Nick Clark · PDF

Policy Freshness Across Asynchronous Execution

Confidence governor evaluating policy freshness as confidence input after asynchronous resumption, with stale policy producing proportional confidence reduction.

Policy Freshness Across Asynchronous Execution

The governance mechanisms of Application [7] and the execution mechanisms of Application [6] interact through the confidence governor (Chapter 5) to address policy freshness across asynchronous execution intervals. When a semantic agent resumes execution after an asynchronous interval and detects that the governance policy in force at the time of suspension has been superseded by a newer policy, the confidence governor evaluates policy freshness as a confidence input.

A policy is treated as stale when its validity window has expired or when its issuing authority has published a superseding policy. Stale policy produces a confidence reduction proportional to the governance significance of the policy change. The reduction is graded rather than absolute, so a minor policy change need not halt execution while a significant change can.

If the confidence reduction causes the confidence value to fall below the execution authorization threshold, the agent transitions to a non-executing cognitive mode and generates an inquiry requesting the current policy before resuming execution. This

prevents an agent from acting on outdated authority after a period of disconnection or suspension.

Disclosure Scope

This article describes subject matter from United States Patent Application 19/647,395. It is provided for technical background and does not constitute legal advice or a representation of claim scope.

Cross-Patent Architecture (/cross-patent-architecture)

All 40 steps → (/inventive-steps)

Cross-cutting architectural principles that compose every primitive into a coherent platform.

Chapter 1 (/patents/19-647395/chapters/foundation)

PRIMARY TECHNICAL DISCLOSURE

- {step.name}, Articles (/articles/cross-patent-architecture)

SECONDARY TECHNICAL

- Transit Cognitive State (/articles/cross-patent-architecture/transit-cognitive-state)
- Substrate Identity Revocation During Active Cognition (/articles/cross-patent-architecture/substrate-identity-revocation)
- **Policy Freshness Across Asynchronous Execution (/articles/cross-patent-architecture/policy-freshness-asynchronous-execution)**
- Governance Authority Evaluation via Integrity Trajectory (/articles/cross-patent-architecture/governance-authority-integrity-trajectory)
- Discovery Agent as Schema-Conformant Index Traverser (/articles/cross-patent-architecture/discovery-agent-schema-index-traverser)
- Cross-Tier Navigation Primitive: World as Model (/articles/cross-patent-architecture/cross-tier-navigation-world-as-model)

Cross-Patent Architecture overview → (/cross-patent-architecture)