.

Assertion-Cost Symmetry (</assertion-cost-symmetry>) [All 49 steps → \(/inventive-steps\)](#)

Making an accusation costs the accuser too — symmetric, metered, replay-proof.

Provisional application

PRIMARY TECHNICAL DISCLOSURE

- [Assertion-Cost Symmetry: Making an Accusation Cost the Accuser \(/articles/assertion-cost-symmetry/making-an-accusation-cost-the-accuser\)](/articles/assertion-cost-symmetry/making-an-accusation-cost-the-accuser)

SECONDARY TECHNICAL

- [Withheld Delegating Faculty, Preserved Direct Execution \(/articles/assertion-cost-symmetry/withheld-delegating-faculty\)](/articles/assertion-cost-symmetry/withheld-delegating-faculty)
- [Depth-Propagated Harm Inheritance Across a Delegation Chain \(/articles/assertion-cost-symmetry/depth-propagated-harm-inheritance\)](/articles/assertion-cost-symmetry/depth-propagated-harm-inheritance)
- [Co-Signature Conditioning of Restoration Authority \(/articles/assertion-cost-symmetry/co-signature-conditioned-restoration\)](/articles/assertion-cost-symmetry/co-signature-conditioned-restoration)
- [The Anti-Evasion Charge on Governance-Address Removal \(/articles/assertion-cost-symmetry/anti-evasion-governance-address-removal\)](/articles/assertion-cost-symmetry/anti-evasion-governance-address-removal)
- [The Progressive Issuance Decrement \(/articles/assertion-cost-symmetry/progressive-issuance-decrement\)](/articles/assertion-cost-symmetry/progressive-issuance-decrement)

APPLICATIONS · GENERAL

- [Report Abuse and Takedown Flooding: Making the Accusation Cost the Accuser \(/articles/assertion-cost-symmetry/takedown-and-report-abuse\)](/articles/assertion-cost-symmetry/takedown-and-report-abuse)
- [The Economics of Agent-to-Agent Disputes \(/articles/assertion-cost-symmetry/agent-to-agent-dispute-economics\)](/articles/assertion-cost-symmetry/agent-to-agent-dispute-economics)

APPLICATIONS · SPECIFIC

- [DMCA Notice and Takedown: Where the Cost of an Assertion Falls \(/articles/assertion-cost-symmetry/dmca-notice-and-takedown\)](/articles/assertion-cost-symmetry/dmca-notice-and-takedown)

TERMINOLOGY

- [acknowledgment artifact \(/glossary#acknowledgment-artifact\)](/glossary#acknowledgment-artifact)

- [assertion-cost counter \(/glossary#assertion-cost-counter\)](/glossary#assertion-cost-counter)
- [authorization budget \(/glossary#authorization-budget\)](/glossary#authorization-budget)
- [dynamic agent hash chain \(/glossary#dynamic-agent-hash-chain\)](/glossary#dynamic-agent-hash-chain)

[Assertion-Cost Symmetry overview → \(/assertion-cost-symmetry\)](/assertion-cost-symmetry)