Peak3

New Release: Graphene Harness and Graphene v4

Release Kit

September 2026

Graphene v4 is the AI-native insurance core with an upgraded Graphene Agent Platform. It now features a marketplace of pre-built agents that run and change the business.

With Graphene Harness, we are disrupting ourselves. Peak3 is moving from selling software to selling the production line that builds it: our entire AI-DLC.

An insurer using Graphene Harness owns the means of changing its core system: the development and maintenance capability itself, rather than a dependency on a vendor's delivery organisation.

Bill Song, CEO of Peak3

Overview of the new release

Click on the badge to jump to the section

Graphene v4 includes the updated **Graphene Agent Platform** with a **marketplace of pre-built agents**, and diverse functional enhancements across **Health, Life and P&C.**

Graphene Harness is an end-to-end **AI-driven delivery lifecycle (AI-DLC)** for insurance software. It is built on a virtual scrum team model for mission-critical technology in insurance.

Graphene v4

AI-Native Core Platform
for Life, Health and P&C

AI in Graphene v4

Overview: Graphene Agent Platform

Agent Marketplace: Run the Business

Agent Marketplace: Change the Business

Interfaces: New Graphene CLI & Skills

Functional Upgrades in v4

Health Insurance

Life Insurance

P&C Insurance

The upgraded Graphene Agent Platform

Turning AI agents from ad-hoc execution into a managed, observable production capability.

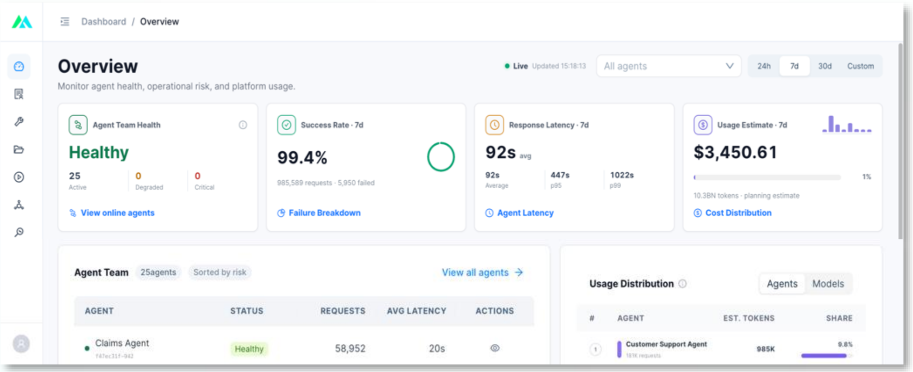
Full agent lifecycle: One platform to build, onboard, execute, observe, evaluate, and govern all agents.

Enhanced scalability and oversight: Every agent in one place: its model, its tools, its knowledge, all declared and versioned.

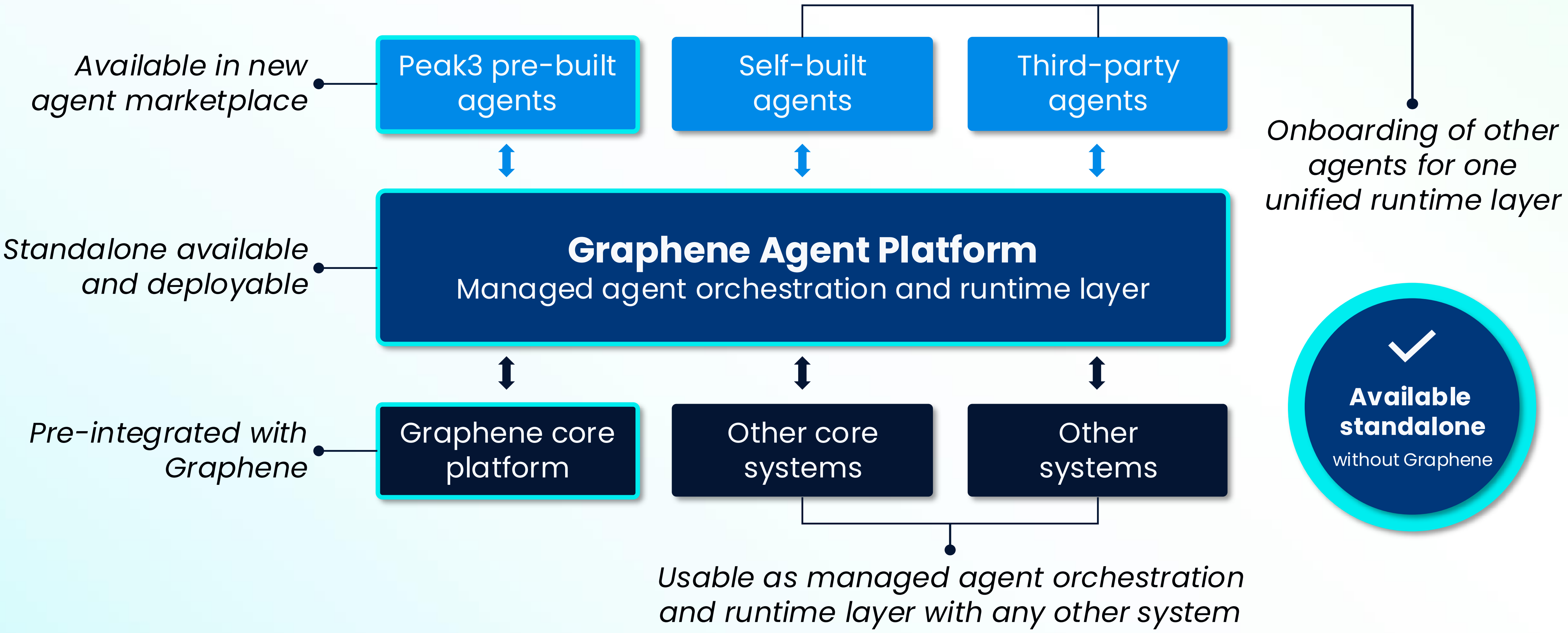
Stringent tool governance: Central definition of all tools, which agents can call them, and at what risk/under which policy.

Audit-grade evidence: Every step of the reasoning retained with detailed tracing and live monitoring.

Fully model-agnostic: Bring-your-own-model with deployment flexibility to ensure compliance and long-term optionality.



Standalone managed agent orchestration and runtime layer between any AI agent, Graphene and other systems



The design principles behind the Graphene Agent Platform

Human oversight

If the action is high-risk, it stops for a human. Approval first, execution second.

Separated governance & use

Agent governance and use are decoupled. Configuration flows down, never back.

Evidence-first

Every run produces granular evaluable, auditable evidence to meet regulatory needs.

Model- & cloud agnostic

Deploy without lock-in. Choose the best-fit model for each use case without rebuilding.

Native multi-tenancy

Tenant isolation is built into the data-routing layer full multi-tenant deployments.

Open and pluggable

Tools from any system and graders can be added without changing the runtime.

Seven core capabilities of the Graphene Agent Platform

Agent runtime

Ensure uniform execution for every agent with HITL.

Reason & Act (ReAct) · Workflow · SSE Streaming · Human-in-the-Loop (HITL) · ...

Model gateway & routing

Route every call to the right model — no lock-in.

Multi Model · BYOM · Per-Agent Routing · Fallback/Failover · Cost Awareness · ...

Knowledge & retrieval

Ground agents in your proprietary knowledge.

RAG · Versioned Release · Hybrid Retrieval · Citations · ...

Tools

Connect once. Execute with risk-graded controls.

Function Calling · HTTP Capture · Risk Grading · Dependency Graph · Sandbox · ...

Tracing & Monitoring

Monitor and reconstruct any action and decision.

Full Trace · Span Tree · Replay · Live Monitoring · Redaction · ...

Governance

Set and enforce governance — separated from use.

Role-Based Access · Policy Hub · OAuth · Tenant Isolation · Audit Log · ...

Runtime evaluation

Make agents provable and improve their performance.

Evidence → Score → Verdict → Audit

Policy-driven · Sampling · 100% Error Scoring · LLM as Judge · Human Review · ...

Governance and use separated on two planes with closed-loop improvements

Platform Tenant: Governance Plane

Where the agent is defined and onboarded.

Publish agent ↓

Closed-loop

↑ Improve agent

Business Tenant: Runtime & Monitoring Plane

Where the agent does the work, under watch.

Agent onboarding: assemble, define policy, publish

Assemble agent

Set the agent's models, tools, the knowledge it draws on, etc. — all declared and versioned in one place.

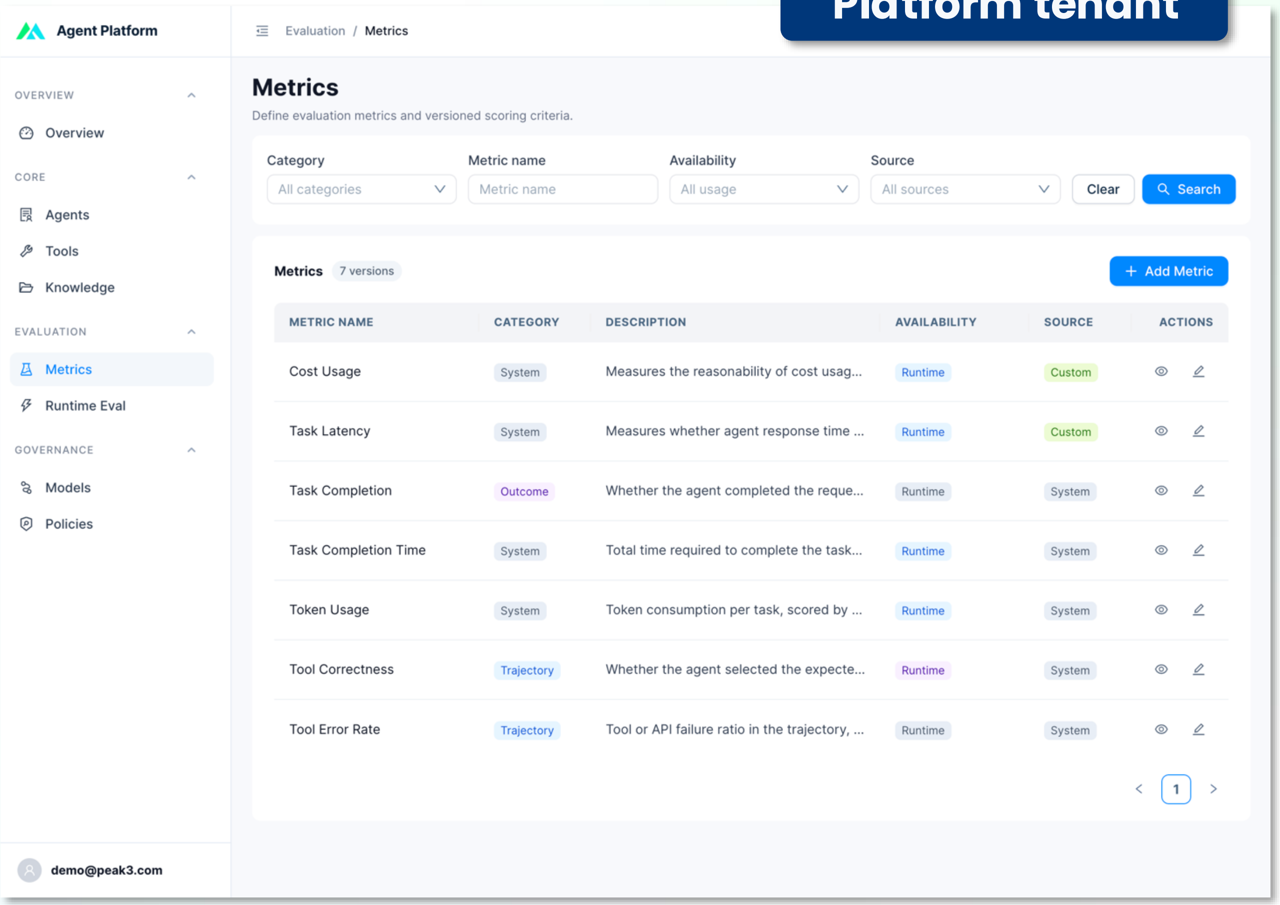
Define evaluation policy

Decide what good performance means. Bind those metrics to the agent as an evaluation policy.

Publish agent

Publish the agent to the business tenant together with its policies. The published contract is enforced live on every run.

Platform tenant



Agent runtime: How a run flows, end to end

Request
Triggered via an API call, webhook or Kafka event from any source.

Authenticate
Authenticated request by role and tenant. Routing based on policy.

Run
Reasoning, tool calling, knowledge retrieval — within published limits.

Escalate
For high-risk transactions, approval routed to humans.

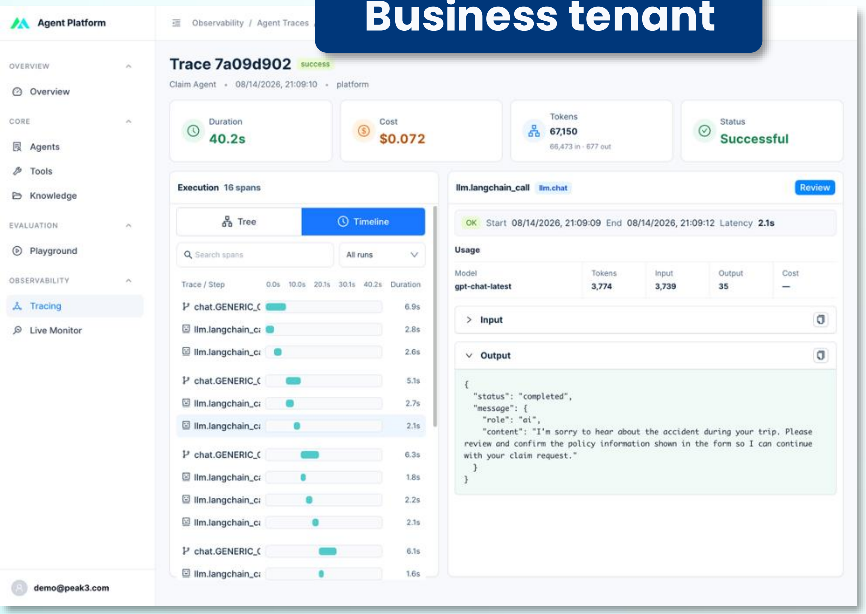
System sync
Write to system (e.g. Graphene) with result synced back to agent.
Accept
Reject

Observe
Every input, output and decision step is traced and monitored.

Evaluate
Metrics for failures and successes evaluated against policy.

Improve
Agent parameters tuned, metrics sharpened and new version published in control plane (platform tenant).

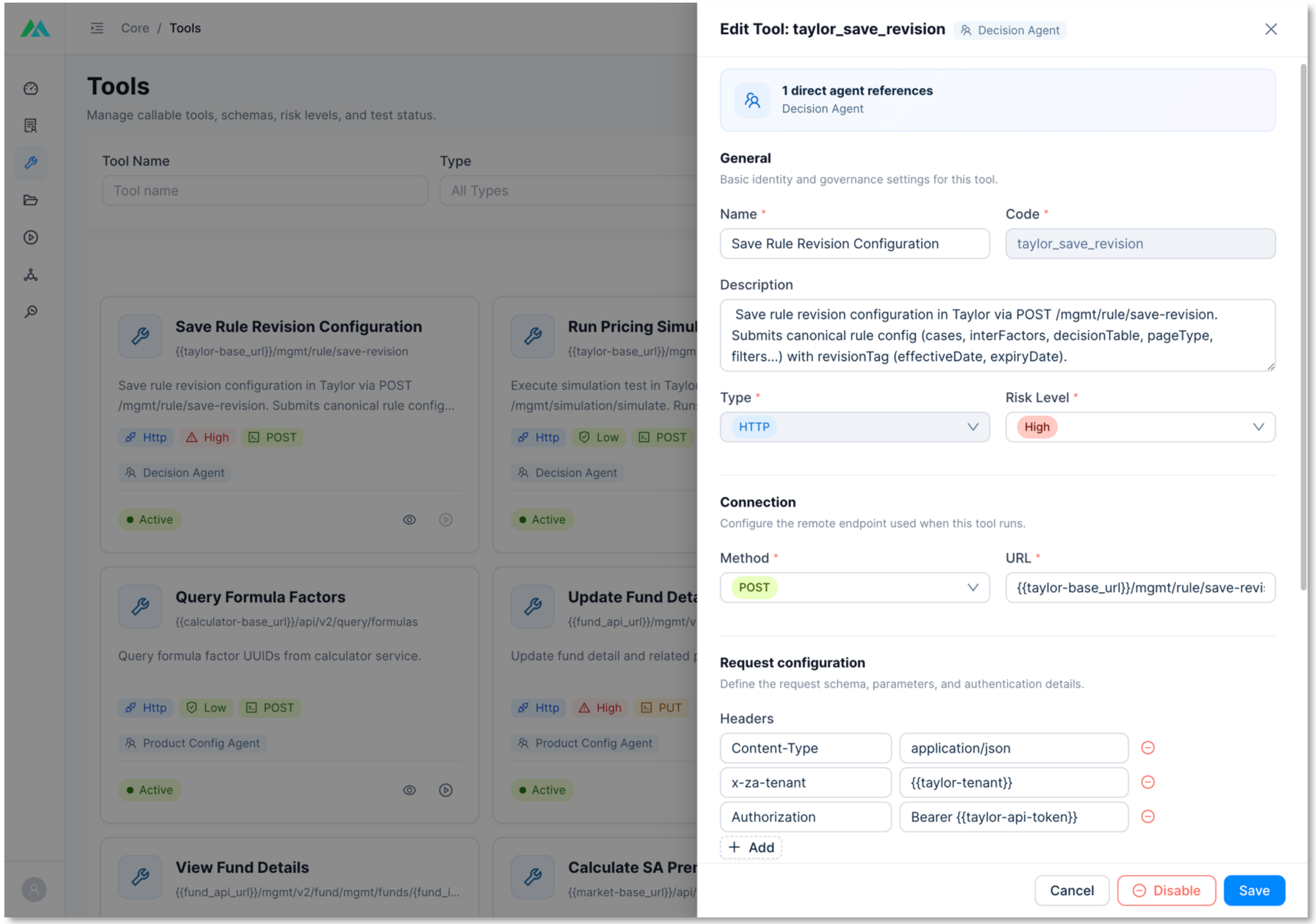
Business tenant



Tools are registered and risk-graded

Every tool an agent can call sits in a registry with a risk grade and a dependency graph (for built-in tools and HTTP tools alike).

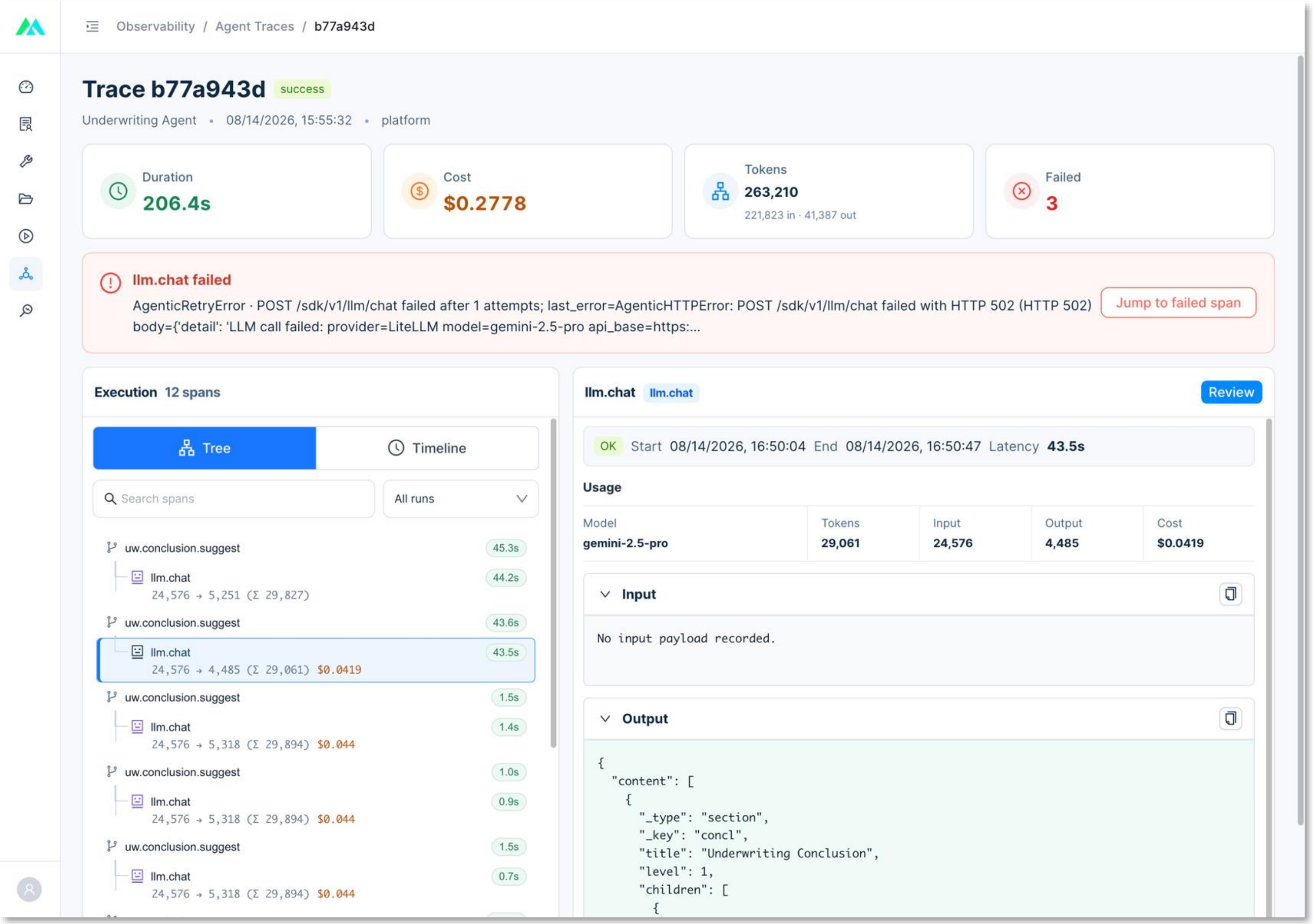
Agent actions are limited to registered tools. Risk levels trigger human approvals.



Audit-grade tracing and explainability for all agent runs

Full tracing with a span tree, replay, redaction, all inputs, outputs and decisions.

