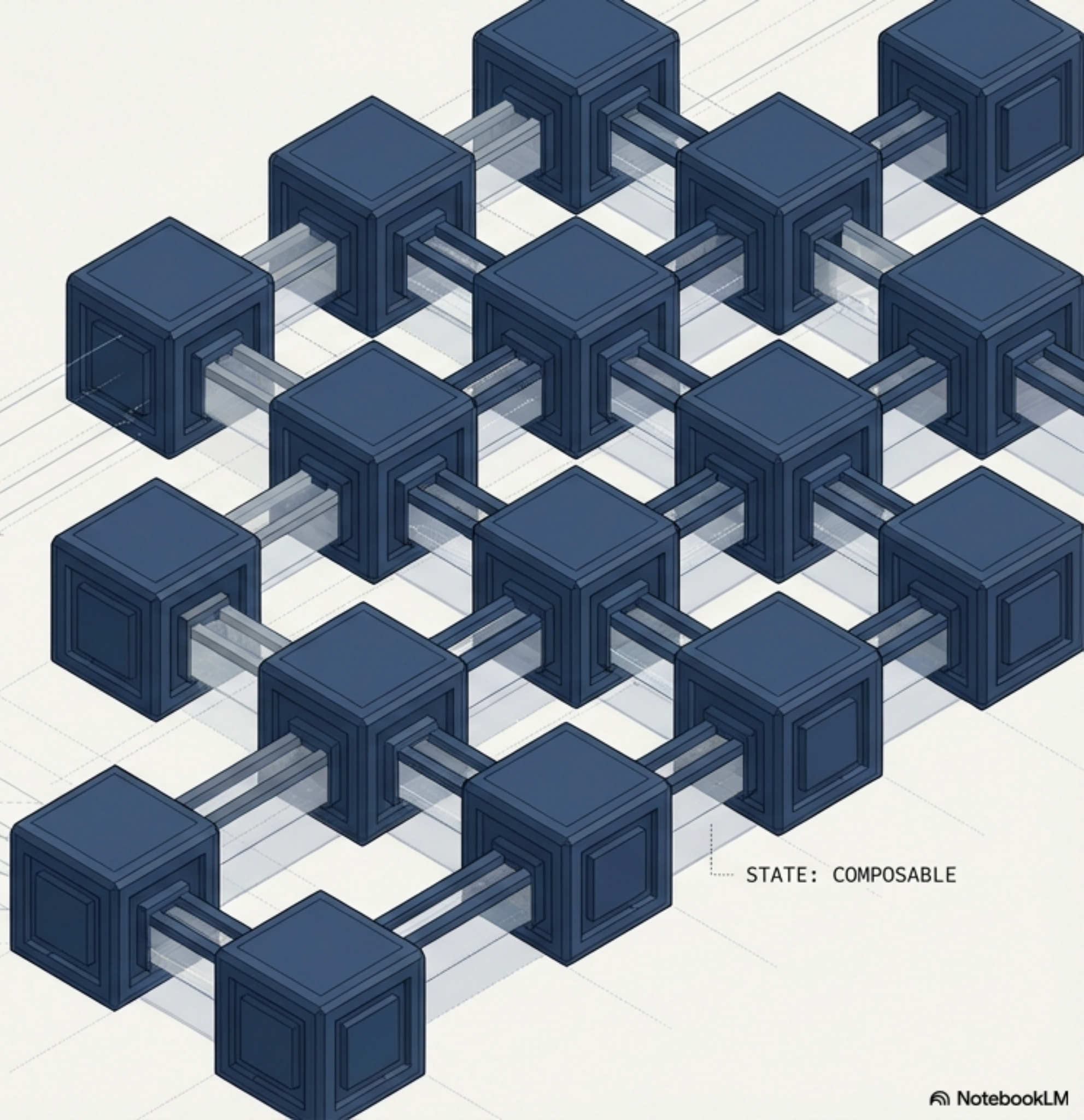
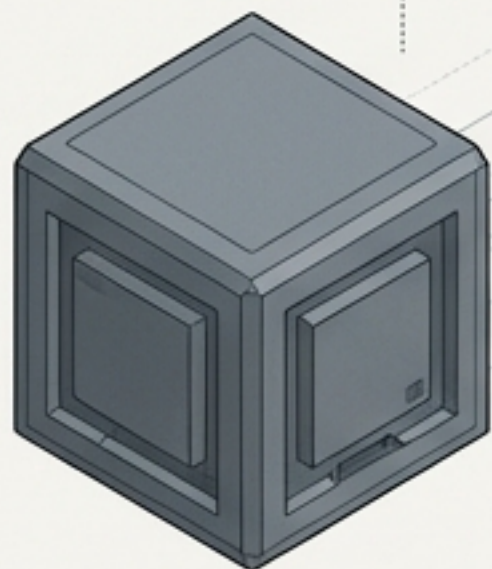


The Foundation Layer of the Agentic Web

Capable models are not enough. How open protocols will connect the isolated islands of the AI economy.

