

The Coherence Platform

Ontology-powered, deterministic AI for the domains your business runs on.

Businesses are investing heavily in AI, data, and automation, yet most of that investment stalls before value at scale. The reason sits one layer down: the knowledge AI needs (how a domain actually works; its rules, dependencies, exceptions) lives scattered across documents, systems, and senior heads, in forms no machine can safely use. **Coherence exists to close exactly that gap.**

The Coherence Platform **builds, governs, and operates domain ontologies**, typed models of business domains: a supply chain, a clinical study, a regulatory estate, a system landscape. It ingests the whole domain (**documents, source code at function level, database schemas, API definitions, process flows, live databases**) and wires the ontology into that material, so the ontology and reality compute against each other. On top runs the use-case layer: analytics, generated deliverables, governed change. **One scoped, checkable domain at a time, everything in it accounted for.**



Ontologies and enterprise architecture share a **representation crisis**: anyone can now generate a model, so representations multiply, drift, and contradict, and none can be leaned on. Coherence ends it structurally. **One locked metamodel of 6 zones, 24 concept types, and 31 verbs holds every business domain**; the vocabulary inside is unbounded and yours; and the ontology cannot drift, because what ships writes itself back.

What's new here



A closed form for meaning, fixed on purpose

The grammar that holds every domain is locked in code, not settings; **a closed form is what AI interprets reliably and humans can actually control**. The machine's job collapses from inventing structure, where modeling projects drown, to classifying into known kinds, which it does well; completeness becomes a computable question; a new vertical is a vocabulary pack, not a project. And an ontology is meaning, made explicit: **an agent here knows what things mean**; a retrieval agent has only text.



Concepts that find their own implementation

Binding meaning to reality is the problem the industry attacks by searching: take a concept, hunt for material that resembles it. **We inverted it**. Because the form is closed, each concept knows what it would look like if it were real, and projects those artifacts: the code that would implement it, the tables that would hold it, the interfaces, the process. Your material is measured against that projection, in both directions, in one reproducible calculation. **No language model decides what connects to what**; the same material always yields the same links, and a link stays a proposal until a person or a parse confirms it.



Authored from evidence, audited by adversaries

A field fills from the sources or stays empty; ambiguity becomes a named investigation, **never a silent assumption**. Independent reviewers then attack every claim: does the evidence hold, what contradicts it, what is missing. The platform refuses to publish while one claim is undefended, recomputed on the server, so nothing can talk it into shipping. Beneath it all, one law: **machine inference is evidence; only a human confirmation is ground**.



The write-back: an ontology that cannot go stale

When governed change deploys, **the deployment itself authors the concept it realized, inside the same transaction**. Keeping the ontology true is a by-product of shipping work; drift would require the delivery machinery to stop. EA diagrams lag, catalogues age, mined twins describe yesterday; **no adjacent category closes this loop**.

The Coherence Platform can help you...

BUILD GOVERNED ONTOLOGIES FROM REAL MATERIAL	RUN DETERMINISTIC ANALYTICS AND ANSWERS ON THEM	DELIVER USE CASES AND GOVERNED CHANGE ON TOP
Point the platform at a domain's documents, data models, and systems; extraction agents propose typed concepts and experts approve what enters . Every claim is challenged before an expert sees it, and the ontology stays true as the domain moves.	Project the ontology per question: impact, readiness, rule-to-enforcement traces. Ask in natural language and get answers governed by the ontology : the structure decides what belongs in an answer, every claim cites, and a claim without evidence is dropped, not improvised. Simulate before committing.	Generate expert deliverables written from the ontology, its structure dictating what they contain, with provenance on every statement . Orchestrate change as chartered initiatives: computed scope, gated approvals, sequenced cutover, and what ships writes itself back.

Key features



1. Coherence Ontology Studio: where domains become ontologies

The authoring surface, built so that **domain experts, not knowledge engineers, do the modeling**. An extraction swarm reads real source material into typed concepts; between extraction and approval sits a layered validation machine (deterministic checks, adversarial review, open questions routed to the expert), so your expert's time goes to judgment, not typing. The output is a **Domain Pack**: one domain's knowledge as an audited, reusable asset.

- ☐ **Evidence or nothing**: a field fills from the sources or stays empty; ambiguity becomes a named investigation for the expert to resolve, never a silent assumption.
- ☐ **Extraction is never trusted by default**: independent reviewers attack each claim (does the evidence hold, does anything contradict it, what is missing), and the platform refuses to publish while one claim is undefended. What your expert signs has already survived its own audit.
- ☐ **One grammar, unlimited vocabularies**: 6 zones, 24 concept types, 31 verbs hold every domain, so a new domain is a pack, not a project, and everything you model speaks one language.