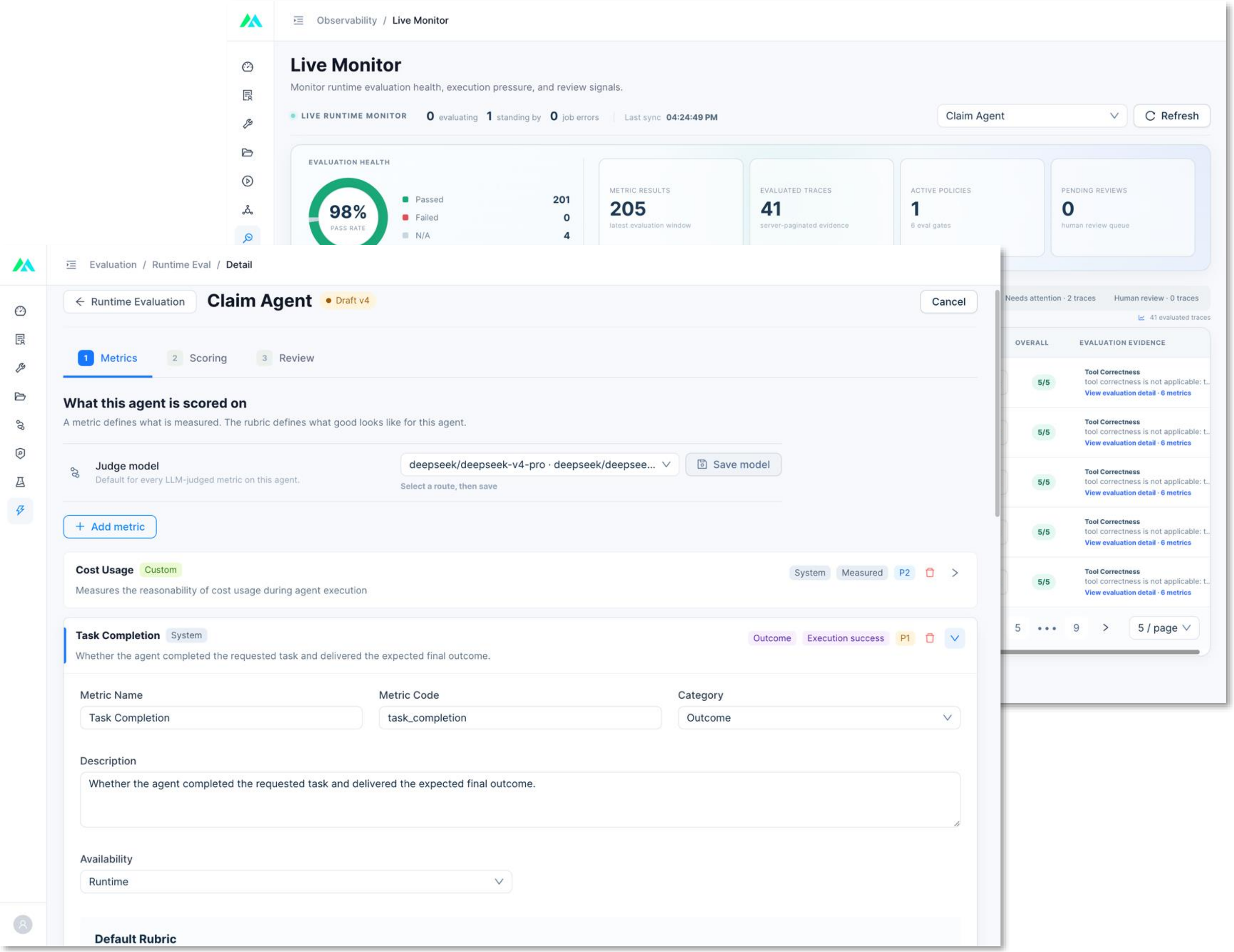
Agent activity becomes not just visible but auditable, and a failed run becomes diagnosable.



Evaluation of all agent runs, fully configurable

Runs are scored automatically against metrics you define. Policy-driven, evidence-first, with pluggable graders.

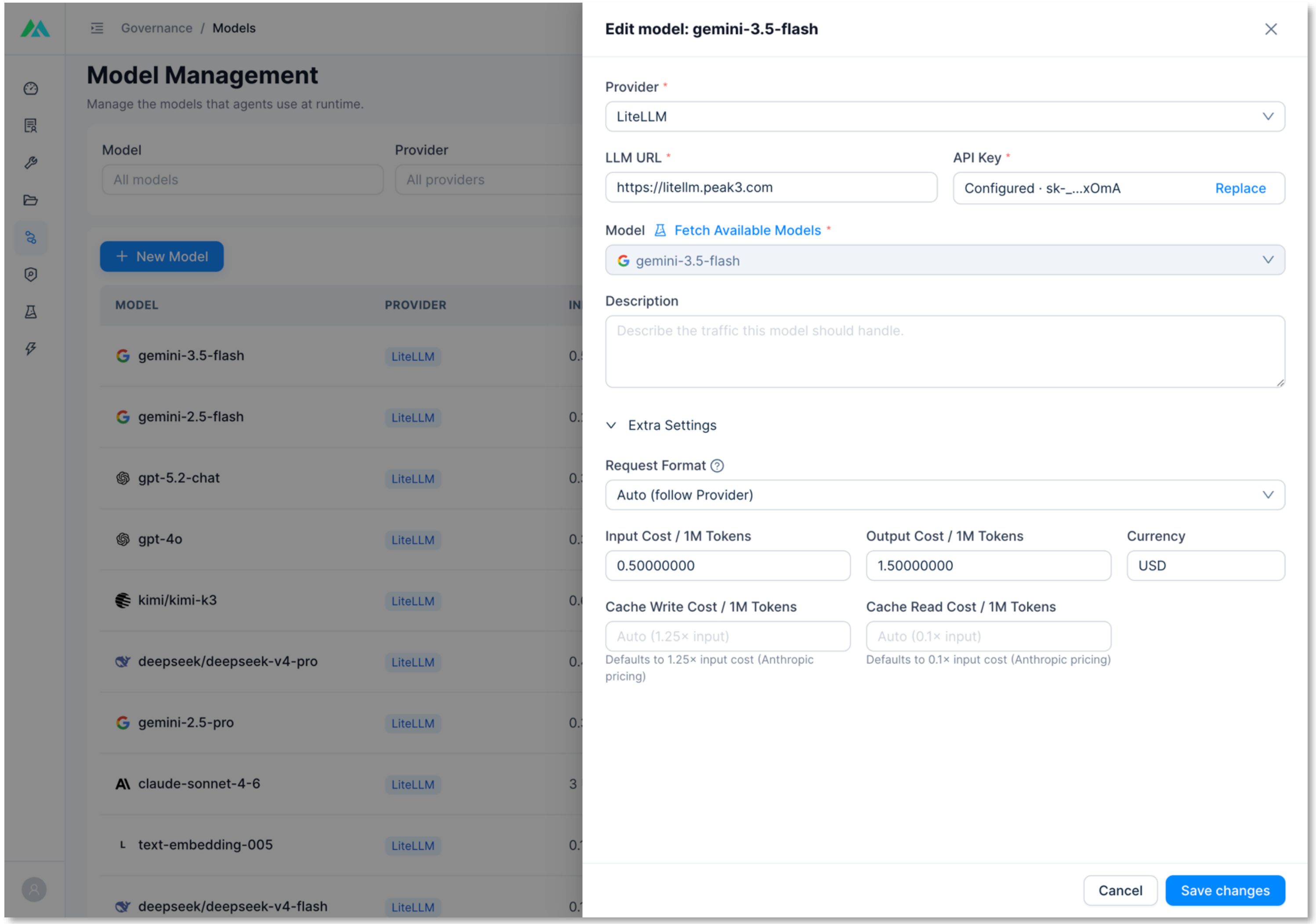
Live monitoring enables proactive resolution of drift and continued improvement.



Fully flexible model choice

Unified model gateway with per-agent routing, multi-vendor support, bring your own model (BYOM) and protocol adaptation.

Choose the model behind any agent and change it without lock-in and without rebuilding the agent.



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Life Insurance

P&C Insurance

Pre-built agentic capabilities across three agent families to autonomously or HITL run the insurance business

	Sales	Underwriting	Servicing	Claims

1 Conversational Support Agents

Improve and automate customer interactions 24/7, from upsell journeys to customer support to FNOL intake, with **conversational multimodal AI agents** integrated into core processes.

2 Intelligent Document Processing Agents

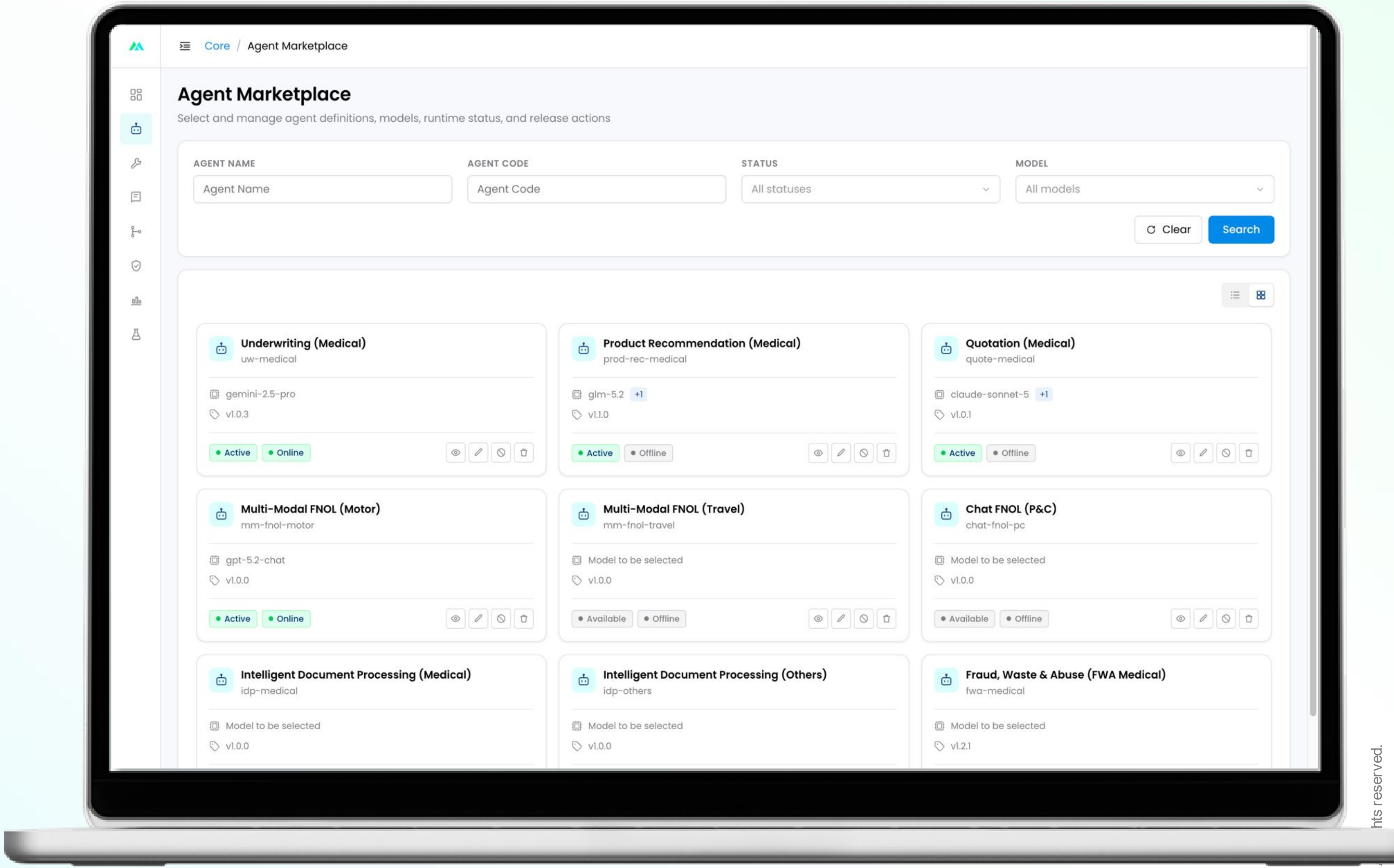
Eliminate manual work and increase accuracy through vision-powered AI agents that **intelligently recognise, extract data from, and validate documents** — from application forms to claims documents.

3 Assessor & Triaging Agents

Automate and improve decisions with AI agents that **autonomously assess underwriting and claims cases, develop risk reports and scores** with transparent evidence chains, and assist experts with final decisions.

Marketplace of agentic solutions

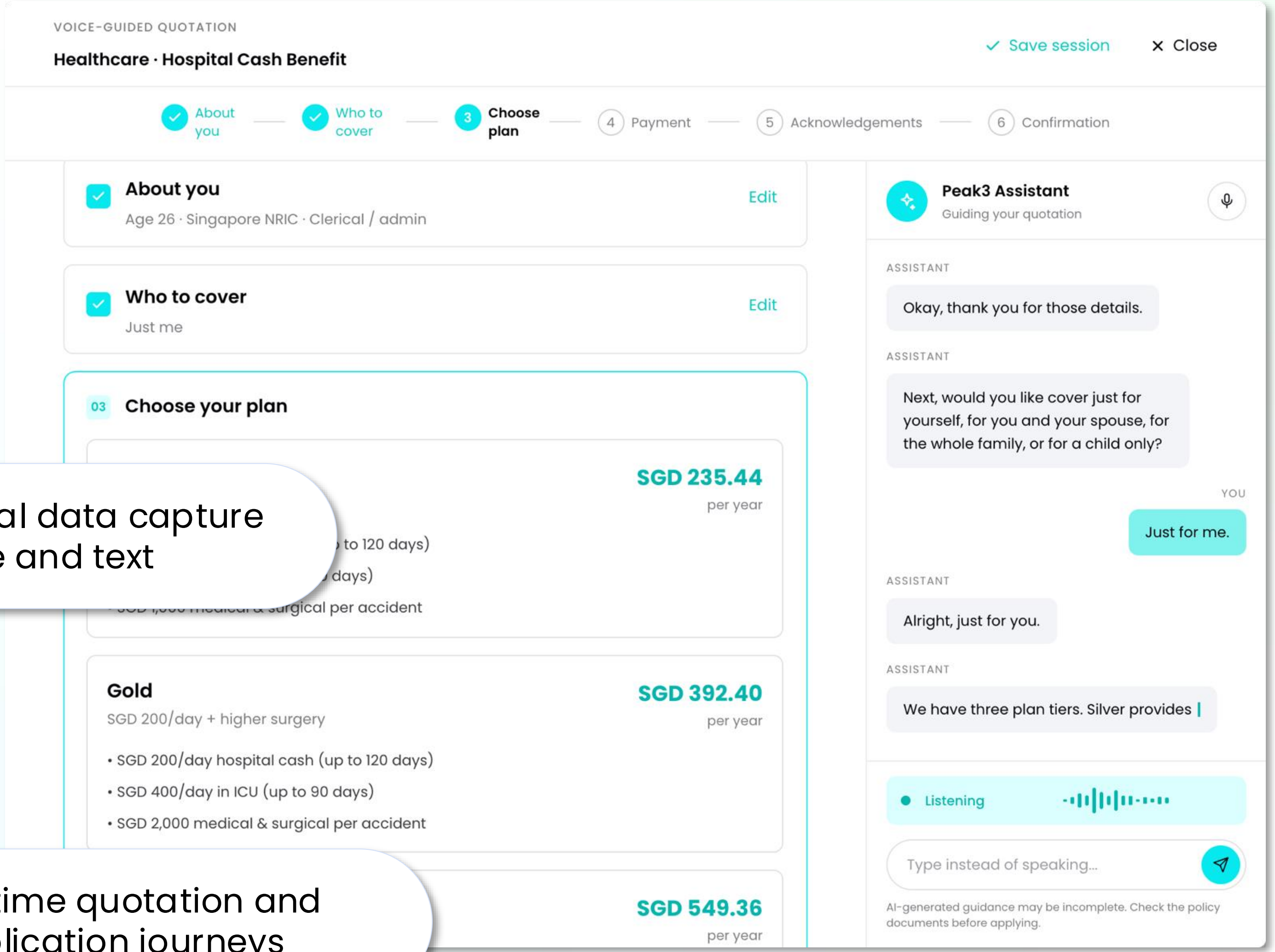
Continuously growing selection of pre-built solutions across the insurance value chain



Agent marketplace

Product advice and quotation (multi-LoB)

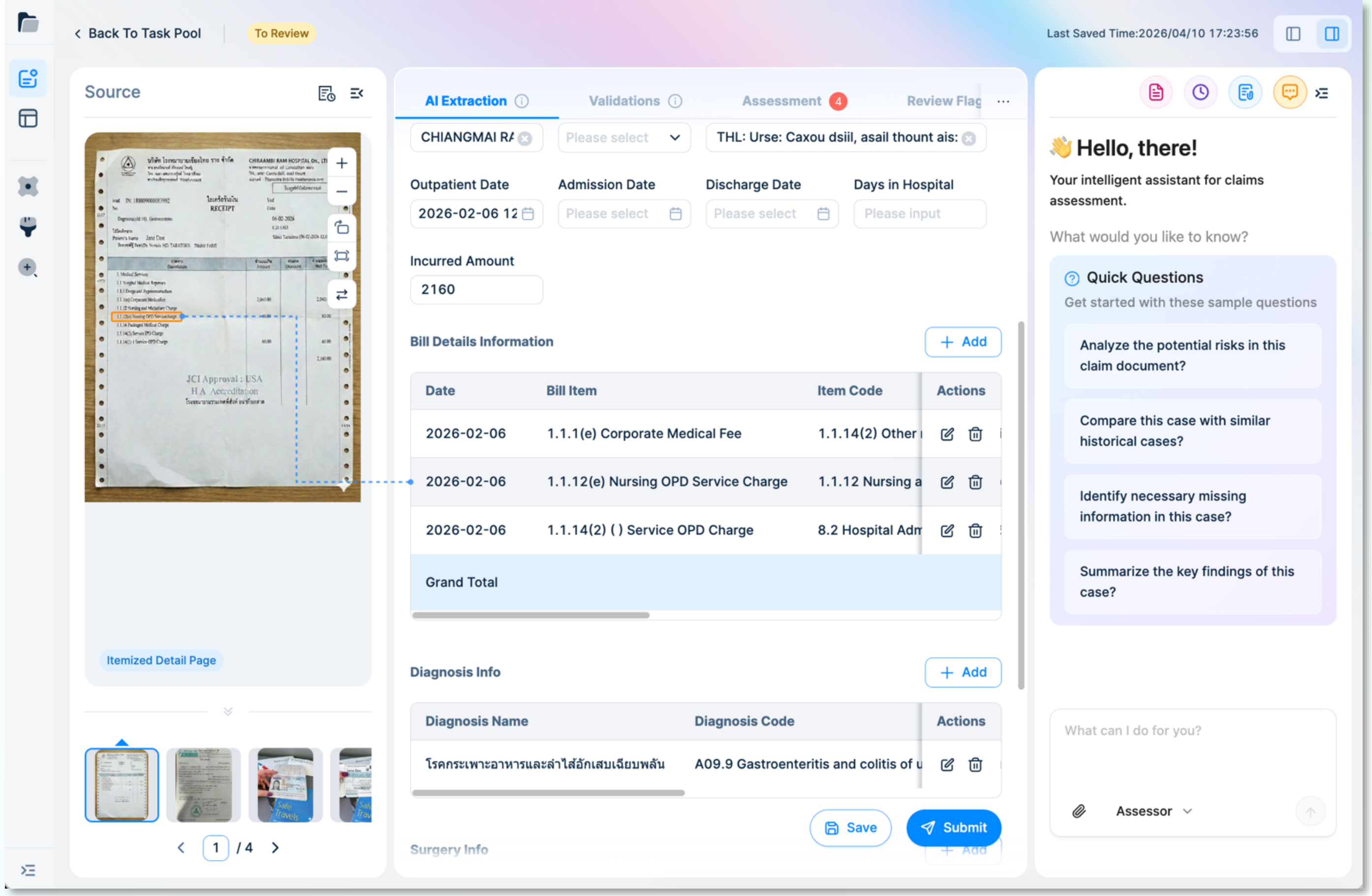
- Conversational answers and advice grounded in knowledge
- Conversational data capture in voice and text
- Interactive forms for customers for co-browsing with agent
- Real-time quotation and application journeys



Agent marketplace

IDP: Intelligent document processing (multi-LoB)

Holistic features to process the most complex insurance documents with 99% accuracy.



- Automated Document Classification
- Cross-Document Validations
- Confidence Scoring & Thresholds
- Zero-Shot Templating
- Visual Bounding Box Citations
- Multilingual Semantic Understanding
- Automated Calculations
- Data Mapping (e.g. ICD Codes)
- User Edit & Version Control
- Intelligent Copilot

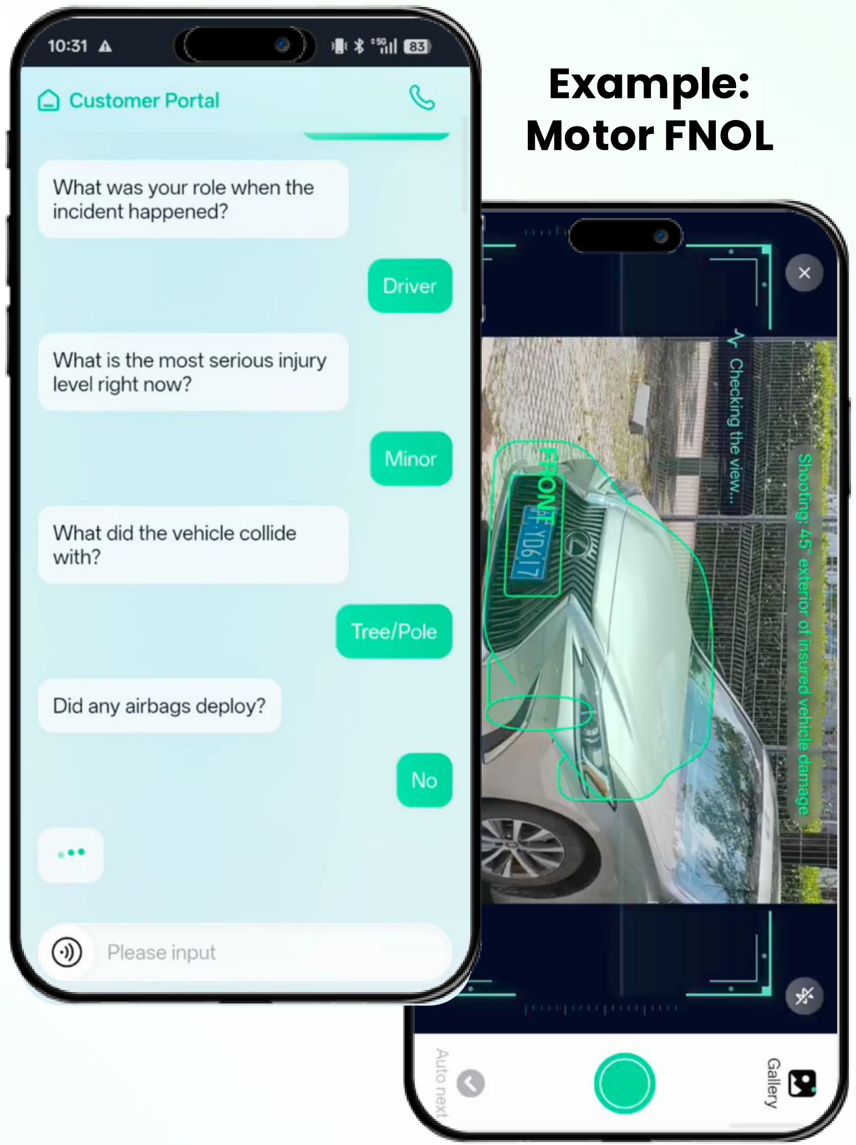
Example: Medical Claims

Agent marketplace

FNOL: Conversational first-notice-of-loss agent (multi-LoB)

- Customers can initiate claims instantly, 24/7, through intuitive, guided conversations.
- Structured data is captured from the very first interaction to improve accuracy.
- The claims workflow is immediately kickstarted to accelerate overall claim cycle time.
- Users are guided to provide all necessary data and complete submissions the first time.