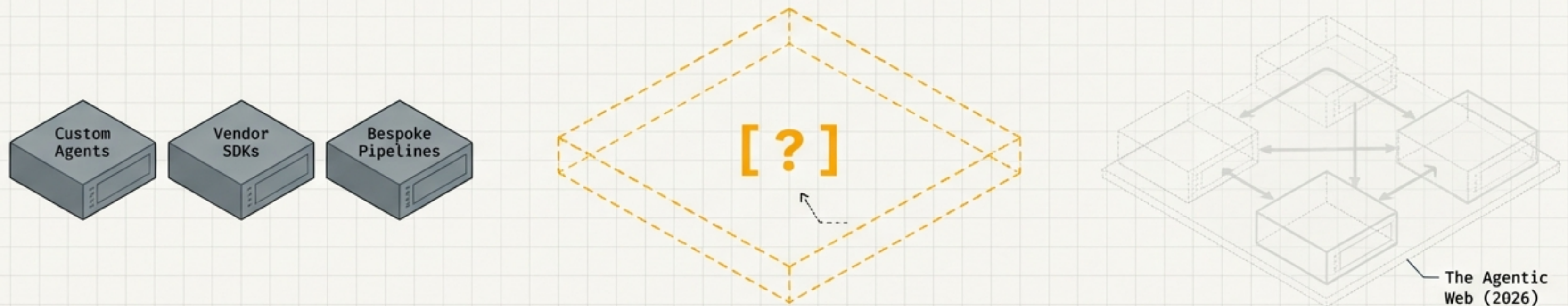
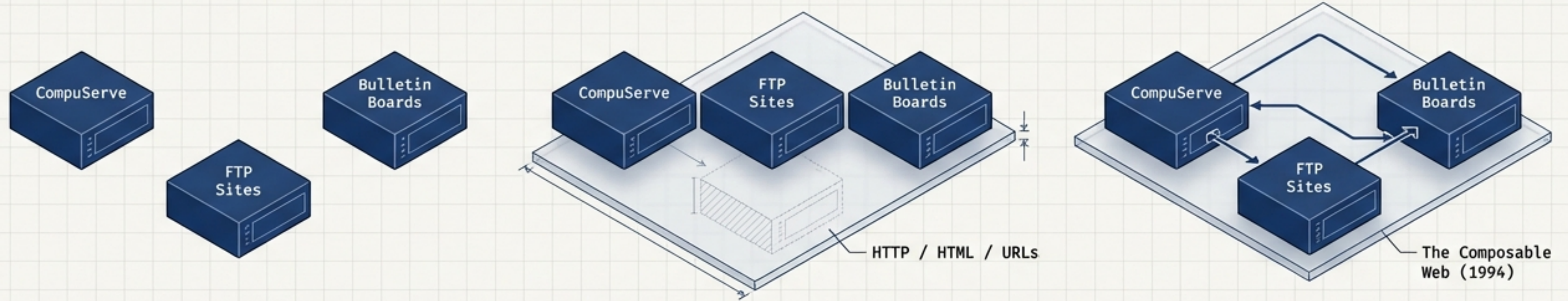
NODE: ISOLATED



