

Heterogeneous Inference Endpoints

Support for multiple managed endpoint types including language, image, speech, embedding, retrieval, and personal corpus models within a single agent.

Heterogeneous Inference Endpoints

The managed inference tool registry stores endpoints of one or more types, including general-purpose language models, task-specific fine-tuned language models, image classifiers, speech recognition models, embedding models, retrieval models, and personal corpus models. Multiple endpoints of distinct types and distinct sizes may be co-resident in the tool registry concurrently, subject to local memory and storage constraints. Each endpoint is a managed inference endpoint subordinate to the agent and subject to governed lifecycle operations.

Disclosure Scope

This article describes subject matter disclosed in U.S. Provisional Application No. 64/070,239.

Agent-Resident Execution

[All 40 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 \(/articles/agent-resident-execution-substrate\)](#)

SECONDARY TECHNICAL

- [Persistent Semantic Agent \(/articles/agent-resident-execution-substrate/persistent-semantic-agent\)](#)
- [Managed Inference Tool Registry \(/articles/agent-resident-execution-substrate/managed-inference-tool-registry\)](#)
- [Agent-to-Tool Dispatcher \(/articles/agent-resident-execution-substrate/agent-to-tool-dispatcher\)](#)
- [Lineage-Derived Training Signal \(/articles/agent-resident-execution-substrate/lineage-derived-training-signal\)](#)
- [Identity Preservation Across Upgrades \(/articles/agent-resident-execution-substrate/identity-preservation-across-upgrades\)](#)
- [Cognitive State-Conditioned Dispatch \(/articles/agent-resident-execution-substrate/cognitive-state-conditioned-dispatch\)](#)
- [Governed Tool Lifecycle \(/articles/agent-resident-execution-substrate/governed-tool-lifecycle\)](#)
- [Continuity-Proof Lineage \(/articles/agent-resident-execution-substrate/continuity-proof-lineage\)](#)
- [Substrate Runtime Continuity \(/articles/agent-resident-execution-substrate/substrate-runtime-continuity\)](#)
- [Personal Corpus Model Training \(/articles/agent-resident-execution-substrate/personal-corpus-model-training\)](#)
- [Heterogeneous Inference Endpoints \(/articles/agent-resident-execution-substrate/heterogeneous-inference-endpoints\)](#)
- [Atomic Lifecycle Substitution \(/articles/agent-resident-execution-substrate/atomic-lifecycle-substitution\)](#)
- [Integrity Signal Feedback \(/articles/agent-resident-execution-substrate/integrity-signal-feedback\)](#)
- [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).

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