Example: Motor FNOL

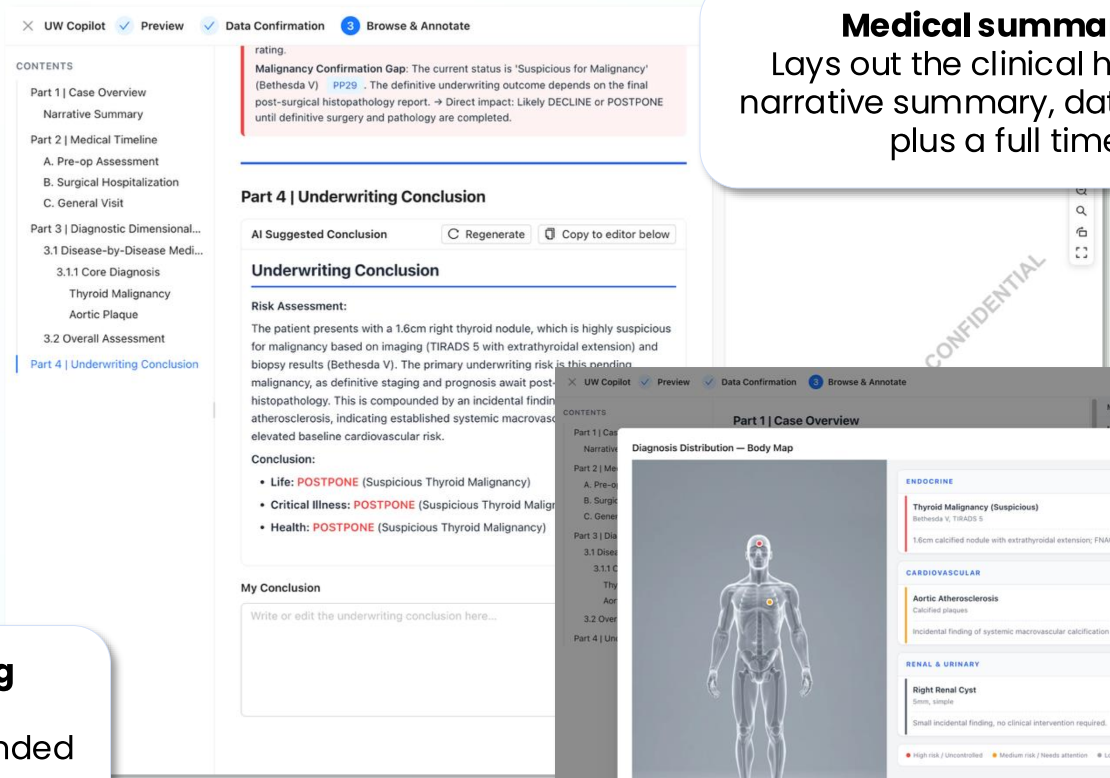


Agent marketplace

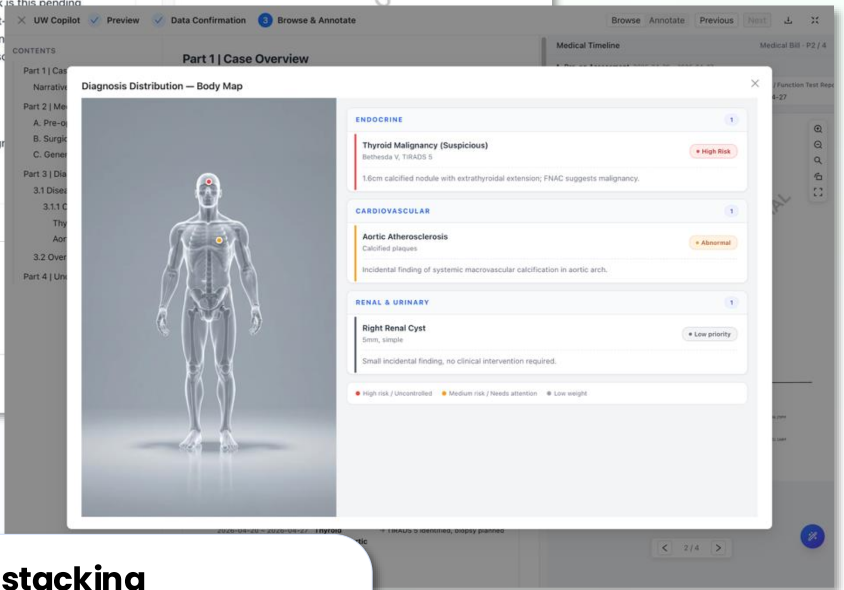
Agentic medical underwriting copilot

Intelligent document processing
Classifies, segments, and extracts data from raw medical records with confidence scoring on every field.

Guideline matching & decisioning
Matches each condition against underwriting manuals with recommended decisions per product line.



Medical summarisation
Lays out the clinical history with a narrative summary, data-issue table, plus a full timeline.



Risk stacking
Goes beyond single-condition review and considers condition compounding and guideline gaps.

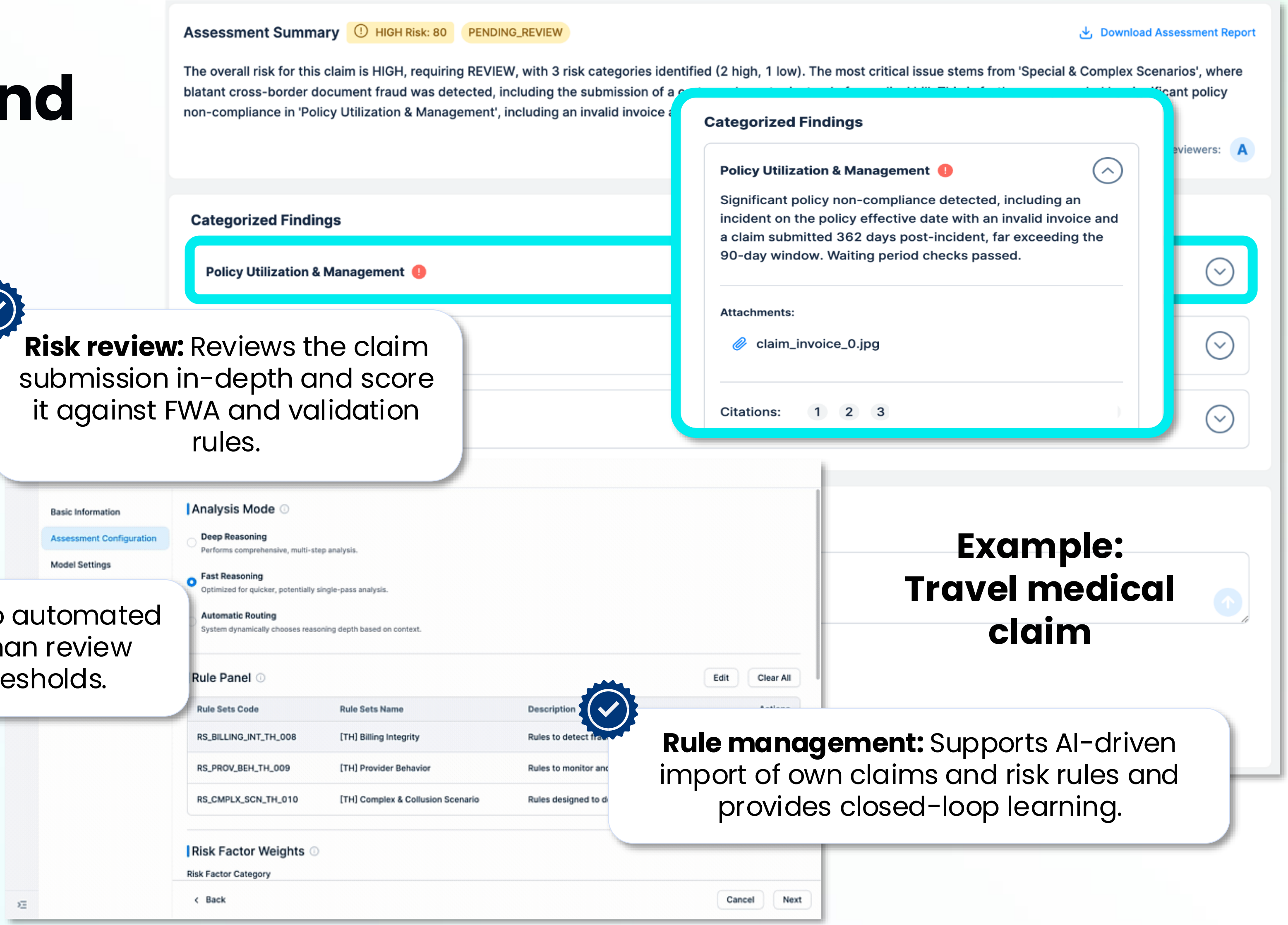
Agent marketplace

FWA: Fraud, waste and abuse (multi-LoB)

Evidence chain: Captures structured evidence chain citing every rule triggered and every source document referenced.

Risk review: Reviews the claim submission in-depth and score it against FWA and validation rules.

Approval routing: Routes cases to automated approval, referral queue or human review based on configurable risk thresholds.



Example: Travel medical claim

Rule management: Supports AI-driven import of own claims and risk rules and provides closed-loop learning.

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Life Insurance

P&C Insurance

Paradigm shift in speed and efficiency of changes

Empowering the business to own innovation.

What? **Task: Create a new insurance product from scratch with multiple plans and/or riders**

Where?	Traditional/legacy core systems	Modern, no-code core systems	AI-native core system
Who?	IT / Dev (in-house/vendor)	Trained BAs (in-house/vendor)	Business + AI (in-house)
How?	Custom development	GUI-based configuration	Prompt-based configuration
How long?	Weeks to months	Days to weeks	Minutes to Hours

Notes: Duration from the time requirements have been confirmed; excluding new integrations (if needed)

New design-time agents turn requirement documents into working configuration

Unstructured requirement documents

(e.g. PDF policy wording, Excel calculator, PDF rulebook)

Product Config

identifies and translates product requirements

Formula Config

translates calculations into executable code

Rules Config

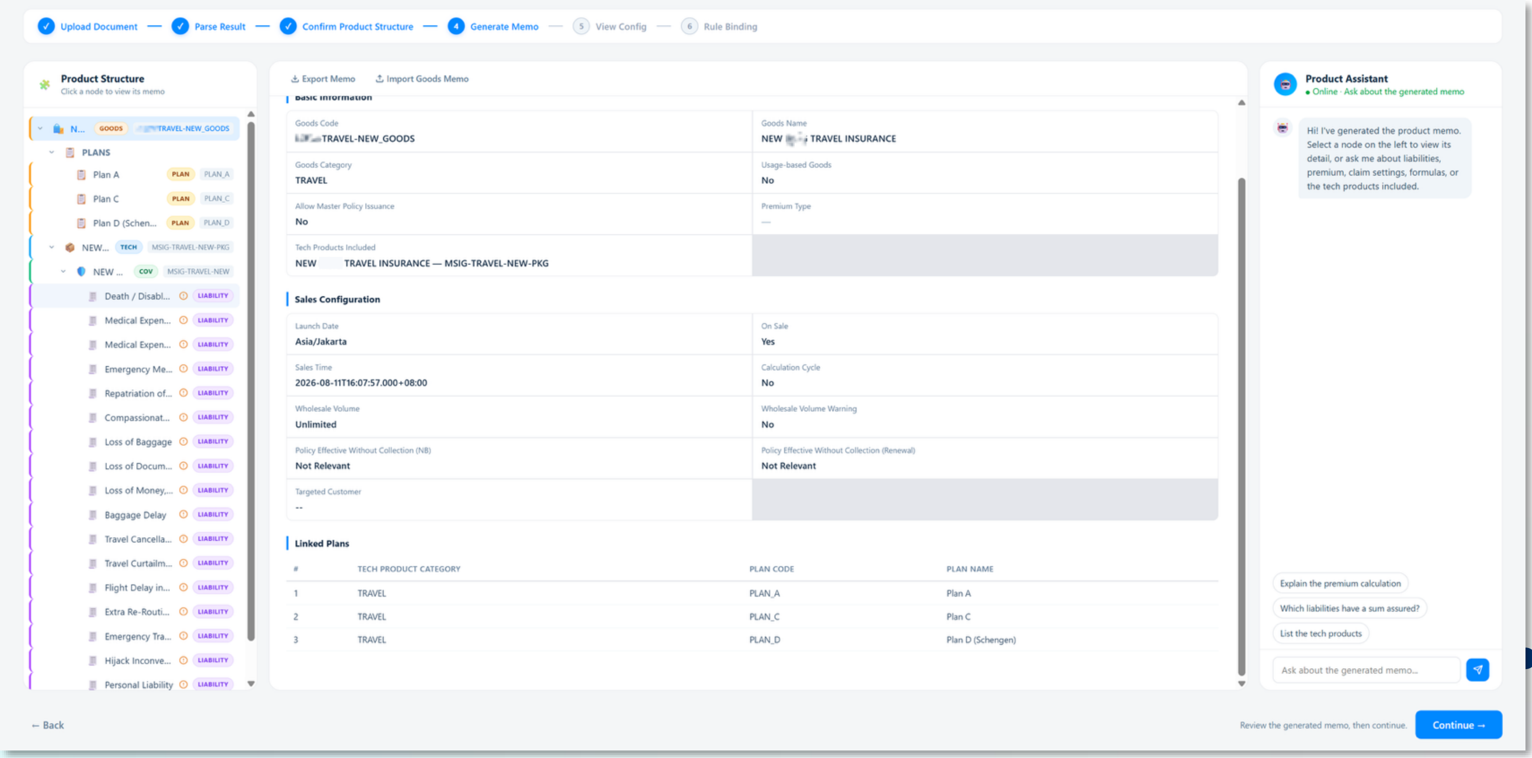
identifies and translates applicable business rules

Working configuration in core system

(e.g. product set-up, premium calculation, underwriting rules)

Read — **Analyse** — **Translate/map** — **Configure**

The Product Agent translates your product specs into Graphene configurations



Human gates: Hard gates for human review and approval (product structure, memo).

Tracing: Full process is recorded and traced to meet audit requirements.

Upload document

Upload policy docs, brochures, etc.

Parse result

AI reads the documents and parses them in structured human-readable format.

Define & confirm structure

AI proposes structure following Graphene's product model for human confirmation.

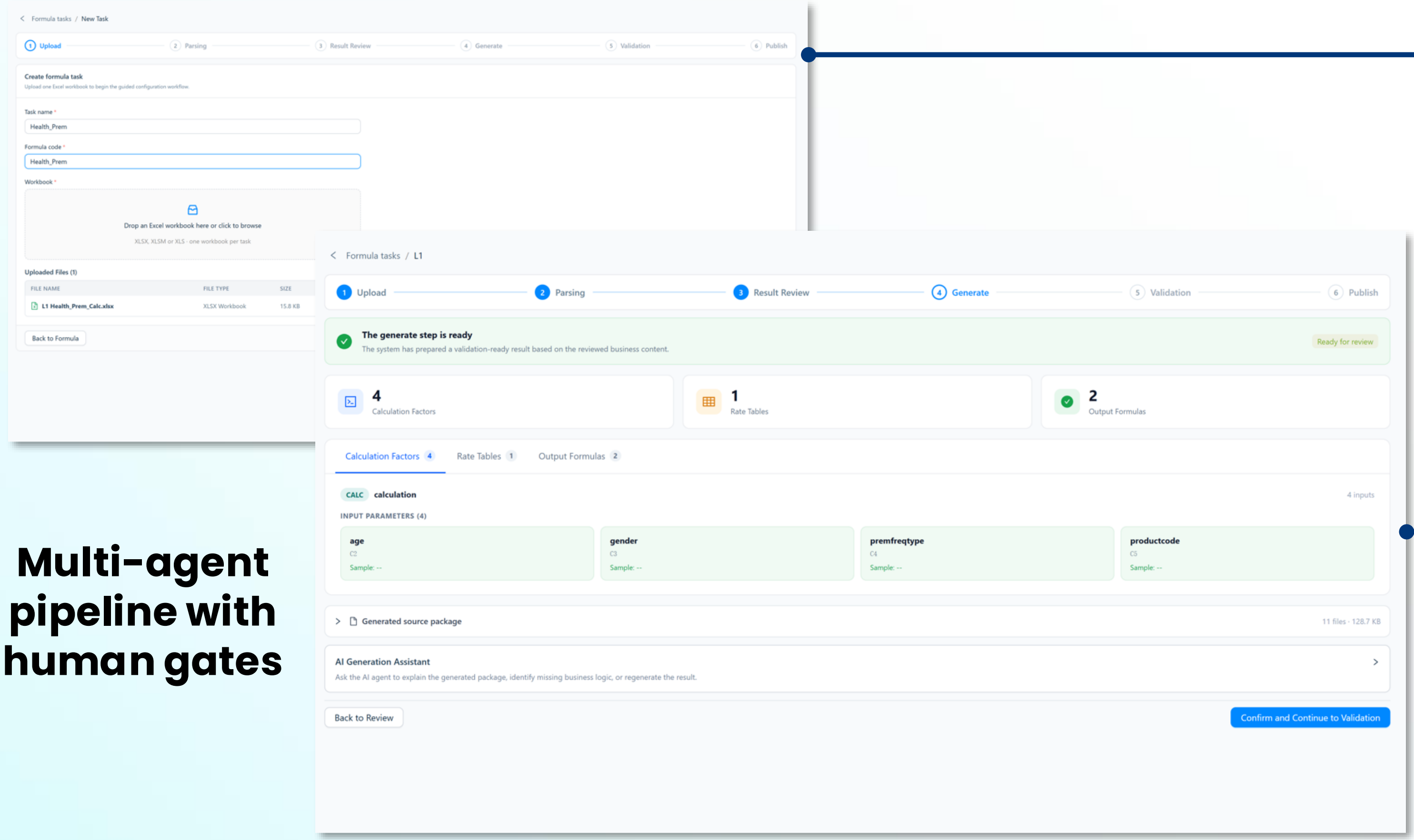
Generate & confirm memo

AI generates detailed product memo (mapped to Graphene structure) for human confirmation.

Create & view configuration

AI sets up product in Graphene based on memo; configuration can be viewed in GUI.

The Formula Agent converts your raw calculations into executable code in Graphene



Multi-agent pipeline with human gates

Upload: Drop your calculation files (Excel)[1]

Parse: AI extracts formulas, tables, conditions, and variable relationships

Review: Human reviews the parsed intermediate results. Confirm or adjust

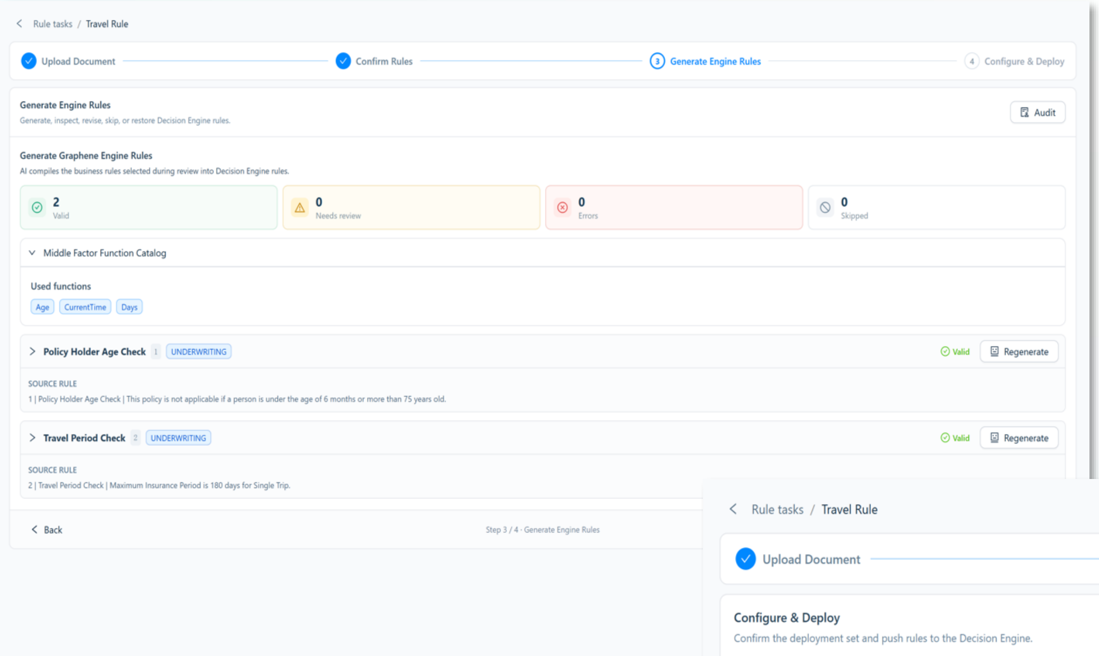
Generate: AI produces clean, structured formula code. Ready for validation

Validate: AI conducts automated checks + review (output vs. expected values compared)

Publish: Deploy to production. Version-controlled with audit trail preserved.

Notes: [1] Currently, only Excel uploads supported; source files to be expanded as part of product roadmap

The Rule Agent takes your rulebook and turns it into executable rules through a staged pipeline



Upload

Upload your rule documents (PDF, Excel, Word)

Parse

AI extracts formulas, decision tables, conditional branches automatically

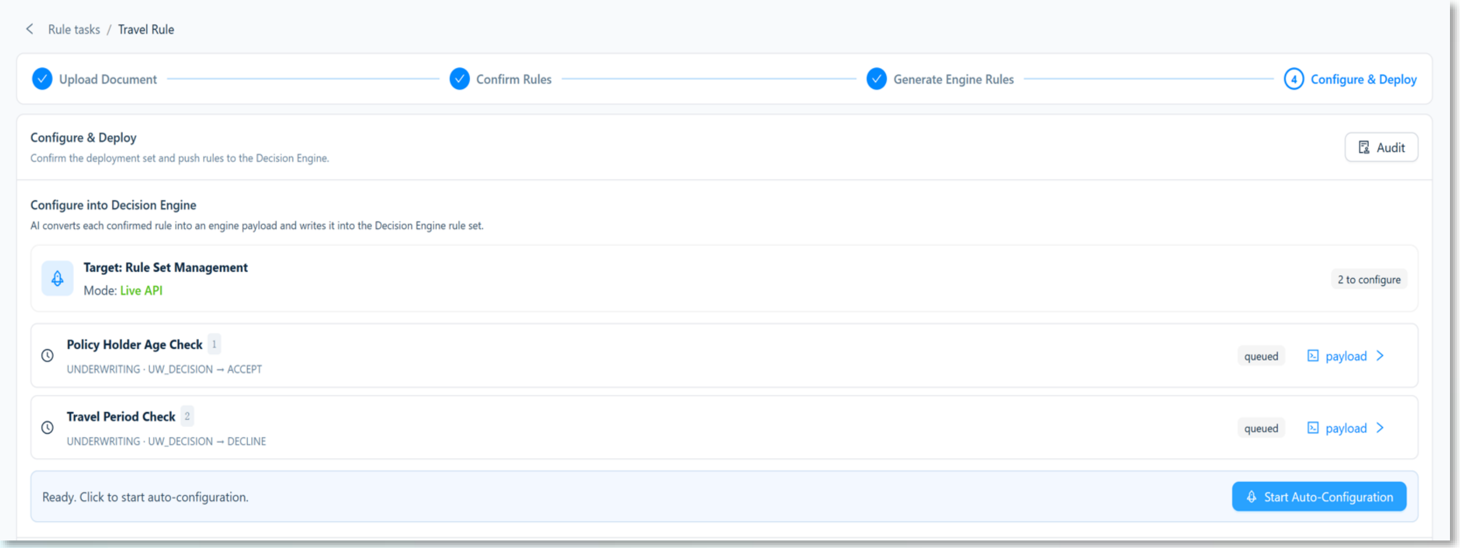
Generate

AI outputs structured rule proposals for human review & ne-click confirmation

Publish

Rules deployed to production. Immediately ready for use

Multi-agent pipeline with human gates for new business, underwriting, servicing and claims rules



Change as new organisational capability

Configuration expertise stops living with a handful of specialists and becomes an organisational capability. Your experts move from writing configuration to reviewing it.