STATE: COMPOSABLE

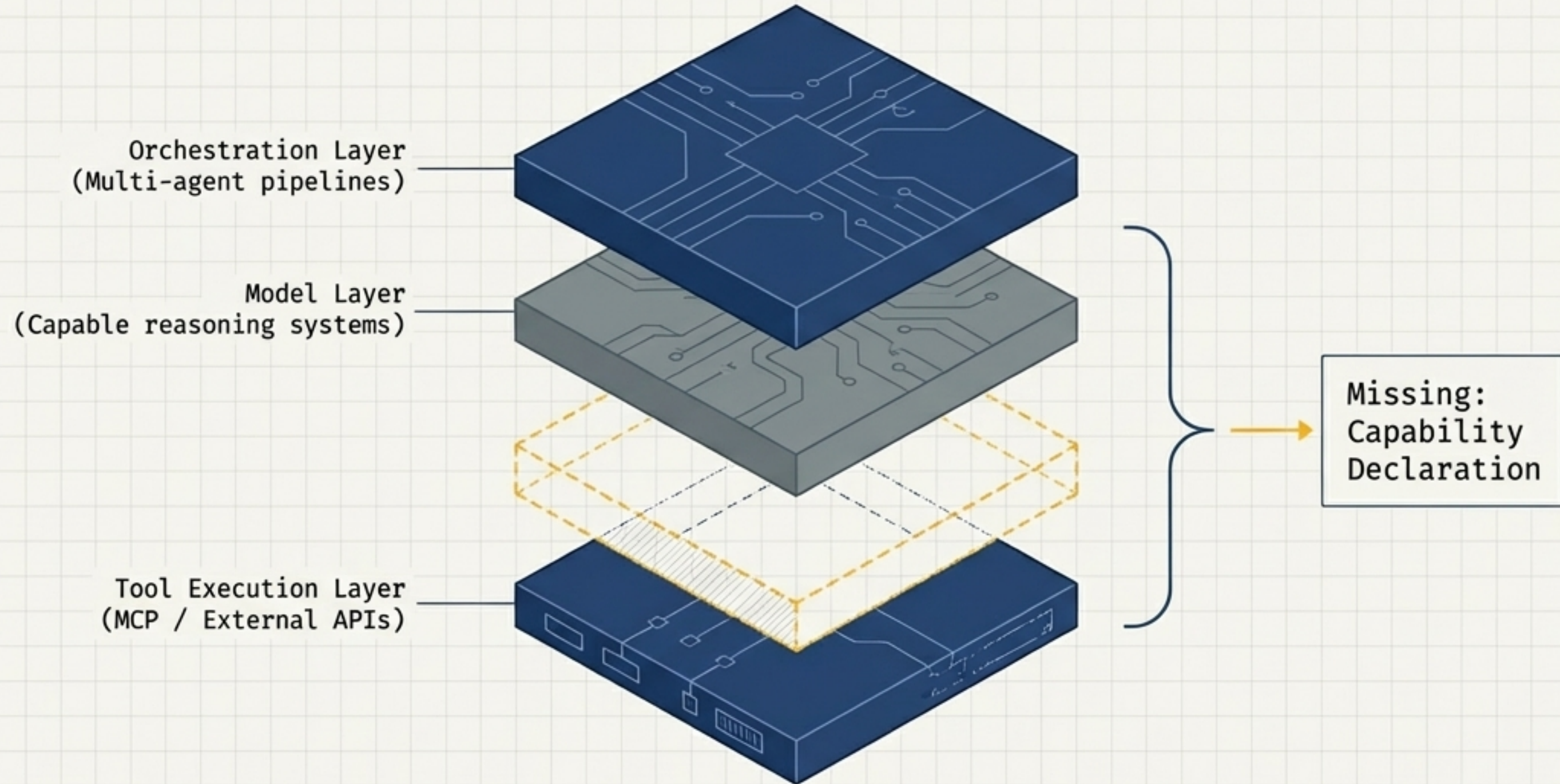
Infrastructure Creates Composability

The early internet scaled because developers agreed on shared protocols.
The agentic web is exactly where the internet was in 1994.



The Gap Between Execution and Orchestration

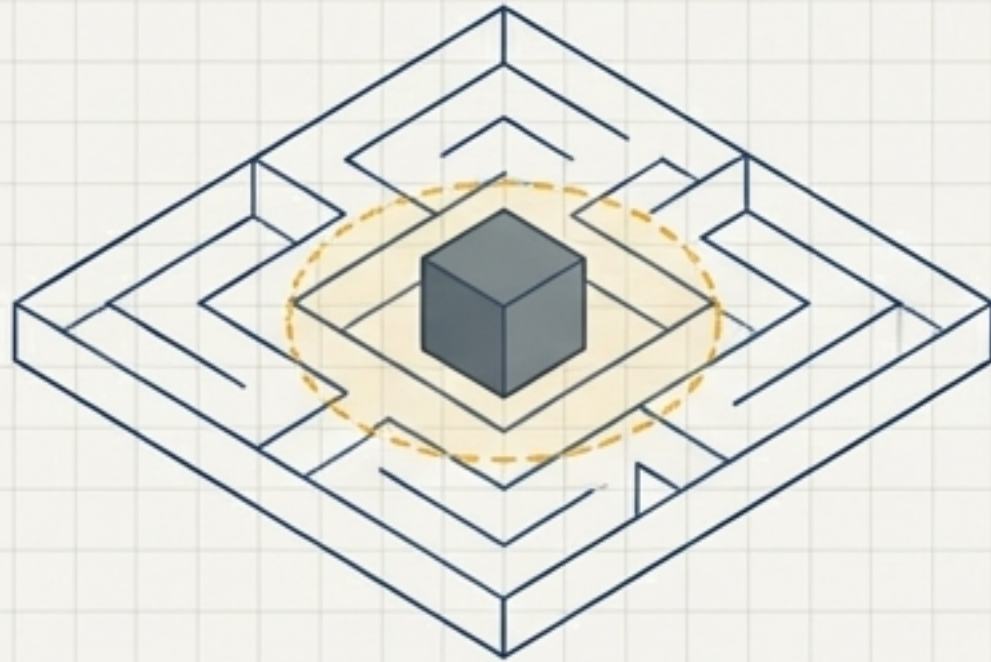
We have capable reasoning models. We have standard tool execution via MCP.
We have multi-agent orchestration. The gap is the declarative glue between them.



The Three Failures of Current Agentic Systems

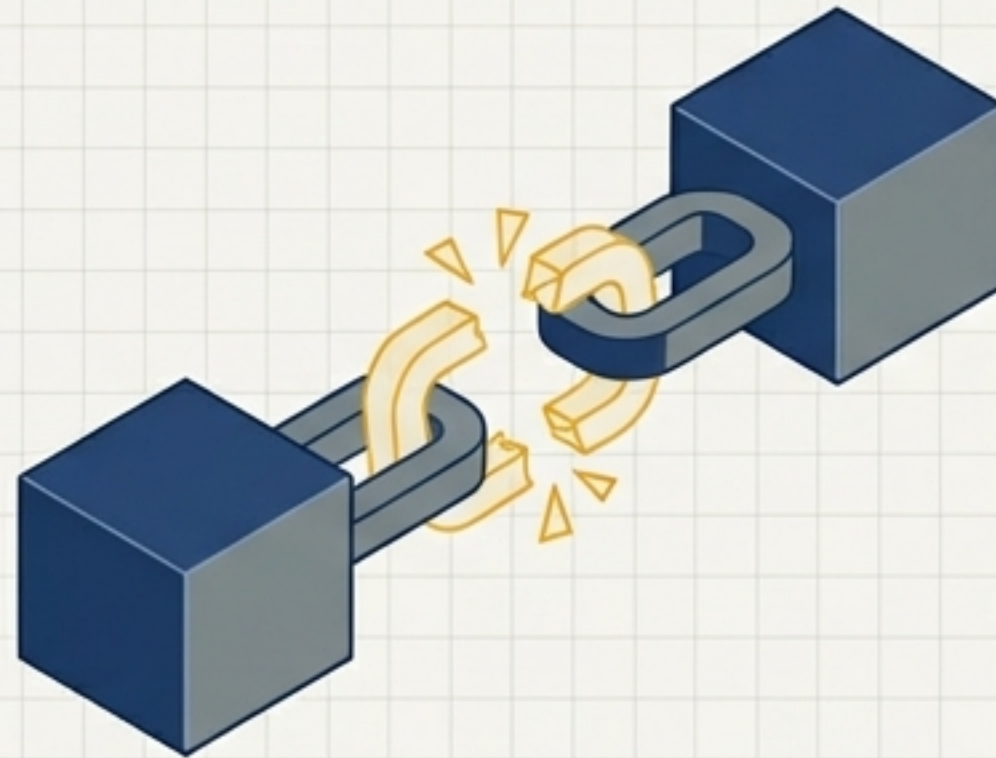
Without a shared protocol, composing a true agentic web breaks down across three distinct dimensions.