2. Coherence Explorer: strategic intelligence over the domain

Not a viewer; **an intelligence product**. The ontology is projected per question into a bounded map of the domain's most consequential issues, not an inventory of everything: strategic outcomes at the top, drillable to the clause or code behind any finding. And the Explorer is where the domain evolves: **decide on a finding, simulate the change, route it into governed delivery**. Nothing commits from this surface.

- ☐ **Standing scrutiny, not dashboards**: specialist agents inspect the domain continuously from four perspectives (architecture, data, risk, change) and converge into one prioritized backlog, so nothing waits for the next review to be noticed.
- ☐ **Consequences before commitment**: propose a change and see what it triggers, what it breaks, and what must move before it; alternatives are weighed side by side, never on the live ontology.
- ☐ **Ask anything of the live ontology**: every answer cites its evidence, and where evidence runs out it says so instead of improvising. That is what makes an answer usable in front of a client or an auditor.



3. Coherence Transformation Orchestrator: where ontologies drive change

The change engine for programs that must survive audit. A sentence becomes a chartered initiative bound to the analysis it came from; deliverables walk a gated lifecycle to cutover, and **the deployment writes the realized result back into the ontology in the same transaction**. The loop closes: the ontology is never older than the reality it governs.

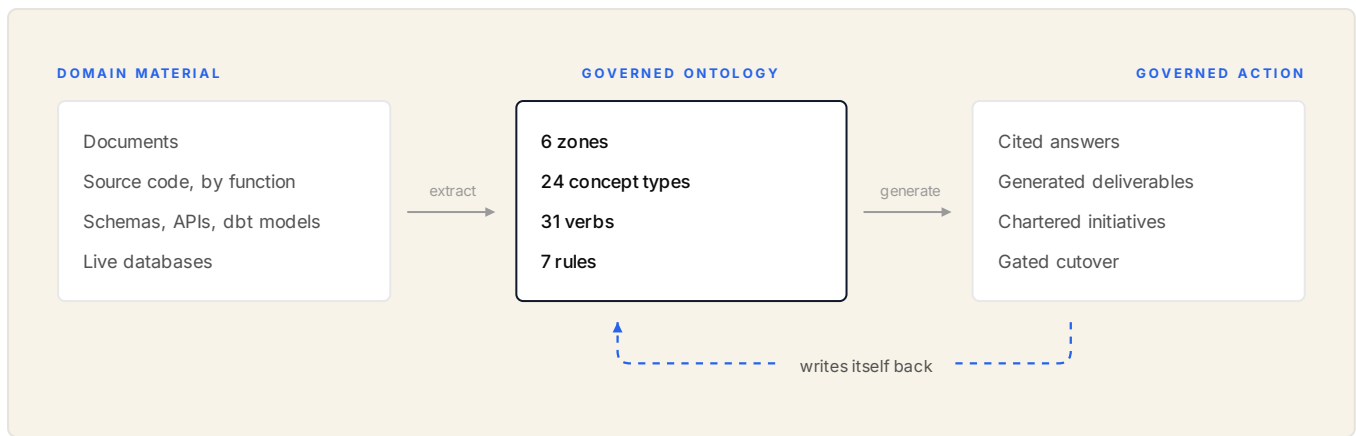
- ☐ **Two signatures decide everything** (what enters the ontology, what changes reality), held by two different people and impossible to route around; the AI drafts and never signs.
- ☐ **Scope cannot creep silently**: the machine may propose forever; only a human confirmation widens what an initiative is committed to deliver. The thing that kills programs needs a signature here.
- ☐ **The audit trail writes itself**: charters seal, phases record immutably, every decision carries who, on what grounds, when: compliance as a by-product of the work, not a second job.



4. Coherence Compute Engine: research, answers, computed change

Nobody opens the Compute Engine; **the three surfaces run on it**. Candidate links between your material and the ontology are scored deterministically, and given a mandate (a specification, an assessment, an analysis) it researches the domain as an expert would: the ontology governs the output, the linked sources supply the evidence, the governing rules their triggers. Back comes a chartered deliverable, every chapter naming its sources, every rule quoting its trigger: **a draft your expert edits and signs, not a blank page they start from**.

- ☐ **It knows what it doesn't know, structurally**: the ontology holds both what the domain's rules require to exist and what the material actually provides, so absence is computed, not sensed. A missing requirement becomes a numbered gap, graded by which rules become unenforceable, with the action to close it.
- ☐ **No hallucination, by construction**: the ontology is what an answer can be wrong against. Every claim is checked against it and the in-scope sources; a claim that cannot cite is removed, and the document says so.
- ☐ **Expert-shaped output**: schedules, field-level specifications, capture matrices, obligation tables, structured the way your profession already works, so validating is fast and signing is defensible.