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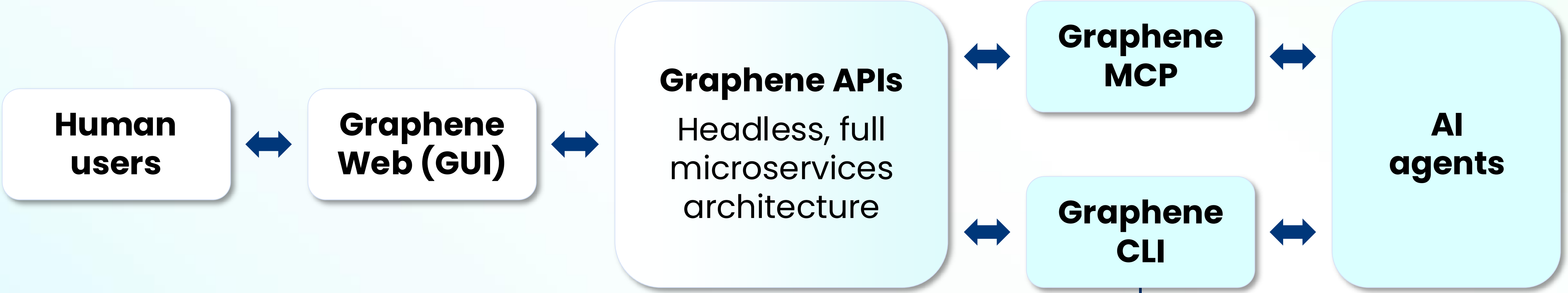
Graphene v4 adds a command line (CLI) as an interface for agents in addition to MCP and APIs



Graphene CLI = Graphene core capabilities exposed as agent-executable commands — discoverable, composable and safe to execute.

Note: Graphene CLI does not replace Graphene Web but acts as an additional interface for agents to safely reach Graphene core services.

Graphene CLI is built for agents: discoverable, structured, safe and environment-aware

Designed for agents, not only for people using a terminal.

Discoverable

Agents discover the system step by step.

Domains → Commands → Parameters → Schema

Complete help makes every capability explicit.

Structured

Commands exchange structured data.

Output: JSON · Table · CSV · NDJSON · jq

Input: JSON · file · stdin

Safe

Preview before any write operation.

Preview → Confirm → Execute

Current state, target state and planned request are shown.

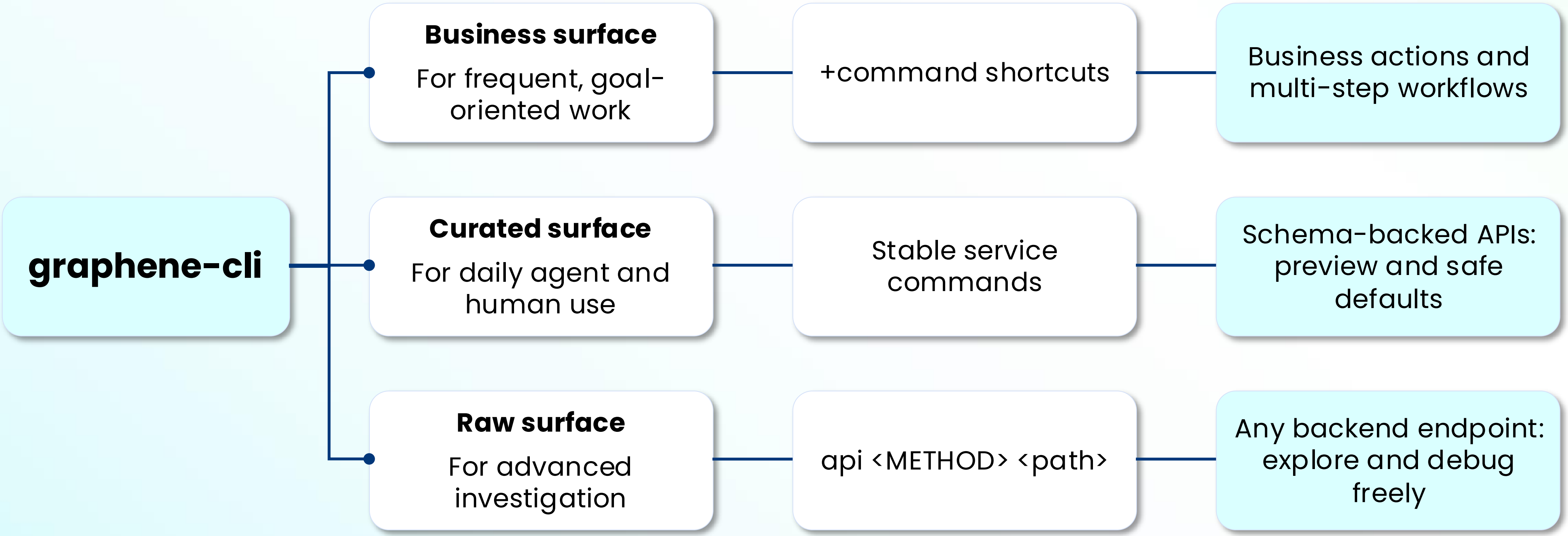
Environment-aware

The CLI resolves the operating context.

Environment · Authentication · Tenant · Service discovery

Agents never manage URLs or tokens themselves.

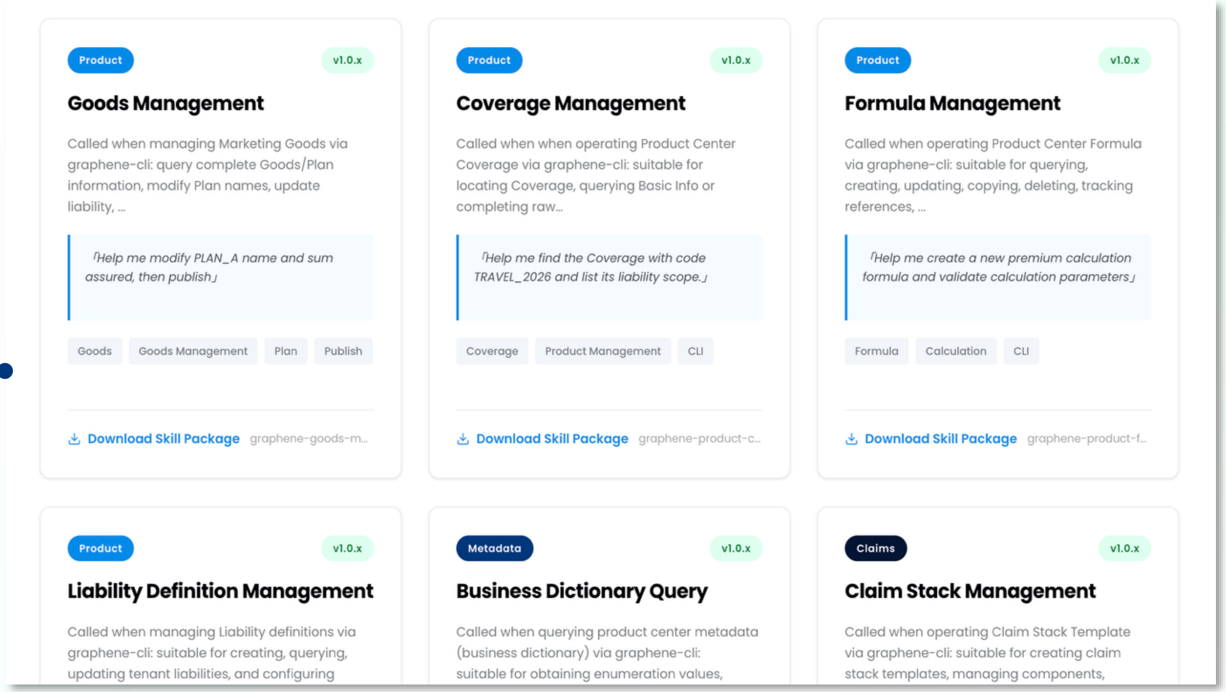
One CLI, three command surfaces — start with intent and move down only for more control



Execution needs knowledge: Graphene CLI comes with skills

Graphene CLI – How to execute
- Commands and APIs
- Structured input and output
- Reliable command composition

Graphene Skills – How to use Graphene
- Business knowledge
- Operational workflows
- Safety rules
- Command examples and best practice



Growing skill library:

Coverage · Liability · Formula · Ratetable · Goods (Marketing Product) · Package · Metadata · Claim Stack · more to be added

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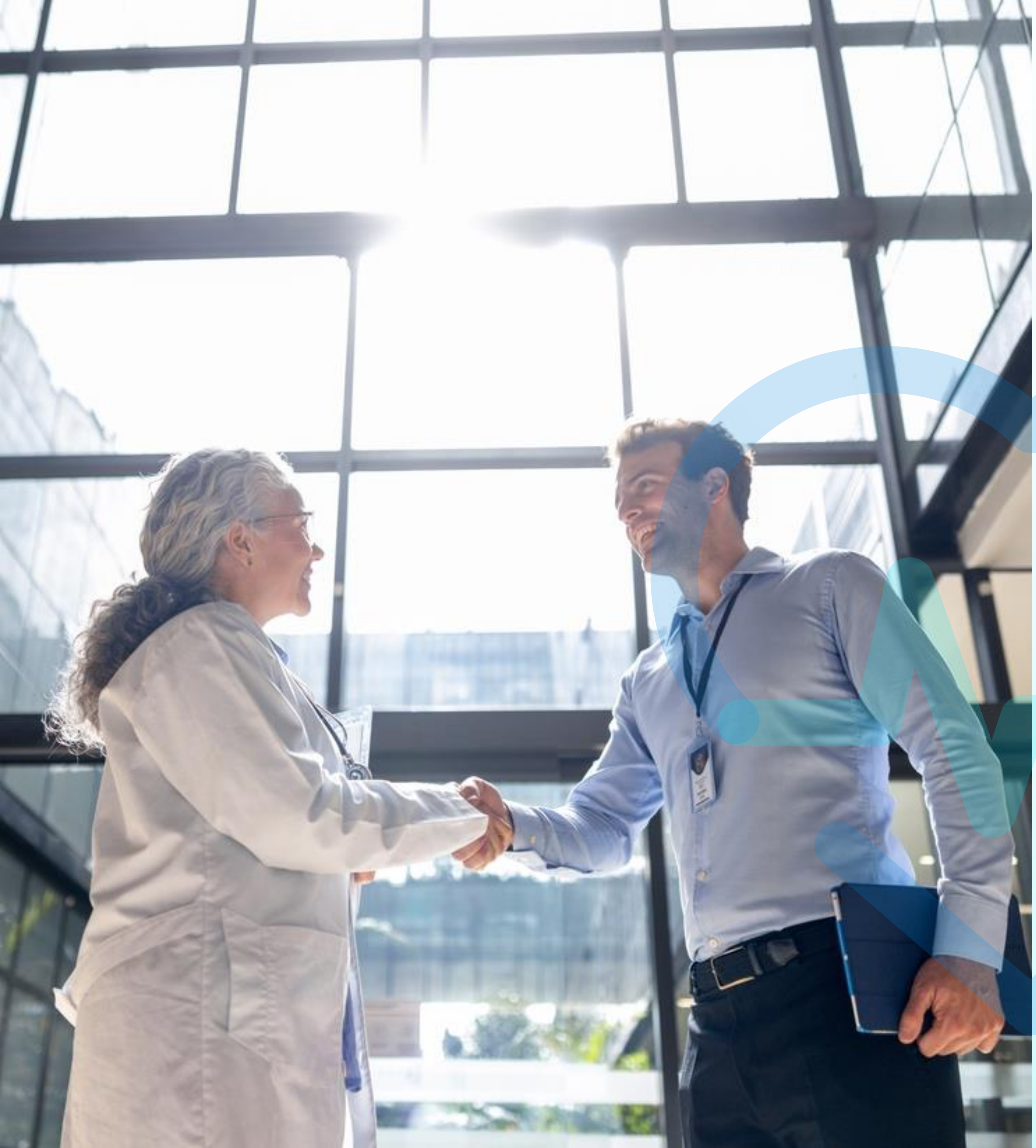


Health

Graphene v4 completes the health insurance lifecycle. New family policy structures are now natively supported. Group health is enhanced end to end with member certificates, flexible enrolment, employer and employee contribution splits, and unified billing. Underwriting gains dynamic medical questionnaires and structured management of pre-existing conditions.

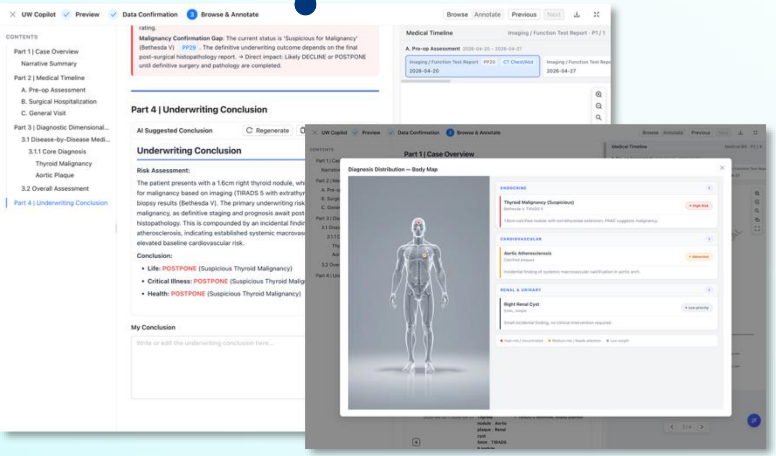
New provider network management brings provider onboarding, network definition, contracting and fee schedules into the core, making cashless treatment and pre-authorisation work end to end, with claims adjudicated automatically against co-payments, sub-limits, room entitlements and waiting periods.

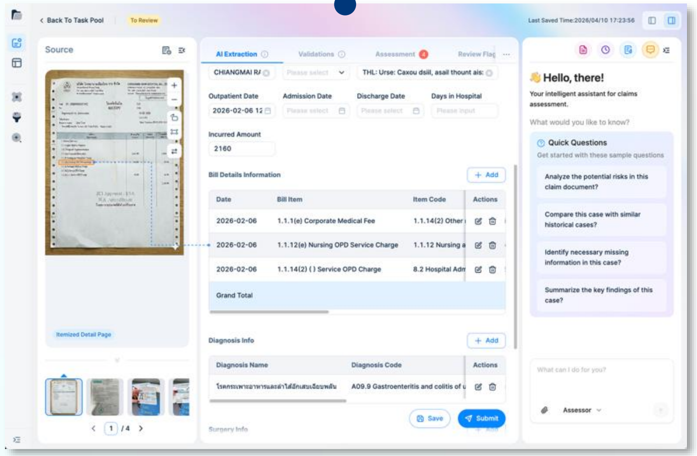
Agentic solutions from the Graphene Agent Platform are available to boost the operational processes from application to claims.

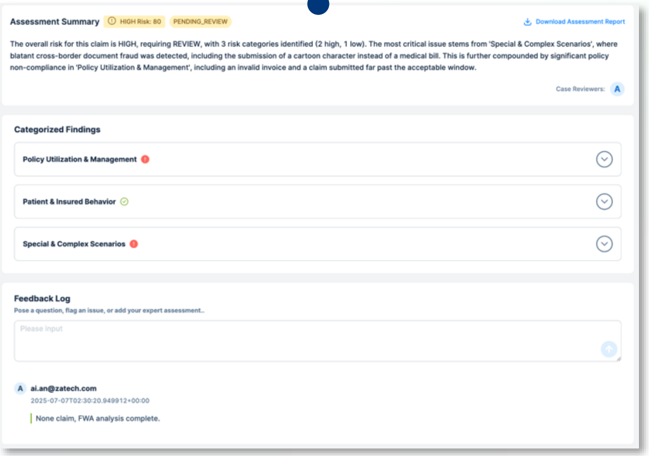
Agentic AI solutions boost health insurance operations from sales to claims (via Graphene Agent Platform)

Available AI solutions for health insurance

- Product advice, support and quotation
- Medical underwriting copilot
- Intelligent document processing
- Conversational claims submission
- Fraud, waste and abuse identification







Graphene v4 extends functional coverage of all health insurance business models

Individual Policy One insured	Standard individual health (one insured = one policy)	
Family Policy Family-level policy with members	**Floater** (shared coverage): Family members share common coverage, limits and deductibles	**Non-Floater** (individual coverage): Each family member has individual coverage, limits and deductibles
Group Policy Employer-provided insurance with multiple variants	Basic employer-provided coverage (no employee choice)	Coverage extension to dependants[1] (family inclusion)
	Employer + optional top-up plans (employee voluntary benefit)	Split premium payment[1] (employer vs. employee contribution)
	Corporate buffer benefits[1] (additional risk pooling mechanism)	Employee purchase with corporate discount schemes[1]

Enhancements across value chain in v4

Family policy as new product structure in v4

Extension of employee benefits business models supported in v4

Notes: [1] On current roadmap for minor releases of Graphene v4

New family floater structure introduces one shared risk pool

Select highlights

Shared sum insured, deductible and limits at family-level

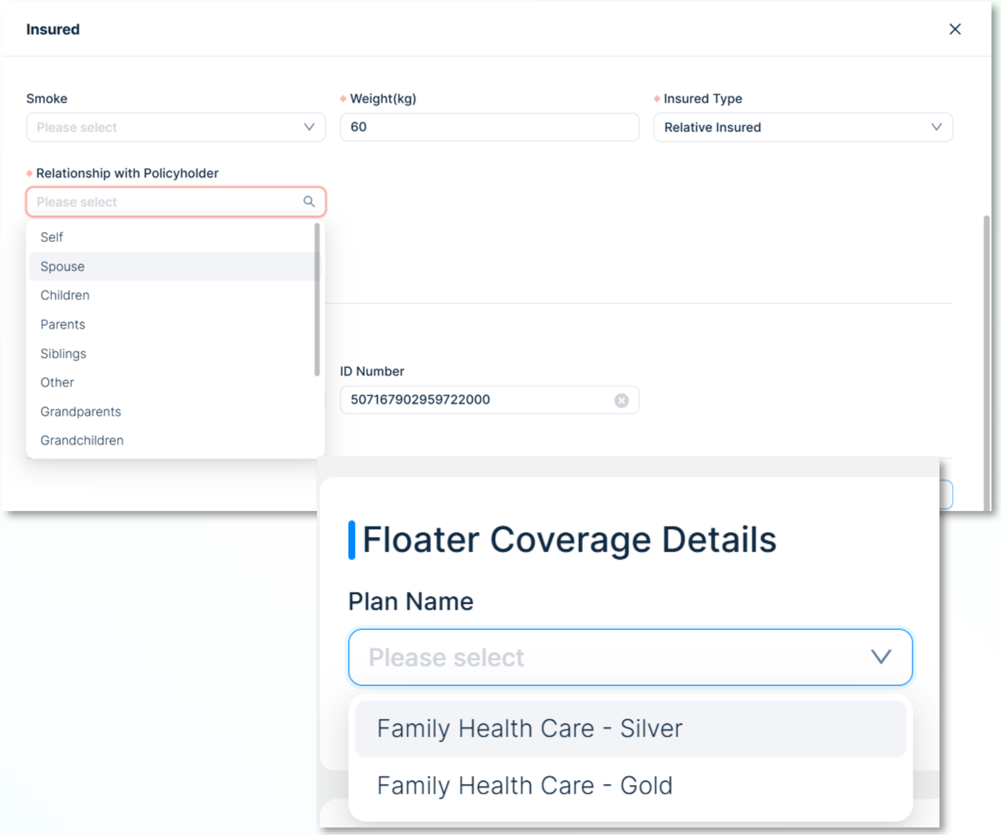
Upgrade data model with native support for family unit. One pool with automatic cumulative tracking and unified shared claim limit management.

Composite family pricing and underwriting

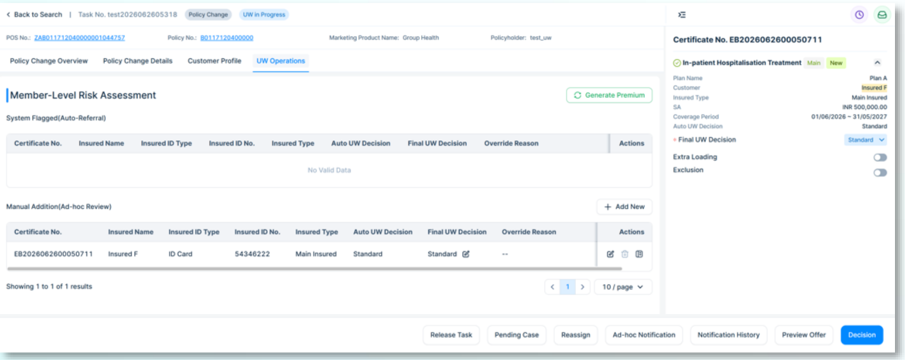
Holistic family risk assessment with member-level independent decisions and family medical history correlation analysis. Composite risk pricing at family level. Loading propagation from any member to the whole policy.

Parallel business workflows

Underwriting and compliance processed in parallel with automatic result coordination (e.g. Primary insured declined → dependent members cascade-declined). Unified renewals and billing.



Enhanced end-to-end group health support across business models



Select highlights

Flexible member onboarding

Enhanced support for new business processing for member certificates (incl. bulk uploads) and flexible enrolment of employees into various health plans, driving efficiency and flexibility.

Intelligent, tiered underwriting

Enhanced Group Health underwriting with a multi-level (group, employee, dependant), condition-based decision support system; powered by Graphene's real-time underwriting engine.

Tailored billing

New support for employer/employee premium splits and unified corporate billing with detailed employee-level premium breakdowns, facilitating seamless payroll deduction.

Full lifecycle support

Enhanced support for policy changes at both group and certificate levels, certificate-level claims processing, and a new comprehensive Group Health renewal framework.

Provider network management (PNM) now sits inside the core for enhanced cost containment and customer experience

Select highlights

Seamless cashless experience

Eligibility verification, provider authentication, and contracted rate calculations execute in real time.

☑ Automated treatment authorisation with zero manual intervention

Faster, modern service delivery with higher customer satisfaction

Enhanced cost containment

When an insured visits a network hospital, the system automatically runs multiple checks before settlement.