1. Discovery



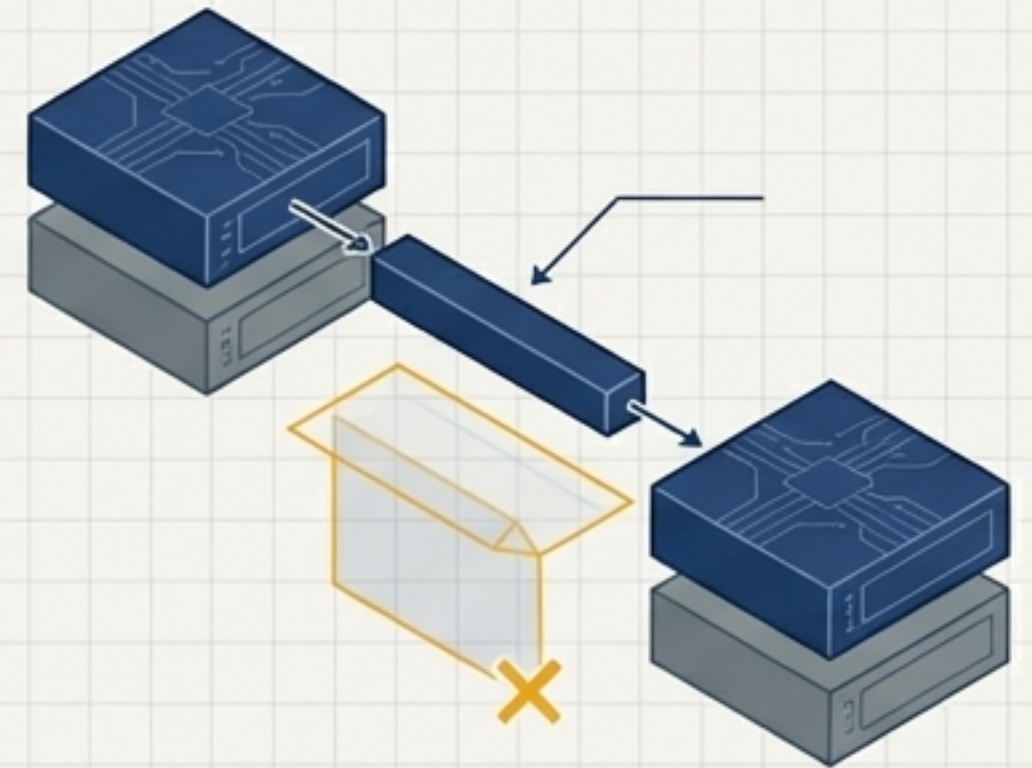
Agents cannot navigate capabilities natively. They require humans to pre-configure system prompts and explicitly hand them tools.

2. Constraint Declaration



Constraints are inferred from natural language, not mathematically verifiable. Implicit trust scales poorly across organizational boundaries.

3. Delegation with Integrity



When Agent A delegates to Agent B, constraint context is dropped. Each handoff forces a dangerous trust reset.

Why Obvious Workarounds Do Not Scale

Current solutions solve specific local problems but fail the fundamental requirements of web-scale composability.

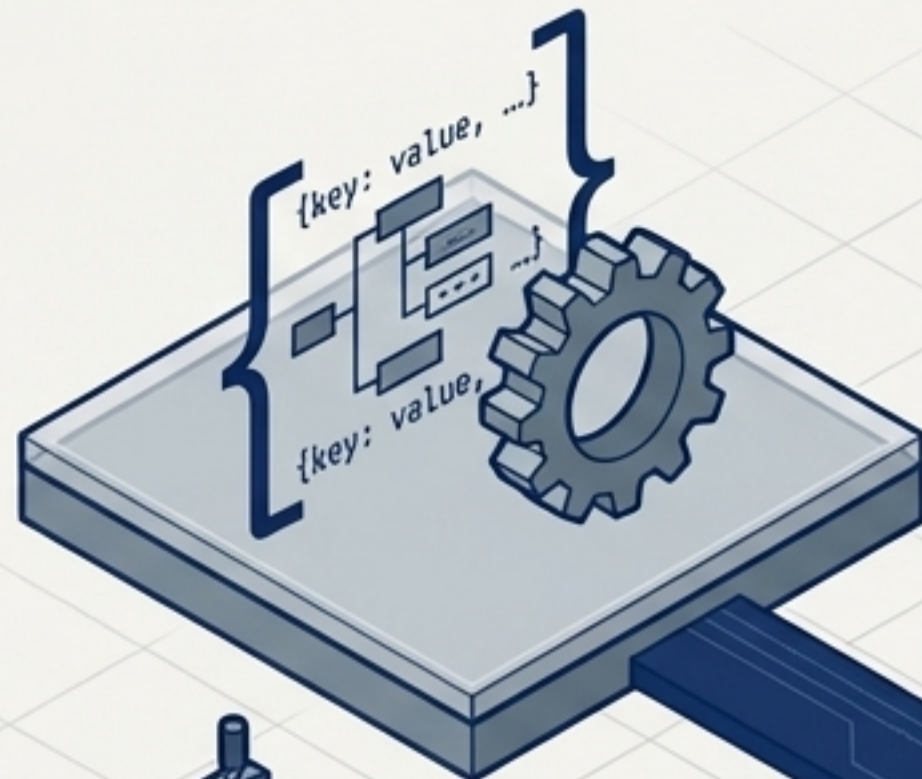
Solution	Machine-Verifiable	Portable	Discoverable	Carries Constraints
Documentation (READMEs/OpenAPI)	✗	✗	✗	✗
Vendor SDKs	✓ CHECK	✗	✗	✗
MCP (Execution Only)	✓ CHECK	✓ CHECK	✗	✗
The Missing Standard				

