End mainframe modernization. Begin continuous innovation.

With Imogen, our AI-powered modernization platform, you can move beyond the high risks and failure rates of conventional multi-year projects—to a world of iterative, modular, and blazingly fast innovation.

Most legacy modernization efforts fail because they try to do everything at once: rewrite the system, redesign the architecture, and introduce new capabilities in a single high-stakes project.

These efforts delay innovation for years while teams struggle through a long tail of integration, debugging, and regression testing. By the time the system finally cuts over, the business requirements have already moved on.

> The problem isn't that organizations need to modernize; the problem is how modernization is done.

First move, then improve

The fastest path to innovation is not attempting to redesign everything at once: it's first making the change easy, then making the easy change, continuously and rapidly.

That's now possible with Imogen, from Mechanical Orchard.

Introducing Imogen

Imogen is a software platform that safely rewrites legacy mainframe applications into modern, cloud-ready systems.

The platform captures how your system actually behaves using real production data flows and uses that behavior to define a deterministic specification of how the system must perform. From this specification, Imogen generates modern code that is continuously verified throughout the rewrite process.

Instead of waiting until the end of a project to discover integration issues, Imogen proves correctness continuously—allowing organizations to modernize incrementally while systems remain in production.

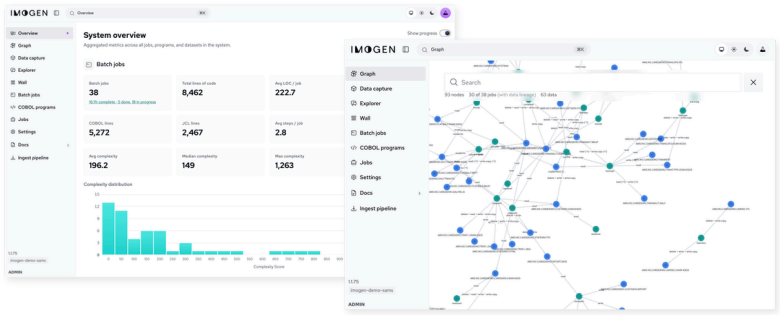
This makes it possible to move quickly without disrupting the business.

Imogen's ability to test new code against real production code over and over until exact equivalence differentiates it from other modernization approaches. As an end-to-end platform, Imogen combines automated and deterministic analysis of mainframe environments, integrated rewriting and validation against data flows, and orchestration for continual, incremental modernization.

Analyze

Deterministic understanding

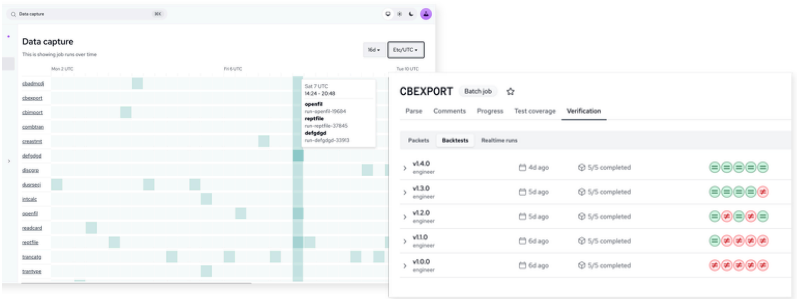
Instead of relying on probabilistic LLM interpretations, Imogen analyzes source code directly to extract logic, dependencies, and workflows into complete, human-readable blueprints. This eliminates guesswork and gives teams a reliable foundation for planning and modernization.



Rewrite

Reliable code at speed

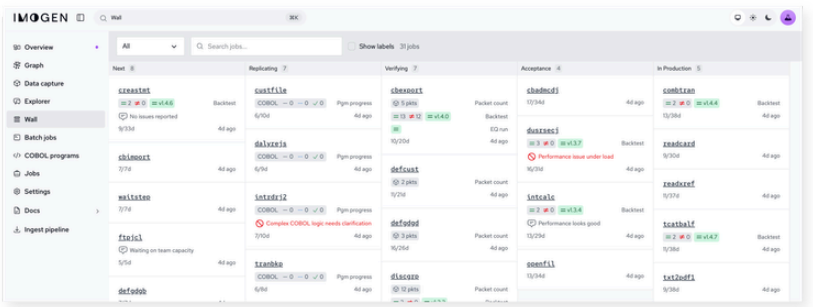
Imogen rapidly generates modern code for each component and continuously verifies it against real production data flows via layered tests. This rapid iteration converts probabilistic AI code generation into deterministic, auditable, production-ready software.



Orchestrate

Old and new co-exist

Core to a safe, incremental rewrite is Imogen's ability to manage the coexistence of legacy and new components. Teams can modernize systems without disrupting business operations, and even begin making changes on the modernized slices based on business priorities.



This is more than a new way to modernize; it's a new operating model for continuous innovation.

With Imogen, modernization breaks free from the cycle of risky, episodic projects and becomes a continuous, repeatable capability. By capturing system behavior through real data flows, Imogen creates a living model of how the business actually runs.

That model becomes the foundation for every future change — grounded in reality, continuously validated, and ready to build on. As AI tools continue to improve, this foundation secures your ability to harness them with a precise, trusted representation of the evolving system on which innovation can be built safely, without disruption.

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