☑ Applicable Network ☑ Agreed Tariff ☑ Contract Validity ☑ Discount Terms

Reduced overpayment risks & stronger medical cost governance

Four core pillars of the new PNM module in Graphene v4

Select highlights

Single source of truth

Centralise management of providers, professionals, contracts, fee schedules, and networks.

Decoupled governance layer

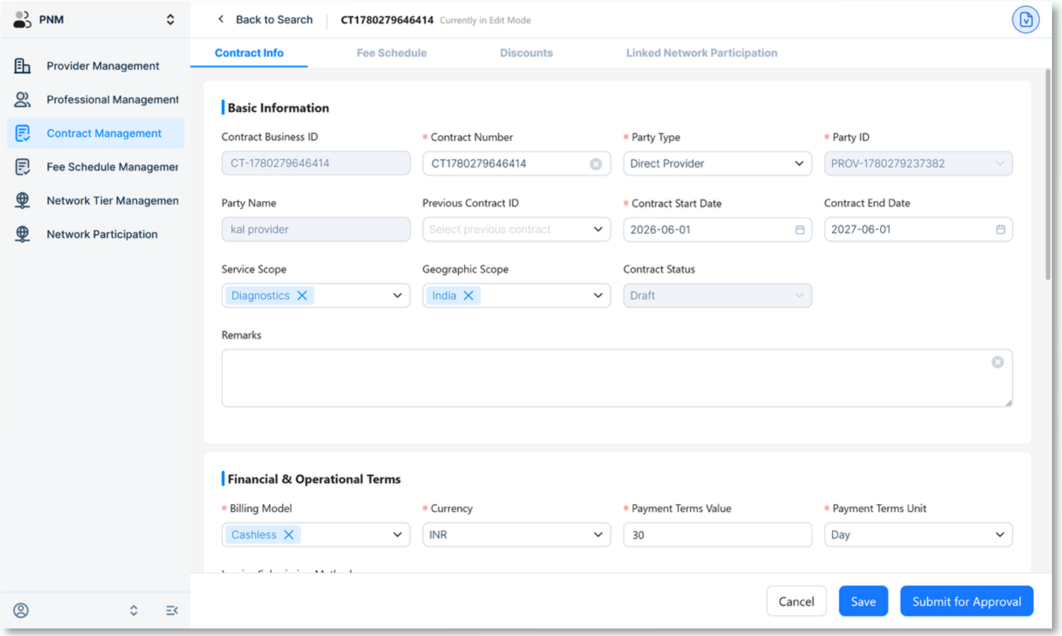
Centrally configure provider rules once and automatically enforce them across all business processes.

Real-time network intelligence

Ensure consistent and dynamic provider validation, routing, and pricing execution at every touchpoint.

Full lifecycle management

Govern provider onboarding, credential review, contract renewal, suspension, and termination from one platform.



Pre-authorisation runs end to end with Graphene v4

Select highlights

Admission/ Pre-Authorisation

Registration by the hospital (GUI or API) automatically creates claim case, and the pre-authorisation task opens, validated against the provider agreement (in PNM).

Enhancement / Change

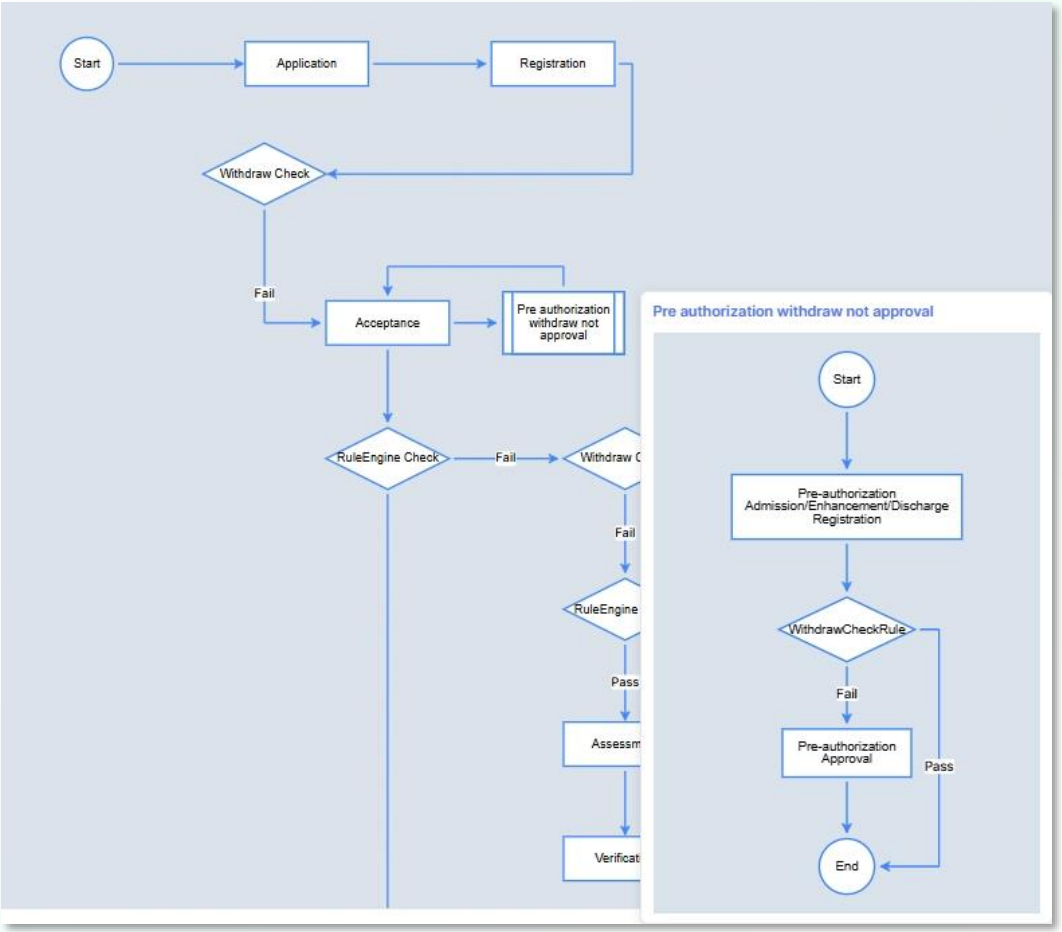
Further authorisation requested mid-stay are versioned with plus and minus deltas against the approved amount and the provider agreement (in PNM).

Discharge / Reconciliation

Cashless and reimbursement amounts are both calculated, with post-discharge reconciliation against the agreed tariff and the pre-authorisation agreement (in PNM).

Claims reserve moves with the case

Reserve provisioned at pre-authorisation registration, then refreshed on every admission, enhancement and discharge approval to match the pre-approved liability.[1]



Notes: [1] Configurable to update on stage submission or in real time during the stage.

Enhanced management of pre-existing conditions to extend coverage to sub-standard risks, while controlling risks

Disclosed and coded

Fully configurable questionnaires capture the condition at application (alternatively, extract it via intelligent document processing). It is then stored against ICD-10 codes, not as free-form text.

Decided and underwritten

Loading, exclusion or decline are automatically applied, configurable at liability level and by duration. Granular management increases insurability of sub-standard risks and automation.

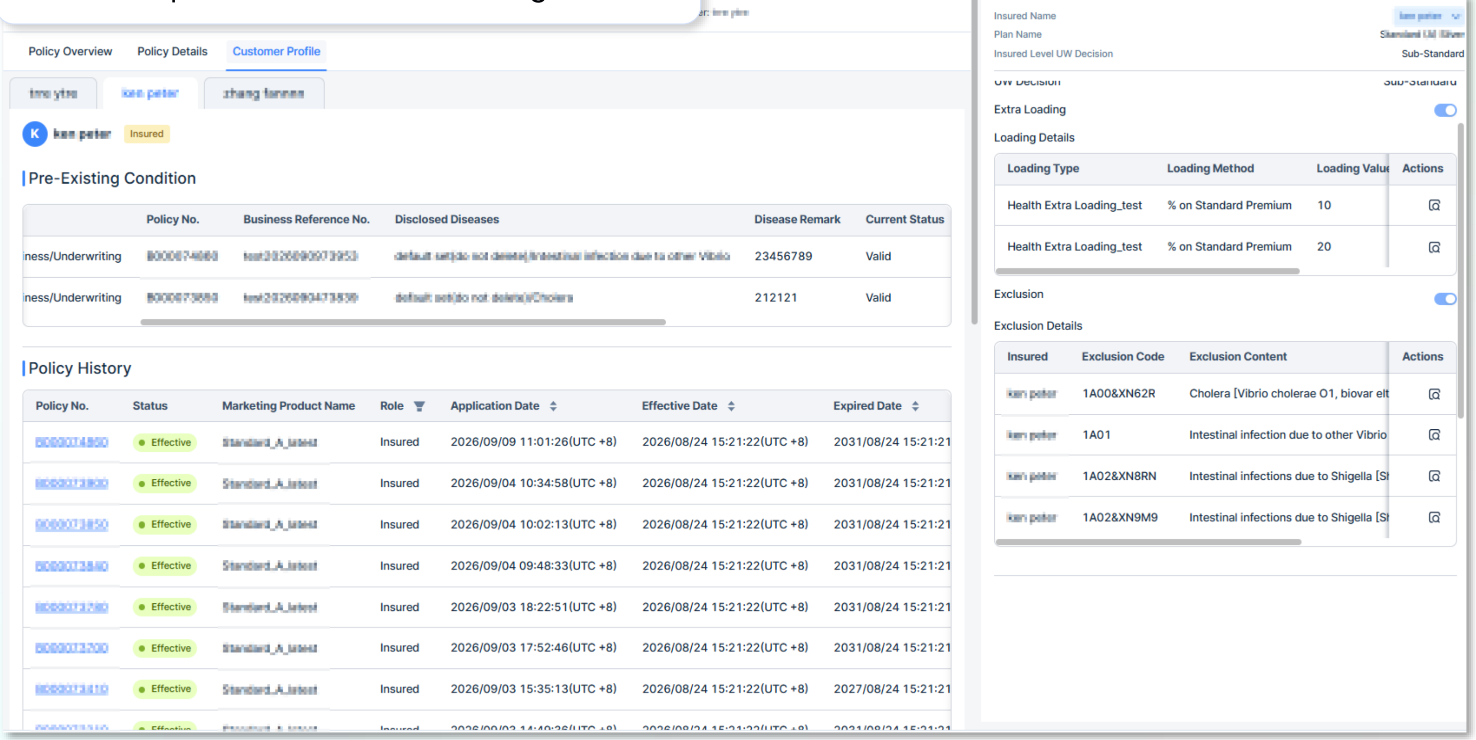
Enforcement and updates

At claim time the exclusion is matched automatically and applied. Health re-declaration can be triggered automatically at key change points, so risk data does not get stale.

Held once, used everywhere

The condition record sits in the client centre and can be shared across every current and future policy the member holds for portfolio-level risk management.

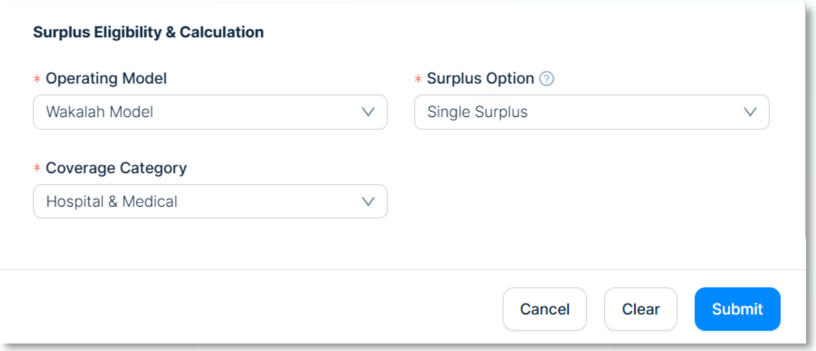
Select highlights



Native support for Takaful insurance business added

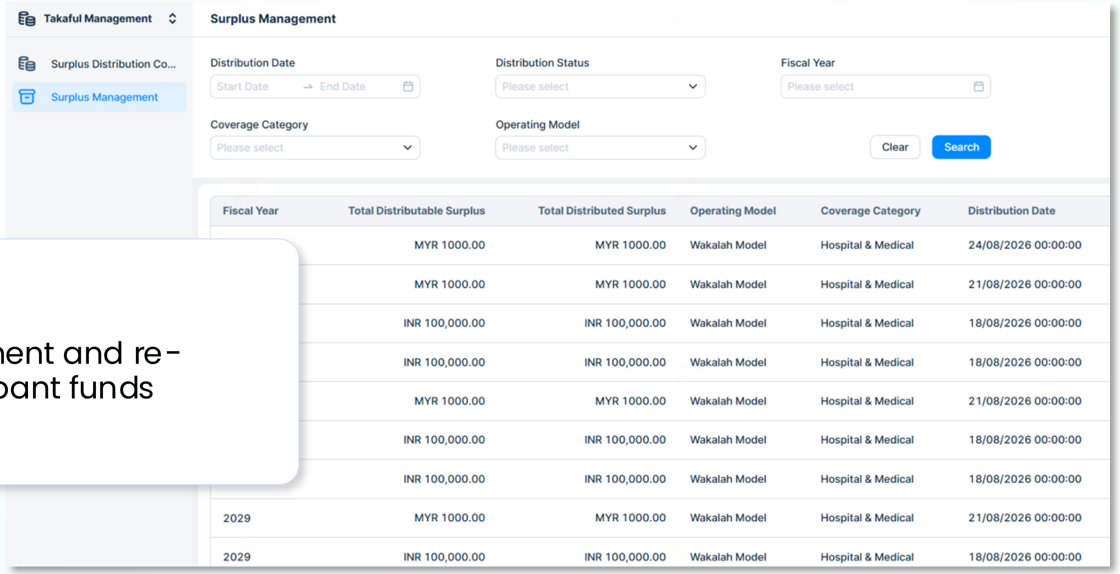
Takaful agreements through configuration, not code

Product features such as Wakalah fee ratio can be flexibly defined through configuration so that every certificate's contribution is allocated consistently and transparently from the moment it becomes effective.



Full Takaful policy lifecycle covered

Takaful compliance across the quotation and proposal, underwriting and compliance checks, issuance with a Takaful e-Certificate, instalment collection, and servicing events.



Automatic Wakalah, Tabarru and surplus processing

Each financial event automatically triggers the correct collection or payment and re-allocates Wakalah and Tabarru as per the product agreement, so participant funds always stay accurate and distributions are auto-processed.

AI in Graphene v4

Overview: Graphene Agent Platform

Agent Marketplace: Run the Business

Agent Marketplace: Change the Business

Interfaces: New Graphene CLI & Skills

Functional Upgrades in v4

Health Insurance

Life Insurance

P&C Insurance

Life & Savings

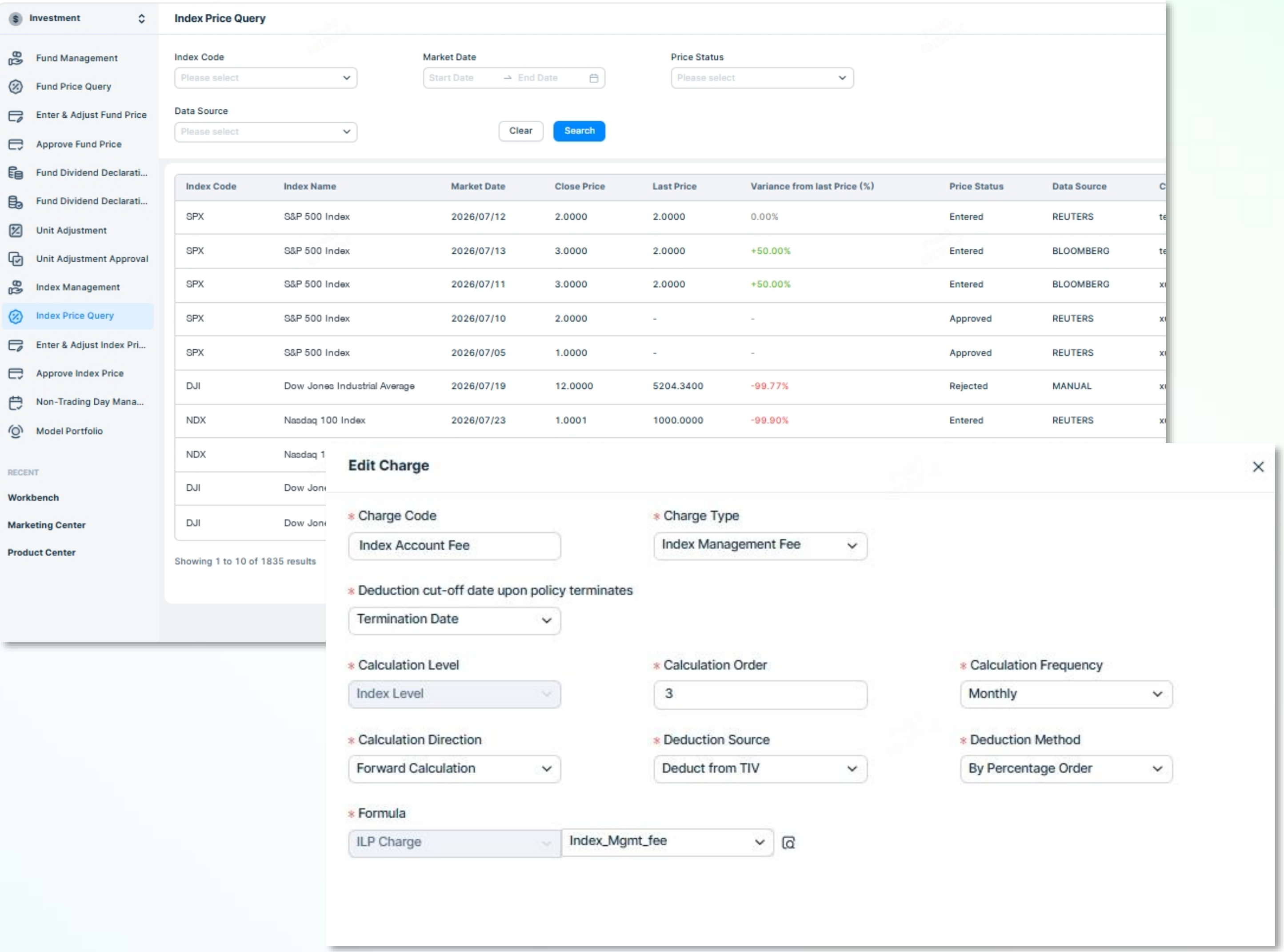
Graphene v4 adds indexed universal life as a natively configured product line: index definition and management, multiple index sub-accounts with segment-level account creation, automated charge deduction, and multi-currency policies.

For digital-asset insurers, it administers crypto-denominated policies end to end: premiums collected and claims and policy loans paid in crypto, unique wallets per policy, 16-decimal precision, custodian integration, and gas, know-your-transaction and withdrawal fees configured as rules.

Joint-life policies are supported from product configuration through to claims.

Indexed universal life (IUL) is now natively supported

IUL offers an attractive proposition for growing HNWI customer segments



Graphene v4 supports the full IUL lifecycle

Product & Rules

- Cap/floor/participation rate
- Target/upside logic
- Charge calculations (e.g. initial & surrender charge, cost of insurance)
- Coverage & premium period
- Guaranteed performance multiplier
- No-lapse guarantee
- Bonus

Application & Issuance

- Multiple index accounts selection
- Auto-generated benefit illustration
- Premium, fees, TIV calculations
- Underwriting & compliance
- Notifications & policy documents generation

Account Management

- Auto index crediting
- Interest crediting and value update for multiple sub-accounts
- Cost of insurance & fees auto-deduction

Policy Servicing

- Index account switch and fund allocation adjustment
- Policy loan application, disbursement, and repayment
- Cash value/bonus lock-in and transfer
- Partial withdrawal
- Top-ups
- Policy currency change

Termination

- Surrender value auto calculation
- Maturity benefit auto calculation
- Claim amount auto calculation
- Multi-currency payment
- Document generation

Instant Notification → **Continuous Monitoring** → **Report Generation**

Index Management

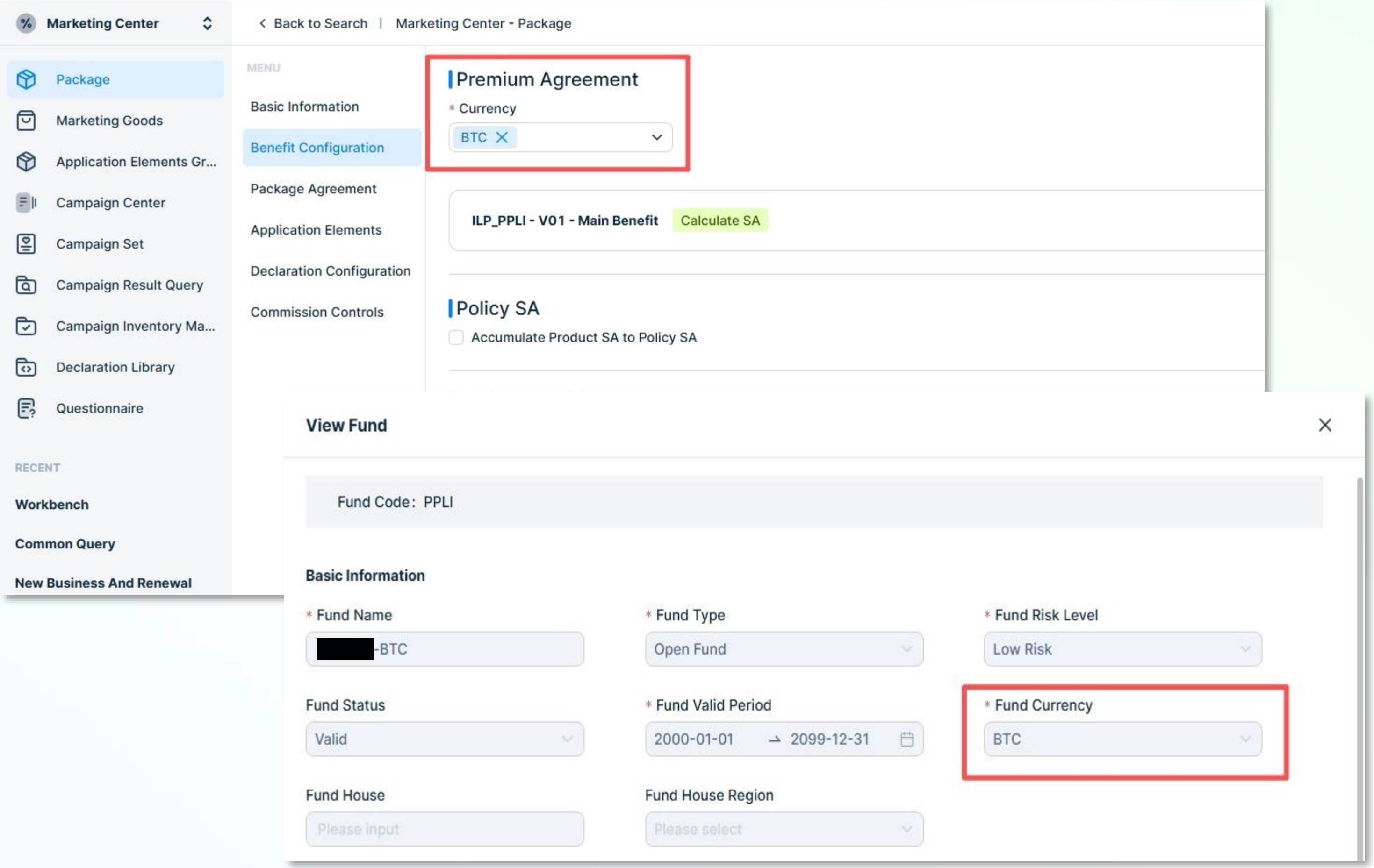
- Daily index sync (retained for 10+ years)
- Index history query & export
- Multiple index benchmarks

Compliance

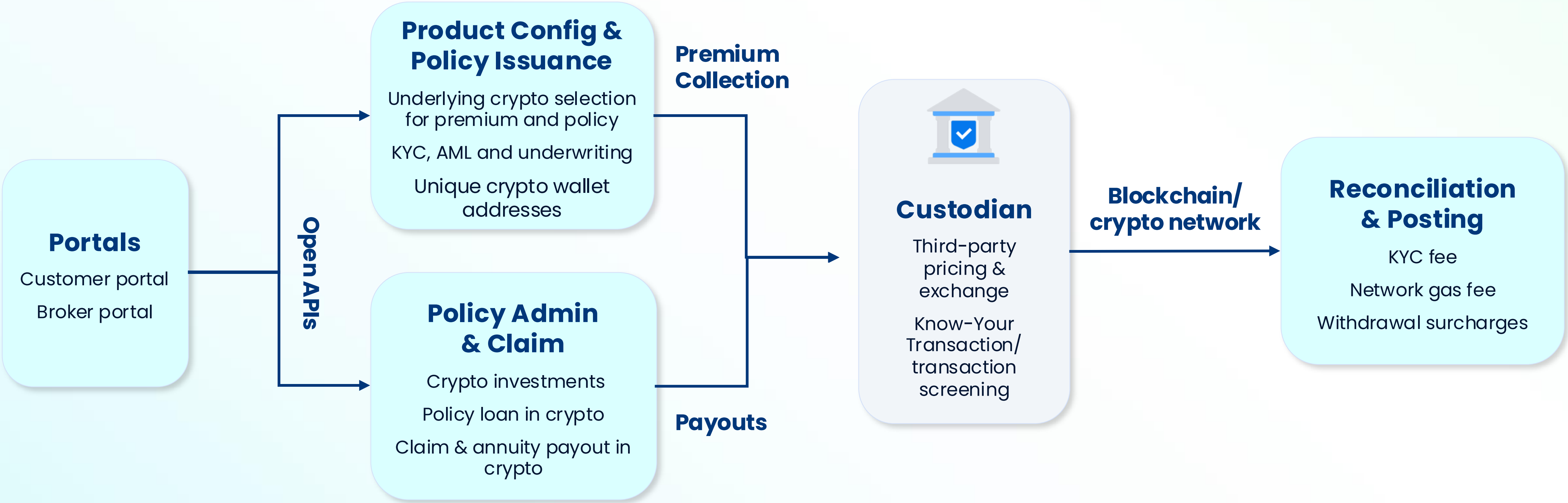
- Index fluctuation monitoring
- Auto alerting
- AML & anti-fraud

Native capabilities for crypto-based life insurance

Digital assets are increasingly a normal part of how people hold wealth. Insurance should be able to follow them there.