Result: A critical vacuum for the constraint and knowledge layer.

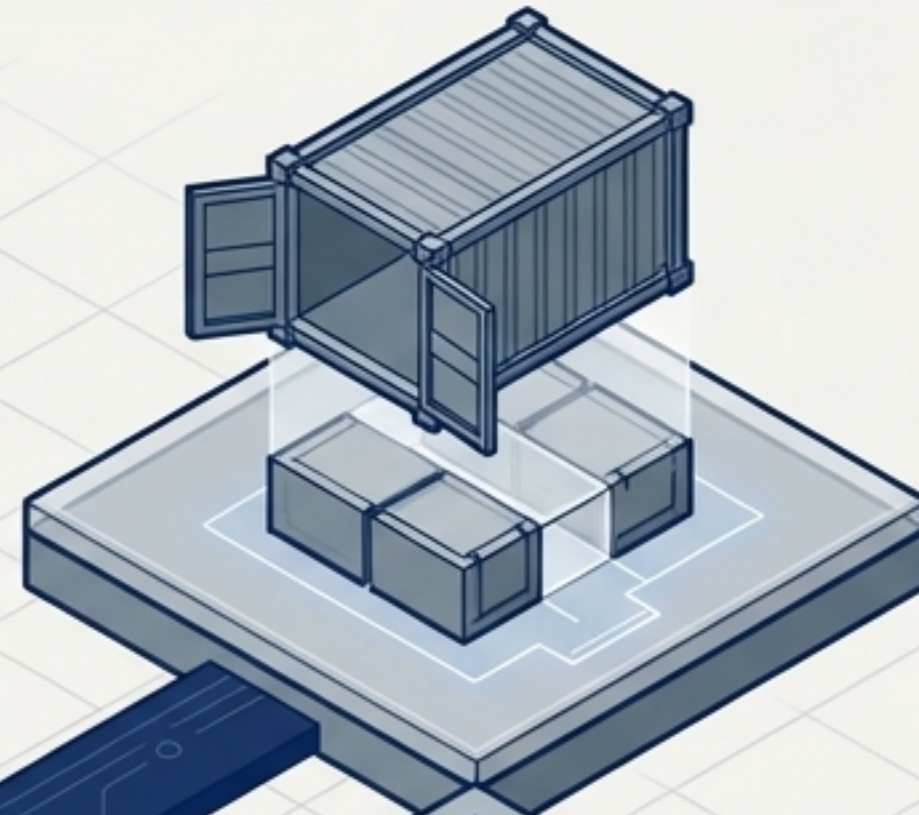
Defining the Missing Layer: Capability Declaration

We need a standard way for any capability to declare itself so agents can consume it safely, without reading documentation or relying on vendor lock-in.

Typed & Machine-Readable
Structured data with defined semantics that agents validate, not text they infer.



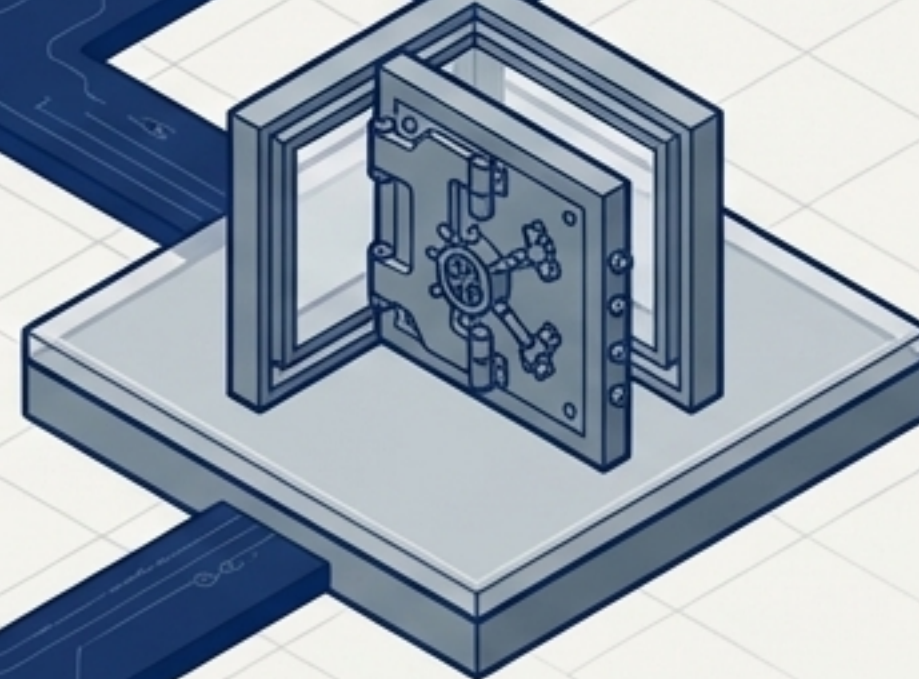
Portable
A declaration that outlasts any specific implementation, SDK, or client.