Technical specifications and feature highlights

- ☐ **One deployable unit**, hosted by Coherence or entirely inside your environment; adopting it is an installation, not an integration program
- ☐ **No AI-vendor lock-in**: the reasoning provider (Anthropic, Google, Amazon) is a configuration choice, not a re-platforming
- ☐ **Reads the domain as it natively is**: documents, source code at function level, database schemas, API definitions, process flows, live databases
- ☐ **Evidence linking is deterministic**: the same material always yields the same links, with no AI judgment in the loop; a computed link stays a proposal until confirmed
- ☐ **Two human gates, impossible to bypass**: what enters the model and what changes reality are signed by people; the AI drafts and never signs
- ☐ **Everything that changes is attributable**: who, what, when, on what evidence; the audit record writes itself as the work happens
- ☐ **Your material never leaves**: documents, code, data and the model itself stay inside; only the reasoning call goes out, to an AI provider you approve
- ☐ **Semantic indexing computed in-house**: sovereign, at zero marginal cost, independent of any external service
- ☐ **Processes are first-class citizens**: how work actually runs is lifted from the systems and checked against how it is documented; the gap between the two is a finding
- ☐ **One fixed grammar**: 6 zones · 24 concept types · 31 verbs hold every domain; the vocabulary inside is unbounded, and yours
- ☐ **Agents have no free hands**: every agent action passes through a governed, audited interface, scoped to the tenant and its clearances
- ☐ **1,957 deterministic tests** guard the platform's behavior; what must never vary is tested to never vary

Proof, in practice

A live engagement · the pilot that closed the loop · a public demonstration estate



LIVE ENGAGEMENT

Clinical trials: a week of authoring becomes two days of validation

A multi-sponsor clinical estate onboards studies on Coherence: **100+ studies onboarded**, provenance on every statement, per-study isolation. What the documents don't specify is **declared as a gap, never filled by assumption**.



PLATFORM PILOT

The loop, closed end to end

On the pilot estate (an Oracle EBS → Charisma migration), a step that existed on paper but not in the system became a governed build. When it deployed, **the ontology updated itself in the same transaction**, and the gap that started the work closed on the same screen where it was found.



PUBLIC DEMONSTRATION ESTATE

An SAP planning migration, governed end to end: watch it live

A complete fictive company, fifteen years of legacy planning logic: **eight pieces of custom logic dispositioned, each with signed grounds**, scope computed from the model rather than estimated, a deliberately planted error caught by the gate, readiness recomputed in front of the audience.

Clinical trials: onboarding a study in days, with evidence on every line

A multi-sponsor clinical-trials operation must author a Site Data Capture Specification for every new study: visit schedules, capture sequences, field-level build rules, known gaps. Manual authoring costs **roughly a week of expert work per study**, against an addressable portfolio of **~7,000 studies**. On Coherence, each study's own documents become a governed domain ontology; the ontology governs what the specification contains; an agent traverses it to generate the document, **with provenance on every statement and gaps declared rather than guessed**. Key results:



One week → two days, per study

Expert authoring became expert validation. The first four studies alone yielded **1,073 governed concepts**, every count read from the live graph, not asserted from a report.



100+ studies, and the canon compounds

Expert corrections encode into a shared clinical canon: known forms classify deterministically, at zero cost, and paid extraction runs **only on what the canon hasn't seen**. Each study makes the next one cheaper.



Written like the expert, audited like the regulator

The generated specification is structured the way the profession itself works (visit schedule, capture taxonomy, visit-by-visit sequences, field-level form specifications, sign-off roles per form), with **every chapter naming the exact sources it was compiled from** and the governing regulatory principles applied throughout. And where the sources run out, the document says so: **a gap analysis with impact and required action**, in place of confident filler.

Three ways to run it, one engine under all

TIER 1 · CONSULTANCY

Your methodology, as an ontology.

Automated consultancy as a service. Your methodology becomes ontologies; deliverables generate with evidence; your seniors validate. The firm's knowledge compounds.

TIER 2 · BUSINESS

Model your own domains.

Your own team models, in the Studio. Platform access hosted by us or in your environment, plus services you can package into offerings for your own clients.

TIER 3 · ENTERPRISE

Estate-scale change, on the map.

Forward-deployed engineers, complex integrations, and full transformation orchestration through gated cutover.

One domain of many: the open end

Clinical documentation is one landing; the migration cockpit and the planning estate are two more. The finding that keeps repeating: **nearly any domain where documents and systems carry the truth, fits**: real estate, energy, capital markets, logistics, legal and regulatory work, the public sector. Each new domain is a vocabulary pack on the same locked grammar, not a new platform; **the use-case layer is open-ended by design, and most of it is still unexplored**.

Judge it on one of your domains.

One domain (a business area, a process, a migration) and the documents that describe it. We'll show you **what the ontology knows, what it can prove, and where the gaps are**. Contact us at hi@coherence-solutions.com for a working session on your material, or a walkthrough of the public demonstration estate.