Graphene supports crypto-based life insurance across premium collection, policy admin and claims



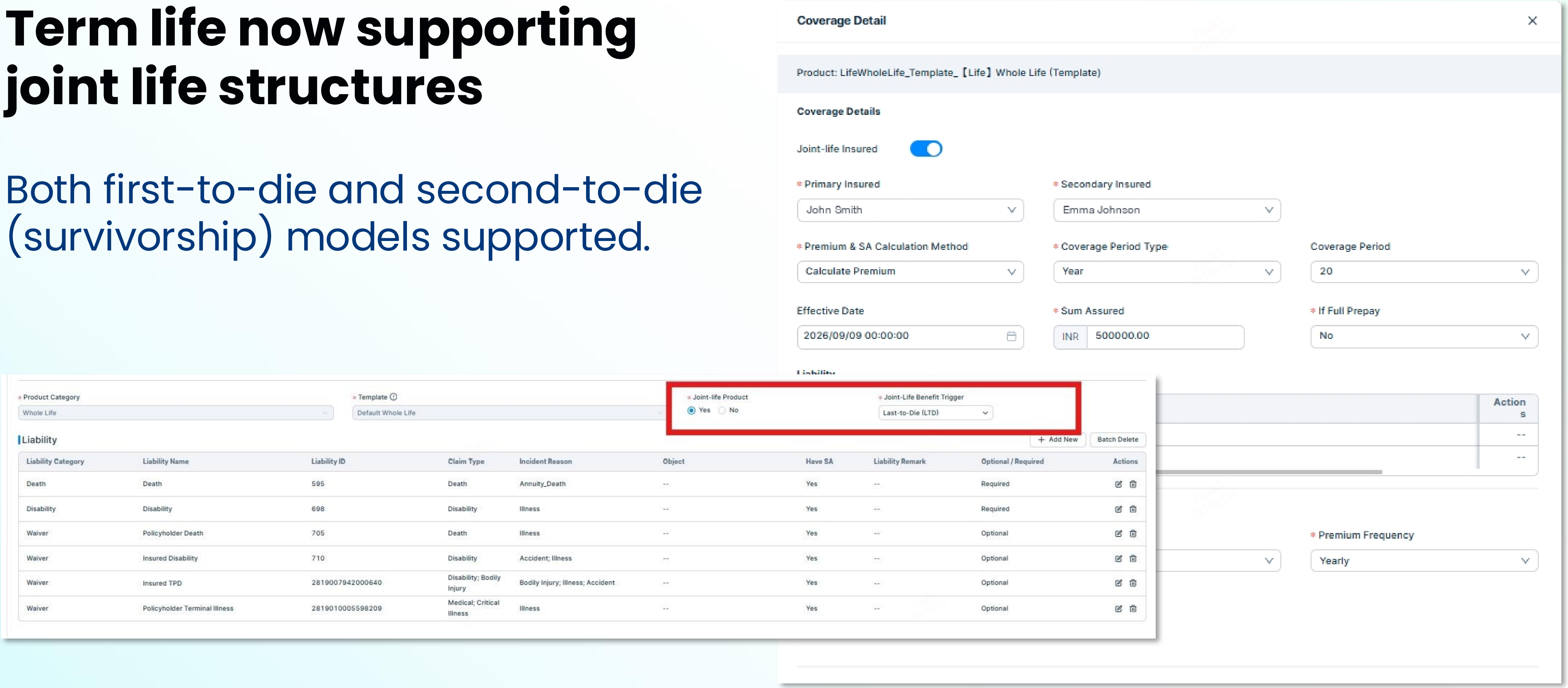
Precision and valuation: 16 decimal places precision · pricing/blockchain oracle · crypto/FX mapping rules

Controls: Crypto-specific fee rules (gas, KYT, surcharges) · granular limits & approvals · exception workflows

Audit & reporting: Transaction tracing · accounting/IFRS 17 exports · operational dashboards

Term life now supporting joint life structures

Both first-to-die and second-to-die (survivorship) models supported.



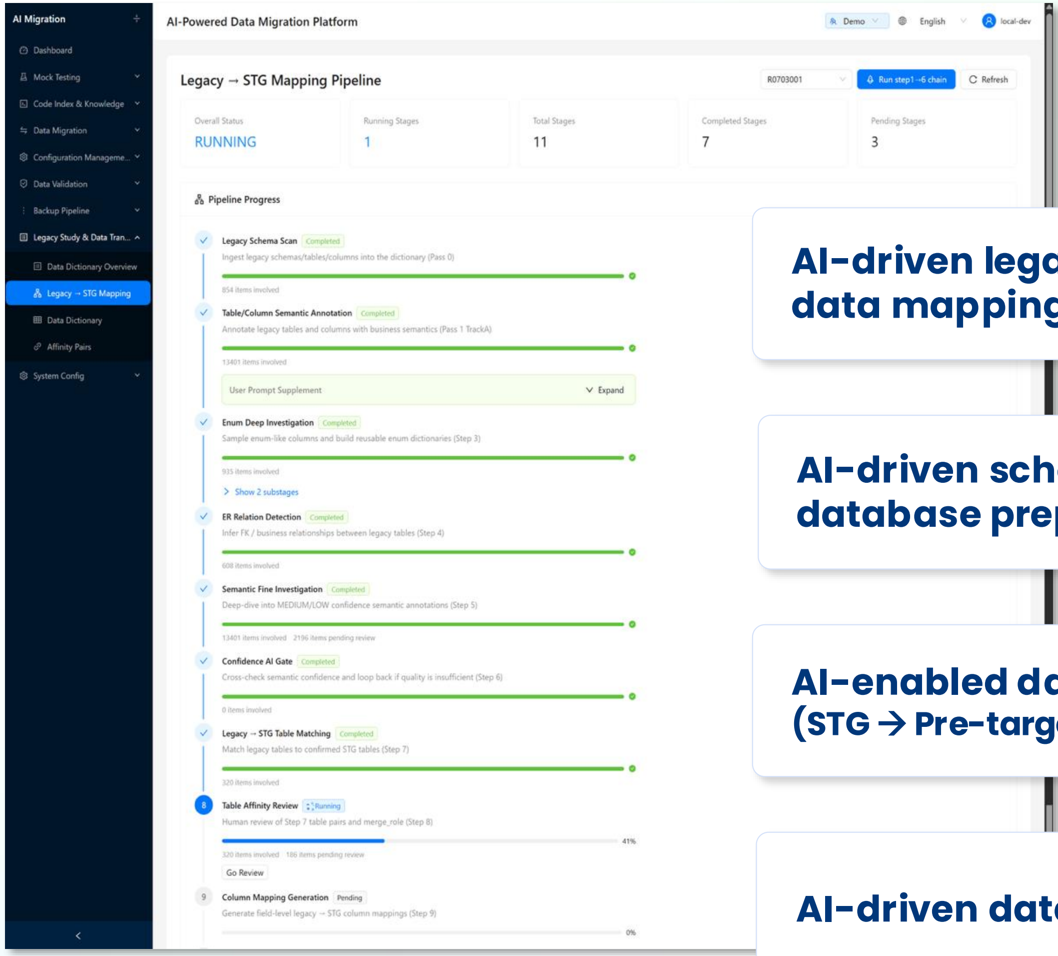
Liability Category	Liability Name	Liability ID	Claim Type	Incident Reason	Object	Have SA	Liability Remark	Optional / Required	Actions
Death	Death	595	Death	Annuity_Death	--	Yes	--	Required	
Disability	Disability	698	Disability	Illness	--	Yes	--	Required	
Waiver	Policyholder Death	705	Death	Illness	--	Yes	--	Optional	
Waiver	Insured Disability	710	Disability	Accident; Illness	--	Yes	--	Optional	
Waiver	Insured TPD	2819007942000640	Disability; Bodily Injury	Bodily Injury; Illness; Accident	--	Yes	--	Optional	
Waiver	Policyholder Terminal Illness	2819010005598209	Medical; Critical Illness	Illness	--	Yes	--	Optional	

AI-driven life insurance migration

Addressing the biggest challenge in life insurance modernisation

Available as part of Graphene Harness

Click to learn more



AI-driven legacy system data mapping

AI-driven schema & database preparation

AI-enabled data transfer (STG → Pre-target → Target)

AI-driven data validation

AI in Graphene v4

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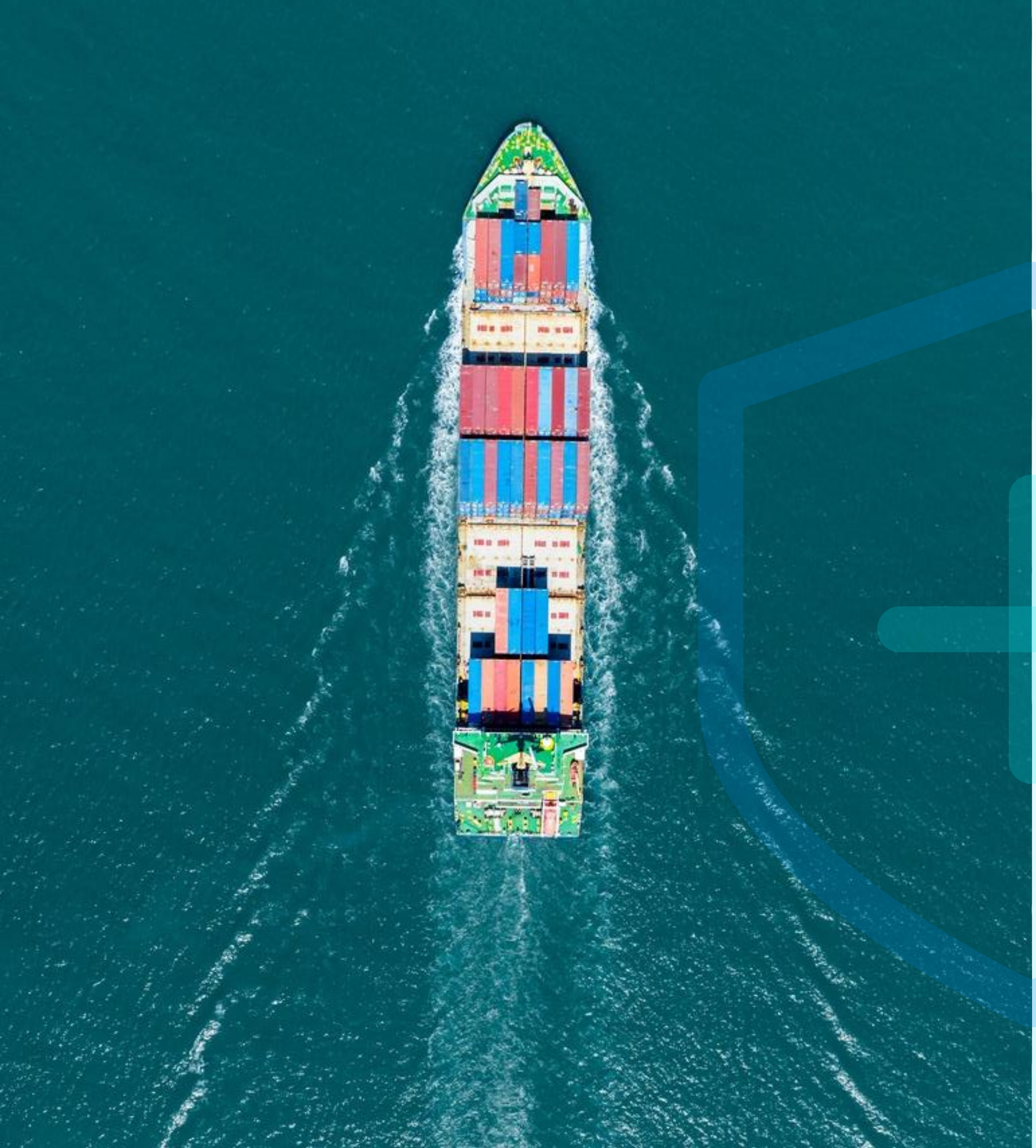
Life Insurance

P&C Insurance



P&C

Commercial lines coverage broadens with marine cargo, engineering, surety and cyber products, together with new clause and policy-wording libraries and a new risk survey management module.

Co-insurance and reinsurance are now administered inside the core rather than beside it: treaty and facultative arrangements, risk accumulation visible to the underwriter at the point of decision, automated recoveries, and reinsurance statements and bordereaux.

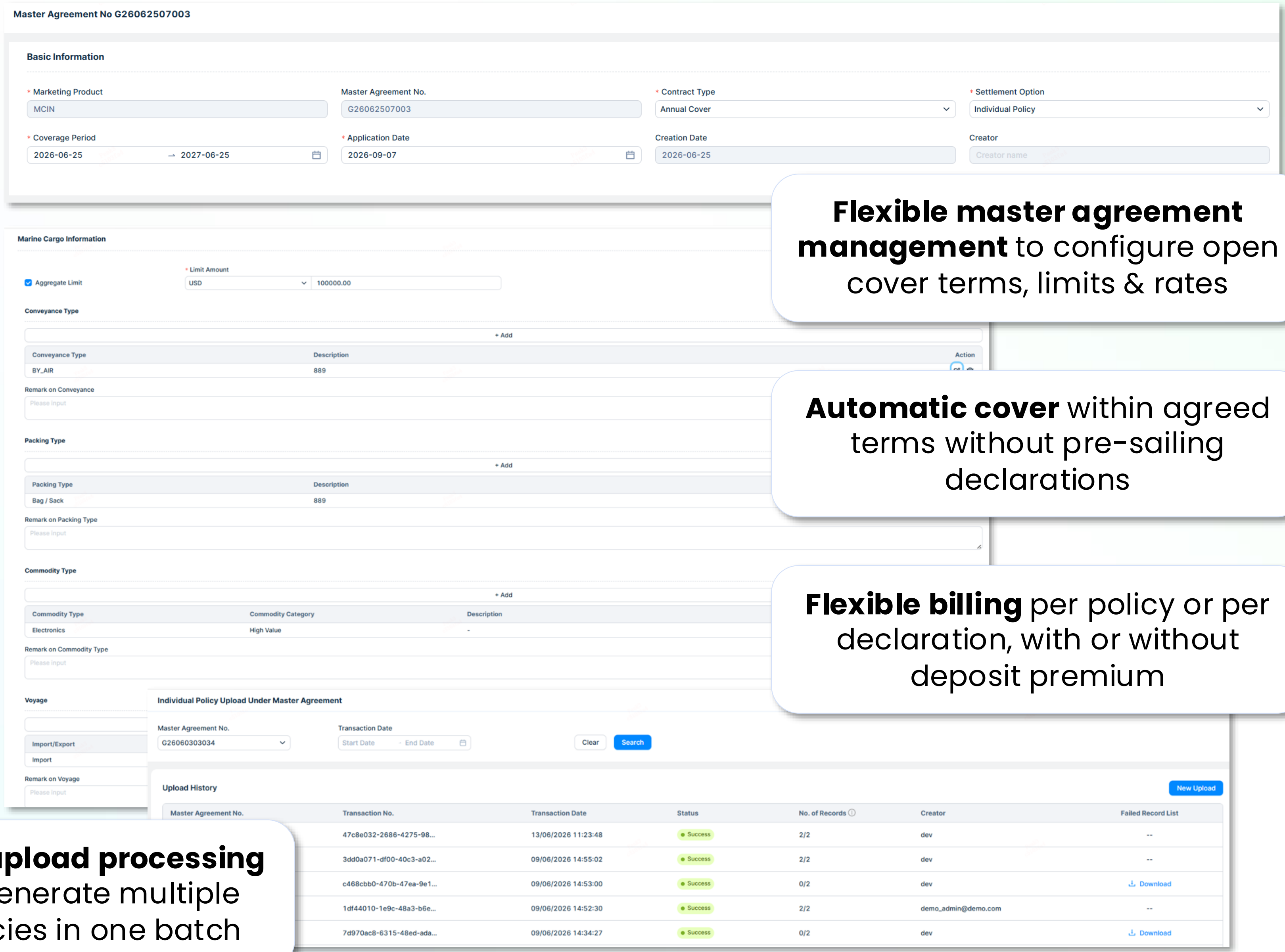
Enhanced native commercial lines support

New and/or enhanced support for the following P&C commercial lines

- Marine / International Cargo
- Engineering / CAR
- Employer's Liability
- Surety (Bond & Guarantee)
- Commercial Cyber

Marine: New support for open cover from agreement configuration to settlement

Select highlights



Flexible master agreement management to configure open cover terms, limits & rates

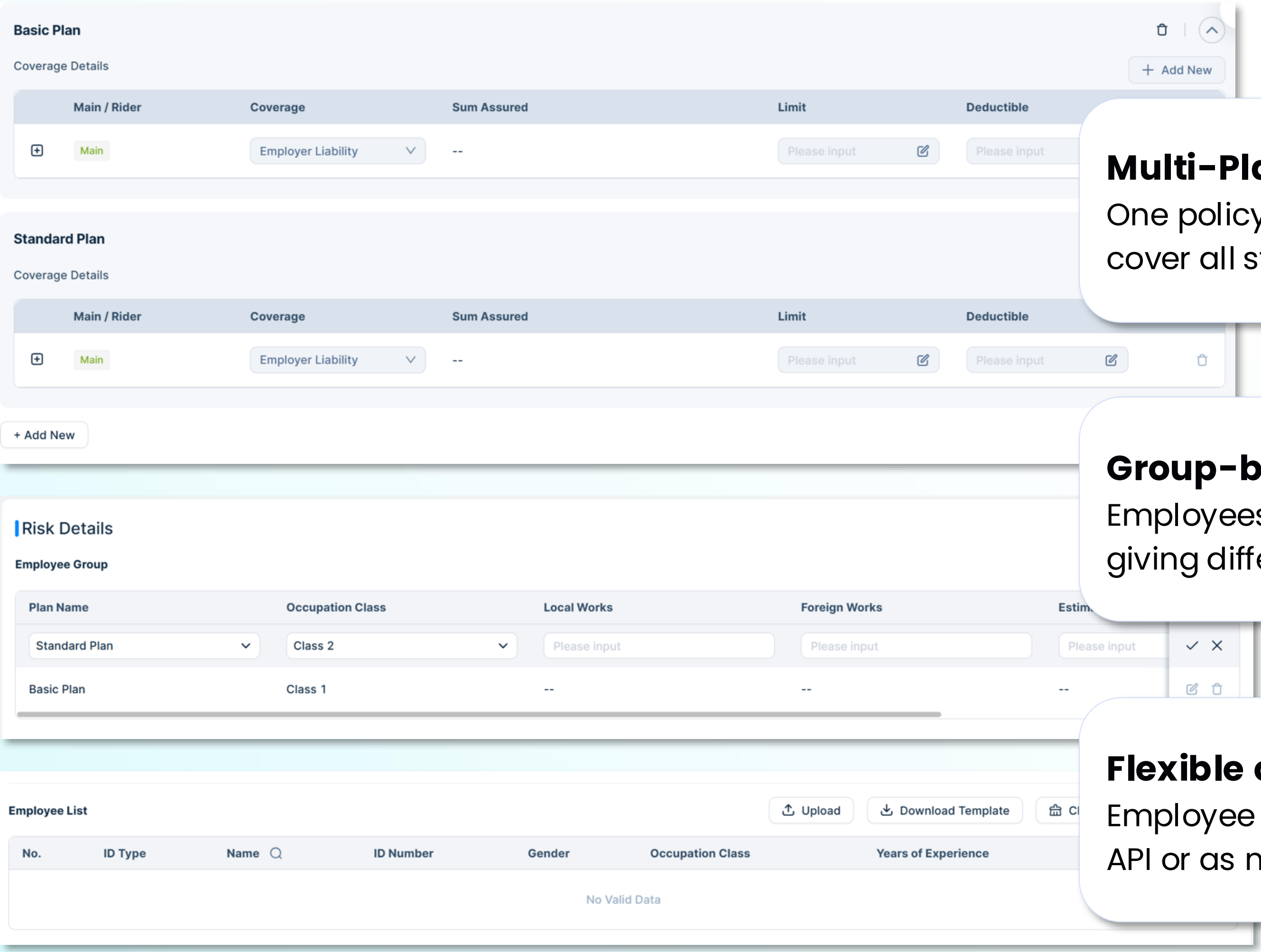
Automatic cover within agreed terms without pre-sailing declarations

Flexible billing per policy or per declaration, with or without deposit premium

Bulk upload processing to generate multiple policies in one batch

Employer's liability: Enhancements for efficient operations and flexible underwriting

Select highlights



Multi-Plan in one single policy

One policy can now carry multiple plans, so that an employer can cover all staff under one contract instead of stacking separate policies.