Discoverable
A well-known registry where agents can find declarations dynamically

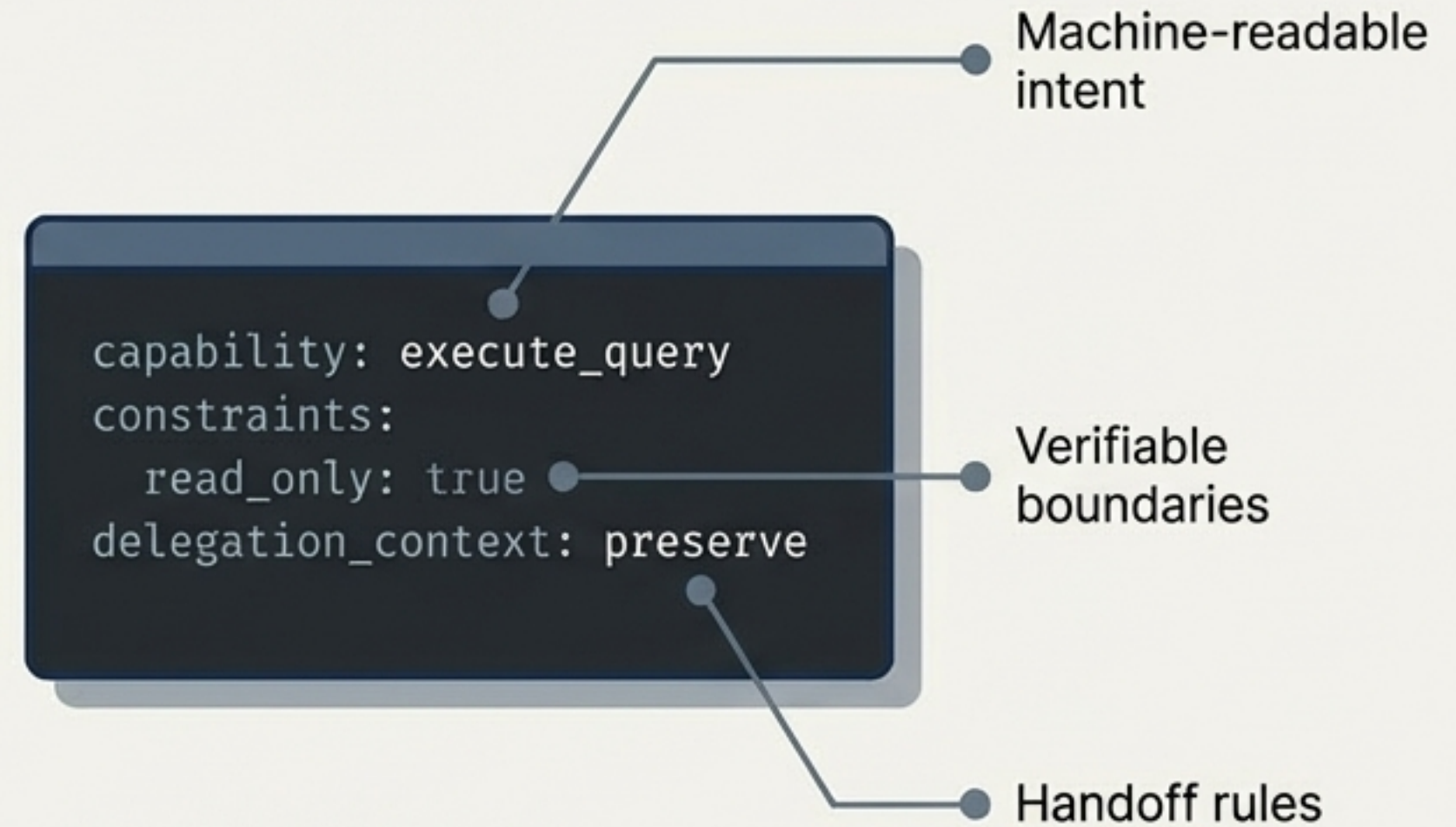


Constraint-Carrying
Declarations that embed requirements, boundaries, and delegation rules natively.



