

# Cognitive State-Conditioned Dispatch

Dispatcher routing conditioned on the agent's current cognitive state fields, enabling state-dependent tool selection and execution priority.

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## Cognitive State-Conditioned Dispatch

The agent-to-tool dispatcher executes a routing decision conditioned on the current value of the cognitive state field, the input characteristics of the inference request, the applicable policy objects, and the per-endpoint capability declaration. The same inference request may route to different managed inference endpoints depending on the agent's current cognitive domain fields, including its execution confidence domain, normative integrity domain, and capability awareness domain.

The dispatcher consults the cognitive state field to determine an applicable confidence threshold, an applicable normative threshold, and an applicable capability threshold. Candidate endpoints whose declared confidence, normative compliance, or capability fall below the applicable thresholds are excluded from the routing decision. Among the remaining candidates, the dispatcher applies a selection function configured to prefer endpoints with higher historical outcome quality recorded in the lineage field for inference requests of similar input characteristics.

# Disclosure Scope

This article describes subject matter disclosed in U.S. Provisional Application No. 64/070,239. It is a technical disclosure for general information and does not constitute legal advice.

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## **Agent-Resident Execution**

[All 40 steps → \(/inventive-steps\)](/inventive-steps)

### **Substrate (/agent-resident-execution-substrate)**

Persistent execution environment carried by the agent, not the host — identity, state, and lineage across power cycles, devices, and upgrades.

Provisional application

## **PRIMARY TECHNICAL DISCLOSURE**

- [{step.name}, Articles \(/articles/agent-resident-execution-substrate\)](/articles/agent-resident-execution-substrate)

## **SECONDARY TECHNICAL**

- [Persistent Semantic Agent \(/articles/agent-resident-execution-substrate/persistent-semantic-agent\)](/articles/agent-resident-execution-substrate/persistent-semantic-agent)
- [Managed Inference Tool Registry \(/articles/agent-resident-execution-substrate/managed-inference-tool-registry\)](/articles/agent-resident-execution-substrate/managed-inference-tool-registry)
- [Agent-to-Tool Dispatcher \(/articles/agent-resident-execution-substrate/agent-to-tool-dispatcher\)](/articles/agent-resident-execution-substrate/agent-to-tool-dispatcher)
- [Lineage-Derived Training Signal \(/articles/agent-resident-execution-substrate/lineage-derived-training-signal\)](/articles/agent-resident-execution-substrate/lineage-derived-training-signal)
- [Identity Preservation Across Upgrades \(/articles/agent-resident-execution-substrate/identity-preservation-across-upgrades\)](/articles/agent-resident-execution-substrate/identity-preservation-across-upgrades)
- [\*\*Cognitive State-Conditioned Dispatch \(/articles/agent-resident-execution-substrate/cognitive-state-conditioned-dispatch\)\*\*](/articles/agent-resident-execution-substrate/cognitive-state-conditioned-dispatch)
- [Governed Tool Lifecycle \(/articles/agent-resident-execution-substrate/governed-tool-lifecycle\)](/articles/agent-resident-execution-substrate/governed-tool-lifecycle)
- [Continuity-Proof Lineage \(/articles/agent-resident-execution-substrate/continuity-proof-lineage\)](/articles/agent-resident-execution-substrate/continuity-proof-lineage)
- [Substrate Runtime Continuity \(/articles/agent-resident-execution-substrate/substrate-runtime-continuity\)](/articles/agent-resident-execution-substrate/substrate-runtime-continuity)

- [Personal Corpus Model Training \(/articles/agent-resident-execution-substrate/personal-corpus-model-training\)](/articles/agent-resident-execution-substrate/personal-corpus-model-training).
- [Heterogeneous Inference Endpoints \(/articles/agent-resident-execution-substrate/heterogeneous-inference-endpoints\)](/articles/agent-resident-execution-substrate/heterogeneous-inference-endpoints).
- [Atomic Lifecycle Substitution \(/articles/agent-resident-execution-substrate/atomic-lifecycle-substitution\)](/articles/agent-resident-execution-substrate/atomic-lifecycle-substitution).
- [Integrity Signal Feedback \(/articles/agent-resident-execution-substrate/integrity-signal-feedback\)](/articles/agent-resident-execution-substrate/integrity-signal-feedback).
- [Hardware-Bound Identity \(/articles/agent-resident-execution-substrate/hardware-bound-identity\)](/articles/agent-resident-execution-substrate/hardware-bound-identity).
- [Cognitive State Append-Only Invariant \(/articles/agent-resident-execution-substrate/cognitive-state-append-only-invariant\)](/articles/agent-resident-execution-substrate/cognitive-state-append-only-invariant).
- [Counterparty Identity Records \(/articles/agent-resident-execution-substrate/counterparty-identity-records\)](/articles/agent-resident-execution-substrate/counterparty-identity-records).
- [Privacy Egress-Controlled Disclosure \(/articles/agent-resident-execution-substrate/privacy-egress-controlled-disclosure\)](/articles/agent-resident-execution-substrate/privacy-egress-controlled-disclosure).
- [Federated Cross-Device Agent Identity \(/articles/agent-resident-execution-substrate/federated-cross-device-agent-identity\)](/articles/agent-resident-execution-substrate/federated-cross-device-agent-identity).

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[Agent-Resident Execution Substrate overview → \(/agent-resident-execution-substrate\)](/agent-resident-execution-substrate)