Group-based differentiated pricing and underwriting

Employees can be grouped and each group is mapped to its own plan, giving different coverage terms and pricing by role.

Flexible census intake

Employee lists can be provided in Excel as structured bulk upload, via API or as manual entry; uploaded data stays editable in place.

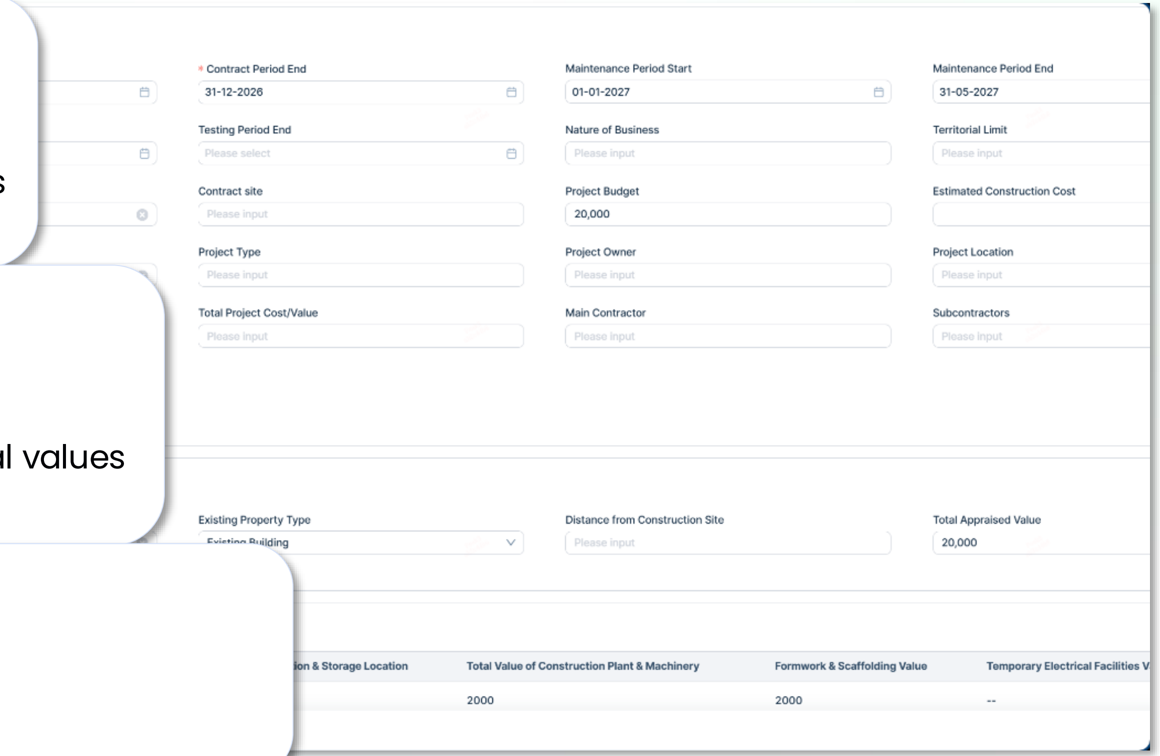
Engineering: Enhanced insured object data model for CAR for better material damage and liability coverage assessment

Select highlights

Project
Contract period start / end, maintenance and testing periods
Contract title, contract site, territorial limit, nature of business
Project budget, estimated cost, owner, main contractor, subcontractors
...

Construction equipment
Equipment name, model, serial number, years in use
Operation and storage location, added row by row
Plant & machinery, formwork & scaffolding, temporary electrical values
...

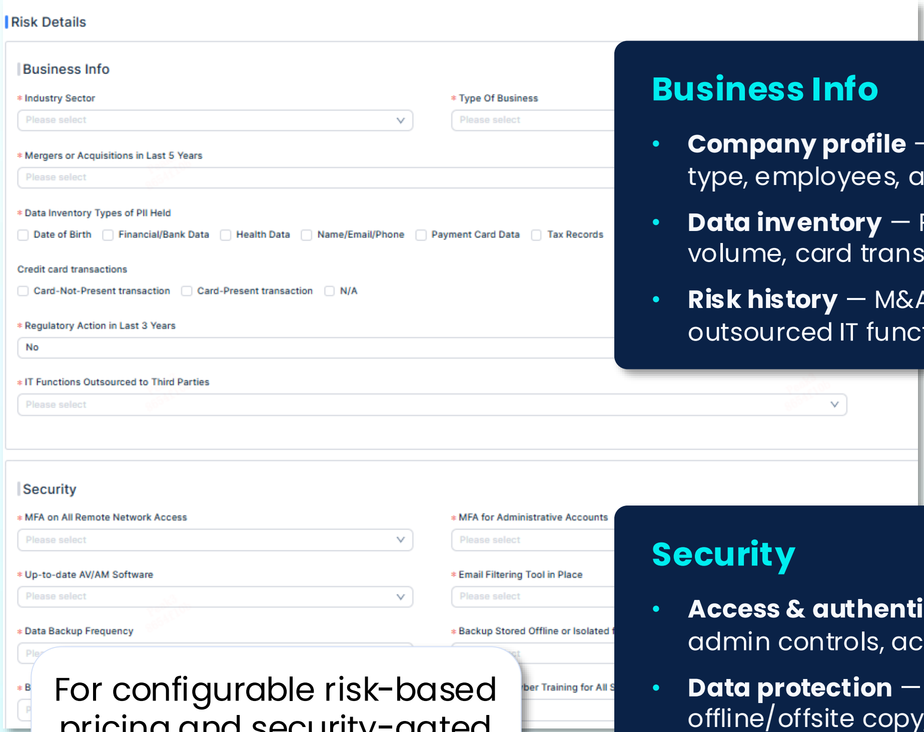
Principal existing property
Property address and existing property type
Distance from site, total appraised value
- ...



Cyber: Enhanced insured object data, underwriting and claims processing for cyber protection

Select highlights

Tailored insured object data for cyber



Business Info

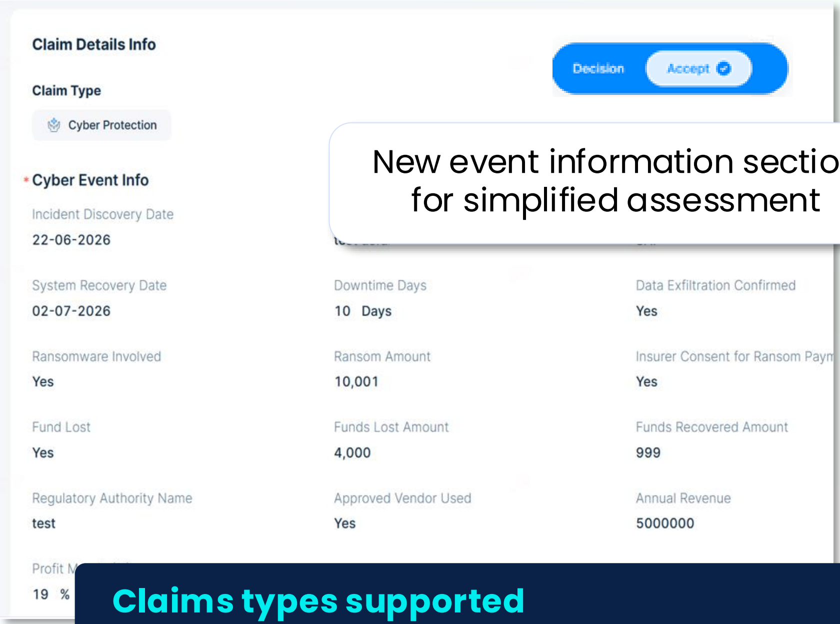
- **Company profile** — industry sector, business type, employees, annual revenue, …
- **Data inventory** — PII types held, records volume, card transaction exposure, …
- **Risk history** — M&A activity, regulatory action, outsourced IT functions, …

Security

- **Access & authentication** — MFA coverage, admin controls, active firewall, …
- **Data protection** — backup frequency, offline/offsite copy, device encryption, …
- **Resilience & compliance** — patch cadence, incident response plan, ISO 27001, pen testing, …

For configurable risk-based pricing and security-gated binding

New cyber claim type



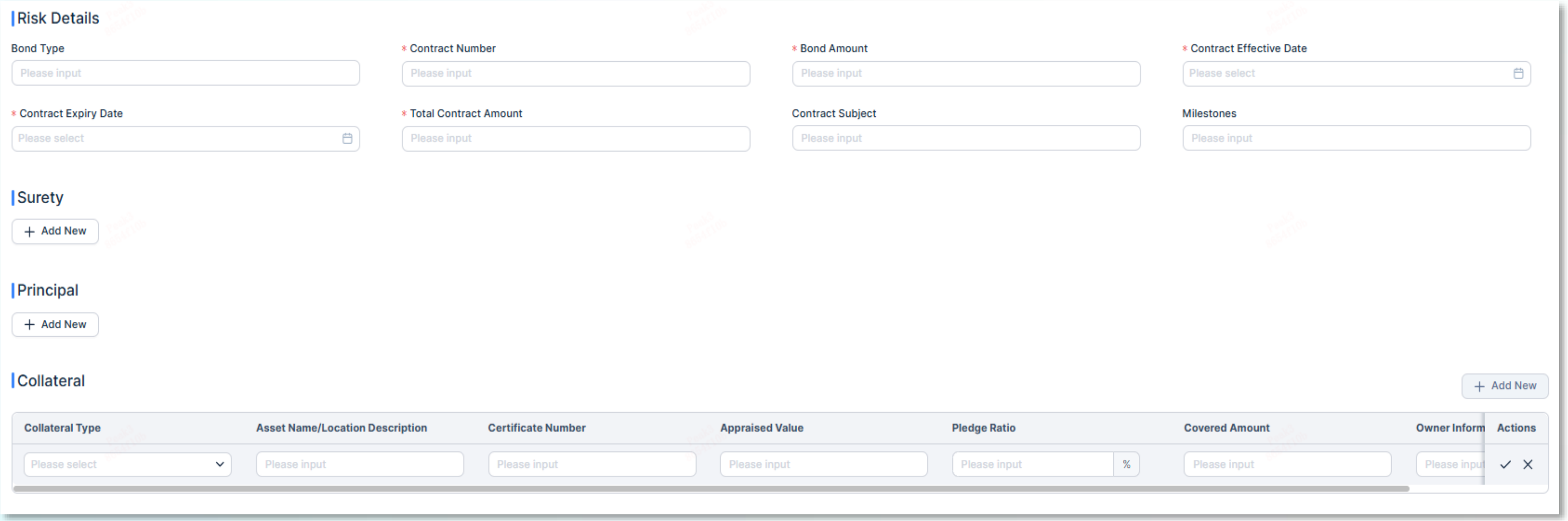
New event information section for simplified assessment

Claims types supported

- **First-Party Loss** — Event Management, Network Interruption, Cyber Ransom, Cyber Crime
- **Third-Party Liability** — Security & Privacy Liability, Digital Media Content Liability, Regulatory Defence & Penalties
- **Extended Reporting Period** — Extended Reporting Period rider, post-cancellation coverage window

Surety: New support for performance and worker bond lines

Select highlights



Policyholder & Bond

- **Policyholder:** individual or company; full KYC (name, ID, address, contact), …
- **Bond details:** contract #, effective/expiry dates, total contract amount, bond type & amount, …
- **Performance specifics:** contract subject and key milestones, …

Surety & Principal

- **Surety:** the insurer/guarantor; optional, can default to the policyholder, …
- **Principal:** contractor being bonded; optional, can default to the policyholder, …
- **Both:** full company profile fields captured when they differ from the policyholder, …

Collateral management

- **Asset details:** type (cash, real estate, land, CD, financial product, parent guarantee, machinery), asset name/location, certificate number, …
- **Valuation:** appraised value, pledge ratio, covered amount, …
- **Owner data:** owner identity and ID, when different from the policyholder, …

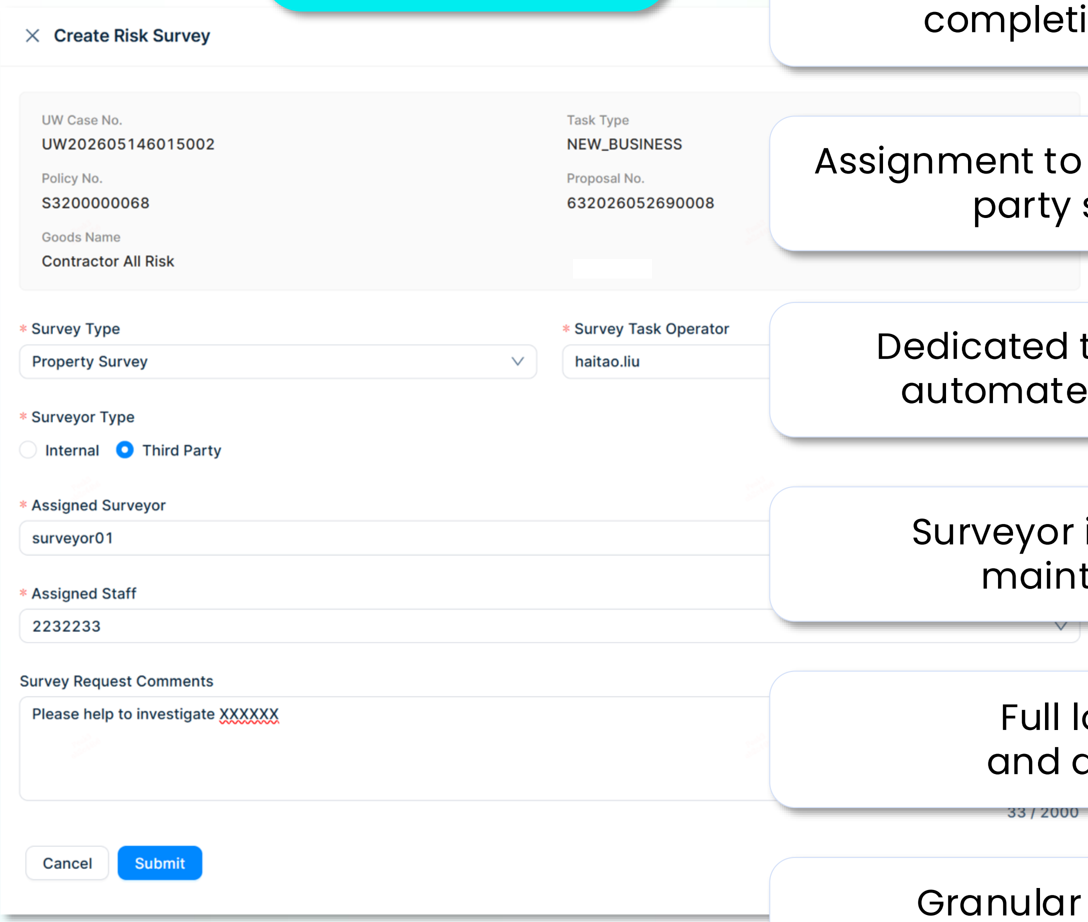
Risk survey: New built-in risk survey function to enhance underwriting

Direct initiation from within underwriting page/workflow

Configurable surveys for different scenarios

Complete capabilities for data/document submission

Select highlights



Workflow lock until completion/closure

Assignment to internal or third-party surveyor

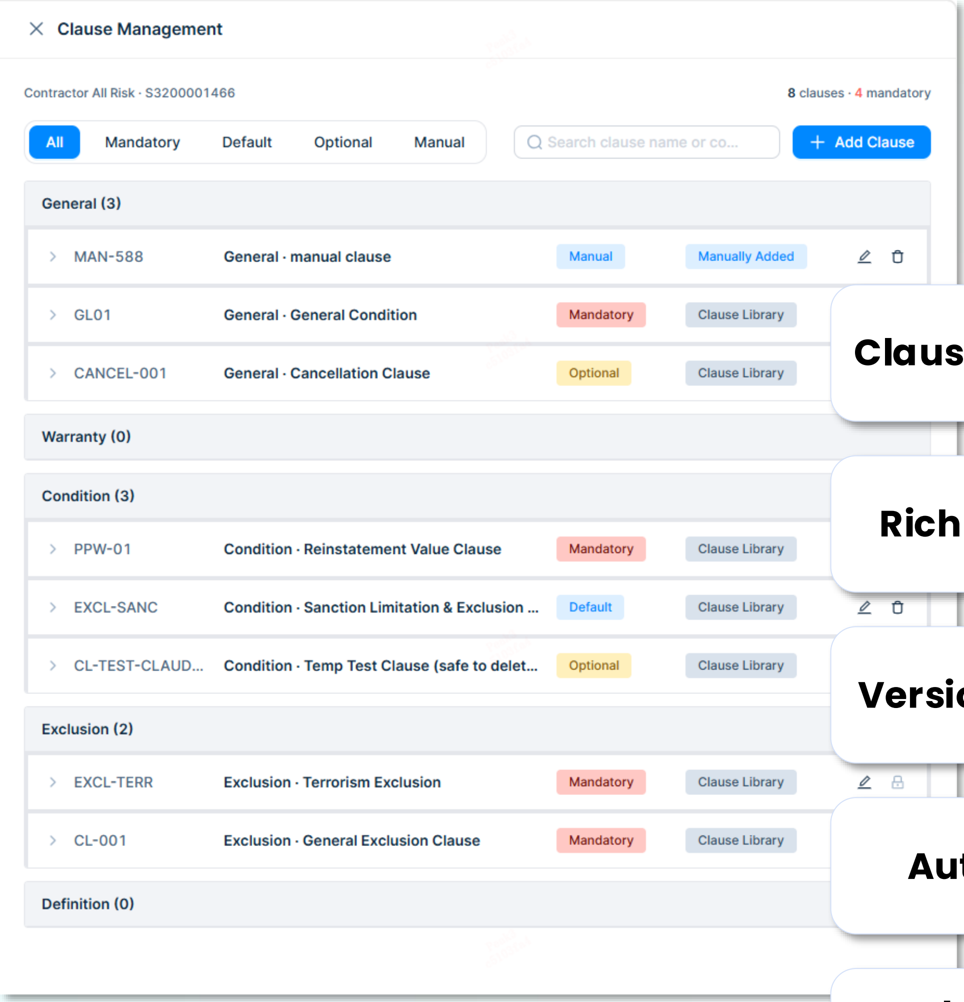
Dedicated task pool with automated reminders

Surveyor information maintenance

Full logging and auditing

Granular permission management

Clause management: New centralised clause library as single source of truth, ensuring consistency and efficiency



Key features

- **Clause definition and maintenance**
- **Rich-text clause wording editing**
- **Version history and release control**
- **Automatic clause application**
- **Underwriter manual intervention** (add / remove / replace)

Reinsurance: Dedicated new outwards reinsurance module for automated reinsurance processing

Select highlights

Foundation & Party Management

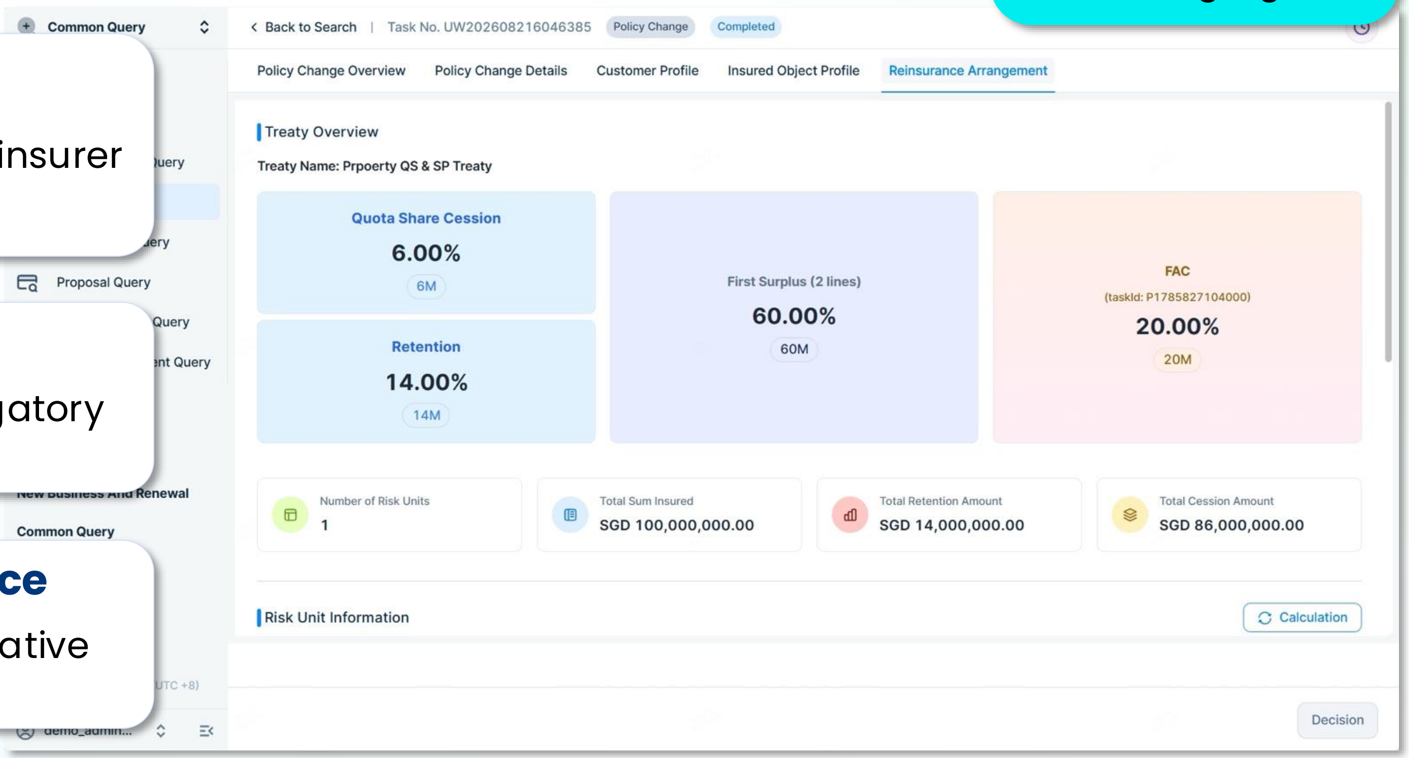
Risk Category · Reinsurance Channel / Broker · Reinsurer Management

Treaty Management

Treaty Definition · Priority Management · Fac Obligatory Definition

Treaty Outwards-Underwriting Reinsurance

Automated Proportional Treaty Allocation · Facultative Proportional Arrangement · Risk Accumulation



Claims & Recovery

Proportional Treaty Recovery · Per Event XOL · Marine Case Consolidation

Statement

Treaty Statement · Manual Statement Generation · AR/AP Bill Generation for Reinsurers

Co-insurance newly supported through configuration

Select highlights

Available co-insurance configurations

- Lead vs. follower
- Premium allocation share
- Sum insured share
- Commission allocation share
- Stamp duty share
- Service tax share
- Co-insurance fees

Co-Insurance

* Is Co-Insurance: Yes
* Co-insurance Type: Follow Co-insurance
* Prem. Collection Method: Lead Collects Full Premium
* Comm. Allocation Method: Each Insurer Pays Own Share
* Co-insurance Fee Basis: Gross Premium

Role	Co-insurer	Participation	SA Share	Prem. Share	Stamp Duty Share	Service Tax Share	Comm. Share	Co-insurance Fee Rate	Co-insurance Fee Amount	Related Policy	Action
Lead	Allianz	80.00 %	8000000.00	8000.00	80.00	480.00	1600.00	%		VC00001	--
Follower	Our Company	10.00 %	1000000.00	1000.00	10.00	60.00	200.00	5.00 %	50.00		--
Follower	Zurich	10.00 %	1000000.00	1000.00	10.00	60.00	200.00	5.00 %	50.00		--
Total		100.00	10000000.00	10000.00	100.00	600.00	2000.00		100.00		

Graphene Harness

World’s First AI Delivery Architecture
for the Insurance Industry

An end-to-end AI delivery architecture for building, testing, migrating and operating insurance systems and agents

Build & change
Design, develop, evolve and migrate insurance systems

Verify
Test and prove every change before release

Diagnose
Identify and understand issues before corrective change

Operate & govern
Run production systems and agents with control

Ground
Ground people, systems and agents in governed insurance context and knowledge.