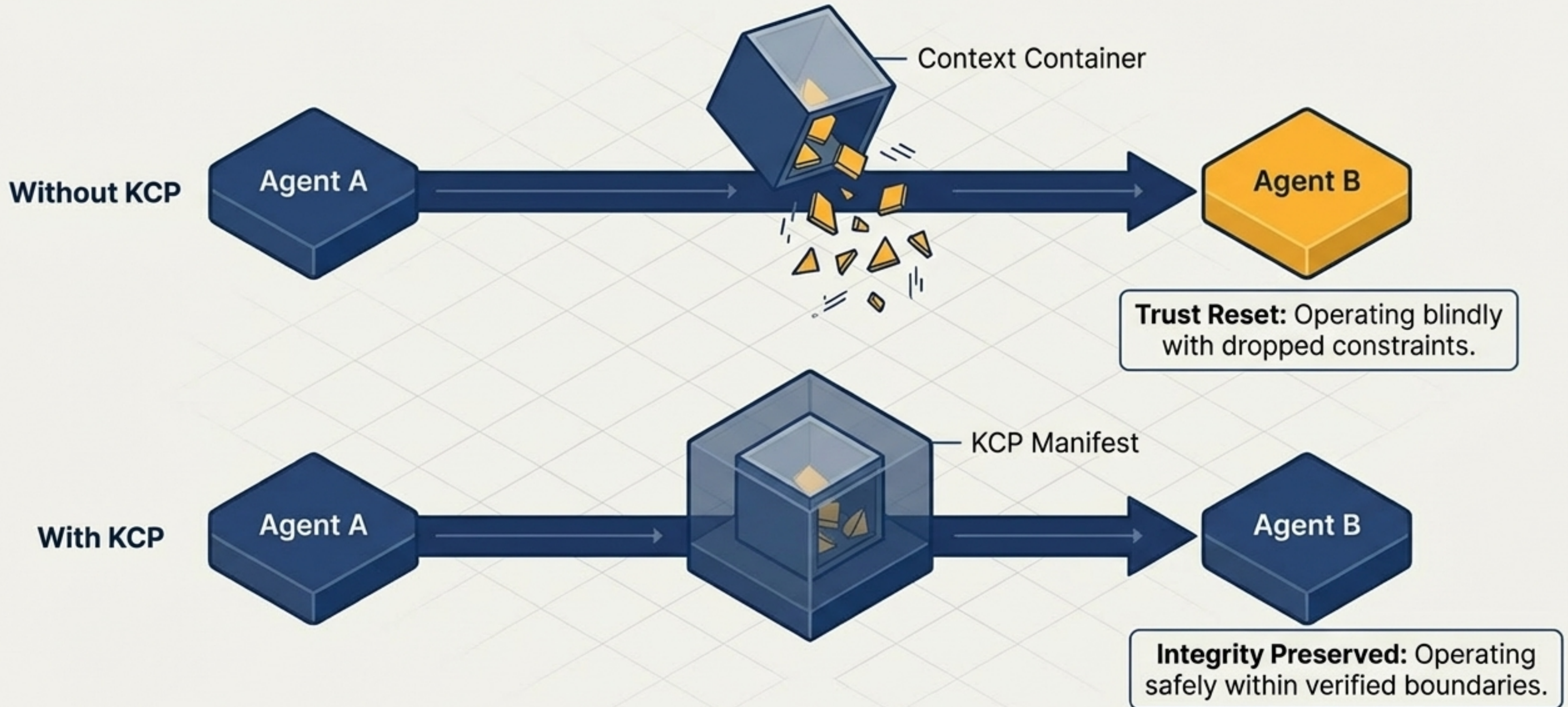
The Knowledge Context Protocol (KCP)

KCP is the typed, portable manifest that tells an agent exactly what a tool does, what context it needs, and what its limits are—before execution.