Target systems

Graphene v4
Peak3's core built and maintained with Harness

AI Agents
Agents built, governed & operated with Harness.

Other systems
Core & other insurance systems modernised in insurer's own environment.

With Graphene Harness, we want to disrupt insurance technology delivery and ourselves

Beyond providing solutions, Peak3 provides the production line (AI-DLC) that builds and maintains them.

Enhanced agility	Faster, continuous change from requirements to production — cutting timelines by half or more.
Full client enablement	Greater insurer ownership and continuity. No vendor-dependence for build and maintenance.
Drastically lower cost	Initially up to 50% lower change and maintenance cost — with an 80%+ ambition.

Graphene Harness is the first fully integrated AI-DLC solution tailored to insurance scenarios

Build & change

Design, develop, evolve and migrate insurance systems

AI Engineering Platform

Governs system & agent change from intent to evidence for insurance developments.

Digital twin collaboration · Workflow orchestration · System change intelligence · Execution governance

AI Migration Platform

Analyses, maps and moves legacy insurance core data at scale.

Migration design & schema mapping · ETL generation · Reconciliation & validation

Verify

Test and prove every change before release

AI Testing Platform

Expands automated test coverage across services and user journeys.

API test generation · UI test generation · Automated execution · Result validation

Diagnose

Understand issues before corrective change

AI Diagnostics Platform

Connects code and environment evidence to accelerate diagnosis and resolution.

Code intelligence · Issue localisation · Root-cause investigation · Diagnostic evidence

Operate & govern

Run production systems and agents with control

MAS Platform

Automates day-to-day production operations.

Event triage · Ops workflows · Service assistance

Agent Control Plane (part of AI Eng Platform)

Manages and governs agents.

Agent lifecycle · Runtime governance · Observability

CI/CD & DevOps

Ground

Ground people, systems and agents in governed insurance context and knowledge.

Knowledge Base

Provide enterprise, system and insurance knowledge foundation.

Knowledge unification

Knowledge governance

Context delivery

Agent-ready services

A deep-dive into the capabilities of Graphene Harness

BUILD & CHANGE

AI Engineering Platform

Digital twin collaboration: Coordinates pre-built specialist AI roles across the virtual delivery team.

Workflow orchestration: Sequences work, human gates and verification in a governed workflow.

System change intelligence: Grounds each change in intent, structure, constraints and evidence.

Execution governance: Controls tool authority while retaining artefacts, decisions and evidence.

AI Migration Platform

Migration design & schema mapping: Defines source-to-target mappings, staging structures and transformation rules.

ETL generation: Builds repeatable pipelines for large-scale insurance core replacement.

Reconciliation & validation: Proves completeness, accuracy and business consistency after migration.

VERIFY

AI Testing Platform

API test generation: Creates executable API scenarios, requests and assertions.

UI test generation: Converts business journeys into reusable user-interface tests.

Automated execution: Runs test suites consistently in controlled target environments.

Result validation: Consolidates outcomes into reviewable release evidence.

DIAGNOSE

AI Diagnostics Platform

Code intelligence: Builds a searchable understanding of code, components and their relationships.

Issue localisation: Finds the code and component most likely responsible in the affected environment.

Root-cause investigation: Uses technical evidence to investigate why an issue occurred.

Diagnostic evidence: Retains the facts used to support diagnosis and action.

OPERATE & GOVERN

MAS Platform

Event triage: Prioritises alerts using correlated operational signals and context.

Operation workflows: Automates routine tasks, remediation steps and human hand-offs.

Service assistance: Supports recurring operations and customer-service requests.

Agent Control Plane (part of AI Eng Platform)

Agent lifecycle: Controls onboarding, versioning, approval and retirement of agents.

Runtime governance: Enforces execution policy, permissions and human-control requirements.

Observability: Monitors agent quality, safety, health and cost.

GROUND

Knowledge Base

Knowledge unification: One reusable enterprise and insurance knowledge base.

Knowledge governance: Manages hierarchy, versions, access and validity.

Context delivery: Serves governed knowledge by role, project and task.

Agent-ready services: Exposes reusable knowledge to people and agents.

Note: Simplified — non-exhaustive capabilities

An end-to-end architecture for mission-critical systems.

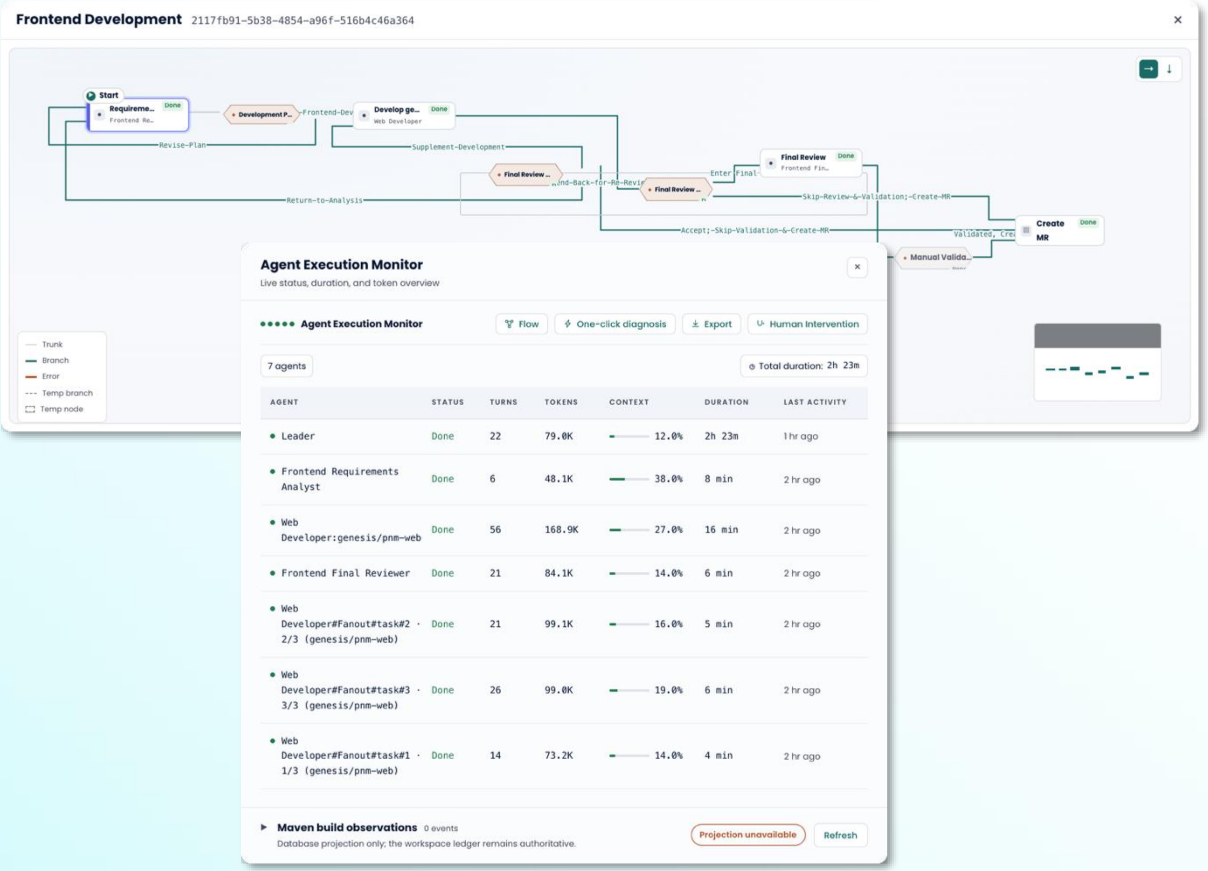
Not a simple coding assistant or a collection of disconnected AI tools.

Graphene Harness is an end-to-end AI delivery lifecycle for building, testing, migrating and maintaining insurance systems and agents, tailored to the insurance industry.

	AI coding assistant	Graphene Harness
Scope	**Writes and changes code, one prompt at a time**	**Runs the whole delivery lifecycle — build, verify, diagnose, operate and govern**
Who does the work	One developer in one session with agents (and subagents)	Pre-built specialist AI roles working as one virtual delivery team
Knowledge	Whatever it can read in the code (or what is provided as context)	A governed insurance and enterprise knowledge base, served by role and task
Governance	Per-developer prompts and permissions	Central authorisation runtime: action / resource codes, scoped grants, audit
Verification	Developer writes and runs the test with AI assistance	Generates API and UI tests, runs them, and consolidates release evidence
Human-in-the-loop	Q&A confirmations in the terminal	Graph-level gates suspend for confirmation; supervision enters as events
Observability	Session logs, scoped to one person	Run-level telemetry: status / duration / tokens / cost / timeline / diagnostics
After go-live	Stops when the code is handed over	Operates and governs the live systems

Note: Non-exhaustive comparison

Graphene Harness keeps the full change connected from intent to retained evidence



Intent: Requirement and expected outcome

Plan: Stages, ownership, dependencies & gates

Work: Specialist activity and produced artefacts

Verify: Tests, reviews and human approvals

Evidence: Decisions, outputs and traces retained

At any point, the team can see what was intended, what happened, who decided and what evidence remains.

AI Engineering Platform: Multi-agent collaboration with governed workflows and full execution governance

Select highlights

Multi-agent collaboration

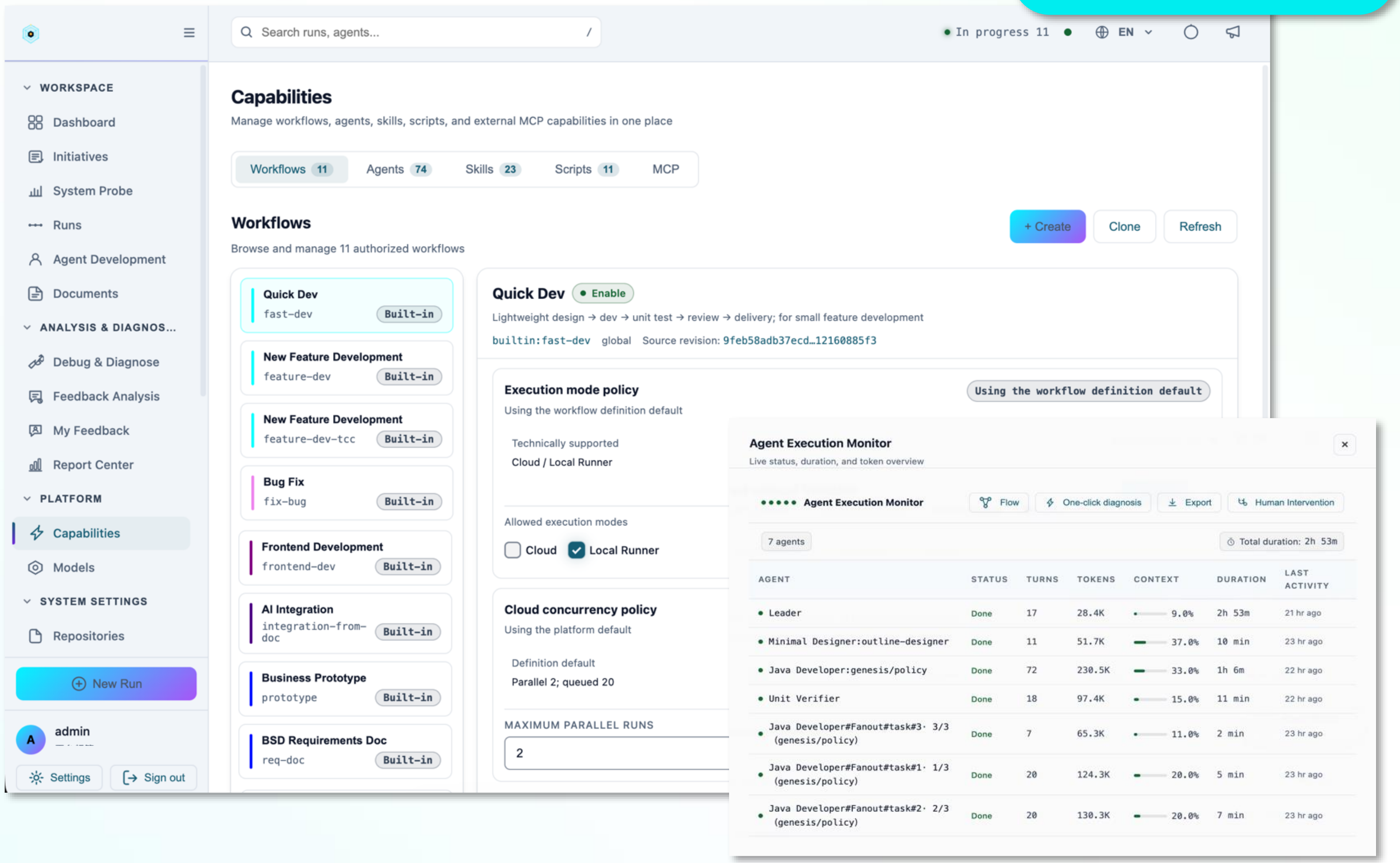
Use multi-group parallel AI agents modelled after real corporate hierarchies, as digital twins with full agent harness.

Standardised workflows

Build on standard workflows (e.g. req-doc, feature-dev) to streamline operations, based on a graph workflow engine.

Execution governance

Ensure full execution governance and observability. Graph-orchestrated agents operate within governed boundaries.



AI Migration Platform: De-risking and accelerating across the migration process

Select highlights

Schema & database preparation

70%+ efficiency gains through AI-driven database and data dictionary maintenance with rapid turnaround, while improving quality.

Legacy system data mapping

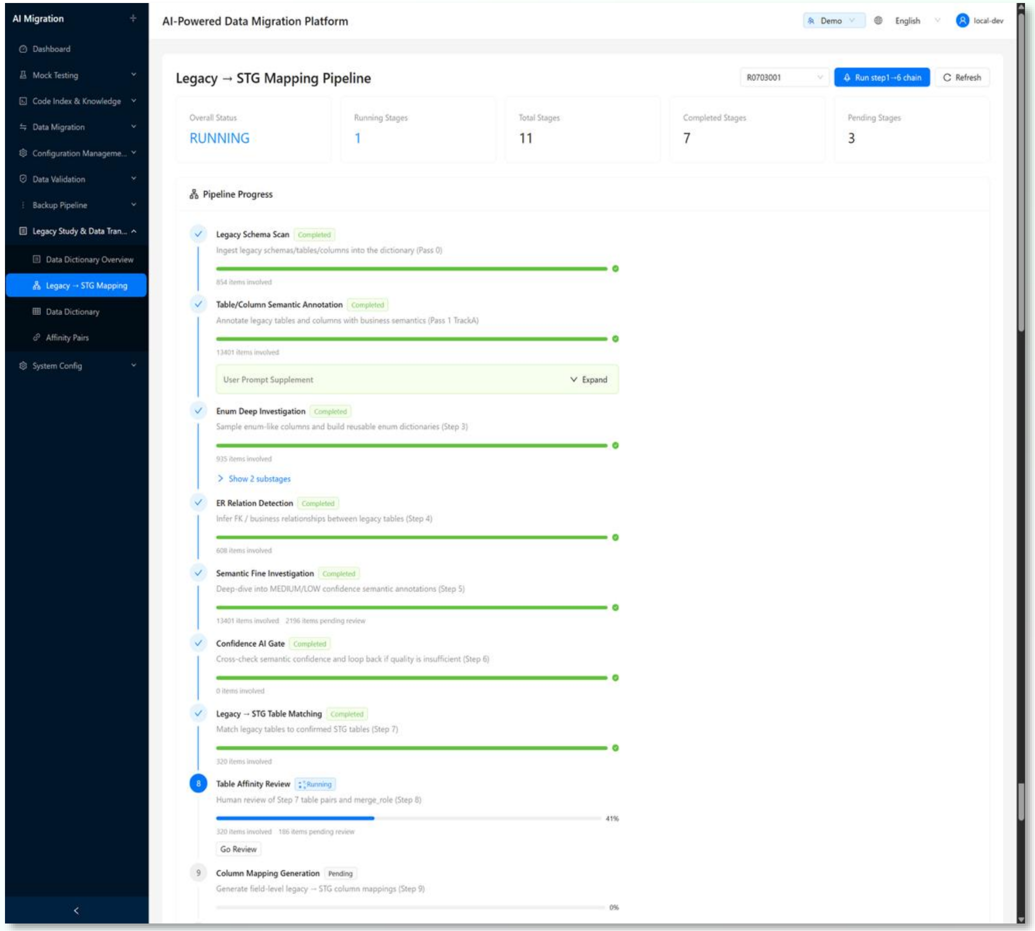
60%+ efficiency gains as AI generates legacy data dictionaries by analysing knowledge bases, source code, and databases, combined with step change in accuracy.

Data transfer
(STG → Pre-target → Target)

40%+ efficiency gains with AI-generated ETL scripts with concurrent execution, ,flexible migration modes and full end-to-end visibility with complete audit trails.

Data validation

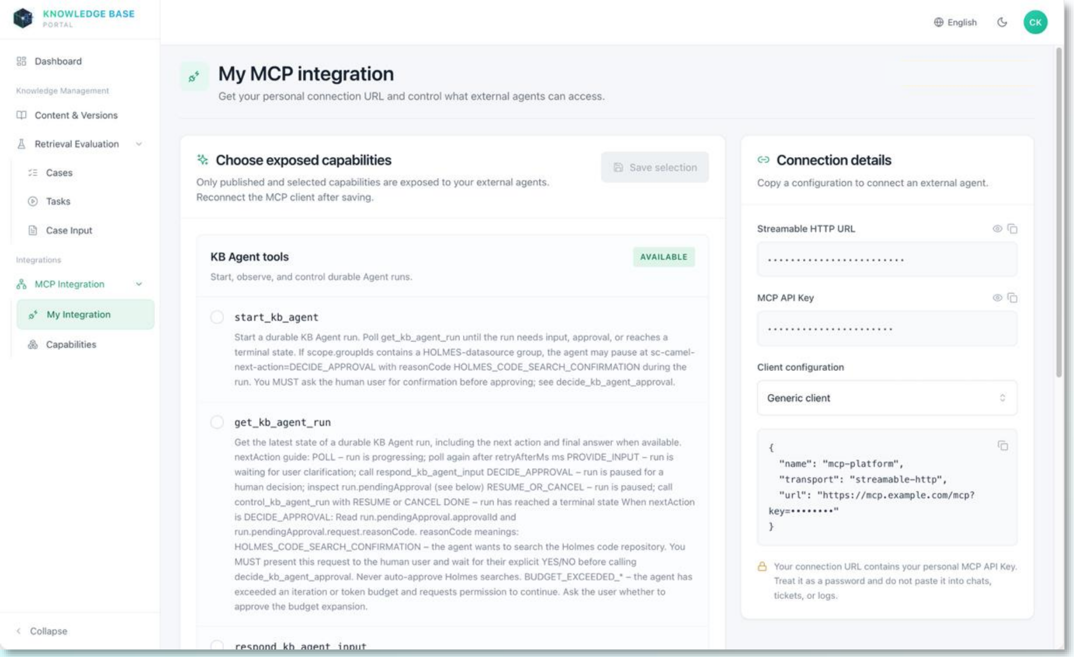
40%+ efficiency gains with AI-powered validation gap analysis & strategy generation to improve coverage, and AI-generated validation code for rapid implementation.



Notes: Indicative figures of efficiency gains subject to migration scope and legacy data/system; legacy system data mapping subject to availability of source code, knowledge bases, etc.

Knowledge base: The key to scaling AI-driven delivery

“Thick foundation, thin applications”
Instead of each AI tool building its own knowledge layer, they all connect to one governed knowledge base.



Key knowledge base capabilities

Engrained permission safety
Syncs with LDAP/AD; ACL enforced at every document chunk; no parallel permission system needed.

Optimised for complex queries
Multi-hop reasoning, comparison, and conditional logic — handles how business teams actually ask questions.

Focus on data protection
Full private deployment support. Data never leaves designated infrastructure. Audit-ready from day one.

Flexible system integration
Standard APIs, MCP and SDKs for rapid connection to existing tools and document management systems.

Cost efficiency focus
Optimised resource usage with built-in caching, model routing, and usage analytics.

Continuous evaluation
Golden-set evaluation, automated regression testing, and key metrics tracked on every configuration change.

Knowledge Base: Grounding agents in business and system knowledge

Business semantics

Insurance and product concepts, rules, domain language and expected behaviour.

System model

Architecture, APIs, data relationships, contracts and invariants.

Engineering knowledge

Code, standards, design patterns, repository structure and tooling.

Task evidence

Requirement, decisions, artefacts, tests and approved historical evidence.

With Graphene Harness, agents reason and operate inside the system's meaning

Each task receives the context needed to understand what the change must achieve and what it must preserve.

We build with Graphene Harness today, our partners next, clients after that

Peak3’s own delivery

TODAY

Our implementations and our new core features are built with Graphene Harness. We are the first users of the lifecycle we are describing.

Select implementation partners

NEXT

Partners who deploy Graphene v4 get the delivery lifecycle itself, extending the same gains beyond our own implementations.

Clients, with enablement

LATER

For self-sufficiency and agility, and a lower IT cost base — at the point where the enablement behind it is ready.

Peak3 forward-deployed engineering

Nothing in insurance is off the shelf. Every insurer needs solutions shaped to its own operational context, its own data and its own regulatory environment.

Build with Peak3's FDE team: Teams with deep insurance domain experience, building AI-first operations alongside your team rather than delivering to it from a distance.

Combined solutions: Peak3 solutions (Graphene v4, Graphene Agent Platform and Graphene Harness) with the systems, data and controls you already run.

Graphene Harness

The goal is not to finish one person's coding task. It is to deliver organisational outcomes.

Workflows, role definitions, knowledge sources, decision gates and evidence become shared organisational assets that can be reviewed, reused and evolved.

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