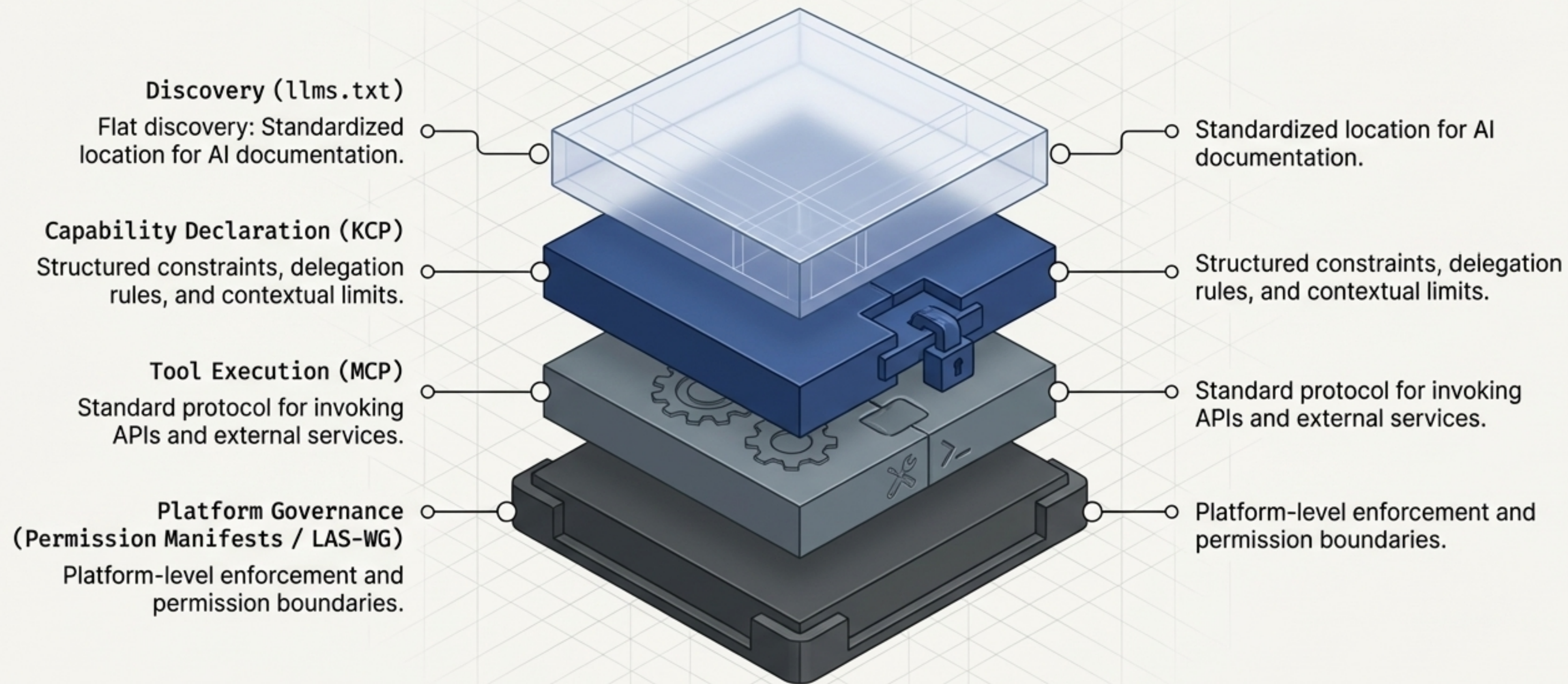
Delegation with Integrity

KCP ensures that authority, context, and constraints travel securely across the multi-agent network.



The Agentic Standards Stack

KCP does not compete; it completes. Together, these open protocols form the blueprint for autonomous composability.



Infrastructure Being Built Right Now

This is not academic. The foundation layer is being assembled in developer rigs, submitted to standards bodies, and validated by independent engineers.

v0.8

Core Specification

Submitted to AI Alliance Foundation as a companion to MCP. IANA URI registration in process.

289

CLI Tool Manifests

Active reference implementation via kcp-commands repository, reducing token overhead for agent discovery.

kcp-basis-oppsett

Independent Validation

First independent implementation built by the Norwegian public sector (March 2026), proving organic architectural fit.

NIST NCCoE

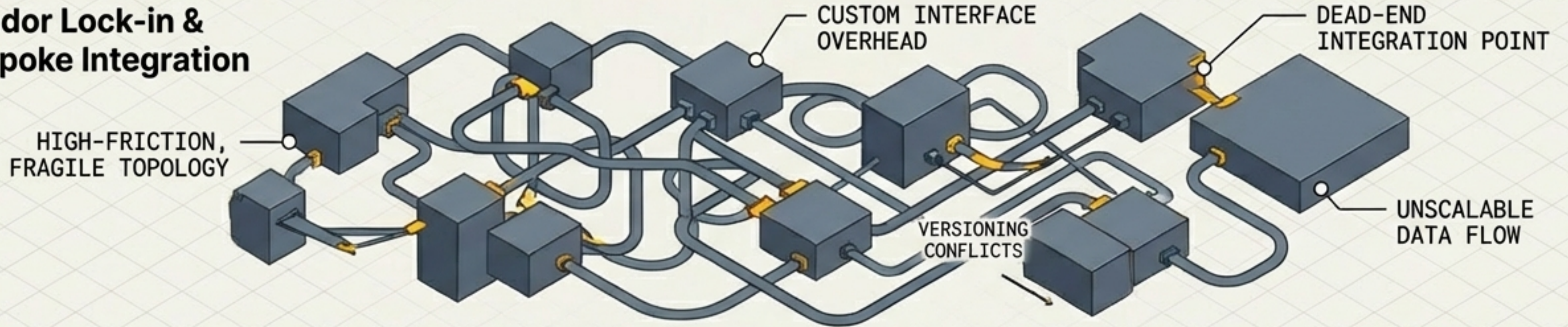
Authorization RFI Response

Validated as the precise architectural solution for the resource-side agent identity and authorization gap.

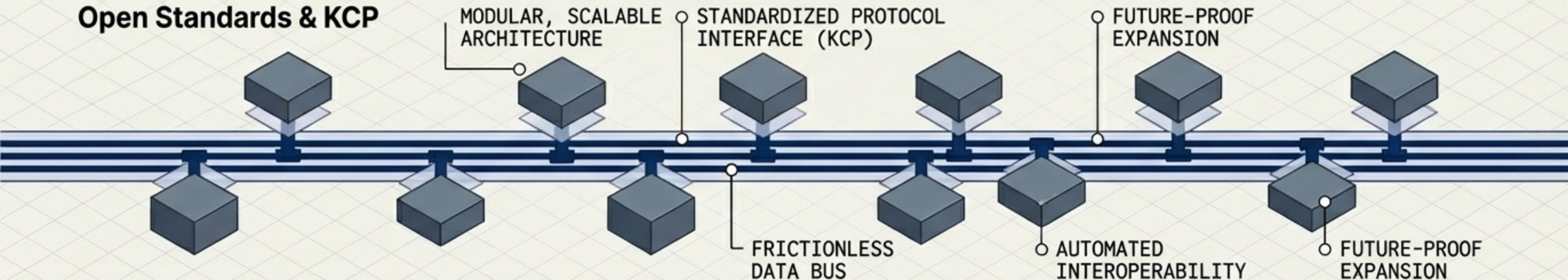
The Cost of Bespoke Integration

We are at the same decision point the web faced in the 90s. The cost of adopting shared protocols is vastly lower than endless bespoke integrations.

Vendor Lock-in & Bespoke Integration



Open Standards & KCP



Build the Foundation Layer

The repos are open. The spec is public. The web without it will remain a collection of capable but isolated pieces.

KCP Spec & Reference
Implementations

[github.com/Cantara/knowledge-
context-protocol](https://github.com/Cantara/knowledge-context-protocol)



289 CLI Tool Manifests
(Apache 2.0)

github.com/Cantara/kcp-commands

